

1 General

1.1 **SECTION INCLUDES**

- .1 Labour, Products, equipment and services necessary for spray applied thermal barrier work in accordance with the Contract Documents.

1.2 **REFERENCES**

- .1 CAN/ULC-S124, Standard Method of Test for the Evaluation of Thermal barriers for Foamed Plastics.

1.3 **SUBMITTALS**

- .1 Product data:
 - .1 Submit copies of manufacturer's Product data in accordance with Section 01 33 00 indicating:
 - .1 Performance criteria, compliance with appropriate reference standard, characteristics, limitations.
 - .2 Product transportation, storage, handling and installation requirements.
- .2 Certification:
 - .1 Submit certified documentation for each worker performing work of this Section, to substantiate 5 years minimum of experience in sprayed thermal barrier installation.
 - .2 Submit installer's and Product manufacturer's certification verifying compliance with Contract Documents.
 - .3 For assemblies not tested and rated in accordance with CAN/ULC-S124, submit proposals based on related designs using accepted thermal barrier design criteria.

1.4 **QUALITY ASSURANCE**

- .1 Qualifications: Execute work of this Section by manufacturer-approved, skilled, qualified, and experienced workers, trained in installation of work of this Section.

1.5 **SITE CONDITIONS**

- .1 Maintain a 5°C air and substrate temperature for 24 hours before, during, and 24 hours after application in accordance with manufacturer's instructions.
- .2 Ventilate to dry thermal barrier. In enclosed areas circulate interior air and exhaust to the exterior.
- .3 Protect adjacent surfaces and equipment around application areas from overspray, marring or damage. Clean, polish or replace materials damaged to acceptance of Engineer.

2 Products

2.1 **MATERIALS**

- .1 All materials under work of this Section, including but not limited to, primers are to have low VOC content limits.
- .2 Primer/bonding agent: As recommended by spray thermal barrier manufacturer.
- .3 Thermal Barrier: CAN/ULC-S124, Spray applied, single component cementitious thermal barrier with a density of 370 to 380 kg/m3:
 - .1 'A/D Cementitious Thermal Barrier' by A/D Fire Protection Systems Inc.
 - .2 'Monokote Z-3306' by Grace Construction Products.
- .4 Water: Clean, free from organic and mineral impurities which would be harmful to application.

2.2 **MIXING**

- .1 Mix Products in accordance with manufacturer's instructions.

3 Execution

3.1 **EXAMINATION**

- .1 Verify condition and dimensions of previously installed Work upon which this Section depends. Report defects to Engineer. Commencement of work of this Section means acceptance of existing conditions.
- .2 Verify that substrates are compatible and have suitable bonding characteristics to receive thermal barrier.
- .3 Ensure that items required to penetrate thermal barrier are placed before installation of thermal barrier.
- .4 Ensure that ducts, piping, equipments, or other items which would interfere with application of thermal barrier are not positioned until thermal barrier is completed.

3.2 **APPLICATION**

- .1 Use temporary enclosures to prevent spray from contaminating air beyond application area. Protect adjacent surfaces and equipment from damage by overspray, fall-out, and dusting of thermal barrier material. Protect walls, windows, floors and other surfaces around areas to be fireproofed, from marring or damage.
- .2 Clean surfaces to be fireproofed of any foreign matter which would affect adhesion.

- .3 Apply primer as recommended by thermal barrier manufacturer for the particular substrate to be fireproofed.
- .4 Apply thermal barrier in separate coats in accordance with the manufacturer's instructions to total thickness required to achieve fire ratings shown on the Contract Drawings. Comply with accepted ULC or WHI design.
- .5 Maintain continuity of thermal barrier without gaps or voids. Board tamp or trowill thermal barrier before curing.
- .6 Repair thermal barrier damaged by other trades, to acceptance of Engineer.

3.3 **FIELD QUALITY CONTROL**

- .1 Perform field tests required by authorities having jurisdiction.

3.4 **CLEANING UP**

- .1 Clean exposed wall, ceiling or other surfaces of thermal barrier materials to the acceptance of Consultant.

END OF SECTION