

1 GENERAL

1.1 General Requirements

- .1 All requirements of the Contract apply to and govern all work of this Section.
- .2 Comply with the requirements of Division 1.

1.2 Related Work Specified in Other Sections

- .1 Fire stopping and smoke seals within mechanical assemblies (i.e inside ducts, dampers) and electrical assemblies. (i.e. inside cable trays)

1.3 Standards Referred to in this Section

- .1 Underwriter's Laboratories of Canada (ULC)
 - .1 ULC-S115-11, Standard Method of Fire Tests of Firestop Systems.

1.4 Submittals

- .1 Samples
 - .1 Submit samples in accordance with Section 01 33 00 - Submittal Procedures, if requested by Departmental Representative.
 - .2 Submit duplicate 300 x 300 mm samples showing actual firestop material proposed for project.
- .2 Shop Drawings
 - .1 Submit shop drawings in accordance with Section 01 33 00 - Submittal Procedures.
 - .2 Submit shop drawings to show proposed material, reinforcement, anchorage, fastenings and method of installation. Construction details should accurately reflect actual job conditions.
- .3 Product Data
 - .1 Submit product data in accordance with Section 01 33 00 - Submittal Procedures.
 - .2 Submit manufacturer's product data for materials and prefabricated devices, providing descriptions are sufficient for identification at job site. Include manufacturer's printed instructions for installation.

2 PRODUCTS

2.1 Materials

- .1 Fire stopping and smoke seal systems: in accordance with ULC-S115.
- .2 Asbestos-free materials and systems capable of maintaining an effective barrier against

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- flame, smoke and gases in compliance with requirements of ULC-S115 and not to exceed opening sizes for which they are intended and conforming to special requirements specified in 3.4.
- .3 Firestop system rating: match rating of system passing through.
 - .4 Service penetration assemblies: certified by ULC in accordance with ULC-S115 and listed in ULC Guide No.40 U19.
 - .5 Service penetration firestop components: certified by ULC in accordance with ULC-S115 and listed in ULC Guide No.40 U19.13 and ULC Guide No.40 U19.15 under the Label Service of ULC.
 - .6 Fire-resistance rating of installed fire stopping assembly in accordance with NBC.
 - .7 Fire stopping and smoke seals at openings intended for ease of re-entry such as cables: elastomeric seal.
 - .8 Fire stopping and smoke seals at openings around penetrations for pipes, ductwork and other mechanical items requiring sound and vibration control: elastomeric seal.
 - .9 Primers: to manufacturer's recommendation for specific material, substrate, and end use.
 - .10 Water (if applicable): potable, clean and free from injurious amounts of deleterious substances.
 - .11 Damming and backup materials, supports and anchoring devices: to manufacturer's recommendations, and in accordance with tested assembly being installed as acceptable to authorities having jurisdiction.
 - .12 Sealants for vertical joints: non-sagging.

3 EXECUTION

3.1 Preparation

- .1 Examine sizes and conditions of voids to be filled to establish correct thicknesses and installation of materials. Ensure that substrates and surfaces are clean, dry and frost free.
- .2 Prepare surfaces in contact with fire stopping materials and smoke seals to manufacturer's instructions.
- .3 Maintain insulation around pipes and ducts penetrating fire separation.
- .4 Mask where necessary to avoid spillage and over coating onto adjoining surfaces;

remove stains on adjacent surfaces.

3.2 Installation

- .1 Install fire stopping and smoke seal material and components in accordance with ULC certification and manufacturer's instructions.
- .2 Seal holes or voids made by through penetrations, poke-through termination devices, and unpenetrated openings or joints to ensure continuity and integrity of fire separation are maintained.
- .3 Provide temporary forming as required and remove forming only after materials have gained sufficient strength and after initial curing.
- .4 Tool or trowel exposed surfaces to a neat finish.
- .5 Remove excess compound promptly as work progresses and upon completion.

3.3 Inspection

- .1 Notify Departmental Representative when ready for inspection and prior to concealing or enclosing firestopping materials and service penetration assemblies.

3.4 Schedule

- .1 Firestop and smoke seal at:
 - .1 Penetrations through existing fire-resistance rated gypsum board partitions and walls.
 - .2 Penetrations through fire-resistance rated floor slabs, and ceilings.
 - .3 Around mechanical and electrical assemblies penetrating fire separations.
 - .4 Rigid ducts: greater than 129 cm²: fire stopping to consist of bead of fire stopping material between retaining angle and fire separation and between retaining angle and duct, on each side of fire separation.

3.5 Clean Up

- .1 Remove excess materials and debris and clean adjacent surfaces immediately after application.
- .2 Remove temporary dams after initial set of fire stopping and smoke seal materials.

END OF SECTION