

# Engineering Judgment Validation & Liability Submittal

EJ Reference # \_\_\_\_\_

Product Cert. & Joint Deflection Design/Spec Checklist	Yes	No
Matching F & T Rating - Compliance with UL 2079 or ASTM E1966?	<input type="checkbox"/>	<input type="checkbox"/>
T-Rating unequal F-Rating – Joint/Assembly Hourly Limitation (T-Rating) documentation supplied?	<input type="checkbox"/>	<input type="checkbox"/>
Hose Stream Rating - H-Rating comply with UL 2079 or ASTM E1966?	<input type="checkbox"/>	<input type="checkbox"/>
Assembly Construction – Specific Material called out - no substitution of referenced certifications?	<input type="checkbox"/>	<input type="checkbox"/>
Installed Joint and Movement Capabilities - Same limitation as referenced certifications?	<input type="checkbox"/>	<input type="checkbox"/>
Joint and/or Movement - Exceed referenced certification/limitation support documentation supplied?	<input type="checkbox"/>	<input type="checkbox"/>

## *Authorization of Construction*

Party	Signature	Date
Owner		
Architect		
General Contractor		
Code Official		
Installer		

## Reference Material

### 2018 IBC Section 715.3 - Fire Test Criteria.

*Fire-resistant joint systems* shall be tested in accordance with the requirements of either ASTM E1966 or UL 2079.

#### NFPA 101

**8.3.5.2.6** All joint systems shall be tested to their maximum joint width in accordance with the requirements of ASTM E1966, Standard Test Method for Fire-Resistive Joint Systems, or UL 2079, Test for Fire Resistive of Building Joint Systems, under a minimum positive pressure differential of 0.01 in. water column (2.5 N/m<sup>2</sup>) for a time period to that of the assembly

#### ASTM E1966

**15.2.1** The fire resistance rating of the fire resistive joint system shall be determined as the time at whichever of the following conditions occurs first:

**15.2.1.1** The temperature rise of any one thermocouple on the unexposed face of the test specimen or adjacent supporting construction is more than 325°F (181°C) above the initial temperature

*Interpretation: fire resistive joint system is limited to lesser of T-Rating or F-Rating - Engineered Judgements (EJs) of fire resistive joint with uneven T-Rating and F-Rating (“less than” or “may be less than”) are not ASTM E1966 compliant.*

#### UL 2079

**29.1** During the tests, the construction shall have complied with the following conditions:

**b)** Transmission of heat through the joint system shall not have raised the temperature at the hottest point more than 325°F (181°C) above its initial temperature during the rating period.

**c)** For tests of wall-to-wall and head-of-wall joint systems, the joint system shall have withstood the hose stream test without developing any opening that permits a projection of water from the stream beyond the unexposed surface.

*Interpretation: fire resistive joint system is limited to lesser of T-Rating or F-Rating - Engineered Judgements (EJs) of fire resistive joint with uneven T-Rating and F-Rating (“less than” or “may be less than”) are not UL 2079 compliant.*