

Procedure Guidance

DATE: January 18, 2024
TO: Associates and Coworkers
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Official
SUBJECT: Engineering Judgements

The following procedure is intended to bring clarity to the use of and requirements for fire protection Engineering Judgments at George Mason University.

The use of Engineering Judgments (EJs) should be guided by the following:

- EJs should only be used where tested and listed systems are not available
- EJs are generally applicable to single, specific projects
- The requirements of EJs, below, are based on USBC 2021 sections 109.3, 112.2, 703.2 and 703.3.
- ["Recommended IFC Guidelines for Evaluating Firestop Systems in Engineering Judgements" Judgments](#)

Engineering Judgments submitted to our office should have three components:

1. A transmittal or cover letter from the Engineer or Architect of Record (EOR or AOR) stating the need for the EJ and noting why a listed system cannot be used. The transmittal should indicate EOR/AOR review of the EJ in the form of a stamp similar to those used for shop drawings.
2. A summary statement from the individual responsible for preparing the EJ outlining the contents of the Supporting Documentation. This statement must be issued from a Virginia registered design professional (with documented knowledge and experience in fire protection engineering) in concert with the manufacturer (and manufacturer's technical personnel), or an independent third-party testing agency depending on the degree of deviation from existing tested assemblies.
3. Supporting analysis and documentation for the proposed design shall include relevant testing information, interpolation from existing tests, expected performance criteria, and detail(s) of the installation.

More information on how EJs are considered by other state agencies can be found here:

- ["Criteria for Engineering Judgments Submitted to DEB"](#), *DEB Newsletter, Issue No. 63, March 2020*.
- ["Engineering Judgments Demystified"](#), *BCOM Newsletter, Issue # 37, January 2018*.