Part 1 GENERAL

1.1 CONFORM TO GENERAL REQUIREMENTS, DIVISION 1.

1.2 RELATED WORK

1. Rigid Insulation - Section 07 21 13 13
2. Mineral Fibre Insulation – Section 07 21 16
3. Rough Carpentry - Section 06 10 00
4. Gypsum Wallboard Systems - Section 09 29 00
5. Electrical and Mechanical – Sections 20 - 28
6. Masonry Units - Section 04 04 25
7. Aluminum Windows and Entrances - Section 08 42 13
8. Sprayed Foam Insulation Air / Vapour Barrier System - Section 07 21 29
9. Metal Stud & Ceiling Suspension Systems - Section 09 22 00

1.3 WORK INCLUDED

1. This section includes polyethylene vapour barrier for installation at warm side of insulation at warm side of insulation in exterior stud wall, attic ceiling joist, and at roof/wall transitions.

1.4 JOB MOCK-UP

1. Submit mock-ups in accordance with Section 01 33 00 - Shop Drawings, Product Data, Samples and Mock-ups.

2. Construct mock-up of sheet vapour barrier installation including one lap joint, and at one edge. Mock-up is to be part of wall specified.

3. Allow 24 hr. for inspection of mock-up by Architect before proceeding with vapour barrier work.

1.5 SPECIAL PROTECTION

1. Provide adequate protection of materials and work of this Section from damage by weather and other causes.

2. Protect the work of other Subcontractors from damage resulting from work of this Section. Make good such damage to the satisfaction of the Consultant.

Part 2 PRODUCTS

2.1 MATERIALS

1. Polyethylene film vapour barrier: equal to CGSB-51.34. (min. 6 mil thickness) for all areas except below concrete floor slab.

2.2 ACCESSORIES

1. Staples: 1/2" (12 mm) minimum leg.
2. Sealant: Tremco Acoustic Caulking.

3. Tape: 3M No. Y-8086 Contractor's Sheathing Tape or duct tape as recommended by vapour barrier manufacturer, 2" (50 mm) wide at all joints, etc.

4. Moulded Box vapour barrier: factory moulded polyethelene box for use with recessed electrical switch and outlet boxes by Sylvanis Electric Equipment Ltd., Model No. 1004-VB and 5254-VB.

Part 3 EXECUTION

3.1 INSTALLATION

1. Place polyethylene on warm side of insulation and tight to insulation at exterior wall and ceiling assemblies prior to installation of gypsum board to form continuous barrier.

2. Use sheets of largest practical size to minimize joints.

3. Secure vapour barrier to framing members and use sealant at joints. Lap joints 16" (400 mm) minimum and caulk complete joint with sealant over solid backing at joint, then tape all joints. Ensure joints occur over framing members.

4. Caulk with sealant where screws or staples penetrate vapour barrier. Tape seal areas where nails or staples penetrate vapour barrier and at all points of penetration.

5. Seal vapour barrier at points of penetration.

6. Inspect sheets for continuity. Patch breaks and openings in vapour barriers. Tape seal.

7. Take extreme care to ensure continuity of vapour barriers. Patch breaks and openings in vapour barriers.

8. Cut sheet vapour barrier to form openings and ensure material is lapped and sealed at frames.

9. Seal perimeter of sheet vapour barrier as follows:

   .1 Apply continuous bead of sealant to substrate at perimeter of sheets.
   .2 Lap sheet over sealant and press into sealant bead.
   .3 Install staples through perimeter of sheets at sealant bead into wood substrate. Use tape to hold in place at metal masonry and concrete substrate.

10. Seal lap joints of sheet vapour barrier as follows:

.1 Attach first sheet to substrate.
.2 Apply continuous bead of sealant over solid backing at joint.
.3 Lap adjoining sheet minimum 150 mm and press into sealant bead.
.4 Install staples through lapped sheets at sealant bead into wood substrate. Use tape to hold in place at metal substrate.
.5 Ensure that no gaps exist in sealant bead. Smooth out folds and ripples occurring in sheet over sealant.

11. Seal electrical switch and outlet device boxes that penetrate vapour barrier as follows:

    .1 For sheet-type vapour barriers, install moulded box vapour barrier wrap boxes with polyethylene film sheet providing minimum 300 mm perimeter lap flange.
    .2 Apply sealant to seal edges of flange to main vapour barrier and seal wiring penetrations through box cover.

12. Protect ceiling insulation with vapour barrier. Extend ceiling vapour barrier over all exterior and interior wallheads.

13. Attach warning labels to walls with vapour barrier.

End of Section 07 26 00