

## Comparing Ordinary and Intermediate Temperature-Rated Residential Sprinklers

Consider all ambient temperature conditions when specifying the sprinkler's temperature rating for residential system designs.



Ordinary Temperature-Rated Sprinklers

For use in areas where ambient temperatures do not exceed 100°F.



Intermediate Temperature-Rated Sprinklers Can be installed in any areas where ambient temperatures are below 151°F.

**UL Testing and Listing**—All UL Listed residential sprinklers, regardless of temperature rating, are "fast response" by definition. All Listed residential sprinklers must meet the requirements of UL's 1626 test standard, which is aimed at ensuring that every model will allow safe escape from the home during a fire by providing 10 minutes of tenability. The UL Listing means the sprinkler meets the criteria, regardless of temperature rating, style, manufacturer, etc.

**Standardization on Ordinary or Intermediate**—Recognizing that both ordinary and intermediate temperature sprinklers achieve this same level of life safety, the NFPA 13D Installation Standard allows standardization on intermediate temperature sprinklers throughout the home. (NFPA 13D, 2016 ed, 7.5.6.1).

NFPA Standards—NFPA 13, 13R, and 13D Installation Standards state that ordinary temperature-rated sprinklers shall not be used where ambient temperatures can exceed 100°F. Intermediate temperature sprinklers are allowed for installation in ambient temperatures of up to 150°F, and in fact can be used in place of ordinary temperature sprinklers throughout the home. In warmer climates, it is common for temperatures in unventilated attics and other unconditioned spaces to easily exceed 100°F. If ordinary temperature sprinklers are used, adequate insulation to protect sprinklers from temperatures above 100°F should be installed. For concealed sprinklers, the element is installed entirely above the plane of the finished ceiling.

As always, following proper care and handling procedures to protect sprinklers from high heat exposure is important—before, during, and after installation.

**Flexibility and Consolidation**—Intermediate temperature-rated sprinklers allow greater flexibility when positioning sprinklers near potential heat sources such as fireplaces, heat diffusers, skylights, and kitchen ovens. In addition to offering safety and performance advantages, standardizing on intermediate temperature-rated residential sprinklers can consolidate contractor inventories and reduce complexity and confusion on the job site.

For additional information, please visit **www.vikinggroupinc.com** or contact the Viking Technical Services Team at **techsvcs@vikingcorp.com**.