

PREBOND 300 PLUS & 160 PLUS - PRE APPLIED WATERPROOFING MEMBRANES**Description**

Prebond® 300 Plus & 160 Plus membranes are unique composite sheets comprised of a thick HDPE film, pressure sensitive adhesive and weather resistant protective coating.

Prebond 300 Plus & 160 Plus membranes are applied either horizontally to smooth prepared concrete, carton forms or well rolled and compacted earth or crushed stone substrate; or vertically to permanent formwork or adjoining structures. Concrete is then cast directly against the adhesive side of the membranes. The specially developed Prebond adhesive layers work together to form a continuous and integral seal to the structure. .

Installation

Prebond Membranes can be applied at temperatures of 25°F (-4°C) or above. When installing Prebond Plus product in cold or marginal weather conditions <40°F (<4°C)

Advantages

- Forms a unique continuous adhesive bond to concrete poured against it - prevents water migration and makes it unaffected by ground settlement beneath slabs
- Fully-adhered adhesive to adhesive watertight ZipLaps and easy to execute detailing
- Provides a barrier to water, moisture and gas - physically isolates the structure from the surrounding ground
- Easy roll/kick out installation - reduces installation time and cost
- Release liner free - expedites installation and reduces construction site waste
- Solar reflective - reduced temperature gain
- Simple and quick to install - requiring no priming or fillets
- Can be applied to permanent formwork - allows maximum use of confined sites
- Self protecting - can be trafficked immediately after application and ready for immediate placing of reinforcement
- Unaffected by wet conditions - cannot activate prematurely
- Inherently waterproof, non-reactive system:
 1. Not reliant on confining pressures or hydration
 2. Unaffected by freeze/thaw, wet/dry cycling
- Chemical resistant - effective in most types of soils and waters, protects structure from salt or sulphate attack.

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Property	Typical Value 300 Plus	Typical Value 160 Plus	Test Method
Color	white	white	
Thickness	0.046 in. (1.2 mm)	0.032 in. (0.8 mm)	ASTM D3767
Lateral Water Migration Resistance	Pass at 231 ft (71 m) of hydrostatic head pressure	Pass at 231 ft (71 m) of hydrostatic head pressure	ASTM D5385, modified ¹
Low temperature flexibility	Unaffected at -20°F (-29°C)	Unaffected at -20°F (-29°C)	ASTM D1970
Resistance to hydrostatic head	231 ft (71 m)	231 ft (71 m)	ASTM D5385, modified ²
Elongation	500%	500%	ASTM D412, modified ³
Tensile strength, film	4000 psi (27.6 MPa)	4000 psi (27.6 MPa)	ASTM D412
Crack cycling at -9.4°F (-23°C), 100 cycles	Unaffected, Pass	Unaffected, Pass	ASTM C836 ⁴
Puncture resistance	221 lbs (990 N)	100 lbs (445 N)	ASTM E154
Peel adhesion to concrete	5 lbs/in. (880 N/m)	5 lbs/in. (880 N/m)	ASTM D903, modified ⁵
Lap peel adhesion at 72°F (22°C)	8 lbs/in. (1408 N/m)	8 lbs/in. (1408 N/m)	ASTM D1876, modified ⁶
Lap peel adhesion at 40°F (4°C)	8 lbs/in. (1408 N/m)	8 lbs/in. (1408 N/m)	ASTM D1876, modified ⁶
Permeance to water vapor transmission	0.01 perms (0.6 ng/(Pa x s x m ²))	0.01 perms (0.6 ng/(Pa x s x m ²))	ASTM E96, method B

1. Lateral water migration resistance is tested by casting concrete against membrane with a hole and subjecting the membrane to hydrostatic head pressure with water. The test measures the resistance of lateral water migration between the concrete and the membrane.
2. Hydrostatic head tests of Prebond Membranes are performed by casting concrete against the membrane with a lap. Before the concrete cures, a 0.125 in. (3 mm) spacer is inserted perpendicular to the membrane to create a gap. The cured block is placed in a chamber where water is introduced to the membrane surface up to the head indicated.
3. Elongation of membrane is run at a rate of 2 in. (50 mm) per minute.
4. Concrete is cast against the Prebond membrane and allowed to cure (7 days minimum).
5. Concrete is cast against the protective coating surface of the membrane and allowed to properly dry (7 days minimum). Peel adhesion of membrane to concrete is measured at a rate of 2 in. (50 mm) per minute at room temperature.
6. The test is conducted 15 minutes after the lap is formed (per GCP published recommendations) and run at a rate of 2 in. (50 mm) per minute at 72°F (22°C).