Protecto Seal 45 Butyl™

Heavy Duty Commercial 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**
Peel Strength	**ASTM D903**	**3.64 PLI**
Puncture Resistance	**ASTM E154**	**75 lbs**
Low Temperature Flex	**ASTM D1970**	**-20F (-29C) No cracks or delamination**
Elongation	**ASTM D412**	**Minimum of 225%**
Nail Sealability	**ASTM D1970**	**Pass**
Permeance	**ASTM E96**	**<.05**
Installation Temperature		**32ºF to 120ºF (0ºC to 48ºC)**
Installation Temperature Cold Weather with Primer		**-10°F to 120ºF (-23.3°C to 48ºC)**
In-Service Temperature		**-45ºF to 300ºF (-42ºC to 149ºC)**
Fire Rating	**ASTM E84**	**Class A**
NFPA 285 Compliant Assemblies	**Comparative ASTM E1354**	**With Various Insulations in NFPA 285 Assemblies**

PACKAGING
Roll Width: 4”, 6”, 9”, 12”
Roll Length: 50’

DESCRIPTION
Protecto Seal 45 Butyl is a 45 mil cold applied self-adhered waterproofing membrane with a tough cross laminated High Density Polyethylene film laminated to an aluminum foil for UV resistance and weatherability, coated on one side with a high temperature proprietary recycled butyl adhesive.

FEATURES
- Proprietary recycled butyl adhesive
- UV rated for long term exposure (10 year)
- Fully adhered system
- Aluminum foil facer film for added sealant adhesion
- Seals around properly installed fasteners
- Recommended for High Altitude, High Temperature and/or Highly Conductive Metal Cladding/Flashing (Cor-Ten or Zinc) applications
- Compatible with most construction sealants, EPDM and will adhere to most construction surfaces[1]
- Class A Fire Rating, flame and smoke spread
- AAMA 711-22 compliant

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. Can be used as a Deck Joist Tape.

Subject to change without notice. Visit www.protectowrap.com for the latest version.

LIMITATIONS
Not recommended for use in high temperature applications that may exceed 300°F (149°C).
Not recommended to be applied over uncured (wet) sealants or adhesives, even if compatible. Not recommended for use over granular surfaces.
Not recommended for use under copper.

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

STORAGE
Protecto Seal 45 Butyl 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.

[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 32°F (0°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 all substrates for adhesion prior to full application. If adhesion to the 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 Butyl** to the rough opening sill; the **Protecto Seal 45 Butyl** 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 Butyl** 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 Butyl** 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 Butyl** 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 Butyl**.

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.

For roof applications:
Protecto Seal 45 Butyl can be installed on any exterior grade solid sheathing normally used for roof decking. Not for use over granular surfaces.
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 Butyl** centered down the full length of the valley. The valley strips should be applied prior to the field membrane application.
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, the field membrane should not extend past the center line of the valley.
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,

* **Cold Weather Applications**, this product may be installed down to **-10°F to 120ºF (-23.3°C to 48ºC)** 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".

On low slope roof applications, all termination edges, end laps and overlaps should be sealed with JS160H Mastic or Protecto Sealant 25XL and troweled flat.

* Additional methods and details can be found at www.protectowrap.com in the Technical Area or call (800) 759-9727.

CLEAN UP
Dispose of waste in accordance with local requirements. Control worksite so that boxes and release liner do not present a hazard.
Packaging materials and release paper can be recycled.

CAUTION
Note: It is very important in full coverage envelope applications that the **Protecto Seal 45 Butyl** is tightly sealed into the roofing and below grade waterproofing systems and perimeter flashings to retain the integrity of the air/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 installing roof membranes or 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
FAX (303) 777-9273
www.protectowrap.com
Made in U.S.A.