Approved Agencies and EXACOR™ in Fire-Resistance Rated Assemblies

This technical tip will explore the allowable test methods used to determine fire-resistance rated assemblies, the International Building Code (IBC) requirements regarding fire rated assemblies, the type of agencies allowed to perform fire rated assembly testing and the summary reports called fire design listings.

Test Methods for Fire-Resistance

Section 703.2 of the 2021 IBC states, "The *fire-resistance rating* of *building elements*, components or assemblies shall be determined by the test procedures set forth in ASTM E119 or UL 263". These test methods are intended to evaluate the duration for which certain building elements contain a fire, retain their structural integrity, or exhibit both properties when exposed to a standard controlled fire during a predetermined test exposure.

ASTM E119 and UL 263 provide equivalent test requirements for the testing of building materials and therefore are referenced in the IBC as stated above for building elements to comply. Having comparable test methods allows an accredited testing agency to test to ASTM E119 or ANSI UL 263 and provide confidence that the test will be conducted in the same manner from one organization to another. Fore more information regarding ASTM E119 please click here.

Approved Agencies for Fire-Rated Assembly Testing

The IBC has criteria that allows for an organization to be considered an *approved agency* for product testing and certification. Approved agencies are independent third-party organizations that perform two functions: (1) product testing to standardized test methods; and (2) product certification to provide evidence that a product conforms to codes and standards. These two functions can be performed by unaffiliated agencies with the proper accreditations or by an agency that is accredited for both product testing and product certification.

Underwriters Laboratory (UL) is an approved agency that has separate divisions that handle product testing or product certification. This allows manufacturers the ability to have their products be tested and certified under one roof. Similar to UL, the International Code Council (ICC) has two subsidiary organizations, ICC-ES and ICC NTA, who provide product certification and testing respectively. UL and ICC-ES are accredited to provide product certifications under ISO/IEC 17065 and both UL and ICC NTA are accredited to

ISO/IEC 17025 for product testing. Therefore, both UL and ICC can conduct testing in accordance with ASTM E119/ANSI UL 263 and provide certification in the form of fire design listings to show conformance with the requirements set forth in the IBC.

In addition to UL, Huber Engineered Woods has also selected to partner with ICC's family of companies, ICC-ES and ICC NTA to provide many of the necessary fire rated assembly testing and certifications required to support the EXACOR™ product line.

Results of Testing

After the approved agency has completed either ASTM E119 or ANSI UL 263, these companies will publish a Fire Design Listing for the fire rated assemblies that have passed the testing. The reports will typically include the following information: a clear identification of each component within the assembly, a list of any alternate components, load bearing capacity and the fire resistance rating.

For a list of completed fire rated assemblies for the EXACOR product line, please reference the Fire & Sound Assembly Handbook at huberwood.com.

Please visit Huberwood.com or contact our technical department at 800-933-9220 Ext 2716 or at techquestions@huber.com with any questions or comments.