



BC BUILDING PRODUCTS
THE ENVELOPE SPECIALISTS

TECHNICAL DATA SHEET

PW 100/40 Air/Vapor Barrier

Manufacturer: Protecto Wrap Company

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Non-Permeable Self Adhered Air/Vapor
Barrier & Thru Wall Flashing

TECHNICAL DATA

Properties	Test Method	Test Results
Color		White/Gray
Thickness		40 mil
Tensile Strength	ASTM D412	975 psi
Elongation (adhesive only)	ASTM D412	500%
Puncture resistance	ASTM E154	57.2 lbs
Water Vapor Transmission Rate	ASTM E96	0.01 perms max (0.009 Perms)
Nail Sealability	ASTM D1970	Pass
Cold Temperature Flexibility	ASTM D1970	Pass at -25°F (-32°C)
Installation Temperature		40°F* to 120°F (5°C* to 48°C)
In-Service Temperature		-45°F to 240°F (-42°C to 116°C)
NFPA 285 Compliant Assemblies	Comparative ASTM E1354	With Various Insulations in NFPA 285 Assemblies

PACKAGING

Roll Width: 4", 6", 9", 12", 18", 24", 36"

Roll Length: 75'

DESCRIPTION

PW 100/40TM is a cold applied self-adhering membrane composed of a tough cross laminated High Density Polyethylene facer coated with a layer of polymer modified asphalt adhesive.

FEATURES

- 120-day exposure rating
- Fully adhered system
- Seals around nails and staples
- Compatible with and will adhere to most construction surfaces¹
- Forms a non-permeable air and vapor barrier

USES

- As a full wall non-permeable building envelope application.
- As a self-adhered flashing for window and door installations where a 40 mil product is required. Safe for use on most wood (do not use on soft woods containing high concentrations of resin/pitch), wood clad, aluminum, fiberglass and vinyl windows and doors
- Sealing joints in exterior sheathing
- Sealing penetrations in wall systems
- As a Thru Wall Flashing

LIMITATIONS

- Not recommended for use on windows or doors that incorporate a highly plasticized nailing flange or drip cap, consult window manufacturer to determine nailing flange type.
- Not recommended for use over or near solvent based sealants. See Technical Letter Chemical Compatibility.
- Not recommended to be applied over uncured (wet) sealants or adhesives, even if compatible.
- Not recommended for use over or in contact with PVC and EPDM roof coverings.
- Not recommended in high temperature applications to exceed 240°F (116°C).
- Not recommended for roofing applications.

SHELF LIFE

PW 100/40 maintains optimum initial adhesion to substrates when used within one year from the date of manufacture.

Open rolls should be stored in an airtight manner

STORAGE

PW 100/40 should be stored in the original, unopened container at ambient temperatures between 40°F to 90°F (5°C to 32°C). Storage area should remain dry and out of direct sunlight. Do not remove materials from original containers until ready for use. Do not double stack pallets.

Cold Weather Storage – products should be stored in original containers in a warm dry area between 40°F to 90°F (5°C to 32°C). Product should be kept warm a minimum of 24 hours prior to and just up to installation.

PREPARATION

All surfaces shall be clean, dry and free of any foreign materials. The surface shall be free of gaps, sharp edges and protrusions.

Metal surfaces may need to be cleaned and/or abraded to achieve optimum adhesion.

¹ Note: If surface is DensGlass Gold®, OSB, Concrete block (CMU), masonry, fiber board sheathing, exterior gypsum, saturated felt type building wrap or cannot be cleaned to a like new surface or the surface is damp or below 40°F (7°C), primer should be used prior to the application of the membrane. Some housewrap materials may require primer, test for adhesion prior to full application.

Protecto Wrap Company recommends priming all substrates prior to application when the temperature is below 40°F (5°C). Cold Weather Applications- Contact your Protecto Wrap Sales Representative.

When used on ICF, the surface must be clean, dry and free of all dirt, dust and debris prior to application of the membrane. Protecto Wrap Company recommends priming the the ICF with only the Universal Water Based Primer shall be used to ensure optimal adhesion.

APPLICATION

Full Wall Air Barrier - and below grade applications on ICF: **PW 100/40** can be installed horizontally or vertically and must form water shedding laps. Side laps should be a minimum of 2", end laps should be a minimum of 4", all membrane terminations should be sealed with a 1" wide troweled bead of JS160-H Mastic or Protecto 25XL Sealant

Windows - Apply first piece of **PW 100/40** to the rough opening sill; the PW 100/40 should overlap the housewrap or building paper at the sill. Firmly roll into place using a hand roller (J-roller, Laminate roller) to smooth out any wrinkles, air bubbles or creases that would allow water to migrate behind the membrane. Set window into the rough opening and fasten per window manufacturer's instructions. Apply vertical pieces of PW 100/40 over the nailing flange at the sides of window frame and directly onto the exterior sheathing, firmly roll into place using a hand roller to smooth out any wrinkles, air bubbles or creases, apply the final piece of PW 100/40 over the top nail flange and overlap the vertical sides pieces adhering directly to the exterior sheathing, firmly roll into place using a "J" roller or hand roller to smooth out any wrinkles, air bubbles or creases. Apply housewrap or building paper over the PW 100/40 at the sides and head of the window. Use housewrap tape or equivalent to seal the housewrap to the exterior of the PW 100/40.

Inverted applications - the substrate must be fully primed and allowed to cure prior to full application. Membrane should be firmly rolled into place using a hand roller to smooth out any wrinkles, air bubbles or creases. Mechanical fasteners should be applied at perimeter of membrane as needed to ensure full contact.

APPLICATION:

Note: It is very important in full coverage envelope applications that the **PW 100/40** is tightly sealed into the roofing and below grade waterproofing systems and perimeter flashings to retain the integrity of the vapor barrier throughout the entire structure. In full building non-permeable envelope applications, the dew point of the wall assembly must be engineered to the exterior of the building.

Additional methods and detail drawings can be found at www.protectowrap.com or call (800) 759-9727.

CLEAN UP

Dispose of waste in accordance to local requirements. Control worksite so that boxes and release liner do not present a hazard.

Packaging materials and release liner can be recycled.

CAUTION

PW 100/40 should not come into contact with solvent based products, polysulfide's, plasticized PVC roofing materials or high concentrations of resins (pitch)

Protecto Wrap Company recommends the use of safety glasses and gloves. Protecto Wrap Company recommends the use of appropriate fall protection when working above ground level.

LIMITED WARRANTY

This product is covered by the Protecto Wrap Standard 10 Year Limited Warranty.

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