

PART 1 - GENERAL

1.1 RELATED SECTIONS

- .1 Section 07 21 16 - Blanket Insulation.

1.2 REFERENCES

- .1 Canadian General Standards Board (CGSB)
- .2 Underwriters Laboratories of Canada (ULC)
 - .1 CAN/ULC-S701-11, Standard for Thermal Insulation, Polystyrene, Boards and Pipe Coverings.
 - .2 CAN/ULC-S704-11, Standard For Thermal Insulation Polyurethane and Polyisocyanurate Boards, Faced.
- .3 Health Canada/Workplace Hazardous Materials Information System (WHMIS)
 - .1 Material Safety Data Sheets (MSDS).

1.3 SUBMITTALS

- .1 Product Data:
 - .1 Submit manufacturer's printed product literature, specifications and data sheet in accordance with Section 01 33 00 - Submittal Procedures.
 - .2 Submit two copies of WHMIS MSDS - Material Safety Data Sheets in accordance with Section 01 33 00 - Submittal Procedures. Indicate VOC's insulation products and adhesives.
- .2 Manufacturer's Instructions:
 - .1 Submit manufacturer's installation instructions.

1.4 QUALITY ASSURANCE

- .1 Test Reports: certified test reports showing compliance with specified performance characteristics and physical properties.
 - .2 Certificates: product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.
 - .3 Health and Safety Requirements: do construction occupational health and safety in accordance with Section 01 35 29 - Health and Safety Requirements.
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1.5 MEASUREMENT FOR PAYMENT

- .1 No separate measurement for payment shall be made for items under this section. Include costs incidental in the Lump Sum Amount of work on the Combined Price Form.

PART 2 - PRODUCTS

2.1 INSULATION

- .1 Type 1: Urethane (Isocyanurate):
 - .1 Faced, to CAN/ULC-S704, Foil Facing, Slip lapped edges, RSI 1.05 per 25 mm, total thickness as indicated on drawings.
- .2 Type 2: Extruded polystyrene (XPs) Expanded polystyrene (EPS): to CAN/ULC-S701.
 - .1 Type: 4.
 - .2 Compressive strength: 415 kPa.
 - .3 Thickness: as indicated on drawings.
 - .4 Size: 610 x 2438 mm.
 - .5 Edges: shiplapped.

2.2 ADHESIVE

- .1 Adhesive (for polystyrene) as recommended by manufacturer.
- .2 Joint Sealing Tape: air resistant pressure sensitive adhesive tape as recommended by insulation manufacturer.

PART 3 - EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

3.2 WORKMANSHIP

- .1 Install insulation after building substrate materials are dry.
 - .2 Install insulation to maintain continuity of thermal protection to building elements and spaces.
 - .3 Fit insulation tight around electrical boxes, plumbing and heating pipes and ducts,
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around exterior doors and windows and other protrusions.

- .4 Keep insulation minimum 75 mm from heat emitting devices such as recessed light fixtures, and CAN/CGA-B149.1 and CAN/CGA-B149.2 type B and L vents.
- .5 Cut and trim insulation neatly to fit spaces. Butt joints tightly, offset vertical joints. Use only insulation boards free from chipped or broken edges. Use largest possible dimensions to reduce number of joints.
- .6 Offset both vertical and horizontal joints in multiple layer applications.
- .7 Do not enclose insulation until it has been inspected and approved by Departmental Representative.

3.3 EXAMINATION

- .1 Examine substrates and immediately inform Departmental Representative in writing of defects.
- .2 Prior to commencement of work ensure:
 - .1 Substrates are firm, straight, smooth, dry, free of snow, ice or frost, and clean of dust and debris.

3.4 RIGID INSULATION INSTALLATION

- .1 Apply adhesive to insulation board in accordance with manufacturer's recommendations.
- .2 Leave insulation board joints unbounded over line of expansion and control joints. Bond a continuous 150 mm wide 0.15 mm modified bituminous membrane over expansion and control joints using compatible adhesive and primer before application of insulation.
- .3 Carefully inspect for continuity of air barrier prior to placement of insulation.

3.5 PERIMETER FOUNDATION INSULATION

- .1 Under slab application: extend polystyrene boards in from perimeter foundation wall as indicated. Lay boards on level compacted fill.

3.6 CAVITY WALL INSTALLATION

- .1 Install urethane insulation boards on outer surface of inner wythe of wall cavity on bed of adhesive.