



APPLICATION INSTRUCTIONS

ENERMAX™ INSULATION AND VAPOR BARRIER

Technical Estimate

Note to specifier: the contents of this specification may form a separate document or can be incorporated into section 07200 — Thermal insulation of the project's technical specification. Please consult the illustration for details on installation.

Section 1 — General Information

1.1 Overview

- 1.1 **ENERMAX™** insulation is a rigid panel produced from non-toxic organic wood fibers, and factory-laminated with an aluminum skin to block water vapor, sound and air infiltration. Install **ENERMAX™** on "warm-in-winter" side of framing, over inner walls or ceiling.

1.2 Related Work

- | | | |
|----|--------------------------|---------------|
| .1 | Frame | section 06100 |
| .2 | Mattress-type insulation | section 07212 |
| .3 | Vapor retarder | section 07190 |
| .4 | Adhesives and sealants | section 07900 |

1.3 Reference Standards

- 1.3 CAN/CSBG-51.33-M — Vapor retardant structural boards other than polyethylene-based.
- 2 National Building Code of Canada, 1990 — Article 9.25.3.5 and sub-section 9.26.6.
- 3 CAN/CSA-A247-M86 Type III.

1.4 Job Site Storage

- 1.4 Pending installation, shelter boards from rain.

Section 2 — Products

2.1 Materials

- 2.1 A composite structural board in rigid panels produced from specially formulated wood fibers. Each panel is factory-laminated with a vapor-permeant aluminum skin in compliance with the CAN/CSBG-51.33-M standard — as per the **ENERMAX™** panel manufactured by Emco Limited Building Products.
 - Thickness: 1/2" (12.7 mm)
 - Size: 4' 1/2" x 12' (1.232 mm x 3.657 mm) or 4' x 8' 1" (1.219 mm x 2.463 mm)
 - Thermal resistance: increases thermal resistance by RSI-0.83 to R4.7 (combination panel/air barrier).

- 2 Nails or staples for temporary fastening.
- 3 2 3/8" (60 mm)-wide, red acrylic coated polypropylene tape, such as Canadian Technical Tape Ltd. "Tuck 20502" or any other aluminum foil tape.
- 4 Acoustic sealant in compliance with CAN/CGSB-19.21-M87 standard.
- 5 Polyethylene sheet or plastic airtight receptacles for electrical outlets.

Section 3 — Application

3.1 Installation

- 3.1 Space between framing studs over which panels will be applied must not exceed 24" (600 mm).
- 2 Panel edges must be supported by wedges or framing studs. Center joints over these.
- 3 On walls, install 4' 1/2" x 12' (1.232 mm x 3.657 mm) panels horizontally. Install 4' x 8' 1" (1.219 mm x 2.463 mm) panels vertically.
- 4 On ceiling, install 4' 1/2" x 12' (1.232 mm x 3.657 mm) panels perpendicular to joists or roof trusses. Install 4' x 8' 1" (1.219 mm x 2.463 mm) panels parallel to joists or roof trusses.
- 5 Cut panels to exact size and position around doors, windows and other openings.

3.2 Fastening & Sealing

- 3.2 Temporarily fasten panels over studs or wedges with nails or staples. On ceiling, do not fasten panels less than 16" (400 mm) away from walls in order to allow for adequate vertical movement of the frame, thus preventing the wall/ceiling panel joints from breaking.
- 2 Make sure nail heads do not pierce the vapor retarder. This may diminish vapor permeance performance.
- 3 Cover all panel joints with adhesive tape.
- 4 Use sealant to cover joints created by panels and other surfaces such as floors, door/window frames and, if applicable, the ceiling's sheathing system.
- 5 Fasten furring to walls horizontally.
- 6 Install electrical outlets, switches, etc. making sure the vapor retarder remains airtight:
 - Apply one polyethylene sheet or airtight box in the opening designated for the electrical box, fasten to panel and seal.
 - Fasten electrical boxes to installed furring. Pass electrical wires in the space between **ENERMAX™** panels and gypsum boards.

PATENT PENDING

EMCO LIMITED
BUILDING PRODUCTS