

Part 1 General

1.1 RELATED SECTIONS

- .1 Section 01 74 19 – Construction Waste Management And Disposal
- .2 Section 01 45 00 – Quality Control
- .3 Section 01 51 00 – Temporary Utilities

1.2 REFERENCES

- .1 Canadian Urethane Foam Contractors' Association Inc. (CUFCA)
- .2 Underwriters' Laboratories of Canada (ULC):
 - .1 CAN/ULC-S101-07 – Fire Endurance Tests of Building Construction and Materials
 - .2 CAN/ULC-S102-07 – Surface Burning Characteristics of Building Materials and Assemblies
 - .3 CAN/ULC-S705.1-01 – Standard for Thermal Insulation Spray Applied Rigid Foam, Medium Density, Material Specification
 - .4 CAN/ULC-S705.2-05 – Standard for Thermal Insulation Spray Applied Rigid Foam, Medium Density, Installer's Responsibilities - Specification

1.3 TEST REPORTS

- .1 Submit test reports, verifying quality of insulation meets or exceeds requirements of this specification, in accordance with Section 01 45 00.
- .2 Submit test reports indicating insulation complies 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 MOCK-UP

- .1 Construct mock-up in accordance with Section 01 45 00.
- .2 Construct mock-up 2 m² minimum, of spray in place urethane foam insulation, in location directed by Departmental Representative. Mock-up may be part of finished work.
- .3 Allow 24 hours for review of mock-up by Departmental Representative before concealing insulation.

1.6 SAFETY REQUIREMENTS

- .1 Protect workers as recommended by CAN/ULC-S705.2 and manufacturer's recommendations:
 - .1 Workers must wear appropriate protective devices and clothing when applying foam insulation.
 - .2 Workers must not eat, drink or smoke while applying foam insulation.

1.7 PROTECTION

- .1 Ventilate enclosed areas in accordance with Section 01 51 00.
- .2 Ventilate enclosed areas where insulation is being applied by introducing fresh air and exhausting air continuously during and 24 hour after application to maintain non-toxic, unpolluted, safe working conditions.
- .3 Provide temporary enclosures to prevent spray and noxious vapours from contaminating air beyond application areas.
- .4 Protect adjacent surfaces and equipment from damage by overspray, fall-out, and dusting of insulation materials.

1.8 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 19.
- .2 Remove from site and dispose of all packaging materials at appropriate recycling facilities.
- .3 Collect and separate for disposal paper, plastic, polystyrene, corrugated cardboard, and other packaging material in appropriate on-site bins for recycling in accordance with Waste Management Plan.
- .4 Fold up metal banding, flatten and place in designated area for recycling.
- .5 Dispose of waste foam daily, and decontaminate empty drums in accordance with foam manufacturer's instructions and CAN/ULC-S705.2.
- .6 Divert metal drums from landfill to metal recycling facility, and to requirements of CAN/ULC-S705.2.

1.9 ENVIRONMENTAL REQUIREMENTS

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

Part 2 Products

2.1 MATERIALS

- .1 Insulation: spray polyurethane complying with CAN/ULC-S705.1.

- .2 Primers: in accordance with manufacturer's recommendations for surface conditions.

Part 3 Execution

3.1 APPLICATION

- .1 Apply insulation to clean surfaces in accordance with CAN/ULC-S705.2 and manufacturer's printed instructions. Use primer where recommended by manufacturer.
- .2 Fill all voids and flutes in metal decking.

END OF SECTION