

INDUSTRY INFORMATION BULLETIN



To: Building Code Officials, Building Owner, Contractors, Manufacturers and Specifiers

Topic: Code Evaluations for Roofing Products

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Informational Bulletin

This SPRI information bulletin addresses:

- Topics related to roofing products and the need for code evaluations;
- The options for providing code compliance information and the types of organizations that typically provide that information; and
- Requirements of the International Building Codes as they relate to membrane roof covering systems.

What is product approval?

A builder must demonstrate to the building official that the roofing products they intend to install on a building comply with all of the requirements of the building, residential, plumbing, fire and energy codes that have been adopted in that jurisdiction.

- The building codes authorize the building official to enforce the codes and regulations that have been adopted through legislation for that jurisdiction.
- The building official is also referred to as the Authority Having Jurisdiction (AHJ).
- Most often, it is the manufacturer that provides evidence of code compliance.

What information is needed for an AHJ to approve membrane roof covering systems?

The requirements for roof coverings are contained within Chapter 15 of the International Building Code (IBC) and Chapter 9 of the International Residential Code (IRC), and related sections of state and local codes.

- These requirements include weather protection, wind uplift resistance, external fire resistance, impact resistance and physical properties.

There are three methods for providing the relevant information to the AHJ. Combinations of these methods can be used to show code compliance for a particular building:

- Manufacturer self-certification;
- Listing (aka Labeling or Certification) by an independent third party; and
- Code evaluation and certification by an independent third party.

How can new or innovative roofing products or assemblies show compliance?

Alternative materials and methods of construction are regulated by Section 104.11 of the IBC and IRC. The material or method of construction must be shown to be equivalent to that described in the code as to quality, strength, effectiveness, fire resistance, durability and safety.

- One method to establish equivalency is through a normative standard called an Acceptance Criteria.
- Acceptance Criteria describe the means to evaluate the product or method of construction for code compliance.
- A code evaluation agency can evaluate the product or method of construction and publish its findings in a Research Report.
- Alternatives must be approved by the AHJ.

Are Research Reports mandatory?

- No, the AHJ should not insist on a research report for a membrane roofing system if the manufacturer has data available for the AHJ to review. Research reports from approved sources are intended to assist in the approval of materials or assemblies not specifically provided for in the code.
- For membrane roofing systems, submitting the appropriate data to show compliance with the various aspects of the building code is absolutely acceptable.

Conclusion

- The Authority Having Jurisdiction has the responsibility to approve the use of products and methods of construction used in his or her jurisdiction and to ensure the products and methods of construction conform to the requirements of the applicable building codes.
- Information provided to the AHJ to demonstrate compliance can take several forms.
- A research report will help make the process of review and approval by the AHJ simpler, but should only be mandatory when the product or method of construction is an alternative to that specified in the code.
- AHJs and manufacturers rely on the services of test laboratories, certification agencies and code evaluation agencies that are accredited under internationally accepted standards. Accreditation provides assurance that the agency operates at a minimum level of competence and independence.

Refer to the SPRI Informational Paper and Appendix for a more comprehensive review of code evaluations and supplemental information on requirements for testing, certification and code evaluation agencies.