

NFPA 1999-2018 Edition

Standard on Protective Clothing and Ensembles for Emergency Medical Operations

TIA Log No.: 1376

Reference: 8.1.3, Table 8.1.3.4 title, 8.1.3.6, 8.1.5, and 8.3.3.2

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www.nfpa.org/1999

1. Revise the title of subsection 8.1.3 to read as follows:

8.1.3 Washing and Drying Procedure for Complete Garments, Garment Samples, Work Gloves, and Work Glove Pouches.

2. Revise the title of Table 8.1.3.4 to read as follows:

Table 8.1.3.4 Wash Cycle Procedure for ~~Whole~~ Complete Garments, Garment Samples, Work Gloves, and Work Glove Pouches

3. Revise paragraphs 8.1.3.6 and 8.1.3.6.1 to read as follows:

8.1.3.6 Complete garments and gGarment samples shall be tumbled for a minimum of 30 minutes or until samples are completely dry and shall be removed immediately at the end of the drying cycle.

8.1.3.6.1 At the conclusion of the final drying cycle, the complete garment and garment samples shall be allowed to air dry for at least 48 hours prior to conducting the test.

4. Delete subsection 8.1.5 and renumber subsequent subsections and paragraphs (including cross references) as shown legislatively:

~~**8.1.5 Washing and Drying Procedure for Garment Materials.** Specimens shall be subjected to 10 cycles of washing and drying in accordance with the procedure specified in Machine Cycle 1, Wash Temperature V, and Drying Procedure Ai, of the 2004 edition of AATCC 135, Dimensional Changes in Automatic Home Laundering of Woven and Knit Fabrics. A 1.8 kg ± 0.1 kg (4.0 lb ± 0.2 lb) load shall be used. A laundry bag shall not be used.~~

8.1.56 Heat Aging Procedure for Gloves.

8.1.56.1 Glove samples ...

8.1.56.2 The sample gloves ...

8.1.67 Abrasion Procedure for Garment Labels. Labels shall be subjected to abrasion in accordance with ASTM D4966, *Standard Test Methods for Abrasion Resistance of Textile Fabrics (Martindale Abrasion Test Method)*, with the modifications in 8.1.67.1 through 8.1.67.3.

8.1.67.1 The standard abrasive fabric and...

8.1.67.2 The standard abrasive fabric shall...

8.1.67.3 Specimens shall be subjected to...

8.1.78 Wet Conditioning for Work Gloves.

8.1.78.1 Test subjects shall be ...

8.1.78.2 The wrist crease location...

8.1.78.3 Test subject shall don ...

8.1.78.4 Test subject shall immerse ...

~~8.1.78.5~~ The glove specimens shall ...

~~8.1.89~~ **Work Glove Test Areas.**

~~8.1.89.1~~ Work glove test areas ...

~~8.1.94~~ **Cold Temperature Conditioning for Medical ...**

5. *Revise 8.3.3.2 to read as follows:*

8.3.3.2 Samples of multiple-use garment barrier layer and garment barrier layer seams shall be conditioned as specified in ~~8.1.5~~ 8.1.3 and then conditioned as specified in 8.1.2. The garment barrier layer and garment barrier layer seams shall be permitted to be representative materials and seams used in the actual construction, or representative of actual construction.

Substantiation: An examination of the records for the revision of NFPA 1999 revealed that a submitted Public Input had been accepted as the basis for a First Revision (No. 98) to add the new top-loader laundering procedures; however, the substantiation statement for the First Revision read, “This change would allow for the preconditioning of garment materials, as opposed to having to launder whole garments and cut specimens from the garments. This brings the testing requirements more into line with other NFPA clothing standards in general, and NFPA 1951, specifically.” Clearly, this is contrary to the final result as appears in the NFPA 1999-2018 standard. A separate First Revision (No. 81) changed the specified laundering preconditioning from 8.1.3 to 8.1.4, which later became Section 8.1.5 when the test method sections in the standard were renumbered.

The top-loader procedures introduced into the 2018 edition of NFPA 1999 are in contrast to the washer/extractor-based procedures that had been specified in the 2013 edition of NFPA 1999 as well as the subsequent TIA-modified edition. The use of top-loader based washing procedures are contrary to the washing of clothing material barrier specimens in both NFPA 1951 and 1971, where barrier layers are instead conditioned by multiple cycles of a washer/extractor laundering procedures.

Emergency Nature: The NFPA Standard contains an error or an omission that was overlooked during the regular revision process. The NFPA Standard contains a conflict within the NFPA Standards or within another NFPA Standard.

The committee made an error for incorporating a change into the 2018 edition of NFPA 1999 that creates conflicts in testing among the fire service project.

Anyone may submit a comment by the closing date indicated above. Please identify the TIA number forward to the Secretary, Standards Council. [SUBMIT A COMMENT](#)