

# TECHNICAL LETTER—CHEMICAL COMPATIBILITY

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## **Chemical Compatibility with Other Building Materials and Sealants with Protecto Wrap's Self-adhered Membranes, Building Tapes, Energy Saving Products, and Liquid Membranes**

Protecto Wrap Company offers different self-adhered products and liquid-applied membranes for a variety of needs.

The designer will often question the chemical compatibility of self-adhered products with other materials during the design of an assembly, or perhaps later in the field. Protecto Wrap self-adhered products are designed to be chemically compatible with most substances and products that are normally present in modern construction.

Protecto Wrap self-adhered products utilize a high-density polymer facing material, synthetic fabric reinforcement, an aluminum reinforced polymer facing material, a foam surface or a wicking surface. Almost always, there is no chemical compatibility issue if a material contacts any of these surfaces. If, on the other hand, the contact area is on the adhesive side of the flashing, then more information will be needed.

Protecto Wrap Company manufactures products with a variety of adhesives. The adhesive side of our products can come into contact with several different materials on the same jobsite. The chemical compatibility of dissimilar materials can cause reactions that affect the performance of the self-adhered membranes and/or the degradation of the materials they contact.

Protecto Wrap Company also manufactures products which utilize an adhesive on both sides of the membrane. These products are covered by a release liner that is removed after installation that exposes the adhesive. The products are: Jiffy Seal 140/60, Jiffy Seal Ice & Water Guard, JS500 Detail Tape, AFM 500 Detail Tape and PSDS Detail Tape.

The following guidelines are to help in the selection of materials that can be used and to identify products that should not be used.

### **Building Materials**

Protecto Wrap self-adhered products are often applied directly to and are compatible with exterior sheathing such as plywood, fire-treated plywood, oriented strand board (OSB), exterior gypsum board, glass mat surfaced gypsum board (Densdeck™/DensGlass Gold®), concrete, and extruded polystyrene. Protecto Wrap self-adhered products are compatible with chromated copper arsenate (CCA), alkaline copper quaternary (ACQ), ammoniacal copper zinc arsenate (ACZA), pressure-treated woods and pressure-treated plywoods.

Protecto Wrap Company recommends on-site testing for adhesion prior to final application of self-adhered membranes. If adhesion to the tested substrate is marginal, a primer should be used to achieve adequate adhesion. Please reference our **Technical Letter - Product/Primer Recommendation** to help in selection of a primer suitable for the application.

### **Windows & Doors**

Protecto Wrap Company flashing products generally come in contact with the nailing flange or frame components of windows and doors. In general our flashing products are compatible with most vinyl and wood window and door components; however, some manufacturers use plasticized PVC in the formulation of the nail flange material that can have a reaction when in contact with Rubberized Asphalt

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and Butyl Blend adhesives. Please consult your window or door manufacturer for information regarding the composition of their nailing flange components if there is any concern.

**Protecto Wrap Rubberized Asphalt Adhesive** based products are compatible with virgin vinyl and rigid polyvinyl chloride (PVC), but not plasticized polyvinyl chloride.

**Protecto Wrap Butyl Hybrid Adhesive** based products are compatible with virgin vinyl and rigid polyvinyl chloride (PVC), but not plasticized polyvinyl chloride.

**Protecto Wrap Butyl Adhesive** based products are 100% butyl rubber adhesive. The butyl adhesive in these products is compatible with virgin vinyl and rigid polyvinyl chloride (PVC), and plasticized polyvinyl chloride.

**Protecto Wrap Block Copolymer Adhesive** based products are compatible with virgin vinyl, rigid polyvinyl chloride (PVC), and plasticized polyvinyl chloride.

**Protecto Wrap Water Based LWM 200** a fluid applied material whose primary ingredient is latex is compatible with virgin vinyl, rigid polyvinyl chloride (PVC), and plasticized polyvinyl chloride.

*Warning: Some arched and round shaped windows may use a plasticized PVC nailing flange. It is always best to contact the window manufacturer to determine if the nailing flange is constructed of plasticized PVC.*

### **Weather Resistive Barriers**

Protecto Wrap self-adhered flashing products are compatible with the following weather resistive barriers:

- Perforated woven Polyolefin (DriShield)
- Non-Perforated Polymer based (DriShield II)
- Polyurethane Coatings
- Spun-Bonded Polyethylene
- High Density Polyethylene Sheet (Vortec)/Visqueen
- Red Rosin Paper
- Asphaltic Dampproofing
- Asphalt Saturated Felt
- Protecto Wrap Fluid Applied Air Barrier System (LWM200)

At window and door openings, Protecto Wrap self-adhered flashing products need to be applied directly to the structural substrate at the sides and head. The flashing at the sill area should be integrated into the weather resistive barrier system to form a water-shedding lap.

### **Metals**

Protecto Wrap products are compatible with most metals; however some metal surfaces may have a protective coating that will not allow optimum adhesion.

- Metal surfaces may need to be solvent wiped, abraded, and primed to achieve optimum adhesion.

### **Sealant and Caulking Materials**

Most sealants are chemically compatible with Protecto Wrap self-adhered products provided that the sealant is applied to the high-density polyethylene film component of the flashings.

The following sealants in general are chemically compatible with the adhesive side of all Protecto Wrap self-adhered products if the specific formulation does not contain hydrocarbon solvents:

- Silicone
- Acrylic
- Butyl
- 1-Part Polyurethane
- 2-Part Polyurethane Remove or strike down any excess sealant prior to installing self-adhered products.

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### Protecto Wrap Liquid Membranes

Protecto Wrap latex based membranes, LWM 200, and Defenseal are compatible with most substrates. Protecto Liner 1350, Protecto Liner 1350 FR, and Protecto Liner 1350 TG are compatible with most substrates; however, are not compatible with Coal Tar or solvent based sealants or mastics.

### Non-Compatible Materials

Protecto Wrap self-adhered membranes are not compatible with the following substances:

- Creosote
- Hydrocarbon Solvents
- Pentachlorophenol
- Diesel Fuel
- Uncured Neoprene
- Gasoline/Oil
- Polysulfides
- High concentrations of pitch (resin from soft wood)
- EPDM\*
- Plasticized PVC\*
- Coal Tar

\* *Protecto Wrap Butyl Adhesive and Block Copolymer products are compatible with plasticized PVC window flanges and EPDM.*

PRODUCT NAME	ADHESIVE/COMPOSITION TYPES					
	Rubberized Asphalt	Butyl Hybrid	Butyl	Block Copolymer	Water Based	2-Component Polyurethane
Bridge Deck	x					
Jiffy Seal 140/60	x	x				
PW 100/60		x				
JS500 Detail Tape		x				
Protecto Bond		x				
PW 100/40	x					
PS45		x				
Stucco, EIFS, Buck Tapes		x				
BT25XL		x				
PSDS			x			
PSDS Detail Tape		x				
Protecto Deck	x					
Protecto Flex		x				
Super Stick Building Tape				x		
LWM 200					x	
Energy Sill Sealer	x					
Triple Guard		x				
Plate Liner	x					
Dual Guard	x					
Rainproof 40	x					
Rainproof 60	x					
Rainproof 60 Plus	x					
Ice and Water Guard	x					

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PRODUCT NAME	ADHESIVE/COMPOSITION TYPES					
	Rubberized Asphalt	Butyl Hybrid	Butyl	Block Copolymer	Water Based	2-Component Polyurethane
Rainproof High Softening Point (HSP)	x					
Tile Flash		x				
Protecto Roof		x				
AFM, AFM-WM, AFM/SCU	x					
Whisper Mat CS	x					
AFM Detail Tape	x					
Defenseal					x	
Whisper Mat HW	x					
Peel and Heat Complete	x					
Protecto Liner 1350						x
Protecto Liner 1350 FR						x
Protecto Liner 1350 TG						x
6645 EPDM Roofing membrane			x			
6640 Roofing Underlayment			x			
6640-R Reinforced Roofing Underlayment			x			
6610 Seam Seal Tape			x			
6612MR Seam Seal/Metal Roof Tape			x			
6634 Air & Vapor Barrier/wall Flashing			x			
6660 Waterproofing Membrane			x			
Pipe Tape 200-35		x				
Pipe Tape 310-35			x			
Pipe Tape 320-35			x			
Pipe Tape 320-35 white			x			
Pipe Tape 320-50 white			x			
AVM		x				

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