Tentative Interim Amendment

NFPA® 1971

Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting

2013 Edition

Reference: Various
TIA 13-2
(SC 13-3-18/TIA Log #1092)

Pursuant to Section 5 of the NFPA *Regulations Governing the Development of NFPA Standards*, the National Fire Protection Association has issued the following Tentative Interim Amendment to NFPA 1971, *Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting*, 2013 edition. The TIA was processed by the Technical Committee on Structural and Proximity Fire Fighting Protective Clothing and Equipment and the Correlating Committee on Fire and Emergency Services Protective Clothing and Equipment, and was issued by the Standards Council on March 7, 2013, with an effective date of March 27, 2013.

A Tentative Interim Amendment is tentative because it has not been processed through the entire standards-making procedures. It is interim because it is effective only between editions of the standard. A TIA automatically becomes a public input of the proponent for the next edition of the standard; as such, it then is subject to all of the procedures of the standards-making process.

1. Revise 2.3.3 to read as follows:

ASTM F2412, *Standard Test Method for Foot Protection*, 2011.

2. Revise 5.1.7 to read as follows:

5.1.7 The following information shall also be printed legibly on each product label with all letters at least 1.5 mm (1⁄16 in.) in height:
(1) Manufacturer’s name, identification, or designation
(2) Manufacturer’s address
(3) Country of manufacture
(4) Manufacturer’s element identification number, lot number, or serial number
(5) Month and year of manufacture, not coded
(6) Model name, number, or design
(7) Size or size range
(8) Principal material(s) of construction
(9) Cleaning precautions

5.1.7.1 For garments only, where the principal material of construction is a component that is listed, the component name under which it is listed shall be identified.

5.1.7.2 For garments only, where the thermal liner, moisture barrier, and outer shell are separable, each separable layer shall also have a label containing the information required in 5.1.7(4) through 5.1.7(8).

5.1.7.3* For footwear only, principal materials of construction shall include at least the outer shell, moisture barrier, and thermal liner materials. Generic names of materials shall be used. Additional materials that are used throughout the majority of the boot shall also be listed on the label.

5.1.7.4* For helmets only, principal materials of construction shall include generic terminology for the shell material provided.

5.1.7.5* For gloves only, principal materials of construction shall include at least outer shell, moisture barrier, thermal liner, and wristlet materials. Generic names of materials shall be used. The type of leather shall be listed, such as cow leather, elk leather, and so forth. Additional materials that are used throughout the majority of the glove body shall also be listed on the label.

3. Delete existing 5.1.8 through 5.1.11.

4. Revise Paragraph 7.7.7 to read as follows:

7.7.7 The glove interface component composite, including, but not limited to, trim, external labels, and external tags, but excluding hardware and hook and pile fasteners that do not directly contact the wearer's body, shall be tested for resistance to flame as specified in Section 8.4, Flame Resistance Test 3, and shall not have an average char length of more than 100 mm (4 in.), shall not have an average afterflame of more than 2.0 seconds, shall not melt or drip, and shall not have the amount of consumed materials exceed 5 percent.

5. Revise Paragraph 7.7.8 to read as follows:

7.7.8 The glove extension composite, including, but not limited to, trim, external labels, and external tags, but excluding hardware and hook and pile fasteners that do not directly contact the wearer's body, shall be tested for resistance to flame as specified in Section 8.4, Flame Resistance Test 3, and shall not have an average char length of more than 100 mm (4 in.), shall not have an average afterflame of more than 2.0 seconds, shall not melt or drip, and shall not have the amount of consumed materials exceed 5 percent.

6. Revise 7.10.9 to read as follows:

7.10.9 Footwear soles and heels shall be tested for resistance to abrasion as specified in Section 8.23 Abrasion Resistance Test, and the relative volume loss shall not be greater than 250 mm^3.

7. Revise 7.13.6 to read as follows:

7.13.6 Hoods shall be individually tested for resistance to shrinkage as specified in Section 8.24, Cleaning Shrinkage Resistance Test, and shall not exhibit shrinkage of more than 5 percent.

8. Revise 8.1.11.4 and add a new Table 8.1.11.4(c) to read as follows:

8.1.11.4 The wash cycle procedure and water levels specified in Table 8.1.11.4 (a), Table 8.1.11.4 (b) and Table 8.1.11.4 (c) shall be followed. In addition, the G force shall not exceed 100 G throughout the wash cycle.

Table 8.1.11.4 (c) Water Level for Gloves and Glove Pouches Operation Wash Cycle Procedure

	Low Water Level + 1 cm (3/8 in)		High Water Level + 1 cm (3/8 in)	
	cm	in	cm	in
Gloves	20	7.9	30.5	12
Glove Pouches	20	7.9	30.5	12

9. Revise 8.6.16 to read as follows:

8.6.16.11 The percent shrinkage of each hood face opening dimension shall be individually calculated, recorded, and reported.

8.6.16.12 The percent shrinkage of each of the three dimensions from the top of the hood to the marks along the basic plane shall be individually calculated, recorded, and reported.

8.6.16.13* The average percent shrinkage of all hood face opening dimensions for all specimens shall be calculated, recorded, and reported.

8.6.16.14* The average percent shrinkage of the three dimensions from the top of the hood to the marks along the basic plane for all specimens shall be calculated, recorded, and reported.

8.6.16.15 Pass or fail performance shall be based separately on the average percent shrinkage of the hood face opening dimensions and the average percent shrinkage of the three dimensions from the top of the hood to the marks along the basic plane for all specimens.

10. Replace existing 8.24.9.7 through 8.24.9.14 with the following:

8.24.9.7 Each of the three dimensions from the top of the hood to the marks along the basic plane before and after laundering shall be recorded and reported.

8.24.9.8 The percent shrinkage of each hood face opening dimension shall be individually calculated, recorded, and reported.

8.24.9.9 The percent shrinkage of each of the three dimensions from the top of the hood to the marks along the basic plane shall be individually calculated, recorded, and reported.

8.24.9.10* The average percent shrinkage of all hood face opening dimensions for all specimens shall be calculated, recorded, and reported.

8.24.9.11* The average percent shrinkage of the three dimensions from the top of the hood to the marks along the basic plane for all specimens shall be calculated, recorded, and reported.

8.24.9.12 Pass or fail performance shall be based separately on the average percent shrinkage of the hood face opening dimensions and the average percent shrinkage of the three dimensions from the top of the hood to the marks along the basic plane for all specimens.

11. Revise Paragraph 8.27.8.2 to read as follows:

8.27.8.2 Samples for conditioning shall be in the form of a pouch as described in 8.1.16.

12. Revise Paragraph 8.28.8.2 to read as follows:

8.28.8.2 Samples for conditioning shall be in the form of a pouch as described in 8.1.16.

13. Revise 8.40.4(4) and add a new 8.40.4(5) to read as follows:*

(4)* Calibration of the tiles shall be checked every 10 tests (50 test runs) or prior to each day of testing, whichever is the less frequent, to ensure that they are not being worn smooth or otherwise damaged.

(5) If the five consecutive test results of the measurements (for each configuration) show a systematic increase or decrease of more than 10% of the initial reading, then one or more further test runs shall be carried out until a sequence of five are obtained that do not show a systematic increase or decrease of greater than 10%.

14. Revise 8.72.5.2 and 8.72.5.4 to read as follows:

8.72.5.2 While standing, each test subject shall grasp the cylinder so that the wrist creates a straight line with the hand. The elbow is against the side of the body, creating a right angle, throughout the duration of the test.

8.72.5.4 Each test subject shall make five successive attempts to twist the cylinder in the appropriate direction exerting as much force as possible. The range of motion of the subject's wrist shall indicate the end of the twisting cycle. The average maximum force over the five attempts shall be the barehanded control value.

15. Renumber Annex items as follows:

A.5.1.9 in the Annex becomes A.5.1.7.3
A.5.1.10 in the Annex becomes A.5.1.7.4
A.5.1.11 in the Annex becomes A.5.1.7.5

16. Add new Annex items as follows:

A.8.6.16.13 This average should be based on a total of 12 values of percentage shrinkage with four values per specimen.

A.8.6.16.14 This average should be based on a total of 9 values of percentage shrinkage with three values per specimen.

17. Add new Annex Items to read as follows:

A.8.24.9.10 This average should be based on a total of 12 values of percentage shrinkage with four values per specimen.

A.8.24.9.11 This average should be based on a total of 9 values of percentage shrinkage with three values per specimen.

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