

**Vertical Recommendation for Use sheets (RfUs)
of the European Coordination of Notified Bodies in the field of Personal Protective Equipment (PPE)
Regulation (EU) 2016/425**

[Vertical Group 1](#) - status in February 2024

[Vertical Group 2](#) - status in February 2024

[Vertical Group 3](#) - status in October 2023

[Vertical Group 4](#) - status in February 2024

[Vertical Group 5](#) - status in October 2023

[Vertical Group 8](#) - status in October 2023

[Vertical Group 9](#) - status in April 2019

[Vertical Group 10](#) - status in September 2021

[Vertical Group 11](#) - status in February 2024


**Vertical Recommendation for Use sheets (RfUs)
of Vertical Group 1 “Head protection”
of the European Coordination of Notified Bodies in the field of Personal Protective Equipment (PPE)**

Regulation (EU) 2016/425

| Number of RfU PPE-R/ | Version | Reference | Keywords | Approved by Vertical Group 1 | Approved by Horizontal Committee | Endorsed by PPE Expert Group |
|-----------------------------|----------------|-------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------|-----------------------------------------|-------------------------------------|
| 01.001 | 01 | EN 397:1995 (+A1) & EN 397:2012 | Industrial helmet, lateral deformation test, test procedure | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.002 | 01 | EN 812:2012 | Industrial bump caps, ventilation | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.003 | 01 | Various | Shock absorption, falling headform, alignment, procedure | 21/04/18 | 23/09/20 | 30/06/23 |
| 01.004 | 01 | EN 1384:1996 (+A1) & EN 1384 : 2012 clauses 3.10, 5.5 & 6.8 | Helmets for equestrian activities, peak, deflection | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.006 | 01 | Various | Kerbstone anvil | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.007 | 01 | All | Test method standards | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.008 | 01 | EN 443 : 2008 | Retention system effectiveness, Pre-requisites | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.009 | 01 | EN 443 : 2008 | Shock absorption, Resistance to penetration | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.011 | 01 | EN 397:2012 + A1:2012 | Chin strap anchorage | 21/04/18 | 23/09/20 | 30/06/23 |
| 01.012 | 01 | Various | Secondary impacts | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.013 | 01 | EN 1078:1997 & 2012 | Retention system, Fastening device | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.014 | 02 | Various | Penetration test block, radius | 09/06/21 | 01/10/21 | 18/11/22 |
| 01.015 | 01 | EN 1077:2007 | Test area | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.016 | 01 | EN 397:1995 & 2012 EN 812:1997 & 2012 | Shock absorption, Resistance to penetration, impact velocity | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.017 | 01 | EN 397:1995 & 2012 | Very low temperature, pre-conditioning | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.019 | 01 | EN 443:2008 | Helmets for Fire Fighting; Flame resistance | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.021 | 01 | EN 397:2012 + A1:2012 | Molten metal splash, assessment | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.022 | 01 | Various | Test position, Penetration testing, Molten metal testing | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.023 | 01 | EN 12492:2012 | Penetration testing, sample restraint | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.024 | 01 | EN 397:2012 + A1:2012 and EN 12492:2012 | Dual-marking | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.025 | 01 | EN 397:2012 + A1:2012 | Molten metal test, orientation | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.026 | 01 | EN 397:2012 + A1:2012 | Ventilation, area measurement, covers | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.027 | 01 | EN 443:2008 | Shock absorption, headforms | 21/04/18 | 21/04/18 | 29/11/19 |

| Number of RfU PPE-R/ | Version | Reference | Keywords | Approved by Vertical Group 1 | Approved by Horizontal Committee | Endorsed by PPE Expert Group |
|------------------------|---------|--------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------|----------------------------------|------------------------------|
| 01.028 | 01 | EN 443:2008 | Retention system strength, headforms | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.029 | 01 | EN 812:2012 | Marking | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.030 | 01 | EN 12492:2012 | Ventilation | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.031 | 01 | EN1384:2012 | Thickness measurement, Area of protection | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.032 | 01 | EN 1384:2012 | Test sequence, sample restoration | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.033 | 01 | EN 14052:2012 + A1:2012 | Resistance to penetration, helmet test support | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.036 | 01 | EN 13484:2012 | Extent of coverage | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.037 | 01 | EN 1385:2012 | Coverage | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.038 | 01 | EN 1385:2012 | Retention system effectiveness | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.039 | 01 | EN 397:2012 | Helmet shell, Materials, Marking | 21/04/18 | 21/04/18 | 29/11/19 |
| 01.041 | 01 | EN 1077: 2007 / EN 1078+ A1:2012 / EN 1385: 2012 | Artificial ageing, ultraviolet irradiation | 21/04/18 | 15/09/19 | 14/03/22 |
| 01.042 | 01 | Various | Lateral crushing, deformation | 21/04/18 | 15/09/19 | 14/03/22 |
| 01.043 | 01 | EN 397:2012 + A1 | Visor position, Testing | 21/04/18 | 15/09/19 | 14/03/22 |
| 01.045 | 01 | EN 397:2012 + A1 | Internal vertical clearance, Internal vertical distance, Air supplied respirators | 24/05/18 | 15/09/19 | 14/03/22 |
| 01.046 | 01 | EN 50365:2002 | Marking durability, marking legibility, marking location | 24/05/18 | 15/09/19 | 14/03/22 |
| 01.047 | 01 | EN16471:2014 & EN16473:2014 | Flame resistance, Testing | 24/05/18 | 23/09/20 | 14/03/22 |
| 01.049 | 01 | | Industrial safety helmets, increased ventilation | 21/04/18 | 23/09/20 | 14/03/22 |
| 01.050 | 01 | EN 1077:2007 | Helmets for Alpine Skiers and Snowboarders with integrated speakers | 21/04/18 | 23/09/20 | 14/03/22 |
| 01.051 | 01 | EN 397:2012 + A1:2012 | Headband, Adjustment | 21/04/18 | 23/09/20 | 30/06/23 |
| 01.052 | 01 | EN 397:2012 + A1:2012 | Lateral deformation, test plates, positioning | 21/04/18 | 23/09/20 | 30/06/23 |
| 01.053 | 01 | EN 397:2012 + A1:2012 | Headband, variants | 21/04/18 | 23/09/20 | 30/06/23 |
| 01.056 | 01 | EN16471:2014 & EN16473:2014 | Coverage, materials | 24/05/18 | 23/09/20 | 14/03/22 |
| 01.059 | 01 | EN 397:2012 + A1:2012 | Winter liners | 09/06/21 | 01/10/21 | 18/11/22 |
| 01.060 | 01 | EN 16473:2014 | Ventilation | 24/05/18 | 23/09/20 | 30/06/23 |
| 01.062 | 01 | | Wind noise | 19/09/19 | 01/10/21 | 18/11/22 |
| 01.063 | 01 | EN 812:2012 | Test configuration | 19/09/19 | 01/10/21 | 18/11/22 |
| 01.064 | 01 | | Electric bicycles, electric scooters, electric skateboards | 25/06/21 | 30/04/22 | 31/08/23 |
| 01.065 | 01 | EN 443:2008 | Visible damage | 19/09/19 | 01/10/21 | 18/11/22 |
| 01.066 | 01 | EN 397:2012 + A1:2012 | Ventilation | 19/09/19 | 01/10/21 | 18/11/22 |
| 01.067 | 01 | EN 50365:2002 | Specification | 19/09/19 | 01/10/21 | 18/11/22 |
| 01.068 | 01 | EN 50365:2002 | Visual inspection, metal parts | 19/09/19 | 01/10/21 | 18/11/22 |

| Number of RfU PPE-R/ | Version | Reference | Keywords | Approved by Vertical Group 1 | Approved by Horizontal Committee | Endorsed by PPE Expert Group |
|-----------------------------|----------------|-------------------------|----------------------------|-------------------------------------|-----------------------------------------|-------------------------------------|
| 01.069 | 01 | EN 14052:2012 + A1:2012 | Pre-conditioning, delay | 19/09/19 | 01/10/21 | 18/11/22 |
| 01.070 | 01 | EN 397:2012 + A1:2012 | Crown area | 09/06/21 | 01/10/21 | 18/11/22 |
| 01.071 | 01 | EN 397:2012+ A1:2012 | Chin-strap anchorage | 09/06/21 | 01/10/21 | 18/11/22 |
| 01.072 | 01 | EN 443:2008 | Horizontal field of vision | 09/06/21 | 30/04/22 | 31/08/23 |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/01.003 Version 1 | | | | | | | | | | | | | | | | | | |
| Number of pages: 2 | Approval stage : Approved on : | | | | | | | | | | | | | | | | | | | |
| Origin : Vertical Group 1 | <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 23.09.2020 <input checked="" type="checkbox"/> EU PPE Expert Group 30.06.2023 | | | | | | | | | | | | | | | | | | | |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: Various <input type="checkbox"/> Other: | | | | | | | | | | | | | | | | | | | | |
| Article: Annex: Clause: | | | | | | | | | | | | | | | | | | | | |
| Key words: Shock absorption, falling headform, alignment, procedure | | | | | | | | | | | | | | | | | | | | |
| Question: What is the correct positioning procedure of the helmeted headform for falling headform shock absorption testing? <i>The following standards are affected:</i> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">EN 966 : 2012 + A1:2012</td> <td style="width: 50%;">clause 7.2.3</td> </tr> <tr> <td>EN 1077 : 2007</td> <td>clause 5.5 (refers to EN 13087-2 : 2000 cl. 5.3)</td> </tr> <tr> <td>EN 1078 : 2012 + A1:2012</td> <td>clause 5.4</td> </tr> <tr> <td>EN 1080 : 2013</td> <td>clause 5.4</td> </tr> <tr> <td>EN 1384 : 2017</td> <td>clause 5.7.1 (refers to EN13087-2 : 2012 cl. 5.3)</td> </tr> <tr> <td>EN 1385 : 2012</td> <td>clause 7.6</td> </tr> <tr> <td>EN 13087-2 : 2000 (+A1) & EN 13087-2 : 2012</td> <td>clause 5.3</td> </tr> <tr> <td>EN 13484 : 2012</td> <td>clause 5.7</td> </tr> <tr> <td>EN 13781 : 2012</td> <td>clause 5.4</td> </tr> </table> | | | EN 966 : 2012 + A1:2012 | clause 7.2.3 | EN 1077 : 2007 | clause 5.5 (refers to EN 13087-2 : 2000 cl. 5.3) | EN 1078 : 2012 + A1:2012 | clause 5.4 | EN 1080 : 2013 | clause 5.4 | EN 1384 : 2017 | clause 5.7.1 (refers to EN13087-2 : 2012 cl. 5.3) | EN 1385 : 2012 | clause 7.6 | EN 13087-2 : 2000 (+A1) & EN 13087-2 : 2012 | clause 5.3 | EN 13484 : 2012 | clause 5.7 | EN 13781 : 2012 | clause 5.4 |
| EN 966 : 2012 + A1:2012 | clause 7.2.3 | | | | | | | | | | | | | | | | | | | |
| EN 1077 : 2007 | clause 5.5 (refers to EN 13087-2 : 2000 cl. 5.3) | | | | | | | | | | | | | | | | | | | |
| EN 1078 : 2012 + A1:2012 | clause 5.4 | | | | | | | | | | | | | | | | | | | |
| EN 1080 : 2013 | clause 5.4 | | | | | | | | | | | | | | | | | | | |
| EN 1384 : 2017 | clause 5.7.1 (refers to EN13087-2 : 2012 cl. 5.3) | | | | | | | | | | | | | | | | | | | |
| EN 1385 : 2012 | clause 7.6 | | | | | | | | | | | | | | | | | | | |
| EN 13087-2 : 2000 (+A1) & EN 13087-2 : 2012 | clause 5.3 | | | | | | | | | | | | | | | | | | | |
| EN 13484 : 2012 | clause 5.7 | | | | | | | | | | | | | | | | | | | |
| EN 13781 : 2012 | clause 5.4 | | | | | | | | | | | | | | | | | | | |

Solution:

Align the target impact point with the centre of the anvil and rotate the headform so that the centre of gravity of the headform, target impact point and anvil centre all lie on the same vertical axis.

Ideally, positioning should also place the line tangential to the external surface of the helmet at the target impact point, parallel to the anvil surface. However, if this cannot also be achieved, then priority shall be given to the alignment between headform centre of gravity, target point and anvil centre.

In circumstances when a tangential impact cannot be achieved, it is accepted that this may lead to the target impact point not being the first point of impact. This is acceptable so long as the first point of contact with the anvil is not so close to the edge of the anvil as to affect the test.

Considerations:

The various standards include various and differing statements regarding positioning:

"the system shall comprise.....a system by which the point of impact can be brought into correspondence with the centre of the anvil." (e.g. EN966, EN1078, EN1080, EN1385)


"The impacts shall be directed towards the centre of gravity of the headform." (e.g. EN1077)

"shall comprise....a system to align the impact site with the centre of the anvil." (e.g. EN1384)

"The test headform shall be so positioned that the designated point on the helmet is vertically above the centre of the anvil. The plane tangential to the point of impact shall be horizontal." (e.g. EN13781)

Some of the standards include more than one of these statements, whilst some do not describe the positioning.

If the headform CoG is not aligned with the target impact point and the centre of the anvil, rotation will occur which may affect results. If the target point of impact is not tangential with the anvil and is not the first point of contact, this will also induce rotation which again may affect results. It has been considered that the effect of rotation caused by misalignment of the CoG is more critical and therefore alignment of the CoG should be prioritised.

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/01.008 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 1 | <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 21.04.2018 <input checked="" type="checkbox"/> EU PPE Working Group 29.11.2019 | |
| Question related to <input type="checkbox"/> PPE Regulation <input checked="" type="checkbox"/> EN/prEN: EN 443 : 2008 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: 5.7 | | |
| Key words: Retention system effectiveness, Pre-requisites | | |
| Question: EN 13087-5 : 2000 clause 4 point f) requires the performance standard to specify the "direction of application of the force". EN 443 : 2008 clause 5.7 does not do this, so how shall the force be applied? | | |
| Solution: The force shall be applied both to the front and rear in two separate tests, although the order is not critical. The single sample specified by EN 443 : 2008 table B.1. shall be used for both tests. The single sample must satisfy the requirements for both the front and rear tests in order that the model be considered acceptable. | | |





CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/01.009
Version 1

RECOMMENDATION FOR USE

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| Number of pages: 1 | | Approval stage : | Approved on : |
| Origin : Vertical Group 1 | | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | | <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| | | <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |
| Question related to | <input type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN 443 : 2008 | <input type="checkbox"/> Other: |
| Article: | Annex: | Clause: 5.4, 5.5 | |
| Key words: Shock absorption, Resistance to penetration | | | |
| Question: In the case of helmets fitted or supplied with face protectors that are covered by the definitions of clause 3.18 "integral additional protective function" or clause 3.19 "non-integral protective functions", how should the face protector be positioned when testing to clause 4.2 "Shock absorption" or 4.3 "Resistance to penetration"? | | | |
| Solution: The face protector shall be placed in its "in-use" position. | | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/01.011 Version 1 |
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| Origin : Vertical Group 1 | <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 23.09.2020 <input checked="" type="checkbox"/> EU PPE Expert Group 30.06.2023 | |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN397:2012+A1:2012 <input type="checkbox"/> Other: | | |
| <hr style="border-top: 1px dashed black;"/> Article: Annex: Clause: 5.1.4 | | |
| Key words: Chin strap anchorage | | |
| Question: Where are acceptable points of breakage for this test? | | |
| Solution: Solution: Parts passing under the chin are considered the chinstrap and failure shall not occur for these parts. Failure of buckles or similar 'closure' devices should not be accepted. If separate buckles or devices are provided for the purpose of creating a reusable disconnection that is intended to release under load, failure shall occur at this device. If such devices are not provided, failure shall occur for parts that do not constitute the chinstrap passing under the chin (refer above). There shall be no breakage of strap material. Rationale: EN397 clause 4.8 describes that the helmet shell shall be fitted with a chinstrap or means of attaching one, but does not refer to the term chinstrap anchorage. Product innovation since the conception of EN397 has resulted in an increasingly diverse range of products. Where the chinstrap ends and where the attachment begins can be unclear due to the varied designs of products, some of which include separate buckles that provide a reusable disconnection point for the chinstrap to release under load. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/01.014 Version 02 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 1 | <input checked="" type="checkbox"/> Vertical Group 09.06.2021 <input checked="" type="checkbox"/> Horizontal Committee 01.10.2021 <input checked="" type="checkbox"/> EU PPE Expert Group 18.11.2022 | |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: Various <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: | | |
| Key words: Penetration test block, radius | | |
| Question: What is the correct radius for the penetration test block? | | |
| Solution: The radius should be 65mm. For all standards except EN 1384:2017, the tolerance on the radius should be ± 1 mm. Reason: EN 1384:2017, EN 12492:2012 and EN 13087-3:2000 are standards that include specifications for a penetration test block. (EN 13087-3 is referred to by EN 443:2008, EN 1077:2007 and EN 14052:2012+A1:2012 without additional details of the test block specification). EN 1384:2017 clause 5.8.3 refers to EN 13087-3 but clarifies the test block as having a radius of (65 ± 5) mm. EN 12492:2012 includes a figure showing a block of radius 66.5mm with a diameter of 165mm. These dimensions are incompatible. EN 13087-3:2000 figure 1 shows the radius of the test block as 65mm, but the diameter as 160mm. These dimensions are incompatible. Either of the diameters stated would give a circumference larger than 495mm. The radius of 65mm would give a diameter that would permit the relevant sizes of helmet to be fitted and allow movement to test different positions. | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/01.015
Version 1

RECOMMENDATION FOR USE

Number of pages: 1

Approval stage :

Approved on :

Origin : Vertical Group 1

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|----------------------------------------------------------|------------|
| <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |

Question related to PPE Regulation

EN/prEN: EN 1077:2007

Other:

Article:

Annex:

Clause: 5.4

Key words:

Test area

Question:

How should the specified test area be marked on the helmet?

Considerations:

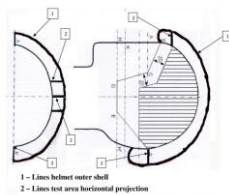
EN1077:2007 is the only standard (in the field of head protection) that defines the impact test area on the headform rather than on the helmet.


In order to perform tests, the test area has to be reproduced on the helmet. Depending upon interpretation of how this should be marked, this could lead to different test areas being marked on the helmet, and obviously to different test results.

Solution:


The test area should be projected horizontally from the headform to the outer helmet surface.

The 'corner' points of the test area shall be projected onto the helmet with lines laying on horizontal planes, parallel to reference plane; for side corners (points C, D, E) directed perpendicular to the vertical longitudinal plane, while for front and rear points (points A' and B) along the vertical longitudinal plane. Then the points marked on the helmet shall be connected by lines, using for example a flexible rule.





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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/01.016 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 1 | <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 21.04.2018 <input checked="" type="checkbox"/> EU PPE Working Group 29.11.2019 | |
| Question related to <input type="checkbox"/> PPE Regulation <input checked="" type="checkbox"/> EN/prEN: EN 397:1995 & 2012 <input type="checkbox"/> Other: EN 812:1997 & 2012 | | |
| ----- Article: Annex: Clause: EN 397 – 6.6.2, 6.7.2 / EN 812 – 6.5.2, 6.6.2 | | |
| Key words: Shock absorption, Resistance to penetration, impact velocity | | |
| Question: Is 0.5% the correct value for the maximum permitted difference between the actual impact velocity and the theoretical velocity for the stated drop height? | | |
| Solution: No, the permitted difference should be 5% maximum. 0.5% is impractical and all other TC158 standards that specify a similar requirement state 5%. | | |


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/01.017 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 1 | <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 21.04.2018 <input checked="" type="checkbox"/> EU PPE Working Group 29.11.2019 | |
| Question related to <input type="checkbox"/> PPE Regulation <input checked="" type="checkbox"/> EN/prEN: EN 397:1995 & 2012 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: 5.2.1 | | |
| Key words: Very low temperature, pre-conditioning | | |
| Question: Is it necessary to perform shock absorption and penetration testing at -10°C if the very low temperature conditioning at -20°C or -30°C has been requested? | | |
| Solution: Yes, because testing at -10°C is a mandatory requirement. | | |


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/01.021 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 1 | <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 21.04.2018 <input checked="" type="checkbox"/> EU PPE Working Group 29.11.2019 | |
| Question related to <input type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN 397:2012 + A1:2012 | <input type="checkbox"/> Other: |
| <hr style="border-top: 1px dashed black;"/> Article: Annex: Clause: 5.2.5 | | |
| Key words: Molten metal splash, assessment | | |
| Question: Shall assessment be limited to the 50mm radius circle onto which the liquid metal is poured, or shall it apply to other areas of the helmet? | | |
| Solution: Assessment shall apply to the shell of the helmet. With reference to the definition of clause 3.4, 'brim', the shell does not include a brim or gutter. Reason: The 50mm radius circle is just a target point for pouring of the metal. | | |


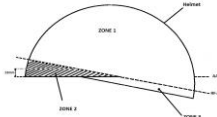
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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/01.025 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 1 | <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 21.04.2018 <input checked="" type="checkbox"/> EU PPE Working Group 29.11.2019 | |
| Question related to <input type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN 397:2012 + A1:2012 | <input type="checkbox"/> Other: |
| <hr style="border-top: 1px dashed black;"/> Article: Annex: Clause: 6.12.2 | | |
| Key words: Molten metal test, orientation | | |
| Question: In what orientation should the helmet and headform be placed when the test is performed? | | |
| Solution: The headform should be vertical and the helmet fitted in a normal wearing position | | |


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/01.026 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 1 | <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 21.04.2018 <input checked="" type="checkbox"/> EU PPE Working Group 29.11.2019 | |
| Question related to <input type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN 397:2012 + A1:2012 | <input type="checkbox"/> Other: |
| <hr style="border-top: 1px dashed black;"/> Article: Annex: Clause: 4.9 | | |
| Key words: Ventilation, area measurement, covers | | |
| Question: Which area of ventilation should be assessed when the helmet includes hard covers/multiple layers and where the area of the aperture(s) in the cover/external layer is not the same area as the aperture(s) in the internal layer (shell)? | | |
| Solution: The area of the smallest aperture(s) should be assessed, whether this/these be in the cover/external layer or in the internal layer. | | |


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/01.027 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 1 | <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 21.04.2018 <input checked="" type="checkbox"/> EU PPE Working Group 29.11.2019 | |
| Question related to <input type="checkbox"/> PPE Regulation <input checked="" type="checkbox"/> EN/prEN: EN 443:2008 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: 5.4.1 | | |
| Key words: Shock absorption, headforms | | |
| Question: For shock absorption testing of area 1a, should the headforms comply with the requirements of EN 960:2006, or is it acceptable to use headforms that comply only with EN 960:1994? | | |
| Solution: The headforms should comply with EN960:2006. Rationale: EN 443:2008 clause 5.4.1 requires testing to be performed in accordance with EN 13087-2:2000. EN 13087-2:2000 makes dated reference to EN 960:1994. According to referencing rules, it could be assumed that the headforms should therefore comply with EN 960:1994. However, EN 443:2008 itself makes dated reference to EN 960:2006. Therefore, the interpretation has been made that testing should be performed in accordance with EN 13087-2:2000, but using equivalent headform sizes complying with EN 960:2006. | | |


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/01.028 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 1 | <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 21.04.2018 <input checked="" type="checkbox"/> EU PPE Working Group 29.11.2019 | |
| Question related to <input type="checkbox"/> PPE Regulation <input checked="" type="checkbox"/> EN/prEN: EN 443:2008 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: 5.8 | | |
| Key words: Retention system strength, headforms | | |
| Question: For retention system strength testing, should the headforms comply with the requirements of EN 960:2006, or is it acceptable to use headforms that comply only with EN 960:1994? | | |
| Solution: The headforms should comply with EN960:2006. Rationale: EN 443:2008 clause 5.8 requires testing to be performed in accordance with EN 13087-5:2000. EN 13087-5:2000 makes dated reference to EN 960:1994. According to referencing rules, it could be assumed that the headforms should therefore comply with EN 960:1994. However, EN 443:2008 itself makes dated reference to EN 960:2006. Therefore, the interpretation has been made that testing should be performed in accordance with EN 13087-5:2000, but using equivalent headform sizes complying with EN 960:2006. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/01.029 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 1 | <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 21.04.2018 <input checked="" type="checkbox"/> EU PPE Expert Group 29.11.2019 | |
| Question related to <input type="checkbox"/> PPE Regulation <input checked="" type="checkbox"/> EN/prEN: EN 812:2012 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: 7.2.3 d) | | |
| Key words: Marking | | |
| Question: In clause 7.2.3 d), is the reference to clause 7.1 correct? | | |
| Solution: No, reference should be to clause 7.2.2. instead Rationale: Clause 7.2.3 d) requires the significance of the markings under clause 7.1 to be explained. Clause 7.1 specifies the general markings, such as 'number of the European Standard', and requiring the significance of such markings to be explained seems illogical. EN 397:2012 + A1:2012 clause 7.2.3 d) includes a very similar requirement, but instead it is the optional markings for which the significance must be explained. It has been interpreted that the requirement in EN 812 was intended to be of a similar to that in EN 397. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/01.031 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 1 | <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 21.04.2018 <input checked="" type="checkbox"/> EU PPE Working Group 29.11.2019 | |
| Question related to <input type="checkbox"/> PPE Regulation <input checked="" type="checkbox"/> EN/prEN: EN1384:2012 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: 4.1 | | |
| Key words: Thickness measurement, Area of protection | | |
| Question: For measurement of thickness of protective padding in the area of protection but outside of the test area, where should this measurement be made? | | |
| Solution: The measurement should be made 12mm up from the lower edge of zone 2 as illustrated below (see also Figure 1 of EN1384) and shall then be compared with the minimum thickness measured within zone 1.  Rationale: The test area equates to zone 1 of the illustration. The minimum thickness within this area should be measured to determine the minimum thickness to be used for comparison purposes. The minimum area of protection comprises zones 1 and 2 of the illustration. Zone 3 indicates a portion of the helmet that falls neither within the minimum area of protection nor the test area. As a minimum, a helmet must cover zones 1 and 2. Coverage of zone 3 is not mandatory. EN1384 is ambiguous from which edge of the area of protection the measurements at 12mm should be taken. It has been interpreted that it should be 12mm from the lower edge of the area of protection, as illustrated above. The minimum thickness along this line should be compared to the minimum thickness in the test area (zone 1). | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/01.032 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 1 | <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 21.04.2018 <input checked="" type="checkbox"/> EU PPE Working Group 29.11.2019 | |
| Question related to <input type="checkbox"/> PPE Regulation <input checked="" type="checkbox"/> EN/prEN: EN 1384:2012 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: 6.2 | | |
| Key words: Test sequence, sample restoration | | |
| Question: Is it acceptable to restore samples following reversible damage before performing the next test in the test sequence? | | |
| Solution: No, samples should be tested without restoration. Rationale: Reversible damage can occur during testing which could influence the outcome of tests later in the test sequence, e.g. detachment of ventilation covers might have a detrimental effect on penetration resistance. Some standards specify a sequence of testing just to minimise the number of samples required for a test programme. However, it was interpreted in this case that the sequence of testing was not just intended to reduce sample quantities, therefore samples should be left unchanged following each test before moving on to the next test in the sequence. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/01.041 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 1 | <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 15.09.2019 <input checked="" type="checkbox"/> EU PPE Expert Group 14.03.2022 | |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 1077: 2007 / EN 1078+ A1:2012 / EN 1385: 2012 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: See below | | |
| Key words: Artificial ageing, ultraviolet irradiation | | |
| Question: The following standards/clauses specify the use of a 125W xenon-filled quartz lamp for 48h at a distance of 250mm: EN1077:20017 clause 5.5.5 EN1078:2012+A1 clause 5.4.2.3 EN1385:2012 clause 7.5.4 The 125W xenon-filled quartz lamp is no longer sold on the market (since 2012). What is an appropriate alternative? | | |
| Solution: A 150W lamp used for 40h at a distance of 250mm. | | |

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|  | <p>CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425</p> <p>RECOMMENDATION FOR USE</p> | <p>PPE-R/01.042 Version 1</p> | | | | | | |
| <p>Number of pages: 1</p> | <p>Approval stage : Approved on :</p> | | | | | | | |
| <p>Origin : Vertical Group 1</p> | <table border="0"> <tr> <td><input checked="" type="checkbox"/> Vertical Group</td> <td style="text-align: right;">21.04.2018</td> </tr> <tr> <td><input checked="" type="checkbox"/> Horizontal Committee</td> <td style="text-align: right;">15.09.2019</td> </tr> <tr> <td><input checked="" type="checkbox"/> EU PPE Expert Group</td> <td style="text-align: right;">14.03.2022</td> </tr> </table> | | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 | <input checked="" type="checkbox"/> Horizontal Committee | 15.09.2019 | <input checked="" type="checkbox"/> EU PPE Expert Group | 14.03.2022 |
| <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 | | | | | | | |
| <input checked="" type="checkbox"/> Horizontal Committee | 15.09.2019 | | | | | | | |
| <input checked="" type="checkbox"/> EU PPE Expert Group | 14.03.2022 | | | | | | | |
| <p>Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: Various <input type="checkbox"/> Other:</p> | | | | | | | | |
| <p>Article: Annex: Clause:</p> | | | | | | | | |
| <p>Key words: Lateral crushing, deformation</p> | | | | | | | | |
| <p>Question: When a product is fitted with an integral visor, should the helmet be tested for lateral deformation/crushing with the visor in the stowed or deployed position?</p> <p>This relates to the following standards:</p> <p>EN397:2012 + A1 clause 5.2.4 EN443:2008 clause 4.4 EN14572:2005 clause 5.7 EN 16473:2014 clause 5.8</p> | | | | | | | | |
| <p>Solution: Testing should be performed with the visor on both positions.</p> <p>A further sample should be used for testing with the visor in the second position.</p> | | | | | | | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/01.047 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 1 | <input checked="" type="checkbox"/> Vertical Group 24.05.2018 <input checked="" type="checkbox"/> Horizontal Committee 23.09.2020 <input checked="" type="checkbox"/> EU PPE Expert Group 14.03.2022 | |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN16471:2014 & EN16473:2014 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: 5.6/5.7 | | |
| Key words: Flame resistance, Testing | | |
| Question: How shall the flame resistance test be performed? | | |
| Solution: The following points shall be considered: <ol style="list-style-type: none"> 1. All externally exposed materials of the shell shall be tested. 2. In the case of the retention system, testing can include up to the edge of any relevant component. 3. The test is an assessment of material and design, so whenever possible, actual components shall be tested. This applies to accessories too. 4. Following 50°C pre-conditioning, the samples shall be allowed to return to ambient condition before testing. 5. The standard specifies requirements of the helmet shell, retention system, accessories and non-integral additional protective devices. The standard does not specify what is to be done for integral protective devices, such as integral faceshields. Such parts should be tested as per the requirements for accessories and non-integral additional protective devices. 6. When testing the shell, the instruction not to test within 5mm of an edge is deemed to include edges created by ventilation features. | | |

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|  | <p>CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425</p> <p>RECOMMENDATION FOR USE</p> | <p>PPE-R/01.050 Version 1</p> | | | | | | |
| <p>Number of pages: 1</p> | <p>Approval stage : Approved on :</p> | | | | | | | |
| <p>Origin : Vertical Group 1</p> | <table border="0"> <tr> <td><input checked="" type="checkbox"/> Vertical Group</td> <td style="text-align: right;">21.04.2018</td> </tr> <tr> <td><input checked="" type="checkbox"/> Horizontal Committee</td> <td style="text-align: right;">23.09.2020</td> </tr> <tr> <td><input checked="" type="checkbox"/> EU PPE Expert Group</td> <td style="text-align: right;">14.03.2022</td> </tr> </table> | | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 | <input checked="" type="checkbox"/> Horizontal Committee | 23.09.2020 | <input checked="" type="checkbox"/> EU PPE Expert Group | 14.03.2022 |
| <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 | | | | | | | |
| <input checked="" type="checkbox"/> Horizontal Committee | 23.09.2020 | | | | | | | |
| <input checked="" type="checkbox"/> EU PPE Expert Group | 14.03.2022 | | | | | | | |
| <p>Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 1077:2007 <input type="checkbox"/> Other:</p> | | | | | | | | |
| <p>Article: Annex: Clause: 4.2.1</p> | | | | | | | | |
| <p>Key words: Helmets for Alpine Skiers and Snowboarders with integrated speakers</p> | | | | | | | | |
| <p>Question: EN1077 clause 4,2,1 includes a note that "<i>Helmets should.....not significantly interfere with the ability of the user to hear</i>". In the case of helmets with integrated speakers, if used inappropriately there is potential for the volume of the sound to be such that ability of the user to hear properly may be significantly affected, e.g. nearing snow compacting vehicles. How should this potential hazard be addressed when certifying such products?</p> | | | | | | | | |
| <p>Solution: The manufacturer should include appropriate warnings in the information to be supplied to the wearer. Such warnings should include reference to the possibility of hearing damage through prolonged excessive volume levels, and the potential reduction in awareness of surroundings.</p> | | | | | | | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/01.051
Version 1

RECOMMENDATION FOR USE

Number of pages: 1

Approval stage :

Approved on :

Origin : Vertical Group 1

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| <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| <input checked="" type="checkbox"/> Horizontal Committee | 23.09.2020 |
| <input checked="" type="checkbox"/> EU PPE Expert Group | 30.06.2023 |

Question related to PPE Regulation PPE Guidelines EN/prEN: EN397:2012+A1:2012 Other:

Article:

Annex:

Clause: 4.7.1

Key words:


Headband, Adjustment

Question:

Is it acceptable for a product to be available in discrete sizes, with the headband of each size not being adjustable in accordance with 4.7.1?

Solution:

No. A headband that satisfies the requirement of 4.7.1 is required.

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/01.071 Version 01 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 1 | <input checked="" type="checkbox"/> Vertical Group 09.06.2021 <input checked="" type="checkbox"/> Horizontal Committee 01.10.2021 <input checked="" type="checkbox"/> EU PPE Expert Group 18.11.2022 | |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 397:2012 + A1:2012 <input type="checkbox"/> Other: | | |
| <hr/> Article: Annex: Clause: 5.1.4, 6.9 | | |
| Key words: Chin-strap anchorage | | |
| Question: Some designs of helmet include more than two chinstrap anchorages. At which stage in the test shall failure of the anchorages(s) be considered to have released the artificial jaw? | | |
| Solution: The test shall continue until the risk of strangulation has been removed. Normally this will be when anchorages have failed so as to prevent the chinstrap remaining around the wearer's neck. | | |


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/01.072 Version 01 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 1 | <input checked="" type="checkbox"/> Vertical Group 09/06/2021 <input checked="" type="checkbox"/> Horizontal Committee 30/04/2022 <input checked="" type="checkbox"/> EU PPE Expert Group 31/08/2023 | |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN443:2008 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: 4.14 a) | | |
| Key words: Horizontal field of vision | | |
| Question: From which points should field of vision in the horizontal directions be assessed? | | |
| Solution: The horizontal field of vision should be assessed from points L1 and L2 only. Rationale EN 443:2008 clause 4.14 specifies requirements for horizontal field of vision but does not state from where it should be measured. EN 443:2008 clause 5.16 states that testing shall be performed in accordance with EN 13087-6 (undated). EN 443:2008 includes figure 4 which appears to show the horizontal field of vision extending from point L and K. EN 13087-6:2012 clause 5.4 clearly states that horizontal field of vision is measured from points L1 and L2 so figure 4 of EN 443:2008 should be disregarded. | | |

**Vertical Recommendation for Use sheets (RfUs)
of Vertical Group 2 “Respiratory protection”
of the European Coordination of Notified Bodies in the field of Personal Protective Equipment (PPE)**

Regulation (EU) 2016/425

| Number of RfU PPE-R/ | Version | Reference | Keywords | Approved by Vertical Group 2 | Approved by Horizontal Committee | Endorsed by PPE Expert Group |
|-----------------------------|----------------|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------|-------------------------------------|
| 02.003 | 01 | All standards | Variations, conformity | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.015 | 01 | Standards including IL/TIL tests | Test panel, total inward leakage testing (TIL), inward leakage testing (IL) | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.018 | 01 | EN 149:2001 | Modified PPE | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.027 | 01 | EN 136:1998 | Full face mask, flammability, head harness | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.036 | 01 | EN 250:2014 | Respiratory Protective equipments, Open-circuit self-contained compressed air diving apparatus (SCUBA), PPE Components | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.043 | 01 | EN 137:2006 | Respiratory Protective Equipments, flame engulfment test, bulky devices | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.044 | 01 | EN 13794:2002 EN 13274-2:2001 | Respiratory Protective Equipments, practical performance tests | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.046 | 01 | EN 13794:2002 | Self-contained closed-circuit breathing apparatus for escape (SCCBA); Carbon-dioxide (CO ₂) content | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.047 | 01 | EN 12941:1998/A2:2008 | Powered helmet/hood, filter connection | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.048 | 01 | All standards | Equipment standard, test standard | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.049 | 01 | | Children, EN testing, EU certification | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.051 | 01 | EN 140:1998 | Valves, replacement | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.054 | 01 | All standards | Total Inward Leakage, talking passage | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.055 | 01 | EN 14387:2004/A1:2008 | Marking, filter packaging | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.058 | 01 | All standards | Reporting, Test results | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.059 | 01 | EN 137:2006 | Resistance to temperature | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.060 | 01 | EN 137:2006 | Temperature performance | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.061 | 01 | EN 149:2001/A1:2009 EN 1827:1999/A1:2009 | Choice of standard | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.062 | 01 | EN 143:2001/A1:2006 | Filter, clogging, penetration test | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.063 | 01 | EN 14387:2008 | Carbon Monoxide Filter Marking | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 02.073 | 01 | EN 14594:2018 | Compressed air supply tube, Resistance to kinking | 08.08.2019 | 15.09.2019 | 14.03.2022 |

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|------------------------|----|---------------------|-----------------------------------------------------------------------|----------|----------|----------|
| 02.080 | 01 | EN 143:2021 | Specified mass of test aerosol for exposure test | 10.02.22 | 30.04.22 | 31.08.23 |
| 02.081 | 01 | EN 143:2021 | Conditioning sequence reversed | 10.02.22 | 30.04.22 | 31.08.23 |
| 02.082 | 01 | EN 143:2021 | Storage test, use of "for single shift use only" pictogram | 10.02.22 | 30.04.22 | 31.08.23 |
| 02.083 | 01 | EN 149:2001+A1:2009 | Temperature, Conditioning, Mechanical Strength, Condition of specimen | 29.04.22 | 31.05.23 | 31.01.24 |
| 02.084 | 01 | EN 14387:2021 | Specified mass of test aerosol for exposure test | 29.04.22 | 31.05.23 | 31.01.24 |
| 02.085 | 01 | EN 14387:2021 | Conditioning sequence reversed | 29.04.22 | 31.05.23 | 31.01.24 |
| 02.086 | 01 | EN 149:2001+A1:2009 | Colors, applied colors | 08.06.22 | 31.05.23 | 31.01.24 |
| 02.087 | 01 | EN 137:2006 | Flame engulfment, hood | 21.04.23 | 31.05.23 | 31.01.24 |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/02.003 Version 1 |
| Number of pages: 1 Origin : Vertical Group 2 | Approval stage : Approved on : <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 21.04.2018 <input checked="" type="checkbox"/> EU PPE Working Group 29.11.2019 | |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> EN/prEN: All standards <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: | | |
| Key words: Variations, conformity | | |
| Question: How to treat the many variations of essentially the same equipment? e. g. a turbo unit with a series of different facepieces / hoods and filters. How many tests should be performed? | | |
| Solution: Perform as many tests as needed to verify the conformity of all elements in the different versions of the equipment also perform tests to verify the conformity of the complete equipment. | | |
| Comment: This suggestion was made that Notified Bodies should make their own decisions to establish the same testing procedures for all testhouses. | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/02.015
Version 1

RECOMMENDATION FOR USE

Number of pages: 1

Approval stage :

Approved on :

Origin : Vertical Group 2

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| <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |

Question related to PPE Regulation

EN/prEN: Standards including
IL/TIL tests

Other:

Article:

Annex:

Clause:

Key words: Test panel, total inward leakage testing (TIL), inward leakage testing (IL)

Question:

For (total) inward leakage testing the EN standards of RPD typically require a test panel of 10 persons.

If the RPD is submitted in several sizes, should a test house select the test panel to ensure that all sizes have been tested?

Solution:

In the case of an RPD being submitted for type examination in more than one size then the test panel should be arranged so that all sizes are tested for inward leakage.

Sufficient specimens shall be provided to enable a total of 10 IL / TIL tests to be performed.

It may not be possible to test all sizes of RPD.



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/02.018
Version 1

RECOMMENDATION FOR USE

Number of pages: 1

Approval stage :

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Origin : Vertical Group 2

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| <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |

Question related to PPE Regulation

EN/prEN: EN 149:2001

Other:

Article:

Annex:

Clause:

Key words: Modified PPE

Question:

If an existing, certified, filtering facepiece (EN 149:2001) is modified by adding an exhalation valve, can a reduced panel (fewer tests subjects) for total inward leakage testing be used to assess compliance of the modified product?

Solution:

No, it is not possible to reduce the number of tests because the additional exhalation valve has a noticeable influence on the expected performance.

Where an exhalation valve is added to a certified filtering half mask (EN 149:2001) the product is considered as a new model.



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/02.058
Version 1

RECOMMENDATION FOR USE

Number of pages: 1

Approval stage :

Approved on :

Origin : Vertical Group 2

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|----------------------------------------------------------|------------|
| <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |

Question related to PPE Regulation

EN/prEN: All Standards

Other:

Article:

Annex:

Clause:

Key words: Reporting, Test results

Question:

Is it necessary to report measurement values in addition to reporting the assessment for each clause?

Solution:

Yes.

The values used to determine the assessment should be reported.



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/02.063
Version 1

RECOMMENDATION FOR USE

Number of pages: 1

Approval stage :

Approved on :

Origin : Vertical Group 2

| | |
|----------------------------------------------------------|------------|
| <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |

Question related to PPE Regulation

EN/prEN: EN 14387:2008

Other:

Article:

Annex:

Clause: 1

Key words: Carbon Monoxide Filter Marking

Question:

Is it possible to have a mixed marking of multi-type gas filters according to EN 14387:2008 including a Carbon monoxide (CO) marking according to another standard than EN 14387:2008?

Solution:

EN 14387:2008 states the Scope "Filters for use against CO are excluded from this standard."

A mixed marking is not possible.

An additional, clearly separated marking on the filter is possible.





CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/02.073
Version 1

RECOMMENDATION FOR USE

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| Number of pages: 1 | Approval stage : | Approved on : |
| Origin : VG2 | <input checked="" type="checkbox"/> Vertical Group | 08.08.2019 |
| | <input checked="" type="checkbox"/> Horizontal Committee | 15.09.2019 |
| | <input checked="" type="checkbox"/> EU PPE Expert Group | 14.03.2022 |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines | <input checked="" type="checkbox"/> EN/prEN: EN 14594:2018 | <input type="checkbox"/> Other: |
| Article: | Annex: | Clause: 6.10.2 |
| Key words: Compressed air supply tube, Resistance to kinking | | |
| Question: A/ The initial starting position of the hose clamps appears inconsistent between Figures 5, 6 and Figure 7. What is the correct starting position of the hose clamps? B/ There appears to be no reference to how quickly the hose is straightened. What is the time duration of the test? | | |
| Solution: A/ Position the hose clamps as demonstrated in Figure 7 B/ The loop is to be straightened over between 5 seconds and 15 seconds. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/02.081 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 2 | <input checked="" type="checkbox"/> Vertical Group 10/02/2022 <input checked="" type="checkbox"/> Horizontal Committee 30/04/2022 <input checked="" type="checkbox"/> EU PPE Expert Group 31/08/2023 | |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 143:2021 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: | | |
| Key words: conditioning sequence reversed | | |
| <p>Question:</p> <p>In EN 143:2021, conditioned filter shall be tested after the temperature conditioning in accordance with 7.4.1 followed by the mechanical strength conditioning in accordance with 7.4.2</p> <p>In previous version of the standard EN 143:2000+A1:2006, filter shall be tested after mechanical strength conditioning followed by temperature conditioning.</p> <p>The conditioning sequence is reversed.</p> <p>For filter already tested according to EN 143:2000+A1:2006, due to of this conditioning sequence reverse, do we have to repeat the tests according to EN 143:2021?</p> | | |
| <p>Solution:</p> <p>The modification of the conditioning sequence is an alignment with ISO 17420-2.</p> <p>This modification is not a modification of the state of the art.</p> <p>It's not necessary to repeat tests due to the modification of conditioning sequence.</p> <p>It can be necessary to repeat tests for other reason</p> | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/02.082 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 2 | <input checked="" type="checkbox"/> Vertical Group 10/02/2022 <input checked="" type="checkbox"/> Horizontal Committee 30/04/2022 <input checked="" type="checkbox"/> EU PPE Expert Group 31/08/2023 | |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 143:2021 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: | | |
| Key words: Storage test, use of "for single shift use only" pictogram | | |
| <p>Question:</p> <ul style="list-style-type: none"> - N and NR markings are deleted from EN 143:2021. - A pictogram "for single shift use only" is defined in 3.2.2 - According to 6.12, all particle filter should conform Exposure test (5.4 of EN 13274-7:2019) and Storage test (5.5 of EN 13274-7:2019) - In 8 "markings", symbol 3.2.2 is not referenced <p>Does it mean that all particles filters shall conform to test after storage, be classified as reusable and symbol of §3.2.2 shall not be used?</p> | | |
| <p>Solution:</p> <p>All particles filters shall meet the requirements after storage tests.</p> <p>If a manufacture still wants to indicate that single shift use is recommended, the manufacturer should use the pictogram defined on 3.2.2 of EN 143:2021.</p> <p>The single shift use shall be clearly and completely defined in the instruction for use.</p> | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/02.086
Version 1

RECOMMENDATION FOR USE

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| Number of pages: 1 | Approval stage : | Approved on : |
| Origin : Vertical Group 2 | <input checked="" type="checkbox"/> Vertical Group | 08/06/2022 |
| | <input checked="" type="checkbox"/> Horizontal Committee | 31/05/2023 |
| | <input checked="" type="checkbox"/> EU PPE Expert Group | 31/01/2024 |

Question related to PPE Regulation PPE Guidelines EN/prEN: EN 149:2001+A1:2009 Other:

Article: Annex: Clause:

Key words: colors, applied colors

Question:
a) For filtering half masks supplied in a variety of colours, how should testing and certification be performed?
b) Do the testing recommendations depend on how the color has been applied to the mask?
Information on possible color options:
The inner and outer layer or the entire filtering half mask can be coloured by mixing the color throughout the polymer material or the color can be applied onto the mask material by painting, printing, spraying, or coating. Different kinds of colors and their patterns can be applied e.g. for each batch. Also, the head bands can be coloured by mixing the color throughout the (polymer) material.

Inkjet technique is not covered by this RFU.

Solution for the question a)

Declarations of the manufacturer

If the manufacturer makes a written declaration that the material of the filtering half masks is consistent across the colors and that the colors do not affect performance, it is not necessary for the Notified Body to require the testing of each color. Below minimum recommendation for the tests should be followed.

If the manufacturer does not provide such a written declaration, complete testing of each color shall be performed.

The manufacturer shall declare for each colored version that the filtering half mask does not affect adverse effects on the user's health.

The manufacturer shall declare that visibility and legibility are controlled for the markings of each color.

Minimum recommendation for the tests

For initial type-examination, the testing should include as wide range of the available colors supplied by the manufacturer as possible but perform testing using the standard sample quantities.

If the manufacturer wishes to add a color to a type-examined filtering half mask, which has no colored versions in initial testing, these tests are recommended for the first three color versions:

- EN 149:2001+A1:2009, 7.9.2 (Penetration of filter material), paraffin oil only, preconditioning of the samples: 3 AR, 3 SW and 3 MS+TC
- EN 149:2001+A1:2009, 7.16 (breathing resistance), preconditioning of the samples: 3 AR, 3 TC and 3 SW
- EN 149:2001+A1:2009, 7.11 (Flammability), preconditioning of the samples: 2 AR and 2 TC

If the manufacturer wishes to add even further colors with the same coloration technique, it is concluded that the coloration technique and the colors do not affect the performance of the filtering half mask and further testing is not needed.

EU type-examination

If any of the filter penetration, breathing resistance or flammability test results for a colored version is significantly different from the other test results, passing of all the tests of EN 149:2001+A1:2009 standard are required for the colored version. The magnitude of the significant difference shall be decided in EU type-examination.

The technical documentation shall describe each color or the coloring technique and color variability if the color and its pattern can be variable.

The technical documentation shall include a written declaration to ensure that marking is visible and legible on each color of mask.

If the Notified Body deems it necessary, samples with markings can be requested in order to check the visibility and legibility of markings. For example, black marking on dark color is not acceptable.

If the EU type-examination certificate has a description or drawing for recognizing the filtering half mask, all colors shall be included, or in case of the variable colors and patterns produced, the coloring technique, and if possible, the limits of the colors shall be described.


Solution for the question b)

If the filtering half mask has any visible changes besides the color, e.g. surface structure of the colored layers, the mask shall be treated as different product.

**Vertical Recommendation for Use sheets (RfUs)
of Vertical Group 3 “Eye and face protection”
of the European Coordination of Notified Bodies in the field of Personal Protective Equipment (PPE)**

Regulation (EU) 2016/425

| Number of RfU PPE-R/ | Version | Reference | Keywords | Approved by Vertical Group 2 | Approved by Horizontal Committee | Endorsed by PPE Expert Group |
|-----------------------------|----------------|---------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------|-------------------------------------|
| 03.032 | 01 | ISO 16321:2021 series EN ISO 12312-2 : 2013 | Blue Light Absorption / Transmittance, protection against blue light emitted by natural or artificial sources | 26.11.2021 | 30.04.2022 | 31.08.2023 |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/03.032 Version 01 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 3 | <input checked="" type="checkbox"/> Vertical Group 26/11/2021 <input checked="" type="checkbox"/> Horizontal Committee 30/04/2022 <input checked="" type="checkbox"/> EU PPE Expert Group 31/08/2023 | |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: ISO 16321 : 2021 series EN ISO 12312-2 : 2013 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: | | |
| Key words: Blue Light Absorption / Transmittance, protection against blue light emitted by natural or artificial sources | | |
| <p>Question:</p> <p>ISO 16321-1:2021 does only establish a requirement for solar blue-light absorption / transmittance (in 6.3.3.5.2), but does not establish a requirement for blue-light absorption / transmittance for spectacles and glasses intended to protect against radiation emitted from artificial sources. A requirement for the blue-light absorption / transmittance of welding filters is given in ISO 16321-2:2021, 4.3.1.2. Another requirement for the blue light absorption / transmittance is given in EN ISO 12312-1, 5.3.5.1 for sunglasses for general use. No required limits are given in any of these standards.</p> <p>What shall be the requirement for the blue-light absorption / transmittance for spectacles, lenses or glasses intended to provide protection against radiation emitted from artificial sources in the blue spectral range?</p> | | |
| <p>Solution:</p> <p>Which value, either / both the solar blue-light absorption / transmittance or / and the blue-light absorption / transmittance shall be specified, depends on the intended application.</p> <p>If the manufacturer claims that a filter (lenses, ocular etc) provides a protection against blue light, either / both the solar blue-light absorption / transmittance τ_{sb} (for protection against sunlight) or / and the blue-light absorption / transmittance τ_b (for protection against artificial sources) shall be specified. Where it is claimed that a filter has less than x % (solar) blue-light transmittance, the (solar) blue-light transmittance, τ_{sb} or τ_b, of the filter shall not exceed $(x + 0,5)$ %. Where it is claimed that a filter has more than x % (solar) blue-light absorption, the (solar) blue-light transmittance, τ_{sb} or τ_b, of the filter shall not exceed $(100,5-x)$ %. Either / both the solar blue-light transmittance or / and the blue-light transmittance shall be measured according to ISO 18526-2 9.1 or / and 9.2.</p> | | |

**Vertical Recommendation for Use sheets (RfUs)
of Vertical Group 4 “Hearing protection”
of the European Coordination of Notified Bodies in the field of Personal Protective Equipment (PPE)**

Regulation (EU) 2016/425

| Number of RfU PPE-R/ | Version | Reference | Keywords | Approved by Vertical Group 4 | Approved by Horizontal Committee | Endorsed by PPE Expert Group |
|-----------------------------|----------------|--------------------------------|--------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------|-------------------------------------|
| 04.001 | 01 | EN 352-1:2002/ 13819-1:2002 | Earmuffs with different wearing modes, headband force | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.006 | 01 | EN 352 (all parts), 13819-2 | HPD of particular size, sound attenuation measurement | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.007 | 01 | EN 13819-1:2002 | Ear-muffs, drop test | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.008 | 01 | EN 13819-2:2002 | Sound attenuation, earplugs in different colours | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.009 | 01 | EN 13819-2:2002 | Sound attenuation, custom moulded earplugs | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.010 | 01 | EN 352-2:2002 | Corded custom moulded earplugs, corded earplugs, earplugs | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.011 | 02 | EN 352-2:2002 | Re-usable earplugs, storage-packaging | 20.05.2021 | 01.10.2021 | 18.11.2022 |
| 04.012 | 01 | EN 352-3:2002 | Helmet-mounted earmuffs | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.015 | 01 | EN 352-4:2001/13819-2:2002 | Level-dependent earmuffs, MIRE, measurement noise, volume control | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.017 | 01 | EN 352-2:2002 | Custom moulded earplugs | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.019 | 01 | EN 352-4:2001, 352-8:2008 | Level-dependent earmuffs with integrated broadcast-receiver | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.020 | 02 | EN 352-6:2002 | Communication earmuffs with an audio input (by wire) | 20.05.2021 | 01.10.2021 | 18.11.2022 |
| 04.022 | 01 | EN 352-6/-8/-11:2002 | Hearing protection device with audio communication | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.027 | 01 | EN 352-8:2008 | Wireless complete hearing protection systems with reproduced sound for entertainment | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.036 | 01 | EN 13819-2:2002 | Insertion loss, asymmetric design, electronic earmuffs | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.037 | 01 | EN 13819-1:2002 | Nominal size designation, flanged earplugs | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.038 | 01 | EN 352-4:2001 EN 352-7:2002 | Level dependent earmuff/earplugs, minimum criterion levels | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.039 | 01 | PPE Regulation | Earplugs, special use, risk in water | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.040 | 01 | EN 352-7:2002 | Earplugs, non-passive earplugs, special use, impulse noise | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.041 | 01 | EN 352-6:2002 | Calculation of mean electrical input level, earmuffs with electrical audio input | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.042 | 01 | EN 352-2:2002 | Banded earplugs worn under the chin, test dimension for sizing | 21.04.2018 | 21.04.2018 | 29.11.2019 |

| Number of RfU PPE-R/ | Version | Reference | Keywords | Approved by Vertical Group 4 | Approved by Horizontal Committee | Endorsed by PPE Expert Group |
|------------------------|---------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------------|------------------------------|
| 04.043 | 01 | EN 352-2:2002 | Banded earplugs, exchange of plugs of banded earplugs | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.044 | 01 | EN 352-6:2002 | Earmuffs with electrical audio input, electrical safety | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.045 | 01 | EN 352-2:2002 | Additional check of protective function, custom moulded earplugs, leakage | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.049 | 01 | EN 352-6:2002 | Earmuffs with communication facilities | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.050 | 02 | EN 352-5:2002 + A1:2005 | Hearing protectors with active noise control | 20.05.2021 | 01.10.2021 | 18.11.2022 |
| 04.051 | 01 | EN 13819-2:2002 | Drop test for earplugs | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.052 | 01 | EN 352-6:2002 | Hearing protectors for safety-related communication, user information | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 04.054 | 01 | EN ISO 4869-1 + -2 | Sound attenuation, decimal place, APV | 24.11.2017 | 18.07.2018 | 05.11.2018 |
| 04.055 | 01 | prEN 13819-3:2016 | Hearing protectors with Bluetooth® facilities | 02.10.2017 | 18.07.2018 | 05.11.2018 |
| 04.056 | 01 | EN 352-2:2002 | Earplugs for children, user information | 20.05.2021 | 01.10.2021 | 18.11.2022 |
| 04.057 | 01 | EN 352-2:2020 | Custom moulded earplugs, individual fit test by the customer itself | 03.03.2023 | 31.05.2023 | 31.01.2024 |
| 04.058 | 01 | EN 352-3:2020 | Mounted earmuffs, earmuffs attached to head protection and/or face protection devices, package information, labelling, size range, warning | 07.07.2022 | 31.05.2023 | 31.01.2024 |
| 04.059 | 01 | EN 13819-2:2020 | Under-the-chin banded earplugs, replacement of test subjects | 07.07.2022 | 31.05.2023 | 31.01.2024 |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/04.007
Version 01

RECOMMENDATION FOR USE

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Origin : VG 4 Hearing protection

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|----------------------------------------------------------|------------|
| <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |

Question related to PPE Regulation

EN/prEN: EN 13819-1:2002

Other:

Article:

Annex:

Clause: 4.6 and 4.7

Key words:

Ear-muffs, drop test

Question:

How shall earmuffs be examined for damage after drop test?

Solution:

When examining an HPD for damage after drop test, if necessary, the cushions and/or liners should be removed before examination and then replaced.



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/04.008
Version 01

RECOMMENDATION FOR USE

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| Number of pages: 1 | Approval stage : | Approved on : |
| Origin : VG 4 Hearing protection | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| | <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |
| Question related to <input type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN 13819-2:2002 | <input checked="" type="checkbox"/> Other: ISO 4869-1 |
| Article: | Annex: | Clause: 4.2 |
| Key words: Sound attenuation, earplugs in different colours | | |
| Question: Shall sound attenuation measurements be repeated in case an earplug is supplied in different colours? | | |
| Solution: If possible, one measurement should be performed and the samples used for that measurement should include all colours. | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/04.009
Version 01

RECOMMENDATION FOR USE

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| Number of pages: 1 | | Approval stage : | Approved on : |
| Origin : VG 4 Hearing protection | | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | | <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| | | <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |
| Question related to | <input type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN 13819-2:2002 | <input checked="" type="checkbox"/> Other: ISO 4869-1 |
| Article: | Annex: | Clause: 4.2 | |
| Key words: Sound attenuation, custom moulded earplugs | | | |
| Question: Some types of custom moulded earplugs are offered with a special cream intended to ease the insertion of the earplug into the ear-canal. Shall sound attenuation measurements be performed using such cream? | | | |
| Solution: The sound attenuation measurements shall be performed <u>without</u> the use of such cream. | | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/04.010
Version 01

RECOMMENDATION FOR USE

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| Number of pages: 1 | | Approval stage : | Approved on : |
| Origin : VG 4 Hearing protection (submitted by BGIA) | | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | | <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| | | <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |
| Question related to | <input checked="" type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN 352-2:2002 | <input type="checkbox"/> Other: |
| Article: | Annex: II, 1.2.1 | Clause: | |
| Key words: Corded custom moulded earplugs, corded earplugs, earplugs | | | |
| Question: By sudden and fast removal of earplugs ear drum ruptures occurred, especially when the cord of corded earplugs was used to remove the earplugs out of the ear canal. What should notified bodies require from the manufacturer to avoid this? | | | |
| Solution: The manufacturer should add a warning to the user information: "Warning: Sudden or fast removal of the earplugs out of the ear canal may damage the ear drum." | | | |




CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/04.017
Version 01

RECOMMENDATION FOR USE

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| Number of pages: 1 | | Approval stage : | Approved on : |
| Origin : VG 4 Hearing protection (submitted by BIA, Germany) | | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | | <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| | | <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |
| Question related to | <input type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN 352-2:2002 | <input type="checkbox"/> Other: |
| Article: | Annex: | Clause: | |
| Key words: Custom moulded earplugs | | | |
| Question: Which qualification is required for a person, who makes impressions of the concha and external ear-canal of the test subjects? | | | |
| Solution: It should be carried out by a trained specialist for hearing aids or adequately trained personal. | | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/04.022 Version 01 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : VG 4 Hearing protection | <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 21.04.2018 <input checked="" type="checkbox"/> EU PPE Working Group 29.11.2019 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input checked="" type="checkbox"/> EN/prEN: EN 352-6/-8/-11:2002 <input type="checkbox"/> Other: | | |
| Article: Annex: II, 3.5 Clause: | | |
| Key words: Hearing protection device with audio communication | | |
| Question: i) Is a hearing protection device (HPD) with audio communication a hearing protector within the meaning of the regulation (EU) 2016/425? ii) Is it possible to certify a communication hearing protector without sound pressure limiter limiting the total exposure of the user according to the requirement given in the PPE regulation? | | |
| Solution: i) It is an HPD if the manufacturer declares it and it should meet the requirements of the regulation. ii) From the technical point of view it is possible to produce every communication hearing protector with a sound pressure level limiter. Therefore in general it should not be possible to certify communication hearing protectors without limiter. In case a specific need exists for no limitation or a limitation at higher values of L_{Aeq} (equivalent continuous A-weighted sound pressure level) than the limit values given by the essential health and safety requirement „Protection against the harmful effects of noise“, clause 3.5 of Annex II of the regulation (EU) 2016/425 on personal protective equipment, the use has to be restricted to specific applications. These applications have to be specified in the user information and on the packaging. In addition, an appropriate warning and a description of the measures to be taken by the user is required in the user information in order not to exceed the daily limit value. | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/04.027
Version 01

RECOMMENDATION FOR USE

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| Number of pages: 1 | Approval stage : | Approved on : |
| Origin : VG 4 Hearing protection (submitted by BIA, Germany) | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| | <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |
| Question related to <input type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN 352-8:2008 | <input type="checkbox"/> Other: |
| Article: | Annex: | Clause: |
| Key words: Wireless complete hearing protection systems with reproduced sound for entertainment | | |
| Question: These systems transmit signals for example via local induction loops. How should such products be tested? | | |
| Solution: They should be tested as earmuffs with broadcast receivers (see EN 352-8:2008, 5.2.3). | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/04.037
Version 01

RECOMMENDATION FOR USE

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| Number of pages: 1 | | Approval stage : | Approved on : |
| Origin : VG 4 Hearing protection | | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | | <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| | | <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |
| Question related to | <input type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN 13819-1:2002 | <input type="checkbox"/> Other: |
| Article: | Annex: | Clause: 5.2.3 | |
| Key words: Nominal size designation, flanged earplugs | | | |
| Question: EN 13819-1, clause 5.2 reads: In order to assign a nominal size designation to each earplug, the dimensions of that part or those parts of the earplug that are intended to seal the ear canal are assessed using a gauge comprising a set of circular holes. Which flanges shall seal the circular hole? | | | |
| Solution: At least that flange showing the smallest and that one with the largest diameter shall seal one circular hole. | | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/04.040
Version 01

RECOMMENDATION FOR USE

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| Number of pages: 1 | | Approval stage : | Approved on : |
| Origin : VG 4 Hearing protection (submitted by INRS, France) | | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | | <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| | | <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |
| Question related to | <input checked="" type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN 352-7:2002 | <input type="checkbox"/> Other: |
| Article: | Annex: | Clause: 4.1.4 | |
| Key words: Earplugs, non-passive earplugs, special use, impulse noise | | | |
| Question: In which way shall the peak attenuation against very high level peak noise of level-dependent earplugs without electronic sound restoration be tested? | | | |
| Solution: Note that EN 352-7:2003 does not cover the assessment of protection of earplugs against the risk of exposure to high peak levels. Measure the peak attenuation on a suitable ear simulator, using an appropriate noise source. The conversion of the measurement data into data characterising the equivalent external impulse sound field may be not straightforward. Only those converted data can be used to compare the exposure under an earplug to peak limit values specified in the EU Directive 2003/10/EC. | | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/04.041
Version 01

RECOMMENDATION FOR USE

Number of pages: 1

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Approved on :

Origin : VG 4 Hearing protection (submitted by BGIA, Germany)

| | |
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| <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
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Question related to PPE Regulation

EN/prEN: EN 352-6:2002

Other:

Article:

Annex:

Clause: Annex B

Key words:

Calculation of mean electrical input level, earmuffs with electrical audio input

Question:

Annex B of EN 352-6 asks for the calculation of the electrical input level for which the mean value plus one standard deviation of the A-weighted diffuse-field related sound pressure level of all sixteen ears is equal to 82 dB(A) .

The procedure to find the mean value is not specified. How should the mean electrical input level be determined?

Solution:

Corresponding to the calculation of the criterion levels in EN 352-4 the following procedure should be applied:

Determine, by interpolation where necessary, the electrical input level (X_i) for which the A-weighted diffuse-field related sound pressure level under the earmuff is equal to 82 dB for each of the 16 ears and then calculate the mean electric input level $(X_1+X_2+\dots+X_{16})/16$ and the standard deviation.




CO-ORDINATION OF NOTIFIED BODIES
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| Origin : VG 4 Hearing protection (submitted by BGIA, Germany) | | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
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| | | <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |
| Question related to | <input checked="" type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN 352-2:2002 | <input type="checkbox"/> Other: |
| Article: | Annex: II, 2.9 | Clause: 6.2 | |
| Key words: Banded earplugs, exchange of plugs of banded earplugs | | | |
| Question: EN 352-2 does not require a description on exchange of plugs of banded earplugs to be included within the user instruction as EN 352-1 does for the exchange of cushions of earmuffs. | | | |
| Solution: The manufacturer shall add a description on how to exchange plugs of banded earplugs to the wearer information in case he provides exchange sets for that banded earplugs. | | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/04.050 Version 2 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 4 | <input checked="" type="checkbox"/> Vertical Group 20.05.2021 <input checked="" type="checkbox"/> Horizontal Committee 01.10.2021 <input checked="" type="checkbox"/> EU PPE Expert Group 18.11.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: : EN 352-5:2002 + A1:2005 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: 6.1 c) and Annex B | | |
| Key words: Hearing protectors with active noise control | | |
| Question: EN 352-5 does not clearly specify the procedure to calculate the total sound attenuation in the active mode of the ANR HPD. Moreover the user information is not required to contain the total attenuation, only the active values. How shall the total sound attenuation be calculated and what attenuation values shall be included in the user information? | | |
| Solution: Aim is the calculation of the assumed protection value (APV) of the total (active plus passive) attenuation. It shall be derived by the active attenuation measured according to EN 352-5, Annex B and the passive attenuation determined according to EN ISO 4869-1:2018. 1. Calculate the mean and standard deviation of the active attenuation in one-third-octave bands between 50 Hz and 10 kHz as measured according to chapter 5.2/Annex B of EN 352-5. 2. Interpolate the subjective REAT data (from 16 test subjects according to EN ISO 4869-1:2018) linearly in one-third-octave bands between 63 Hz and 8 kHz for mean and SD. Extrapolate the subjective data to 50 Hz and 10 kHz. 3. Add the mean values of the two contributions (active and passive) to get the mean of the total attenuation for each one-third-octave band. 4. Average the three one-third-octave bands of total attenuation for one octave band (between 63 Hz and 8 kHz) energetically (using negative values, i.e. the residual level under the HPD). The lowest attenuation has the highest weight for the end result. This yields the mean of the total attenuation in octave bands. 5. Sum the standard deviation of passive and active attenuation quadratically for one-third-octave bands between 50 Hz and 10 kHz. 6. Average the three standard deviation values for one octave band (between 63 Hz and 8 kHz) energetically using positive values, i.e. the highest value has the highest weight for the end result. This yields the standard deviation of the total attenuation in octave bands. 7. Calculate the APV for each octave band by subtracting the standard deviation from the mean of the total attenuation. $APV_{tot} = m_{tot} - s_{tot}$ Content of the user information (6.1 c): The user information shall contain the mean, standard deviation and APV between 63 Hz and 8 kHz for the total attenuation together with the derived HML and SNR values. | | |



CO-ORDINATION OF NOTIFIED BODIES
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| <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |

Question related to PPE Regulation

EN/prEN: EN 352-6:2002

Other:

Article:

Annex:

Clause: 6

Key words:

Hearing protectors for safety-related communication, user information

Question:

How can it be ensured that hearing protectors for safety-related communication (that do not contain a limiter) are not used for entertainment purposes?

Solution:

An additional warning in the user information should be included that reads:

“This product may not be used for entertainment since the output level is not limited to the necessary innocuous level.”

**Vertical Recommendation for Use sheets (RfUs)
of Vertical Group 5 “Protective Clothing, Hand and Arm Protection”
of the European Coordination of Notified Bodies in the field of Personal Protective Equipment (PPE)**

Regulation (EU) 2016/425

| Number of RfU PPE-R/ | Sheet number | Version | Reference | Keywords | Approved by Vertical Group 5 | Approved by Horizontal Committee | Endorsed by PPE Expert Group |
|-----------------------------|------------------------|----------------|---------------------------------------------------------|-------------------------------------------------------------|-------------------------------------|-----------------------------------------|-------------------------------------|
| General | 21-014 | 01 | EN ISO 13688:2013 (4.2) | Innocuousness, azo colourants | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| General | 20-003 | 01 | EN ISO 13688:2013 | Comfort, practical performance | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| General | 20-010 | 01 | EN 13911:2004 | Fire hoods, practical performance test | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| General | 32-004 | 01 | EN 13911:2004 / EN 13911:2017 | Categorization | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| General | 20-016 | | EN 14877:2002 | Abrasive blasting; categorization | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| General | 05.031 | 01 | | Optional clauses | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| General | 05.105 | 01 | | Categorization; working garments | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| General | 05.230 | 01 | | Water vapour resistance | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| General | 05.289 | 01 | | Dimensional change; seams | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| General | 05.292 | 01 | | Combination of PPE | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| General | 05.355 | 01 | | Reference to standards | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| General | 17-007 | 01 | | Categorization; combination of properties | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| General | 19-013 | 01 | | Draft standards | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| General | 23-011 | 01 | | Examination of models | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| General | 25-003 | 01 | EN 530 / EN ISO 12947-2 | Abrasion | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| General | 30-003 | 01 | | Validity of test reports | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| General | 30-007 | 01 | | Pretreatment; drying procedures | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| General | 30-009 | 01 | | Module C2 schedule; Module B renewal | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| General | 32-012 | 01 | | Symbols, date of obsolescence, date of manufacture, marking | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| | | | | | | | |
| High Visibility | 31-008 | 01 | | Harnesses | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| High Visibility | 05.181 | 01 | EN 471: 2003 (4.1) / EN ISO 20471: 2013 (4.1) | Classification; Jacket with removable sleeves | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| High Visibility | 05.341 | 01 | EN 471: 2003 (4.1, 5.1) / EN ISO 20471: 2013 (4.1, 5.1) | Classification; perforated materials | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| High Visibility | 05.116 | 01 | EN 471: 2003 (4.1) / EN ISO 20471: 2013 (4.1) | Classification; combined performance materials | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| High Visibility | 28-009 | 01 | EN ISO 20471: 2013 (4.1) | Minimum area | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| High Visibility | 29-012 | 01 | EN ISO 20471: 2013 (4.1) | Combined performance material; class | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| High | 34-009 | 01 | EN ISO 20471: | Background; encircle | 28-8-2019 | 30-9-2019 | 7-2-2020 |

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| Visibility | | | 2013 (4.1, 4.2) | | | | |
| High Visibility | 05.346 | 01 | EN 471: 2003 (4.2) / EN ISO 20471: 2013 (4.2) | Design; retroreflective; patterns | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| High Visibility | 29-008 | 01 | EN ISO 20471: 2013 (4.2.1, 4.2.2) | Background; interruptions | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| High Visibility | 29-010 | 01 | EN ISO 20471: 2013 (4.2.1, 4.2.2) | Retroreflective bands; shoulders | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| High Visibility | 34-011 | 01 | EN ISO 20471: 2013 (4.2.2) | Design; sleeve; torso. | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| High Visibility | 29-001 | 01 | EN ISO 20471: 2013 (4.2.3) | waist; bib and brace | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| High Visibility | 28-008 | 01 | EN ISO 20471: 2013 (5) | Acceptance of EN 471 test report | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| High Visibility | 30-001 | 01 | EN ISO 20471: 2013 (5.3) | Colour fastness; trimmings | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| High Visibility | 29-018 | 01 | EN ISO 20471: 2013 (5.3.3) | Colour fastness; hot pressing | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| High Visibility | 23-001 | 01 | EN 471: 2003 (6) / EN ISO 20471: 2013 (6) | Segmented retroreflective tapes | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| High Visibility | 17-004 | 01 | EN 471: 2003 (6.2) / EN ISO 20471: 2013 (6.2) | Washing, maximum number of cycles | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| High Visibility | 29-017 | 01 | EN ISO 20471: 2013 (6.2.1) | Retroreflective; washing | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| High Visibility | 19-001 | 01 | EN 13356: 2001 (5.2.2) | Reflective; measurement | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| High Visibility | 21-015 | 01 | EN 13356 / EN 1150 | High visibility accessories, cape for horse riders | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| High Visibility | 21-004 | 01 | EN 13356 | High visibility accessories, minimum area | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| | | | | | | | |
| EN ISO 11612 | 24-007 | 01 | EN ISO 11612:2015 | Categorization | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 22-018 | 01 | EN ISO 11612:2015 | Categorization | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 05.229 | 01 | EN ISO 11612:2015 (1) | Visors | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 24-019 r2 | 01 | EN ISO 11612:2015 (4.2.2) | Suits; single garments | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 31-002 | 01 | EN ISO 11612:2015 (4.2.2) | Quick-release fastenings | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 24-018 | 01 | EN ISO 11612:2015 (4.3) | Pockets; flame spread | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 05.308 | 01 | EN ISO 11612:2015 (4.5) | Molten metal design; Pockets | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 05.314 | 01 | EN ISO 11612:2015 (4.5) | Molten metal design; Pockets | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 05.354 | 01 | EN ISO 11612:2015 (4.5) | Molten metal design; Pockets | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 29-014 | 01 | EN ISO 11612:2015 | Design; pockets | 28-8-2019 | 30-9-2019 | 7-2-2020 |

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| | | | (4.5b) | | | | |
| EN ISO 11612 | 29-016 | 01 | EN ISO 11612:2015 (4.5b) | Design; pockets | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 30-002 | 01 | EN ISO 11612:2015 (4.5b) | Design; pockets | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 23-010 | 01 | EN ISO 11612:2015 (4.5d) | Molten metal design; overlapping seams | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 29-015 | 01 | EN ISO 11612:2015 (4.5e) | Design; closures | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 18-009 | 01 | EN ISO 11612:2015 (4.5) | Molten metal design; Zips | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 27-014 | 01 | EN ISO 11612:2015 (4.5) | Molten metal design, closures, cover flap | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 25-011 | 01 | EN ISO 11612:2015 (5.2.1; 5.2.3) | Pre-treatment of material | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 23-018 | 01 | EN ISO 11612:2015 (5.2) | Flame spread; cleaning | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 05.334 | 01 | EN 469: 2005 (5.2) | Pretreatment; flame spread | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 26-006b | 01 | EN ISO 11612:2015 (6.2) | Heat resistance; accessories; hardware | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 27-004 | 01 | EN ISO 11612:2015 (6.2.1) | Heat resistance; hardware | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 29-023 | 01 | EN ISO 11612:2015 (6.2.1) | Heat Resistance; shrinkage | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 24-020 | 01 | EN ISO 11612:2015 (6.3.2.2) | Multilayer garments | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 29-004 | 01 | EN ISO 11612:2015 (6.3.2.2) | Hole formation; outer layer | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 30-006 | 01 | EN ISO 11612:2015 (6.3.2.2) | Multilayer; Limited flame spread; Heat transmission | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 26-006a | 01 | EN ISO 11612:2015 (6.3.2) | Flame spread; seams; accessories; hardware | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 30-004 | 01 | EN ISO 11612:2015 (6.3.2.3) | Flammability behaviour; hardware | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 25-006 | 01 | EN ISO 11612:2015 (6.3.2.4) | Flammability behaviour; embroidery | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 27-009 | 01 | EN ISO 11612:2015 (6.3.2.4) | Flammability behaviour; transfer logos | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 24-013 | 01 | EN ISO 11612:2015 (6.3.3.1) | Flame spread; hems; seams | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 26-008 | 01 | EN ISO 11612:2015 (6.5.4) | Seam strength | 28-8-2019 | 30-9-2019 | 7-2-2020 |

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| EN ISO 11612 | 27-003 | 01 | EN ISO 11612:2015 (7.2; 7.3) | Heat transfer; assembly; interlining | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 34-014 | 01 | EN 407: 2004 (5.4) | Radiant heat level | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 26-015 | 01 | EN ISO 11612:2015 (7.4; 7.5) / ISO 9185 | Molten metal splashes test | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 30-008 | 01 | EN ISO 11612:2015 (7.5) | Molten metal splashes test; Retroreflective | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11612 | 31-003 | 01 | EN ISO 11612:2015 (Annex B) | Second set of specimens | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11611 | 05.292 | 01 | | Combination of PPE | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11611 | 24-028 | 01 | EN ISO 11611: 2007 (4.1) | Single garments | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11611 | 24-029 | 01 | EN ISO 11611: 2007 (4.1) | Additional protective clothing | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11611 | 26-016 | 01 | EN ISO 11611: 2007 (4.1) | Short sleeves; short trousers | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11611 | 05.335 | 01 | EN 470-1: 1995 (4.1) EN ISO 11611: 2007 (4.1) | Design | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11611 | 24-003 | 01 | EN ISO 11611: 2007 (4.1.1) | Design; neck; collar | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11611 | 29-016 | 01 | EN ISO 11612:2015 (4.5b) | Design; pockets | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11611 | 29-014 | 01 | EN ISO 11612:2015 (4.5b) | Design; pockets | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11611 | 29-015 | 01 | EN ISO 11612:2015 (4.5e) | Design; closures | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11611 | 23-018 | 01 | EN ISO 11612:2015 (5.2) | Flame spread; cleaning | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11611 | 05.334 | 01 | EN 469: 2005 (5.2) | Pretreatment; flame spread | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11611 | 26-008 | 01 | EN ISO 11612:2015 (6.5.4) | Seam strength | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11611 | 24-013 | 01 | EN ISO 11612:2015 (6.3.3.1) | Flame spread; hems; seams | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11611 | 26-006 | 01 | EN ISO 11611: 2007 (6.7) | Flame spread; seams; accessories; hardware | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11611 | 25-002 | 01 | EN ISO 11611: 2007 (6.9) | Heat transfer, multi-layers | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 11611 | 34-014 | 01 | EN 407: 2004 (5.4) | Radiant heat level | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 469 | 17-015 | 01 | EN 469: 2005 (1) | Certification, separate clothing items | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 469 | 05.157 b | 01 | EN 469: 1995 (4.6) | Closure systems | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 469 | 05.328 | 01 | EN 469: 2005 (4.3) | Neck protection | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 469 | 05.334 | 01 | EN 469: 2005 | Pretreatment; flame spread | 28-8-2019 | 30-9-2019 | 7-2-2020 |

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| | | | (5.2) | | | | |
| EN 469 | 05-157 | 01 | EN 469: 2005 (6.1) | Badges, logos | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 469 | 05.352 | 01 | EN 469: 2005 (6.1) | Embroideries | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 469 | 21-013 | 01 | EN 469: 2005 (6.1.6) | Hardware; flame spread | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 469 | 22-001 | 01 | EN 469: 2005 (6.1, 5.3) | Flame spread, materials, component assembly | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 469 | 22-003 | 01 | EN 469: 2005 (6.1, 6.5, 3) | Flame spread, materials, hardware, braces | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 469 | 22-002 | 01 | EN 469: 2005 (6.5, 5.3) | Heat resistance, materials, clothing assembly | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 469 | 28-005 | 01 | EN 469: 2005 (6.7) | Tear strength | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 469 | 05.061 | 01 | EN 469: 1995 (7.5) EN 469: 2005 (6.10) | Liquid penetration | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 469 | 23-020 | 01 | EN 469: 2005 (6.14) | Fluorescent material | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 469 | 25-001 | 01 | EN 469: 2005 (6.14, Annex B); | Retroreflective; fluorescent; minimum area | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 469 | 22-004 | 01 | EN 469: 2005 (7.4.2) | Heat protection; marking | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 469 | 25-007 | 01 | EN 469: 2005 (Annex B) | Retroreflective photometric performance | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 14116 | 18-008 | 01 | EN 533:1997 (4.1) / EN ISO 14116:2008 (4.1) / EN ISO 14116:2015 (4.1) | Index 1; skin contact | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 14116 | 26-006 | 01 | EN ISO 11611: 2007 (6.7) | Flame spread; seams; accessories; hardware | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Arc flash | 22-016 | 01 | CLC/TS 50354 | Acceptance criteria | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 9150 | 05.272 | 01 | | calorimeter | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 9151 | 05.323 | 01 | EN ISO 9151 | | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 9185 | 29-013 | 01 | EN ISO 9185:2007 | Damage definition, PVC sensor | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN ISO 15025 | 05.283 | 01 | EN 532 | Hole, flame-spread test | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| CHEMICAL | 05.042 | 01 | EN 369 (5.2) | permeation, collecting medium | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| CHEMICAL | 21-011 | 01 | EN 1073-2 (4.2) | Radioactive contamination – puncture resistance | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| CHEMICAL | 05.351 | 01 | EN 13034 | Additional features | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| CHEMICAL | 27-012 | 01 | EN 13034: 2005/A1: 2009 (4.1) | Penetration & repellency; FR treatments | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| CHEMICAL | 21-026 | 01 | EN 13034 (4.2) | Chemical penetration, seams etc. | 28-8-2019 | 30-9-2019 | 7-2-2020 |

| Number of RfU PPE-R/ | Sheet number | Version | Reference | Keywords | Approved by Vertical Group 5 | Approved by Horizontal Committee | Endorsed by PPE Expert Group |
|----------------------|---------------------------------------------------------------|---------|---------------------------------------------------|-----------------------------------------------------------------------------|------------------------------|----------------------------------|------------------------------|
| CHEMICAL | 27-002 | 01 | EN 13034: 2005/A1: 2009 (5.1) | Partial body protection | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| CHEMICAL | 18-003 | 01 | EN ISO 13982-1 (6e) | instructions for use; test results | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| CHEMICAL | 21-023 | 01 | EN 14126 (4.1.4) | infective agents | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| CHEMICAL | 24-024 | 01 | EN 14605: 2005 | Face protection; User Information | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| CHEMICAL | 29-002 | 01 | EN 14605: 2005 (4.1, 4.2) | Permeation; chemicals | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| CHEMICAL | 20-004 | 01 | General | Abrasion, flex cracking, pressure pot | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| CHEMICAL | 05.318 | 01 | General | Instructions for use | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| CHEMICAL | 05.158 ; 05.350 | 01 | General | Pockets | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| CHEMICAL | 05.313 | 01 | General | Repellency | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| CHEMICAL | 33-003 | 01 | EN 14605: 2005/A1: 2009 / EN 13034: 2005/A1: 2009 | Spray test; Jet test | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| | | | | | | | |
| EN 388 | 17-011 | 01 | General | Gloves without fingertip | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 388 | 05.125 | 01 | General | performance levels | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 388 | 05.290 RFU 05.32-003 r1 | 01 | EN 388: 2016 (6.1) | Coated gloves, abrasion | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 388 | 32-003 r1 | 01 | EN 388: 2016 (6.1.5.3) | Abrasion, layers | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 388 | 18-002 | 01 | EN 388: 2016 (6.2.3) | Cut resistance | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 388 | 32-009 | 01 | EN 388: 2016 (6.2.6) | Cut resistance | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 388 | 34-004 | 01 | EN 388: 2016 (6.2.6) | Blade cut resistance | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 388 | 34-003 | 01 | EN 388: 2016 (6.2, 6.3) | Blade cut resistance | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 388 | 05.264 | 01 | EN 388: 2016 (6.4) | Tear strength | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 388 | 22-010 | 01 | EN 388: 2016 | Mechanical protection | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 388 | 27-001 | 01 | EN 388: 2016 | Leather; description; thickness | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 388 | 27-005 | 01 | EN 388: 2016 (7,8) | Marking, Information | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| | | | | | | | |
| EN 374 | 26-012 | 01 | EN ISO 374-1: 2016 | Marking | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 374 | 28-003 | 01 | EN 16523-1:2015 | permeation, gloves with irregular design | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 374 | 33-001 | 01 | EN ISO 374-1:2016 / EN 374-4: 2013 | Degradation; Hydrofluoric Acid | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 374 | 33-002 | 01 | EN ISO 374-1:2016 | Permeation levels; User information | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 374 | 32-005 | 01 | EN374-4: 2013 | Sampling, puncture test, irregular construction, chemical protective gloves | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 374 | 34-005 | 01 | EN ISO 374-1:2016 (Table 2) | Permeation against chemicals | 28-8-2019 | 30-9-2019 | 7-2-2020 |

| Number of RfU PPE-R/ | Sheet number | Version | Reference | Keywords | Approved by Vertical Group 5 | Approved by Horizontal Committee | Endorsed by PPE Expert Group |
|--------------------------|-----------------------------|---------|---------------------------------------|--------------------------------------------------------|------------------------------|----------------------------------|------------------------------|
| Gloves general | 27-011 | 01 | General | Gloves; cold; categorization | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Gloves EN 420 | 23-007 | 01 | EN 420: 2010 (4.3.2) | pH value | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Gloves EN 420 | 32-010 | 01 | EN 420: 2003 (4.3.2) | pH value | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Gloves EN 420 | 19-012 | 01 | EN 420: 2010 (4.3.3) | Chromium | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Gloves EN 420 | 19-011 | 01 | EN 420: 2010 (4.3.4) | Protein content | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Gloves EN 420 | 20-006 | 01 | EN 420: 2010 (4.3.4) | Gloves, natural rubber, protein content | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Gloves EN 420 | 18-014 | 01 | EN 420: 2010 (5.3) | Water vapour transmission and absorption | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Gloves EN 420 | 23-006 | 01 | EN 420: 2010 (5.3.1) | Water vapour transmission | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Gloves EN 421 | 19-004 | 01 | EN 421: 2010 | Radiologist's gloves; ionizing radiation | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Gloves EN 511 | 34-008 | 01 | EN 511: 2006 (4.5 / 5.5) | insulation against cold, heated gloves | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Gloves EN 659 | 19-010 | 01 | EN 659: 2008 | Firefighter's gloves; cuffs | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Gloves EN 659 | 22-013 | 01 | EN 659: 2008 | Firefighter gloves; heat transfer | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Gloves EN 659 | 24-009 | 01 | EN 659: 2008 | Firefighter gloves; features | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Gloves EN 659 | 22-014 | 01 | EN 659: 2008 | Firefighter gloves; marking | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Electrostatic charges | 28-012 | 01 | EN 61340 | Electrostatics | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Electrostatic charges | 34-010 | 01 | EN 1149-5:2018 (4.2.1) | Surface resistance; Surface resistivity | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Electrostatic charges | 34-016 | 01 | EN 1149-5:2018 (4.2.2.2, 4.2.2.3) | Attachments; Conductive parts | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Cold protective clothing | 05.299 | 01 | EN 342:2017 | combination of cold protection and chemical protection | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Cold protective clothing | 22-017 (Q1) | 01 | EN 342: 2017; EN 14058: 2017 | Categorization; scope | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Cold protective clothing | 27-015 | 01 | EN 342: 2017 | ensembles and garments; cap | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| Cold protective clothing | 33-005 | 01 | EN 342: 2017 / EN 14058:2017 Clause 5 | pre-treatment; design and comfort; innocuousness | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 343 | 17-007 | 01 | General | Categorization; combination of properties | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 343 | 26-014 | 01 | EN 343: 2019 | Removable sleeves | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 407 | 05.245 r3 | 01 | EN 407: 2004 | Categorization | 28-8-2019 | 30-9-2019 | 7-2-2020 |

| Number of RfU PPE-R/ | Sheet number | Version | Reference | Keywords | Approved by Vertical Group 5 | Approved by Horizontal Committee | Endorsed by PPE Expert Group |
|----------------------|-------------------------|---------|-------------------------|---------------------------------------------|------------------------------|----------------------------------|------------------------------|
| EN 407 | 05.337 | 01 | EN 407: 2004 (5.2) | Categorization; contact heat | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 407 | 29-020 | 01 | EN 407: 2004 (5.2) | Classification; contact heat | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 407 | 34-014 | 01 | EN 407: 2004 (5.4) | Radiant heat level | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 407 | 29-019 | 01 | EN 407: 2004 (5.6) | Thermal protection; molten metal | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 407 | 27-013 | 01 | EN 407: 2004 (4.2) | | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 12477 | 24-010a | 01 | EN 12477: 2001 (5.7) | Convective heat | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 510 | 05.252 | 01 | EN 510: 1993 | Entanglement with moving parts | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 510 | 05.353 | 01 | EN 510: 1993 | External pockets | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 14404 | 18-004 | 01 | 6.2.2 | PPE; definition | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 14404 | 33-006 | 01 | | Scope | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 14404 | 23-003 | 01 | 3.3, 6.2, 3.3, 6.2, 8.1 | Type 2; Trousers | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 14404 | 26-007 | 01 | 5.2.5; 6.5 | Penetration resistance | 28-8-2019 | 30-9-2019 | 7-2-2020 |
| EN 16689 | 33-007 | 01 | EN 16689: 2017 (7.8.2) | pre-treatment, viral penetration resistance | 28-8-2019 | 30-9-2019 | 7-2-2020 |

| Number of RfU PPE-R/ | Version | Reference | Keywords | Approved by Vertical Group 2 | Approved by Horizontal Committee | Endorsed by PPE Expert Group |
|--------------------------------------------------------|---------|----------------------|-------------------------------------------|------------------------------|----------------------------------|------------------------------|
| 05.05-110 | 02 | EN 366 | Radiant heat; colour | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.05-156 | 02 | EN ISO 11612:2015 | Dimensional change, knitted fabrics | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.05-184 | 02 | EN 1082 | Butcher gloves | 16-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.05-188 | 02 | EN 530:2010 | Abrasion, pressure | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.05-223 | 02 | | Marking, partial protection | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.05-226 | 02 | EN 14605 | Attached items | 16-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.05-251 | 02 | EN ISO 20471: 2013 | Design; retroreflective; arrangement | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.05-282 | 02 | EN 470-1 | Molten metal drops; high visibility | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.05-309 | 02 | | Test report, reference to regulation | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.05-316 | 02 | EN 366 / EN ISO 6942 | Blackening of calorimeter | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.05-348 05.21-010 | 02 | EN ISO 20471: 2013 | Bands encircling the torso | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.17-002 | 02 | | Instructions of use | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.17-008 | 02 | | Protective clothing, categorisation | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.17-017 | 02 | | Various performance levels in one garment | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.17-018 | 02 | EN ISO 20471: 2013 | Retroreflective; shoulder bands | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.18-005 | 02 | EN 659:2008 | Firefighter gloves; puncture | 16-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.18-006 | 03 | EN 14404 | Type 2, trousers | 18-03-2022 | 30-04-2022 | 31-08-2023 |
| 05.19-002 | 02 | EN 13356:2001 | Retroreflective; angle | 15-06-2021 | 01-10-2021 | 18-11-2022 |

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|----------------------------|----|----------------------------------------------------------|--------------------------------------------------------------------|------------|------------|------------|
| 05.22-008 | 02 | EN ISO 20471:2013 | Colour fastness; non-fluorescent | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.23-005 | 02 | EN 13034 | Repellency, penetration | 16-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.23-013 | 02 | EN ISO 20471:2013 | Retroreflective bands | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.24-006 | 02 | EN ISO 20471:2013 | Retroreflective; encircling bands | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.24-012b | 03 | EN 1149-5 | Design, vests | 18-03-2022 | 30-04-2022 | 31-08-2023 |
| 05.24-026 | 02 | EN ISO 20471:2013 | Measurement of background material; combined performance materials | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.26-001 | 02 | EN 13034 | Breathable spray-tight | 16-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.26-013 | 02 | | Antineoplastic agents | 16-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.28-007 | 02 | EN 61482-2 - IEC 61482-2:2009 | Retro-reflective | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.28-010 | 02 | EN ISO 20471:2013 | Coated fabrics and laminates; water vapour resistance | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.29-007 | 02 | EN ISO 20471:2013 | Physiological performance; Contrast material | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.29-011 | 02 | EN ISO 11612:2015 | Definitions; material; flame spread | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.31-001 | 02 | EN 13034:2005 /A1:2009 | Washing, reimpregnation, care label | 16-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.32-011 | 02 | EN ISO 13688:2013 | Marking | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.33-004 | 02 | EN ISO 11611:2015 | Aprons; plastic buckles | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.34-002 | 00 | EN 14325:2018 | Pressure pot; abrasion | 22-05-2019 | 30-04-2022 | 31-08-2023 |
| 05.34-006 | 02 | EN ISO 20471:2013 +A1:2016 / EN 14058:2017 / EN 342:2017 | Water vapour resistance, comfort, combination of standards | 15-06-2021 | 01-10-2021 | 18-11-2022 |
| 05.34-007 | 02 | EN 13034:2005/ A1:2009 | Pre-treatment, liquid repellency and penetration | 16-06-2021 | 01-10-2021 | 18-11-2022 |



CO-ORDINATION OF NOTIFIED BODIES PPE

Vertical Group 5: Protective clothing and gloves

RECOMMENDATION FOR USE

General

Rev.: 2019-08

Approval by:

Horizontal Committee

PPE expert group

Approved on:

30-09-2019

7-2-2020

| Sheet number PPE- R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment |
|-------------------------------|-------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| 21-014 | EN ISO 13688:2013 (4.2) | Innocuousness, azo colourants | <p>EN ISO 13688: 2013 clause 4.2 Innocuousness, paragraph (d), states that Azo colourants, which release carcinogenic amines listed in EN14362-1, shall not be detected by the method in that standard.</p> <p>EN14362-1 is the method for the determination of amines in <u>natural</u> fibres. This method is not suitable for <u>synthetic</u> fibres or for <u>leathers</u>.</p> | <p>EN 14362-2 should be used for synthetic fibres and CEN ISO/TS 17234: 2003 used for dyed leathers</p> <p>For information: EN 14362 Textiles - Methods for the determination of certain aromatic amines derived from azo colorants</p> <p>Part 1: Detection of the use of certain azo colorants accessible without extraction</p> <p>Part 2: Detection of the use of certain azo colorants accessible by extracting the fibres</p> <p>CEN ISO/TS 17234:2003 Leather -- Chemical tests -- Determination of certain azo colourants in dyed leathers</p> | <p><i>Approval by Horizontal Committee: 30-9-2019</i></p> <p><i>Approval by PPE expert group: 7-2-2020</i></p> |
| 20-003 | EN ISO 13688:2013 | Comfort, practical performance | <p>What is the minimum requirement to meet clauses 1.2.1.2 and 1.2.1.3 of the Essential Health and Safety Requirements?</p> | <p>When there is no specific assessment procedure in the relevant product standard, Annex C of EN ISO 13688: 2013 or a similar assessment shall be used.</p> | <p><i>Approval by Horizontal Committee: 30-9-2019</i></p> <p><i>Approval by PPE expert group: 7-2-2020</i></p> |



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| 20-010 | EN 13911:2004 | Fire hoods, practical performance test | <p>The paragraph 6.2 refers to annex B (a normative annex). This annex describes a practical performance test which shall be conducted with fire-fighter equipment: firehood, clothing, breathing apparatus, helmet, and gloves.</p> <p>As this test is depending on the type of each equipment used and as it is the responsibility of the fire-fighter to select the correct equipment depending on a risk assessment (and not the notified body):</p> <p>Is it possible for a notified body to issue an EC type examination based on EN 13911 without carrying out the practical performance test defined in annex B but with a warning which explains that the fire-fighter shall conduct the test before selecting a firehood?</p> | <p>No, as the annex B is normative, no EC type examination based on EN 13911 should be issued without carrying out the practical performance test.</p> <p>Compatibility of the hood with other PPE items shall be checked. It is the responsibility of the manufacturer to propose a set of PPE to be used with the hood. This set can later be extended.</p> | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |
| 32-004 | EN 13911:2004 / EN 13911:2017 | Categorization | <p>What Category are firefighter's hoods conforming to EN 13911?</p> <p>These items are intended to be worn together with firefighter suits complying with EN 469, breathing apparatus complying with EN 136 and EN 137, and helmets complying with EN 443, and are worn during structural firefighting.</p> | <p>Firefighter PPE for use in high-temperature environments, as found in structural firefighting, is Category III. This includes fire hoods intended to be worn for protection during structural firefighting.</p> | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |
| 20-016 | EN 14877:2002 | Abrasive blasting; categorization | <p>To which category of PPE do abrasive blasting clothing of Type 1 (no respiratory protection), Type 2 (upper part of the body) and Type 3 (whole body protection, including respiratory protection) belong?</p> | <p>Type 1 is PPE of category II (independent of respiratory protection devices).</p> <p>Types 2 and 3 are category III, because they are used in combination with respiratory protection devices.</p> | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |

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| 05.031 | | Optional clauses | In several standards, some properties are marked: "if required". Shall the corresponding tests be carried out necessarily? | The test shall only be carried out on request of the manufacturer or if the property is claimed in the technical file or the information for use. | Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020 |
| 05.105 | | Categorization; working garments | Are classical working garments considered as protective clothing? | A classical working garment which protects only against non aggressive dust without any specific protection is not considered as protective clothing and is excluded from the scope of the PPE Regulation. For a PPE the risk has to be described by the manufacturer. Sanctioning improper use is the responsibility of the market surveillance. | Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020 |
| 05.230 | | Water vapour resistance | Annex II, 2.2 of the Regulation states that PPE enclosing parts of the body shall minimise perspiration resulting from use. Otherwise it must be equipped with means of absorbing perspiration. Is it necessary to test all kinds of clothing for water vapour resistance? | No, several techniques (design, cooling garments, ventilation) can be used to meet that requirement | Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020 |
| 05.289 | | Dimensional change; seams | Is dimensional change in clothing only related to length and width or to seams too? | At the moment only shrinkage of materials shall be tested. | Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020 |
| 05.292 | | Combination of PPE | A manufacturer produces a vest, sleeves that can be attached to the vest or used separately, apron and gaiters for welders, all made of the same material. Can he submit one technical file containing designs, etc for all of them? In such a case, can each garment, separately bear the CE marking? | It is possible to submit one technical file only for all products. This depends on the intended use. If the manufacturer points out in the information leaflet that they must always be used together, then one certification shall be carried out. If not, several separate certifications are possible. | Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020 |

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| 24-028 | EN ISO 11611: 2007 (4.1) | Single garments | Standards said: "heat and flame protective suits shall completely cover the upper and lower torso, neck, arms and legs. Suits shall consist of a single garment, e.g. an overall or boiler suit, or a two-piece garment, consisting of a jacket and a pair or trousers. | 24-028 | EN ISO 11611: 2007 (4.1) |
| 24-029 | EN ISO 11611: 2007 (4.1) | Additional protective clothing | It is possible to certify only neck curtain, hoods, sleeves apron and gaiters? | Yes. | Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020 |
| 26-016 | EN ISO 11611: 2007 (4.1) | Short sleeves; short trousers | Can we certify a garment with short sleeves or short trousers to thermal risks (welding protection)? | No. | Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020 |
| 05.335 | EN 470-1: 1995 (4.1) EN ISO 11611: 2007 (4.1) | Design | In case a zipper is used: should it be covered when made of metal to prevent electrical conduction (as per EN 470-1) or should it be treated as to prevent sticking of the molten metal (as per EN 531 D and E). | The outside of the zippers shall be covered | Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020 |
| 24-003 | EN ISO 11611: 2007 (4.1.1) | Design; neck; collar | Clause 4.1.1 of EN ISO 11611 states that: "Welders' protective suits shall completely cover the upper and lower torso, neck, arms and legs." What form of collar is required to meet this Clause? The text implies that the collar must completely cover the neck, including the throat, in the same way that firefighter's suits protect the wearer's neck. | A standard shirt-type collar, or a mandarin collar, are suitable for this type of end-use, provided that they can be fastened at the neck. A collar that fastens over the throat, such as a firefighter's collar, is not normally required for this end use. | Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020 |
| 05.355 | | Reference to standards | Can a garment label refer to e.g. EN 343 when the material does not fulfil the requirement for bursting strength? | One can only refer to a standard when <u>all</u> criteria of this standard are met. The pictogram is not protected and can be used | Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020 |

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| 17-007 | | Categorization; combination of properties | <p>If we receive a PPE where the manufacturer's instructions show the foul weather and the heat and flame pictograms, can a Notified Body certify this PPE only against the thermal risks?</p> <p>What if instead of the foul weather pictogram (category I), a static electricity pictogram (category II) is used?</p> | <p>It is impossible to make partial certificates for the same PPE and hence all relevant essential requirements shall be checked. The PPE categorization and the corresponding certification procedure are determined by the "highest" type of risk.</p> | <p><i>Approval by Horizontal Committee: 30-9-2019</i> <i>Approval by PPE expert group: 7-2-2020</i></p> |
| 19-013 | | Draft standards | <p>For some PPE, no harmonized standards exist and there are only draft standards available. In case of EU type examination of such equipments, what version of draft standard can be used? The most recent publicly available draft or the most recent working group draft?</p> | <p>In all cases certification shall be made against the essential requirements of the Regulation. The draft standard may be used as a technical tool but by itself does not give a presumption of conformity, like a harmonized standard does.</p> <p>The manufacturer cannot claim compliance with the harmonised standard either. To do this the laboratory results shall be reviewed alongside the final standard when it is available.</p> <p>A working group draft of later date than the public enquiry draft is to be considered as a more accurate reflection of the state of the art, as it takes the comments of the enquiry into account. Such a document can be expected to be closer to the final text of the standard than an enquiry draft.</p> | <p><i>Approval by Horizontal Committee: 30-9-2019</i> <i>Approval by PPE expert group: 7-2-2020</i></p> |

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| 23-011 | | Examination of models | <p>According to the Regulation the certification body shall conduct the necessary examinations to establish the conformity of the model with the essential health and safety requirements. But what does it mean? Should the same model in every different material concept or variation be examined?</p> <p>For example: If a company have a model of a fire fighter's jacket in five different tested material concepts that fulfils the requirements of EN 469 and three different reflective materials that also fulfils the requirements in combination with the material concepts. Shall each combination of the model be examined? In this example it means examination of 15 jackets, provided by the manufacturer.</p> | <p>All model, material and colour changes shall be brought to the attention of the notified body.</p> <p>If the manufacturer can show that these changes can be seen as a variant to a certified model in the sense of the PPE guidelines, a new model examination shall not be required.</p> <p>If the manufacturer can show that there will be no influence on the protective properties, the changes shall not be considered as a new model and no model examination shall be required.</p> | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |
| 25-003 | EN 530 / EN ISO 12947-2 | Abrasion | <p>Martindale testing machines for use in the test methods – EN 530 (indicated in EN 471, EN 343), EN 388 clause 6.1 or EN ISO 12947-2 (indicated in EN 343), should meet the requirements of EN ISO 12947-1 and have the counter for counting the abrasion rubs, but not abrasion cycles.</p> <p>However standards EN 388, EN 471, EN 343 state requirements for abrasion resistance in abrasion cycles.</p> <p>Does it mean, that required number of abrasion cycles, performing above mentioned tests, should be converted into rubs, multiplying the number of cycles by 16, according to definitions described in EN ISO 12947-1, clause 3 ?</p> | <p>In EN ISO 12947 a cycle is a full Lissajous figure (16 revolutions)</p> <p>In EN 388, EN 471, EN 343 and other performance specifications, a 'cycle' usually means 1 revolution or 'rub'.</p> <p>We ask CEN TC162 to clarify the definition in their standards.</p> | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |

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| 30-003 r1 | | Validity of test reports | The acceptance of test reports for EU Type-Examination is treated differently by Notified Bodies, is it possible to come to a consensus that all NB's use the same approach ? | <p>Yes.</p> <p>The acceptance of test reports EU Type-Examination is the responsibility of the Notified Body. Module B of the PPE Regulation states: “carry out appropriate examinations and tests, or have them carried out.....”</p> <p>In cases where the Notified Body accepts test reports only until a certain date, such date should be not less than 5 years.</p> <p>The Notified Body may also require verification testing of materials.</p> | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |
| 30-007 | | Pretreatment; drying procedures | Is it permissible to omit drying procedures between wash cycles on washing pre-treatments where passive drying procedures are to be used (e.g. for ISO 11612, ISO 11611, EN 469, ISO 14116, ISO 20471 etc.) | <p>Yes, as passive drying procedures do not affect properties such as heat and flame resistance, physical properties, colour and retroreflectivity. Where drying procedures are passive (e.g. Line dry, Flat dry, Drip Dry) drying procedures may be omitted between wash cycles and only conducted after the final wash. However, the material should be removed from the machine between washes.</p> <p>But where active drying procedures are required (e.g. Tumble dry) the drying procedures must be conducted between washes, in standards where the laundry cycle is defined as “each cycle consists of one wash and one drying cycle”.</p> | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |
| 30-009 | | Module C2 schedule; Module B renewal | <p>Vertical Groups have been asked by the Horizontal Committee to try to harmonize their procedures for Module C2.</p> <p>What principles should be followed when conducting Module C2 on protective clothing and gloves?</p> | <p>The Notified Body has the responsibility for the Module C2 process.</p> <p>All protection offered by the product shall be examined. The tests can be spread over 5 years.</p> <p>The tests carried out can be taken into consideration during the renewal of the EU Type-Examination Certificate.</p> | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |
| 32-012 | | symbols, date of obsolescence, date of manufacture, marking | Which symbols should be used, if information according to PPE Regulation Annex II, paragraph 2.4 is required on the marking / label of protective clothing or gloves? | <p>If symbols are used, then the following symbols should be used:</p> <p>ISO 7000 nr 2607 for date of obsolescence </p> <p>ISO 7000 nr 2497 for date of manufacture </p> | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |



**CO-ORDINATION OF
NOTIFIED BODIES PPE**

**Vertical Group 5: Protective
clothing and gloves**

**RECOMMENDATION FOR
USE**

High Visibility
EN ISO 20471 (EN 471) –
EN 1150 – EN 13356
Rev.: 2019-08

Approval by:
Horizontal Committee
EU PPE Expert Group

Approved on:
30-09-2019
7-2-2020

| Sheet number PPE- R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment |
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| 31-008 | | Harnesses | <p>In the previous Standard EN 471:2003, there was sub-clause 4.2.9 relating to harnesses:</p> <p>“Harnesses shall comprise a retroreflective band (separate or combined performance materials) encircling the waist and other retroreflective bands (separate or combined performance materials) joining the waistband from the back to the front over both shoulders, the bands not less than 30 mm wide.”</p> <p>But in the current Standard EN ISO 20471:2013 High visibility clothing – Test methods and requirements, there is no clause relating to harnesses.</p> <p>So the question is how to deal with harnesses?</p> | <ol style="list-style-type: none"> 1. To EN 13356, for a Type 2 accessory intended to signal the user's presence visually when illuminated by vehicle headlight on dark roads. 2. To the Regulation, taking into account the draft standards for products for use in medium risk situations. | <p><i>Approval by Horizontal Committee: 30/09/2019</i></p> <p><i>Approval by PPE expert group: 07/02/2020</i></p> |

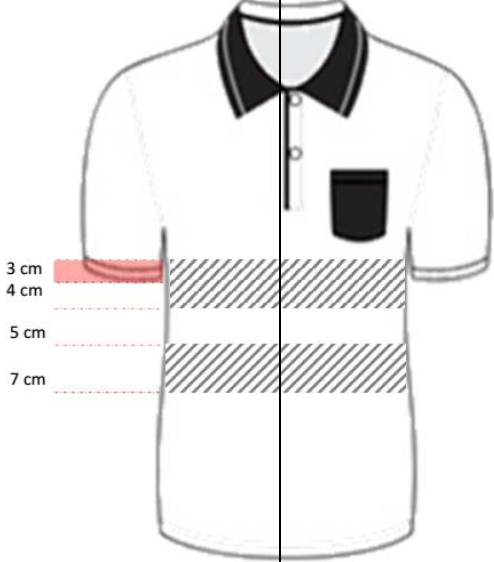
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| 05.181 | EN 471: 2003 (4.1) / EN ISO 20471: 2013 (4.1) | Classification; Jacket with removable sleeves | How to certify/classify a jacket with removable sleeves (class 3 with sleeves and class 2 without)? | <p>The class indication in the marking could be replaced by an "i" referring to the instruction for use.</p> <p>An alternative is to mention the highest class in the marking, accompanied by a warning (in full text and in the language of the country of use) that this ranking can not be obtained if the garment is worn without sleeves</p> <p>The choice is left to the manufacturer but everything has to be fully explained in the instructions for use, which are an integral part of the technical documentation.</p> | <p>Approval by Horizontal Committee: 30/09/2019</p> <p>Approval by PPE expert group: 07/02/2020</p> |
| 05.341 | EN 471: 2003 (4.1, 5.1) / EN ISO 20471: 2013 (4.1, 5.1) | Classification; perforated materials | <p>How shall the minimum required area (performance class) be determined in the case of perforated materials?</p> <p>Shall the minimum luminance factor be applied also to perforated background materials?</p> | <p>The colour test shall be carried out on the material as it is used (i.e., samples with perforation), the area to be taken into account for classification purposes is the total visible area of perforated material (i.e., without deducting the area of the perforations).</p> | <p>Approval by Horizontal Committee: 30/09/2019</p> <p>Approval by PPE expert group: 07/02/2020</p> |
| 05.116 | EN 471: 2003 (4.1) / EN ISO 20471: 2013 (4.1) | Classification; combined performance materials | Is it possible to certify all types of garments with combined performance material in class 1? | <p>Combined materials can be used for all types of high visibility garments in class 1</p> | <p>Approval by Horizontal Committee: 30/09/2019</p> <p>Approval by PPE expert group: 07/02/2020</p> |
| 28-009 | EN ISO 20471: 2013 (4.1) | Minimum area | <p>Clause 4.1 final paragraph states:</p> <p>“At least (50 ± 10) % of the minimum area of visible background material shall be on the front part of the garment.”</p> <p>No requirements for minimum area are given for the back of the garment. The required area for the front of the garment is stated to be at least 50±10% of the minimum area. This is a contradiction.</p> | <p>At least 40% of the minimum area, as specified in Table 1 of EN ISO 20471, shall be on the front of the garment, and at least 40% of the minimum area, as specified in Table 1 of EN ISO 20471, shall be on the back of the garment.</p> <p>The requirements of Table 1 for minimum area shall be met.</p> | <p>Approval by Horizontal Committee: 30/09/2019</p> <p>Approval by PPE expert group: 07/02/2020</p> |


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| 29-012 | EN ISO 20471: 2013 (4.1) | Combined performance material; class | <p>Clause 4.1 states “Garments shall comprise the required areas of background material and retroreflective material or alternatively shall comprise the required area of combined performance material”.</p> <p>For combined performance material, you only have the option ‘Class 1’ even when there is combined performance material which meets the requirements of Table 4 (Minimum coefficient of retroreflection in $cd/(lx \cdot m^2)$ for separate performance retroreflective material).</p> | <p>If combined performance material which meets Table 4 of the EN ISO 20471 is used for high-visibility garments, these tapes can be classified as separate performance retroreflective material so that the garments can reach a higher class.</p> | <p>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</p> |
| 34-009 | EN ISO 20471: 2013 (4.1, 4.2) | Background; encircle | <p>EN ISO 20471+A1:2016 clause 4.1 states:</p> <p>“The garment shall be made of high visibility material on all sides. To ensure visibility from all sides (360 degrees visibility), it is important that horizontal retroreflective bands and fluorescent material encircle torso, trouser legs and sleeves.”</p> <p>EN ISO 20471 clause 4.2.2 states:</p> <p>“The background material shall encircle the torso and sleeves and shall maintain a minimum width (height) of 50 mm.”</p> <p>EN ISO 20471 clause 4.2.3 states:</p> <p>“The background material shall encircle the trouser legs and shall maintain a minimum width (height) of 50 mm.”</p> <p>How much of the background material shall as a minimum encircle the sleeves, legs and torso?</p> | <p>Minimum 50 mm band around the torso, the trouser legs and the sleeves.</p> | |

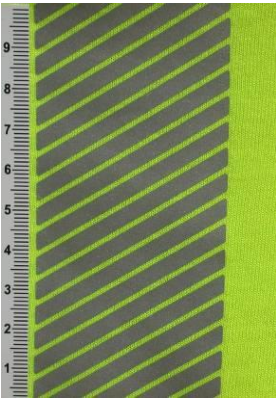
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| 05.346 | EN 471: 2003 (4.2) / EN ISO 20471: 2013 (4.2) | Design; retroreflective; patterns | <p>Is it possible to introduce different patterns of retroreflective striping as variants as long as the specification (classification and performance requirements) is met?</p> <p>Same rationale for various background colours?</p> | <p>It is possible to accept these variants if they are clearly explained in the technical documentation and if all possibilities are included in the test report</p> <p>Idem.</p> | <p>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</p> |
| 29-008 | EN ISO 20471: 2013 (4.2.1, 4.2.2) | Background; interruptions | <p>There is no definition about the quantity and dimensions of interruptions in fluorescent background material by fastening systems (e.g. zipper) and seams, only for retro-reflective material. Some designs of light and sportive jackets don't have a hidden opening in front.</p> <p>Doesn't it make sense to allow such interruptions in fluorescent background material?</p> | <p>Interruptions in fluorescent background material are allowed for zipper closing systems, excluding those covered by flaps with non-fluorescent material.</p> | <p>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</p> |




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| 29-010 | EN ISO 20471: 2013 (4.2.1, 4.2.2) | Retroreflective bands; shoulders | <p>Clauses 4.2.1 and 4.2.2 of EN ISO 20471 (Garments covering torso and arms) say:</p> <p>“Any gap (for fastening systems and seams) in the lengthwise continuity of each band of retroreflective or combined performance material shall not be greater than 50 mm, measured parallel to the direction of the band, and the total of such gaps shall not be greater than 100 mm in any one band around the torso”</p> <p>Does this mean that the retro reflective tapes around the shoulders cannot be interrupted? For example: the flap of a pocket?</p> | <p>Treat horizontal and vertical torso bands in the same way.</p> <p>Gaps of no more than 50 mm are allowed in each vertical retroreflective band, measured parallel to the direction of the band, and the total of such gaps shall not be greater than 100 mm in each band.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i></p> <p><i>Approval by PPE expert group: 07/02/2020</i></p> |
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| 34-011 | EN ISO 20471: 2013 (4.2.2) | Design; sleeve; torso. | <p>The manufacturer wants to certify a t-shirt without retroreflective tape on the sleeves, only on the torso.</p> <p>Is it possible certify the t-shirt, as presented in the picture below, without retroreflective tape on the sleeves?</p>  <p>Observation: Each retroreflective band on the torso is 7 cm in width (height). The sleeve blocks 3 cm of the view of the torso band. There remains 4 cm of torso band not blocked.</p> | <p>Yes.</p> <p>a) If the manufacturer reduces the sleeve length by 3 centimetres;</p> <p>b) if the manufacturer puts a single retroreflective band on the sleeve 50 mm above the sleeve edge.</p> <p>c) if the manufacturer lowers both horizontal torso bands.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i></p> <p><i>Approval by PPE expert group: 07/02/2020</i></p> |
| 29-001 | EN ISO 20471: 2013 (4.2.3) | waist; bib and brace | <p>Does EN ISO 20471 allow to consider a band of retroreflective material around the waist of a of bib and brace trousers in the assessment of the minimum required area of retroreflective material?</p> | <p>No.</p> <p>Clause 4.1 of EN ISO 20471 contains the sentence: “Only those areas of retroreflective materials that comply with the design requirements of 4.2 shall be used in the assessment of the minimum required area of retroreflective areas.”</p> <p>This design feature was a “must-have” in EN 471 for Class 2 and 3 but it’s no longer considered. Neither the requirements in 4.2 nor the examples shown in Figure 3 refer to it.</p> | |

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| 28-008 | EN ISO 20471:2013 (5) | Acceptance of EN 471 test report | <p>A client applies for EN ISO 20471:2013 certification.</p> <p>Do you consider / accept fabric test reports tested according to EN 471:2003+A1 where all properties meet the requirements of EN ISO 20471?</p> <p>Or</p> <p>Do you ask for a test report from fabric tested according to EN ISO 20471:2013?</p> | Accept the EN 471 test report (according to the NB's usual policy on test reports) and carry out / ask for the additional testing or the different testing required in EN ISO 20471. | |
| 30-001 | EN ISO 20471:2013 (5.3) | Colour fastness; trimmings | <p>Are the black trimmings considered to be non-fluorescent material and the colour fastness of 5.3.1, 5.3.2 and 5.3.3 are to be tested?</p>  | <p>Recommended solution :</p> <p>Yes, black and other contrast coloured trimmings can have influence on background material and therefore the colour fastness must be tested and shall pass requirement of 5.3.1, 5.3.2 and 5.3.3.</p> | <p>Approval by Horizontal Committee: 30/09/2019</p> <p>Approval by PPE expert group: 07/02/2020</p> |
| 29-018 | EN ISO 20471:2013 (5.3.3) | Colour fastness; hot pressing | <p>According to table 3 of the standard, the ironing fastness test should be performed in the dry/dry condition.</p> <p>Therefore, the staining requirement is incompatible because the dry/dry condition of the test method is performed without an adjacent fabric.</p> | The test is performed in the dry condition, with the addition of the control fabric, in order to measure the staining. | <p>Approval by Horizontal Committee: 30/09/2019</p> <p>Approval by PPE expert group: 07/02/2020</p> |

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| 23-001 | EN 471: 2003 (6) / EN ISO 20471: 2013 (6) | Segmented retroreflective tapes | <p>A retroreflective tape is available, 50mm in width, supplied on a clear film backing. The tape consists of separate sections of retro-reflective material, each about 5-6mm wide, with a gap of about 1-2mm between each segment; each segment is vertically off-set by about 30 degrees (see picture)</p>  <p>1) Assuming a section of tested tape meets the photometric requirements of the standard, is any definitive research that shows whether segmented materials provide the same level of conspicuity as non-segmented tapes?</p> <p>2) Are gaps in the tape acceptable? Manufacturers may wish to make materials with larger gaps between segments, different segmented widths, and different off-sets.</p> <p>3) Should gaps between tape segments be counted as background material?</p> <p>4) As the segmented tape is made to be bonded to fabric, this suggests that photometric measurement should be measured with the tape bonded to a standard material. Should this be a background material complying with EN471:2003 or some other material? The tape could be applied to the non-fluorescent part of a garment.</p> | <p>1) this item is on the agenda of WG 7 for the revision of EN 471</p> <p>2) gaps are acceptable provided the material meets the requirements of EN 471</p> <p>3) gaps should not be counted as background material</p> <p>4) the reflective material can either be tested on a black background (worst case) or on the material it is applied on in the garment. The material type (knitted, woven, ...) should match the material type used in the garment and a suitable measuring area used which takes into account the gaps between the reflective materials.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i></p> <p><i>Approval by PPE expert group: 07/02/2020</i></p> <p>7.3]</p> |
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| 17-004 | EN 471: 2003 (6.2) / EN ISO 20471: 2013 (6.2) | Washing, maximum number of cycles | <p>Nowadays in the market there are reflective bands that only last three washes.</p> <p>Is it possible to certify high visibility clothing under the PPE Regulation, and to EN ISO 20471 and EN ISO 13688 standards, if the care labelling shows that the maximum number of washes is only three?</p> | Yes, this is possible, but the accompanying information (leaflet, marking) should be very explicit and unambiguous about this. | <i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 07/02/2020</i> |
| 29-017 | EN ISO 20471: 2013 (6.2.1) | Retroreflective; washing | <p>According to Table 6 of the standard, the performance of retroreflective material shall be measured after pretreatments. Washing must be performed according to point 7.5.2, stating that the washing shall be carried out on a readymade garment or, alternatively, for domestic laundering, on three background material specimens with two stripes of retroreflective material.</p> <p>Is it mandatory to perform the test according to point 7.5.2, on a readymade garment or on retroreflective sewn on to background material, if a test certificate from a Notified Body is available, stating conformance to EN ISO 20471 and where the retroreflective behaviour was checked after a specific number of washing cycles?</p> | No. It is considered that the material meets the requirements for retroreflection after washing if, in the test certificate, it shows that the appropriate number of cleaning cycles have been carried out on the tape. | <i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 07/02/2020</i> |

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| 19-001 | EN 13356: 2001 (5.2.2) | Reflective ; measurement | <p>Testing of armbands (and similar deformable materials)</p> <p>Most of the European test houses are measuring the photometric measurements of these items on a flat surface.</p> <p>For probably historic reasons (there was one or more accessory standard in Scandinavia before EN 13356) one or two test houses in the Nordic countries have a special way to mount the product on a cylinder and measure the retro-reflection this way.</p> <p>However, there is no reference whatsoever in the standard to this way of testing, nor it is clear which diameter this cylinder should have: the diameter of the wrist of a child, or more like the leg of an adult?</p> | <p>Measuring conditions shall be as much as possible in accordance with the real use of the accessories as confirmed by EN 13356, clause 5.2.2. This could e.g. be a flat surface for accessories used as a reflective strip on a flat background. For armbands however the use of a cylindrical shape (10 cm diameter) is recommended.</p> | <p>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</p> |
| 21-015 | EN 13356 / EN 1150 | High visibility accessories, cape for horse riders | <p>Is it possible to certify <u>the reflective striping</u> on a cape for horsemen (grey colour) according to EN 13356 ? The width of reflective stripes is less than 5 cm.</p>  <p>The information leaflet clearly declares that it isn't a warning vest and for use by horsemen only.</p> <p>The standard EN 13356 is fixed at the label. The material of the cape doesn't comply with either EN 471 or EN 1150.</p> | <p>The argument given in favour of certification of this product was that it was only an accessory (EN 13356), comparable to a reflective sticker or hang tag. The cape is then merely a piece of normal clothing, to which the reflective stripes are attached.</p> <p>However, most notified bodies did not follow this argument and were of the opinion that such type of garment gives the user a false sense of safety, even if the information for use explains that only the striping and not the vest should be considered as a PPE.</p> | <p>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</p> |

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| 21-004 | EN 13356 | High visibility accessories, minimum area | <p>What is the meaning of the term "minimum area" in the text underneath table 2 of EN 13356.</p> <p>Does it mean the reflective area of the test specimen or does it refer to the area of 15 cm² which type 2 & 3 accessories should exceed (see clause 4.1).</p> <p>If "minimum area" does refer to 15 cm² then surely the requirements in table 2 are meaningless. A type 2 or 3 reflector needs to meet R' values at specific entrance and observation angles. However if a reflector only just meets these levels then it will not meet the minimum R value of 400 mcd/lx.</p> <p>We have a reflector which meets table 2 but fails to meet this 400 mcd/lx value.</p> | Both requirements shall be met. The 15 cm ² are necessary for the visibility from a distance. On the other hand the material shall also meet the 400 mcd/lx requirement. | <p><i>Approval by Horizontal Committee: 30/09/2019</i></p> <p><i>Approval by PPE expert group: 07/02/2020</i></p> |
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CO-ORDINATION OF NOTIFIED BODIES PPE

Vertical Group 5: Protective clothing and gloves

RECOMMENDATION FOR USE

EN ISO 11612

(EN 531)

Rev.: 2019-08

Approval by:

Horizontal Committee

EU PPE Expert


Approved on:


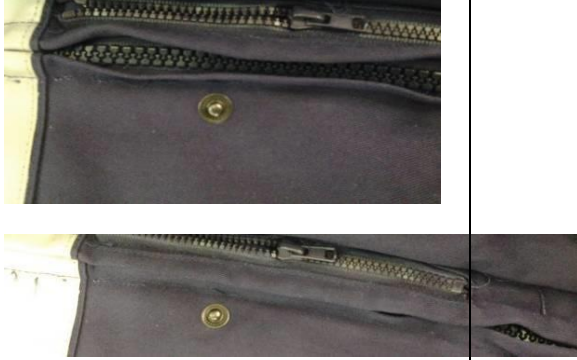
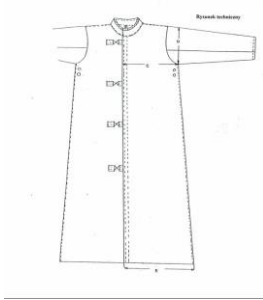
30-09-2019

7-2-2020

| Sheet number PPE-R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment |
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| 24-007 | EN ISO 11612:2015 | Categorization | What products conforming to EN ISO 11612 belong to category 3? | <p>It is a manufacturer's decision which should be in accordance with the intended use and the risk. The notified body has the right to disagree with the manufacturer's decision.</p> <p>The information leaflet shall contain the appropriate information.</p> <p>The Annex gives the agreed position of VG5.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i></p> <p><i>Approval by PPE expert group: 7-2-2020</i></p> |
| 22-018 | EN ISO 11612:2015 | Categorization | <p>What category is aluminised clothing designed for steelworkers that meets requirements of EN ISO 11612 class A1, B3-B4, C3-C4 and is not dedicated exactly for emergency team ?</p> <p>Annex I of the PPE Regulation it is pointed out that category III will cover:</p> <p>“e) high-temperature environments the effects of which are comparable to those of an air temperature of at least 100 °C;”</p> | <p>Clothing for steelworkers should be classified as category III.</p> <p>From PPE Regulation Guidelines (1st ed.) categorization guide 6.3:</p> <p>“Clothing and/or accessories (whether or not detachable), designed and manufactured for use in high-temperature environments the effects of which are comparable to those of an air temperature of 100 °C or more and which may or may not be characterised by the presence of infra-red radiation, flames, hot splashes or the projection of large amounts of molten materials.”</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i></p> <p><i>Approval by PPE expert group: 7-2-2020</i></p> |
| 05.229 | EN ISO 11612:2015 (1) | Visors | <p>One of the components of flame and heat protective clothing, is a hood incorporating a visor.</p> <p>However the standards make no reference to tests (optical and thermal) or performance levels for the visor. The same applies to some respiratory requirements, like dead space.</p> <p>What shall be checked by the notified body?</p> | <p>The notified body shall conduct the necessary tests for these respiratory and optical protection components to establish conformity with the basic health and safety requirements (in accordance with the intended use).</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i></p> <p><i>Approval by PPE expert group: 7-2-2020</i></p> |

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| 24-019 r2 | EN ISO 11612:2015 (4.2.2) | Suits; single garments | <p>According to EN 531 it was possible to certify single garments and sleeveless or short-sleeved garments.</p> <p>Should the following requirement "Heat and flame protective suits shall completely cover upper and lower torso, neck, arms and legs" be applied also to single garments? It is possible to certify single garments according to EN ISO 11612:2015?</p> | <p>Single garments can be certified according to EN ISO 11612.</p> <p>Sleeveless or short sleeve garments and short trousers can be certified according to EN ISO 11612 as "Additional Protective Clothing", to be worn with full suits complying with the standard. Examples are high visibility vests and undergarments.</p> <p>It must be possible to buy and sell garments separately. According to scope of the standard garments could be worn for a wide range of end uses. The body area to be protected should be based on the risk assessment.</p> <p>Note: EN ISO 11612 clause 9.3 requires the User Information to include a note giving the items of clothing that need to be worn in order to protect the wearer's body.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i></p> <p><i>Approval by PPE expert group: 7-2-2020</i></p> |
| 31-002 | EN ISO 11612:2015 (4.2.2) | Quick-release fastenings | <p>Clause 4.2.2 states: "quick-release fastenings shall be provided to enable rapid removal of the garments in the event of an emergency".</p> <p>What is meant by rapid removal? How long is permitted before the garment is not rapidly removed, and how is it to be assessed? Should the time allowed for rapid removal be related to the level of protection?</p> | <p>A standardized assessment is not presently available, and a more specific requirement and assessment method should be included in the revision of the standard.</p> <p>Fastenings are deemed to be 'quick-release' if they allow rapid removal of the clothing. Rapid removal is to be assessed by the Notified Body, giving consideration to the level of protection offered.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i></p> <p><i>Approval by PPE expert group: 7-2-2020</i></p> |
| 24-018 | EN ISO 11612:2015 (4.3) | Pockets; flame spread | <p>Clause 4.3 states that: "Where garments are constructed with pockets, the pockets shall be made of the materials conforming to 6.3" (limited flame spread).</p> <p>This requirement is relevant for patch pockets, but in the garments there are often also inner pockets, which are not exposed to external hazards. There have been durability problems when using flame retardant materials in inner pockets in normal use. Inner pocket material shall meet the requirement for heat resistance, but could the requirements for limited flame spread properties be lower than for outer material?</p> | <p>Inner pocket material shall meet the flame spread requirements when tested on their own or when tested to 6.3.2.2 as an assembly.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i></p> <p><i>Approval by PPE expert group: 7-2-2020</i></p> |
| 05.308 | EN ISO 11612:2015 (4.5) | Molten metal design; Pockets | <p>1. Can a zipper be used for closing a pocket?</p> <p>2. Trousers pockets with vertical openings do not need flaps. If jackets have vertical pockets, they do need flaps. Some manufacturers propose flaps as an extension of the opening.</p> | <p>1. Yes, if covered by a flap</p> <p>2. The flap should be in the opposite direction or perpendicular to the opening</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i></p> <p><i>Approval by PPE expert group: 7-2-2020</i></p> |

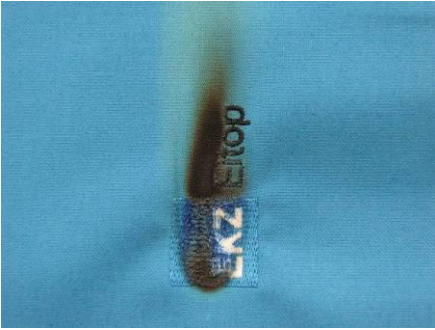
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| 05.314 | EN ISO 11612:2015 (4.5) | Molten metal design; Pockets | Are the pocket requirements also valid for a pass-through? Does it need to be closed over its entire length? | It shall be possible to close all openings fully to avoid molten metal to enter. | <i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i> |
| 05.354 | EN ISO 11612:2015 (4.5) | Molten metal design; Pockets | Can an antenna (e.g. of a cell phone or walkie-talkie) stick out of the pocket flap through an opening? | No, the pocket shall be closed over all its length | <i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i> |
| 29-014 | EN ISO 11612:2015 (4.5b) | Design ; pockets | <p>The standard EN ISO 11612 (point 4.5 b) states that external pockets must be covered by flaps at least 20 mm wider than the opening of the pocket in order to prevent the flap from being tucked into the pocket.</p> <p>Is it allowed to have this kind of flap sewn on both sides? This flap fulfils the point “to prevent the flap from being tucked into the pocket” but it is not 20 wider than the opening.</p>  | This pocket flap fulfils the requirements of EN ISO 11612 (point 4.5 b). | <i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i> |
| 29-016 | EN ISO 11612:2015 (4.5b) | Design ; pockets | <p>The standard EN ISO 11612 (point 4.5 b) states that the external pockets on jackets, trousers, coveralls and bib + brace, other than side pockets below the waist which do not extend more than 10° forward of the side seam, shall be covered by flaps.</p> <p>Does this also apply to the openings of a garment without a pocket (only an opening in the garment)? Some trousers are made with these openings to allow the access to an inner trouser with a pocket.</p> | No. These types of openings must always be covered. | <i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i> |
| 30-002 | EN ISO 11612:2015 (4.5b) | Design ; pockets | Can the molten splash protective garments, certified according to EN ISO 11612, have a single not flapped pocket placed behind the side seam on one or both legs? | No, Clause 4.5b requires these types of pockets to have a flap. | <i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i> |


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| 23-010 | EN ISO 11612:2015 (4.5d) | Molten metal design; overlapping seams | <p>Is a fabric application (see grey strip) to be considered as an overlapping seam or as an embroidery, and can it be certified like that or not?</p>  | The garment shall be tested against molten metal splash using a test specimen, which contains the strip as positioned on the garment or the design shall be modified to meet the requirements of the standard. | <i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i> |
| 29-015 | EN ISO 11612:2015 (4.5e) | Design ; closures | <p>The standard EN ISO 11612 (point 4.5 e) states that closures shall be designed with a protective cover flap on the outside of the garment.</p> <p>Is this covered zipper allowed?</p>  <p>(NOTE: The question refers to the larger, main zipper, not the short zipper on the outside of the flap.)</p> | No. This design does not fulfil the additional design requirements (Clause 4.5) of EN ISO 11612. | <i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i> |
| 18-009 | EN ISO 11612:2015 (4.5) | Molten metal design; Zips | The standard requires that metal zippers are covered or treated in order to prevent molten metal to stick to the zipper. Does this mean that plastic zippers can remain uncovered? | For this type of intended use zippers shall always be covered. | <i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i> |
| 27-014 | EN ISO 11612:2015 (4.5) | Molten metal design, closures, cover flap | <p>Is the design of clothing with metal closures without cover flap permissible for the aluminised clothing against molten metal splashes?</p>  | Yes, this design is possible with a suitable overlapping of materials, and depending on the design and ergonomic assessment of the Notified Body. | <i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i> |

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| 25-011 | EN ISO 11612:2015 (5.2.1; 5.2.3) | Pre-treatment of material | If the manufacturer's instructions indicate that 50 cleaning cycles are allowed, should each test specified in Clauses 6 and 7, except 6.8, 6.9.2 and 6.9.3, be performed after 50 cleaning cycles; OR should they be performed after 5 cleaning cycles and only flame spread according to 6.3 be performed before and after 50 cycles? | If the manufacturer's label indicate a maximum number of cleaning cycles are allowed then each test specified in Clauses 6 and 7, except 6.8, 6.9.2 and 6.9.3 shall be performed after that number of cleaning cycles . If no maximum number is claimed, the tests are carried out after 5 cycles. The User Information may contain additional information on flame spread testing after additional cleaning cycles. | <i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i> |
| 23-018 | EN ISO 11612:2015 (5.2) | Flame spread; cleaning | EN ISO 11611 and 11612 require flame spread tests to be carried out after cleaning to the manufacturer's instructions. If not specified, then five cleaning cycles are carried out. For washable materials, one cleaning cycle is defined as a wash plus drying. Where no manufacturer's instructions are given, is it possible to accept test results where the pretreatment is five wash cycles and a final dry? | The purpose of the cleaning pretreatment for the flame spread test is to remove any finishes that could affect flammability. Washing cycles will be as effective as wash/dry cycles in this regard. However, EN ISO 11612 requires the materials to be pretreated for all of the remaining tests, so there is little saved in the way of testing cost or time. | <i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i> |
| 05.334 | EN ISO 11612:2015 (5.2) | Flammability, washing, durability | Manufacturer claims e.g. 50 washing cycles for the flame retardancy of the fabric. Shall the fabric be washed 50 times and the flame spread tested before the certification? | Testing may be omitted if an audit by an independent third party of the fabric manufacturer's quality system proves the manufacturer monitors frequently and adequately the permanency of the fire retardancy. If this quality control and documentation is missing, appropriate numbers of washings shall be carried out before testing the flame spread. However, it remains the Notified Body's decision whether or not this documentation is acceptable | <i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i> |
| 26-006b | EN ISO 11612:2015 (6.2) | Heat resistance; accessories; hardware | If in a technical files different fabrics (different weight, different composition, coated and non-coated, with or without A/S fibre etc) are used to make the personal protective equipment (clothing), shall the heat resistance be tested on each accessory (hardware) in each quality? | In principle, testing from similar fabrics can be used for certification. It is recognised that garment assemblies can be highly complex, being comprised of a variety of materials and combinations. Therefore, it is recommended that each Notified Body considers the worst case condition for the product, thereby requiring those tests it deems necessary to satisfy the requirements of the Standards and the Directive. | <i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i> |
| 27-004 | EN ISO 11612:2015 (6.2.1) | Heat resistance; hardware | Is it obligatory to test hardware according to EN ISO 11612, Clause 6.2.1 (heat resistance) if the test according to EN ISO 11612 Clause 6.3.2.3 (limited flame spread) is carried out and the hardware passes the requirements? | The test according to 6.2.1 shall be carried out on all hardware, tested as presented on the garment. | <i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i> |

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| 29-023 | EN ISO 11612:2015 (6.2.1) | Heat Resistance; shrinkage | <p>When tested according to EN ISO 11612 (point 6.2.1) at 180°C, shrinkage must not exceed 5%, and the sample must not ignite or melt.</p> <p>It possible certify a garment to EN ISO 11612, if it contains a knitted fabric that fulfills all of the requirements of EN ISO 11612 except shrinkage after heat resistance?</p> | No. | <p><i>Approval by Horizontal Committee: 30/09/2019</i></p> <p><i>Approval by PPE expert group: 7-2-2020</i></p> |
| 24-020 | EN ISO 11612:2015 (6.3.2.2) | Multilayer garments | <p>Clause 6.3.2.2 states that: "If the garment is multilayer, specimens of the component assembly including seams shall be tested both by applying the flame to the surface of the outer material of the garment and to the innermost lining of the garment and shall meet the requirements of 6.3.2.1..."</p> <p>In Nordic countries there are a lot of multilayer garments on the market and in use due to our cold climate. When certified according to EN 531 the flame spread was tested by applying the flame to the surface of the multilayer material. To meet the requirement of EN ISO 11612 the innermost lining shall have the same flame spread properties as the outer material. This makes the multilayer garments very heavy, stiff and impermeable.</p> | Certify to the Regulation. | <p><i>Approval by Horizontal Committee: 30/09/2019</i></p> <p><i>Approval by PPE expert group: 7-2-2020</i></p> |
| 29-004 | EN ISO 11612:2015 (6.3.2.2) | Hole formation; outer layer | <p>Clause 6.3.2.2 states:</p> <p>“If the garment is multilayer, specimens of the component assembly including seams shall be tested both by applying the flame to the surface of the outer material of the garment and to the innermost lining of the garment and shall meet the requirements of 6.3.2.1, including that no specimen shall suffer hole formation except for an interlining that is used for specific protection other than heat protection, for example liquid penetration.”</p> <p>Can a two-layer garment, that suffers hole formation of the outer layer when tested according to 6.3.2.2, meet code letter A1 of EN ISO 11612?</p> | <p>No.</p> <p>The only layer that is allowed to show hole formation is an interlining (EN ISO 11612 definition: layer between the outermost layer and the innermost lining in a multilayer garment).</p> <p>Hole formation in either the outer layer or the innermost layer is hole formation in the specimen, and is forbidden by 6.3.2.1.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i></p> <p><i>Approval by PPE expert group: 7-2-2020</i></p> |

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| 30-006 | EN ISO 11612:2015 (6.3.2.2) | Multilayer; Limited flame spread; Heat transmission | <p>1. According to EN ISO 11612:2008, 5.1: “Samples shall be representative of the component assembly, exactly as used in the finished garment”. However, it is known that adding materials to the component assembly (e.g. high-bulk non-woven interlining and linings) can only increase the protection level for the parameters from Clause 7 (e.g. radiant heat and convective heat). In the case of multilayer protective clothing, also intended for protection against cold, must the Notified Body require testing of the complete assembly against the relevant heat transfer tests in Clause 7?</p> <p>2. In a multilayer garment, if the classification for heat transfer can be based upon the performance of the outer fabric only, can holing of an interlining (e.g. a nonwoven providing protection against cold) during the limited flame spread test be accepted?</p> | <p>1. No. The classification for heat transfer can be based upon the performance of the outer fabric only, provided the assembly meets Code Letter A, and all fabrics meet the Heat Resistance requirements (6.2.1).</p> <p>2. Yes. If the classification for heat transfer for a multi-layer garment is based upon the performance of the outer fabric only, hole formation in an interlining (e.g. a high-bulk non-woven providing protection against cold) during the limited flame spread test can be accepted.</p> | <p>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 7-2-2020</p> |
| 26-006a | EN ISO 11612:2015 (6.3.2) | Flame spread; seams; accessories; hardware | <p>If in a technical files different fabrics (different weight, different composition, coated and non-coated, with or without A/S fibre etc) are used to make the personal protective equipment (clothing), shall the flame spread on the accessories (hardware etc) and the seam be tested on each quality?</p> | <p>In principle, testing from similar fabrics can be used for certification.</p> <p>It is recognised that garment assemblies can be highly complex, being comprised of a variety of materials and combinations. Therefore, it is recommended that each Notified Body considers the worst case condition for the product, thereby requiring those tests it deems necessary to satisfy the requirements of the Standards and the Regulation.</p> | <p>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 7-2-2020</p> |
| 30-004 | EN ISO 11612:2015 (6.3.2.3) | Flammability behaviour; hardware | <p>Clause 6.3.2.3 states: <i>“Hardware (e.g. touch and close (hook and pile) fasteners, etc.), whether it is exposed or covered when all closure systems in the closed position, shall be tested separately by applying the test flame to the outer surface of the component assembly containing hardware exactly as designed in the garment. The hardware shall remain functional after the test.”</i></p> <p>Can closures which are completely metal and which are not sewn on to the garment be excluded from the test due to a much higher melting point than possible with the test flame?</p> | <p>Yes.</p> <p>Closures which are completely metal and which are not sewn on to the garment do not have to undergo the test.</p> | <p>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 7-2-2020</p> |

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| 25-006 | EN ISO 11612:2015 (6.3.2.4) | Flammability behaviour; embroidery | <p>Clause 6.3.2.4 states: "Labels, badges, retro-reflective materials, etc., shall have the same flammability behaviour as the outer layer of the garment." Clause 6.3.2.1 states: c) no specimen shall melt or suffer flaming or molten debris.</p> <p>How do we judge an embroidery applied on the outer layer which melts during the test?</p>  | <p>In the case of small embroideries, localised melting in the area of the flame is acceptable. Molten debris or afterflame > 2s is not acceptable.</p> <p>Consideration should be given to the backing of the embroidery. Testing or covering may be required.</p> | <p>Approval by Horizontal Committee: 30/09/2019</p> <p>Approval by PPE expert group: 7-2-2020</p> |
| 27-009 | EN ISO 11612:2015 (6.3.2.4) | Flammability behaviour; transfer logos | <p>Many Notified Bodies have experience of inconsistent results with transfer logos. The flammability behaviour can be very different, depending on the size of the logo, the nature of the fabric that the logo is tested on, the colour of the logo, if the logos are letters or a complete surface. Can test results be transferred from one material to another?</p> | <p>No, test results can not be transferred. It is recommended that Notified Bodies in each case decide which combination of logos and fabrics need to be tested.</p> | <p>Approval by Horizontal Committee: 30/09/2019</p> <p>Approval by PPE expert group: 7-2-2020</p> |
| 24-013 | EN ISO 11612:2015 (6.3.3.1) | Flame spread; hems; seams | <p>Clause 6.3.3.1 states that for testing of seams flame spread, "three hemmed specimens containing a structural seam shall be tested in accordance with ISO 15025:2000, Procedure B"</p> <p>What shall we mean by "hemmed specimens"?</p> | <p>The hemmed specimens containing a structural seam are only these seams that appear "hemmed" (bent) in the garment provided by the producer.</p> <p>Hemmed samples produced by the manufacturer using the same production process as the garment are also acceptable. Specimens which are hemmed by the test laboratory are not acceptable.</p> | <p>Approval by Horizontal Committee: 30/09/2019</p> <p>Approval by PPE expert group: 7-2-2020</p> |
| 26-006 | EN ISO 11611:2007 (6.7) | Flame spread; seams; accessories; hardware | <p>If in a technical files different fabrics (different weight, different composition, coated and non-coated, with or without A/S fibre etc) are used to make the personal protective equipment (clothing), shall the flame spread on the accessories (hardware etc) and the seam be tested on each quality?</p> | <p>In principle, testing from similar fabrics can be used for certification.</p> <p>It is recognised that garment assemblies can be highly complex, being comprised of a variety of materials and combinations. Therefore, it is recommended that each Notified Body considers the worst case condition for the product, thereby requiring those tests it deems necessary to satisfy the requirements of the Standards and the Regulation.</p> | <p>Approval by Horizontal Committee: 30/09/2019</p> <p>Approval by PPE expert group: 07/02/2020</p> |
| 25-002 | EN ISO 11611:2007 (6.9) | Heat transfer, multi-layers | <p>Clause 6.9 requires a heat transfer test, in accordance with ISO 6942, to be carried out on the complete material assembly, if the garment is multi-layered.</p> <p>Is it possible to accept test reports issued for each separate material of a multi-layered garment or should the complete material assembly be tested?</p> | <p>If each material of multi-layered garment (e.g. outer, inner, lining) fulfils the relevant requirements for heat transfer in accordance with EN ISO 11611, clause 6.9, the test on the complete material assembly is not necessary, because the performance will not be reduced.</p> | <p>Approval by Horizontal Committee: 30/09/2019</p> <p>Approval by PPE expert group: 07/02/2020</p> |

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| 26-008 | EN ISO 11612:2015 (6.5.4) | Seam strength | <p>The mean value of breaking force, according to EN 13935-2 (seam strength), of a single layer fabric was measured as 204 N, against a requirement of 225 N. The seam itself is still in order after testing, but there is seam slippage visible which lead to the break-up of the testing equipment (see picture). How shall this be assessed?</p>  | <p>The test equipment may have stopped the test prematurely.</p> <p>The material may also be prone to seam slippage. The seams should be tested up to the requirement of EN ISO 11612 (225 N) or until the seam fails.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i></p> |
| 27-003 | EN ISO 11612:2015 (7.2; 7.3) | Heat transfer; assembly; interlining | <p>A multilayer assembly is tested according to Code Letters B and/or C (ISO 9151 convective heat; ISO 6942 radiant heat). The outer and lining fabrics meet the requirements of EN ISO 11612. The sample meets one of the levels for B and/or C, however the intermediate layer (e.g. insulating nonwoven) has completely melted in the exposed area.</p> <p>Is this multilayer assembly acceptable?</p> | <p>Yes, provided the assembly passes Code Letter A, and all fabrics pass Heat Resistance (6.2.1).</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i></p> |
| 34-014 | EN ISO 11612:2015 (7.3) | Radiant heat level | <p>EN 407 requires for performance level 1 (radiant heat transfer RHTI 24) >7s, when tested according to EN ISO 6942:2002, method B at 20 kW/m².</p> <p>However 7s are needed to obtain RHTI 24 without a test sample; thus every material will pass.</p> <p>There is the same problem with the radiant heat level in EN ISO 11611 and EN ISO 11612 (C1 ≥ 7.0s).</p> <p>Should the minimum performance levels in these standards be revised?</p> | <p>Yes, the minimum performance levels in these standards should be revised.</p> <p>VG5 requests CEN/TC 162/WG 2 and 8 to clarify and improve these standards; amendment / revision is needed.</p> <p>Note: Further standards might need improvement as well; Level 1 from >7s to <20s; EN 15384 requires >11s.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i></p> |
| 26-015 | EN ISO 11612:2015 (7.4; 7.5) / ISO 9185 | Molten metal splash test | <p>For testing molten metal splash, the standard does not suggest any metal support where the specimen is fully supported. When we test in this way, the result is better than without this metal support. Have we to test with this metal support or without it?</p> | <p>For those materials that deform during the test, a metal support would be appropriate.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i></p> |

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| 30-008 | EN ISO 11612:2015 (7.5) | Molten metal splashes test; Retroreflective | <p>Where clothing for protection against molten iron (conforming to EN ISO 11612 Code Letter E) has reflective tapes (meeting the requirements of EN ISO 11612 for flame spread and heat resistance), is it mandatory to perform the molten iron splash test (clause 7.5) on the reflective tape?</p> <p>If yes, how should the tape be placed during the test?</p> | <p>No.</p> <p>However, where a tape or other feature forms a ridge, a molten metal splash test shall be performed, with the pour positioned above the ridge.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i></p> |
| 31-003 | EN ISO 11612:2015 (Annex B) | Second set of specimens | <p>Annex B states:</p> <p>“Annex B (normative) Determination of property values for rating and classification”</p> <p>“All the individual results of the specimens of a test shall meet the performance requirement.”</p> <p>“The average result shall be given. If a material exhibits differing behaviour for a property in the length and cross directions of the material, the resultant property value shall be the value obtained in the lesser performing direction.”</p> <p>“In the event that only one specimen fails, another set of specimens shall be tested and all the individual results of this second set of specimens shall meet the requirements. Otherwise, the sample is considered to have failed the requirement.”</p> <p>What is meant by “another set of specimens”</p> | <p>The second set of specimens is a full set of specimens for the particular test.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i></p> |

Annex to question 24-007 "categorization": category III

Agreed category for EN ISO 11612 levels.

Category III = ***BOLD ITALICS***

| Level | Convective Heat | | Level | Radiant Heat | | Level | Contact Heat |
|-------|-------------------|--|-------|---------------------|--|-------|-------------------|
| B1 | 4-10 | | C1 | 7-20 | | F1 | 5-10 |
| B2 | 10-20 | | C2 | <i>20-50</i> | | F2 | 10-15 |
| B3 | <i>20+</i> | | C3 | <i>50-95</i> | | F3 | <i>15+</i> |
| | | | C4 | <i>95+</i> | | | |

| Level | Molten aluminium | | Level | Molten iron |
|-------|-----------------------|--|-------|-----------------------|
| D1 | 100-200* | | E1 | 60-120* |
| D2 | <i>200-350</i> | | E2 | <i>120-200</i> |
| D3 | <i>350+</i> | | E3 | <i>200+</i> |

* Levels D1 and E1 are not agreed by VG5. Refer to the Standing Committee.



CO-ORDINATION OF NOTIFIED BODIES PPE

Vertical Group 5: Protective clothing and gloves

RECOMMENDATION FOR USE

EN ISO 11611 (EN 470-1) Rev.: 2019-08

Approval by:

Horizontal Committee

EU PPE Working Group

Approved on:


30-09-2019


7-2-2020

| Sheet number PPE-R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment |
|---------------------------|---------------------------------------------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| 05.292 | EN 470-1: 1995 (1) | Combination of items | <p>A manufacturer produces a vest, sleeves that can be attached to the vest or can be used separately, apron and gaiters for welders, all made of the same material.</p> <p>Can he submit one technical file containing designs, etc for all of them?</p> <p>In such a case, should each garment, separately bear the CE marking</p> | <p>It is possible to submit one technical file for all products.</p> <p>This depends on the intended use. If the manufacturer points out in the information leaflet that they must always be used all together, then one certification shall be carried out.</p> <p>If not, several separate certifications are possible.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</i></p> |
| 24-028 | EN ISO 11611: 2007 (4.1) | Single garments | <p>Standards said: "heat and flame protective suits shall completely cover the upper and lower torso, neck, arms and legs. Suits shall consist of a single garment, e.g. an overall or boiler suit, or a two-piece garment, consisting of a jacket and a pair of trousers.</p> <p>It is possible to certify only a jacket or a pair of trousers?</p> | <p>Yes. Single garments can be certified. The User Information must include a note giving the items of clothing that need to be worn in order to protect the wearer's body.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</i></p> |
| 24-029 | EN ISO 11611: 2007 (4.1) | Additional protective clothing | <p>It is possible to certify only neck curtain, hoods, sleeves apron and gaiters?</p> | <p>Yes.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</i></p> |
| 26-016 | EN ISO 11611: 2007 (4.1) | Short sleeves; short trousers | <p>Can we certify a garment with short sleeves or short trousers to thermal risks (welding protection)?</p> | <p>No.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</i></p> |
| 05.335 | EN 470-1: 1995 (4.1) EN ISO 11611: 2007 (4.1) | Design | <p>In case a zipper is used: should it be covered when made of metal to prevent electrical conduction (as per EN 470-1) or should it be treated as to prevent sticking of the molten metal (as per EN 531 D and E).</p> | <p>The outside of the zippers shall be covered</p> | <p><i>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</i></p> |

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| 24-003 | EN ISO 11611: 2007 (4.1.1) | Design; neck; collar | <p>Clause 4.1.1 of EN ISO 11611 states that: “Welders' protective suits shall completely cover the upper and lower torso, neck, arms and legs.”</p> <p>What form of collar is required to meet this Clause? The text implies that the collar must completely cover the neck, including the throat, in the same way that firefighter’s suits protect the wearer’s neck.</p> | <p>A standard shirt-type collar, or a mandarin collar, are suitable for this type of end-use, provided that they can be fastened at the neck.</p> <p>A collar that fastens over the throat, such as a firefighter’s collar, is not normally required for this end use.</p> | <p>Approval by Horizontal Committee: 30/09/2019</p> <p>Approval by PPE expert group: 07/02/2020</p> |
| 29-016 | EN ISO 11611: 2007 (4.3b) | Design; pockets | <p>The standard EN ISO 11611 (point 4.3) states that the external pockets on jackets, trousers, coveralls and bib + brace, other than side pockets below the waist which do not extend more than 10° forward of the side seam, shall be covered by flaps.</p> <p>Does this also apply to the openings of a garment without a pocket (only an opening in the garment)? Some trousers are made with these openings to allow the access to an inner trouser with a pocket.</p> | No. These types of openings must always be covered. | <p>Approval by Horizontal Committee: 30/09/2019</p> <p>Approval by PPE expert group: 07/02/2020</p> |
| 29-014 | EN ISO 11611: 2007 (4.3c) | Design; pockets | <p>The standard EN ISO 11611 (point 4.3 c) states that all flaps shall be stitched down or capable of fastening the pocket closed. They shall be 20 mm wider than the opening (10 mm on each side) to prevent the flap from being tucked into the pocket.</p> <p>Is it allowed to have this kind of flap sewn on both sides? This flap fulfils the point “to prevent the flap from being tucked into the pocket” but it is not 20 wider than the opening.</p> | This pocket flap fulfils the requirements of EN ISO 11611 (point 4.3 c). | <p>Approval by Horizontal Committee: 30/09/2019</p> <p>Approval by PPE expert group: 07/02/2020</p> |



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| 29-015 | EN ISO 11611: 2007 (4.4) | Design; closures | <p>The standard EN ISO 11611 (point 4.4) states that closures shall be designed with a protective cover flap on the outside of the garment.</p> <p>Is this covered zipper allowed?</p>  <p>(NOTE: The question refers to the larger, main zipper, not the short zipper on the outside of the flap.)</p> | No. This design does not fulfil the requirements of EN ISO 11611. | <p>Approval by Horizontal Committee: 30/09/2019</p> <p>Approval by PPE expert group: 07/02/2020</p> |
| 23-018 | EN ISO 11611: 2007 (5.2.2) | Flame spread; pretreatment | <p>EN ISO 11611 and 11612 require flame spread tests to be carried out after cleaning to the manufacturer's instructions. If not specified, then five cleaning cycles are carried out. For washable materials, one cleaning cycle is defined as a wash plus drying.</p> <p>Where no manufacturer's instructions are given, is it possible to accept test results where the pretreatment is five wash cycles and a final dry?</p> | <p>The purpose of the cleaning pretreatment for the flame spread test is to remove any finishes that could affect flammability. Washing cycles will be as effective as wash/dry cycles in this regard.</p> <p>However, EN ISO 11611 requires the materials to be pretreated for all of the remaining tests, so there is little saved in the way of testing cost or time.</p> | <p>Approval by Horizontal Committee: 30/09/2019</p> <p>Approval by PPE expert group: 07/02/2020</p> |
| 05.334 | EN 470-1: 1995 (7.2) EN ISO 11611: 2007 (5.2.2) | Flammability, washing, durability | <p>Manufacturer claims e.g. 50 washing cycles for the flame retardancy of the fabric. Shall the fabric be washed 50 times and the flame spread tested before the certification?</p> | <p>Testing may be omitted if an audit by an independent third party of the fabric manufacturer's quality system proves the manufacturer monitors frequently and adequately the permanency of the fire retardancy.</p> <p>If this quality control and documentation is missing, appropriate numbers of washings shall be carried out before testing the flame spread.</p> <p>However, it remains the Notified Body's decision whether or not this documentation is acceptable</p> | <p>Approval by Horizontal Committee: 30/09/2019</p> <p>Approval by PPE expert group: 07/02/2020</p> |

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| 26-008 | EN ISO 11611: 2007 (6.4) | Seam strength | <p>The mean value of breaking force, according to EN 13935-2 (seam strength), of a single layer fabric was measured as 204 N, against a requirement of 225 N. The seam itself is still in order after testing, but there is seam slippage visible which lead to the break-up of the testing equipment (see picture). How shall this be assessed?</p>  | <p>The test equipment may have stopped the test prematurely.</p> <p>The material may also be prone to seam slippage. The seams should be tested up to the requirement of EN ISO 11611 (225 N) or until the seam fails.</p> | <p>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</p> |
| 24-013 | EN ISO 11611: 2007 (6.7) | Flame spread; hemmed seams | <p>Clause 6.7 among others states that for testing of seams flame spread, “three hemmed specimens containing a structural seam shall be tested in accordance with ISO 15025:2000, Procedure B”</p> <p>What shall we mean by “hemmed specimens”?</p> | <p>The hemmed specimens containing a structural seam are only these seams that appear “hemmed” (bent) in the garment provided by the producer.</p> <p>Hemmed samples produced by the manufacturer using the same production process as the garment are also acceptable. Specimens which are hemmed by the test laboratory are not acceptable.</p> | <p>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</p> |
| 26-006 | EN ISO 11611: 2007 (6.7) | Flame spread; seams; accessories; hardware | <p>If in a technical files different fabrics (different weight, different composition, coated and non-coated, with or without A/S fibre etc) are used to make the personal protective equipment (clothing), shall the flame spread on the accessories (hardware etc) and the seam be tested on each quality?</p> | <p>In principle, testing from similar fabrics can be used for certification.</p> <p>It is recognised that garment assemblies can be highly complex, being comprised of a variety of materials and combinations. Therefore, it is recommended that each Notified Body considers the worst case condition for the product, thereby requiring those tests it deems necessary to satisfy the requirements of the Standards and the Regulation.</p> | <p>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</p> |
| 25-002 | EN ISO 11611: 2007 (6.9) | Heat transfer, multi-layers | <p>Clause 6.9 requires a heat transfer test, in accordance with ISO 6942, to be carried out on the complete material assembly, if the garment is multi-layered.</p> <p>Is it possible to accept test reports issued for each separate material of a multi-layered garment or should the complete material assembly be tested?</p> | <p>If each material of multi-layered garment (e.g. outer, inner, lining) fulfils the relevant requirements for heat transfer in accordance with EN ISO 11611, clause 6.9, the test on the complete material assembly is not necessary, because the performance will not be reduced.</p> | <p>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</p> |

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| 34-014 | EN ISO 11611: 2015 (6.9) | Radiant heat level | <p>EN 407 requires for performance level 1 (radiant heat transfer RHTI 24) >7s, when tested according to EN ISO 6942:2002, method B at 20 kW/m².</p> <p>However 7s are needed to obtain RHTI 24 without a test sample; thus every material will pass.</p> <p>There is the same problem with the radiant heat level in EN ISO 11611 (Class 1 \geq 7.0 s) and EN ISO 11612.</p> <p>Should the minimum performance levels in these standards be revised?</p> | <p>Yes, the minimum performance levels in these standards should be revised.</p> <p>VG5 requests CEN/TC 162/WG 2 and 8 to clarify and improve these standards; amendment / revision is needed.</p> <p>Note: Further standards might need improvement as well; Level 1 from >7s to <20s; EN 15384 requires >11s.</p> | <p>Approval by Horizontal Committee: 30/09/2019</p> <p>Approval by PPE expert group: 07/02/2020</p> |
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CO-ORDINATION OF NOTIFIED BODIES PPE

Vertical Group 5: Protective clothing and gloves

RECOMMENDATION FOR USE

EN 469

Rev.: 2019-08

Approval by:

Horizontal Committee

EU PPE Expert Group

Approved on:

30-09-2019

7-2-2020

| Sheet number PPE-R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment |
|------------------------|--------------------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 17-015 | EN 469: 2005 (1) | Certification, separate clothing items | Is it possible to certify trousers (without the corresponding jacket) and jackets (without the corresponding trousers), if it is specified in the informative leaflet and in the certificate that they have to be worn with a jacket (resp. trousers) that fulfils the requirements of EN 469? | This is possible. The wording of the informative leaflet shall be very clear and precise. | Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020 |
| 05.157 b | EN 469: 1995 (4.6) | Closure systems | A suit has lower insulation where the zipper is placed. How low may this be, before the garment is rejected? | The lower insulation value at the place of the zipper normally generally does not cause problems and hence has not to be considered. | Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020 |
| 05.328 | EN 469: 2005 (4.3) | Neck protection | EN 469:2005, clause 4.3, states that "Protective clothing for firefighters shall provide protection for the firefighters torso, neck," Should the collar have the same minimum performance level as the tunic? | The manufacturer shall give advice in the informative leaflet that the level of protection in the collar is lower. The user shall take that situation into account. | Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020 |

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| 05.334 | EN 469: 2005 (5.2) | Pretreatment; flame spread | A manufacturer claims e.g. 50 washing cycles for the flame retardancy of the fabric. Shall the fabric be washed 50 times and the flame spread tested before the certification? | <p>Testing may be omitted if an audit by an independent third party of the fabric manufacturer's quality system proves the manufacturer monitors frequently and adequately the permanency of the fire retardancy.</p> <p>If this quality control and documentation is missing, appropriate numbers of washings shall be carried out before testing the flame spread.</p> <p>However, it remains the Notified Body's decision whether or not this documentation is acceptable</p> | <i>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</i> |
| 05-157 | EN 469: 2005 (6.1) | Badges, logos | The standard does not require flammability testing of accessories such as badges/logos. | The accessories have to be tested in accordance with EN ISO 15025 if they are not properly covered. | <i>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</i> |

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| 05.352 | EN 469: 2005 (6.1) | Embroideries | <p>When and under which conditions can embroideries be applied on the garment? Should we limit the surface? Are there requirements that the yarn should fulfil?</p> | <p>Embroideries in FR yarn should be accepted without restriction.</p> <p>Separate embroideries with non-FR yarn could be stitched to the garment afterwards. There is still a safe background.</p> <p>For embroideries with non-FR material, a test according EN ISO 15025 should be carried out to check if the sample fulfils the criteria.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</i></p> |
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| 21-013 | EN 469: 2005 (6.1.6) | Hardware; flame spread | Clause 6.1.6 (testing and performance of “hardware”) is not clear as to how to apply it. If an attempt to apply it as written is undertaken, the result is likely to be that it is not possible to certify typical firefighter clothing! | <p>The wording of EN 469, clause 6.1.6 has proven to be impracticable and therefore it is recommended that hardware be tested by applying the flame to the outer surface of the region of the clothing containing the hardware, e.g. a closure system. If the hardware is a closure system, it shall function after the test.</p> <p>If there is hardware inside the clothing that might be exposed to flame, for example within 10 cm of the hem of the jacket, this system shall be tested by exposing the item directly to the flame. The item shall not give molten or flaming debris and shall give an afterflame time of not more than 2 s.</p> | Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020 |
| 22-001 | EN 469: 2005 (6.1, 5.3) | Flame spread, materials, component assembly | How should internal materials which are not part of the main assembly be tested to Clause 6.1 (Flame Spread). Examples include felt and foam used for padding. Are they included in the definition of ‘component assembly’ (clause 3.4). | Internal materials which are not part of the main assembly are part of a ‘component assembly’ (clause 3.4) and should be tested to Clause 6.1 (Flame Spread) as part of an assembly, as presented in the garment, with the test flame applied to the outer surface. | Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020 |

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| 22-003 | EN 469: 2005 (6.1, 6.5, 3) | Flame spread, materials, hardware, braces | <p>Should trouser braces be tested to EN 469?</p> <p>If they should be tested, are they a 'material' (clause 3.11) or 'hardware' (clause 3.7).</p> | <p>Braces, which will not be exposed to flame in use, do not need to be tested to EN 469, 6.1.</p> <p>Braces should be tested to Clause 6.5 (Heat Resistance).</p> | <p><i>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</i></p> |
| 22-002 | EN 469: 2005 (6.5, 5.3) | Heat resistance, materials, clothing assembly | <p>Are internal and external materials, which are not part of the main assembly, part of the 'clothing assembly', and should they be tested to Clause 6.5 (Heat Resistance).</p> <p>Examples include felt and foam used for padding, kneepad fabric, loops and webbing, and reinforcement fabric on hems.</p> | <p>These materials are part of the 'clothing assembly' and should be tested to Clause 6.5 (Heat Resistance).</p> | <p><i>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</i></p> |

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| 28-005 | EN 469: 2005 (6.7) | Tear strength | <p>EN 469 specifies a minimum tear strength for non-coated outer material of at least 25 N when tested according to EN ISO 13937-2:2000.</p> <p>Fabrics for firefighter's clothing are often made with novel structures and technologies to increase the tensile and tear strength. This can cause problems with the tear test method. In some cases, threads are pulled out of the normal small-width test specimens or the tear transfers across the specimen. The standard says that these specimens should be discarded.</p> <p>Clause 9.4 of EN ISO 13937-2 states "Annex D describes a test method using enlarged test specimens (8.2.2) which may be acceptable to samples considered untearable by the test using small-width test specimens or for special tear-resistant fabrics".</p> <p>However, the results measured with large specimens may be very different, and are often much higher than with small specimens. One sample tested by BTG achieved ~ 150 N using small specimens and greater than 600 N with large specimens. It may also be the case that these larger specimens also suffer from the same problems, in which case the standard recommends that other methods are considered, however EN 469 only specifies EN ISO 13937-2.</p> <p>Although all of these results are much greater than the minimum 25 N, and so clearly meet the requirements of EN 469, the problem remains that if different laboratories use different sample sizes, then test reports for similar or the same</p> | <p>The small test specimen shall be used. If there are problems with the specimens, the larger specimen size can be used. This shall be recorded in the test report.</p> <p>If, when using the enlarged test specimen, the specimens continue to fail in such a way that the standard says the specimens should be discarded, the result shall be recorded on the test report, together with a statement that the method is considered unsuitable for this type of material.</p> | <p>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</p> |
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| 05-061 | EN 469: 1995 (7.5) EN 469: 2005 (6.10) | Liquid penetration | How can one perform an EN 368 [EN ISO 6530] test on retroreflective elements? | The liquid penetration test should not be performed on retroreflective material. | Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020 |
| 23-020 | EN 469: 2005 (6.14) | Fluorescent material | <p>There are tapes on the market which are commonly used for firefighter's garments which do not fully meet EN 469, for instance one incorporating red stripes with a central silver retroreflective stripe.</p> <p>The red is described in the marketing literature as 'Fluorescent', but it fails to meet the requirements of clause 6.14, i.e. it cannot be described as fluorescent according to EN 471:2003.</p> <p>Is it possible to use this or similar tapes on garments conforming to EN 469:2005?</p> | <p>Yes, provided that user information state that the tape does not meet the requirements of EN 471.</p> <p>The Type-Examination Certificate should also state that the material is not to be regarded as meeting EN 471.</p> | Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020 |
| 25-001 | EN 469: 2005 (6.14, Annex B); | Retroreflective; fluorescent; minimum area | <p>EN 469 states that if applied, retroreflective shall encircle the arms, legs and torso.</p> <p>In EN 469 this requirement is understood to be required for fluorescent if it is applied.</p> <p>When measuring the area of fluorescent and/or retroreflective, should we take only the encircling bands into account, or should we also include material that does not encircle?</p> | ALL visibility material should be included in the area calculation, including non-encircling and vertical strips. | Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020 |

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| 22-004 | EN 469: 2005 (7.4.2) | Heat protection; marking | <p>When an EN 469:2005 garment meets Level 2 for Radiant and Convective Heat for all assemblies, should it be marked: Xf2 Xr2</p> <p>Or can it be marked: X2</p> | <p>Both solutions may be used, but X2 may only be used if both Xf2 and Xr2 levels are obtained.</p> <p>According to WG 2 the notion Xf2 Xr2 is to be preferred. WG 2 will be asked for clarification in the next amendment or revision of the standard.</p> | <p>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</p> |
| 25-007 | EN 469: 2005 (Annex B) | Retroreflective photometric performance | <p>The standard EN 469, annex B allows clothing for fire-fighters with retro reflective materials less than 50mm width.</p> <p>Example: Bands with fluorescent and retro reflective materials (yellow/silver/yellow)</p> <p>Which area must be used for the determination of retro reflective photometric performance?</p> | <p>Only the area of retro reflective material.</p> | <p>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 07/02/2020</p> |



CO-ORDINATION OF NOTIFIED BODIES PPE

Vertical Group 5: Protective clothing and gloves

RECOMMENDATION FOR USE

EN ISO 14116

(EN 533)
Rev.: 2019-08

Approval by:

Horizontal Committee


EU PPE Expert Group


Approved on:


30-09-2019



7-2-2020


| Sheet number PPE-R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment |
|---------------------------|-----------------------------------------------------------------------|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| 18-008 | EN 533:1997 (4.1) / EN ISO 14116:2008 (4.1) / EN ISO 14116:2015 (4.1) | Index 1; skin contact | <p>EN ISO 14116 forbids contact between the skin and an index 1 material.</p> <p>EN 1149-5 on the other hand requires a sufficient contact between the antistatic side of the fabric and the skin.</p> <p>Does this mean that e.g. a PU-coated antistatic material can not be used for a combined protection against both risks.</p> | <p>Another material which meets the index 2 requirement of EN ISO 14116 and the dielectric requirements of EN 1149-5 should be used to ensure continuity (e.g. at wrists, ankles and neck)</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i></p> <p><i>Approval by PPE Expert Group: 07/02/2020</i></p> |
| 26-006 | EN ISO 14116:2008 (6.1.4) / EN ISO 14116:2015 (6.1) | Flame spread; seams; accessories; hardware | <p>If in a technical files different fabrics (different weight, different composition, coated and non-coated, with or without A/S fibre etc) are used to make the personal protective equipment (clothing), shall the flame spread on the accessories (hardware etc) and the seam be tested on each quality?</p> | <p>In principle, testing from similar fabrics can be used for certification.</p> <p>It is recognised that garment assemblies can be highly complex, being comprised of a variety of materials and combinations. Therefore, it is recommended that each Notified Body considers the worst case condition for the product, thereby requiring those tests it deems necessary to satisfy the requirements of the Standards and the Regulation.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i></p> <p><i>Approval by PPE Expert Group: 07/02/2020</i></p> |


|  | | CO-ORDINATION OF NOTIFIED BODIES PPE | | | IEC / EN 61482 Rev.: 2019-08 | |
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| | | Vertical Group 5: Protective clothing and gloves | | | <u>Approval by:</u> Horizontal Committee EU PPE Expert Group | |
| RECOMMENDATION FOR USE | | | | | | |
| Sheet number PPE-R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment | |
| 22-016 | CLC/TS 50354 | Acceptance criteria | <p>The standard does not specify when the test has to be carried out on garment or on fabric. On what should we base our choice on? The requirement depends on the material tested: In the garment test, the requirements take the behaviour of the accessories and fasteners into account (after exposure, they shall be functional) but the heat flux is not to be measured, however, in the material test (obviously) the accessories are not evaluated but the heat flux does.</p> <p>Which method must be carried out in order to certify a PPE against thermal hazards of an electrical arc? Which requirements are the most important in order to evaluate the protective clothing? In order to evaluate the behaviour of the accessories (and/or other materials) against the exposition of an electrical arc, it is (maybe) not enough to consider the results obtained on fabric.</p> | <p>The current standard is IEC 61482-1-2 since January 2007. This standard is a test method which contains provisions which can be evaluated easily and make it possible to assess the protective properties of the whole garment.</p> <p>Another standard IEC 61482-2 which contains product requirements has been published.</p> <p>Both fabric and garment shall be tested and evaluated.</p> | <p><i>Approval by Horizontal Committee: 30/09/2019</i></p> <p><i>Approval by PPE expert group: 07/02/2020</i></p> | |

|  | | CO-ORDINATION OF NOTIFIED BODIES PPE Vertical Group 5: Protective clothing and gloves RECOMMENDATION FOR USE | | | EN ISO 9150 (EN 348) Rev.: 2019-08 | |
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| Sheet number PPE-R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment | |
| 05.272 | | calorimeter | How can we cool the molten metal splash calorimeter without producing a thermal drift? | It is better to let it cool down without any external action. | <i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i> | |

|  | | CO-ORDINATION OF NOTIFIED BODIES PPE Vertical Group 5: Protective clothing and gloves RECOMMENDATION FOR USE | | | EN ISO 9151 (EN 367) Rev: 2019-08 | |
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| Sheet number PPE-R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment | |
| 05.323 | EN ISO 9151 (EN 367) | knitted fabrics | Some materials like knitted fabrics undergo a deformation when exposed to the flame. They detach from the calorimeter thus creating an air gap which could result in a higher level of performance. Can this result to be considered as valid? | At this moment there is no general solution. A wire grid could be used to avoid such deformation | <i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i> | |


|  | | CO-ORDINATION OF NOTIFIED BODIES PPE Vertical Group 5: Protective clothing and gloves RECOMMENDATION FOR USE | | EN ISO 9185 (EN 373) Rev.: 2019-08 | |
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| Sheet number PPE-R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment |
| 29-013 | EN ISO 9185:2007 | Damage definition, PVC sensor | <p>According to point 3.1 of the standard, the definition of damage is any flattening or modification of the roughness.</p> <p>The attached photo, can it be considered as damage?</p>  | This is considered to be damage. | <i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i> |

|  | | CO-ORDINATION OF NOTIFIED BODIES PPE Vertical Group 5: Protective clothing and gloves RECOMMENDATION FOR USE | | EN ISO 15025 (EN 532) Rev.: 2019-08 | |
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| Sheet number PPE-R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment |
| 05.283 | EN 532 | Hole, flame-spread test | <p>After the flame expose the charred part of some materials is very weak, and it breaks when the specimen is taken from the specimen holder.</p> <p>When shall the evaluation of the hole be made?</p> <p>1) When the specimen is placed on the specimen holder</p> <p>2) When the specimen is removed from the specimen holder</p> | The evaluation of hole shall be made when the sample is placed on the specimen holder. | <i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i> |

|  | | <p align="center">CO-ORDINATION OF NOTIFIED BODIES PPE</p> <p align="center">Vertical Group 5: Protective clothing and gloves</p> | | <p align="center">CHEMICAL (including biological and radioactive risks) Rev.: 2019-08</p> | |
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| | | <p>RECOMMENDATION FOR USE</p> | | | |
| Sheet number PPE-R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment |
| 05.042 | EN 369 (5.2) | permeation, collecting medium | <p>According to EN 369 (and EN ISO 6529) the collecting medium shall be:</p> <p>"Water or any other liquid having no influence on material permeation resistance".</p> <p>This may be very difficult since the liquid collecting medium shall comply with 3 requirements:</p> <ul style="list-style-type: none"> - to dissolve the test chemical; - to be inert with regard to the material to be tested, and not modify its permeation properties. - to allow the chemical product to be detected with the sensitivity mentioned in paragraph 6.6 ($1\mu\text{g}\cdot\text{cm}^{-2}\cdot\text{mm}^{-1}$) <p>Combination of the three requirements will sometimes be impossible, e.g. extraction of plasticizers from PVC gloves or detection problems with a paraffin type mineral oil.</p> | <p>It is necessary to verify before testing that the collecting medium has no influence on the tested material and the blank shall be zero.</p> <p>Suggestion: a guide to collecting medium selection should be produced</p> | <p><i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i></p> |
| 21-011 | EN 1073-2 (4.2) | Radioactive contamination – puncture resistance | <p>Can a material, which obtains a level 1 for puncture resistance (EN 863), be used for non-ventilated protective clothing against particulate radioactive contamination (EN 1073-2)?</p> | <p>The requirements, as specified in EN 1073-2, are somewhat ambiguous. The introductory sentence to clause 4 states that at least level 1 shall be reached, whereas Table 1 (clause 4.2) specifies level 2 as a minimum. Guidance should be taken from this table.</p> <p>Hence materials that obtain only level 1 can not be used for this type of protective clothing.</p> | <p><i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i></p> |


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| 05.351 | EN 13034 | Additional features | Can embroideries be put on a garment? | The embroidered garment shall pass the low level spray test | <i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i> |
| 27-012 | EN 13034: 2005/A1: 2009 (4.1) | Penetration & repellency ; FR treatments | If a nonwoven fabric that meets EN 13034 for chemical penetration & repellency has a Flame Retardant treatment applied, must the fabric be retested? | Applied FR treatments can affect the chemical penetration & repellency performance of a nonwoven fabric. The penetration & repellency must be retested before the garment can be recertified to EN 13034. | <i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i> |
| 21-026 | EN 13034 (4.2) | Chemical penetration, seams etc. | EN 13034:2005 Clause 4.2 states that seams for chemical protective clothing materials shall prevent penetration of liquid. For type 6 suits, the standard specifies that the whole suit spray test (according clause 5.2) should be performed, but is it enough to evaluate the resistance to liquid penetration of seams? A specific method to test the resistance to liquid penetration of seams for all kind of type 6 items (Type 6 suits or type PB 6) is not specified in EN 13034:2005. Should the seams be tested against the four chemicals listed in EN 14325 Table 9? | Garments covering the whole body (coverall, jackets and trousers) shall be subjected to a whole suit spray test to assess the (limited) spray tightness of the garment construction. This is not applicable to partial body protection items. | <i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i> |
| 27-002 | EN 13034: 2005/A1: 2009 (5.1) | Partial body protection | Are garments that only have a “secondary” protective function against liquid chemicals (primarily function is against heat, electric arc, EN 471) like separate jackets and pants, still considered as a chemical protective suit? This would demand a spray test. Or can the jacket & pants be considered as “partial body protection” Type 6 [PB], without a spray test (according to clause 5.1)? The fabric itself has passed all the tests according to EN 14325:2004, but the wearer has a low risk to get contaminated during the daily range of operations. | Garments intended to be worn as part of a suit must be subjected to the Spray Test. For single garments, the manufacturer must state in the Instructions for Use that the garment must be worn with a suitable corresponding garment that complies with EN 13034. | <i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i> |

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| 18-003 | EN ISO 13982-1 (6e) | instructions for use; test results | Should a manufacturer be allowed to indicate in the instructions for use the real values of test results obtained in EC type examination testing, when the requirement of these tests is expressed as a pass/fail criterion only? | <p>No, according to sheet nr- CNB/P/00.077 RfU PPE-R/00.034, which is an explanation of the Regulation - annex II – item 1.4, the instructions for use must not be misleading for the user.</p> <p>Mentioning a measured value in addition to the conformity statement could make the user suppose that this value can be used to express the real performance of the equipment, and to determine the choice of the most suitable equipment and its conditions of use (for example wear period) taking into account the risk analysis.</p> <p>This is not acceptable since the standardisation working group - after evaluation of the test method - only retained a pass/fail criteria instead of classes.</p> | Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020 |
| 21-023 | EN 14126 (4.1.4) | infective agents | <p>1.) For chemical protective clothing, which meets the requirements of EN 943-1, protection against infective agents is claimed. Shall this clothing meet all requirements (tests), specified in EN 14126, clause 4.1.4, or just part of them?</p> <p>2.) Is it necessary to perform the same material tests on clothing materials, gloves and boots?</p> | <p>1.) The intended use and the corresponding risks and levels of protection shall clearly be stated. From this it should become clear if all or just some of the requirements are relevant and which tests should be performed. It should be noted that EN 14126 was developed with a very wide range of clothing types in mind.</p> <p>2.) Yes, all constituent materials, exposed to the risk, shall be tested</p> | Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020 |

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| 24-024 | EN 14605: 2005 | Face protection ; User Information | <p>Type 3 and type 4 chemically protective suits typically are not supplied with all the necessary items to also protect the face and throat or head and neck (nor hands and feet; however, most makes of gloves and boots will work properly with any suit).</p> <p>Who has the responsibility to find solutions to protection of the body parts that are obviously not protected by donning the suit, especially face/throat or head/neck?</p> <p>Is there a difference between the responsibility for Type 3 and Type 4 suits?</p> <p>Example shows a hood with rather big opening under the chin, i.e. a full face mask will not cover the gap fully.</p>  | <p>Preferred solution:</p> <p>A. For both type 3 and type 4: The PPE manufacturer must give detailed instructions how to protect the face/throat (head/neck) by specifying model(s) of face shields or respiratory protective equipment that will give appropriate protection.</p> <p>Acceptable solution:</p> <p>B: For type 3: The PPE manufacturer must give detailed instructions how to protect the face/throat (head/neck) by specifying model(s) of face shields or respiratory protective equipment that will give appropriate protection. For type 4 it is sufficient for the PPE manufacturer to give a warning in the instructions that the user shall make sure the chosen face protection will give the intended protection.</p> | <i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i> |
| 29-002 | EN 14605: 2005 (4.1, 4.2) | Permeation; chemicals | When certifying garments to Type 4, does the chemical chosen for the permeation test have to be one of the four chemicals listed in EN 14325 Clause 4.12? | <p>No.</p> <p>The Type 4 chemical protective clothing material shall meet at least Class 1 for permeation resistance against at least one chemical as chosen by the manufacturer.</p> <p>The chemicals against which the clothing should be assessed, should be specified in the relevant product standard or be derived from the intended use, as described in the information for use.</p> | <i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i> |













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| 20-004 | General | Abrasion, flex cracking, pressure pot | <p>When testing coated fabrics, laminates and membranes to Clauses 4.4, 4.5 and 4.6 of EN 14325:2004, there can be significant differences in classification between visual assessment and when using the pressure pot. Many fabrics that have previously passed using visual inspection have failed when assessed with the pressure pot.</p> <p>Now that EN 13034, EN ISO 13982-1 and EN 14605 have been ratified, what should be done regarding Certificates that have been issued where the fabric was assessed visually?</p> | <p>The notified bodies shall draw the manufacturers' attention to the changes induced by EN 14325 and their impact on material classification and recommend the manufacturers to have their materials assessed against the new test procedures.</p> <p>However, this should not be presented as mandatory.</p> | Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020 |
| 05.318 | General | Instructions for use | <p>Should NB's agree on essential harmonised formulations, which are not covered/required by the (pr)EN-standards, to be included into the "instructions for use" for specific types of CPC?</p> | <p>Yes, they should.</p> <p>This is an approach to improve equal treatment of the manufacturers by the European test houses.</p> <p><u>CPC Types 1, 2, 3, 4, 6</u> <i>"This clothing gives protection against specific named chemicals."</i> <i>"The test results found under laboratory conditions are only to be regarded as an orientation for practical applications."</i></p> <p><u>CPC Types 3,4,6 that are used in connection with respiratory protective devices (RPD)</u> <i>"No general statements can be given for the leak tightness of RPD in connection with the approved suit different from those used under test."</i></p> | Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020 |
| 05.158; 05.350 | General | Pockets | <p>Are open pockets (without pocket flap) especially rule pockets, allowed for this kind of protective clothing?</p> | <p>Open pockets should not be used. All pockets, including pockets with a vertical opening, shall be covered to prevent penetration of liquids</p> | Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020 |
| 05.313 | General | Repellency | <p>Several manufacturers include in their instructions for use the procedure to be followed for reapplication of the fluorocarbon finish. Does the NB need to verify these instructions?</p> | <p>No, the NB only needs to verify that the manufacturer gives the instruction.</p> | Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020 |

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| 33-003 | EN 14605: 2005/A 1: 2009 / EN 13034: 2005/A 1: 2009 | Spray test; Jet test | <p>EN 14605 clause 4.3.4.2 (resistance against penetration of liquids (spray test)) requires all suits to pass the test (EN ISO 17491-4) e.g. detector garment stain > 3x calibration stain area.</p> <p>EN ISO 17491-4 requires in clause 9 and 10 to check and record the contaminated / wet area on the internal surface of the test garment, as well as on the absorbent undergarment.</p> <p>Similar requirements apply for the suits to pass the jet test (EN ISO 17941-3), and in EN 13034 for the light spray test.</p> <p>What shall be considered for the spray / jet test if wet spot areas are detected only on the internal surface of one of the three test garments (e.g. seams)?</p> | <p>Clauses 4.3.4.2 and 4.3.4.3 of EN 14605, and Clause 5.2 of EN 13034, have the suit test requirement written in the form:</p> <p><i>“i.e. the total stain area on any one undergarment of each suit shall be less than or equal to three times the total calibrated stain area.”</i></p> <p>This requirement disregards any contamination or wet area on the internal surface of the test clothing.</p> <p>The PPE Regulation Basic Health and Safety Requirement 3.10.2 requires, as far as possible, complete leak-tightness or, failing this, limited leak-tightness necessitating a restriction of the period of wear. The absorbent detector garment cannot detect all penetrations spots of a test garment, because it will not always be in contact with all areas of the inner side of the test garment.</p> <p>If there is contamination of the internal surfaces of the test clothing, this shall be noted in the manufacturer’s information.</p> <p>(NOTE: The standards EN 14605 and EN 13034 (in their English and French versions) use the term ‘i.e.’ meaning ‘that is’. The German version uses the term for ‘e.g.’ meaning ‘for example’.)</p> | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |
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|  | | CO-ORDINATION OF NOTIFIED BODIES PPE Vertical Group 5: Protective clothing and gloves RECOMMENDATION FOR USE | | EN 388 Rev.: 2019-08 | |
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| | | | | <u>Approval by:</u> Horizontal Committee EU PPE Expert Group | <u>Approved on:</u> 30-09-2019 7-2-2020 |
| Sheet number CNB/P/0 5 | Standard (clause) | Key words | Question | Proposed solution | Comment |
| 17-011 | General | Gloves without fingertip | <p>Is it possible to certify gloves according to EN 388 without fingertip for better dexterity?.</p> <p>In EN 388 the test-samples are cut from the palm of the gloves.</p> | Yes, this is possible. | <i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i> |
| 05.125 | General | performance levels | <p>If the whole palm (do we agree, that "whole palm" includes fingers?) of a glove type is made from one layer, but a variant is doubled only in the main part (without fingers), shall we assess the variant with the same EN 388 performance profile as for the single-layer-type?</p> | <p>Yes, because the reinforcement is only partial. The benefit of the partial reinforcement can be stated in the informative note, but an upgrading of the whole performance-level should be avoided, because it does not cover the fingers.</p> <p>Put the performance classification on the safe side.</p> | <i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i> |
| 05.290 RFU 05.32-003 r1 | EN 388: 2016 (6.1) | Coated gloves, abrasion | <p>Should the abrasion test for gloves with vinyl or plastic coating be considered finished when only a part is removed or when it is totally removed?</p> | <p>The end point is reached when a hole appears in the whole material.</p> | <i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i> |

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| 32-003 r1 | EN 388: 2016 (6.1.5. 3) | Abrasion, layers | <p>Clause 6.1.5.3. states: “Begin the test and check the test specimens after 100 rubs.” “If a breakthrough is found when examining the test specimens at a given performance level, the classification will be at the preceding inferior performance level.” “When the specimen is constituted of several layers the final result of the test will be the sum of the results of all the layers.”</p> <p>Therefore if a glove has more than one unbonded layer, but each individual layer fails to meet 100 rubs, then following Clause 6.1.5.3, the glove would not meet Level 1 and would be unclassified for Abrasion, even if the total number of rubs from all layers added together would exceed 100.</p> <p>Can the layers be checked before Level 1 (100 rubs), and the total number of rubs at which the individual layers still comply be used for classification?</p> <p>Following the same principle, for multi-layered gloves with layers at least Level 1, can a test be stopped between Levels and the results for individual layers (number of rubs at which layers still comply) be added together to achieve a Level greater than would be achieved by adding the Levels (number of rubs for the Level) together? E.g. Level 2 + Level 2 + Level 2 = 1500 = Level 2, whereas the layers may actually achieve 600 + 700 + 800 = 2100 = Level 3.</p> | No. For multi-layered gloves, it is not possible to add the number of rubs for the determination of the Level. | <i>Approval by Horizontal Committee: 30-9- 2019 Approval by PPE expert group: 7- 2-2020</i> |
| 18-002 | EN 388: 2016 (6.2.3) | Cut resistance | <p>According to clause 6.2.3 it is required, that in the case of several unbonded layers, these layers are tested together for classification of blade cut resistance.</p> <p>In some cases tests on a material combination e.g. leather/kevlar-knitting lead to a lower performance level (eg. level 2) compared to the performance level on an individual material layer (e.g. level 1 for leather, level 3 for kevlar-knitting).</p> <p>Could in case of several unbonded layers, the test be performed on each layer and the classification of cut resistance be based on the highest value obtained (as in clause 6.3.6 tear resistance) ?</p> | No, the combination shall be tested as specified in EN 388. | <i>Approval by Horizontal Committee: 30-9- 2019 Approval by PPE expert group: 7- 2-2020</i> |
| 32-009 | EN 388: 2016 (6.2.6) | Cut resistance | <p>Performing the blade cut test of EN 388, if a cut through does not occur within 60 cycles, the test must be stopped manually, but the standard fails to state how to proceed: in case the C_{n+1} is lower than $3 \cdot C_n$ the cut Index is calculated taking into account the “60”</p> <p>What is the correct procedure to follow?</p> | The “60 cycles result” means the material is highly resistant to cutting and therefore ISO 13997 method shall be used, independently from the 3-times difference between cut cycles before and after the specimen testing. | <i>Approval by Horizontal Committee: 30-9- 2019 Approval by PPE expert group: 7- 2-2020</i> |

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| 34-004 | EN 388: 2016 (6.2.6) | Blade cut resistance | <p>EN 388:2016+A1:2018 § 6.2.6 states “The test specimen is subjected to the same test and the number of cycles (T) is recorded. The test is manually stopped when T reaches maximum 60 cycles.”</p> <p>In such a situation where the test is manually stopped and no actual cut through of the specimen has occurred should a cut index be calculated using a T value of 60 and a cut resistance level be reported?</p> | <p>Yes. However, the test report should also include an informative note to explain that while a cut performance level is reported this is given on the basis that the test was manually stopped after 60 cycles in accordance with EN 388:2016 § 6.2.6 and no cut through of the specimen occurred.</p> | <p><i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i></p> |
| 34-003 | EN 388: 2016 (6.2, 6.3) | Blade cut resistance | <p>Can the cut resistance method according to Clause 6.3 (EN ISO 13997) be performed and marked for materials that do not dull the blade in the Blade cut resistance test (Clause 6.2)?</p> | <p>Yes.</p> | <p><i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i></p> |
| 05.264 | EN 388: 2016 (6.4) | Tear strength | <p>A glove with two layers (in the palm, not in the fingers) stitched together in an X pattern.</p> <p>Shall this be considered as bonded or unbonded layers?</p> <p>Shall the performance level of the palm area be considered the performance level for the whole glove or it should be mentioned in the information leaflet that the specific level concerns only the palm area?</p> | <p>It shall be considered as not bonded.</p> <p>It shall be mentioned in the information leaflet that the performance level is only applicable to the palm area.</p> | <p><i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i></p> |

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| 22-010 | EN 388: 2016 | Mechanical protection | <p>How should one test and evaluate the mechanical protection level according to EN 388:2016 of the following gloves? (see photographs of gloves a to d attached). What should be on the pictogram?</p> <table border="1"> <tr> <td> <p>a) Gloves with reinforcement patches almost completely covering the palm and thumb:</p>  </td> <td> <p>b) Gloves with reinforcement patches almost completely covering the palm but not the thumb:</p>  </td> </tr> <tr> <td> <p>c) Gloves with reinforcement patches covering some places on the palm and thumb:</p>  </td> <td> <p>d) Gloves with only the palm reinforced by stitches. The abrasion and cut resistance of the complete structure is clearly higher than that of the component materials (outer layer and lining):</p>  </td> </tr> </table> | <p>a) Gloves with reinforcement patches almost completely covering the palm and thumb:</p>  | <p>b) Gloves with reinforcement patches almost completely covering the palm but not the thumb:</p>  | <p>c) Gloves with reinforcement patches covering some places on the palm and thumb:</p>  | <p>d) Gloves with only the palm reinforced by stitches. The abrasion and cut resistance of the complete structure is clearly higher than that of the component materials (outer layer and lining):</p>  | <p>The results obtained on the weakest parts of the structure should be considered for the marking. This is sometimes in contradiction with taking the specimens from the palm of the glove. The informative notice shall give clear information on the meaning of the markings.</p> <p>Glove a) Abrasion resistance: test on the complete structure, not on the separate materials. Tear strength of the reinforcement patches should be tested and taken into account if higher than that of the other materials in the palm structure. Puncture and cut resistance should be tested on the weakest spots.</p> <p>Glove b) For cut, tear and puncture see solution a) For abrasion use solution a) if the fingers are reinforced and solution c) if they are not.</p> <p>Glove c) Test without taking into account the reinforcement patches, but make a note in the consumer information brochure stating that the areas covered by reinforcement patches may have a higher protection level.</p> <p>Glove d) Abrasion and cutting: test with the stitches, it will be impossible to take test specimens otherwise. Tear on separate layers. Puncture: on all layers together.</p> | <p><i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i></p> |
| <p>a) Gloves with reinforcement patches almost completely covering the palm and thumb:</p>  | <p>b) Gloves with reinforcement patches almost completely covering the palm but not the thumb:</p>  | | | | | | | | |
| <p>c) Gloves with reinforcement patches covering some places on the palm and thumb:</p>  | <p>d) Gloves with only the palm reinforced by stitches. The abrasion and cut resistance of the complete structure is clearly higher than that of the component materials (outer layer and lining):</p>  | | | | | | | | |

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| 27-001 | EN 388: 2016 | Leather; description; thickness | <p>1) Shall a manufacturer of leather gloves indicate the thickness of the leather in their Technical File.</p> <p>2) For module C2, do these values become requirements that must be checked?</p> | <p>1) Yes</p> <p>2) Information retained in the Technical File relating to thickness may be useful for determining product conformity</p> | <p><i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i></p> |
| 27-005 | EN 388: 2016 (7,8) | Marking, Information | <p>For gloves with reinforcement, patches the performance levels of the weakest parts/spots of the structure shall be considered and stated next to the pictogram (see RfU 22-010, glove c). Can the performance levels of the reinforcement patches be additionally stated</p> <p>a) next to the pictogram (2nd row of levels) and</p> <p>b) in the manufacturer's information?</p> | <p>a) The performance levels of the reinforcement patches are not to be shown additionally next to the pictogram (as a 2nd row of levels) as this can be confusing and misleading for the end-user.</p> <p>b) The performance levels of the reinforcement patches can additionally be mentioned in the manufacturer's information.</p> | <p><i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i></p> |



CO-ORDINATION OF NOTIFIED BODIES PPE

Vertical Group 5: Protective clothing and gloves

RECOMMENDATION FOR USE

EN ISO 374

Gloves for chemicals and micro-organisms

Rev.: 2019-08

Approval by:

Horizontal Committee

EU PPE Expert Group

Approved on:

30-09-2019

7-2-2020

| Sheet number PPE-R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment |
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| 26-012 | EN ISO 374-1: 2016 | Marking | <p>Article 17.1 of the PPE Regulation says that CE marking must be affixed to each piece of manufactured PPE so as to be visible, legible and indelible throughout the expected life of the PPE. However, if it is not possible in view of the characteristics of the products, the CE marking may be affixed to the packaging.</p> <p>For single use protective gloves, usually packed in a box containing 100 pieces, is it possible to consider the economic reason as the characteristic of the product which allows the CE marking to be affixed to the box instead of marking on each piece?</p> | <p>The PPE Regulation allows this “in view of the characteristics of the product”.</p> <p>The PPE Guidelines confirms that “this would be justified where affixing it to the product was ... not achievable under reasonable technical and economic conditions” (Section 4.4), 1st Version April 2018).</p> <p>EN 420 also allows this.</p> | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |
| 28-003 | EN 16523-1:2015 | permeation, gloves with irregular design | <p>For the module B or C2 evaluation of irregular gloves, shall we take the lowest result for permeation between the palm and cuff areas?</p> | <p>The classification is based on the result from the area having the lowest breakthrough time.</p> | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |

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| 33-001 | EN ISO 374-1:2016 / EN 374-4: 2013 | Degradation; Hydrofluoric Acid | <p>The current list of chemicals in Table 2 of EN ISO 374-1:2016 includes Hydrofluoric Acid 40% (CAS 7664-39-3) and clause 5.3 requires that all chemicals claimed in the marking should be tested according to EN 374-4 (Degradation). However, the degradation test method requires the use of glass vials for this test, which is not suitable for use with Hydrofluoric Acid. How should this problem be approached?</p> | <p>It is possible to make the test using polystyrene screw cap vials 12 mm inner diameter in the neck (just as the prescribed 20 ml glass vials). They can resist the 40 % Hydrofluoric Acid for an hour though do show some whitening.</p> <p>NOTE: The vapour pressure of 40% Hydrofluoric Acid is so high that the test needs to be performed in a fume cabinet, and the test equipment should be protected from corrosion due to the vapour.</p> | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |
| 33-002 | EN ISO 374-1:2016 | Permeation levels; User information | <p>EN ISO 374-1:2016: Clause 7 states</p> <p>“The information supplied by the manufacturer shall be in accordance with the requirements for information as defined in EN 420. It shall also include the results of 5.2, 5.3, 5.4 the list of all the chemicals to which the protective gloves have been tested and the performance levels obtained in permeation testing”.</p> <p>This list can be interpreted to consist of either:</p> <p>a) All those tested and achieving level 1 or above (Note: Table 1 of EN ISO 374-1 does not include level 0)</p> <p>or</p> <p>b) Everything tested including those that achieved level 0</p> <p>However, for certification to the Regulation there is a third possibility to only include the tested chemicals where the manufacturer wishes to make a claim.</p> <p>Which of the above options are considered to be acceptable?</p> | <p>Some customers will complete exploratory/development testing against many different chemicals, for example those which may be new to the list within EN ISO 374-1:2016 and unfamiliar to the customers. If they are unsure on how their gloves may perform, they may wish to carry out this investigative check testing but not claim the levels achieved if they are below the expected.</p> <p>Proposed solution is therefore that only the chemicals that the manufacturer wishes to claim protection against should be listed.</p> <p>To list potentially up to 17 level 0 results on an artwork or UIS documents would appear to have limited value and distract from the more useful information. It would also take up a large quantity of the user instruction sheets/box artwork which already needs to include a lot of mandatory information to comply with EN ISO 374-1:2016.</p> | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |

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| 32-005 | EN374-4: 2013 | Sampling, puncture test, irregular construction, chemical protective gloves | <p>Clause 5.1 states:</p> <p>“Select three gloves for testing.”</p> <p>“In the case of irregular and/or multiple construction, one sample shall be tested from each area. Using the appropriate circular die of 20 mm, cut 6 specimens of each glove for a total of 18 specimens. For each glove, 3 specimens will be exposed to the challenge chemical and 3 specimens will be unexposed.”</p> <p>“Select specimens so that they are homogeneous and representative of the glove’s primary construction. Avoid embossed patterned areas or other areas of varying thickness when cutting these specimens”.</p> <p>For gloves of irregular and/or multiple construction, how should this be interpreted?</p> <p>Should sets of three specimens be taken from each area, or should the three specimens from each glove be distributed to get at least one specimen from each area.</p> <p>In case of a glove with significant difference between palm area and back of hand area, shall 6 specimens be taken from each glove (e.g. 1+1 from palm and 2+2 from back), or should 12 specimens be taken (3+3 from palm and 3+3 from back) ?</p> | <p>“one sample from each area” means that 2 sets of 3 specimens shall be taken from each of the different areas of each glove giving a total of 18 specimens for gloves of homogeneous construction, 36 from gloves with two different areas, etc.</p> | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |
| 34-005 | EN ISO 374-1:2016 (Table 2) | Permeation against chemicals | <p>Table 2 contains the challenge chemicals for the Permeation testing of protective gloves. Within the table Formaldehyde is named under letter T. The concentration is given as 37%. A solution of Formaldehyde with such a high concentration tends to polymerise from within. Therefore, a stabilising agent is added. Which stabilising agent should be used?</p> | <p>The most commonly used stabilising agent is Methanol. Therefore, it is suggested to use the commercially available mixture of 37% Formaldehyde and approximately 10% Methanol.</p> | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |



CO-ORDINATION OF NOTIFIED BODIES PPE

Vertical Group 5: Protective clothing and gloves

RECOMMENDATION FOR USE

Gloves

General & Miscellaneous

Rev.: 2019-08

Approval by:

Horizontal Committee
EU PPE Expert Group

Approved on:


30-09-2019
7-2-2020

| Sheet number PPE- R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment |
|-------------------------------|----------------------------|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| 27-011 | General | Gloves; cold; categorization | What is a category of gloves protecting against cold if a temperature of cool environment is equal or higher than -5°C? | VG5 are of the opinion that these protective gloves belong to PPE of category I. | <i>Approval by Horizontal Committee: 30-9- 2019 Approval by PPE expert group: 7-2-2020</i> |
| 23-007 | EN 420: 2010 (4.3.2) | pH value | In a case of knitted gloves partly coated by plastics or rubber, which parts of glove should be tested for pH value to confirm that it meets the requirement of the standard (back side of glove not coated or partly coated and palm side – totally coated)? | Both the knitted material and the coated material shall be tested | <i>Approval by Horizontal Committee: 30-9- 2019 Approval by PPE expert group: 7-2-2020</i> |
| 32-010 | EN 420: 2003 (4.3.2) | pH value | Point 4.3.2 of EN 420:2003+A1:2009 says: “Determination of pH shall be according to EN ISO 4045 for leather gloves, and EN 1413 for other materials. Following amendments shall apply: - if gloves are made of more than one layer, all layers shall be tested together;” Issue: for some Customers it may be convenient from an economic point of view to only perform the test on each single layer. | The lab can decide on a case by case basis if - they perform the test as described in the Standard (all the layers together); or - determine the pH content of each single material which will have to meet the following requirement: 3,5<pH<9,5. | <i>Approval by Horizontal Committee: 30-9- 2019 Approval by PPE expert group: 7-2-2020</i> |
| 19-012 | EN 420: 2010 (4.3.3) | Chromium | Does clause 4.3.3 Determination of chromium (VI) content exclude chemical protective gloves? | This clause intended to address testing of leather gloves. Leather gloves shall always be tested on their Cr-VI content. Other gloves shall only be tested in case of doubt. A declaration of the manufacturer that the product is free of Cr-VI shall be required. | <i>Approval by Horizontal Committee: 30-9- 2019 Approval by PPE expert group: 7-2-2020</i> |
| 19-011 | EN 420: 2010 (4.3.4) | Protein content | Is clause 4.3.4 Determination of extractable protein content applicable to chemical protective gloves made from natural rubber ? Does the NOTE exclude them? | The clause makes testing of extractable protein content mandatory. The note can be considered as a warning to be very careful with the interpretation of test results but is not in contradiction with the clause. | <i>Approval by Horizontal Committee: 30-9- 2019 Approval by PPE expert group: 7-2-2020</i> |

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| 20-006 | EN 420: 2010 (4.3.4) | Gloves, natural rubber, protein content | <p>EN 420 (2010) foresees the determination of extractable protein content for natural rubber latex gloves in section 4.3.4.</p> <p>Is this mandatory for natural rubber gloves that are worn with under-gloves (this is the case of containment enclosure gloves)?</p> | <p>Strictly spoken the test should be carried out, but it gives no useful information. Therefore warnings should be given in the information for use:</p> <ul style="list-style-type: none"> - A warning mentioning that this glove is liable to cause allergies due to the natural rubber - A wording indicating that this glove has to be worn with under-gloves of at least the same length as the rubber glove | <p><i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i></p> |
| 18-014 | EN 420: 2010 (5.3) | Water vapour transmission and absorption | <p>1. The way the clause is written “If required,...” makes the requirement optional but according to Regulation 2016/425 Annex II 2.2 it should be considered in any case.</p> <p>2. Nothing is said about where to take the test sample from.</p> | <p>1. Non-compliance with this requirement, i.e. in the case of fully impermeable gloves, shall be mentioned in the user's information and recommendations to improve the comfort should be given e.g. by limiting the time of use.</p> <p>2. Test specimens shall be taken from any relevant part of the glove</p> | <p><i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i></p> |
| 23-006 | EN 420: 2010 (5.3.1) | Water vapour transmission | <p>1. According to EN 420:2010, p. 5.3.1: “Where practicable, protective gloves shall allow water vapour transmission” and “If required, gloves shall have a water vapour transmission....”. What do “where practicable” and “if required” mean? In what cases are they applicable?</p> <p>2. How should the test be performed when the glove is made of more than one layer of material – on each material layer separately or on assembly of materials? (the question concerns the test of water vapour transmission and absorption).</p> <p>3. How should the assessment be conducted when the glove is made of different materials on back and palm side?</p> | <p>1. If water vapour transmission is claimed, this property shall be tested</p> <p>2. All layers shall be tested together for water vapour transmission and absorption</p> <p>3. They shall be assessed separately and this shall be reported in the information for use</p> | <p><i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i></p> |

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| 19-004 | EN 421: 2010 | Radiologist's gloves; ionizing radiation | <p>A manufacturer argues that EN 421 is not a suitable standard to measure the protection level of gloves for the medical market (protection of radiologists).</p> <p>Referring to EN 421, § 5.1.1: The only results obtained and required to be reported are lead equivalence values in mm. There is no way to determine with this rather simple test what the percentage scattered radiation is absorbed by the gloves.</p> <p>The proposal is to discontinue use of EN 421 as product standard for this type of PPE and instead to use IEC 61331-1:2014 Protective devices against diagnostic medical X-radiation - Part 1 : Determination of attenuation properties of materials (most recent version: EN 61331-1:2014)</p> | EN 61331-1:2014 appears to be more suitable for medical X-ray applications, whereas EN 421:2010 is more adapted to the needs of the nuclear industry. If used for the certification of protective gloves for radiologists, EN 61331-1:2014 shall be used in conjunction with EN 61331-3:2014. Results are (as in EN 421) expressed in mm Pb equivalent). | Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020 |
| 34-008 | EN 511: 2006 (4.5 / 5.5) | insulation against cold, heated gloves | <p>Protective gloves are tested for convective cold on a thermal hand model according to clause 5.5 (Annex A), with four performance levels defined in clause 4.5.</p> <p>The test is intended for standard gloves made with insulating material, however it is possible to incorporate active heating (electrically powered) in a glove, which may result in an increased performance level for convective cold.</p> <p>How should a glove with electrically powered active heating be assessed against clause 4.5?</p> | <p>The glove should be tested with the heating system inactive, and can additionally be tested with the system active.</p> <p>The testing with the system inactive should be used for classification according to the standard.</p> <p>The information for use can include the additional information regarding the test and performance with the system active.</p> | Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020 |
| 19-010 | EN 659: 2008 | Firefighter's gloves; cuffs | <p>A fire-fighters glove, with a knitted cuff has been submitted for testing to EN 659.</p> <p>What tests should be carried out on the cuff material, which is of knitted construction and differs from the main part of the glove</p> | <p>pH and burning behaviour shall be tested.</p> <p>If the cuff is – in use – covered by the sleeve of the fire fighter's jacket convective and radiant heat don't need to be tested.</p> | Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020 |
| 22-013 | EN 659: 2008 | Firefighter gloves; heat transfer | <p>The general requirements (clause 3.1) demands separate tests if the material in front and/or back of the glove is different.</p> <p>Clause 3.8 (convective heat) requires sampling from palm and back.</p> <p>Clause 3.9 (radiant heat) requires sampling from the back.</p> <p>Can we accept a reduced protection at the side of the fingers because it's neither front nor back ?</p> <p>If the assembly construction in these parts is different from front/back, a different (reduced ?) protection performance can be expected.</p> | The assembly at the side part of the glove's fingers should be tested on convective heat insulation, if it deviates from the assembly at the front/back of the gloves. | Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020 |

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| 24-009 | EN 659:2008 | Firefighter gloves; features | <p>1. In EN 659:2008 there is no requirement concerning elements of gloves such as hook and loop fasteners and retroreflective/fluorescent strips. What requirements shall these elements of gloves meet? What test method shall be used for testing them?</p> <p>2. Shall a label inside a glove comply with the requirement of burning behaviour or heat resistance (tested like the lining material)?</p> | <p>1. The hook and loop fasteners shall be tested for flame resistance according to EN 469:2005 6.1.6. Testing should be done on the fastener when closed, as presented on the glove. The fastener shall function after the test.</p> <p>Retroreflective/fluorescent material shall conform to the requirements of EN 469:2005: Annex B.3.2 (flame spread). Other exposed items shall also pass the flame spread requirements of EN 469.</p> <p>2. A label that will lie next to the skin shall meet the requirement for the lining material of gloves (heat resistance according to clause 3.11 of EN 659:2003).</p> | <p><i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i></p> |
| 22-014 | EN 659:2008 | Firefighter gloves; marking | <p>EN 659 requires the marking of every protective glove the number of the standard, EN 659, and the firefighter pictogram [ISO 7000-2418].</p> <p>Furthermore the marking must be carried out according to the requirements of EN 420 .</p> <p>The EN 420 says in 7.2.1.1.e : “The number of the specific standard and the performance levels must be indicated .”</p> <p>Does it mean we have to put all performance levels on the gloves ?</p> | <p>Only the pictogram and the number of the standard should be on the gloves.</p> | <p><i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i></p> |

|  | | <p align="center">CO-ORDINATION OF NOTIFIED BODIES PPE</p> <p align="center">Vertical Group 5: Protective clothing and gloves</p> <p align="center">RECOMMENDATION FOR USE</p> | | | <p>Electrostatic charges</p> <p>EN 1149 series</p> <p>Rev.: 2019-08</p> | |
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| | | | | | <p>Approval by:</p> <p>Horizontal Committee EU PPE Expert Group</p> | |
| Sheet number PPE-R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment | |
| 28-012 | EN 61340 | Electrostatics | Do members of VG5 consider the use of the EN 61340 standard appropriate as a means of showing compliance with the PPE Regulation? | No. As this series of standards does not address protection of the wearer, this series cannot be used to demonstrate compliance with the EHSR of the PPE Regulation. | <i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i> | |
| 34-010 | EN 1149-5:2018 (4.2.1) | Surface resistance; Surface resistivity | <p>1) For assessment according to Subcl. 4.2.1 of EN 1149-5, should be tested the surface resistance or surface resistivity? (the scope of the standard EN 1149-1 is surface resistivity; but in the EN 1149-5 is required surface resistance; surface resistivity = surface resistance x 19,8)</p> <p>2) Subcl. 4.2.1 says: “Geometric mean of surface resistance of less than or equal to $2,5 \times 10^9 \Omega$ on at least one surface, tested according to EN 1149-1.” The value less than or equal to $2,5 \times 10^9 \Omega$ on at least one surface is meant as the obverse side or the reverse side?</p> | <p>1) EN 1149-5 requires a maximum surface resistance of $2.5 \times 10^9 \Omega$. Calculation of Surface resistivity is required by EN 1149-1, but is not required for certification according to EN 1149-5.</p> <p>2) Result from obverse side or the reverse side is accepted.</p> | <i>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</i> | |

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| 34-016 | EN 1149-5:2018 (4.2.2.2, 4.2.2.3) | Attachments; Conductive parts | <p>Are non-conductive attachments to the outside of garments, greater in thickness than 2 mm, acceptable?</p> <p>e.g. plastic buttons (> 2 mm thick), plastic buckles (> 2 mm thick) and plastic press studs (see pictures below)</p> | <p>EN 1149-5:2018, clause 4.2.2.2, states that “Exposed cords, drawstrings, etc. shall not exceed 20 mm in width.”</p> <p>For other items, the guidance in CEN/CLC/TR 16832 and IEC/TS 60079-32-1 (CLC/TR 60079-32-1) should be followed.</p> <p>CEN/CLC/TR 16832:2015 Table A.2, and CLC/TR 60079-32-1:2018 Table 3, set a limit of 400 mm² (4 cm²) for the maximum area of an insulating solid material for use in the most sensitive atmosphere, when attached to outermost (dissipative) material.</p> <p>EN 1149-5:2018, clause 4.2.2.2, states “Attachment to the outside of garments shall be done in such a way that separation between the attached elements and the electrostatic dissipative material is avoided.”</p> | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |
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Images for PPE-R/05.34-016





CO-ORDINATION OF NOTIFIED BODIES PPE

Vertical Group 5: Protective clothing and gloves

RECOMMENDATION FOR USE

**Cold protective Clothing
EN 342, EN 14058
Rev.: 2019-08**

Approval by:

Horizontal Committee
EU PPE Expert Group

Approved on:

30-09-2019
7-2-2020

| Sheet number PPE-R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment |
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| 05.299 | EN 342:2017 | combination of cold protection and chemical protection | <p>What are the requirements, test methods, and categorization of a cold protection suit worn over chemical protection?</p> <p>It is used to protect the user of a chemical protective suit against cold of gases liquefied under pressure to -60°C, and to protect also the devices against these “cold” chemicals.</p> <p>The chemicals protective suit itself fulfils the permeation requirements</p> | <p>This is a category III equipment.</p> <p>General requirements of the Regulation (design principles, innocuousness of PPE and comfort and efficiency) shall be checked.</p> <p>This includes testing of strength; puncture, tear, seam strength, flex cracking at low temperature and resistance to ignition.</p> <p>Requirements of EN 943-2 are used for evaluating the level of performance.</p> <p>The whole suit when used with the chemical protective clothing and devices shall pass the work simulation test at low temperatures as specified in EN 943-2, clause 8.1.1.2.</p> | <p><i>Approval by Horizontal Committee: 30-9-2019</i></p> <p><i>Approval by PPE expert group: 7-2-2020</i></p> |
| 22-017 (Q1) | EN 342: 2017; EN 14058: 2017 | Categorization; scope | <p>According directive, high risks are temperatures lower than -50°C and low risks are situations of “atmospheric conditions that are not of an extreme nature.”.</p> <p>EN 342 covers the medium risks, but it’s not very clear if scope of the standard EN 14058 addresses category I or II.</p> | <p>EN 14058 was developed for protection in cool environments (higher than -5°C), which corresponds to cat. I PPE. However, it contains also an optional manikin test. Depending on the results of the manikin test the garment can be cat I or cat II (see tables in annex B of the standard). Results should be interpreted in connection with the rest of the standard clothing used in the test.</p> | <p><i>Approval by Horizontal Committee: 30-9-2019</i></p> <p><i>Approval by PPE expert group: 7-2-2020</i></p> |

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| 27-015 | EN 342: 2017 | ensembles and garments; cap | <p>In the EN 342 p. 1 Scope it is stated that: the standard does not include specific requirements for head wear, footwear and gloves intended to prevent local cooling.</p> <p>Is it possible to certify according to EN 342 a two piece suit with cap?</p> | <p>Yes, it is possible to certify a two piece suit with cap according to EN 342:2017. The labels in each item must indicate that all items must be worn together.</p> | <p><i>Approval by Horizontal Committee: 30-9-2019</i> <i>Approval by PPE expert group: 7-2-2020</i></p> |
| 33-005 | EN 342: 2017 / EN 14058:2017 Clause 5 | pre-treatment; design and comfort; innocuousness | <p>EN 342 and EN 14058, Clause 5 (Pre-treatment) states:</p> <p>“The specimens used for tests specified in 6.2 to [6.5 / 6.7] shall be pre-treated by cleaning, which shall be in line with the manufacturer’s instructions on the basis of standardized processes.”</p> <p>In each standard it is stated:</p> <p>“4.1.1 General requirements. When tested in accordance with 6.2.1 the following requirements shall be met” [design and comfort requirements]</p> <p>“4.1.2 Innocuousness. When tested in accordance with 6.2.2 the requirements of EN ISO 13688:2013, 4.2, shall be met with regard to innocuousness.”</p> <p>“6.2.1 General requirements. The general requirements shall be assessed by visual inspection and by hand.”</p> <p>“6.2.2 Innocuousness. The innocuousness of the protective clothing shall be tested according to EN ISO 13688:2013, 4.2.”</p> <p>For design, ergonomics and comfort assessments, garments are usually assessed in their new condition. In EN ISO 13688 innocuousness is tested on new material. How should Clauses 6.2.1 and 6.2.2 of both standards be assessed?</p> | <p>Clause 5 (Pre-treatment) should exclude 6.2 for both standards.</p> <p>Clauses 6.2.1 (design and comfort requirements) and 6.2.2 (Innocuousness) should be tested without pretreatment.</p> | <p><i>Approval by Horizontal Committee: 30-9-2019</i> <i>Approval by PPE expert group: 7-2-2020</i></p> |



CO-ORDINATION OF NOTIFIED BODIES PPE

Vertical Group 5: Protective clothing and gloves

RECOMMENDATION FOR USE

EN 343

Foul weather clothing

Rev.: 2019-08

Approval by:

Horizontal Committee
EU PPE Expert Group

Approved on:

30-09-2019
7-2-2020

| Sheet number PPE-R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment |
|---------------------------|----------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 17-007 | General | Categorization; combination of properties | <p>If we receive a PPE where the manufacturer's instructions show the foul weather and the heat and flame pictograms, can a Notified Body certify this PPE only against the thermal risks?</p> <p>What if instead of the foul weather pictogram (category I), a static electricity pictogram (category II) is used?</p> | <p>It is impossible to make partial certificates for the same PPE and hence all relevant essential requirements shall be checked. The PPE categorization and the corresponding certification procedure are determined by the "highest" type of risk.</p> | <p><i>Approval by Horizontal Committee: 30-9-2019</i> <i>Approval by PPE expert group: 7-2-2020</i></p> <p>NOTE: See Horizontal Sheet PPE-R/00.005. The higher categorization applies to all protection offered by the PPE.</p> |
| 26-014 | EN 343: 2019 | Removable sleeves | <p>Is it possible to mark a jacket with removable sleeves according to EN 343?</p> <p>Zippers are usually used to attach the sleeves and they cannot be taped. Water penetration can occur and the product is not waterproof.</p> | <p>Yes. However, the closures must provide adequate protection against water penetration.</p> <p>The User Information must explain the limitations of use.</p> | <p><i>Approval by Horizontal Committee: 30-9-2019</i> <i>Approval by PPE expert group: 7-2-2020</i></p> <p>NOTE: remains valid for EN 343:2019.</p> |



**CO-ORDINATION OF
NOTIFIED BODIES PPE**

**Vertical Group 5: Protective
clothing and gloves**

**RECOMMENDATION FOR
USE**

EN 407
EN 12477
See also 'Gloves - General'
Rev.: 2019-08

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| <u>Approval by:</u> Horizontal Committee EU PPE Expert Group | <u>Approved on:</u> 30-09-2019 7-2-2020 |
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| Sheet number PPE-R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment |
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| 05.245 r3 | EN 407: 2004 | Categorization | Under which conditions shall products complying with EN 407 belong to category III? | <p>Solution:</p> <p>The intended use and the type of risk determines the category.</p> <p>See Annex for VG5 recommendation.</p> <p>NOTE: Radiant Heat test method has changed; hence different levels in the 2004 version.</p> | <i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i> |
| 05.337 | EN 407: 2004 (5.2) | Categorization; contact heat | Which category of PPE is the most appropriate one for gloves of performance level "1" (test at 100°C) | <p>Category II</p> <p>The manufacturer is responsible for product categorization.</p> | <i>Approval by Horizontal Committee: 30/09/2019</i> <i>Approval by PPE expert group: 7-2-2020</i> |


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| 29-020 | EN 407: 2004 (5.2) | Classification; contact heat | <p>According to EN 407:2004, Section 5.2, " For contact heat performance levels of 3 or 4, the burning behaviour according to 6.3 shall be performed. The product shall record at least level 3 in the burning behaviour test, otherwise the maximum contact heat performance that shall be reported is level 2."</p> <p>However, in the introduction to Section 5 is established that: " ... the defined performance level depends upon the intended field of application of the glove. Only the tests which are relevant to the risks in the intended end-use application shall be carried out.."</p> <p>Is it possible to classify / certify a glove as class 3 contact heat, in case you have not requested Flammability Testing?</p> <p>Can you certify a glove as high protection for contact heat risk without checking the flame test?</p> <p>NOTE: point 8 of the standard states:</p> <p>"The manufacturer shall indicate in his information supplied with the gloves: A clear warning that the glove must not come in contact with a naked flame, if the glove has a performance level 1 or 2 in burning behaviour..."</p> | No, it is not possible according to EN 407. | <p><i>Approval by Horizontal Committee: 30/09/2019</i></p> <p><i>Approval by PPE expert group: 7-2-2020</i></p> |
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| 34-014 | EN 407: 2004 (5.4) | Radiant heat level | <p>EN 407 requires for performance level 1 (radiant heat transfer RHTI 24) >7s, when tested according to EN ISO 6942:2002, method B at 20 kW/m².</p> <p>However 7s are needed to obtain RHTI 24 without a test sample; thus every material will pass.</p> <p>There is the same problem with the radiant heat level in EN ISO 11611 and EN ISO 11612.</p> <p>Should the minimum performance levels in these standards be revised?</p> | <p>Yes, the minimum performance levels in these standards should be revised.</p> <p>VG5 requests CEN/TC 162/WG 2 and 8 to clarify and improve these standards; amendment / revision is needed.</p> <p>Note: Further standards might need improvement as well; Level 1 from >7s to <20s; EN 15384 requires >11s.</p> | <p>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 7-2-2020</p> |
| 29-019 | EN 407: 2004 (5.6) | Thermal protection; molten metal | <p>According to EN 407:2004, section 5.6, the test of large splashes of molten metal is only applicable to iron. However, the same point specifies that other metals should be tested as required:</p> <p>“This test only applies to molten iron. Other metals shall be tested as required. The corresponding test results shall be given on the information supplied by the manufacturer (clause 8).”</p> <p>If the test is performed with other metals, is it possible to classify the level of performance according to Table 6? If not, how should it be classified?</p> | <p>It is not possible to use this classification on the marking for any other metal.</p> | <p>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 7-2-2020</p> |

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|---------|----------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| 27-013 | EN 407: 2004 (4.2) | Emergency removal | <p>According to EN 407:2004, 4.2: “Unless otherwise requested, protective gloves of performance levels 3 and 4 in all tests described in 5.1 to 5.6, shall be manufactured so that they can easily be removed in case of emergency”. In this case a test method and requirement for fire-fighter gloves are applicable. The time for removal of gloves shall not be greater than 3 s for both procedures of test: dry and wet.</p> <p>For gloves that meet level 3 / 4 in any of the tests from 5.1 to 5.6 is it necessary to test the gloves after both dry and wet conditioning?</p> | <p>The removal test can be carried out only in the dry state if the manufacturer’s information states that the glove is not intended for use in wet conditions.</p> | <p>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 7-2-2020</p> |
| 24-010a | EN 12477: 2001 (5.7) | Convective heat | <p>According to EN 12477:2001 clause 5.7 (convective heat resistance) all the individual values shall comply with the minimum performance required in table 2 (performance level 2, $HTI \geq 7$). The result for gloves shall be given as the arithmetic mean of the three values. What about gloves reaching i.e. performance level 3 for convective heat resistance? Shall the individual values in this case comply with the minimum performance level 2 or 3 ($HTI \geq 10$)?</p> | <p>In a case of both: 2 and 3 level of performance for convective heat resistance of gloves the individual values of HTI shall comply with the minimum performance level 2.</p> | <p>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 7-2-2020</p> |

Annex to Technical sheet 05.245: category III (underlined)

| Property → ↓ Product standard | Burning behaviour - Afterflame time (s) - Afterglow time (s) | Convective heat (EN 367) - HTI (s) | Radiant heat (20 kW/m ²) | Contact heat - Contact temp (°C) - Pain threshold time (s) | Welding drops - Number of drops | Molten metal splashes mass (g) - Aluminium - Iron |
|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|------------------------------------|--------------------------------------|------------------------------------------------------------------|------------------------------------|---------------------------------------------------------|
| EN 407:2004 Protective gloves against thermal risks (category 2 or 3) Levels | < 2 < 5 | <u>≥ 18</u> | <u>≥ 95</u> | <u>500</u> <u>≥ 15</u> | > 35 | <u>200</u> |
| | < 3 < 25 | > 10 | <u>≥ 50</u> | 350 > 15 | > 25 | <u>120</u> |
| | < 10 <120 | > 7 | <u>≥ 20</u> | 250 > 15 | > 15 | 60 |
| | < 20 | > 4 | > 7 | 100 > 15 | > 10 | 30 |

|  | | CO-ORDINATION OF NOTIFIED BODIES PPE Vertical Group 5: Protective clothing and gloves RECOMMENDATION FOR USE | | EN 510 Rev.: 2019-08 | |
|-----------------------------------------------------------------------------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| | | | | <u>Approval by:</u> Horizontal Committee EU PPE Expert Group | <u>Approved on:</u> 30-09-2019 7-2-2020 |
| Sheet number PPE-R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment |
| 05.252 | EN 510: 1993 | Entanglement with moving parts | Can a <u>vest</u> without sleeves be considered as within the <u>scope</u> of EN 510? | Can be certified but not marked with EN 510. | <i>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 7-2-2020</i> |
| 05.353 | EN 510: 1993 | External pockets | Why are pockets with external opening forbidden? When they are closed, they are not more dangerous than the front closure system. When not closed, it could be dangerous, but this is also the case when the coverall is not closed. When the instructions clearly mention the coverall and its pockets need to be closed. It is the user's responsibility when the garments are not worn properly. | External pockets are forbidden. | <i>Approval by Horizontal Committee: 30/09/2019 Approval by PPE expert group: 7-2-2020</i> |



CO-ORDINATION OF NOTIFIED BODIES PPE

Vertical Group 5: Protective clothing and gloves

RECOMMENDATION FOR USE

EN 14404

Rev.: 2019-08

Approval by:

Horizontal Committee

EU PPE Expert Group

Approved on:

30-09-2019

7-2-2020

| Sheet number PPE-R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment |
|---------------------------|----------------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 18-004 | 6.2.2 | PPE; definition | Are knee protectors of type 1 (fastened to the leg), type 2 (in trousers), type 3 (kneelers not attached to the body) and type 4 (incorporated knee protectors in devices with additional functions) PPE and do they belong to category II of the PPE Regulation? | Type 1 and 2 are PPE of category II. Type 3 are not PPE (not attached to the body). Type 4 are not PPE, except if attached to the body. | <i>Approval by Horizontal Committee: 30-9-2019</i> <i>Approval by PPE expert group: 7-2-2020</i> The PPE Regulation and PPE Guidelines clarify the categorization of these items. |
| 33-006 | | Scope | Can knee pockets be put on PPE clothing without claiming EN 14404? | Yes, if the manufacturer does not claim EN 14404 then knee pockets can be put on the clothing without making any reference to the standard. As soon as a reference to EN 14404 is stated in the label/UI the tests as per EN 14404 must be performed and the knee pads should be referenced in the UI. | <i>Approval by Horizontal Committee: 30-9-2019</i> <i>Approval by PPE expert group: 7-2-2020</i> |

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|--------|---------------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| 23-003 | 3.3, 6.2, 8.1 | Type 2; Trousers | <p>1) Can type 2 knee protectors (pads) exchangeable in trousers be certified and comply with EN 14404 independent of the trousers?</p> <p>2) Can type 2 knee protectors (pads) exchangeable in trousers and marked with EN 14404 be certified for the pad manufacturer alone if he does not place the trousers on the market or defines the appropriate trousers?</p> | <p>1) No, because according to EN 14404 clause 6.2 (testing with trousers), 6.10.2 (ergonomic testing with trousers), 8. 1 (information about trousers) the combination of trousers and knee pads needs to be tested and certified.</p> <p>2) No, because the EU type approval certificate shall be issued for the manufacturer of the combination of trousers and knee pads or for the pad manufacturer only for specific trousers (e.g. defined by trousers' manufacturer and article number for appropriate trouser design, material and knee pad pocket shape).</p> | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |
| 26-007 | 5.2.5; 6.5 | Penetration resistance | <p>During penetration testing of a knee protector the required minimum force can't be applied to the test spike (nail) after a movement of 25mm (see also EN 863 clause 4.3). The protector resists complete penetration due to the thickness of the protector.</p> <p>Required is a resistance against penetration at a force of at least 100N for level 1.</p> <p>Does the knee protector meet the requirement of clause 5.2.5?</p> | <p>Clause 5.2.5 requires that a knee protector shall resist at a required force complete penetration and the internal face of the protector shall not deflect by more than 5mm. It is required that the minimum penetration force can be applied to the test spike. A knee protector cannot be said to meet 5.2.5 if the test spike moves max. 25mm without penetration but the required penetration force can't be applied (e.g. thick soft foam).</p> <p>The maximum test spike movement of 25 mm shall be increased as appropriate, such that the required force, as specified in 5.2.5 of EN 14404, can be applied. The test shall be terminated if the internal face of the knee protector deflects by more than 5 mm, or the spike penetrates the specimen.</p> | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |



CO-ORDINATION OF NOTIFIED BODIES PPE

Vertical Group 5: Protective clothing and gloves

RECOMMENDATION FOR USE


EN 16689

Rev.: 2019-08


Approval by:
Horizontal Committee
EU PPE Expert Group

Approved on:
30-09-2019
7-2-2020


| Sheet number PPE-R/05. | Standard (clause) | Key words | Question | Proposed solution | Comment |
|------------------------|-------------------------|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 33-007 | EN 16689 : 2017 (7.8.2) | pre-treatment, viral penetration resistance | <p>The pre-treatment for the viral penetration test states: (paragraph: 7.8.2.)</p> <p><i>“The samples shall first be subjected to pre-treatment by laundering or dry cleaning as specified in 5.2 and then be subjected to pre-treatment by oven exposure as specified in ISO 17493 at a temperature of 140°C +5/ -0 °C for 5 minutes, except that no measurement or observation shall be made.</i></p> <p><i>This sequence of pre-treatments shall be repeated a second time. Testing following the last oven exposure shall take place within 5 minutes of the oven exposure.</i></p> <p><i>Following the last pre-treatment, specimens shall be taken from the moisture management component seam for viral penetration resistance testing.”</i></p> <p>There are 2 x oven tests; what sequence of treatments should be followed if 5 or 25 cleaning cycles are claimed? Does this mean two sets of oven test and pretreatments, e.g. 2 x 5 or 2 x 25 cleaning cycles, or the first oven test in the middle of the cleaning pretreatments?</p> | <p>The first oven test occurs during the manufacturer’s claimed number of cleaning cycles.</p> <p>If, for example, the maximum number of wash / dry cycles is 25:</p> <ul style="list-style-type: none"> • 13 wash/dry cycles • Oven exposure • 12 wash/dry cycles • Oven exposure <p>In cases where the number of cycles requested is 5:</p> <ul style="list-style-type: none"> • 3 wash/dry cycles • Oven exposure • 2 wash/dry cycles • Oven exposure | <p>Approval by Horizontal Committee: 30-9-2019 Approval by PPE expert group: 7-2-2020</p> |


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.05-156 Version 02 |
| Number of pages: 1 | Approval stage: | Approved on: |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 15.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN ISO 11612: 2015 (6.4) <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: |
| Key words: Dimensional change, knitted fabrics | | |
| Question: The 5% maximum change quoted in these specifications is neither appropriate nor accurately measurable for knitted fabrics. | | |
| Solution: The 5% figure is maintained as a rule. The notified body may judge as an expert opinion that the knitted material is stretchable enough not to affect the protective properties, and a higher shrinkage is acceptable. The real shrinkage should be mentioned in the information for use. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.05-184 Version 02 |
| Number of pages: 1 | Approval stage: Approved on: | |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 16.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 1082 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: | | |
| Key words: Butcher gloves | | |
| Question: The butcher gloves are generally repaired, when a chain-mail breaks down. What procedures to apply if these repaired butcher gloves are placed on the market as a new product with a new name? | | |
| Solution: A repaired product placed on the market has to be considered as a new product. The VG is concerned about the (un)safety of repaired PPE. | | |

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|  | <p>CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425</p> <p>RECOMMENDATION FOR USE</p> | <p>PPE-R/05.05-223 Version 02</p> |
| Number of pages: 1 | Approval stage: Approved on: | |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 15.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input type="checkbox"/> EN/prEN: <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: |
| Key words: | | |
| Marking, partial protection | | |
| Question: | | |
| How can the marking be made when only a part of garment complies with a standard? | | |
| <i>Example:</i> The whole garment passes EN ISO 15025 A1level 3 and the requirements for CPC Type 6, but only the front of the garment can be categorized in class D3 for aluminium splashes. Can D3 be put on the marking? | | |
| Solution: | | |
| It is possible to mark with the number of the standard, if in the marking and information of use it is clearly explained which part of the body is protected. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.05-226 Version 02 |
| Number of pages: 1 | Approval stage: | Approved on: |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 16.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 14605 <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: |
| Key words: | | |
| Attached items | | |
| Question: At present there appears to be no requirement to test gloves, boots, etc attached to chemical suits for resistance to permeation against the same chemicals as the main body of the suit. | | |
| Solution: We propose to test the materials of gloves to either EN 374-3 or EN 369 using the same battery of chemicals that the main part of the suit has been tested against. For the boots there is no standard. The N.B. shall conduct all necessary tests to establish the conformity for the same battery of chemicals. The user information should include test data for the individual components of the clothing assembly. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.05-251 Version 02 |
| Number of pages: 1 | Approval stage: | Approved on: |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 15.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN ISO 20471:2013 (4.2) <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: |
| Key words: Design; retroreflective; arrangement | | |
| Question: Can retroreflective bands be arranged in another way than described in EN ISO 20471, in order to make them <u>more visible</u> in a given end-use, e.g. retroreflective bands positioned on the legs when there is a risk the bands are hidden by fixed or moving items present in the work situation? Can these items still be considered as complying with EN IS 20471 (cfr. marking), if accompanied by a reference to the deviation and the reasons for it? | | |
| Solution: In case of deviation from a harmonized standard to suit a particular end-use, it should be proven from the risk analysis of that particular application that the proposed modification is justified, i.e. the PPE still meets the basic health and safety requirements of the Regulation. No. Compliance with an EN standard means to comply with the whole standard. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.05-282 Version 02 |
| Number of pages: 1 | Approval stage: | Approved on: |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 15.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 470-1 (6.2) <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: |
| Key words: | | |
| Molten metal drops; high visibility | | |
| Question: | | |
| Should the retroreflective material be tested to EN 348 (Molten metal) as well as to EN ISO 15025 (burning behaviour) for high visibility garments used for welding operations? | | |
| Solution: | | |
| Yes, they shall fulfil the requirements for welder's protective clothing. | | |

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|  | <p>CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425</p> <p>RECOMMENDATION FOR USE</p> | <p>PPE-R/05.05-309 Version 02</p> |
| Number of pages: 1 | Approval stage: | Approved on: |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 15.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input type="checkbox"/> EN/prEN: <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: |
| Key words: Test report, reference to regulation | | |
| Question: Is it allowed to mention in a test report that the tested fabric (not a garment) conforms to the safety requirements of PPE Regulation 2016/425? | | |
| Solution: No, the Regulation addresses PPE, i.e. finished products, not materials. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.05-316 Version 02 |
| Number of pages: 1 | Approval stage: | Approved on: |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 15.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 366 / EN ISO 6942 <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: |
| Key words: Blackening of calorimeter | | |
| Question: In EN 366 / EN ISO 6942 it is said that the calorimeter shall be blackened before the tests. Is this absolutely necessary? If the answer is YES, what type of paint? | | |
| Solution: YES, it is necessary. In EN 367:1992 the following information is given: Black paint: Nextel Velvet Coating: Black 2010 3M UK Ltd. P.O. Box 38 Yeoman House 63, Croydon Road, Penge London SE 20 7TR United Kingdom Paint remover: Acetone | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/05.05-348
PPE-R/05.21-010
Version 02

RECOMMENDATION FOR USE

Number of pages: 1

Origin: Vertical Group 5

Approval stage:

Approved on:

- Vertical Group
- Horizontal Committee
- EU PPE Expert Group

15.06.2021
01.10.2021
18.11.2022

Question related to PPE Regulation PPE Guidelines

EN/prEN: EN ISO 20471:2013
(4.2.2)

Other:

Article:

Annex:

Clause:

Key words:

Bands encircling the torso

Question:

EN ISO 20471:2013, clause 4.2.2 states that garments covering the torso and arms shall have retroreflective bands "encircling the torso".

According to the dictionary a torso is the trunk of the human body, without head or limbs.


There is no problem to verify this requirement if the bands are put low enough (under the armpit) to encircle the torso fully. But what if the upper band is placed almost at shoulder height and hence can not encircle the torso fully?


Solution:


The band shall be put low enough to encircle the torso.

Other configurations may be used if justified by specific work situations and on the condition that the reflective trimming remains sufficiently visible in all work postures.





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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.17-002 Version 02 |
| Number of pages: 1 | Approval stage: Approved on: | |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 15.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input type="checkbox"/> EN/prEN: <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: |
| Key words: | | |
| Instructions for use | | |
| Question: | | |
| EN ISO 13688:2013 requires that, in the instructions for use, the article number appears in the same way as it is marked on the label. | | |
| The clause on labelling in the same EN ISO 13688 requires to indicate the article designation: product type, commercial name or code. | | |
| Is it acceptable to have a general sentence in the instructions for use, e.g. "These instructions apply to our range of high visibility garments according to IEN ISO 20471:2013"? Or should each individual item be mentioned separately in the instructions for use? | | |
| Solution: | | |
| It is acceptable to use more general wording, on condition that: | | |
| <ul style="list-style-type: none"> - it is possible to link the garment clearly to the correct "instructions for use" notice, e.g. by using article numbers, even if the same notice applies to a group of items; - the notice gives an adequate explanation of all different classes and performance levels in the standard (where this is the case) and allows to identify the data, which apply to that particular item. | | |

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|  | <p>CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425</p> <p>RECOMMENDATION FOR USE</p> | <p>PPE-R/05.17-008 Version 02</p> |
| Number of pages: 1 | Approval stage: | Approved on: |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 15.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input type="checkbox"/> EN/prEN: <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: |
| Key words: Protective clothing, categorisation | | |
| Question: Nowadays in the market there is non-fluorescent protective clothing with reflective bands (gardening, maintenance, etc.). What is the categorisation of this clothing (I or II)? If they are in category II, which harmonised standard can we use? | | |
| Solution: These are category II products. There is no appropriate harmonised standard, but elements from EN ISO 20471 can be used. The information leaflet shall be clear on the use and the limitations of use. <i>Note: EN 13356 (accessories) should not be used, since clothing is explicitly excluded from the scope</i> | | |


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|  | <p>CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425</p> <p>RECOMMENDATION FOR USE</p> | <p>PPE-R/05.17-017 Version 02</p> |
| Number of pages: 1 | Approval stage: Approved on: | |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group 15.06.2021 <input checked="" type="checkbox"/> Horizontal Committee 01.10.2021 <input checked="" type="checkbox"/> EU PPE Expert Group 18.11.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input type="checkbox"/> EN/prEN: <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: |
| Key words: Various performance levels in one garment | | |
| Question: How can a garment be marked with different levels of performance in front and back (e.g. aluminised material in the front, and non-aluminised material in the back)? | | |
| Solution: As a general principle the "worst case" approach shall be used, i.e. the lowest level shall be announced in the marking. This shall also be done in the information leaflet, but the attention may be drawn to the higher protection levels offered by some parts of the garment, in particular if they are exposed to higher degrees of risk. The higher performance level may however be announced in the marking and in the information leaflet if no mistake on behalf of the user is possible and if the product standard does not contain specific and conflicting provisions. Examples: 1. IEC 61331-3 on X-ray protective aprons specifies that the protection levels in front and back may be different, but that both levels shall be indicated in the marking 2. EN ISO 11612 does not contain such provisions and e.g. in the case of someone working in front of an oven and wearing a long coat with an aluminized front and an open back for comfort, the protection level of the front should be announced. The "flame" pictogram on the garment should then be accompanied by the "i" pictogram to draw more attention to the information leaflet. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.17-018 Version 02 |
| Number of pages: 1 Origin: Vertical Group 5 | Approval stage: Approved on: <input checked="" type="checkbox"/> Vertical Group 15.06.2021 <input checked="" type="checkbox"/> Horizontal Committee 01.10.2021 <input checked="" type="checkbox"/> EU PPE Expert Group 18.11.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN ISO 20471:2013 (4.2.1, 4.2.2) <input type="checkbox"/> Other: | | |
| Article: _____ Annex: _____ Clause: _____ | | |
| Key words: Retroreflective; shoulder bands | | |
| Question: Is it possible to certify equipment with the following design?  | | |
| Solution: The garment represented in the drawing does not meet the requirements of EN ISO 20471. A certification is only possible according to the Regulation if the relevant essential requirements are met. EN ISO 20471 however should not be mentioned in the marking or the information leaflet. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.18-005 Version 02 |
| Number of pages: 1 | Approval stage: | Approved on: |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 16.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 659:2008 (3.6) <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: |
| Key words: Firefighter gloves; puncture | | |
| Question: In EN 659:2008, the puncture requirement is level 3 instead of level 2 in the old version EN 659:1995. Most French fire-fighters gloves have level 2 and give entire satisfaction because dexterity is more important for fire-fighters than puncture. Is it possible to certify according to the Regulation a fire-fighter glove with level 2 for puncture? | | |
| Solution: A certification against the essential requirements of the Regulation is possible, if an analysis of the foreseeable conditions of use shows that a performance level 2 for puncture is sufficient and a lower level of mechanical strength can be justified e.g. by the need of a better dexterity of the glove. The manufacturer shall indicate and explain this adequately in the "instructions for use". | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.19-002 r3 Version 02 |
| Number of pages: 1 | Approval stage: | Approved on: |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 15.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 13356:2001 (5.1) <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: |
| Key words: Retroreflective; angle | | |
| Question: <p>The standard specifies that after exposure the test specimens have to be measured at an entrance angle $\beta_1=+5^\circ$ and $\beta_2=0^\circ$ and an observation angle $\alpha = 0,2^\circ$. In clauses 4.2.2 to 7 it is mentioned that all photometric requirements of Table 1 and 2 have to be met. This is very confusing. Shall all the angles be measured after exposure or only one?</p> <p>Taking EN ISO 20471 for comparison, after exposure only one angle is measured. Furthermore the requirements of EN ISO 20471 after exposure are lower than for a new product (from 330/250 to 100 cd/lux/m²), which is not the case in EN 13356.</p> <p>Although the requirements after exposure should not be decreased too much, we see no real need to measure at more than one angle.</p> | | |
| Solution: <p>For Type 1, after exposure, measurements shall be repeated at two angles, 0.2-degree observation angle and +5 and -5 degree entrance angles.</p> <p>For Type 2 & 3, after exposure, a measurement shall be repeated at one angle, 0.2-degree observation angle and +5 degree entrance angle.</p> | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.22-008 Version 02 |
| Number of pages: 1 | Approval stage: Approved on: | |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group 15.06.2021 <input checked="" type="checkbox"/> Horizontal Committee 01.10.2021 <input checked="" type="checkbox"/> EU PPE Expert Group 18.11.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN ISO 20471:2013 (5.3) <input type="checkbox"/> Other: | | |
| Article: _____ Annex: _____ Clause: _____ | | |
| Key words: Colour fastness; non-fluorescent | | |
| Question: For which kind of non-fluorescent materials are the colour fastness / staining requirements in clause 5.3 applicable? | | |
| Solution: <p>The colour fastness / staining requirements in clause 5.3 are applicable for the non-fluorescent material layers; e.g. additional (contrast) material layers on the outside of a garment or lining(s) inside the garment. Also non- fluorescent material layers are mentioned in the revised title of clause 5.3 in EN ISO 20471.</p> <p>The colourfastness / staining requirements in clause 5.3 are therefore not applicable for the non-fluorescent materials which aren't (garment) layers: e.g. embroideries, textile material of zipper, elastic strips, small marking tags, sewing threads etc.</p> <p>Small areas of non-fluorescent materials (e.g. < 2% of fluorescent material area) as labels, (knitted) stretch bands for jackets or trousers, fashion stripes (e.g. 3 mm chest braid), pocket flaps etc need special consideration (e.g. large area? dark colour? industrial washing? etc) and may require testing.</p> <p>Washing of the whole garment can be used as a screening test to assess the influence of these small area materials. For other materials the colour fastness shall be assessed.</p> <p>Clarification in the next revision of EN ISO 20471 is requested.</p> | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.23-005 Version 02 |
| Number of pages: 1 | Approval stage: | Approved on: |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 16.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 13034 (4.1) <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: |
| Key words: Repellency, penetration | | |
| Question: Chemical protective clothing materials for type 6 garment shall be tested and classified for their liquid repellency and resistance to penetration by liquids. EN 14325 states that the materials shall be tested against all 4 chemicals listed (sulphuric acid, sodium hydroxide, o-xylene and butanol). The user information should contain information on the performance levels for all chemicals tested. Many materials for type 6 garments are designed to meet the repellency and penetration requirements for sulphuric acid and sodium hydroxide, not for solvents. This means that manufacturers are requested to have their materials tested against substances, for which they know they will fail. Hence the tests will bring no additional information. | | |
| Solution: The garment shall not be tested against substances, from which it does not protect. However, it shall be clearly indicated in the information for use that no protection is provided against these substances. | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/05.23-013

Version 02

RECOMMENDATION FOR USE

Number of pages: 1

Approval stage:

Approved on:

Origin: Vertical Group 5

- Vertical Group
- Horizontal Committee
- EU PPE Expert Group

15.06.2021

01.10.2021

18.11.2022

Question related to PPE Regulation PPE Guidelines

EN/prEN: EN ISO 20471:2013
(4.2)

Other:

Article:

Annex:

Clause:

Key words:

Retroreflective bands

Question:

Is it possible to place retro-reflective tapes in these directions – tape skew parallel in one direction (see pictures in EN ISO 20471) or is possible contrary skew?



Solution:

EN ISO 20471 allows this.



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/05.24-006
Version 02

RECOMMENDATION FOR USE

Number of pages: 1

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- Vertical Group
- Horizontal Committee
- EU PPE Expert Group

15.06.2021
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18.11.2022

Question related to PPE Regulation PPE Guidelines

EN/prEN: EN ISO 20471:2013
(4.2)

Other:

Article:

Annex:

Clause:

Key words:

Retroreflective; encircling bands

Question:

EN ISO 20471 requires retroreflective bands with a minimum width of 50 mm to be applied in continuous bands. Does a deliberate offset in a band, such as shown in the example, meet the requirements?



Solution:

CEN/TC 162/WG 7 response:

The band shall be continuous without any offset.



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/05.24-026


Version 02


RECOMMENDATION FOR USE

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| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group | 15.06.2021 |
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| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines | <input checked="" type="checkbox"/> EN/prEN: EN ISO 20471:2013 (4.1) | <input type="checkbox"/> Other: |
| Article: | Annex: | Clause: |
| Key words: Measurement of background material; combined performance materials | | |
| Question: It is possible to add the area of background material and combined material to achieve the total area? | | |
| Solution: If using combined performance material according to EN ISO 20471 Table 5, the full area of 0.20 m ² must be used. | | |


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.26-001 Version 02 |
| Number of pages: 1 | Approval stage: Approved on: | |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group 16.06.2021 <input checked="" type="checkbox"/> Horizontal Committee 01.10.2021 <input checked="" type="checkbox"/> EU PPE Expert Group 18.11.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 13034 <input type="checkbox"/> Other: | | |
| Article: _____ Annex: _____ Clause: _____ | | |
| Key words: Breathable spray-tight | | |
| Question: The BSIF PSMA committee have identified a need for, and advantages of, development of a standard suitable for "breathable" spray-tight protective garments; they have highlighted a number of issues with the current permeation test called up for Type 4 garments (through EN 14605 which references EN 14325 Clause 4.11). Work to address the issues is ongoing at CEN level. In the meantime, there are applications which require a higher level of liquid spray protection than that offered by a Type 6 garment; but do not necessarily need the chemical permeation resistance specified in EN 14605 for a Type 4 garment (Examples of which include applications requiring decontamination by a shower following hazardous particulate contamination). Whilst the standards are being reviewed to address this issue, how should Notified Bodies CE certify these kinds of products? | | |
| Solution: For Type 6 products, including those which are breathable*, which are to be marketed as "spray-tight": <ul style="list-style-type: none"> • Product shall meet all requirements of EN 13034; • Product shall additionally be tested in accordance with ISO 17491-4 (Method B, High Level Spray Test); • Product shall pass the spray test as per the requirement of EN 14605 4.3.4.2; • The spray-tight shield may be used on product packaging and user information; • The user instructions and CE certificate shall clearly indicate that the product meets the spray-test requirements of EN 14605 only and does not claim the Type 4 standard. • The User Instructions shall relate the recommended decontamination process to the spray test performance. <p>* The generally accepted definition of "breathable" materials is those that are moisture and/or air permeable. PD CEN TR/ 15419:2006 define air-permeable materials as "materials with pores or apertures that allow the transmission of gases". In order to demonstrate that a material is breathable a manufacturer shall test to EN 31092 (test method for water vapour resistance) as specified in EN13688:2013 4.4.2 and shall achieve Class 2 or 3 (according to EN 343).</p> NOTE: If and when the standards are revised to provide for this particular kind of product; this guidance sheet should be reviewed. | | |


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.26-013 Version 02 |
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| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group 16.06.2021 <input checked="" type="checkbox"/> Horizontal Committee 01.10.2021 <input checked="" type="checkbox"/> EU PPE Expert Group 18.11.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: General <input type="checkbox"/> Other: | | |
| Article: _____ Annex: _____ Clause: _____ | | |
| Key words: Antineoplastic agents | | |
| Question: Is it possible to use the phrase “against chemicals risks and antineoplastic agents” in the scope of EU type certificate according to EN ISO 374-1: 2016, when the glove is tested with permeation test, EN 374-3, using an appropriate number of antineoplastic agents? Could it be possible when the glove is tested against at least four of antineoplastic agents chosen from this list? Cyclophosphamide / Carmustine / Adryamicin (Doxorubicin or Adriblastine) / Fluorouracil / Methotrexate / Vincristine / cis Platinum / Daunorubicin. This list represents the most used chemicals in hospital treatments. | | |
| Solution: Yes. The phrase can be used if protection against an anti-neoplastic agent is demonstrated. The list of agents tested shall be included on the Certificate and the User Information. | | |


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.28-007 Version 02 |
| Number of pages: 1 | Approval stage: | Approved on: |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 15.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 61482-2 - IEC 61482-2:2009 (4.2) <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: |
| Key words: Retro-reflective | | |
| Question: A garment is certified according to EN ISO 20471:2013/A1:2016, EN ISO 14116:2015 and EN 61482-2. The manufacturer wants to replace the retro-reflective tapes by another brand (same performance). The original retro-reflective products have not been tested by themselves according to EN 61482-1-2/ EN 61482-1-1, and have only been tested when applied to the garment. Is an additional test of the garment with the new retro-reflective tapes mandatory? Or is performance of the retro-reflective material in passing ISO 17493:2000 (as per RfU 25-010 "Design & melting parts") and flame spread Index 3 according to EN ISO 14116:2008, sufficient? | | |
| Solution: A retro-reflective material that passes ISO 17493 (at 180°C for 5 minutes) and meets Index 3 of EN ISO 14116 can be used on an arc-flash garment certified according to IEC 61482-2 without retesting. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.28-010 Version 02 |
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| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 15.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN ISO 20471:2013 (5.6.2) <input type="checkbox"/> Other: | | |
| Article: _____ Annex: _____ Clause: _____ | | |
| Key words: Coated fabrics and laminates; water vapour resistance | | |
| Question: Clause 5.6.2 states: “For garments which offer protection against rain (coated woven and knitted fabrics and laminates), test and classify in accordance with EN 343.” Should garments manufactured from coated fabrics and laminates which do not claim compliance with EN 343 be: a) Tested to EN 343 in respect of water vapour resistance only; b) Tested for full compliance to EN 343; c) Tested to EN ISO 20471 clause 5.6.3. | | |
| Solution: c) Tested to EN ISO 20471 clause 5.6.3. | | |


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.29-007 Version 02 |
| Number of pages: 1 | Approval stage: | Approved on: |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 15.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN ISO 20471:2013 (5.6.3) <input type="checkbox"/> Other: | | |
| Article: _____ Annex: _____ Clause: _____ | | |
| Key words: Physiological performance; Contrast material | | |
| Question: According to clause 5.6 all materials, incl. contrast material, shall fulfil the water vapour resistance. What shall be done if only a very small area is covered by such contrast material, e.g. for side inserts or the lowest seam part (see picture) and therefore doesn't cover the major part of torso? Do they also have to fulfil the Ret < 5, even if the size would hardly harm the physiological climate of the wearer?  | | |
| Solution: The area of those small inserts shall not be relevant (hem, edges, side, armpits) as long as they do not cover the vapour relevant places and the size of those inserts altogether do not exceed 10% of background material. | | |


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.29-011 Version 02 |
| Number of pages: 1 | Approval stage: Approved on: | |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group 15.06.2021 <input checked="" type="checkbox"/> Horizontal Committee 01.10.2021 <input checked="" type="checkbox"/> EU PPE Expert Group 18.11.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN ISO 11612: 2015 (6.3.2.1) <input type="checkbox"/> Other: | | |
| Article: _____ Annex: _____ Clause: _____ | | |
| Key words: Definitions; material; flame spread | | |
| Question: For code letter A1, single layer garments are tested to 6.3.2.1 with the flame to the outer surface only. Multi-layer garments are tested to 6.3.2.2, with the flame to the outermost surface and the innermost lining. The EN ISO EN ISO 11612:2015 has new definitions: 3.14 material assembly combination of all materials of a multi-layer garment presented exactly as the finished garment construction 3.15 material combination material produced from a series of separate layers, fixed together during the garment manufacturing stage 3.16 multilayer material material consisting of different layers intimately combined prior to the garment manufacturing stage, e.g. by weaving, quilting, coating or gluing 1. Is lamination gluing ? 2. Is a “material combination” considered to be a single layer or a multilayer material? 3. Is a “multilayer material” considered to be a single layer or a material assembly? 4. If one of these is considered to be single layer and the other not, what is the reasoning? What is the difference for the safety of the wearer of the garment (this can be the only criterion for the decision)? A “single layer” is a single material that has not been intimately combined with another layer. | | |
| Solution: 1. Replace ‘gluing’ with ‘laminating’ 2. A “material combination” is considered to be a material assembly. 3. A “multilayer material” is considered to be a material assembly. 4. Defining the difference between a single layer or multilayer is important to know for testing purposes as the innermost layer of a multilayer is as important as the inner side of a single layer = both are nearest to the skin. | | |


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.31-001 Version 02 |
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| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 16.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 13034:2005/A1: 2009 (4.1) <input type="checkbox"/> Other: | | |
| Article: _____ Annex: _____ Clause: _____ | | |
| Key words: Washing, reimpregnation, care label | | |
| Question: 1) EN 13034 Clause 6 requires care labelling to be present for reusable garments, but does not require the maximum number cleaning cycles to be stated; however, this is required on the information supplied by the manufacturer (clause 7j) Should the manufacturer have to place on the garment care label the maximum number of cleaning cycles permitted, or the maximum number of cleaning cycles permitted prior to reimpregnation. 2) EN13034 Clause 4.1 states that Manufacturer's instructions with regard to number of cleaning cycles, cleaning procedures and possible reapplication of treatments shall be observed. In the case of garments that may have treatments reapplied, should they be tested after the maximum number of cleaning cycles (prior to reapplication of treatments) and then again after retreatment (as is described in withdrawn EN 469:2014). | | |
| Solution: 5. No. However, this information must be included in the instructions for use. 6. Garments that may have treatments reapplied should be tested for liquid repellency and penetration and the garment spray test after the maximum number of cleaning cycles, prior to reapplication of treatments. All other testing according to EN 13034 shall be tested after five cleaning cycles, as required by EN 14325:2004. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.32-011 Version 02 |
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| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 15.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN ISO 13688: 2013 (7.2) <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: |
| Key words: Marking | | |
| Question: 1) Is it allowed to use EN ISO 13688 or EN 420 alone and to put in the marking only EN ISO 13688 or EN 420? 2) Is it required to put “EN ISO 13688” or “EN 420” in the labelling in addition to the specific product standard number? | | |
| Solution: 1. No; marking with the number of the general standard alone is not allowed; see Introduction, Clause 1 (Scope) and marking – EN ISO 13688 Clause 7.2(h) and EN 420 Clause 7.2.1. 2. No, because Clauses 7.2 only require the number of the specific product standard in the marking. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.33-004 Version 02 |
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| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 15.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN ISO 11611: 2015 <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: |
| Key words: Aprons; plastic buckles | | |
| Question: Plastic buckles are used as closure and regulation system in aprons to be certified in accordance with EN ISO 11611:2015 and/or EN ISO 11612:2015. The buckles are on the back of the user. | | |
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| Shall this type of closure/regulation system: <ol style="list-style-type: none"> 1) be covered by a protective cover flap? (as required by § 4.6 of EN ISO 11611:2015 and 4.5 of EN ISO 11612:2015) 2) undergo the test of limited flame spread? (as required by § 6.7.2.3 of EN ISO 11611:2015 and 6.3.2.3 of EN ISO 11612:2015) 3) undergo the test of heat resistance at 180 °C? (as required by § 6.2.1 of EN ISO 11612:2015) | | |
| Solution: <ol style="list-style-type: none"> 1. No, this type of closure/regulation system does not need to be covered by a protective flap. This is not a closure in the meaning of the standards EN ISO 11611 and EN ISO 11612. 2. Yes, it must be tested for limited flame spread, for both standards. 3. Yes, it must undergo the heat resistance test at 180 °C for EN ISO 11612, but not for EN ISO 11611 (as heat resistance is not required for EN ISO 11611). | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.34-002 Version 00 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group 22/05/2019 <input checked="" type="checkbox"/> Horizontal Committee 30/04/2022 <input checked="" type="checkbox"/> EU PPE Expert Group 31/08/2023 | |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 14325 : 2018 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: 4.4.2.2: Annex E | | |
| Key words: Pressure pot; abrasion | | |
| <p>Question:</p> <p>EN 14325:2018 introduces a new pressure pot for assessing abrasion resistance of chemical protective clothing material.</p> <p>Annex E.1 contains the dimensions for the round test pot apparatus (diameter, height etc.). Annex E.2.2 contains the total volume of the pressure pot and associated device and tubing, however this volume is not possible with the given dimensions.</p> <p>When testing abrasion resistance according to EN 14325:2018, what dimensions should be used for the round pressure pot?</p> | | |
| <p>Solution:</p> <p>The expected volume in Annex E.2.2 is incorrect. The dimensions in Annex E.1 should be used to construct the round test pot.</p> <p>The total volume contained in the pressure pot cell (about 475 cm³), pressure measuring device and piping, etc. shall be 570 (+0 /- 50) cm³.</p> | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.34-006 Version 02 |
| Number of pages: 2 | Approval stage: | Approved on: |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 15.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN ISO 20471:2013 +A1:2016 / EN 14058:2017 / EN 342: 2017 <input type="checkbox"/> Other: | | |
| Article: _____ Annex: _____ Clause: _____ | | |
| Key words: Water vapour resistance, comfort, combination of standards | | |
| Question: For example: Softshell xyz <ul style="list-style-type: none"> • Ret: 30.94 m².Pa/W • Rct: 0.0659 m².K/W • lmt: 0.12779573 Requirements for EN 14058: <ul style="list-style-type: none"> - Minimum Rct: 0.06 m².K/W - Maximum Ret: 55 m².Pa/W - Minimum lmt (calculated): 0.065 Requirements of EN ISO 20471: <ul style="list-style-type: none"> - Maximum Ret: 5 m².Pa/W Otherwise: <ul style="list-style-type: none"> - Minimum lmt: 0.15 - When combined with EN 343, the rules of the latter apply. <p>However, a softshell cannot have taped seams, so combining with EN 343 is not possible.</p> <p>In this case, a standard which lists requirements for high visibility, has a more stringent requirement for lmt than a standard that addresses thermophysiological comfort.</p> <p>Can the lmt requirement of EN ISO 20471 be overruled by the requirements of comfort standard requirements?</p> | | |
| Solution: No. These items can be certified to the Regulation. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/05.34-007 Version 02 |
| Number of pages: 2 | Approval stage: | Approved on: |
| Origin: Vertical Group 5 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 16.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 13034:2005/A1:2009 <input type="checkbox"/> Other: | | |
| Article: _____ Annex: _____ Clause: _____ | | |
| Key words: Pre-treatment, liquid repellency and penetration | | |
| Question: Can we align the part pre-treatment from EN 13034 prior to testing of liquid repellency and penetration with the existing agreement RfU PPE-R/05.21-022 (compare with EN 469)? EN 14325:2018 says: “4.2 Pre-treatment 4.2.1 Pre-treatment by cleaning and disinfection <i>Before each test, all chemical protective clothing material samples, with the exception of limited-use chemical protective clothing, shall undergo pretreatment by cleaning and disinfection as applicable. If the manufacturer's instructions indicate that cleaning or disinfection is not allowed, i.e. limited use garments, then testing shall be carried out on new material.</i> <i>Where applicable according to manufacturer's instruction, the cleaning and disinfection shall be in line with the manufacturer's instructions, on the basis of standardized procedures. If the number of cleaning and disinfection cycles is not specified, the tests shall be carried out after 5 cycles of pretreatment, each consisting of one wash cycle, one dry cycle and one disinfection cycle carried out in the sequence as indicated by the manufacturer's instructions. This shall be reflected in the information supplied by the manufacturer. If the garment can be washed or alternatively dry-cleaned it shall only be washed, dried and disinfected. If only dry-cleaning is allowed, the garment shall only be dry-cleaned and disinfected in accordance with the manufacturer's instructions.</i> ” | | |

Solution:

Yes, proposal for EN 13034: 4.12 (liquid repellency) and 4.13 (liquid penetration) and 5.2 (light spray test) (based on prEN 469:2019): testing after worst case:

Examples:

| Recommendation UI | Pre-treatment worst case |
|------------------------------------------|-------------------------------------------------|
| Reimpregnation after third washing cycle | Two washing cycles no impregnation |
| Reimpregnation after 10th washing cycle | Testing after 9 washing cycles no impregnation |
| Reimpregnation after 25th washing cycle | Testing after 24 washing cycles no impregnation |

Compare with the new prEN 469:2019 proposal:

“5.4 Deterioration of repellency by cleaning

Where the finishing, applied to improve or maintain the repellency for liquids resistance performance of the garment, can be deteriorated by the cleaning procedures indicated by the manufacturer, the manufacturer shall indicate the maximum number of cleaning cycles that can be carried out before the garment needs to be re-treated or re-impregnated to restore its performances.

Testing according to 6.2.2 shall be carried out before the cleaning cycle for which the manufacturer guarantees, “i.e. the chemical resistance performance”. For example, if the instructions state “re-impregnation during each third cleaning cycle”, tests shall be performed after the second cleaning cycle, i.e. before re-impregnation. If the instructions state “reimpregnation after each cleaning cycle”, the tests shall be performed on new items.”

**Vertical Recommendation for Use sheets (RfUs)
of Vertical Group 8 “Lifejackets”
of the European Coordination of Notified Bodies in the field of Personal Protective Equipment (PPE)**

Regulation (EU) 2016/425

| Number of RfU PPE-R/ | Version | Reference | Keywords | Approved by Vertical Group 8 | Approved by Horizontal Committee | Endorsed by PPE Working Group |
|-----------------------------|----------------|----------------------------------------------------------|------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------|--------------------------------------|
| 08.002 | 01 | ISO 12402-5:2006 and ISO 12402-5:2006+A1:2010 | Snorkel Vest | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.004 | 01 | ISO 12402-7:2007 and ISO 12402-7:2007+A1:2011 | Fabric & Sewing Thread | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.005 | 01 | ISO 12402-8:2006 and ISO 12402-8:2006+A1:2011 | Sprayhood clear material | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.006 | 01 | ISO 12402-6:2006 and ISO 12402-6:2006+A1:2010 | VG8 Proposal for 50N Flotation Suits (EN ISO 12402-6) | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.007 | 01 | EN ISO 12402-7:2007 and ISO 12402-7:2007+A1:2011 | Hardware | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.009 | 01 | EN ISO 12402-5:2006+A1:2010 and ISO 12402-6:2006+A1:2010 | Buoyancy requirements and testing procedures for 2 piece 50N flotation suits | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.010 | 01 | EN ISO 12402-7:2007+A1:2011 | Inherently buoyant material – Thickness of foam | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.011 | 01 | EN ISO 12402-4:2006 and ISO 12402-4:2006+A1:2010 | In water performance - faceplane | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.013 | 01 | EN ISO 12402-7:2007+A1:2011 | Webbing and Thread requirements | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.014 | 01 | ISO 12402-7:2007+A1:2011 | Colour and illumination issues | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.015 | 01 | ISO 12402-7:2007+A1:2011 | Inflation Chamber Material | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.016 | 01 | ISO 12402-9:2006+A1:2011 | Buoyancy test method | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.018 | 01 | ISO 12402-6:2006+A1:2010 | Constant wear devices | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.019 | 01 | ISO 12402-7:2007+A1:2011 | Oral inflation systems | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.022 | 01 | EN ISO 12402-7+A1:2011 | IRM Oil, Foam testing | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.023 | 01 | EN 13138-1,-2,-3:2008 | Colour requirements | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.026 | 01 | ISO 12402-9:2006+A1:2011 | Inflation tests | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.027 | 01 | ISO 15027-1:2012 | Resistance to illumination | 21.04.2018 | 21.04.2018 | 29.11.2019 |

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|------------------------|----|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------|------------|------------|------------|
| 08.028 | 01 | ISO 15027-1:2012 | Thermal testing | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.029 | 01 | EN ISO 12402-7:2007+A1:2011 | Abrasion Resistance for Inflatable Chamber Material | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.032 | 01 | EN ISO 12402-2:2006+A1:2010, EN ISO 12402-3:2006+A1:2010 | Face plane angle and Torso angle | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.033 | 01 | ISO 12402-9:2006 +A1:2011 | Order of testing: Temperature cycle test and rotating shock bin test | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.034 | 02 | ISO 12402-7:2007+A1:2011 | Unsupported Inflation Chamber Materials | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.035 | 01 | EN ISO 12402:2006+A1:2010 Parts 2-6 | Pouch type PFD's | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.036 | 01 | EN ISO 15027-1:2012 & EN ISO 15027-2:2012 | Preconditioning of immersion suit material samples | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.038 | 00 | EN ISO 12402-6:2006+A1:2010 | PFDs for fire fighting | 13.12.2017 | 13.07.2018 | 05.11.2018 |
| 08.041 | 01 | EN 14225-1:2017 | Surface wetsuit testing requirements | 13.12.2017 | 13.07.2018 | 05.11.2018 |
| 08.042 | 00 | EN ISO 12402 Parts 2-5, Clause 5.5.10.2.3 EN ISO 12402-9:2006+A1:2011, Clause 5.5.9.3f) | Force to inflate test for inflatable PFD's | 13.12.2017 | 13.07.2018 | 05.11.2018 |
| 08.043 | 02 | EN ISO 12402-5:2006/A1:2010 | PFD Hydration Pack | 16.05.2018 | 13.07.2018 | 05.11.2018 |
| 08.044 | 01 | EN 14225-2:2017 | Information supplied with a diving drysuit | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 08.048 | 01 | EN 12402-2, 3, 4 & 5:2020 | Visibility of inflation system indicators | 28.05.2021 | 01.10.2021 | 18.11.2022 |
| 08.049 | 00 | EN 12628:1999 | EU type examination - diving combined buoyancy and rescue devices | 28.05.2021 | 01.10.2021 | 18.11.2022 |
| 08.053 | 01 | EN ISO 12402-9:2020 | Test subject selection criteria Multi-Sized Buoyancy Aids (level 50) | 31.01.2022 | 30.04.2022 | 31.08.2023 |





CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/08.011
Version 1

RECOMMENDATION FOR USE

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| Number of pages: 1 | Approval stage : | Approved on : |
| Origin : Vertical Group 8 | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| | <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |
| Question related to <input type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN ISO 12402-4:2006 and ISO 12402-4:2006+A1:2010 | <input type="checkbox"/> Other: |
| Article: | Annex: | Clause: 5.6.3.1 |
| Key words: In water performance - faceplane | | |
| Question: The standard ISO 12402-4:2006+A1:2010 has minimum in water requirements for Freeboard (min 80mm), Body angle (min 30° degrees) and face plane (min 20°). The EN 395:1995 standard did not have a requirement for face plane. | | |
| Solution: The requirement for face plane on a 100N device is replaced with the requirement below in order to bring it in line with the existing requirements of a 100N device under EN 395:1995. Requirement for 100N devices: The face plane must be positive. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/08.029 Revision 01 Language: E |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : VG8 | <input checked="" type="checkbox"/> Vertical Group 13.12.2017 <input checked="" type="checkbox"/> Horizontal Committee 13.07.2018 <input checked="" type="checkbox"/> EU PPE Working Group 29.11.2019 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input checked="" type="checkbox"/> EN/prEN: EN ISO 12402-7:2007+A1:2011 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: Table 13, Annex B | | |
| Key words: Abrasion Resistance for Inflatable Chamber Material | | |
| Question: The Abrasion Resistance Test for inflatable chamber material has inconsistent test methods by referencing both the Wyzenbeek Method as defined in Annex B and the Martindale Method defined in ISO 12947-2. What is the correct method to be used and what is the compliance criterion? | | |
| Solution: VG8 propose that the Wyzenbeek Method is the appropriate abrasion method. As the intent of the compliance criteria is to validate the tensile strength of the material after abrasion, a tensile strength test shall be performed in accordance with ISO 13934-2 after the method defined in Annex B. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/08.038 Revision 00 Language: E |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : VG8 | <input checked="" type="checkbox"/> Vertical Group 13.12.2017 <input checked="" type="checkbox"/> Horizontal Committee 13.07.2018 <input checked="" type="checkbox"/> EU PPE Working Group 05.11.2018 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN ISO 12402-6:2006+A1:2010 | <input checked="" type="checkbox"/> Other: |
| Article: | Annex: | Clause: 5.4 |
| Key words: PFDs for fire fighting | | |
| Question: What compatibility testing is to be carried out for PFDs specifically intended for fire fighting application? | | |
| Solution: The PFD must meet the performance requirement for the relevant part of ISO 12402 depending on performance level with the following additions: 1. In water performance compatibility testing PFDs intended specifically for fire fighting application shall be tested for in water performance in accordance with 5.6 of EN ISO 12402-9:2006+A1:2011 with each ensemble of equipment (i.e. protective clothing, breathing apparatus and head protection) it is intended to be worn in conjunction with. It is not required to test for in water performance in swimwear only. The likelihood is that for this type of PFD the design is specialised to accommodate the fire fighting equipment (i.e. larger neck aperture) and it is therefore unlikely that a PFD will meet the in water performance requirements with test subjects wearing swimwear only. 2. 180°C hot exposure test The whole PFD shall be tested in accordance with ISO 17493 at a temperature of (180 ± 5) °C for 5 min. After exposure the performance of the PFD shall be proved by an in-water test in accordance with ISO 12402-9:2006, 5.6.5. All components of the PFD including the gas cylinder shall be exposed. Adequate provisions must be incorporated in to the design of the PFD to ensure that the gas cylinder is protected during exposure to heat. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/08.043 Revision 02 Language: E |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : VG8 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Working Group | 16.05.2018 13.07.2018 05.11.2018 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input checked="" type="checkbox"/> EN/prEN: EN ISO 12402-5:2006/A1:2010 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: N/A | | |
| Key words: PFD Hydration Pack | | |
| Question: Manufacturers may look to include a hydration pack built into or designed to be used with a manufactured PFD which is to be compliant with PPE Regulation 2016/425 and EN ISO 12402-5:2006/A1:2010. The hydration pack would serve as a store for liquid drinks used during activities such as Paddle boarding, Kayaking, Sailing. Currently no testing is specified for how to address any additional risks posed by the inclusion of a hydration pack within the PFD. What additional testing or evaluation should be conducted to ensure hydration packs do not affect performance of the PFD? | | |
| Solution: The following tests are to be conducted on the PFD with the hydration pack incorporated: <ul style="list-style-type: none"> - Buoyancy test (Clause 5.3.4.2 of EN ISO 12402-5:2006+A1:2010 and tested according to 5.5.9 of EN ISO 12402-9:2006+A1:2011): to be carried out with the hydration pack filled with water to ensure that minimum buoyancy provided is not affected. - In-water testing (Clause 5.6.3 of ISO 12402-5:2006/A1:2010 and tested according to clause 5.6 of EN ISO 12402-9:2006+A1:2011): to be carried out with the hydration pack filled with water and also inflated fully with air (through blowing into device). All in water performance requirements should be met; - Donning test (Clause 5.6.2 of ISO 12402-5:2006+A1:2010 and tested according to clause 5.6.4 of EN ISO 12402-9:2006+A1:2011): to be carried out to ensure that donning is not unduly affected by the presence of the Hydration pack when full of water. Note, for PFD's other than level 50 that have a built hydration pack or designed to be used with a hydration pack, the relevant clauses for buoyancy, donning and in water performance should be satisfied in the relevant parts of ISO 12402 parts 2-4. | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/08.053
Version 01

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| Number of pages: 1 | Approval stage : | Approved on : | | | | | | | | | | | | | | | | | | | | | | | | |
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| Origin : Vertical Group 8 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 31/01/2022 30/04/2022 31/08/2023 | | | | | | | | | | | | | | | | | | | | | | | | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines | <input checked="" type="checkbox"/> EN/prEN: EN ISO 12402-9:2020 | <input type="checkbox"/> Other: | | | | | | | | | | | | | | | | | | | | | | | | |
| Article: | Annex: | Clause: 5.6.1.1, 5.6.1.2 & 5.6.1.3, Table 3, Table 4 and Table 5 | | | | | | | | | | | | | | | | | | | | | | | | |
| Key words: Test subject selection criteria Multi-Sized Buoyancy Aids (level 50) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Question: EN ISO 12402-9:2020 includes different requirements for test subject selection for 'multi-sized' buoyancy aids in 5.6.1.2 (para 2), but this is not currently differentiated in the footnotes of Table 3. How are the footnotes of Table 3 applied for multi-sized buoyancy aids for test subject selection criteria? | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Solution: Multi-Sized Buoyancy Aids (level 50) For a multi-sized buoyancy aid (level 50), the second paragraph of clause 5.6.1.2 applies, and a minimum of 3 test subjects in each size shall be tested. It is recognised that a smaller number of test subjects is tested for buoyancy aids, because the in-water performance requirements are lower than for lifejackets (level 100, 150 & 275) as per clause 5.6.1.2 (para 2). Footnote a) of Table 3 applies across the full range of sizes so that no more than two thirds of test subjects shall be of any one gender. Footnotes b), c) and d) of Table 3 do not apply, as the manufacturers stated user mass/size range is used for subject size selection. Footnotes e) and f) of Table 3 are applied for each size and the 3 test subjects in each size shall cover the smallest and largest body mass ($\pm 5\%$) of the manufacturer's stated range, plus one other subject within the stated mass range. See example below for a buoyancy aid with 5 sizes, subjects should be selected as follows: <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Buoyancy Aid</th> <th style="text-align: left;">25kg-40kg</th> <th style="text-align: left;">40-60kg</th> <th style="text-align: left;">60-80kg</th> <th style="text-align: left;">80-100kg</th> <th style="text-align: left;">100kg+</th> </tr> </thead> <tbody> <tr> <td>Lowest mass range $\pm 5\%$</td> <td>One subject between 23.75kg and 26.25 kg</td> <td>One subject between 38kg and 42kg</td> <td>One subject between 57kg and 63kg</td> <td>One subject between 76kg and 84kg</td> <td>One subject between 95kg and 105kg</td> </tr> <tr> <td>Mid mass selection</td> <td>One subject between 27kg and 38kg</td> <td>One subject between 43kg and 57kg</td> <td>One subject between 64kg and 57kg</td> <td>One subject between 85kg and 95kg</td> <td>One subject between 106kg and 120kg</td> </tr> <tr> <td>Upper mass range $\pm 5\%$</td> <td>One subject between 38kg and 42kg</td> <td>One subject between 57kg and 63kg</td> <td>One subject between 76kg and 84kg</td> <td>One subject between 95kg and 105kg</td> <td>One subject >120kg (upper adult mass range of Table 3)</td> </tr> </tbody> </table> | | | Buoyancy Aid | 25kg-40kg | 40-60kg | 60-80kg | 80-100kg | 100kg+ | Lowest mass range $\pm 5\%$ | One subject between 23.75kg and 26.25 kg | One subject between 38kg and 42kg | One subject between 57kg and 63kg | One subject between 76kg and 84kg | One subject between 95kg and 105kg | Mid mass selection | One subject between 27kg and 38kg | One subject between 43kg and 57kg | One subject between 64kg and 57kg | One subject between 85kg and 95kg | One subject between 106kg and 120kg | Upper mass range $\pm 5\%$ | One subject between 38kg and 42kg | One subject between 57kg and 63kg | One subject between 76kg and 84kg | One subject between 95kg and 105kg | One subject >120kg (upper adult mass range of Table 3) |
| Buoyancy Aid | 25kg-40kg | 40-60kg | 60-80kg | 80-100kg | 100kg+ | | | | | | | | | | | | | | | | | | | | | |
| Lowest mass range $\pm 5\%$ | One subject between 23.75kg and 26.25 kg | One subject between 38kg and 42kg | One subject between 57kg and 63kg | One subject between 76kg and 84kg | One subject between 95kg and 105kg | | | | | | | | | | | | | | | | | | | | | |
| Mid mass selection | One subject between 27kg and 38kg | One subject between 43kg and 57kg | One subject between 64kg and 57kg | One subject between 85kg and 95kg | One subject between 106kg and 120kg | | | | | | | | | | | | | | | | | | | | | |
| Upper mass range $\pm 5\%$ | One subject between 38kg and 42kg | One subject between 57kg and 63kg | One subject between 76kg and 84kg | One subject between 95kg and 105kg | One subject >120kg (upper adult mass range of Table 3) | | | | | | | | | | | | | | | | | | | | | |
| In addition, where a manufacturer does not state an upper limit to the user mass range, for example, states a size range of 100kg+, then the largest size category (>120kg, >1900mm) of Table 3 shall be used as the upper cell. Note: This would also be the case for any other sizes stating no upper limit, e.g., 70kg+, 90kg+. | | | | | | | | | | | | | | | | | | | | | | | | | | |

**Vertical Recommendation for Use sheets (RfUs)
of Vertical Group 9 “Protective Clothing for Motorcycle Riders and Sports Impact Protectors”
of the European Coordination of Notified Bodies in the field of Personal Protective Equipment (PPE)**

Regulation (EU) 2016/425

| Number of RfU PPE-R/ | Version | Reference | Keywords | Approved by Vertical Group 9 | Approved by Horizontal Committee | Endorsed by PPE Working Group |
|-----------------------------|----------------|---------------------------------|---------------------------------------------------------------------|-------------------------------------|-----------------------------------------|--------------------------------------|
| 09.002 | 01 | EN 1621-2:2014 | Motorcyclists back protector sizing intervals | 21/04/18 | 21/04/18 | 22/04/19 |
| 09.004 | 01 | EN 14021:2003 & EN 1621-1:2012 | Elbow protectors in addition to stone shields for motorcycle riders | 21/04/18 | 21/04/18 | 22/04/19 |
| 09.005 | 01 | EN 1621-1:2012 & EN 1621-2:2014 | Impact protectors for use in motorcycling AND skiing | 21/04/18 | 21/04/18 | 22/04/19 |
| 09.009 | 01 | EN 1621-1:2012 & EN 1621-2:2014 | Wet impact test after hydrolytic | 21/04/18 | 21/04/18 | 22/04/19 |
| 09.010 | 01 | EN 16027:2011 | Protective Goal Keepers Gloves, Impact Strength | 21/04/18 | 21/04/18 | 22/04/19 |
| 09.012 | 01 | EN 1621-1:2012 | Information by the manufacturer | 21/04/18 | 21/04/18 | 22/04/19 |
| 09.013 | 01 | EN 13594:2015 | Tear Testing, Determination of Pass / Fail, Protective Overlays | 21/04/18 | 21/04/18 | 22/04/19 |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/09.002
Version 1

RECOMMENDATION FOR USE

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| Number of pages: 1 | | Approval stage : | Approved on : |
| Origin : Vertical Group 9 | | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | | <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| | | <input checked="" type="checkbox"/> EU PPE Working Group | 22.04.2019 |
| Question related to | <input type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: 1621-2: 2014 | <input type="checkbox"/> Other: |
| Article: | Annex: II | Clause: 4.6 Sizing | |
| Key words: Motorcyclists back protector sizing intervals | | | |
| Question: EN 1621-2: 2014 clause 4.6 Sizing, states "The waist to shoulder length, expressed in centimetres shall be specified as a range up to max. 5cm." Should this maximum 5cm range be the number of centimetres between the minimum and maximum value claimed (e.g 45 – 50cm) OR should this maximum 5cm include both the maximum and minimum values (e.g 45 – 49cm)? | | | |
| Solution: Providing that there is an 'overlap' in the sizing across the range of available sizes (for example Size S = 45 – 50cm, Size M = 50 – 55cm) it would be considered acceptable for the 5cm range to be the number of centimetres between the maximum and minimum value claimed. However, if no 'overlap' in values is present or only a single size of protector is available, (for example Size S = 45 – 50cm, Size M = 51 – 56cm) the 5cm range should include both the minimum and maximum value claimed. | | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/09.004
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RECOMMENDATION FOR USE

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| <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| <input checked="" type="checkbox"/> EU PPE Working Group | 22.04.2019 |

Question related to PPE Regulation

EN/prEN: EN 14021: 2003 & EN
1621-1: 2012

Other:

Article:

Annex:

Clause:

Key words:

Elbow protectors in addition to stone shields for motorcycle riders

Question:

EN 14021: 2003 (stone shields) further to chest protectors covers also shoulder and back protectors. However, sometimes, this device is offered to the market with elbow protectors connected to it.

Which standard has to be referred to when it comes to type approval and certification?

Solution:

The additional elbow protectors have to comply with the requirements of their dedicated standard EN 1621-1: 2012



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/09.009
Version 1

RECOMMENDATION FOR USE

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|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------|---------------|
| Number of pages: 1 | | Approval stage : | Approved on : |
| Origin : CEN/TC 162/WG 9 Meeting 04/06/2013 | | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | | <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| | | <input checked="" type="checkbox"/> EU PPE Working Group | 22.04.2019 |
| Question related to <input type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN 1621-1:2012 & EN 1621-2:2014 | <input type="checkbox"/> Other: | |
| Wet Impact Test After Hydrolytic Ageing | | | |
| Article: | Annex: | Clause: EN 1621-1 clause 6.3.4.3 & EN 1621-2 clause 5.1.6.2 | |
| Key words: Wet impact test after hydrolytic | | | |
| Question: How should the sample be stored in the sealed bag according to 1621-1 clause 6.3.4.3 and 1621-2 clause 5.1.6.2? | | | |
| Solution: The sample should be stored to allow water to drop out within the sealed bag. | | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/09.010
Version 1

RECOMMENDATION FOR USE

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| Number of pages: 1 | Approval stage : | Approved on : |
| Origin : SATRA (UK) | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| | <input checked="" type="checkbox"/> EU PPE Working Group | 22.04.2019 |
| Question related to <input type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN 16027: 2011 | <input type="checkbox"/> Other: |
| Impact Testing | | |
| Article: | Annex: | Clause: 5.6 Impact Strength |
| Key words: Protective Goal Keepers Gloves, Impact Strength | | |
| Question: The standard EN 16027: 2011 details the test apparatus required for Impact Strength testing in 5.6.1 and the procedure for this test in clause 5.6.2. Although clause 5.6.2 details the impact energy that should be used to carry out this assessment, neither the list of apparatus (clause 5.6.1) nor the procedure (clause 5.6.2), specify the weight of the carriage which should be used. Is it possible to use any weight carriage to carry out this test, providing that the correct drop height has been calculated prior to testing to obtain the impact energy specified in the standard? | | |
| Solution: No. A heavy mass falling a short distance may not produce the same effect as a small mass falling from a greater height. A carriage weight of 2.5 kg should be used. | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/09.012
Version 1

RECOMMENDATION FOR USE


| | | |
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| Number of pages: 1 | Approval stage : | Approved on : |
| Origin : Vertical Group 9 | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| | <input checked="" type="checkbox"/> EU PPE Working Group | 22.04.2019 |
| Question related to <input type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN 1621-1: 2012 | <input type="checkbox"/> Other: |
| User Information | | |
| Article: | Annex: | Clause: 8 |
| Key words: Information by the manufacturer | | |
| Question: The instruction for use shall contain according to clause 8.e.2 the performance of impact attenuation: 1) Is it sufficient if at least the highest (poorest) result according to clause 6.3.4 (ambient, wet, high and low temperature test) is mentioned? 2) Instead of the exact recorded value obtained during type approval, is it acceptable that the manufacturer states at least the minimum requirement value given by the standard for the claimed performance level? | | |
| Solution: 1) Yes, because this value (e.g. mean value for wet test) determines the performance level in the marking. More results can be given if desired by the manufacturer. 2) No. This would not be acceptable. | | |

**Vertical Recommendation for Use sheets (RfUs)
of Vertical Group 10 “Foot and Leg Protection”
of the European Coordination of Notified Bodies in the field of Personal Protective Equipment (PPE)**

Regulation (EU) 2016/425

| Number of RfU PPE-R/ | Version | Reference | Keywords | Approved by Vertical Group 10 | Approved by Horizontal Committee | Endorsed by PPE Working Group |
|-----------------------------|----------------|---------------------------------------------------------------|--------------------------------------------------------------------|--------------------------------------|-----------------------------------------|--------------------------------------|
| 10.001 | 01 | EN ISO 20345: 2011, EN ISO 20346: 2014 and EN ISO 20347: 2012 | Obsolescence | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.003 | 01 | EN ISO 20345: 2011, EN ISO 20346: 2014 and EN ISO 20347: 2012 | Outsole without continuity | 21-4-2018 | 21-4-2018 | 07-02-2020 |
| 10.004 | 01 | EN 15090: 2012 | Insulation against heat, assessment, deformation | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.005 | 01 | EN ISO 20345:2011, EN ISO 20346:2014, EN ISO 20347: 2012 | Synthetic upper materials on classification I footwear | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.006 | 01 | EN 13287:2012 | Slip resistance, curved outsoles | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.007 | 01 | EN ISO 20347: 2012 | Water resistance test duration | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.008 | 01 | EN ISO 20344: 2011 | Key words: Penetration resistant inserts dimensions, coverage area | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.009 | 01 | | Innocuousness AZO Dyes | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.011 | 01 | EN ISO 20344: 2011 | Water absorption / desorption, cotton gauze | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.012 | 01 | EN ISO 20344: 2011 | Water resistance, insock, water detection | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.014 | 01 | EN ISO 20347: 2012 | Certification, vamp lining mandatory | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.015 | 01 | EN ISO 13287: 2012 | Slip resistance | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.017 | 01 | | Overshoe, slip resistance | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.018 | 01 | EN ISO 20345:2011 cl. 6.2.7 EN13634:2010 | Ankle Protection , how many areas per shoe | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.019 | 01 | | Orthopedic changes on safety and occupational footwear | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.020 | 01 | EN ISO 20345: 2011 and EN ISO 20347: 2012 | Water vapour permeability (WVP), quarter lining | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.021 | 01 | EN ISO 20344:2011 | Outsole cracking | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.024 | 01 | EN ISO 13287: 2012 | Penetration resistance, slip resistance | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.025 | 01 | EN ISO 20346: 2014 | | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.026 | 01 | EN 13832-1: | Stocking, degradation test | 21-4-2018 | 21-4-2018 | 29-11-2019 |

| Number of RfU PPE-R/ | Version | Reference | Keywords | Approved by Vertical Group 10 | Approved by Horizontal Committee | Endorsed by PPE Working Group |
|------------------------|---------|--------------------------------------------------------------------------|--------------------------------------------------|-------------------------------|----------------------------------|-------------------------------|
| | | 2006 | | | | |
| 10.027 | 01 | EN ISO 20345:2011 (EN ISO 20346:2014) | Toe cap, cracks | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.028 | 01 | EN ISO 20345:2011 | Water absorption / desorption | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.029 | 01 | EN ISO 20345:2011, EN ISO 20346:2014 and EN ISO 20347:2012 | Open heel region | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.030 | 01 | | Overshoes without heel section – slip resistance | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.031 | 01 | | Certification of a sandal | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.032 | 01 | EN 15090:2012 | Insulation against heat, sandbath | 21-4-2018 | 21-4-2018 | 29-11-2019 |
| 10.045 | 01 | EN ISO 20345:2011/EN 15090:2012 | Heel shape | 21-4-2018 | 21-4-2018 | 07-02-2020 |
| 10.046 | 01 | | Gaiter | 21-4-2018 | 21-4-2018 | 07-02-2020 |
| 10.049 | 01 | EN ISO 20345:2011; EN ISO 20346:2014; EN ISO 20347:12 | Upper Overlay | 21-4-2018 | 21-4-2018 | 07-02-2020 |
| 10.050 | 01 | EN ISO 20344:2011; EN ISO 20345:2011; EN ISO 20346:2014; EN ISO 20347:12 | Slip resistance & non-cleated outsoles | 21-4-2018 | 21-4-2018 | 07-02-2020 |
| 10.051 | 01 | EN ISO 20345:2011; EN ISO 20346:2014; EN ISO 20347:12 | Instructions for use/Limitations of use | 21-4-2018 | 21-4-2018 | 07-02-2020 |
| 10.052 | 01 | | Sole design | 21-4-2018 | 21-4-2018 | 07-02-2020 |
| 10.054 | 01 | | Samples / specimen numbers | 21-4-2018 | 21-4-2018 | 07-02-2020 |
| 10.055 | 01 | | One model and different protecting components | 21-4-2018 | 21-4-2018 | 07-02-2020 |
| 10.056 | 01 | | Sock lining, insole abrasion | 21-4-2018 | 21-4-2018 | 07-02-2020 |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/10.001 Version 01 |
| Number of pages: 1 Origin : France | Approval stage : Approved on : <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 21.04.2018 <input checked="" type="checkbox"/> EU PPE Working Group 29.11.2019 | |
| Question related to <input type="checkbox"/> PPE Regulation <input checked="" type="checkbox"/> EN/prEN: EN ISO 20345: 2011, EN ISO 20346: 2014 and EN ISO 20347: 2012 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: 8 | | |
| Key words: Obsolescence | | |
| <p>Question:</p> <p>In the standards EN ISO 20345: 2011, EN ISO 20346: 2014 and EN ISO 20347: 2012 clause 8.1 it is written: “Safety footwear shall be supplied to the customer with information written at least in the official language(s) of the state of destination. All information shall be unambiguous. The following information shall be given: 7) obsolescence deadline or period of obsolescence”</p> <p>The obsolescence deadline is difficult to assess by the manufacturer. It is possible to give a limit when the products are stored by the manufacturer himself because he knows the conditions. But, when the products are stored by a retailer or the customer, it is very difficult to give figures.</p> <p>The problem is more critical with polymeric boots (PU, due to hydrolysis...)</p> <p>French manufacturers try to define this limit period but they have had information from Italy that it is possible to avoid to answer to this point of the standard with a sentence like: “Due to several factors, humidity, changes in the materials in the time, it is not possible to give a date of obsolescence.”</p> <p>This sentence is not conform to the standard, but conform to the regulation.</p> <p>Does that mean that CE marking is possible but reference to the standard impossible?</p> | | |
| <p>Solution:</p> <p>To avoid inconsistent information, VG 10 proposes to give the following text to help the person that puts the product on the market:</p> <p>“When stored under normal conditions (light, temperature, and relative humidity), the obsolescence date of a footwear is generally:</p> <ul style="list-style-type: none"> - 10 years after the date of manufacturing for shoes with upper leather, rubber and thermoplastic materials (such as SEBS etc) and EVA - 5 years after the date of manufacturing for shoes including PVC - 3 years after the date of manufacturing for shoes including PU and TPU <p>However, these durations are medium values. It is the responsibility of the manufacturer to determine them. Higher periods of validity can be accepted by the Notified Body if the manufacturer can provide supporting evidence (tests, experience).</p> | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/10.005
Version 01

RECOMMENDATION FOR USE

Number of pages: 1

Approval stage :

Approved on :

Origin : CTC

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|----------------------------------------------------------|------------|
| <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |

Question related to PPE Regulation

EN/prEN: EN ISO 20345:2011,
EN ISO 20346:2014, EN ISO
20347: 2012

Other:

Article:

Annex:

Clause:

Key words:

Synthetic upper materials on classification I footwear

Question:

Class I footwear models with synthetic material on upper which are used as decorative component or for design (PU, reflective tape...) are widespread. This kind of material is usually used for small surfaces : see orange and black components on pictures for example



Regarding to the EN ISO 20345: 2011 standard (5.4) these components must be tested as upper components but the water vapour coefficient and permeability is not conform because of the component quality

Is it possible to certify these models to EN ISO : 2011 classification I ?

Solution:

Certification in class I is possible provided that the overlay components (that do not meet the water vapour coefficient and permeability requirements):

1. For Design A - Account for no more than 40% of the whole area of the upper (excluding the collar) – see # below
2. For Designs B, C or D - Account for no more than 10% of the whole area of the upper (excluding the toe cap, counter and collar)
3. Always cover an upper material that is fully compliant with EN ISO 20345/6/7

(Point 3 does not apply to materials covering the toe cap and the counter)

For information, note that that in general for design A footwear the toe cap and counter areas typically account for around 30% of the total upper area



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/10.006
Version 01

RECOMMENDATION FOR USE

Number of pages: 2

Approval stage :

Approved on :

Origin : TUV

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| <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |

Question related to PPE Regulation

EN/prEN: EN 13287:2012

Other:

Article:

Annex:

Clause:

Key words:

Slip resistance, curved outsoles

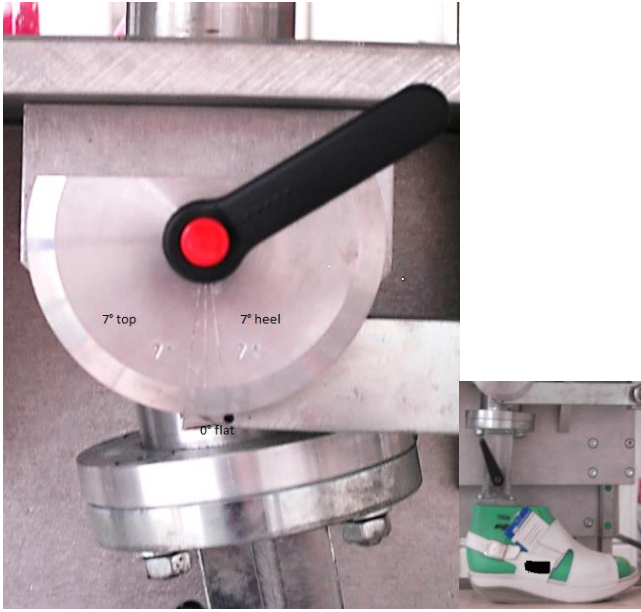
Question:

How best to carry out slip resistance testing of samples with curved outsoles?

Solution

One possible solution (which is dependent on design of the machine) is to adjust the 7 ° angle on the testing device for the heel mode based on this central vertex without using the wedge – see photographs below







CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/10.007
Version 01

RECOMMENDATION FOR USE

Number of pages: 1

Approval stage :

Approved on :

Origin : TUV / PFI / INESCOP

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| <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |

Question related to PPE Regulation

EN/prEN: EN ISO 20347: 2012

Other:

Article:

Annex:

Clause: 6.2.5

Key words:

Water resistance test duration

Question:

It says in clause 6.2.5 of EN ISO 20347: 2012 that the requirement for Water resistance according to EN ISO 20344, 5.15.2 is 3 cm² after 15 minutes. But this is different to that stated in EN ISO 20344: 2011 and EN ISO 20345: 2011 as follows:

EN ISO 20344: 2011 Clause 5.15.2.4.8 states 80 minutes

EN ISO 20345: 2011 Clause 6.2.5 states 80 minutes

EN ISO 20347: 2012 Clause 6.2.5 states 15 minutes

With regard to EN ISO 20347: 2012 Clause 6.2.5 what is the recommended way to proceed for notified bodies against this background?

Solution:

Notified bodies should take the 80 minutes, as it says in EN ISO 20345: 2011.



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/10.008
Version 01

RECOMMENDATION FOR USE

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| Number of pages: 1 | Approval stage : | Approved on : |
| Origin : CIOP-PIB | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| | <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |

Question related to PPE Regulation EN/prEN: EN ISO 20344: 2011 Other:

Article: Annex: Clause: 5.8.1

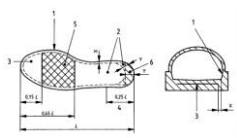
Key words: Penetration resistant inserts dimensions, coverage area

Question:

According to clause. 5.8.1 of EN ISO 20344:2011 "Section the footwear and measure the distances X and Y being the distances between the edge of the insert and the line left by the feather edge of the last....." (figure below)

The questions are:


- 1. In which places shall the footwear be cut?
- 2. How many cuts shall be made?
- 3. How many measurements of distance X and Y shall be made?



Solution:

It should be noted that the requirement applies to the whole perimeter of the insert but at least the following four points should be checked by cutting into the sample:

1. The footwear shall be cut at - The heel; The forepart; The waist and The toe cap area
2. Four – please see answer 1 above
3. Three of X and one of Y

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/10.009 Version 01 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : CIOP-PIB | <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 21.04.2018 <input checked="" type="checkbox"/> EU PPE Working Group 29.11.2019 | |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> EN/prEN: <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: | | |
| Key words: Innocuousness AZO Dyes | | |
| Question: For which materials in footwear should the Notified Body require the test reports proving that the content of azo dyes listed in the directive 2002/61/EC is in accordance with the requirements? | | |
| Solution: It should be noted that the PPE Regulation 2016/425 does not differentiate between materials likely to come into skin contact and those not likely. However, as a minimum, all materials present on the inner surface of the footwear should be assessed. Consideration should also be given to all other hazardous substances listed in Annex 17 of REACH. | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/10.019
Version 01

RECOMMENDATION FOR USE

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| Number of pages: 2 | Approval stage : | Approved on : |
| Origin : TUV | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| | <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |
| Question related to <input type="checkbox"/> PPE Regulation | <input type="checkbox"/> EN/prEN: | <input type="checkbox"/> Other: |
| Article: | Annex: | Clause: |
| Key words: Orthopedic changes on safety and occupational footwear | | |
| Question: With reference to EN ISO 20345: 2011 and EN ISO 20347: 2012, which tests are necessary for the assessment of orthopedic change? | | |
| Solution: see annex | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/10.021
Version 01

RECOMMENDATION FOR USE

Number of pages: 1

Approval stage :

Approved on :

Origin : IFA Germany

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| <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |

Question related to PPE Regulation

EN/prEN: EN ISO 20344:2011

Other:

Article:

Annex:

Clause:

Key words:

Outsole cracking

Question:

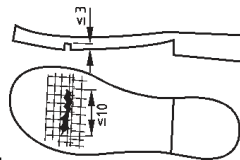
The figure B.1 in annex B does not correspond to the title: outsole cracks



corresponding to cleat height

What is the recommended way to proceed for notified bodies against this background?

Solution:



Follow figure corresponding to outsole cracks.



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/10.026
Version 01

RECOMMENDATION FOR USE

Number of pages: 1

Approval stage :

Approved on :

Origin : CTC

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| <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |

Question related to PPE Regulation

EN/prEN: EN 13832-1: 2006

Other:

Article:

Annex:

Clause:

Key words:

Stocking, degradation test

Question:

In clause 4.2.3 of EN 13832-1: 2006 - footwear protecting against chemicals - there is a procedure for the preparation of samples for degradation test that states "the lining shall be removed"

Standard EN ISO 20345 : 2011, table 2, includes a note to say that the "stocking covering the last before the moulding process is not considered as a lining"

Below is a picture of a cross section of polymeric footwear with a stocking. - So the question is :- Should this stocking be considered as a lining and be removed before testing or should it be left in place for the degradation test ?





Polymeric material

Stocking

Solution:

If the removal of the stocking damages the sample, it is recommend to test the full complex including the stocking but if the stocking can be removed without damaging the sample then this should be done.

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/10.029 Version 01 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : PFI | <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 21.04.2018 <input checked="" type="checkbox"/> EU PPE Working Group 29.11.2019 | |
| Question related to <input type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN ISO 20345: 2011, EN ISO 20346: 2014 and EN ISO 20347: 2012 | <input type="checkbox"/> Other: |
| Article: | Annex: | Clause: |
| Key words: Open heel region | | |
| <p>Question:</p> <p>According to EN ISO 20345: 2011, EN ISO 20346: 2014 and EN ISO 20347: 2012 an open heel region is allowed with design A footwear. However shoes with an open heel region may not fit the feet correctly so could easily be lost during the walking movement. This is especially critical for ergonomic features and for slip resistance meaning BHSR 1.1.1 and 1.3.1 may only be partly fulfilled, if there is no feature to hold the footwear on the feet. What could be done to address this concern?</p> <div style="text-align: center;">  </div> | | |
| <p>Solution:</p> <p>When a heel strap is present that can be moved – for instance onto the front part as shown above, a warning shall be included in the user information to instruct the wearer to configure the strap round the back of the foot during use.</p> | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/10.031
Version 01

RECOMMENDATION FOR USE

Number of pages: 1

Approval stage :

Approved on :

Origin : Intertek

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|----------------------------------------------------------|------------|
| <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |

Question related to PPE Regulation

EN/prEN:

Other:

Article:

Annex:

Clause:

Key words:

Certification of a sandal


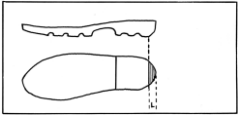
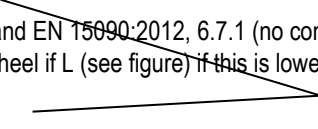
Question:

Could this sandal be certified to EN ISO 20347:2012?



Solution:

Yes, provided the footwear meets the claimed requirements. Hence not S1 or O1 because the seat region is not closed


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/10.045 Version 1 |
| Number of pages: 1 Origin : RICOTEST | Approval stage : Approved on : <input checked="" type="checkbox"/> Vertical Group 18-12-2002 <input checked="" type="checkbox"/> Horizontal Committee 15-09-2019 <input checked="" type="checkbox"/> EU PPE Working Group 07-02-2020 | |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN ISO 20345:2011/EN 15090:2012 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: 5.8.1.3 (EN ISO 20345); 6.7.1 (EN 15090) | | |
| Key words: Heel shape | | |
| <p>Question:</p> <p>EN ISO 20345:2011, 5.8.1.3 specifies the depth of the sole cleats. EN 15090:2012, 6.7.1 states that “there are no continuous linear transverse valleys across the sole.</p> <p>In some cases, the back part of the sole in the heel area is not flat and it is constituted of small linear cleats (see figure hereunder)</p> <p>This heel shape should not be excluded because it can improve the footwear properties (for instance the slip resistance)</p> <div style="text-align: center;">  </div> | | |
| <p>Solution:</p> <p>The requirement of EN ISO 20345:2011, 5.8.1.3 (the depth of the sole cleats) and EN 15090:2012, 6.7.1 (no continuous linear transverse valley across the sole) do not apply to any inclined area at the back part of the heel if L (see figure) if this is lower than the depth of the small linear cleats in the heel area</p> <div style="text-align: right;">  </div> | | |


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|  | <p>CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425</p> <p>RECOMMENDATION FOR USE</p> | <p>PPE-R/10.046 Version 1</p> |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : BG 24 D. Opara | <input checked="" type="checkbox"/> Vertical Group 18-12-2002 <input checked="" type="checkbox"/> Horizontal Committee 15-09-2019 <input checked="" type="checkbox"/> EU PPE Working Group 07-02-2020 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input type="checkbox"/> EN/prEN: <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: | | |
| Key words: Gaiter | | |
| <p>Question:</p> <p>Which are the general requirements to certify gaiters?</p> | | |
| <p>Solution:</p> <p>The gaiter shall be tested according to the test methods that would be used to test the footwear against the same risk.</p> <p>The technical file shall take into account the essential requirement of the Regulation (EU) 2016/425 (e.g. sizing, innocuousness....).</p> <p>Without these 2 assessments certification is impossible.</p> <p>The EU type examination certificate is given on the basis of the Regulation.</p> | | |

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|  | <p>CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425</p> <p>RECOMMENDATION FOR USE</p> | <p>PPE-R/10.049 Version 1</p> |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : CTC | <input checked="" type="checkbox"/> Vertical Group 10-02-2005 <input checked="" type="checkbox"/> Horizontal Committee 15-09-2019 <input checked="" type="checkbox"/> EU PPE Working Group 07-02-2020 | |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN ISO 20345:2011; <input type="checkbox"/> Other: EN ISO 20346:2014; EN ISO 20347:12 | | |
| Article: Annex: Clause: 5.4 | | |
| Key words: Upper Overlay | | |
| <p>Question:</p> <p>In the context of this question, an “overlay material” is a component of the footwear upper that is only present in areas where there is a second (underlying) material that fully complies with the requirements of EN ISO 20345:2011 Clause 5.4.</p> <p>Question :</p> <p>What testing should be carried out on an “overlay material”?</p> | | |
| <p>Solution:</p> <p>Overlay materials above the height defined in EN ISO 20345:2011, Table 10 – As they are not an insert no testing is required.</p> <p>Overlay materials below the height defined in EN ISO 20345:2011, Table 10, the following shall be tested :</p> <ul style="list-style-type: none"> • Upper, all requirements of EN 20345:2011/20346:2014/20347:2012 are applicable • Upper plus overlay material Water Vapour Permeability and coefficient | | |


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/10.050 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : INESCOP | <input checked="" type="checkbox"/> Vertical Group 24-03-2006 <input checked="" type="checkbox"/> Horizontal Committee 15-09-2019 <input checked="" type="checkbox"/> EU PPE Working Group 07-02-2020 | |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN ISO 20344:2011; <input type="checkbox"/> Other: EN ISO 20345:2011; EN ISO 20346:2014; EN ISO 20347:12 | | |
| Article: Annex: Clause: 5.8.1 | | |
| Key words: Slip resistance & non-cleated outsoles | | |
| <p>Question:</p> <p>EN ISO 20345:2011, EN ISO 20346:2014 and EN ISO 20347:2012 5.8.1 specify in clause 5.8.1 that outsoles with cleat height of less than 2, 5 mm are regarded as uncleated.</p> <p>This could be not sufficient, because the height could be only 0,5 mm and become worn out very quickly. The slip resistance would change significantly.</p> | | |
| <p>Solution:</p> <p>In this case it was agreed that it was particularly important for the user information to explain the possible effect of worn cleats on slip resistance and to include a warning for the user to examine the cleats before use.</p> | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/10.051 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : BGBAU | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Working Group | 24-03-2006 15-09-2019 07-02-2020 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN ISO 20345:2011; EN ISO 20346:2014; EN ISO 20347:12 <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: 8.1 |
| Key words: Instructions for use/Limitations of use | | |
| <p>Question:</p> <p>The instructions for use shall give information about all limitations of use (EN ISO 20345:2011 Clause 8.1 e). For the manufacturer it is very difficult to give all limitations of use. What is acceptable to N.B s?</p> <p>For instance a “winter boot” certified to EN ISO 20345 with no testing for slip resistance on ice and no mention of this lack of testing in the User Information had been considered as unacceptable.</p> | | |
| <p>Solution:</p> <p>The only solution provided was to make sure that all testing/protection is fully explained in the user instructions and then to include a statement. “This PPE has only been tested against the hazards identified by the product marking and explained in this leaflet – For other hazards, please contact the manufacturer”.</p> | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | | PPE-R/10.052 Version 1 |
| | Number of pages: 1 Origin : CTC | Approval stage : Approved on : <input checked="" type="checkbox"/> Vertical Group 16-03-2007 <input checked="" type="checkbox"/> Horizontal Committee 15-09-2019 <input checked="" type="checkbox"/> EU PPE Working Group 07-02-2020 | |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input type="checkbox"/> EN/prEN: <input type="checkbox"/> Other: | | | |
| Article: Annex: Clause: | | | |
| Key words: Sole design | | | |
| <p>Question:</p> <p>A boot manufacturer send us 3 sizes for the CE marking of a product but one of the sizes has a different outsole design.</p> <p>He explains that the 3 shapes of sole have an equivalent philosophy. He wants to have one certificate for the product.</p> <p>Is it acceptable?</p> | | | |
| <p>Solution:</p> <p>These products must be on two certificates (one for each outsole mould design).</p> <p>Each certificate to be supported by its own set of tests based on that particular outsole design.</p> | | | |

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|  | <p>CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425</p> <p>RECOMMENDATION FOR USE</p> | <p>PPE-R/10.054 Version 01</p> |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : SATRA | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Working Group | 15-09-2019 07-02-2020 |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input type="checkbox"/> EN/prEN: <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: |
| Key words: Samples / specimen numbers | | |
| <p>Question:</p> <p>What should be done where the number of samples specified in EN ISO 20344:2011 is different from that specified in the test method.</p> <p>e.g. Tear test on upper materials.</p> <p>EN ISO 20344:2011. 1 sample from each of 3 sizes. Number of test pieces from each sample = 3</p> <p>EN ISO 3377-2:2002 (for leather). 6 test pieces, 3 along & 3 across EN ISO 4674-1:2003 method B (for coated fabric & textile). 10 test pieces, 5 along & 5 across</p> | | |
| <p>Solution:</p> <p>In cases of conflict, the requirements of EN ISO 20344: 2011 should be followed (Where possible testing in both perpendicular directions)</p> | | |

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|  | <p>CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425</p> <p>RECOMMENDATION FOR USE</p> | <p>PPE-R/10.055 Version 01</p> |
| <p>Number of pages: 1</p> | <p>Approval stage : Approved on :</p> | |
| <p>Origin : INESCOP</p> | <p> <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee 15-09-2019 <input checked="" type="checkbox"/> EU PPE Working Group 07-02-2020 </p> | |
| <p>Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input type="checkbox"/> EN/prEN: <input type="checkbox"/> Other:</p> | | |
| <p>Article: Annex: Clause:</p> | | |
| <p>Key words: One model and different protecting components</p> | | |
| <p>Question: We have sometimes allowed use of two different steel toecaps, very similar but different make. We have tested the model with both toecaps and the corrosion in both of them and that was all.</p> <p>But now a manufacturer wants to have in a single model the possibility to use steel and non metallic toecaps, metal and textile inserts. Of course all possibilities shall be tested, but, is it possible to call it a single model?</p> | | |
| <p>Solution: When the safety components are from different materials that have different properties / dimensions they will have to be treated as different models with different product names so that they can be differentiated in the market place.</p> | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/10.056 Version 01 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : INESCOP | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee 15-09-2019 <input checked="" type="checkbox"/> EU PPE Working Group 07-02-2020 | |
| Question related to <input type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input type="checkbox"/> EN/prEN: <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: | | |
| Key words: Sock lining, insole abrasion | | |
| Question: The abrasion resistance of the insole must be carried out according to EN ISO 20344: 2011 Clause 7.3. However, when the footwear has an inner sock lining covering also the insole that method seems to be meaningless. For textiles the Martindale method (Clause 6.12), used for linings and insocks, is potentially more suitable. | | |
| Solution: When footwear has an inner sock lining it is enough to carry out the abrasion resistance of the lining according to EN ISO 20344: 2011 clause 6.12 and it is unnecessary to carry out the insole abrasion test according to Clause 7.3. | | |

**Vertical Recommendation for Use sheets (RfUs)
of Vertical Group 11 “Protection against Falls from a Height”
of the European Coordination of Notified Bodies in the field of Personal Protective Equipment (PPE)**

Regulation (EU) 2016/425

| Number of RfU PPE-R/ | Version | Reference | Keywords | Approved by Vertical Group 11 | Approved by Horizontal Committee | Endorsed by PPE Working Group |
|-----------------------------|----------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------|-----------------------------------------|--------------------------------------|
| 11.004 | 02 | EN 364:1992 | Length of the test lanyard | 21.04.2018 | 21.04.2018 | 22.04.2019 |
| 11.006 | 02 | | EU type examined equipment; minor variations, additional testing / verification | 21.04.2018 | 21.04.2018 | 22.04.2019 |
| 11.007 | 02 | | EU type examined equipment; medium variations; verification; re-examination | 21.04.2018 | 21.04.2018 | 22.04.2019 |
| 11.008 | 02 | | EU type examined equipment; essential variations; specific or partial tests | 21.04.2018 | 21.04.2018 | 22.04.2019 |
| 11.009 | 02 | | EU type examined equipment; essential variations; EU type examination | 21.04.2018 | 21.04.2018 | 22.04.2019 |
| 11.019 | 02 | EN 364:1992 | Energy absorber; chain test lanyard | 21.04.2018 | 21.04.2018 | 22.04.2019 |
| 11.023 | 02 | All EN/prEN | Static testing; stressing rate | 21.04.2018 | 21.04.2018 | 22.04.2019 |
| 11.024 | 02 | EN 364:1992 | Dynamic force measurement; filter characteristic | 21.04.2018 | 21.04.2018 | 22.04.2019 |
| 11.031 | 01 | | Canyoning; caving | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.034 | 02 | EN 353-2 :2002 | Fall protection system; special use | 21.04.2018 | 21.04.2018 | 22.04.2019 |
| 11.037 | 02 | EN1891:1998, EN 364:1992 | Low stretch kernmantel rope - drop machine | 21.04.2018 | 21.04.2018 | 22.04.2019 |
| 11.040 | 02 | | Date of manufacture, marking, ageing | 23.11.2022 | 31.05.2023 | 31.01.2024 |
| 11.041 | 02 | EN 795:2012 - type B | Vacuum, magnetic, anchor device | 07.06.2021 | 01.10.2021 | 18.11.2022 |
| 11.042 | 01 | EN 353-2:2002 | Guided Type Fall Arrester - Incorrect attachment and use | 21.04.2018 | 21.04.2018 | 29.11.2019 |
| 11.043 | 02 | EN 361:2002, EN 358:1999 | Back support; full body harness; waist belt; work positioning elements | 21.04.2018 | 21.04.2018 | 22.04.2019 |
| 11.049 | 02 | EN 1891:1998 | Low stretch kernmantel ropes; diameter | 21.04.2018 | 21.04.2018 | 22.04.2019 |
| 11.050 | 02 | EN 353-2:2002 | Guided type fall arrester including a flexible anchor line; static strength | 21.04.2018 | 21.04.2018 | 22.04.2019 |
| 11.051 | 02 | All EN for PPE against fall from a height with load bearing textile element | Load bearing textile materials | 07.06.2021 | 01.10.2021 | 18.11.2022 |
| 11.053 | 02 | EN 361:2002 | Full body harness: front loops | 21.04.2018 | 21.04.2018 | 22.04.2019 |
| 11.057 | 02 | EN 361:2002 | Marking of fall arrest | 21.04.2018 | 21.04.2018 | 22.04.2019 |

| Number of RfU PPE-R/ | Version | Reference | Keywords | Approved by Vertical Group 11 | Approved by Horizontal Committee | Endorsed by PPE Working Group |
|------------------------|---------|----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------|----------------------------------|-------------------------------|
| | | | attachment points on EN 361:2002 harnesses | | | |
| 11.060 | 01 | EN 360:2002 | Horizontal use; retractable type fall arrester | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.062 | 01 | EN 353-2 :2002, EN 355:2002; EN 360:2002 | Testing with higher loads | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.063 | 02 | EN 355 :2002 | Energy absorber - static test – dynamic test | 23.11.2022 | 31.05.2023 | 31.01.2024 |
| 11.064 | 01 | EN 353-1:2014, EN 353-2:2002 | Different fall arrestors for fall arrest systems | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.068 | 02 | EN 12278:2007 | Pulley, sheaves, static strength test | 21.04.2018 | 21.04.2018 | 22.04.2019 |
| 11.069 | 02 | EN 361:2002, ... | Synthetic fibre, breaking tenacity | 21.04.2018 | 21.04.2018 | 22.04.2019 |
| 11.074 | 03 | EN 354:2010, EN 355:2002 | EN 354, EN 355, horizontal use; lanyards with energy absorber, short lanyard, edge test | 22.11.2022 | 31.05.2023 | 31.01.2024 |
| 11.075 | 01 | EN 353-2:2002 | EN 353-2, horizontal use; guided type fall arrester including flexible anchor line , edge test | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.081 | 02 | EN 353-2:2002, EN 364:1992 | Guided type fall arrester, dynamic performance, non integral energy absorber, non integral lanyard | 14.10.2020 | 01.10.2021 | 18.11.2022 |
| 11.083 | 01 | EN 355 | Samples, test order | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.085 | 02 | EN 360:2002 | Retractable fall arrester, fall factor, locking feature | 14.10.2020 | 01.10.2021 | 18.11.2022 |
| 11.087 | 01 | EN 360 :2002 | Removable lanyard, non retractable termination lanyard | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.088 | 02 | Any EN on fall arrest if relevant | Rope / Knots, technique, end user, friction knots | 14.10.2020 | 01.10.2021 | 18.11.2022 |
| 11.093 | 01 | EN 341 :2011 | Descender device, temperature test | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.094 | 03 | EN 358:2018, EN 354:2010 | Pole choker, work positioning lanyard | 23.11.2022 | 31.05.2023 | 31.01.2024 |
| 11.095 | 01 | EN 795:2012, TS 16415:2013, EN 892:2012 | Anchor device, free fall distance, test lanyard, rigid test mass | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.096 | 01 | EN 795:2012, EN 353-2 :2002, EN 360 :2002 | Anchor device, type C, instructions for use, EN 360, EN 353-2 | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.098 | 01 | EN 795:2012 | Anchor device, type B, lanyard | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.103 | 01 | EN 795:2012, TS 16415:2013 | Anchor device, static strength test, material, durability | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.104 | 01 | EN 362:2005, EN 12278:2007, EN 795:2012, EN 12275:2013, prEN 15567-1 | Ropes courses, wire rope, Tyrolean, pulley, shuttle | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.105 | 01 | EN 341:2011 | Descender device, classes | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.106 | 02 | EN 360:2002 | Retractable type fall arrester, retraction function with rotation | 07.06.2021 | 01.10.2021 | 18.11.2022 |

| Number of RfU PPE-R/ | Version | Reference | Keywords | Approved by Vertical Group 11 | Approved by Horizontal Committee | Endorsed by PPE Working Group |
|------------------------|---------|----------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------|----------------------------------|-------------------------------|
| 11.108 | 01 | EN 795:2012, TS 16415:2013 | Anchor device, anchor points | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.109 | 01 | EN 795:2012, TS 16415:2013 | Anchor device, type C, requirement , low value | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.110 | 01 | EN 795:2012, TS 16415:2013 | Anchor device, type C, energy absorber | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.111 | 01 | EN 795:2012, TS 16415:2013 | Anchor device, type C, type A, post, fixing element | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.112 | 01 | EN 795 :2012, TS 16415 :2013 | Anchor device, type C, authorized people, lifeline, span | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.113 | 01 | EN 795:2012, TS 16415 :2013 | Anchor device, dynamic test, permanent deformation | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.114 | 03 | | Load sharing device, rigging plates, use for work, industry, mountaineering | 07.06.2021 | 01.10.2021 | 18.11.2022 |
| 11.115 | 01 | | Clamps, rescue, evacuation, lifting, lowering | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.116 | 02 | EN 353-1:2014 +A1:2017 | Guided type fall arrester including rigid anchor line; angles of rigid anchor line | 21.04.2018 | 01.10.2021 | 18.11.2022 |
| 11.117 | 02 | EN 341:2011 | Descender devices for rescue; Function Test | 14.10.2020 | 01.10.2021 | 18.11.2022 |
| 11.118 | 01 | EN 341:2011 | Descender devices for rescue; textile rope lines | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.119 | 01 | EN 353-1: 2014+A1/2017 | Guided type fall arrester including rigid anchor line; Number of users simultaneously | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.121 | 01 | EN 353-1:2014 | Function test, arrest distance | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.122 | 01 | EN 360 :2002, EN 361 :2002 | Retractable fall arrester, full body harness | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.123 | 01 | EN 360:2002, EN 341:2011, EN 1496:2017 | Retractable fall arrester, descender device for rescue , rescue lifting device | 21.04.2018 | 27.12.2018 | 29.11.2019 |
| 11.124 | 05 | EN 360:2002 | Retractable type fall arresters, twin, horizontal use | 02.12.2021 | 30.04.2022 | 31.08.2023 |
| 11.125 | 03 | EN 892:2012 +A1:2016, EN 1891:1998 | Dynamic mountaineering rope, low stretch kernmantel rope, marking | 07.06.2021 | 01.10.2021 | 18.11.2022 |
| 11.127 | 02 | EN 361:2002 | Full body harness, ergonomic tests | 07.06.2021 | 01.10.2021 | 18.11.2022 |
| 11.129 | 01 | EN 353-1:2014 + A1:2017 | Guided type fall arrester, closing mechanism | 13.06.2019 | 15.09.2019 | 14.03.2022 |
| 11.130 | 01 | EN 358:2018 | Dynamic strength test, integrated lanyard | 13.06.2019 | 15.09.2019 | 14.03.2022 |
| 11.131 | 01 | EN 358:2018, EN 361:2002, EN 813:2008, EN 12277+A1: 2018 | Fastening elements, harness, sit harness | 13.06.2019 | 15.09.2019 | 14.03.2022 |
| 11.132 | 01 | EN 361:2002 | Maximum rated load, full body harness, instructions for use | 13.06.2019 | 15.09.2019 | 14.03.2022 |
| 11.133 | 01 | EN 892:2012 +A1:2016, EN 1891:1998 | Dynamic mountaineering rope, low stretch kernmantel rope, construction | 13.06.2019 | 15.09.2019 | 14.03.2022 |

| Number of RfU PPE-R/ | Version | Reference | Keywords | Approved by Vertical Group 11 | Approved by Horizontal Committee | Endorsed by PPE Working Group |
|------------------------|---------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------|----------------------------------|-------------------------------|
| 11.135 | 03 | EN 795:2012, EN 354 2010, EN 362 :2004, EN 12275:2013 EN 365 :2004 | Swivel, use for work, industry, mountaineering | 02.12.2021 | 30.04.2022 | 31.08.2023 |
| 11.136 | 01 | EN 353-1:2014 | Guided type fall arrester , connecting element | 07.10.2019 | 01.10.2021 | 18.11.2022 |
| 11.137 | 01 | EN 353-1:2014 +A1:2017 | Guided type fall arrester, minimum distance test | 14.10.2020 | 01.10.2021 | 18.11.2022 |
| 11.138 | 01 | EN 17109:2020 | Individual safety systems, rope courses | 20.11.2020 | 01.10.2021 | 18.11.2022 |
| 11.139 | 01 | EN 12841:2006, EN 341:2011, EN 1891:1998 | Rope not conform to EN 1891, anchor line, line | 20.11.2020 | 01.10.2021 | 18.11.2022 |
| 11.140 | 02 | EN 12841-B: 2006, EN 567:2013, EN 361:2002, EN 358:2018, EN 813:2008, EN 12277:2015 +A1:2018 | Rope clamp/Rope adjustment device used in harnesses | 07.06.2021 | 01.10.2021 | 18.11.2022 |
| 11.141 | 01 | EN 358:2018, EN 12841:2006 | Compatibility, design | 07.06.2021 | 01.10.2021 | 18.11.2022 |
| 11.144 | 01 | EN 12275:2013 | EN 12275, marking, classes B and T | 23.11.2022 | 31.05.2023 | 31.01.2024 |
| 11.145 | 01 | EN 17109:2020 | ISS, MCD, connector | 23.11.2022 | 31.05.2023 | 31.01.2024 |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/11.004
Version 2

RECOMMENDATION FOR USE

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| Number of pages: 1 | Approval stage : | Approved on : |
| Origin : Vertical Group 11 'Protection against Falls from a Height' | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| | <input checked="" type="checkbox"/> EU PPE Working Group | 22.04.2019 |

Question related to PPE Regulation EN/prEN: EN 364:1992 Other:

Article: Annex: Clause: 5.1.2.1

Key words:
Length of the test lanyard

Question:
What is the definition of the length of a test lanyard?

Solution:
Define the length as per figure 2 of EN 1497:2007.



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/11.006
Version 2

RECOMMENDATION FOR USE

Number of pages: 1

Approval stage :

Approved on :

Origin : Vertical Group 11 'Protection against Falls from a Height'

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|----------------------------------------------------------|------------|
| <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| <input checked="" type="checkbox"/> EU PPE Working Group | 22.04.2019 |

Question related to PPE Regulation

EN/prEN:

Other:

Article:

Annex:

Clause:

Key words:

EU type examined equipment; minor variations, additional testing / verification

Question:

What are minor variations within EU type examined equipment which do not require additional testing / verification?

Solution:

Examples of minor changes:

- Change in trade mark
- Change in reference
- Change in marking

Documents to be supplied:

- Formal letter from the manufacturer describing the change (s) in the equipment and confirming that there is no further modification
- Manufacturers technical specification relative to the change
- Sample or specimen

Conditions of validity:

- Delivery of an EU type examination extension
- The extension file is to be kept in the file of the original equipment



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/11.008
Version 2

RECOMMENDATION FOR USE

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| Number of pages: 1 | | Approval stage : | Approved on : |
| Origin : Vertical Group 11 'Protection against Falls from a Height' | | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | | <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| | | <input checked="" type="checkbox"/> EU PPE Working Group | 22.04.2019 |
| Question related to | <input checked="" type="checkbox"/> PPE Regulation | <input type="checkbox"/> EN/prEN: | <input type="checkbox"/> Other: |
| Article: | Annex: | Clause: | |
| Key words: EU type examined equipment; essential variations; specific or partial tests | | | |
| Question: What are essential variations within EU type examined equipment which require specific or partial test? | | | |
| Solution: <u>Examples of essential changes requiring specific or partial tests:</u> <ul style="list-style-type: none">- On a belt, a change in the type of carriage guard- On a harness, a change in the metal buckle (material, dimension, treatment, ...)- On a harness, a change in the dorsal plate- On a connector, a change in the anti-corrosion treatment- On a retractable type fall arrester, a change in the termination | | | |
| <u>Documents to be supplied by the manufacturer :</u> <ul style="list-style-type: none">- Formal letter from the manufacturer describing the change (s) in the equipment and confirming that there is no further modification- Manufacturers technical specification relative to the change (drawings, parts list, letter of subcontractor, ...)- One or several specimens of the modified equipment, or one or several samples of the modified component for performing the tests- One specimen of the original equipment for comparison with the modified equipment | | | |
| <u>Conditions of validity :</u> <ul style="list-style-type: none">- Performance of specific tests on the modified equipment- Delivery of an EU type examination extension- The extension file is to be kept in the file of the original equipment | | | |
| <u>N.B.:</u> When an equipment is modified several times, it is necessary to query the continuation of the original certificate. | | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/11.024
Version 2

RECOMMENDATION FOR USE

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| Number of pages: 1 | | Approval stage : | Approved on : |
| Origin : Vertical Group 11 'Protection against Falls from a Height' | | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | | <input checked="" type="checkbox"/> Horizontal Committee | 21.04.2018 |
| | | <input checked="" type="checkbox"/> EU PPE Working Group | 22.04.2019 |
| Question related to | <input type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN 364:1992 | <input type="checkbox"/> Other: |
| Article: | Annex: | Clause: | |
| Key words: Dynamic force measurement; filter characteristic | | | |
| Question: How are the filter characteristics used for dynamic force measurements? | | | |
| Solution: The filter characteristics used for dynamic force measurements during testing of PPE against falls from a height are as follows: <ol style="list-style-type: none">1. Type: Low-Pass2. Characteristic: Butterworth3. Cutoff-Frequency: 60 Hz4. Tolerance level at 0 Hz : +0,1/-0,2 dB5. Tolerance level at 60 Hz : (-3dB) +0,1/-0,3 dB6. Slope: 24 dB/Octave7. Tolerance level of the slope : +5/-5 dB8. Attenuation band: -50 dB | | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/11.034
Version 2

RECOMMENDATION FOR USE

| | | | |
|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------|---------------------------------|
| Number of pages: 2 | | Approval stage : | Approved on : |
| Origin : Vertical Group 11 'Protection against Falls from a Height' | | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
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| | | <input checked="" type="checkbox"/> EU PPE Working Group | 22.04.2019 |
| Question related to | <input checked="" type="checkbox"/> PPE Regulation | <input checked="" type="checkbox"/> EN/prEN: EN 353-2 :2002 | <input type="checkbox"/> Other: |
| Article: | Annex: | Clause: | |
| Key words: Fall protection system; special use | | | |
| Question: How to test and certify fall protection systems for use in corrosion protective work on latticed tower masts | | | |
| Solution: See attached | | | |

| | |
|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Requirement: | <p>see EN 353-2:2002</p> <p>diverging from the standard in the following points:</p> <ul style="list-style-type: none"> - length of the lanyard > 1 m - arrest distance $H \leq 5,75$ m - the „locking test after conditioning" can be omitted |
| Additional requirements: | <ul style="list-style-type: none"> - The fall arrester must be provided with a self-locking device that prevents the fall arrester from sliding down the anchor line. - It must not be possible to release the locking device of the fall arrester when the user holds on to it in panic in case of a fall from a height. - static strength test of the anchor line with the fall arrester attached (15 kN, to be maintained for 3 min.) - The correct function of the fall arrest system has to be ensured even if the coating materials can soil the device. - The position of the lower attachment on the anchor line must not change during the loading or load alleviation of the flexible anchor line. |
| Tests to be carried out: | <ul style="list-style-type: none"> - dynamic performance test with the shortest possible length of the rope, according to EN 364:1992, clause 5.5.2. - for systems with two ropes, the load may be measured at either the fall arrester or at the lanyard - dynamic performance in the lower part of the anchor line; with the system attached at the maximum permissible height (drop test with a 100 kg falling mass carried out at a height of approx. 8 m above ground level - measure the arrest distance H after the test, no determination of the arrest force) - dynamic performance test according to EN 364:1992, clause 5.5.4 - static strength of the flexible anchor line (for textile materials 22 kN, for metallic materials 15 kN, to be maintained for 3 min. in either case), attachment at the end terminations for ropes with permanently installed end terminations or via discs for ropes without permanently installed end terminations (knots) - static strength test of the lanyard, according to EN 364:1992, clause 5.2.2 (for textile materials 22 kN, for metallic materials 15 kN). - static strength test carried out on the anchor line with the guided type fall arrester attached (15 kN, to be maintained for 3 min.), if necessary, the rope is knotted in order to block the fall arrester - corrosion resistance according to EN 364:1992, clause 5.13 - if the flexible anchor line consists of two ropes, static strength test of the lower attachment (15 kN, to be maintained for 3 min.) |
| Tests to be carried out: | <ul style="list-style-type: none"> - dynamic performance test with the shortest possible length of the rope, according to EN 364:1992, clause 5.5.2. - for systems with two ropes, the load may be measured at either the fall arrester or at the lanyard - dynamic performance in the lower part of the anchor line; with the system attached at the maximum permissible height (drop test with a 100 kg falling mass carried out at a height of approx. 8 m above ground level measure the arrest distance H after the test, no determination of the arrest force) - dynamic performance test according to EN 364:1992, clause 5.5.4 - static strength of the flexible anchor line (for textile materials 22 kN, for metallic materials 15 kN, to be maintained for 3 min. in either case), attachment at the end terminations for ropes with permanently installed and terminations or via discs for ropes without permanently installed end terminations (knots) - static strength test of the lanyard, according to EN 364:1992, clause 5.2.2 (for textile materials 22 kN, for metallic materials 15 kN) - static strength test carried out on the anchor line with the guided type fall arrester attached (15 kN, to be maintained for 3 min.), if necessary, the rope is knotted in order to block the fall arrester - corrosion resistance according to EN 364:1992, clause 5.13 - if the flexible anchor line consists of two ropes, static strength test of the lower attachment (15 kN, to be maintained for 3 min.) |
| Additional information to be included in the instructions for use: | <ul style="list-style-type: none"> - information that the fall arrest system may only be used in corrosion protection work on latticed tower masts. - warning: a collision with elements of the structure cannot be excluded |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/11.037
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| Article: | Annex: | Clause: 5.9.2 | |
| Key words: Low stretch kernmantel rope - drop machine | | | |
| Question: Dynamic performance and number of drops: Which drop machine has to be used (free fall or guided)? | | | |
| Solution: VG11 recommends to use the free fall machine. | | | |



**CO-ORDINATION OF NOTIFIED
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PPE-R/11.040
Version 2

RECOMMENDATION FOR USE

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Vertical Group

23/11/2022

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Question related to
Requirement 2.4

PPE Regulation:



EN/prEN:

Other:

Article:

Annex:

Clause:

Key words:


Date of manufacture, marking, ageing

Question:

1. Should PPE against fall from a height subject to ageing be marked with the date of manufacture even if the particular standard does not require this?
2. What shall be the format of the date?

Solution:

1. YES if obsolescence date is not marked. Note: all PPE against fall from a height subject to ageing shall be marked with the date of manufacture and/or obsolescence date.
2. The date's marking should at least include the year and the month. There is no required format for the date but it shall be explained in instruction for use.

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/11.051 Version 02 |
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| Origin : Vertical Group 11 | <input checked="" type="checkbox"/> Vertical Group 07.06.2021 <input checked="" type="checkbox"/> Horizontal Committee 01.10.2021 <input checked="" type="checkbox"/> EU PPE Expert Group 18.11.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: all EN for PPE against fall from a height with load bearing textile element <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: | | |
| Key words: Load bearing textile materials | | |
| Question: Which kinds of load bearing textile materials are acceptable for use in personal protective equipment against falls from a height and which are not? | | |
| Solution: <i>Note: solution takes into account document N1042 from TC136/WG5</i> The following requirements apply to the load bearing textile materials used in personal protective equipment against falls from a height. Note 1: Mixtures of acceptable materials are also acceptable. Note 2: Materials that are not themselves load bearing (e.g. elastic yarn, polyethylene made of monofilament fibres) but mixed with load bearing material(s) are acceptable. Note 3: Other load bearing textile materials are not acceptable except if documented justification can be provided for specific application. A – ROPES Examples: as PPE (dynamic rope, low stretch kernmantel rope, accessory cord) or component of PPE (lanyard, sling, anchor line, retractable lanyard,...) Common materials A1 - polyamide: acceptable. A2 - polyester: acceptable. A3 - polypropylene: acceptable if providing a suitable UV resistance justification (e.g. compliance with EN1263:2014) given by the manufacturer. High strength materials A4 - Aramid (e.g. Technora®, Kevlar®, Twaron®): acceptable , but if used in the outer sheath, the instructions for use requires an additional warning about low UV resistance. A5 - Liquid Cristal Polymer (LCP) other than aramids (e.g Vectran®): acceptable , but if used in the outer sheath, the manufacturer's instructions and information requires an additional warning about low UV resistance. A6 - Ultrahigh molecular weight polyethylene (UHMWPE) e.g. Dyneema®, Spectra®: acceptable but if used in the outer sheath, the manufacturer's instructions and information requires a warning about the low melting point (140°C) and low friction coefficient (slipperiness) of the material. | | |

B - WEBBINGS

Examples: as PPE (tape) or component of PPE (harness, work positioning belt, lanyard, sling, retractable lanyard,...)

Common materials

B1 - polyamide:

acceptable. B2 -

polyester: **acceptable.**

B3 - polypropylene: **acceptable** if providing a suitable UV resistance justification (e.g. compliance with EN1263:2014) given by the manufacturer

High strength materials

B4 - Aramid (e.g. Technora®, Kevlar®, Twaron®): **acceptable**, but the manufacturer's instructions and information requires an additional warning about low UV resistance.

B5 - Liquid Cristal Polymer (LCP) other than aramids (e.g Vectran®): **acceptable**, but the manufacturer's instructions and information requires an additional warning about low UV resistance.

B6 - Ultrahigh molecular weight polyethylene (UHMWPE) e.g. Dyneema®, Spectra®: **acceptable** but the manufacturer's instructions and information requires a warning about the low melting point (140°C) and low friction coefficient (slipperiness) of the material.

C - STITCHING MATERIAL

Common materials

C1 - polyamide:

acceptable. C2 -

polyester: **acceptable.**

C3 - polypropylene: **acceptable** if providing a suitable UV resistance justification (e.g. compliance with EN1263:2014) given by the manufacturer.

High strength materials

C4 - Aramid (e.g. Technora®, Kevlar®, Twaron®): **acceptable**, but if used on the product surface, the instructions for use requires an additional warning about low UV resistance

C5 - Liquid Cristal Polymer (LCP) other than aramids (e.g Vectran®): **acceptable**, but if used on the product surface, the manufacturer's instructions and information requires an additional warning about low UV resistance

C6 - Ultrahigh molecular weight polyethylene (UHMWPE) e.g. Dyneema®, Spectra®: **acceptable** but if used on the product surface, the manufacturer's instructions and information requires a warning about the low melting point (140°C).



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

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| <input checked="" type="checkbox"/> EU PPE Working Group | 22.04.2019 |

Question related to PPE Regulation

EN/prEN: EN 361:2002

Other:

Article:

Annex:

Clause:

Key words:

Marking of fall arrest attachment points on EN 361:2002 harnesses

Question:

How could the 'A' marking appear on EN 361:2002 fall arrest attachment points?

Solution:

1) Minimum height: 10 mm

2) Letter 'A' to be no more than 50 mm from the attachment point

3) Divided attachment elements should be marked:

A/2 or **A**



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/11.060
Version 1

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Question related to PPE Regulation PPE Guidelines

EN/prEN: EN 360:2002

Other:

Article:

Annex:

Clause:

Key words:

Horizontal use; retractable type fall arrester

Question:

What tests are necessary for retractable type fall arresters intended for horizontal use over an edge?

Solution:

1. Preliminary note:

The principles for testing relate to the optional test of retractable type fall arresters. It is presumed that the anchor point of the retractable type fall arrester is not situated lower than the standing user.

2. General requirements:

The retractable type fall arrester shall comply with the requirements in accordance with EN 360:2002.

3. Additional requirements:

- 3.1 Locking in a horizontal arrangement
- 3.2 Locking in a horizontal arrangement following optional conditioning
- 3.3 Dynamic performance in a horizontal arrangement when loaded over an edge with an edge radius of 0.5 mm
- 3.4 Dynamic strength in a horizontal arrangement when loaded over an edge with an edge radius of 0.5 mm
- 3.5 Static strength in a horizontal arrangement when loaded over an edge with an edge radius of 0.5 mm

4. Additional tests to be carried out:

4.1 Edge to be used for testing:

For the dynamic tests, **an edged (type A)** drawn square steel bar in accordance with EN 10278:1999 (material C 45+C or E 335 GC (ST60) pursuant to EN 10025) shall be used. The dimensions of the steel bar shall be at least $10 \times \leq 70$ mm, the edge radius (0.5 +/- 0.05) mm, the surface roughness in accordance with EN ISO 1302: average surface finish $R_a = 3.2 \mu\text{m}$.

Observe after each test the edge is still intact otherwise use a new edge

4.2 Test mass and sample lengths:

1- The test mass (steel weight as in EN 364:1992) shall correspond to the nominal weight, but shall at least be 100 kg.

Note: the nominal mass shall be the same as for vertical use (according to EN 360:2002)

2- According to 4.4 and 4.5 requirements and figure 1, the manufacturer has to provide following samples for testing:

- Dynamic performance - perpendicular to the edge : L = 3,3m (exact value for lab: 3 354mm)
- Dynamic performance – with a lateral offset of 1.50m : L = 3,8m (exact value for lab: 3 807mm)
- Dynamic strength - perpendicular to the edge : L = 3,6m (exact value for lab: 3 606mm)
- Dynamic strength - with a lateral offset of 1.50m : L = 4,0m (exact value for lab: 4 030mm)

Nota: test lab can adjust the exact length specified between brackets on its test facility

if necessary anchor the device to a length of chain to achieve the 1.5 m offset.

4.3 Locking performance:

Mount the retractable type fall arrester as indicated by the manufacturer, in a horizontal arrangement. The lanyard is directed vertically downwards by means of a pulley, at a distance of 300 mm from the outlet.

When a mass of between 5 and 30 kg is attached to the lanyard, the retractable type fall arrester shall lock within a distance of 2.00 m

4.4 Dynamic performance

In two drop tests, the retractable type fall arrester is submitted to a dynamic performance test in a horizontal arrangement as indicated by the manufacturer, similar to the test arrangement (see figure 1). The anchor point shall be situated at the same level as the edge used for testing. The distance between the anchor point and the edge must be 2.5 m. A new test sample may be used for each drop test. No support has to be placed below the case (except if the manufacturer specifies in its Instructions for use that the case has to be used level and give information of this support)

The test shall be performed on the lanyard itself.

If a testing component (like mass, load cell, test connector), a cover (thimble, rubber cover) or an integral connector would hit the edge, the test shall be performed again by increasing the previous offset distance such as these components would not strike the edge

A first drop test is carried out perpendicularly to the edge and a second drop test with a lateral offset of 1.50 m. The drop weight is released from a height of 1.50 m and at a horizontal distance of 500mm from the edge. The force is measured at the test mass and the arrest distance shall be determined. If the test mass or a connecting element (e.g. connector) used for test hits the edge, repeat the test with a longer horizontal distance in a such a way that only a part of the EN 360:2002 device hits the edge

- The determined braking force at the test mass shall not be greater than 6 kN.
- The retractable type fall arrester shall hold the test mass.

Both dynamic performance shall be carried out at the end stop with the full lanyard being withdrawn from the device. For this purpose, the lanyard provided by the manufacturer together with the retractable type fall arrester shall have an adequate length (Cf. to 4.2).

4.5 Dynamic strength

Two drop tests are carried out following the same test arrangement as described in 4.4. However, the drop height of the test mass is 2m above the edge. A new test sample may be used for each drop test.

The arrest distance and the braking force are not determined.

- The retractable type fall arrester shall hold the test mass.

4.6 Static strength

After the dynamic strength test, with the same test arrangement, the force applied to the lanyard is increased to 3 kN for wire ropes or 4.5 kN for textile lanyards and is maintained for 3 min.

- The lanyard shall withstand the force.

4.7 Test with non rigid anchor device

If the manufacturer claims the retractable fall arrester can be used in conjunction with a non rigid (flexible) anchor device, dynamic performance tests have to be repeated with this combination.

5. Additional information to be included in the marking:

- Advice that a horizontal use of the retractable type fall arrester over **an edge type A** is possible (pictogram if applicable)
- Advice that loading of the retractable type fall arrester over edges shall be avoided.

6. Additional information to be included in the instructions for use:

- a) Advice that the retractable type fall arrester was tested also for horizontal use and a drop over a **Type A** edge has been successfully tested.
Type A edge definition: A steel edge with a radius of $r = 0,5$ mm and without burrs was used for the test. Due to this test, the equipment may be used over similar edges, as can be found e.g. at rolled steel profiles, at wooden beams or at a clad, rounded roof parapet. However, the following shall be considered when the equipment is used in a horizontal or transverse arrangement and a risk of a fall from a height over an edge exists:
1. If the risk assessment carried out before the start of the work shows that the edge is very “cutting” and / or “free of burrs” (such as in case of an unclad roof parapet, a rusty steel girder or a concrete edge)
 - relevant measures shall be taken before the start of the work to prevent a drop over the edge or,
 - before the start of work, an edge protection shall be mounted or
 - the manufacturer shall be contacted.
 2. The anchor point may only be situated at the same height as the edge at which a fall might occur or above the edge.
 3. The required clearance below the edge at which a fall might occur shall be defined.
 4. To attenuate a drop ending in a pendulum movement, the working area or lateral movements to both sides of the centre axis shall be limited to a maximum of 1.50 m. In other cases, no individual anchor points, but, e.g., type C or type D anchor devices in accordance with EN 795:2012 shall be used.
- b) Indication whether the retractable type fall arrester may be used with a type C anchor device in accordance with EN 795:2012 with a horizontal flexible anchor line. (Note: This combination must have been submitted to EU type examination).
Furthermore, the deflection of the anchor device shall be taken into account when determining the clearance required below the feet of the user. To that effect, the indications specified in the instructions for use of the anchor device shall be considered.
- c) The deflection of the anchor device shall be taken into account when determining the clearance required below the feet of the user. To that effect, the indications specified in the instructions for use of the anchor device shall be considered.
- d) Advice on existing risks of injury during fall arrest when the user collides with parts of building or construction during a fall over the edge.
- e) Advice that, for the event of a fall over the edge, special rescue measures shall be defined and trained.

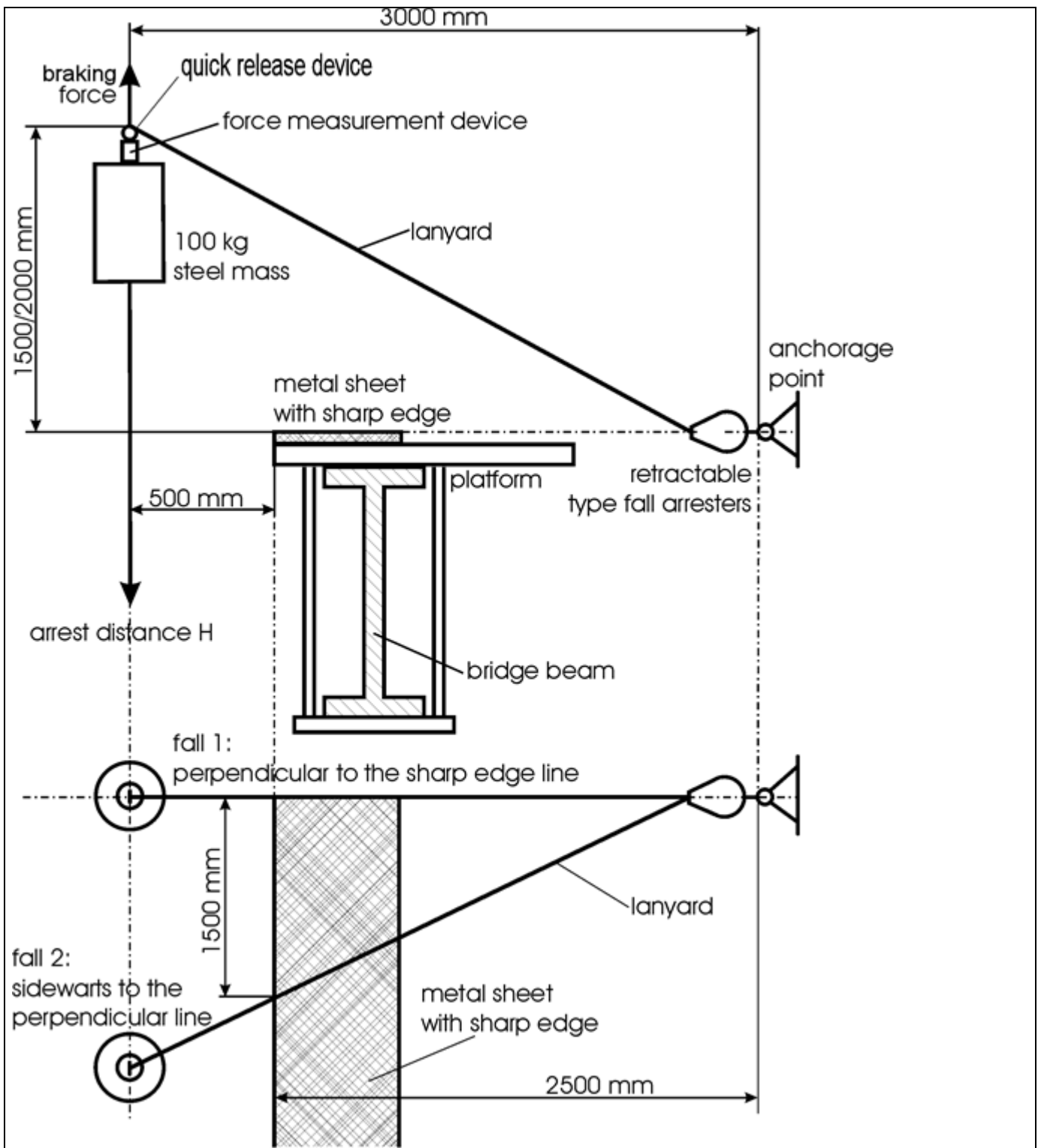


Figure 1: Dynamic performance test for retractable type fall arrester in horizontal use



CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425

PPE-R/11.063
Version 2

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Update : in red

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- EU PPE Expert Group

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Question related to PPE Regulation



EN/prEN: EN355:2002



Other:

Article:

Annex:

Clause:

Key words:

Energy absorber - static test – dynamic test

Question:

What test method should be used to carry out test on energy absorber including an integral lanyard?

Solution:

Energy absorber including an integral (incorporated/ inseparable) lanyard shall be tested according to following methods:

Note 1 : Each test shall be performed using a new sample

Note 2: requirements apply to both fixed and adjustable lanyard

1. Static-Test for incorporated lanyard/s energy absorbers

If the energy absorber is incorporated in a lanyard, the lanyard part shall be tested according to EN 354:2010. art 4.5 (including all applicable conditionings)

Note 3: twin tail energy absorbers shall be 'c-c' tested according to 4.5 and 5.7.2.3 of EN 354:2010 (e.g. 22kN for textile lanyards) whatever the design (independent or linked tail)

2. Static-Test – 3-points loading test for twin tail energy absorbers

A 3-point test shall be performed starting with a situation as given in figure on the right. The legs shall be adjusted initially in line with no slack. For adjustable lanyards, legs shall be fully extended before the test. The energy absorbing element shall be positioned perpendicular to the line of the legs. A static load of 9 kN shall be applied for 3 minutes at the attachment point of the energy absorbing element while the attachment points of the twin tail lanyards are fixed. The energy absorbing element/twin tail lanyards-system shall sustain the static load. Leg 1

Leg 2

Note 4: The 9 kN test force is based on a

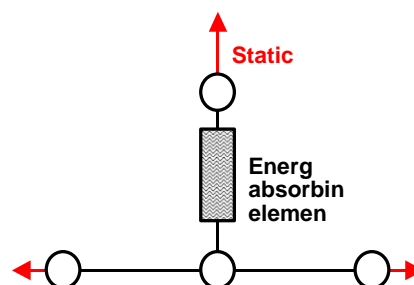


Figure: 3-point test with legs at start in line, perpendicular energy absorbing element

safety factor of 1.5 on the 6 kN maximum force likely to be applied in use. Due to the force amplification effect in the legs, a 15 kN force is not considered necessary

3- Dynamic performance test on twin tail energy absorber with an energy absorbing element on each leg

In case of energy dissipating element in both legs, repeat the dynamic performance test (EN 355 article 5.2) by testing both legs together.

Requirement: same as EN 355:2002



CO-ORDINATION OF NOTIFIED BODIES
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Question related to PPE Regulation

EN/prEN: EN 361:2002,...

Other:

Article:

Annex:

Clause: 4.2

Key words:

Synthetic fibre, breaking tenacity

Question:

How to confirm breaking tenacity of synthetic fibre as 0,6 N/tex ?

Solution:

VG11 members require confirmation (e.g. certificate of conformity) in manufacturer's technical file declaring the minimum breaking tenacity of synthetic fibres as 0.6 N/tex.

Note: this requirement is not applicable to accessory straps.



**CO-ORDINATION OF NOTIFIED
BODIES PPE Regulation 2016/425**

PPE-R/11.074
Version 3

RECOMMENDATION FOR USE

V3: updates in red

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| Article: | Annex: | Clause: |
| Key words: EN 354, EN 355, horizontal use; lanyards with energy absorber, short lanyard , edge test | | |
| Question: What tests are necessary for lanyards with an energy absorber intended for horizontal use over an edge? | | |
| Solution: Preliminary remarks: 1-Remark for forked lanyard: Forked lanyard with one energy absorbing element: horizontal test with one leg. (to be repeated if the two legs are different) Forked lanyard with energy absorbing element at each leg: horizontal test with one leg (to be repeated if the two legs are different) and on both legs 2-Remark for short lanyards Considering the 4 test configurations (performance/strength and direct/offset) and the fact that the lanyard shall impact the edge from the start till the end (e.g; at the end of the pendulum), some small lanyards with an energy absorber are too short to be tested. The test principles relate to the testing of the partial system lanyard <u>including</u> energy absorber. This means that the energy absorber must form a non-detachable unit with the lanyard, whereby one initially assumes a random position of the energy absorber in the system. The anchor point of this partial system may not be lower than the stand level of the user. An angle (measured between the two legs of the fastener / mobile guide) of at least 90° is assumed for the deflection on an edge. General requirements: EN 354:2010 EN 355:2002 Additional requirements: 1. Dynamic performance with horizontal arrangement and stress over an edge 2. Dynamic and static strength with horizontal arrangement and stress over an edge Additional test to be performed: Preliminary remarks: A drawn square steel bar pursuant to EN 10278:1999 (Material C 45 K / E 335 GC (ST60) pursuant to EN 10025) is to be used as a rest edge for the dynamic tests. The minimum dimensions of the steel bar must be 10 x 70 mm, the edge radius 0.5 mm. The drop weight (steel weight analogous to EN 364:1992) must correspond to the nominal load, though at least 100 kg. The nominal load to be used shall be the same as that claimed according to RfU 11.062 if applicable During the test the chain / wire rope and the lanyard end connector shall not touch the bar stock | | |

To 1: dynamic performance

The lanyard including energy absorber is dynamically stressed in a horizontal arrangement, as specified by the manufacturer, analogous to the test plan (Enclosure) through two drop tests.

If the partial system is too short it may be connected to the anchor point by means of a chain or wire rope. A new test sample may be used for each drop test.

For each of the 2 tests, if the product is too short to be tested (see second preliminary remark), the manufacturer can supply a longer test specimen, so that the lanyard will hit the edge from the start till the end

One drop test is carried out at right angles to the edge, another with a lateral offset of 1.50m. The falling weight is dropped from a height of 1.50m and at a horizontal distance of 50cm from the edge. The braking force is measured at the mass and the arresting section determined.

- The braking force determined at the mass may not exceed 6 kN
- The lanyard/energy absorber must withstand the load

Note: If the manufacturer specifies that the energy absorber may be connected to the anchor point instead of the D-ring of the full body harness, you should clarify whether this could mean higher impact forces on the user. The test house then specifies together with the manufacturer which further drop tests on edges, e.g. with a different edge radius or material, are to be carried out.

To 2: dynamic/static strength

Two drop tests each are performed with same test set-up as described in 1.). The drop height of the falling mass is, however, 2 m above the fall edge. A new test sample may be used for each drop test.

For each of the 2 tests, if the product is too short to be tested (see second preliminary remark), the manufacturer can supply a longer test specimen, so that the lanyard will hit the edge from the start till the end

The arresting distance and braking force are not measured.

- The lanyard/energy absorber must withstand the load

The minimum breaking force is then tested for the same test piece immediately after the drop test. This is carried out through a static test over a period of 3 minutes with a force corresponding to 3-times the nominal load, though at least 4.5 kN.

- The lanyard/energy absorber must withstand the load

Additional information on marking:

- Note that a horizontal use of the lanyard with energy absorber is possible (possibly pictogram).
- Note that the lanyard/energy absorber should not be stressed over sharp edges.

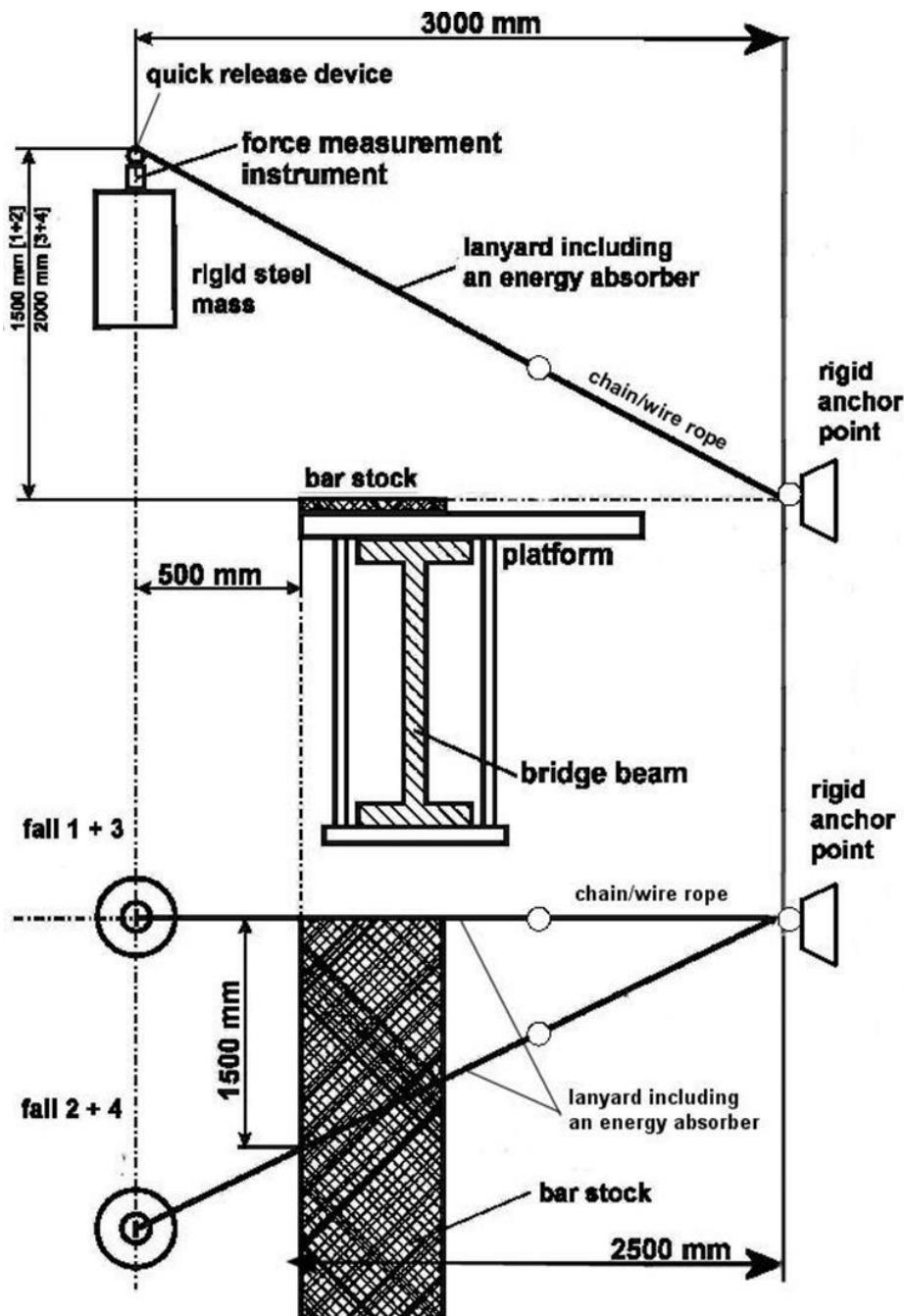
Additional information in the instructions for use:

- Note: the lanyard/energy absorber has been successfully tested for horizontal use and a resulting simulated fall over an edge.

A steel bar with a radius of $r = 0.5$ mm with no burrs was used in these tests. On the basis of this test, the lanyard with energy absorber is suitable for use over similar edges such as rolled steel profiles, wooden beams or a clad, rounded proof parapet. Notwithstanding this test, the following must be taken into account with a horizontal or oblique use where there is a risk of falling over an edge.

1. If the risk assessment carried out before the start of work shows that the fall edge is a particularly "sharp" and/or "not free from burrs" edge (e.g. unclad proof parapet or sharp concrete edge), then corresponding precautions must be taken before the start of work to rule out the risk of falling over the edge or an edge protection should be mounted before the start of work or you should contact the manufacturer.
2. The anchor point for the lanyard/energy absorber may not be below the user's stand level (e.g. platform, flat roof).
3. The deflection at the edge (measured between the two legs of the fastener / mobile guide) must be at least 90°.
4. The necessary free space beneath the edge.
5. The lanyard must always be used in such a way that there is no slack rope. If the lanyard is equipped with a length adjustment device, this may only be used if the user is not moving in the direction of the fall edge.

6. To prevent a pendulum fall, the working area and lateral movements from the median axis on both sides should be limited in each case to a max. of 1.50m. In other cases, no individual anchor points should be used but rather a Class C or D anchor device pursuant to EN 795:2012.
7. Note: If the lanyard/energy absorber is used with a Class C anchor device pursuant to EN 795:2012 with a horizontal flexible anchor line, the deflection of the anchor device must also be taken into account when determining the necessary clearance beneath the user. Pay attention to the details in the instructions of use of the anchor device.
8. Note: After a fall over an edge there is a risk of injuries during capture if the falling person knocks against parts of the building or construction.
9. Special rescue measures are to be stipulated and trained in the event of a fall over an edge.



Solution:

Preliminary remarks:

The test principles relate to the optional testing of the partial system guided type fall arrester including flexible anchorage line. The anchor point of this partial system may not be lower than the stand level of the user. An angle (measured between the two legs of the fastener / flexible anchorage line) of at least 90° is assumed for the deflection on an edge.

During horizontal use it is likely that the function of the guided type fall arrester may be affected when the user falls, for example through catching / blocking on edges or other structural features. This is why only devices that use an energy absorber as connection between the arrester and user should be used horizontally.

General requirements:

EN 353-2:2002

Additional requirements:

1. Dynamic performance with horizontal arrangement and stress over an edge
2. Dynamic and static strength with horizontal arrangement and stress over an edge

Additional test to be performed:

Preliminary remarks: A drawn square steel bar pursuant to EN 10278:1999 (Material C 45 K / E 335 GC (ST60) pursuant to EN 10025) is to be used as a rest edge for the dynamic tests. The minimum dimensions of the steel bar must be 10 x 70 mm, the edge radius 0.5 mm. The drop weight (steel weight analogous to EN 364:1992) must correspond to the nominal load, though at least 100 kg.
The nominal load to be used shall be the same as that claimed according to RfU 11.062 if applicable

To 1: dynamic performance /static strength

The partial system is dynamically stressed in a horizontal arrangement, as specified by the manufacturer, analogous to the test plan (Enclosure) through two drop tests. A new test sample may be used for each drop test.

One drop test is carried out at right angles to the edge, another with a lateral offset of 1.50m. The falling weight is dropped from a height of 1.50m and at a horizontal distance of 30cm from the edge. The braking force is measured at the mass and the arresting section determined.

- The braking force determined at the mass may not exceed 6 kN
- The partial system must withstand the load

Note: If the flexible anchorage line is not stressed on the edge on account of the length of the connection, for example, a further set of tests should be performed. The distance between the falling weight and edge should be enlarged to a maximum of 50 cm so that the flexible anchorage line is stressed at the edge. If the flexible anchorage line is still not stressed at this max. distance the requirements have been fulfilled.“

To 2: dynamic/static strength

Two drop tests each are performed with same test set-up as described in 1.). The drop height of the falling weight is, however, 2 m above the fall edge. A new test sample may be used for each drop test. The arresting section and braking force are not measured.

- The partial system must withstand the load

The minimum breaking force is then tested for the same test piece immediately after the drop test. This is carried out through a static test over a period of 3 minutes with a force corresponding to 3-times the nominal load, though at least 4.5 kN.

- The partial system must withstand the load

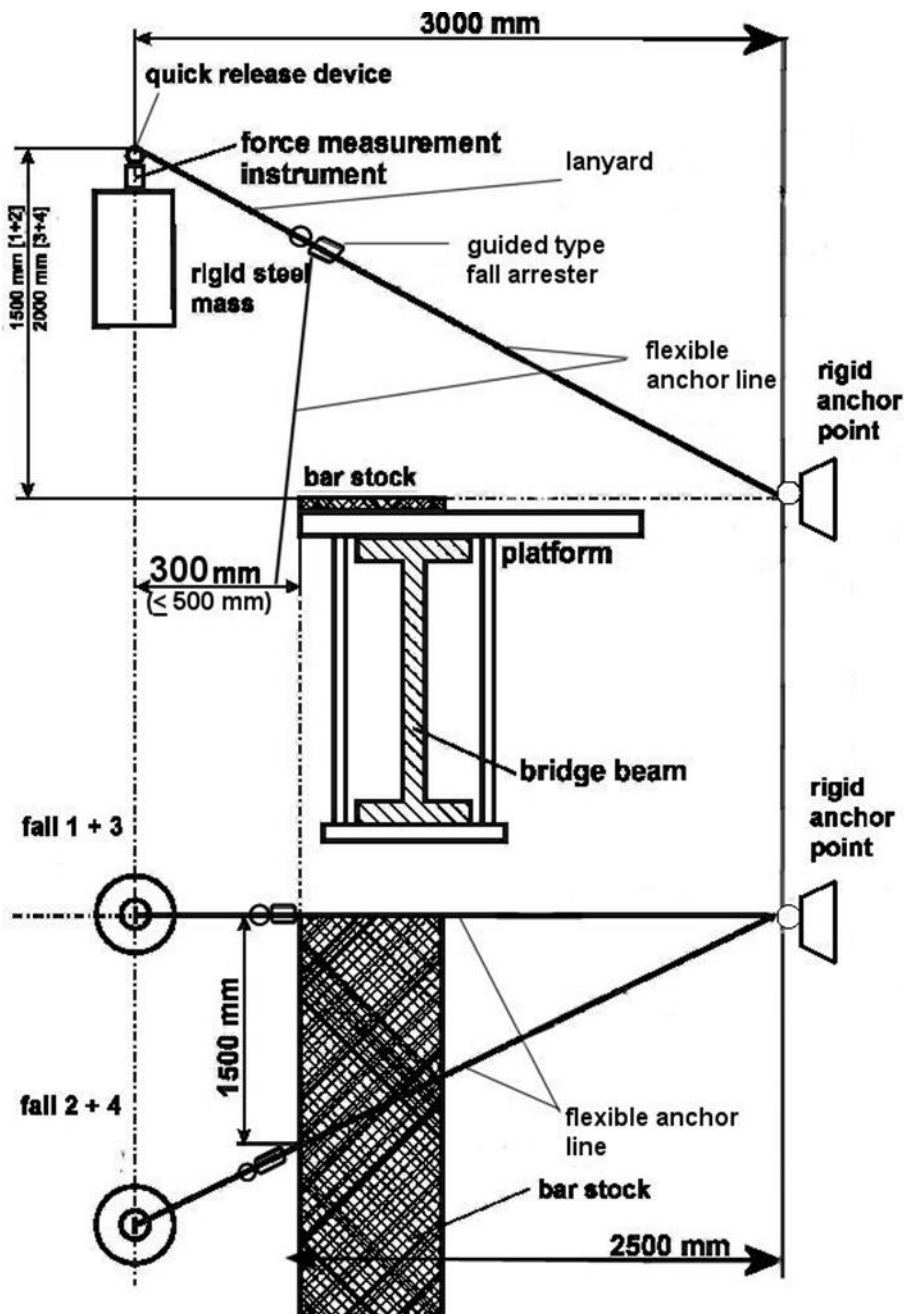
Additional information on marking:


- Note that a horizontal use of the guided type fall arrester including flexible anchorage line is possible (possibly pictogram).
- Note that the partial system should not be stressed over sharp edges.

Additional information in the instructions for use:

- Note: the guided type fall arrester including flexible anchorage line has been successfully tested for horizontal use and a resulting simulated fall over an edge.
A steel bar with a radius of $r = 0.5$ mm with no burrs was used in these tests. On the basis of this test, the equipment is suitable for use over similar edges such as rolled steel profiles, wooden beams or a clad, rounded parapet. Notwithstanding this test, the following must be taken into account with a horizontal or oblique use where there is a risk of falling over an edge:
 5. If the risk assessment carried out before the start of work shows that the fall edge is a particularly “sharp” and/or “not free from burrs” edge (e.g. unclad parapet or sharp concrete edge), then
 - corresponding precautions must be taken before the start of work to rule out the risk of falling over the edge or
 - an edge protection should be mounted before the start of work or
 - you should contact the manufacturer.
 6. The anchor point for the flexible anchorage line may not be below the user’s stand level (e.g. platform, flat roof).
 7. The deflection at the edge (measured between the two legs of the fastener / flexible anchorage line) must be at least 90°.
 8. The necessary free space beneath the edge

9. The partial system must always be used in such a way that there is no slack rope. The length may only be adjusted if the user is not moving in the direction of the fall edge
10. To prevent a pendulum fall, the working area and lateral movements from the median axis on both sides should be limited in each case to a max. of 1.50m. In other cases, no individual anchor points should be used but rather a Class C or D anchor device pursuant to EN 795:2012.
11. Note: If the partial system is used with a type C anchor device pursuant to EN 795:2012 with a horizontal flexible anchorage line, the deflection of the anchor device must also be taken into account when determining the necessary clearance beneath the user. Pay attention to the details in the instructions of use of the anchor device.
12. Note: After a fall over an edge there is a risk of injuries during capture if the falling person knocks against parts of the building or construction.
13. Special rescue measures are to be stipulated and trained in the event of a fall over an edge.



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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/11.081 Version 02 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 11 | <input checked="" type="checkbox"/> Vertical Group 14.10.2020 <input checked="" type="checkbox"/> Horizontal Committee 01.10.2021 <input checked="" type="checkbox"/> EU PPE Expert Group 18.11.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN353-2 :2002, EN 364:1992 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: | | |
| Key words: Guided type fall arrester, dynamic performance, non integral energy absorber, non integral lanyard | | |
| Question: How to assess the dynamic performance of an EN 353-2 device that includes a non integral energy absorber or a non integral lanyard? | | |
| Solution: An EN 353-2 device shall be tested in accordance with EN 364 Clause 5.5.2 or Clause 5.8.2 both with each energy absorber and/or lanyard that can be used in the flexible anchor line and/or connected to the guided type fall arrester and without any energy absorber or lanyard, as specified by the manufacturer in its instruction for use. | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/11.083
Version 1

RECOMMENDATION FOR USE

Number of pages: 1

Approval stage :

Approved on :

Origin : Vertical Group 11 'Protection against Falls from a Height'

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| <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |

Question related to PPE Regulation PPE Guidelines

EN/prEN: EN 355

Other:

Article:

Annex:

Clause:

Key words:

Samples, test order

Question:

Which sample shall be used to carry out the dynamic performance on EN 355:2002?


Solution:

The dynamic performance test shall be carried out on a new sample.

The 15kN static strength test shall be carried out after the dynamic performance on the same sample

A new sample shall be used for preloading test

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/11.085 Version 02 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 11 | <input checked="" type="checkbox"/> Vertical Group 14.10.2020 <input checked="" type="checkbox"/> Horizontal Committee 01.10.2021 <input checked="" type="checkbox"/> EU PPE Expert Group 18.11.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 360:2002 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: | | |
| Key words: Retractable type fall arrester, fall factor, locking feature | | |
| Question: How to assess retractable type fall arresters (EN 360 type) claiming the possibility to go above the device and/or including a retraction locking feature? | | |
| Solution: Retractable type fall arresters claiming the possibility to go above the device and/or including a retraction locking feature shall comply with EN 360 and following additional requirement: The complete length of the retractable type fall arrester including connectors shall be limited to 2.50m 1- Dynamic performance test (with locked retraction feature if applicable), the maximum extracted length and a fall factor 2 Requirement: $F < 6kN$, $H < 2L + 1.75\text{ m}$ and $H_{max} < 5.75\text{m}$ L = complete length of the retractable type fall arrester including connectors. 2- Dynamic performance test (with locked retraction feature if applicable), half the maximum extracted length and fall factor 2 (to test the locking mechanism) Requirement: $F < 6kN$, $H < L + 1.75\text{ m}$ and $H_{max} < 3.75\text{m}$ L = complete length of the retractable type fall arrester including connectors. 3- Static strength test on the lanyard webbing only (a test specimen can be submitted by the applicant) Requirement: 22kN for 3 minutes. Instructions for use and marking according (clearance below the user etc.) | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/11.087 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 11 'Protection against Falls from a Height' | <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 27.12.2018 <input checked="" type="checkbox"/> EU PPE Working Group 29.11.2019 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 360 :2002 <input type="checkbox"/> Other: | | |
| Article: _____ Annex: _____ Clause: _____ | | |
| Key words: Removable lanyard, non retractable termination lanyard | | |
| Question: 1/ Is it allowed to add a removable lanyard to a retractable fall arrester end termination? 2/ What is the maximum permissible permanently non retractable termination length of a retractable fall arrester? | | |
| Solution: 1/ No, the retractable fall arrester shall be made of one continuous piece of retractable lanyard 2/ The permanently non retractable termination (including e.g. energy absorber, handling, loop, integral connector,...) shall not exceed 600 mm. | | |

2. Testing

The tests should be carried out according to the intended use of the whole system (e.g. EN 358, EN 795, EN 12841 ...). If there is no applicable standard for the whole system, the tests should be carried out according to a risk assessment which considers: the intended use (manufacturer's instructions and information), the Essential Health and Safety Requirement of the PPE Regulation, test procedures from other EN standards and applicable RfUs (e.g. maximum user weight).

All combinations of different knots and knot materials ('lanyards') on different guiding ropes must be tested. Example for a friction hitch on a guiding rope the following test protocol would apply:

- Guiding rope A + Lanyard A as prusik
- Guiding rope A + Lanyard A as distel
- Guiding rope B + Lanyard A as prusik
- Etc...

A grab test according to EN 12841:2006 – 4.3.3 (5.5.2) is mandatory.

3. Marking

Each load bearing component that might be removable must have a marking, which states the correspondence to the whole system.

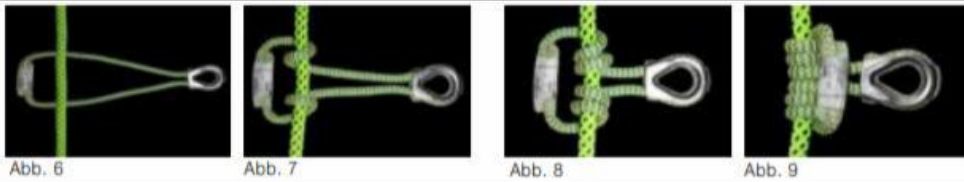
Example: 'Component name 1' part of 'system name', 'Component name 2' part of 'system name', etc.

4. Manufacturer's instructions and information

The manufacturer's instructions and information must show and explain all possible attachments of the system.

If parts can be replaced, or if it is very likely that they will be replaced by the end user, a detailed description with pictures must be included in the Instructions for use

Example for prusik (3-coil):



Every tested and approved combination of guiding rope and friction hitch must be explained in manufacturer's instructions and information.

Note: The length of the lanyard (for the friction hitch) is very important for the functionality and performance of the whole system.

The setup of all approved friction knots must be explained in the instructions for use.

Every system component must be identifiable.

There must be a described functional test in the manufacturer's instructions and information to test the performance of the friction knot (which movement is allowed; in which directions the knot should not move etc)

There must be a warning to check the reliable grab function of the friction hitch before every use.



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/11.095
Version 1

RECOMMENDATION FOR USE

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| Number of pages: 1 | | Approval stage : | Approved on : |
| Origin : Vertical Group 11 'Protection against Falls from a Height' | | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | | <input checked="" type="checkbox"/> Horizontal Committee | 27.12.2018 |
| | | <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |
| Question related to | <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines | <input checked="" type="checkbox"/> EN/prEN: EN 795:2012, TS 16415:2013, EN 892:2012 | <input type="checkbox"/> Other: |
| Article: | Annex: | Clause: Art. 5.2.1. of EN 795 and Art. 5.1 of TS 16415 | |
| Key words: Anchor device, free fall distance, test lanyard, rigid test mass | | | |
| Question: What kind of test lanyard or test mass can be used to test anchor devices? | | | |
| Solution: The test lanyard shall conform to following: <ol style="list-style-type: none">1. Made of a single mountaineering rope conform to EN 892 with an impact force of $(9 \pm 1,5)$ kN in the first dynamic test2. Length of minimum 1m and maximum 2m3. Stitched or made of hand knots (e.g. bowline) The test mass shall be of minimum 100kg and maximum 200kg | | | |

Specific requirement for individual belay shuttles:

7. If the shuttle can also be used as connector against fall from a height, it shall be conform to EN 12275 or EN 362. Note: if change-over of connector is not on a place where you are of safe balance (platform), then connectors have to be with automatic gate locking device

D- Tests requirements

1. Only for shuttles with pulleys: function test under load (EN 12278)

This test shall be carried out on the maximum diameter of wire rope marked on the shuttle.

The shuttle is placed on a test device designed to reproduce the real loading (with maximum deflection allowed on instructions for use)

Apply a force of $F = (2 \pm 0,05)$ kN and check that the shuttle is capable to rotate ten times in either direction under this force

2. Only for continuous belay system shuttles; Deformation test (derived from EN 15567)

This test shall be carried out on both the maximum diameter of wire rope marked on the shuttle and on the minimum one

Apply a force of $F = (6 \pm 0,1)$ kN for 3 minutes in the foreseeable load direction.

Requirements:

Elastic deformation: gap of shuttle shall not be more than (Wire rope minimum diameter)-2 mm.

Permanent deformation: no visible permanent deformation of the shuttle

3. For all shuttles: Dynamic strength test (part of EN 795 type B)

3.1 Principle and test samples

The shuttle is dynamically tested on a steel tube.

> Test lanyard shall be the ones defined in EN 795:2012 [2m long EN 892 single rope, impact force $(9 \pm 1,5)$ kN]

> Type of support: the support shall be a steel tube of the maximum claimed wire rope diameter.

Note: in case of any device on which a continuous belay system shuttle could pass in a risk of fall area (e.g.: junction element, switch element,...), test shall be repeated on adequate fixation

3.2 Test structure calibration pre-test

Using a rigid test mass of 100kg, determine the free fall distance 'h' of the mass required to generate a fall arrest load of $(9 \pm 0,5/+0)$ kN by carrying out a test using a rigid anchor point fixed to a rigid structure by the test lanyard. Whatever is the test structure, the free fall distance may need to be adjusted to achieve the load of 9 kN.

3.3 Test method

The shuttle is installed on the steel tube

The rigid test mass is connected to the shuttle by the test lanyard

Move the rigid test mass downwards until the test lanyard holds the mass. Then raise the rigid test mass to the free fall distance 'h' determined in 3.2 and hold it at a maximum of 300 mm horizontally from the anchor point.

Release the rigid test mass and check requirements

3.4 Requirement

The shuttle shall not release the rigid test mass

4. For all shuttles: Static strength test

The shuttle is statically tested on a steel tube.

> Type of support: the support shall be a steel tube of the maximum claimed wire rope diameter.

> Principle: application of a strength of $F=15\text{kN}$ during 3 minutes

> Requirement: the shuttle shall not break

Note: in case of any device on which a continuous belay system shuttle could pass in a risk of fall area (e.g.: junction element or switch element), test shall be repeated.

5. For all shuttles: Corrosion resistance (EN 795)

> Expose representative samples of the metal parts of the shuttle to the neutral salt spray test in accordance with EN ISO 9227 for a period of (24 0,5/0)h. Dry for (60 5/0)min at (20 ± 2) °C. Then repeat the procedure, so that the shuttle is subjected in total to (24 0,5/0)h exposure and (60 5/0)min drying plus another (24 0,5/0)h exposure and (60 5/0)min drying. Examine the device and verify that it meets the requirements of 4.2.1. When it is necessary to gain visual access to the internal elements, dismantle the shuttle

> Requirement: there shall be no corrosion of the metal parts material that would affect their functional operation, e.g. the correct operation of moving elements. The presence of tarnishing and white scaling is acceptable

E- Marking requirements

1. Trade mark of the device
2. Reference to instructions ('I' in the book)
3. Wire rope diameter range

Note: no EN marking related to this use

F- Instructions requirements

Beyond usual requirements (name and address of the manufacturer or its representative, marking signification, maintenance, cleaning, life span, effect of chemical agents, effect of humidity and freeze, storage, transport, ...):

1. Scope of the device and how to use it
2. Wire rope compatibility: types of wire rope (at least diameter range, material and construction) on which the shuttle can be placed and a clear sentence that the shuttle shall not be used with another type of wire rope
3. Connectors and lanyard compatibility: how to choose them
4. Continuous belay system shuttles: how to place the device on the safety rope
5. Continuous belay system shuttles: wear and tear discard criteria for the gap (control value in mm) as applicable
6. Necessary clearance for the device
7. Shuttles with pulley: Speed limitations, brake recommendations (limits to prevent damage)

If relevant: instruction requirement of EN 12278, EN 12275, EN 362, EN 795



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/11.105
Version 1

RECOMMENDATION FOR USE

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| <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |

Question related to PPE Regulation PPE Guidelines

EN/prEN: EN 341 :2011

Other:

Article:

Annex:

Clause: article 4.5 a)

Key words:

Descender device, classes

Question:

What are the requirements for the descent energy test on classes A, B and C?

Solution:

For class A: the descender device shall resist a descent energy test of $7,5 \cdot 10^6$ J

For class B: the descender device shall resist a descent energy test of $1,5 \cdot 10^6$ J

For class C: the descender device shall resist a descent energy test of $0,5 \cdot 10^6$ J

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/11.106 Version 02 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 11 | <input checked="" type="checkbox"/> Vertical Group 07.06.2021 <input checked="" type="checkbox"/> Horizontal Committee 01.10.2021 <input checked="" type="checkbox"/> EU PPE Expert Group 18.11.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 360 :2002 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: | | |
| Key words: Retractable type fall arrester, retraction function with rotation | | |
| Question: How shall the retraction function with rotation be assessed? | | |
| Solution: The retractable type fall arrester shall be tested according to art. 4.1.1 and 5.3.5 of prEN 360 (TC160/WG2 doc N770) : Requirement The retractable lanyard(s) shall fully retract. Test method 5.3.5.1 Suspend the RTFA to a non-rotating anchor point and fully extract the retractable lanyard(s) and allow the lanyard(s) to fully retract in a controlled manner. 5.3.5.2 Extract (300 ± 10) mm of the retractable lanyard. Rotate the end termination of the retractable lanyard or the RTFA housing attachment point ten full turns. Allow the lanyard to retract. The lanyard retraction and any untwisting shall be unassisted and controlled by hand resistance to prevent uncontrolled take-up of the lanyard by the RTFA. Check that the lanyard fully retracts. If applicable, repeat the test for each direction claimed by the manufacturer | | |



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PPE Regulation 2016/425

PPE-R/11.114

Version 3

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- Vertical Group
- Horizontal Committee
- EU PPE Expert Group

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18.11.2022

Question related to PPE Regulation PPE Guidelines

EN/prEN:

Other:

Article:

Annex:

Clause:

Key words:


load sharing device, rigging plates, use for work, industry, mountaineering,

Question:

As there is no applicable EN standard for these devices, how to assess load sharing devices (e.g., rigging plates) used by a person for fall protection for industry or mountaineering?

Solution:

Use UIAA 130:2021


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/11.115 Version 1 |
| Number of pages: 2 | Approval stage : Approved on : | |
| Origin : Vertical Group 11 'Protection against Falls from a Height' | <input checked="" type="checkbox"/> Vertical Group 21.04.2018 <input checked="" type="checkbox"/> Horizontal Committee 27.12.2018 <input checked="" type="checkbox"/> EU PPE Working Group 29.11.2019 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input type="checkbox"/> EN/prEN: <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: |
| Key words: Clamps, rescue, evacuation, lifting, lowering | | |
| Question: How shall clamps that are claimed to be used in conjunction with devices for the rescue or evacuation lifting and lowering process be tested and evaluated? | | |
| Solution: Requirements: <ol style="list-style-type: none"> 1. General: The function test, static strength test and dynamic test has to be carried out with any type of construction of the line (e. g. integrated lanyard of an energy absorber, lanyard of a retractable type fall arrester, flexible anchor line) as specified by the manufacturer 2. Construction: Construction of the rescue / evacuation clamp has to be conform with clauses 4.1.1, 4.1.2, 4.1.4 and 4.1.5 of the EN 567:2013 3. Function Check the function by lifting and lowering of a mass equivalent to the minimum and maximum rated for three times over a height of 1 m. Hold the mass for 3 minutes after each lifting and lowering process. Repeat the test with conditioning to wet and cold and to very cold in accordance with EN 354. 4. Static strength for the rescue / evacuation clamp including the anchor line/lanyard The rescue / evacuation clamp including the lanyard/anchor line has to withstand a load of 6kN for 3 minutes (test procedure according to EN 354). Permanent extension of max. 25 mm is accepted. 5. Static strength for the rescue / evacuation clamp The rescue / evacuation clamp has to withstand for 3 minutes a load of 12kN on a rigid rod bar instead of the anchor line/lanyard (test procedure according to EN 353-2:2014 2002 or EN 12841:2006) 6. Dynamic strength Requirement and procedure in accordance with EN 795:2012 clause 5.2.1.4 (9kN without integrity test) and 5.3.3 by using a lanyard/anchor line with end termination and a position of the rescue / evacuation clamp of 1m below the end termination. 7. Corrosion resistance Corrosion resistance has to be conforming to 5.5 of EN 362:2002 2004. | | |

8. Marking (in addition to EN 365:2004)

- clear to the intended equipment to be used with the rescue / evacuation clamp
- min. and max. rated load in kilogram
- pictogram showing the direction of use
- pictogram/figure showing how the rescue / evacuation clamp should be attached
- maximum and minimum rated load

9. Instruction for use (in addition to EN 365:2004)

- a warning that the claimed use of the clamp is only for rescue / evacuation and should only be used by person which are well trained in rescue procedures
- maximum and minimum rated load
- a description, on how the clamp is against unintended loosening secured,
- a description, on how the clamp has to be used with the rescue / evacuation equipment,
- a information, indicating the type designation and specifications of the fall arrest components (lanyards/anchor lines), e. g. retractable type fall arrester, guided type fall arrester including a flexible anchor line, for which the clamp is intended to be used

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/11.117 Version 2 |
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| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN EN 341 :2011 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: | | |
| Key words: Descender devices for rescue; Function Test | | |
| Question: What is the sense of the test “wet and cold condition” (art.5.4.3) by immerse the device in water? | | |
| Preliminary note: By immersing automatic descender devices in water (instead of spraying) these devices will normally fail this test Solution: For automatic descender devices the wet and cold condition test can be limited to cold condition. If taken into account, automatic descenders should not be conditioned according to the first 2 sentences of EN 341:2011 art. 5.4.3. Manufacturer’s instructions and Information must be clear stating that use in wet and cold conditions is not allowed with these devices. EN 341 shall not marked on the product nor in the instructions, unless the device satisfies EN 341:2011 art. 5.4.3. | | |



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/11.121
Version 1

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Origin : Vertical Group 11 'Protection against Falls from a Height'

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|----------------------------------------------------------|------------|
| <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| <input checked="" type="checkbox"/> Horizontal Committee | 27.12.2018 |
| <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |

Question related to PPE Regulation PPE Guidelines

EN/prEN: EN 353-1:2014

Other:

Article:

Annex:

Clause:

Key words:

Function test, arrest distance

Question:

For function Tests, shall H_{LD} and H_{AD} requirement be met both or only one of them?

Solution:

H_{LD} and H_{AD} requirement shall be met both



CO-ORDINATION OF NOTIFIED BODIES
PPE Regulation 2016/425

PPE-R/11.123
Version 1

RECOMMENDATION FOR USE

| | | | |
|----------------------------------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------|---------------------------------|
| Number of pages: 1 | | Approval stage : | Approved on : |
| Origin : Vertical Group 11 'Protection against Falls from a Height' | | <input checked="" type="checkbox"/> Vertical Group | 21.04.2018 |
| | | <input checked="" type="checkbox"/> Horizontal Committee | 27.12.2018 |
| | | <input checked="" type="checkbox"/> EU PPE Working Group | 29.11.2019 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines | | <input checked="" type="checkbox"/> EN/prEN: EN 360:2002, EN 341:2011, EN 1496:2017 | <input type="checkbox"/> Other: |
| Article: | Annex: | Clause: | |
| Key words: Retractable fall arrester, descender device for rescue , rescue lifting device | | | |
| Question: How to test EN 360 including descending EN 341 and/or lifting EN 1496 functions? | | | |
| Solution: Testing should be based on relevant requirement from EN 360 and EN 341 and/or EN 1496 | | | |

Solution:

1 General requirements

Each single retractable type fall arrester shall comply with EN 360:2002

2 Additional requirements / tests

2.1 Design requirements

- Both retractable lanyards/devices shall be identical (design, material, dimensions, length, ...).
- The complete length of the retractable type fall arrester including connectors L has to be limited to $L \leq 2.5$ m.
- The lanyards must be of textile materials to avoid severe injuries in case of a fall.
- If the manufacturer claims horizontal use on twin RTFA, test 2.3 of this RfU shall be repeated following 4.4 (Dynamic Performance tests) of PPE-R/11.060.

Notes:

- Twin RTFA with one energy absorbing element: horizontal test with one leg (to be repeated if the two legs are different)
- Twin RTFA with energy absorbing element at each leg: horizontal test with one leg (to be repeated if the two legs are different) and both legs
- a new sample can be used for each test

2.2. Dynamic performance test with one lanyard attached

Attach one fully extracted lanyard to a rigid anchor point. Connect the harness attachment point including a load cell to a test mass equal to the maximum rated load but not less than 100 kg and raise the mass twice the maximum length of the device. Release the test mass and record the braking force F_{max} and the arrest distance H.

Requirement: $F \leq 6$ kN and $H \leq 2L + 1.75$ m and $H \leq 5,75$ m

Note: This method takes into account the foreseeable misuse of free fall, by climbing above the anchor point.

2.3 Dynamic performance test with both lanyards attached to the same anchor point

Attach both fully extracted lanyards to a rigid anchor point. Connect the harness attachment point including a load cell to a test mass equal to the maximum rated load but not less than 100 kg and raise the mass twice the maximum length of the device. Release the test mass and record the braking force F_{max} and the arrest distance H.

Requirement: $F \leq 6$ kN and $H \leq 2L + 1.75$ m and $H \leq 5,75$ m

Note: This method takes into account the foreseeable misuse of free fall, by climbing above the anchor point with both lanyards connected to the same anchor point.

2.4 Dynamic performance test at near full extraction

Attach one fully extracted lanyard to a rigid anchor point. Connect the harness attachment point including a load cell to a test mass equal to the maximum rated load but not less than 100 kg and raise the mass 250mm. Release the test mass and record the braking force F_{max} and the arrest distance H .

Requirement: $F_{max} < 6$ kN and $H < 1.4$ m

Note: This method is used to test the behaviour of the end stop. The arrest distance of 1.4m results from the EN 360:2002 clause 4.5 requirement of 2.0m minus 0.6m because there is no free fall.

2.5 Dynamic performance test with both lanyards attached to different anchor points

Attach each lanyard to a separate rigid anchor point with a horizontal distance of 1.5 times the maximum length of the retractable type fall arrester (e.g. 2m device = 3.0m distance). Connect the harness attachment point including a load cell to a test mass equal to the maximum rated load but not less than 100 kg and raise the mass until the lanyards are fully extended. Release the test mass and record the braking force F_{max} and the arrest distance H .

Requirement: $F \leq 6$ kN and $H \leq 2L + 1.75$ m and $H \leq 5,75$ m

Note: This method takes into account the foreseeable misuse of free fall, by climbing above the anchor point if both lanyards are connected to different anchor points.

2.6 Static strength test of the retractable lanyard

Apply a force of 22kN for 3 minutes on the retractable lanyard only. (A test specimen including suitable terminations can be submitted by the applicant.)

Requirement: The lanyard shall sustain the load without failure.

2.7 Ergonomic test

Carry out an ergonomic test with two persons of different height and weight within the range of 160 cm to 190 cm and within the range of 60 kg to 95 kg, wearing lightweight clothing and a full body harness conforming to EN 361:2002. The test persons examine the ergonomic and functional behavior of the device when climbing (up- and downwards, horizontal, diagonal) in a suitable construction (ladder, modular scaffolds, ...).

Check if there are any additional risks for the user (e.g. housing could hit the head).

2.8 Retraction function with rotation test (4.1.1/5.3.5 of prEN 360 – TC160/WG2 doc N770)

5.3.5.1 Suspend the twin RTFA to a non-rotating anchor point and fully extract the retractable lanyard(s) and allow the lanyard(s) to fully

retract in a controlled manner.

5.3.5.3 For a twin RTFA extract (1000 ± 10) mm of the retractable lanyards. Rotate the twin RTFA housing attachment point ten full turns.

Allow the lanyards to retract. The lanyard retraction and any untwisting shall be unassisted and controlled by hand resistance to prevent uncontrolled take-up of the lanyard by the RTFA. Check that the lanyard fully retracts. Perform the test in 5.3.5.2 (*) on each lanyard. If applicable, repeat the test for each direction claimed by the manufacturer.


() : 5.3.5.2 For a RTFA extract (300 ± 10) mm of the retractable lanyard. Rotate the end termination of the retractable lanyard or the RTFA housing attachment point ten full turns. Allow the lanyard to retract. The lanyard retraction and any untwisting shall be unassisted and controlled by hand resistance to prevent uncontrolled take-up of the lanyard by the RTFA. Check that the lanyard fully retracts. If applicable, repeat the test for each direction claimed by the manufacturer.*


Requirement: The retractable lanyard(s) shall fully retract.

3 Instructions for use


In addition to conforming to EN 360:2002, the information shall include advice or information as follows:


- Advise that the unit must only be attached to the fall arrest attachment element at the back of the full body harness.
- Information on the intended use the device is designed for (e.g. vertical and horizontal movement in high-rack warehouses, assembly and dismantling of industrial scaffoldings, vertical climbing on two spar ladders or crampons courses, ...).
- Advise that the anchor points at the building or structure shall be at least at waist height. In exceptional cases, the anchor point may be also lower, but not lower than the height of the user's prior level. These exceptions are for example use in container assembly, on flat roofs, in erection of steel structures where larger distances are present between the anchor points due to construction.
- A warning about the risk of injury to the neck and head by the device and the lanyard.


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/11.125 Version 3 |
| Number of pages: 1 | Approval stage : | Approved on : |
| Origin : Vertical Group 11 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 07.06.2021 01.10.2021 18.11.2022 |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines | <input checked="" type="checkbox"/> EN/prEN: EN 892:2012 +A1:2016, EN 1891:1998 | <input type="checkbox"/> Other: |
| Article: | Annex: | Clause: |
| Key words: Dynamic mountaineering rope, low stretch kernmantel rope, marking | | |
| Question: Are markings made of bands mandatory for EN 892:2012+A1:2016 Dynamic mountaineering ropes and EN 1891:1998 Low stretch kernmantel ropes? | | |
| Solution: No as long as ropes have durable markings at both ends. But if bands are used they shall comply EN 892:2012+A1:2016 (art. 6) and EN 1891:1998 (art. 6.2) | | |


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | | PPE-R/11.127 Version 2 | |
| | Number of pages: 1 | Approval stage : | | Approved on : |
| Origin : Vertical Group 11 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | | 07.06.2021 01.10.2021 18.11.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines | <input checked="" type="checkbox"/> EN/prEN: EN 361 :2002 | <input type="checkbox"/> Other: | | |
| Article: | Annex: | Clause: | | |
| Key words: Full body harness, ergonomic tests | | | | |
| Question: How to assess ergonomic requirement on full body harness? | | | | |
| Solution: 1- Requirement: When tested in accordance with §2, the full body harness shall be shown to: <ul style="list-style-type: none"> a) be capable of adjustment to enable correct positioning on the user; b) be able to support the user in an upright position while in suspension; c) consist of metal fittings with no contact with the groin, the inside of the thighs, the armpits or the small of the back; d) shall not migrate from original position e) remain correctly adjusted. 2- Test Methodology The test subjects shall be two persons of different height, within the range 160 cm to 190 cm, and of different weight, within the range 60 kg to 110kg. Each person shall be within the size range for the full body harness being examined and shall wear lightweight clothing. There shall be a size difference of at least 15 cm between the two persons and weight difference of at least 30 kg. The test subject shall don the full body harness in accordance with the information supplied by the manufacturer. Test 1: The test subject shall perform at least following movements: raising hands above the head, leaning the body in the direction of the ground, squatting, kneeling, picking up an object from floor... Test 2: the test subject shall be suspended clear of the ground by means of a suitable lifting/lowering device connected to the attachment point. The suspension test shall be carried out for each attachment point of the full body harness designated by the manufacturer. The test subjects shall be directly supervised throughout the procedure | | | | |


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/11.129 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 11 'Protection against Falls from a Height' | <input checked="" type="checkbox"/> Vertical Group 13.06.2019 <input checked="" type="checkbox"/> Horizontal Committee 15.09.2019 <input checked="" type="checkbox"/> EU PPE Expert Group 14.03.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 353-1:2014 + A1:2017 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: | | |
| Key words: Guided type fall arrester, closing mechanism | | |
| Question: How to check the complete closure of the opening mechanism of a guided type fall arrester? | | |
| Preliminary note: After fitting or refitting the guided type fall arrester back onto the rigid anchor line in accordance with the manufacturer's instructions and information, there shall be complete closure of the opening mechanism and the self-locking fall arrest function shall be free to operate. The design of the fall arrester shall be such that it is not possible to use it in a not completely closed position. Solution: During article 5.1.3 "ascending and descending test with two persons " both test persons shall remove and refit the guided type fall arrester on the rigid anchor line in accordance with the manufacturer's instructions and information. Carry out a visual check and verify that the opening mechanism closes completely after refitting the guided type fall arrester in or on the rigid anchor line and then perform a pre-use check in accordance with the manufacturer's instructions (see EN 365:2004, 4.2.2. k). | | |


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/11.130 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 11 'Protection against Falls from a Height' | <input checked="" type="checkbox"/> Vertical Group 13.06.2019 <input checked="" type="checkbox"/> Horizontal Committee 15.09.2019 <input checked="" type="checkbox"/> EU PPE Expert Group 14.03.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 358:2018 <input type="checkbox"/> Other: | | |
| Article: _____ Annex: _____ Clause: _____ | | |
| Key words: Dynamic strength test, integrated lanyard | | |
| Question: How to carry out test according to Art. 5.7.3.2 of EN 358:2018 (dynamic strength test on Waist belt with integrated lanyard) as it could be understood to test with full length of the lanyard minus 300mm? | | |
| Solution: The dynamic strength test of a waist belt with integrated lanyard can be carried out with a specific sample of 1,3m long, provided for the purpose of the test by the manufacturer | | |


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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/11.131 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 11 'Protection against Falls from a Height' | <input checked="" type="checkbox"/> Vertical Group 13.06.2019 <input checked="" type="checkbox"/> Horizontal Committee 15.09.2019 <input checked="" type="checkbox"/> EU PPE Expert Group 14.03.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 358:2018, EN 361:2002, EN 813:2008, EN 12277+A1:2018 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: | | |
| Key words: Fastening elements, harness, sit harness | | |
| Question: Should all fastening elements that are part of a harness/sit harness EN 361:2002, EN 813:2008 or EN 12277+A1:2018 so designed and constructed that they can be opened by pushing two buttons be tested according to EN 358:2018 clauses 4.1.2.1 to 4.2.3 and clauses 5.2.2 to 5.2.5? | | |
| Solution: Yes | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/11.132 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 11 'Protection against Falls from a Height' | <input checked="" type="checkbox"/> Vertical Group 13.06.2019 <input checked="" type="checkbox"/> Horizontal Committee 15.09.2019 <input checked="" type="checkbox"/> EU PPE Expert Group 14.03.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 361:2002 <input type="checkbox"/> Other: 11.062 | | |
| <hr style="border-top: 1px dashed black;"/> Article: Annex: Clause: | | |
| Key words: Maximum rated load, full body harness, instructions for use | | |
| Question: Can instructions for use of a Full Body Harness claim a maximum rated load more than 100kg? | | |
| Solution: Yes, but instructions for use shall require only to use energy absorbing elements compatible with this maximum rated load. Reminder: energy absorbing element shall be tested according to RfU 11.062 or relevant EN standard. | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/11.133 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 11 'Protection against Falls from a Height' | <input checked="" type="checkbox"/> Vertical Group 13.06.2019 <input checked="" type="checkbox"/> Horizontal Committee 15.09.2019 <input checked="" type="checkbox"/> EU PPE Expert Group 14.03.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: EN 892:2012 +A1:2016, EN 1891:1998 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: | | |
| Key words: Dynamic mountaineering rope, low stretch kernmantel rope, construction | | |
| Question: Should each construction (braiding,core yarns,...) of dynamic mountaineering ropes EN 892:2012+A1:2016 or low stretch kernmantel ropes EN 1891:1998 be tested ? | | |
| Solution: Yes | | |

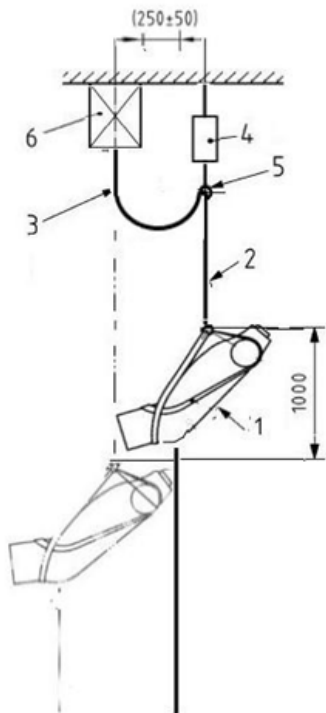
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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | | PPE-R/11.136 Version 1 |
| Number of pages: 1 | | Approval stage : | Approved on : |
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| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines | <input checked="" type="checkbox"/> EN/prEN: EN 353-1 :2014 | <input type="checkbox"/> Other: | |
| Article: 4.1.2.5 | Annex: | Clause: | |
| Key words: Guided type fall arrester , connecting element | | | |
| Preliminary remark: Clause 4.1.2.5 of EN 353-1:2014 states "The connecting element(s) shall be permanently attached to the guided type fall arrester" Question: Is a Guided Type Fall Arrester ('GTFA') connected to a connector by a secondary component (e.g. a small size wire rope) conforms to requirement of 4.1.2.5? Example:  | | | |
| Solution: No. There is a foreseeable misuse of using the Guided Type Fall Arrester not directly connected to the connector. Note: It could only be acceptable if it would fulfill all requirements when the connector is linked to the guided type fall arrester by secondary component (e.g. the wire rope). | | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | | PPE-R/11.137 Version 1 |
| | Number of pages: 1 | Approval stage : | Approved on : |
| Origin : Vertical Group 11 | <input checked="" type="checkbox"/> Vertical Group <input checked="" type="checkbox"/> Horizontal Committee <input checked="" type="checkbox"/> EU PPE Expert Group | 14.10.2020 01.10.2021 18.11.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines | <input checked="" type="checkbox"/> EN/prEN: EN 353-1 :2014+A1 :2017 | <input type="checkbox"/> Other: | |
| Article : 5.3.4.3 and Fig. 11 | Annex: | Clause: | |
| Key words: Guided type fall arrester, minimum distance test | | | |
| Preliminary remark: Clause 5.3.4.3. states that in the pre-release position, the test mass shall be in contact with the guided type fall-arrester but in Figure 11, which depicts the test arrangement, the test mass is not in contact with the fall-arrester. Question: Which takes precedence, the text in clause 5.3.4.3 or the diagram in Figure 11? | | | |
| Solution: The test method in clause 5.3.4.3 takes precedence over the diagrammatic representation of the test in Figure 11. Note: where an energy-absorbing element is relatively short the test shall be carried out so that: "with the guided type fall arrester in an unlocked position the rigid test mass shall be in contact with any part of the guided type fall arrester, including the energy-absorbing element, without changing the position of the guided type fall arrester on the rigid anchor line.." | | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/11.138 Version 1 |
| Number of pages: 1 | Approval stage : Approved on : | |
| Origin : Vertical Group 11 | <input checked="" type="checkbox"/> Vertical Group 20.11.2020 <input checked="" type="checkbox"/> Horizontal Committee 01.10.2021 <input checked="" type="checkbox"/> EU PPE Expert Group 18.11.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: : EN 17109 :2020 <input type="checkbox"/> Other: | | |
| Article: Annex: Clause: | | |
| Key words: Individual safety systems, rope courses | | |
| Question: How to interpret the various editorials errors noted in EN 17109:2020? | | |
| Solution: <ul style="list-style-type: none"> • Article 4.3.4 refers to 5.3.5 method but should only refer to 5.3.5.1, 5.3.5.1.2 and 5.3.5.1.3 as 5.3.5.1.4 is not applicable here • Article 4.4 shall refer to 5.3.5.4 • Article 4.5 refers to 5.1 but should refer to 5.5 • Article 5.3.1 says that for 5.3.3 and 5.3.4 all loading positions indicated in the instructions for use shall be tested. But 5.3.3 and 5.3.4 tests have to be carried out in the normal position. Article 5.3.1 should refer to 5.3.5 • Article 5.3.5.2 and 5.3.5.3 do not indicate how long the strength shall be applied (or if no duration). VG11 decision: Apply the load for (3+0.1/-0) min • Article 4.2 / 5.2 does not define which diameter the test shall be carried out. Proposal: minimum • Articles 6c and 7a: should refer to EN 17109:2020 and not 2019 • Annex B, Table B1: Number 14 should be EN 12277:2015+A1:2018-12 | | |

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|  | CO-ORDINATION OF NOTIFIED BODIES PPE Regulation 2016/425 RECOMMENDATION FOR USE | PPE-R/11.140 Version 2 |
| Number of pages: 2 | Approval stage : Approved on : | |
| Origin : Vertical Group 11 | <input checked="" type="checkbox"/> Vertical Group 07.06.2021 <input checked="" type="checkbox"/> Horizontal Committee 01.10.2021 <input checked="" type="checkbox"/> EU PPE Expert Group 18.11.2022 | |
| Question related to <input checked="" type="checkbox"/> PPE Regulation <input type="checkbox"/> PPE Guidelines <input checked="" type="checkbox"/> EN/prEN: : EN 12841-B:2006, <input type="checkbox"/> Other: EN 567:2013, EN 361:2002, EN 358:2018, EN 813:2008, EN 12277:2015+A1 :2018 | | |
| Article: Annex: Clause: | | |
| Key words: Rope clamp/Rope adjustment device used in harnesses | | |
| Question: How to assess harnesses including a rope clamp/rope adjustment device or a specific attachment point (e.g. small size stitched loop) designed only for rope clamp/rope adjustment device?  | | |
| Solution: Harnesses including a rope clamp/rope adjustment device shall fulfil following requirements beyond PPE Regulation: 1- Rope clamp/Rope adjustment device shall conform to EN 12841:2006 type B (rope access use) and/or EN 567:2013 (mountaineering use) 2- Harness including a rope clamp/rope adjustment device or an attachment point specifically designed for rope clamp/rope adjustment device shall fulfil: EN 361:2002 and/or EN 358:2018 and/or EN 813:2008 and/or EN 12277:2015/A1:2018 3- Harness attachment point specifically designed only for rope clamp/rope adjustment device shall fulfil following tests depending on the scope of use: 3.1 EN 12841:2006 type B use claimed for rope access (for EN 361:2002, EN 358:2018, EN 813:2008 harness) a) Minimum Working Strength: according to article 4.3.3 dry condition (F=4kN/3min) b) Dynamic Strength Test: instead of article 4.3.4 use following test procedure: > Use EN 364:1992 torso dummy (with maximum user weight) | | |

- > Test setup: Anchor point – test lanyard (1m EN 892:2012+A1:2016 single rope \varnothing 11mm with an impact force of $(9 \pm 1,5)$ kN – EN 362:2004 connector – anchor line (5m of rope type claimed by the manufacturer based on EN 12841 requirement) with maximum diameter
- > Place the rope adjustment device of the harness 1m below the top point of anchor line and suspend the dummy for 60 sec.
- > Connect the quick release mechanism to EN 362:2004 connector between test lanyard and anchor line and raise the system 1m to generate a 1m long free fall
- > Release the system
- > Measure arrest distance H_a (max. 2m) of rope adjustment device (based on EN 12841/B:2006)
- > Repeat the test with anchor line with minimum diameter as claimed by manufacturer



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| 1 | torso dummy (incl. rope adjustment device) |
| 2 | anchor line |
| 3 | test lanyard (1m EN892:2012 + A1:2016 single rope) |
| 4 | quick release mechanism |
| 5 | connector between test lanyard and anchor line |
| 6 | anchor point |

3.2 EN 567:2013 use claimed for mountaineering (for EN 12277:2015/A1:2018 harness)
 Static Strength Test: according to EN 567:2013 article 4.2.1 ($F=4\text{kN}$ – no cycles)

