

Section 23
Building Codes &
Firetemp™ Product Approvals

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Building Codes

The Uniform Building Code (UBC) is a health and safety welfare document. In the area of fire protection for commercial buildings, its purpose is to maximize safety for occupants and minimize property damage. New federal specifications require firestopping and smoke seals around all penetrating items, and smoke seals where dissimilar fire separations meet. Most institutional buildings are covered under the UBC. These include hospitals and care homes, universities and schools, federal prisons, hydro projects, and nuclear power plants.

In addition to the Uniform Building Code (UBC), there are other national and regional codes. Certain areas of the county also require regional approvals.

UL and other third-part testing agencies must obtain accreditation for their individual specialties - such as fire resistance testing - from the Code Body Authority.

Regional Model Building Codes

Sections of various regional codes regulated by different organizations apply to firestopping:

ICBO - International Conference of Building Officials has the Uniform Building Code (UBC); Chapters 17 and 43 refer to firestopping.

SBCCI - Southern Building Code Congress International; Standard Building Code: Chapters 7, 10 and 17

BOCA - Building Officials and Code Administrators International; National Building Code: Article 9

CABO - Council of American Building Officials is a coordinating agency between ICBO, SBCCI, and BOCA

National Building Codes

Sections of certain national organizations' codes, recognized throughout their countries, also pertain to firestopping. These are:

NEC - National Electric Code: Section 300.21

NFPA 101 - The National Fire Protection Association Life Safety Code: Chapter 6

NFPA 70 - The National Fire Protection Association, National Electric Code: Chapters 3, 7 and 8

NBC - National Building Code of Canada

Local and Regional Approvals

Additional local and regional approvals are required in some areas. Cities and organizations issuing reports covering these additional approvals involving firestopping include:

- City of New York, NY: MEA Firetemp™ CI 106-99-M, Firetemp™ SI 107-99-M, Firetemp™ SE 108-99-M
- City and County of Los Angeles (COLA), CA: complies per UL listing
- California State Fire Marshal (CSFM)
- Southern Building Code Congress International (SBCCI)
- Building Officials and Code Administrators International (BOCA)
- International Conference of Building Officials (ICBO)

Industry Associations

There are also two other industry associations whose names and initials appear frequently in conjunction with firestopping issues:

IFC - International Firestop Council, a not-for-profit association of manufacturers, distributors, and users of fire protective materials and systems, that promotes the technology of fire containment in modern building construction through research, educational programs, and development of safety standards and code provisions..

ASTM - American Society for Testing and Materials standards (firestop related committee groups such as ASTM E.05), whose test standards are followed by accredited testing agencies in the US other than Underwriters Laboratories, Inc.

Third-Party Testing Agencies

To comply with building code, passive fire protection products classified as “Regulated Construction Products” must be tested by a third-party testing agency as part of a firestop system. The third-party testing agency assures performance to certain tested and listed uses, which appear in their directory. It is important to remember that firestop systems - not individual products - are tested for their fire resistance. That is why firestop products cannot be used in applications for which they are not specifically approved and listed.

Fire Resistance Test Standards

Third-party testing agencies have their own ways of referring to their approvals of standard testing. They use a combination of letters and numbers, which vary.

Beginning Letters

ASTM: Warnock Hersey and most other agencies use ASTM - a direct

reference to the American Society for Testing and Materials standards, the committee concerned with fire resistance regulations and codes.

UL: Underwriters Laboratories, Inc. has the designation of UL for its own tests.

CAN/ULC: The testing agency in Canada.

Numbers

Following these letters, a series of numbers refers to a specific testing area.

Letter/Number Combinations

The letter and number combinations for fire resistance test standards are -

Testing of Through-Penetration Firestopping:

ASTM E 814

UL 1479

Fire Tests of Building Construction and Materials:

ASTM E 119

UL 263

Tests of Fire Resistance of Building Joint Systems

UL 2019

Testing of Surface Burning Characteristics of Building Materials

ASTM E 84

UL 723

Standard Method of Fire Tests of Firestop Systems

CAN4-S115