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| Version | | Date | | Description of Revisions | |
| 1 | | August 30, 2006 | | Approved final document. | |
| 2 | | November 13, 2009 | | Modified ‘Related Section’ | |
| 3 | | June 7, 2012 | | Addition of References and Replacement Parts sections to this page. | |
| 4 | | July 6, 2012 | | Change tab settings in page 1-5. | |
| 5 | | April 23, 2015 | | General formatting | |
| 6 | | April 7, 2016 | | Phase 1 Update (AV) | |
| 7 | | November 29,2016 | | Update as per Legal Comments (eDOCs# 6396348) | |

NOTE:

This is a CONTROLLED Document. Any documents appearing in paper form are not controlled and should be checked against the on-line file version prior to use.

**Notice:** This Document hardcopy must be used for reference purpose only.

**The on-line copy is the current version of the document.**

# GEneral

## Related Work

### Fire stopping and smoke seals within mechanical assemblies (i.e. inside ducts, dampers) and electrical assemblies (i.e. inside cable trays) are specified in Division 15 and 16 respectively.

## Related Sections

### *[Under "Related Sections", identify other Sections that are related to, and/or dependent on, the work results or information specified elsewhere. The list should be limited to Sections with specific information that the reader might expect to find in this Section, but is specified elsewhere. For example, if hardware for aluminum entrances is specified in the aluminum entrance Section, a cross-reference would be appropriate in the finish hardware Section. The purpose of this cross-referencing is for information only, to aid in finding those other requirements—not to define the scope of the Section.*

### *Cross-referencing here may also be used to coordinate assemblies or systems whose components may span multiple Sections and which must meet certain performance requirements as an assembly or system.*

### *Contractor is responsible for coordination of the Work.*

### *This Section is to be completed/updated during the design development by the Consultant. If it is not applicable to the section for the specific project it may be deleted.]*

### *[List Sections specifying installation of products supplied but not installed under this Section and indicate specific items.]*

### Section [\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_]: Execution requirements for ...[item]... specified under this Section.

### *[List Sections specifying products installed but not supplied under this Section and indicate specific items.]*

### Section [\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_]: Product requirements for ...[item]... for installation under this Section.

### *[List Sections specifying related requirements.]*

### Section [\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_]: *[Optional short phrase indicating relationship].*

#### Section 01060 – Regulatory Requirements

#### Section 01300 – Submittals

#### Division 15 – Mechanical

#### Division 16 – Electrical

## References

### Comply with the latest edition of the following statutes, codes, standards and all amendments thereto: *[Consultant to verify standards referenced in this Section and amend as required]*

#### American Society for Testing and Materials (ASTM International):

##### ASTM E814-13a, Standard Test Method for Fire Tests of Penetration Firestop Systems.

#### Underwriters Laboratories of Canada (ULC)

##### CAN/ULC-S115-11, Standard Method of Fire Tests of Firestop Systems.

##### ULC Guide No. 40 U19, Firestop Systems

##### ULC Guide No.40 U19.13,

##### ULC Guide No.40 U19.15,

## Submittals

### Samples

#### Submit samples in accordance with Section 01300 - Submittals.

### Shop Drawings

#### Submit shop drawings in accordance with Section 01300 - Submittals.

#### Submit shop drawings to show proposed material, reinforcement, anchorage, fastenings and method of installation. Construction details should accurately reflect actual Site conditions.

### Product Data

#### Submit product data in accordance with Section 01300 – Submittals.

#### Submit manufacturer's product data for materials and prefabricated devices, providing descriptions are sufficient for identification at the Site. Include manufacturer's printed instructions for installation.

## Measurement and Payment

*[Choose one of the following payment language provisions that best suits the individual project.*

*If this Section is not specifically referenced by an item in the Bid Form, please use the following language:*

### The work of this Section will not be measured separately for payment. All costs associated with the work of this Section shall be included in the Contract Price.

*OR If this Section is specifically referenced in the Bid Form, use the following language and identify the relevant item in the Bid Form:*

### All costs associated with the work of this Section shall be included in the price(s) for Item No(s). \_\_\_ in the Bid Form.

*If the work of this Section is to be measured and paid for by several different methods, please amend the standard wording given above to reflect the different methods of measurement and payment.*]

# PRODUCTS

## Materials

### Fire stopping and smoke seal systems: in accordance with CAN/ULC-S115-11 *[and/or ASTM E814-13a, Consultant to modify as required].*

### Asbestos-free materials and systems capable of maintaining an effective barrier against flame, smoke and gases in compliance with requirements of CAN/ULC-S115-11 *[and/or ASTM E814-13a, Consultant to modify as required].*

#### Not to exceed opening sizes for which they are intended [and conforming to special requirements specified in subsection 3.5 below].

#### Firestop system rating: [\_\_\_].

### Service penetration assemblies: certified by ULC in accordance with CAN/ULC-S115-11 [*and/or ASTM E814-13a, Consultant to modify as required].* and listed in ULC Guide No.40 U19.

### Service penetration firestop components: certified by ULC in accordance with CAN/ULC-S115-11 *[and/or ASTM E814-13a, Consultant to modify as required]*. and listed in ULC Guide No.40 U19.13 and ULC Guide No.40 U19.15 under the Label Service of ULC.

### Fire-resistance rating of installed fire stopping assembly in accordance with National Building Code (NBC).

### Fire stopping and smoke seals at openings intended for ease of re-entry such as cables: elastomeric seal.

### Fire stopping and smoke seals at openings around penetrations for pipes, ductwork and other mechanical items requiring sound and vibration control: elastomeric seal.

### Primers: to manufacturer's recommendation for specific material, substrate, and end use.

### Water (if applicable): potable, clean and free from injurious amounts of deleterious substances.

### 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.

### Sealants for vertical joints: non-sagging.

# EXECUTION

## Preparation

### 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.

### Prepare surfaces in contact with fire stopping materials and smoke seals to manufacturer's instructions.

### Maintain insulation around pipes and ducts penetrating fire separation [without interruption to vapour barrier].

### Mask where necessary to avoid spillage and over coating onto adjoining surfaces; remove stains on adjacent surfaces.

## Installation

### Install fire stopping and smoke seal material and components in accordance with ULC certification and manufacturer's instructions.

### 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.

### Provide temporary forming as required and remove forming only after materials have gained sufficient strength and after initial curing.

### Tool or trowel exposed surfaces to a neat finish.

### Remove excess compound promptly as work progresses and upon completion.

## Inspection

### Notify the Consultant when ready for inspection and prior to concealing or enclosing firestopping materials and service penetration assemblies.

## Schedule

### Firestop and smoke seal at:

#### Penetrations through fire-resistance rated masonry, concrete, and gypsum board partitions and walls.

#### Edge of floor slabs at curtain wall and precast concrete panels.

#### Top of fire-resistance rated masonry and gypsum board partitions.

#### Intersection of fire-resistance rated masonry and gypsum board partitions.

#### Control and sway joints in fire-resistance rated masonry and gypsum board partitions and walls.

#### Penetrations through fire-resistance rated floor slabs, ceilings and roofs.

#### Openings and sleeves installed for future use through fire separations.

#### Around mechanical and electrical assemblies penetrating fire separations.

#### 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.

## Special Requirements

### Location of special requirements for fire stopping and smoke seal materials at openings and penetrations in fire resistant rated assemblies are as follows:

#### Non dust generation: at *[insert location]*

#### Movement: [[\_\_\_] [%]].

#### Designed for re-entry, removable at: *[insert location].*

#### [\_\_\_] rating except at *[insert location]*.

## Clean Up

### Remove excess materials and debris and clean adjacent surfaces immediately after application.

### Remove temporary dams after initial set of fire stopping and smoke seal materials.

**END OF SECTION**