TECHNICAL BULLETIN

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Technical Bulletin #2012-02 (Revised 2016)

TO: All POLYGLASS Users

CC: POLYGLASS Sales & Technical Services

Date: May 15, 2015

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National Technical Services Manager

RE: Suitable Substrates; POLYGLASS Self-Adhesive (SA) Membranes

The following information is a guideline for the use of "ADESO" Self-Adhesive membranes which is to include Low-Slope membranes and Steep-Slope underlayments.

Suitable Substrates; Direct SA Membrane Application:

- 1.0 Thermal Insulation
 - 1.1 Polyisocyanurate (organic facer, combined organic/fiberglass facer)

 Note: Maximum single layer thickness of 2.5 inches unless *rigid coverboard is utilized above the thermal insulation.
 - 1.2 Wood Fiber ASTM C 209 (6 sides asphalt impregnated only)
 - 1.3 Asphalt recovery board (as submitted to and pre-approved by PG)
 - 1.4 Expanded Polystyrene (EPS); UL Classified or FM Approved. Refer to membrane approvals. Minimum thickness 2 inches, Minimum 2 lb. density. Note: Finished cap sheet; White or Tan only. Must be installed with underlying base membranes during same day of work.
- 2.0 <u>Concrete/Gypsum Products (Requires Priming)</u>
 - 2.1 Structural Cast-in-Place Concrete
 - 2.2 Non-Structural Cast-in-Place Concrete
 - 2.3 Limited Pre-Cast Concrete applications
 - 2.4 CMU (vertical wall only)
 - 2.5 Cast-in-Place Gypsum (non-nailable density)
- 3.0 Metals and Metallic Surfaces
 - 3.1 Most Ferrous and Non-Ferrous Metal (Requires Priming)
 - 3.2 Latent Aluminum Reflective Roof Coatings (Requires power washing and Priming)



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- 4.0 Rigid Coverboards
 - 4.1 USG Securock Gypsum Fiber Roof Board
 - 4.2 Georgia Pacific DensDeck Roof Board: DensDeck Prime; DensDeck DuraGard. [Priming to DensDeck Prime Roof Board not required but does enhance adhesion]
- 5.0 Wood Deck Products
 - 5.1 APA Rated Exterior Rated (Grade) Plywood (15/32 or greater)
 - 5.2 APA Rated Exterior Rated (Grade) Oriented Strand Board (OSB) [Priming recommended but not required for new OSB].
 - 5.3 APA Rated Exterior Rated (Grade) Plywood and Oriented Strand Board (OSB) with an under-side radiant barrier can create a double vapor barrier in direct to deck membrane applications. This type of sheathing has been seen to create an enhance risk of buckling of the underlayment and entrapping moisture possibly leading to sheathing degradation. Use of a mechanically attached anchor sheet to the sheathing is strongly recommended.
 - 5.4 *Dimensional Lumber; Square Edge boards 1x4 or 1x6, Wood Plank 2 5/8", Shiplap and T&G 1x4 or 1x6. (Board gaps may not exceed ¼")
 - 5.5 Zip System Roof Sheathing
- 6.0 <u>Asphaltic Membranes</u>
 - 6.1 Elastoflex SA V, Elastobase Poly/Sand, Elastobase Poly/Poly
 - 6.2 *ASTM D 226 Type II Organic Felt (Proper attachment required, refer to applicable product approvals)
 - 6.3 *Oxidized Asphalt, SBS & APP polymer modified asphalt surfaces

Non-Suitable Substrates Non-Direct SA membrane application:

- 7.0 <u>Thermal Insulations</u>
 - 7.1 Perlite
 - 7.2 Foil Faced Insulation
 - 7.3 Extruded Polystyrene; fan-fold, board stock (unless otherwise approved by Polyglass)
 - 7.4 Wood Fiberboard (Exception: Asphalt impregnated 6 six-sided)
 - 7.5 Fiberous Glass or Mineral Wool (Exception: Roxul MonoBoard Plus if preapproved for project conditions)
- 8.0 <u>Concrete/Gypsum Products</u>
 - 8.1 Lightweight Insulating Concrete [LWIC] (nailable)
 - 8.2 Gypsum (nailable)
 - 8.3 Duraboard or similar



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- 9.0 <u>Metal/Metallic/Miscellaneous Surfaces</u>
 - 9.1 Silicone coated surfaces
 - 9.2 Aluminized Emulsions
- 10.0 Coverboards
 - 10.1 DensDeck RoofBoard (Exception: see suitable above)
- 11.0 Wood Deck Products
 - 11.1 Treated sheathing and lumber
- 12.0 <u>Asphaltic/Non-Asphaltic Membranes</u>
 - 12.1 Sand or other aggregate surfaced membranes
 - 12.2 Non-aged oxidized asphalt (smooth BUR flood coat)
 - 12.3 Synthetic underlayment (unless otherwise approved by Polyglass)

*Note 1: Not all substrates noted as suitable may qualify for manufacturer's warranties, or may be subject to certain limitations or exclusions. Non-supported gaps in wood decking such as dimensional lumber, wood plank, shiplap and T&G may adversely affect product performance or result in other undesirable results. When in question an attachment sheet or sheathing type product is recommended.

Note 2: Some substrates may be suitable for limited conditions or project circumstances and should be pre-approved by Polyglass Technical Services.

- 1) All surfaces to receive SA membranes are to be clean, dry and free of any surface contaminates that could adversely affect adhesion of the product. Low-Sloped applications direct to wood sheathing not fully supported by wood blockings to all joints should have a bond-breaker tape at all sheathing joints or an anchor sheet nailed to the sheathing.
- 2) Asphalt Primer to be compliant with ASTM D 41. Polyglass PG-100 Primer is recommended.
- 3) Water-Based Acrylic Primer is suitable and recommended for use with SA membrane applications. Polyglass WB-3000 is recommended.
- 4) Polyglass recommends the use of modified mastics with SA membranes and is required when used at lap joints. Polyglass PolyPlus 50 is recommended.

Primers include PG100, other ASTM D 41 asphalt primer approved by PG, WB3000 Acrylic Water-Based Primer or other water-based acrylic primer approved by PG. Refer to product data sheets, published requirements or contact Technical Services for questions in regards to primer choice and application for specific conditions.

This Technical Bulletin is intended to serve as a guideline and not intended to address all products and project circumstances. Consult Polyglass Technical Services for assistance for specific project concerns.

Revised 06/28/16

