

Subject 2443

August 17, 2018

SUMMARY OF TOPICS

The following changes in requirements to the Standard for Flexible Sprinkler Hose with Fittings for Fire Protection Service, UL 2443, are being proposed:

1. Permanency of Marking

2. Thermoplastic Inlet Fittings

3. Revisions to Clarify Test Methods and Requirements

STP BALLOTS AND ALL COMMENTS DUE: September 17, 2018

<http://ulstandards.ul.com/develop-standards/participation/interest-categories/>

If you are interested in applying for STP 199 membership or are aware of potential candidates for this STP, please contact the STP Project Manager, Wathma.Jayathilake@ul.com.

For your convenience in review, proposed additions to existing requirements are shown underlined and proposed deletions are shown ~~lined-out~~.

1. Permanency of Marking

RATIONALE

Proposal submitted by: Kerry Bell, UL LLC

UL proposes a new 24.3 to reference marking options that would be considered to provide a level of assurance that the required markings referenced in UL 2443 are permanent.

PROPOSAL

24.3 The markings specified in 24.1 – 24.2 shall be permanent, such as:

a) By being molded, stamped, cast; or

b) By use of paint-stenciled, stamped, or etched corrosion resistant metal nameplate, permanently secured to the flexible sprinkler hose; or

c) By indelible stamping on a pressure-sensitive label. Ordinary usage, handling, and storage of the product are to be considered in determining the permanence of marking. Adhesive attached marking and labeling systems shall comply with the indoor- or outdoor-use requirements in the Standard for Marking and Labeling Systems, UL 969.

UL COPYRIGHTED MATERIAL –
NOT AUTHORIZED FOR FURTHER REPRODUCTION OR
DISTRIBUTION WITHOUT PERMISSION FROM UL



Documents

Document Sharing Hub

2. Thermoplastic Inlet Fittings

RATIONALE

Proposal submitted by: Kerry Bell, UL LLC

UL proposes to revise 6.1 to permit the use of a thermoplastic pressure retaining inlet fittings that would allow flexible hoses to be directly connected to evaluated plastic sprinkler piping. As addressed in the proposal, the use of the flexible sprinkler hose with the thermoplastic fitting would be limited to use with the plastic piping only to avoid the inappropriate application of these products in the field.

PROPOSAL

6.1 Flexible sprinkler hose with threaded end fittings shall be constructed of metallic pressure retaining components and have a rated pressure of 175 psig (1.21 Mpa) or higher.

Exception: The end fittings of flexible sprinkler hose are permitted to be constructed of thermoplastic material complying with the applicable requirements of UL 1821, Standard for Thermoplastic Sprinkler Pipe and Fittings for Fire Protection Service and when specified in the installation instructions to be connected directly to thermoplastic sprinkler piping.

3. Revisions to Clarify Test Methods and Requirements

RATIONALE

Proposal submitted by: Kerry Bell, UL LLC

UL proposes to revise 17.1 to limit the application of the Low Temperature Test to those hose assemblies that incorporate an elastomeric or polymeric seal since the purpose of this test is to investigate the performance of these seals at low temperatures. UL also proposes to revise 21.1 to maintain consistency with the hydrostatic strength test requirement of four times the rated working as described in 8.1 c).

PROPOSAL

17.1 Following exposure to low temperature conditions described in 17.2, a flexible sprinkler hose with fittings intended for dry systems using elastomeric or polymeric seals shall not show signs of leakage.

21.1 Flexible hose with fittings shall withstand without leakage or damage repeated flexing according to the following:

a) In a U-bend arrangement as shown in Figure 21.1, the number of flexing cycles shall be as follows:

1. Flexible hose with fittings having High Flexibility – 50,000 cycles; and
2. Flexible hose with fittings having Limited Flexibility – 100 cycles.