

# Protecto Seal 45™

Commercial Grade Window and Door Flashing Exposable Waterproofing Membrane

# **TECHNICAL DATA**

| Properties                    | Test Method | Test Results                          |
|-------------------------------|-------------|---------------------------------------|
| Color                         |             | Aluminum Silver                       |
| Thickness                     |             | 45 mil                                |
| Tensile Strength              | ASTM D412   | 400psi                                |
| Puncture Resistance           | ASTM E154   | 75 lbs                                |
| Low Temperature Flex          | ASTM D1970  | -20F (-29C) No cracks or delamination |
| Elongation                    | ASTM D412   | 225%                                  |
| Nail Sealability              | ASTM D1970  | Pass                                  |
| Permeance                     | ASTM E96    | <.05                                  |
| Installation Temperature      |             | 40°F to 120°F (5°C to 48°C)           |
| Installation Temperature Cold |             | 10°F to 120°F (-12°C to 48°C)         |
| Weather with primer           |             |                                       |
| In-Service Temperature        |             | -45°F to 240°F (-42°C to 116°C)       |

### **PACKAGING**

Roll Width: 4", 6", 12", 36"

Roll Length: 50'

# **DESCRIPTION**

Protecto Seal 45 is a 45 mil cold applied self-adhering waterproofing membrane composed of a tough cross laminated High Density Polyethylene film laminated to an aluminum foil for UV resistance and weatherability. The adhesive is composed of our asphalt adhesive

# **FEATURES**

- Proprietary asphalt adhesive
- UV rated for long term exposure
- Fully adhered system
- Aluminum foil facer film for added sealant adhesion
- Seals around properly installed fasteners
- Compatible with and will adhere to most construction surfaces<sup>1</sup>
- Forms a positive air/vapor barrier²

# **USES**

Used as a complete waterproof membrane for commercial window and door flashings, skylights, parapet walls, vent stacks, metal buildings. Also used as a system for complete roof coverage on low-pitched and porch roofs, mobile home roofs, RV's, gutters, valleys and HVAC units.

# **LIMITATIONS**

Not recommended for use on windows or doors that incorporate a 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 recommend to be applied over uncured (wet) sealants or adhesives, even if compatible Not recommended for use over or in contact with PVC or TPO type roof coverings.

Not recommended in high temperature applications to exceed 240°F (116°C), or under high temp metal coverings, such as copper or zinc.

### SHELF LIFE

Protecto Seal 45 maintains optimum initial adhesion to substrates when used within one year from the date of manufacture.

#### **STORAGE**

Protecto Seal 45 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 50°F to 90°F (10°C to 32°C). Product should be kept warm a minimum of 24 hours prior to and just up to installation.

### **PREPARATION**

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

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

<sup>1</sup> Note: If surface is DensGlass Gold<sup>®</sup>, 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 (5°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 field testing substrates for adhesion before full application. If adhesion to substrate is found to be marginal, then a primer shall be used to ensure optimal adhesion. Refer to: Technical Letter Primer Recommendations; Technical Letter Adhesion to Substrates.

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 testing the ICF for adhesion. If adhesion to the ICF substrate is found to be marginal, then only the Universal Water Based Primer shall be used to ensure optimal adhesion.

### **APPLICATION**

Apply first piece of Protecto Seal 45 to the rough opening sill; the Protecto Seal 45 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 Protecto Seal 45 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 Protecto Seal 45 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 Protecto Seal 45 at the sides and head of the window. Use housewrap tape or equivalent to seal the housewrap to the exterior of the Protecto Seal 45.

# For roof applications:

Protecto seal 45 can be installed on any exterior grade solid sheathing normally used for roof decking. Install membrane such that all laps shed water in both vertical and horizontal installations.

Valleys require a minimum 18" wide roll of Protecto Seal 45 centered down the full length of the valley. Install membrane starting at the lowest point of roof slope and work up the slope.

Position the roll into the desired location, roll out the membrane and cut to length as needed. Align the roll with edge of eave or overlap of preceding roll, pull membrane tight, start by removing a portion of the release liner and adhere to roof deck (reposition as needed prior to removing the remaining release liner).

Lift the opposing end of the membrane and remove or strip the release liner, pulling it to one side, keep membrane aligned and tight, adhere membrane to the roof deck while another person brooms the sheet flat.

Edge laps are 4" minimum and end laps are 6" minimum. All laps should be firmly pressed and/or rolled to minimize creases and wrinkles and insure a positive seal,

All terminations edges and overlaps should be sealed with Protecto Sealant 25XL.

For ceiling and soffit 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.

- \* Cold Weather Applications, this product may be installed down to 10°F to 120°F (-12°C to 48°C) However; the product must be stored in original containers in a warm dry area between 50°F to 90°F (10°C to 32°C). Product must be kept warm a minimum of 24 hours prior to and just up to installation. To achieve optimum adhesion at the lower temperatures a primer must be used. Protecto Wrap Company recommends testing substrates for adhesion prior to full application. If adhesion to substrate is found to be marginal, then a primer shall be used to ensure optimal adhesion. Refer to: "Technical Letter Cold Weather Applications".
- \* 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 paper can be recycled.

### **CAUTION**

Protecto Seal 45 should not come into contact with solvent based products, polysulfide's, plasticized PVC roofing materials or high concentrations of resins (pitch).

<sup>2</sup> Note: It is very important in full coverage envelope applications that the **BT25XL** 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 envelope applications, the dew point of the wall assembly must be engineered to the exterior of the building.

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.

PROTECTO WRAP COMPANY 1955 South Cherokee Street Denver, CO 80223 (303) 777-3001 • (800) 759-9727