# Uponor AquaSAFE<sup>™</sup> Installation Guide Addendum – Exposed Listing

# AquaSAFE<sup>™</sup> Approved for Unfinished Basements

Uponor AquaSAFE systems are now listed for use in exposed installations when installed in accordance with NFPA 13D, the QAI listing to UL 1821 and the following guidelines.

### **Installation Requirements**

Uponor AquaPEX<sup>®</sup> White tubing and ProPEX<sup>®</sup> fittings listed to UL 1821 may be installed without protection (exposed) in the following assemblies.

### **Exposed Wood Joist Ceiling Assemblies**

- The ceiling shall be horizontal and constructed using dimensional lumber (solid wood), engineered wood, engineered wood I-joists, or open web wood joists (wood floor trusses).
- Joist depth between 6 and 16 inches deep with on-center spacing between 12 and 24 inches.
- · Joists may remain exposed after installation.
- Tubing shall be supported every 24 inches with metal supports designed for use with non-metallic pipe/tubing. Follow minimum bend radius limitations as detailed in the Uponor AquaSAFE Installation Guide. Drilling through joists is an acceptable method of support if allowed by the AHJ, joist manufacturer and applicable building codes.
- Listed residential sprinklers with an activation temperature of 155°F and 4.9 minimum K-factor shall be used in the exposed portion of the sprinkler system. Sprinkler spacing shall be no larger than 16 feet. Sprinklers shall be installed with deflectors no more than 1¾" below the bottom of the joist to account for future finished ceilings per NFPA 13D.
- Uponor AquaPEX tubing shall not be installed in locations with direct exposure to sunlight.

## **Exposed Finished Ceiling Assemblies**

- Ceiling shall be horizontal and must be finished with minimum <sup>3</sup>/<sub>6</sub>" thickness gypsum wallboard, a suspended membrane ceiling with lay-in panels or tiles having a minimum weight of 0.35 lb/ft<sup>2</sup> installed with metallic support grids, or <sup>1</sup>/<sub>2</sub>" thick code complying plywood or solid sheathing.
- Tubing shall be supported every 24 inches with metal supports designed for use with non-metallic pipe/tubing. Follow minimum bend radius limitations as detailed in the Uponor AquaSAFE Installation Guide. Drilling through joists is an acceptable method of support if allowed by the AHJ, joist manufacturer and applicable building codes.
- Listed residential sprinklers with an activation temperature of 155°F and 4.9 minimum K-factor shall be used in the exposed portion of the sprinkler system. Sprinkler spacing shall be no larger than 16 feet. Sprinklers shall be installed with deflectors no more than 1¾" below the bottom of the joist to account for future finished ceilings per NFPA 13D.
- Uponor AquaPEX tubing shall not be installed in locations with direct exposure to sunlight.

**Note:** This addendum is intended to address the specific requirements for exposed installations. Additional guidelines and limitations for other installation applications are detailed in the Uponor AquaSAFE System Installation Guide.

**Uponor, Inc.** 5925 148th Street West Apple Valley, MN 55124 USA Tel: 800.321.4739 Fax: 952.891.2008

#### Uponor Ltd.

2000 Argentia Rd., Plaza 1, Ste. 200 Mississauga, ON L5N 1W1 CANADA Tel: 888.994.7726 Fax: 800.638.9517



FIRE SAFETY SYSTEMS

RESIDENTIAL