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English Version

Protective clothing for firefighters - Performance requirements for protective clothing for firefighting activities

Habillement de protection pour sapeurs-pompiers -Exigences de performance pour les vêtements de protection pour la lutte contre l'incendie Schutzkleidung für die Feuerwehr -Leistungsanforderungen für Schutzkleidung für Tätigkeiten der Feuerwehr

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 162.

This draft amendment A1, if approved, will modify the European Standard EN 469:2020. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 469:2020/prA1:2022) has been prepared by Technical Committee CEN/TC 162 "Protective clothing including hand and arm protection and lifejackets", the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZA, which is an integral part of this document.

1 Modifications to Clause 3, "Terms and definitions"

Replace the current definition for term "3.11, drain mesh material", with the following:

"water-permeable material to allow drainage of water".

Replace the current Example under term "3.16, hardware" with the following:

"EXAMPLE Fasteners, rank markings, buttons, zippers, embroideries, braces (see also 3.10 device).".

Replace the current definition for term "3.43, wristlet" with the following:

"elastic part of a garment that encircles the wrist or ankles tightly".

2 Modification to 4.3.4, "Closure system"

Replace the first paragraph with the following:

"The closure system regions shall provide the same level of protection as the rest of the garment.".

3 Modification to 4.3.5, "External pockets"

In paragraph 2, replace the 3rd sentence, with the following:

"Exceptions are allowed for radio pockets and side pockets below the waist which do not extend more than 10° forward of the side seam.".

4 Modification to 4.3.11, "Drain mesh"

Replace the current text with the following:

"The width of any drain mesh material shall not exceed the 3 cm. The drain mesh material used will also become part of the component assembly and shall meet the requirements of 6.2.1.1 and 6.2.1.6 (see Annex G).".

5 Modification to 4.3.13, "Devices integrated into firefighting garments"

Replace the current text with the following:

"Any devices that are incorporated (whether permanently fixed or not), the interfaced areas or areas of interaction shall be designed so that the level of protection is maintained.".

6 Modification to 5.3, "Pre-treatment"

In paragraph 1, replace the 1st sentence with the following:

"Each test specified in Clause 6, except test in 6.2.1.6 and 6.2.1.7, shall be pre-treated by cleaning.".

7 Modification to 5.4, "Deterioration of repellency by cleaning"

In paragraph 3, replace the 2nd sentence with the following:

"Then after reimpregation is applied, the test shall be performed again in order to demonstrate meeting the requirement.".

8 Modification to Clause 6, "Performance requirements"

In 6.1, replace the current Table 1 with the following:

"Table 1 — Summary of performance requirements of Clause 6 and 7, levels, grades and marking codes

Property	Applicable subclause	Pre- treatment according to 5.3	Performance attribute 1 and Marking (where applicable)		Performance attribute 2 and Marking (where applicable)	
Flame spread	6.2.1.1	before and after	Index 3 of	14116:2015		
Contact heat (Level)	6.2.1.2	before and after	Not required		10 s time according to EN ISO 12127-1	
Heat transfer (flame) (Level)	6.2.1.3	before and after	HTI ₂₄ ≥ 9,0 s HTI ₂₄₋₁₂ ≥ 3,0 s	X1	$HTI_{24} \ge 13,0 \text{ s}$ $HTI_{24-12} \ge 4,0 \text{ s}$	X2
Heat transfer (radiation)	6.2.1.4	before and after	RHTI ₂₄ ≥ 10,0 s RHTI ₂₄₋₁₂ ≥ 3,0 s		RHTI ₂₄ ≥ 18,0 s RHTI ₂₄₋₁₂ ≥ 4,0 s	
Residual tensile strength					N	
Heat resistance	6.2.1.6	before	shrinkage ≤ ± 5 % No ignition No melting Requirements also for slide fasteners and hardware			
Heat resistance sewing thread	6.2.1.7	none	No melting at a temperature of (260 ± 5) °C.			
Resistance to penetration of chemicals	6.2.2	only according to 5.4	No penetration to innermost surface, Index of repellency ≥ 80 %			
Tensile strength	6.2.3.1	after	Outer material ≥ 450N Structural seams ≥ 300 N			
Tear strength	6.2.3.2	after	≥ 30 N			
Water penetration (Grade)	6.2.4	after	< 20 kPa	Y1	≥ 20 kPa	Y2
Dimensional change	6.2.5	after	≤ ± 3 % (woven) ≤ ± 5 %(non-woven and knitted)			