

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 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
 - .2 Remove from site and dispose of packaging materials at appropriate recycling facilities.
 - .3 Collect and separate for disposal paper, plastic, polystyrene, corrugated cardboard and packaging material in appropriate on-site for recycling in accordance with Waste Management Plan.
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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: ship lapped.

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 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.
 - .4 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.
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- .5 Offset both vertical and horizontal joints in multiple layer applications.
- .6 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.

3.6 CLEANING

- .1 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.