

PART 1 - GENERAL

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| <u>1.1 RELATED SECTIONS</u> | .1 | Section 01 33 00 - Submittal Procedures.  |
|                             | .2 | Section 01 74 21 - Construction/Demolition Waste Management and Disposal.   |
|                             | .3 | Section 01 45 00 - Testing and Quality Control.   |
| <u>1.2 REFERENCES</u>       | .1 | Canadian Urethane Foam Contractors' Association Inc. (CUFCA)  |
|                             | .2 | Underwriters' Laboratories of Canada (ULC)  |
|                             | .1 | CAN/ULC-S101, Fire Endurance Tests of Building Construction and Materials.  |
|                             | .2 | CAN/ULC-S102, Surface Burning   |
|                             | .3 | Characteristics of Building Materials and Assemblies.   |
|                             | .4 | CAN/ULC-S705.1, Standard for Thermal Insulation Spray Applied Rigid Foam, Medium Density, Material Specification.                     |
|                             | .5 | CAN/ULC-S705.2, Standard for Thermal Insulation Spray Applied Rigid Foam, Medium Density, Installer's Responsibilities-Specification. |
| <u>1.3 TEST REPORTS</u>     | .1 | Submit test reports, verifying qualities of foam sealant meet or exceed requirements of this specification.                           |
|                             | .2 | Submit test reports in accordance with CAN/ULC-S101 for fire endurance and CAN/ULC-S102 for surface burning characteristics.          |

- 1.4 QUALITY ASSURANCE .1 Applicators to conform to CUFCA Quality Assurance Program.
- 1.5 SAFETY REQUIREMENTS .1 Protect workers as recommended by CAN/ULC-S705.2 and manufacturer's recommendations:  
    .1 Workers must wear gloves, respirators, dust masks, eye protection, protective clothing when applying foam sealant.  
    .2 Workers must not eat, drink or smoke while applying foam sealant.
- 1.6 PROTECTION .1 Ventilate area to receive insulation by introducing fresh air and exhausting air continuously during and 24 hours after application to maintain non-toxic, unpolluted, safe working conditions.  
    .2 Provide temporary enclosures to prevent spray and noxious vapours from contaminating air beyond application area.  
    .3 Protect adjacent surfaces and equipment from damage by overspray, fall-out, and dusting of insulation materials.  
    .4 Dispose of waste foam sealant daily in location designated by Departmental Representative and decontaminate empty drums in accordance with foam sealant manufacturer's instructions.

1.7 ENVIRONMENTAL  
REQUIREMENTS

- .1 Apply foam sealant only when surfaces and ambient temperatures are within manufacturers' prescribed limits.

PART 2 - PRODUCTS

2.1 MATERIALS

- .1 Low expanding, one-component, polyurethane foam sealant, curing to a semi-rigid, closed cell urethane foam providing a RSI of 0.9 per 25.4 mm. To meet the following physical properties:
- .1 Density: 25.7 kg/m<sup>3</sup>
  - .2 Compressive Strength  
Parallel @ 10%: 69-96 psi
  - .3 Tensile Strength: 103 psi
  - .4 Water Vapour  
Transmission: 5.97 perms
  - .5 Flame Spread: 20
  - .6 Smoke Development: 70

PART 3 - EXECUTION

3.1 APPLICATION

- .1 Apply foam sealant to clean surfaces in accordance manufacturer's printed instructions. Surfaces to be free of dust, dirt, oil and other foreign materials.
- .2 Cover surfaces not intended to be foamed.
- .3 Apply foam sealant to perimeter of openings indicated and to thickness as recommended by manufacturer. Trim excess cured foam from finished area.
- .4 Cover exposed urethane foam sealants to protect from adverse effects from ultraviolet light (sunlight).