



# ADDENDUM No. 4 (Four)

PROJECT NAME: PCA Marten Street  
DATE: August 9, 2019  
PROJECT NUMBER: 16-3841

PAGE : 1 of 5

## ADDENDUM NUMBER #4 (Four)

This Addendum forms part of the Contract Documents and amends the original Drawings and Specifications dated July 19, 2019 and it is to be read, interpreted and coordinated with all other parts. The cost of all contained herein is to be included in the contract sum. The following revisions supersede the information contained in the original drawings and specifications issued for the above-named project to the extent referenced and shall become part thereof.

This Addendum consists of 5 pages.

### GENERAL

Ensure that all parties submitting bids are aware of all items included in this Addendum.

### A1 SPECIFICATION

#### Section 09 96 46 Intumescent Coating

*Add new section, attached to and forming part of this addendum.*

### A2 RESPONSE TO BIDDERS' QUESTIONS

1. Please provide the specs of the intumescent coating to the exterior wall assemblies W2a, W2b, W3, W5, W5a.

**Answer:** *Add new section 09 96 46 Intumescent coating, attached to and forming part of this addendum.*

End of Addendum #4

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**Part 1 General**

**1.1 SUMMARY**

- .1 This Section includes requirements for supply and installation of thin film intumescent fire resistive coatings.

**1.2 RELATED REQUIREMENTS**

- .1 Section 06 10 00 – Rough Carpentry
- .2 Section 07 84 00 – Firestopping and Smoke seals
- .3 Section 09 91 00 – Painting

**1.3 REFERENCES**

- .1 American Society for Testing and Materials International (ASTM)
  - .1 ASTM D2240-15e1, Standard Test Method for Rubber Property - Durometer Hardness.
  - .2 ASTM D2794-93 (2010), Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
  - .3 ASTM D3960-05(2018), Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings.
  - .4 ASTM D4060-14, Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abrader.
  - .5 ASTM E84-18a, Standard Test Method for Surface Burning Characteristics of Building Materials.
  - .6 ASTM E119-18a, Standard Methods for Fire Tests of Building Construction and Materials.
  - .7 ASTM E595-15, Standard Test Method for Total Mass Loss and Collected Volatile Condensable Materials from Out-gassing in a vacuum Environment.
  - .8 ASTM E736/E736M-17, Standard Test Method for Cohesion/Adhesion of Sprayed Fire-Resistive Materials Applied to Structural Members.
  - .9 ASTM E759/E759M-92(2015)e1, Standard Test Method for Effect of Deflection on Sprayed Fire-Resistive Materials Applied to Structural Members.
  - .10 ASTM E761/E761-92(2015)e1, Standard Test Method for Compressive Strength of Sprayed Fire-Resistive Materials Applied to Structural Members.
- .2 Association of the Wall and Ceiling Industries - International (AWCI)
  - .1 AWCI Technical Manual 12-B, Standard Practice for the Testing and Inspection of Field Applied Thin-Film Intumescent Fire-Resistive Materials; an Annotated Guide.
- .3 Intertek Testing Services/Warnock Hersey International, Inc. (ITS/WH)
  - .1 Directory of Listed Products, current edition.
- .4 Underwriters Laboratories Inc. (ULI)
  - .1 Fire Resistance Directory, Volume 1, current edition.

- .5 Underwriters' Laboratories of Canada (ULC)
  - .1 List of Equipment and Materials, Fire Resistance, current edition.
  - .2 CAN/ULC S102-18, Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.

#### **1.4 ACTION SUBMITTALS / INFORMATIONAL SUBMITTALS**

- .1 Provide product data in accordance with Section 01 33 00 - Submittal Procedures.
  - .1 Submit manufacturer's printed product literature, specifications and data sheet indicating product characteristics, performance and limitation criteria including copies of fire test reports of fireproofing application to substrate materials required and manufacturer's installation instructions.
  - .2 Provide two copies of WHMIS MSDS - Material Safety Data Sheets in accordance with WHMIS acceptable to Labour Canada, and Health and Welfare Canada. Indicate VOC's insulation products and adhesives.
- .2 Submit manufacturer's installation instructions to requirements of Division 01.

#### **1.5 CLOSEOUT SUBMITTALS**

- .1 Operation and Maintenance Data: Submit copies of paint manufacturer's written maintenance information for inclusion into operation and maintenance manual specified in Section 01 78 00 – Closeout Submittals including specific warning of any maintenance practice or materials that may damage or disfigure the finished Work.

#### **1.6 QUALITY ASSURANCE**

- .1 Regulatory Requirements: Conform to applicable building code for fire resistance rating; submit certification of acceptability of fireproofing materials to Authority Having Jurisdiction.
- .2 Qualifications:
  - .1 Manufacturer: Company specializing in manufacturing products of this Section.
  - .2 Applicator: Approved, licensed and supervised by the manufacturer of fireproofing materials. Company with minimum 5 years documented experience.
  - .3 Product: Manufactured under ULC Follow up Program. Each container or package shall bear ULC label.

#### **1.7 DELIVERY, STORAGE AND HANDLING**

- .1 Delivery and Acceptance Requirements: Deliver and store materials at a temperature not below 5°C in a dry, protected area, off ground in original, undamaged, sealed containers with manufacturer's labels and seals intact.
- .2 Storage and Handling Requirements: Discard any materials which have come into contact with contaminants prior to actual use.

## **1.8 PROJECT CONDITIONS**

- .1 Ambient Conditions: Do not apply sprayed intumescent fireproofing when temperature of substrate and surrounding air is below 5°C and as follows:
  - .1 Do not apply intumescent fireproofing until concrete toppings and roofing applications have been installed.
  - .2 Provide ventilation in areas to receive work of this Section, during and 24 hours after application.
  - .3 Relative humidity must not exceed 75% throughout the total period of application and drying for the intumescent fireproofing, and must not exceed 65% throughout the application and drying for the protection decorative finish coat.

## **1.9 WASTE MANAGEMENT AND DISPOSAL**

- .1 Separate waste materials for recycling in accordance with Section 01 74 21 - Waste Management and Disposal.

## **Part 2 Products**

### **2.1 MANUFACTURERS**

- .1 Basis of Design Products: Products named in this Section were used as the basis of design for the project; additional manufacturers offering similar products may be incorporated into the work of this Section provided they meet the performance requirements established by the named products and provided they submit requests for substitution a minimum of ten (10) days in advance of Bid Closing.

### **2.2 DESIGN REQUIREMENTS**

- .1 Delegated Design Requirements: Design thickness of intumescent coatings required by the Contract Documents to withstand fire ratings indicated and in accordance with requirements of the Building Code.
- .2 Performance Requirements: Manufacturer shall design proprietary coating systems to withstand the listed fire resistance ratings in accordance with the Building Code, Underwriters Laboratories Canada, and Authority Having Jurisdiction.

### **2.3 MATERIALS**

- .1 Wood Substrate:
  - .1 Water based intumescent paint to ASTM E119 with Class A flame spread to ASTM E84/UL723.
  - .2 Acceptable Materials:
    - .1 Fire Barrier Paint, FlameOFF
    - .2 DC333, International Fireproof Technology Inc.

**Part 3 Execution**

**3.1 EXAMINATION**

- .1 Examine surfaces to receive work of this Section and report any defects which may affect the Work of this Section. Identification marking of the components must be by way crayon to facilitate ease of removal prior to application of the intumescent fireproofing.
- .2 Verify the substrate surfaces are ready to receive work; weld flashes should be ground smooth prior to commencement of application.
- .3 Verify that all clips, hangers, sleeves and similar devices have been attached.
- .4 Confirm compatibility of surfaces to receive fireproofing materials; beginning of installation means acceptance of existing surfaces.

**3.2 PREPARATION**

- .1 Clean substrate free of dust, dirt, grease or other foreign matter which would impair bond of fire resistance materials.
- .2 Protect adjacent surfaces and equipment from over-spray of sprayed materials.

**3.3 APPLICATION**

- .1 Thoroughly mix the intumescent fireproofing in accordance with manufacturer's instructions and apply in sufficient thickness to achieve rating with as many passes as necessary to cover with, uniformed in texture.
- .2 Apply primer, intumescent fireproofing and protective decorative finish using spray, brush or roller to film thicknesses recommended by manufacturer based on mass and perimeter area of members being coated.

**3.4 REPAIR**

- .1 Patch and repair any fireproofing that has been damaged by this or any other section. Cost of repairs to be borne by Sections of work responsible for damage, and as assessed by Contractor.

**3.5 CLEANING**

- .1 Remove fireproofing from materials and surfaces not specifically required to be fireproofed.
- .2 Remove excess material, overspray, droppings and debris.

**END OF SECTION**