

UNIFIX inc.

SHEATHING BOARD WITH INTEGRATED AIR / VAPOUR BARRIER

Perma
BASE
Cement Board By
UNIFIX INC. **SEAL**



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PERMABASE SEAL

SHEATHING BOARD WITH INTEGRATED AIR / VAPOUR BARRIER

GENERAL DESCRIPTION

PermaBase Seal is a composite board made of lightweight cement applied continuously to an SBS type modified bitumen membrane. Its unique technology allows complete integration of the membrane with the cement core. It is used as sheathing in a building enclosure, when insulation is applied to the exterior.

It forms an integral part of the air/vapour barrier system and can be used with brick facing, EIFS system, glass curtain-wall, and metal siding cladding systems.

PermaBase Seal air/vapour barrier sheathing board exceeds the requirements of article 5.4.1.2.1 **Air Barrier System Properties** of the National Building Code of Canada 1995.

RESULTS OF AIR PRESSURE TESTS

- 75Pa = 0.004 L/s·m²
- 300Pa = 0.009 L/s·m²

COMPOSITION

Cement board: 1/2" (12.5 mm) thick, 3' x 8' (915mm x 2440mm) board made of Portland cement, sand, polystyrene beads, alkali resistant fiber mesh facing and Edgetech[®] technology reinforced edges.

SBS type modified bitumen membrane: 2.2mm thick membrane reinforced with 95g/m² fiberglass exceeding the CGSB 37-GP-56M standard requirements. Self-healing during screwing operation. Air and water vapor proof.

SUPERIOR FEATURES/BENEFITS

- **Structural strength:** High wind and deformation resistance capacity, superior to that of reinforced gypsum.
- **Superior resistance:** Board resists puncture, impact, compression, shear, and flexural forces.
- **Dimensional stability/moisture and fungus resistance:** PermaBase Seal is extremely durable and capable of resisting prolonged exposure to moisture. It will not rot, disintegrate or swell when exposed to water.
- **Ease of use:** PermaBase Seal can be cut with a knife; no power tools required.
- **Immediate seal:** Board renders structure impervious upon installation.
- **Self-healing membrane:** No need to seal screws.
- **Year-round installation:** Board can be installed at temperatures below freezing.
- **Versatility:** Board can be used in walls or where an air/vapour barrier system is required.
- **Integrated membrane:** Cement is poured into membrane; complete and consistent integration throughout. No adhesives are used.
- **Cost efficiency:** Board is quick to install: time saving.

INSTALLATION

All framing should comply with building codes. Boards and accessories must be installed according to manufacturer's written recommendations.

- **Wood or steel studs:** 20 gauge min. @ 16" (400 mm) max. spacing.
- **Boards:** Position boards horizontally; perpendicular to framing. Vertical joints must be offset by 16" (400mm) min. from those in adjacent row.
- **Fasteners:** Fasten using PermaBase screw, self-tapping, corrosion resistant screws* (complying with ASTM-B117) spaced at 8" (200mm) max., 2" (50mm) min. from corners and 1/2" (13mm) min. from ends and edges. No need to drill holes beforehand. Screw head must be level with board surface. Never countersink holes or drive fastener through membrane.
- **Masonry ties:** These fasteners can be installed directly on the board. Ties that latch into metal studs can be used, but an incision must first be made in the board. Use a compatible sealing compound.**
- **Joints and junctions:** Apply bonding material**. Seal using 4" (100mm) SBS self-adhesive tape. Make sure membrane is clean, center tape on joint and press into place.
- **Insulation:** Glue insulating boards using a product compatible** with membrane. Mechanical fasteners can also be used. Sprayed polyurethane foam insulation can be applied directly to the board.

Note: Application tests of sprayed polyurethane foam revealed an exceptional adhesive capacity.

* PermaBase Screw: Head diameter 0.42" (10.6mm), no ribs under head, chemical coating and zinc electrodeposition.

** As recommended by SBS modified bitumen membrane manufacturers.

CONSIDERATIONS

PermaBase Seal is not designed to be exposed permanently to the elements. Cover as quickly as possible.

- Product is not oil and solvent resistant.
- In spite of its structural qualities, the board cannot be used to transfer building loads.
- PermaBase Seal is only one component of a wall assembly. It is the responsibility of the design professional to ensure it is used appropriately.

PermaBase Seal is both an air and a vapor barrier. Do not use the board where these two features are not required. Instead, use a 3/8" (9.5mm) PermaBase sheathing board (without a membrane).