

PART 1 GENERAL

1.1 REFERENCE

- .1 Comply with the General Conditions of the Contract, Supplementary General Conditions and the requirements of Division 1.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- .1 Excavating, Backfilling and Grading Section 02200
- .2 Cast in Place Concrete Section 03300
- .3 Waterproofing Section 07155

1.3 SCOPE OF WORK INCLUDED

- .1 Supply and install perimeter insulation placed 1.2m vertically down from Level 1 finished floor line. Supply and install insulation under entire floor areas which all have in floor heating. Refer to A2.2 floor finish plan for extents.

1.4 QUALITY ASSURANCE

- .1 Reference standard quoted in Contract Documents refers to: CAN/CGSB-51.30M, Thermal Insulation, polystyrene boards and pipe covering.

1.5 PRODUCT DELIVERY, STORAGE AND HANDLING

- .1 Store insulation materials in dry areas, protected from wetting, sunlight and traffic. Store insulation board flat, on a flat surface, and to prevent edge damage and placing of materials on top of stored boards.
- .2 Ensure that insulation board and adhesives are stored at a minimum temperature of 4 deg. C. for 12 hours before installation, and that freezable adhesives are stored only at temperatures above 0 deg.C. at all times.

1.6 SITE CONDITIONS

- .1 Do not expose insulation board to sunlight after installation. Protect it with polyethylene or tarpaulin cover as recommended by manufacturer if backfilling is not completed within 24 hours; and, as soon as practicable, back fill and pour concrete slab.

PART 2 PRODUCTS

2.1 MATERIALS

- .1 Horizontal Application :
Extruded polystyrene Insulation conforming to CAN/ULC S701-05, Type 4 having a R value of 5 per inch and compressive strength of 30 psi such as STYROFOAM SM by Dow Chemical Canada ULC or approved equal. 2 layers of 67mm achieving a thermal insulation value of R25.
- .2 Vertical Application :
Extruded polystyrene Insulation conforming to CAN/ULC S701-05, Type 4 having a R value of 5 per inch and compressive strength of 30 psi such as STYROFOAM SM by Dow Chemical Canada ULC or approved equal. On the interior of Foundation wall (from underside of floor slab to top of footing) provide 2 layers of 67mm achieving a thermal insulation value of R12.5 for each layer. Additionally, 1 layer of minimum thickness 67mm achieving a thermal insulation value of R12.5 on the exterior of foundation wall (from underside of soil to top of footing).
- .2 Adhesives: Only as approved by board supplier; and that can be handled at temperature of 4 deg.C and over, have adequate early and permanent bond and tensile strength for application, and have a service temperature between high and low temperatures to which they will be subjected.

PART 3 EXECUTION

3.1 EXAMINATION

- .1 Before commencing Work, ensure that all surfaces to which insulation board is applied are clean, reasonable smooth with no abrupt changes in plane, free of grease and with protruding fins of mortar or concrete removed, and that the surfaces are otherwise acceptable for insulation application as specified.

3.2 INSTALLATION

- .1 Install insulation board in accordance with manufacturer's specifications.

- .2 Install boards in largest panel sizes possible in order to cover areas by full length panels and to minimize cutting and number of joints.
- .3 Butt boards in moderate contact.
- .4 Secure insulation by adhesive if backfilling is not immediately placed to retain panels in place.
- .5 Prime surfaces before application of adhesive only where and as recommended by adhesive manufacturer.
- .6 Apply 50 mm diameter pads of adhesive to faces of panels as required to hold board in place on walls.
- .7 Position and press boards into full contact with adhesive, and temporarily hold them in place until adhesive has set.
- .8 Ensure that backfilling is completed within 24 hours, and that it does not dislodge or damage insulation.

END OF SECTION