

Chapter 296-156 WAC

Fire-Resistant Material Applicators Certification

WAC 296-156-001 Purpose and scope.

This standard contains requirements under chapter 49.105 RCW for:

- (1) Contractors performing work that includes the application of fire-resistant materials to use a certified fire-resistant material applicator for installations in the following buildings:
 - (a) Wet or dry mix materials, cementitious materials, and fibrous materials, applied to achieve an hourly fire-resistant rating for buildings classified as construction types I, II, III, IV, and V, as defined by the international building code.
 - (b) Sealants, putty, and caulking used for firestop systems, applied to risk category III and IV buildings, as defined by the international building code.
- (2) Training and certification of fire-resistant materials applicators, including training course approval, and the issuance of worker certification.

WAC 296-156-003 Definitions.

Unless the context clearly requires otherwise, the definitions in this section apply throughout this chapter.

- (1) **Certified fire-resistant material applicator.** An individual certified by the department to apply fire-resistant material. Certified fire-resistant material applicator does not include an individual applying fire-resistant material in or to the individual's own residence.
- (2) **Competent instructor.** An instructor who has demonstrated satisfactory performance in the occupation for a minimum of three years beyond the customary learning period for that occupation and who:
 - (a) Meets the requirements of the state board for community and technical colleges for a vocational-technical instructor; or
 - (b) Is recognized within an industry as having expertise in a specific occupation and is a subject matter expert; and
 - (c) Has training in teaching techniques and adult learning styles. The training may be acquired before, or within one year after, the competent instructor begins to provide related supplemental instruction.
- (3) **Contractor.** An employer performing work that includes the application of fire-resistant material, or any person, partnership, or business entity that does not have employees but that performs work that includes the application of fire-resistant material.
- (4) **Department.** The department of labor and industries.
- (5) **Director.** The director of the department of labor and industries or the director's designee.
- (6) **Fire-resistant material.**
 - (a) Wet or dry mix materials, cementitious materials, and fibrous materials, applied to achieve an hourly fire-resistant rating for buildings classified as construction types I, II, III, IV, and V, as defined by the international building code; and
 - (b) Sealants, putty, and caulking used for firestop systems, applied to risk category III and IV

buildings, as defined by the international building code.

(7) **Fireproofing.** Materials applied to building structural components to preserve the integrity of those components in the event of a fire.

(8) **Fire stop.** Materials used to block holes and penetrations in rate fire walls and barriers to prevent fire from passing through.

(9) **Person.** One or more individuals, partnerships, associations, corporations, business trusts, legal representatives, or any organized group of persons.

(10) **Registered apprentice.** An apprentice registered in an apprenticeship program approved by the Washington state apprenticeship and training council according to chapter 49.04 RCW.

WAC 296-156-010 Certification verification and penalties.

- (1) Contractors must ensure all fire-resistant material is applied by a certified fire-resistant material applicator prior to the individual applying any fire-resistant material. The applicator's certification must be for the correct specialty for the materials being applied (i.e. fireproofing or fire stop).
 - (2) Activities considered application of fire-resistant material include:
 - (a) Determining placement of fire-resistant materials, which structural components materials are to be protected, or the type of fire-resistant material being used during an application.
 - (b) Preparing fire-resistant materials on-site for application, including mixing and loading materials into equipment used for application.
 - (c) Setting up equipment used for application of fire resistant materials.
 - (d) Operating equipment applying fire-resistant materials.
 - (e) Hand application of fire resistant materials.
 - (f) Inspection of work and verification of proper installation.
 - (3) Certification requirements do not apply to fire protection engineers, or other qualified professionals such as architects and building inspectors, during design, contract management, or inspection of fire-resistant materials.
 - (4) A contractor must verify that the individual is certified by the department by obtaining written documentation of the individual's certification.
 - (a) Contractors must retain the written documentation for a period of 10 years from the time of the work.
 - (b) Written documentation is a copy of the certificate issued by the department to the individual or a copy of verification provided by the department through publicly accessible electronic systems or through written correspondence.
 - (5) Enforcement of this rule will follow department rules and policies pursuant to chapter 49.17 RCW. In addition, the following statutory penalties and actions will apply to contractor violations of the requirements in WAC 296-156-010(1).
 - (a) The first violation of this section will have a minimum penalty of \$2,500.
 - (b) The second violation will have a minimum penalty of \$3,000 and debarment from bidding for public works projects for one year.
 - (c) The third and subsequent violations will have a minimum penalty of \$5,000 and the contractor's permanent debarment from public works projects.
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WAC 296-156-020 Training certification.

- (1) To qualify for a fire-resistant materials applicator training certificate, workers must:
 - (a) Attend and successfully complete an approved 40-hour spray fireproofing or fire stop training course for applicators.
 - (b) Complete an application through an approved training course sponsor.
- (2) Applicators must do the following to renew and continue certification:
 - (a) Attend and successfully complete an approved spray fireproofing or fire stop refresher training course for applicators.
 - (b) Complete an application through an approved training course sponsor.
 - (c) The refresher training may be taken up to 1 year prior to expiration of the applicator's certification and will have their certification extended for 5 years. Training conducted earlier than this will extend the certification to 5 years from the training date.
 - (d) Applicators may not work without a current certificate, but may complete refresher training for up to 3 years following expiration. Certification will be reissued for 5 years from the training date
 - (e) Initial training must be repeated for certifications that have lapsed more than 3 years.
- (3) Upon receipt of the verification of completion of approved training, and the completed application, the department will issue a certificate to the worker which will include:
 - (a) The name of the person awarded the certificate;
 - (b) Certificate number;
 - (c) Expiration date; and
 - (d) A statement that the person receiving the certificate has completed the type of training listed on the certificate
- (4) Certificates will be valid for 5 years from the date of course completion.
- (5) The department may suspend or revoke a certificate as provided in WAC 296-156-050.

WAC 296-156-030 Training course approval.

- (1) Training courses may be sponsored by any person, or other entity having department approval. There are four separate courses which are approved separately. Training sponsors may be approved to train in more than one course. The courses are:
 - (a) Fireproofing initial training
 - (b) Fireproofing refresher training
 - (c) Fire stop initial training
 - (d) Fire stop refresher training
- (2) An approved course must include in-person and hands-on instruction, and meet the minimum required elements for approved course in WAC 296-156-035 including topics and hours.
- (3) Prior to receiving department approval, each course must be evaluated by the department for the breadth of knowledge, course content, training techniques, and experience required to properly train workers. Sponsors of training courses proposed for approval must submit:
 - (a) Background information about course sponsors;
 - (b) Course locations;

- (c) Course fees;
 - (d) Copies of course handouts;
 - (e) A detailed description of course content and the amount of time allotted to each major topic. See WAC 296-156-060 for a list of required training topics that must be included;
 - (f) A description of teaching methods to be utilized and a list of all audio-visual materials; the department may, in its discretion, request that copies of the materials be provided for review;
 - (g) A list of all personnel involved in course preparation and presentation and a description of the background, special training and qualifications of each. Training must be taught by competent instructors. The department may, in its discretion, require proposed instructors to pass an examination on subjects related to their respective topics of instruction;
 - (h) A description of student evaluation methods;
 - (i) A description of course evaluation methods;
 - (j) Any restrictions on attendance (language, class size, affiliation, etc.);
 - (k) A list of any other states that currently approve the training course; and
 - (l) The amount and type of hands-on training.
- (4) Materials may be submitted electronically through the Fire Resistant Materials online portal
 - (5) For timely approval, the initial application for training course approval and course materials must be submitted to the department at least 60 days prior to the requested approval date.
 - (6) The decision to grant or renew approval of a training course is the sole discretion of the department.
 - (a) Following approval of a training course, the department will issue the course sponsor an approval that is valid for three years from the date of issuance.
 - (b) Application for renewal must follow the procedures described in subsections (3) and (4) of this section.
 - (7) In recognition that the industry is evolving, the department reserves the right to require additional subjects to be taught and to specify the amount of time which must be allotted to adequately cover required subjects. To ensure adequate coverage of required material, each course sponsor must be provided and required to incorporate into their training course, a detailed outline of subject matter developed by the department.
 - (8) For timely approval, the training course approval renewal must be received by the department no later than 30 days before the approval expiration date.
 - (9) Any changes to a training course must be approved by the department in advance.
 - (10) The course sponsor must provide the department with a roster of all persons who have completed the training course. The list must be provided no later than 10 days after course completion and must include the:
 - (a) Training course provider name;
 - (b) Instructor name(s);
 - (c) Course name;
 - (d) Dates of class;

- (e) Location of class;
 - (f) Student's name;
 - (g) Student's mailing address; and
 - (h) Certificate number (if applicable).
- (11) The course sponsor must notify the department, in writing, at least 14 days before a training class is scheduled to begin. The notification must include the date, time, instructor, and address where the training will be conducted.
- (12) A representative of the department may, at the department's discretion, attend a training course as an observer to verify that the training course is conducted in accordance with the program approved by the department.
- (a) Course sponsors conducting training outside the state of Washington must reimburse the department for reasonable travel expenses associated with department audits of the training courses.
 - (b) Reasonable travel expenses are defined as current state of Washington per diem and travel allowance rates including airfare and/or surface transportation rates. Such reimbursement must be paid within 30 days of receipt of the billing notice.
- (13) The training course sponsor must limit each class to a maximum of 50 participants.
- (14) There must be at least one instructor for every 25 students for classroom instruction and one instructor for every 10 students during hands-on instruction.
- (15) Denial, suspension, or revocation of approval will be done in accordance with WAC 296-156-050.
- (16) Recordkeeping requirements for training providers: All approved providers of accredited training courses must comply with the following minimum recordkeeping requirements:
- (a) Training course materials. A training provider must retain copies of all instructional materials used in delivery of the classroom training such as student manuals, instructor notebooks and handouts.
 - (b) Instructor qualifications. A training provider must retain copies of all instructors' resumes, and the documents approving each instructor issued by the department. Instructors must be approved by the department before teaching courses for accreditation purposes. A training provider must notify the department in advance whenever it changes course instructors. Records must accurately identify the instructors that taught each particular class for each date that a course is offered.
 - (c) Training records. The training providers must maintain records that document the names of all persons who have completed training, the disciplines for which training was provided, training dates and training locations.
 - (d) Record retention and access. The training provider must maintain the records in a manner that allows verification of the required information via telephone, or other communication.
 - (i) The training provider must maintain all required training course materials for a minimum of the duration of the course offering plus four years.
 - (ii) The training provider must maintain all required instructor qualification records for the duration of the instructor's employment plus four years.
 - (iii) The training provider must maintain all required training records for a minimum of four years. The training provider may find it advantageous to retain these records for a longer period.
 - (iv) The training provider must allow reasonable access to all of the records which may be

required by the department for the approval of training providers or the accreditation of training courses, to the department, on request.

- (v) If a training provider ceases to conduct training, the training provider must notify the department and give it the opportunity to take possession of that provider's training records.

WAC 296-156-040 Prior Training and Reciprocity.

- (1) The department may recognize fire-resistant materials applicator training conducted prior to January 1, 2025, or under a certification program in another state provided that:
 - (a) The department evaluates the training and determines the certification to be equivalent to the minimum requirements of this chapter. A request for review of training may be made by a worker, employer, or training provider.
 - (b) The worker can provide evidence of training;
 - (c) For out-of-state training the worker must provide evidence of 1,000 hours of fire-resistant material application work after completion of training.
 - (d) The training was completed within the past five years; and
 - (e) The worker completes a Washington State refresher course.
- (2) The department will maintain a list recognized training accessible from the department's website.
- (3) When the department's evaluation of another state's training and certification procedures identifies deficiencies, the department will require the worker to complete the Washington 8-hour Fire-Resistant Materials Applicator training before issuing a Washington state certification.

WAC 296-156-050 Denial, suspension, and revocation.

- (1) The department may deny, suspend, or revoke a course approval if the course sponsor does not comply with the training standards and accreditation requirements of this chapter.
- (2) The department may suspend or revoke the training course approval, if in the department's judgment the sponsor does not maintain the course content and quality as initially approved, or make changes to a course. The criteria for suspension or revocation of training course approval includes, but is not limited to, at least one of the following:
 - (a) Misrepresentation of the extent of training course approval;
 - (b) Failure to submit required information or notification in a timely manner;
 - (c) Failure to maintain requisite records;
 - (d) Falsification of accreditation records, instructor qualifications, or other accreditation information; or
 - (e) Failure to adhere to the training standards and accreditation requirements of this chapter.
- (3) The department may deny, suspend, or revoke any certificate issued under this chapter if the certificate was obtained through error or fraud.
- (4) The criteria for denying, suspending, or revoking a certificate for workers must include at least one of the following:
 - (a) Obtaining certification from a training provider that does not have approval to offer training;
 - (b) Obtaining certification through fraudulent representation of training documents;

- (c) Obtaining training documentation through fraudulent means.
- (5) Before any course approval or certificate may be denied, suspended, or revoked, the holder thereof must be given written notice of the department's intention to do so, mailed by certified mail, return receipt requested, to the holder's last known address.
- (6) A denial, suspension, or revocation order may be appealed in accordance with RCW 49.17.140. Any party aggrieved by an order of the board of industrial insurance appeals may obtain superior court review in the manner provided in RCW 49.17.150.

WAC 296-156-060 Training Course Content

- (1) Fireproofing initial training must contain the content listed in Table 1.

Table 1: Training course content for fireproofing

Goal of certification: Provide the necessary training to understand the procedures to properly perform application of SFRM (Spray Fire Resistant Materials) in the construction industry as described in ASTM E1513. Participants will learn practical use of SFRMs, tools of the trade, basic work processes, and safe working practices.	
COURSE OUTCOMES/OBJECTIVES Upon successful completion of this course, students will be able to:	
<ul style="list-style-type: none"> • Identify and discuss potential hazards on the construction site • Define Spray fireproofing and explain why it is used • Proper material handling • Identify materials used in fireproofing • Identify common machines used in work processes • Identify pre- set up planning • Identify nozzle parts • Knowing parts of beams • Proper covering • Describe appropriate methods of clean up • Demonstrate spraying techniques • Demonstrate knowledge of inspection process • Demonstrate hands on understanding 	
Training Syllabus (36 hrs)	
Training overview/Method	(10 hrs)
<ul style="list-style-type: none"> • In class instruction • Presentation with visual aids • Job Site Safety and Professionalism • Fireproofing terms • Review codes and best practice • PPE • Poly protection/covering • Typical Equipment/scaffolds • Machines/pumps • Jobsite hazards 	

<ul style="list-style-type: none"> • Fireproofing materials • Application techniques • Inspection
Skills check (Hands on) (26 hrs)
<ul style="list-style-type: none"> • Demonstrate knowledge of site preparation • Machine setup 4 hrs • Proper covering and protection 3hrs • Material handing/mixing • Job Site Safety and Professionalism 1hr • Maintenance 2 hrs • General housekeeping 1 hrs • Material application • Spray application 8 hrs • Hand application 1 hrs • Trouble shooting 2 hrs • Clean up • Remove poly protection 2 hr • Overspray removal 2 hr
Resource materials <ul style="list-style-type: none"> • UL best practice guide • ASTM E1513 • Safety Data Sheets • Monokote mk6 • Calco 300 • Blaze shield hs • Monokote z106 • Application diagrams • Isolatek • monokote

- (2) Fireproofing refresher training must:
 - (a) Contain a combination of topics listed in Table 1
 - (b) Not contain course materials other than those listed in Table 1
- (3) Fire stop initial training must contain the content listed in Table 2.

Table 2: Training course content for firestop

<p>Goal of certification: Provide the necessary training to understand the procedures to properly perform application of FSRM (Fire Stop Resistant Materials) in the construction industry. Participants will learn practical use of FSRMs, tools of the trade, basic work processes, and safe working practices.</p> <ul style="list-style-type: none"> • Introduction to Firestop
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What is firestop

Knowing the difference – ignition source vs fuel sources

- Conditions required for fire



- Products of combustion

- History of firestop

Fire event timeline during the 20th and 21st century

Recent statistics

Future of firestop

Major events help shape the firestop industry

Hartford Hospital fire 1961

Browns Ferry Nuclear fire 1975

MGM Grand Hotel fire 1980

Station Night Club fire 2003

- Containment

Three principles of fire protection

Active vs Passive fire protection

Theory of compartmentation

- Common fire stop terms

- Go over glossary of terms
- Through penetrations vs. membrane penetrations
- Annular spaces
- Authorities and jurisdictions

- Specific Trades Related to FireStop

- This course provides a basic overview of various construction disciplines as they relate to the firestop industry. Topics include work processes and utility identification of Plumbing, HVAC, Electrical, and Fire Protection systems.

- Test Standards and Firestop codes

- UL (Independent Testing Laboratories)
- ASTM (American Society for Testing Materials)
- Firestop testing standards
 - ASTM E 814
 - ASTM E 1399
 - ASTM E 1966
 - UL 2079 Standard
 - UL-1479 Standard
 - International Building Code Chapter 7
 - International Fire Code Chapter 7
 - NFPA 101

- Location requirements of firestop

- Through penetration firestop systems
- Location requirements of firestops
- Understanding Sound Transmission Class rating (STC)
- Fire-resistant ratings
- Fire barriers

- UL Fire Stop directory

- Underwriters Laboratories firestop listing directory
- UL systems selection
- Nomenclature for firestop through penetrations

- Anatomy of a UL systems – through penetrations
- Floor - concrete
- Floor – wood framed
- Putty pad rules
- Oversized box installations
- Nomenclature for firestop-rated joints
- Identify and discuss potential hazards on the construction site
- Proper material handling
- Identify materials used in fireproofing
- Identify pre-set up planning
- Describe appropriate methods of clean up
- Demonstrate knowledge of inspection process
- Demonstrate hands on understanding

Training overview/Method (10 hrs)

- In class instruction
- Presentation with visual aids
- Job Site Safety and Professionalism
- Fireproofing terms
- Review codes and best practice
- PPE
- Protection/covering
- Typical Equipment/scaffolds
- Jobsite hazards
- Fireproofing materials
- Application techniques
- Inspection

Skills check (Hands on) (26 hrs)

Demonstrate knowledge of site preparation and installation

- | | |
|---------------------------------------|--------|
| ● Equipment/Machine setup | 1 hrs |
| ● Proper prep and protection | 2 hrs |
| ● Material handing/mixing | 1 hrs |
| ● Job Site Safety and Professionalism | 1 hrs |
| ● Maintenance | 1 hrs |
| ● General housekeeping | 1 hrs |
| ● Material system installation | 15 hrs |
| ● Trouble shooting | 1 hrs |
| ● Clean up | 1 hrs |
| ● Protection removal | 2 hrs |

Total training Time (36 hrs)

Resource materials

- UL best practice guide
- Safety Data Sheets
- Application diagrams

(4) Fire stop refresher training must:

- (a) Contain a combination of topics listed in Table 2
- (b) Not contain course materials other than those listed in Table 2

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