

Chapter 296-156 WAC
FIRE-RESISTANT MATERIALS APPLICATOR CERTIFICATION

NEW SECTION

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, covered by ASTM 15.13.

(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 material applicators, including training course approval, and the issuance of individual certification.

(3) The following are exempt from this rule:

(a) Applicators for firestop that do not apply in building risk categories I or II according to the International Building Code (IBC) Structural Design 1604.5 or the most currently recognized edition as adopted by the state of Washington building code council;

(b) Gypsum wallboard installation;

(c) Specialized concrete placement;

(d) Intumescent coatings;

(e) Wall, soffit or other framing of metal/steel studs or dimensional lumber;

(f) Buildings that fall under the International Residential Code such as single-family residences, duplexes, and townhomes;

(g) Company project team members such as project managers, project engineers, superintendents, fire protection engineers, architects and building inspectors, design management, contract management, or any individual not responsible for the direct application of fire-resistant materials.

NEW SECTION

WAC 296-156-003 Definitions. Unless the context clearly requires otherwise, the definitions in this section apply throughout this chapter.

(1) **Authorized training provider.** An apprenticeship program registered with the Washington state apprenticeship and training council, by a fire-resistant material manufacturer, or other certified training provider approved by the department to provide training in the application of fire-resistant materials.

(2) **Certified fire-resistant material applicator.** An individual certified by the department to apply fire-resistant material.

(3) **Certificate.** A document issued by the department that validates an individual's completion of an approved fire-resistant material applicators training course and authorizes an individual to apply fire-resistant materials, install firestop, or both.

(4) **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.

(5) **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.

(6) **Department.** The department of labor and industries.

(7) **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.

(8) **Fireproofing or spray fireproofing.** Is the use of spray-applied fire-resistant or resistive materials (SFRM) in a building to prevent structural collapse and allow safe egress of occupants in case of a fire.

(9) **Firestop.** Materials used to form a passive fire protection that is used to seal around openings, between joints in a fire-resistance-rated wall, floor, ceiling, or shaft system.

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

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

NEW SECTION

WAC 296-156-010 Certification verification and penalties. (1) Beginning one year from the effective date of this rule, 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., spray fireproofing or firestop).

(2) Activities considered as application of fire-resistant material include any of the following:

(a) A certified applicator who determines 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) Installation of the fire-resistant material whether it would be a spray fireproofing or firestop installation.

(c) Operating equipment applying fire-resistant materials.

(d) Hand application of fire-resistant materials.

(3) A contractor must verify that the individual has a certificate.

(a) Written documentation is a copy of the certificate issued by the department or through written correspondence.

(b) Employers must retain the documentation, for a period of 10 years from the time of the work.

(4) 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.

NEW SECTION

WAC 296-156-020 Applicator training and certification requirements. (1) To qualify for a fire-resistant material applicators certification, individuals must:

(a) Attend and successfully complete an approved spray fireproofing or firestop fire-resistant material training course for applicators.

(b) The courses are:

- Spray fire-resistant material full course (32 hours)
- Spray fire-resistant material refresher course (8 hours)
- Firestop full course (24 hours)
- Firestop refresher course (8 hours)

(c) Complete and submit an application upon completion of an approved certification training program to the department.

(2) Certification renewal. A refresher training by an authorized training provider is required every five years. Applicators must do the following to renew and continue certification:

(a) Attend and successfully complete an approved certification training program.

(b) The refresher training may be taken prior to expiration of the applicator's certification and will have their certification extended for five years from the date of training.

(c) Applicators may not work without a current certificate, but may complete refresher training for up to two years following expiration. Certification will be reissued for five years from the training date.

- (d) Initial training must be repeated for certifications that have lapsed more than two years.
- (e) Email the following documents to the department:
- (i) Current copy of the individual's fire-resistant material applicator certification;
 - (ii) Individual application for the renewed certification; and
 - (iii) Documentation from the authorized training provider of the type of training provided of the individual.
- (3) The certificate will include all of the following information:
- (a) The name of the person awarded the certificate;
 - (b) Certificate number;
 - (c) Expiration date;
 - (d) Name of approved training provider organization and authorized training provider instructor; and
 - (e) A statement that the person receiving the certificate has completed the type of training listed on the certificate.
- (4) Certificates will be valid for five years from the date of issuance.
- (5) The department may deny, suspend, or revoke a certificate as provided in WAC 296-156-050.

NEW SECTION

WAC 296-156-030 Training course approval. (1) Fire-resistant material applicator training providers and courses may be sponsored by an apprenticeship program registered with the Washington state apprenticeship and training council, by fire-resistant material manufacturers, or other certified training providers that have been approved by the department to provide training in the application of fire-resistant materials. There are four separate courses which are approved separately. An authorized training provider's sponsors may be approved to train in more than one course listed in subsection (2) of this section.

- (2) Fire-resistant material applicator courses include:
- Spray fire-resistant material full course (32 hours)
 - Spray fire-resistant material refresher course (8 hours)
 - Firestop full course (24 hours)
 - Firestop refresher course (8 hours)
- (3) An approved course must include in-person and hands-on instruction, and meet the minimum required elements for an approved course in WAC 296-156-050 including topics and hours.
- (4) Prior to receiving initial or renewal approval by the department, each course must be evaluated for the breadth of knowledge, course content, training techniques, and experience required to properly train course participants. To apply for approval, the following must be submitted:
- (a) Background information about the authorized training provider course sponsors and instructors;
 - (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 based on WAC 296-156-050;

(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) Training must be taught by competent instructors;

(h) A description of course participant evaluation methods;

(i) A description of course evaluation methods;

(j) Any restrictions on attendance (including, but not limited to: Language, class size, affiliation);

(k) A list of any other states that currently approve the training course.

(5) Applications for course approval must be submitted timely. Course instruction cannot begin until department approval has been received. For timely approval (earlier submissions are encouraged):

(a) 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.

(b) The renewal application for the training course approval must be received by the department no later than 30 days before the approval expiration date.

(6) The decision to grant or renew approval of a training course is the sole discretion of the department.

(7) 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.

(8) Any changes to a training course must be approved by the department in advance of those changes being incorporated into and used in a training course.

(9) 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) The authorized training provider 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, surface transportation rates, or both. Such reimbursement must be paid within 30 days of receipt of the billing notice.

(10) The authorized training provider must limit each class to a maximum of 40 participants.

(11) There must be at least one instructor for every 20 students for classroom instruction and one instructor for every 10 students during hands-on instruction.

(12) Recordkeeping requirements: All approved authorized training providers must comply with the following minimum recordkeeping requirements and provide to the department upon request the following:

(a) Training course materials. The authorized training provider must retain copies of all instructional materials used in delivery of the classroom training such as course participant manuals, instructor notebooks, and handouts.

(b) Instructor qualifications. The authorized training provider must retain copies of all instructors' resumes and qualifications. Records must accurately identify the instructors that taught each particular class for each date that a course is offered.

(c) Record retention and access. The authorized training provider must maintain the records in a manner that allows verification of the required information via telephone, or other communication.

(i) All required training records must be maintained for 10 years, it may be advantageous to retain these records for a longer period.

(ii) The authorized training provider must allow reasonable access to all of the records which may be required by the department for the approval of training courses on request.

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

(13) The course sponsor must provide the department with a list of all persons who have completed a basic or refresher training course. The list must be provided no later than 10 days after course completion and must include the name, email address, and mailing address of each trainee.

(14) The department may deny, suspend, or revoke approval of a training course as provided in WAC 296-156-060.

NEW SECTION

WAC 296-156-050 Training course content.

Table 1: Training course content for spray fireproofing material

Goal of certification: Provide the necessary training to understand the procedures to properly perform application of fireproofing materials (also known as spray fire-resistive materials (SFRM)) 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• Knowing parts of structural member, beams, columns• Proper protective coverings• Describe appropriate methods of clean up• Demonstrate spraying techniques• Demonstrate knowledge of inspection process• Demonstrate hands on understanding

Training Syllabus

SFRM Training Requirements	Initial Training (32 hrs.)	Refresher Training (8 hrs.)
In class instruction	√	√
Presentation with visual aids	√	
Knowledge and understanding fire rating	√	√
Job site safety and professionalism	√	√
Fireproofing terms	√	√
Review codes and best practice	√	√

SFRM Training Requirements	Initial Training (32 hrs.)	Refresher Training (8 hrs.)
PPE	√	√
Poly protection/covering	√	
Typical equipment/scaffolds	√	√
Machines/pumps	√	√
Jobsite hazards	√	√
Fireproofing materials	√	√
Application techniques	√	√
Inspection	√	√
Demonstrate knowledge of site preparation	√	
Machine setup	√	
Proper covering and protection	√	
Material handling/mixing	√	
Job site safety and professionalism	√	
Maintenance	√	
General housekeeping	√	
Spray application	√	
Hand application	√	
Trouble shooting	√	
Clean up	√	
Overspray removal	√	
Material application	√	
Conduct hands on application of updated product and systems		
Skill assessment test	√	√

Resource materials

- UL best practice guide
- ASTM E1513
- Safety data sheets
- Monokote mk6
- Calco 300
- Blaze shield hs
- Monokote z106
- Application diagrams
- Isolatek
- Monokote

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 (Firestop Resistant Materials), firestop in the construction industry. Participants will learn practical use of FSRMs, firestop, tools of the trade, basic work processes, and safe working practices.</p>
<p>COURSE OUTCOMES/OBJECTIVES</p> <p>Upon successful completion of this course, students will be able to:</p> <ul style="list-style-type: none"> • Identify and discuss potential hazards on the construction site • Containment • Common firestop terms • UL firestop directory • Identify and discuss potential hazards on the construction site • Specific trades related to firestop • Hands-on experience • Test standards and firestop codes

Firestop Training Requirements	Initial Training (24 hrs.)	Refresher Training (8 hrs.)
Presentation with visual aids	√	√
Firestop terms	√	√
Review UL and ASTM firestop codes and best practice	√	√
PPE	√	√
Firestop materials	√	√
Application technique	√	√
Hands-on install firestop systems	√	√
Know the proper system that should be installed according to submittals, verify proper system	√	√
Conduct destructive testing and verify firestop material was installed correctly	√	
Repair systems that were tested	√	
Material handling/mixing	√	
Material system installation	√	
Troubleshooting	√	
Clean up	√	
Review challenges of firestop installation	√	√
Review updated codes and best practice		√
New/updated firestop product/materials	√	
Updated application techniques	√	
Inspection criteria and protocols	√	√
Conduct hands-on application of updated product and systems		√
Skills assessment test	√	√

NEW SECTION

WAC 296-156-060 Denial, suspension, and revocation. (1) The department may deny, suspend, or revoke a course approval if the authorized training provider does not comply with the training requirements of this chapter.

(2) The department may suspend or revoke the authorized training provider course(s) approval, if in the department's determination the authorized training provider does not maintain the course content and quality as initially approved, or makes changes to a course without resubmitting updated training materials for approval. 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 records, instructor qualifications, or other information;
- (e) Failure to adhere to the training 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 individuals 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 must be given written notice of the department's intention to do so, mailed by certified or electronic (email), 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.