

#### Product Description:

GOLIATH PVC 80 is a polyester-reinforced, thermoplastic PVC waterproofing membrane for single-ply roofing systems. GOLIATH PVC is compounded high quality polyvinyl chloride resin, resilient plasticizers, stabilizers, pigments and other proprietary materials and manufactured in a nominal 80 mil thickness. Also available as Goliath PVC Fleeceback

#### Features and Benefits:

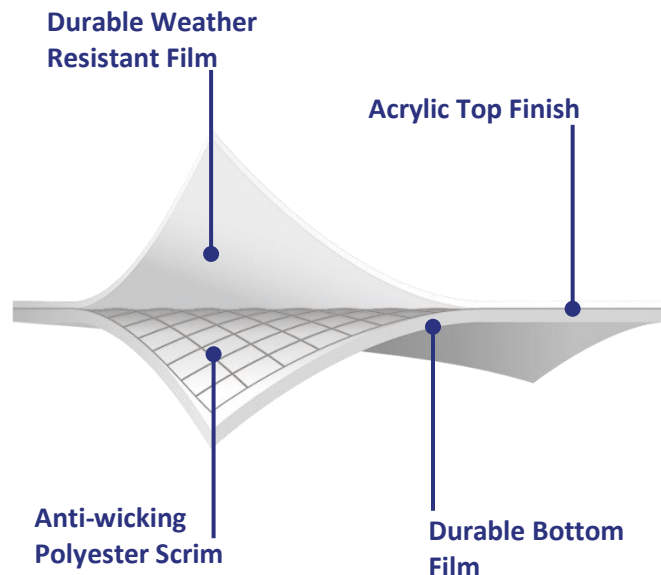
- Meets or exceeds ASTM D4434, Type III Thermoplastic Membrane
- Excellent flexibility in all climates.
- Engineered PVC formulation providing good resistance to environmental elements such as UV radiation, Ozone, microorganisms.
- GOLIATH PVC 80 is highly reflective and can help reduce heat transfer through the roof into the building's interior. It meets California Title 24 requirements for Solar Reflectance and Emissivity (White).
- Thick, weather-resistant, heavy duty top ply exceeding minimum requirements in over the scrim thickness with acrylic-based top finish allowing for exceptional abrasion resistance and great clean-ability.
- GOLIATH PVC 80 can be easily welded with superior seam strength.
- An anti-wicking polyester reinforcement (9x9 1000 Denier) provides strength, tear resistance and enhanced moisture resistance. No edge sealant is required for cut edges.

#### Use:

GOLIATH PVC 80 can be installed in new, recover, and re-roof constructions as the primary field membrane and base flashing at all roof to wall transitions. It can be mechanically attached or fully adhered to a properly prepared substrate with approved fasteners and membrane plates or approved membrane adhesive (Please refer to listed approved roofing materials and constructions).

#### Warranties:

GOLIATH PVC 80 has a 15-Year limited material warranty and is available for additional warranty when installed with an approved applicator.



#### Available Colors/Embossed:

- TOP SURFACE: White/Tan/Grey/Brown/Green/Red (Std.)



- BOTTOM SURFACE: Black/Grey/Olive/Blue (Std.)



- Custom colors available upon request

#### Approvals:

GOLIATH membranes are listed with various component assemblies at UL and Factory Mutual (F.M. Global) for fire, wind uplift and impact resistance. Further information is available with the following code directories:

- FM Global
- Underwriters Laboratories
- Underwriters Laboratories of Canada



### Installation:

GOLIATH PVC can be used for mechanically fastened or fully adhered systems using thermal weld for seaming. Refer to GOLIATH application guides and detail drawings for instructions.

### Energy and Environment:

| Solar Reflectance / Thermal Emittance / Calculated SRI Values |                   |                   |                   |                       |
|---------------------------------------------------------------|-------------------|-------------------|-------------------|-----------------------|
| Color                                                         | Solar Reflectance | Thermal Emittance | SRI Value Initial | SRI Value 3-Year Aged |
| White                                                         | 0.87              | 0.88              | 110               | 91                    |
| Tan                                                           | 0.37              | 0.87              | 39                | NA                    |
| Grey                                                          | 0.16              | 0.88              | 13                | NA                    |
| Brown                                                         | 0.08              | 0.87              | 2                 | NA                    |
| Recycled Content                                              |                   |                   |                   |                       |
| Post-consumer                                                 |                   |                   | 0%                |                       |
| Pre-consumer                                                  |                   |                   | 0% - 40%          |                       |

### Packaging and Dimensions:

| Size   |        | Coverage per roll | Rolls per pallet | Approx. pallet weight |
|--------|--------|-------------------|------------------|-----------------------|
| W      | L      |                   |                  |                       |
| 72 in. | 60 ft. | 360 sq. ft.       | 12               | 2400 lb.              |
| 36 in. | 60 ft. | 180 sq. ft.       | 24               | 2400 lb.              |

Custom packaging and roll sizes available upon request.



### Typical Physical Properties:

Meets the requirements of ASTM D 4434, Type III

| Physical Properties   |                                          | Test Method                  | Requirements                                                                         | GOLIATH TOWER PVC 80        |
|-----------------------|------------------------------------------|------------------------------|--------------------------------------------------------------------------------------|-----------------------------|
| Strength              | Breaking strength                        | ASTM D751, Method A Grab     | ≥ 200 lbf. MD/XMD                                                                    | 405 lbf. MD/385 lbf.XMD     |
|                       | Elongation at break                      | ASTM D751, Method A Grab     | ≥ 15% MD/XMD                                                                         | 34 % MD/29 % XMD            |
|                       | Tearing strength                         | ASTM D751, Method B          | ≥ 45 lbf. MD/XMD                                                                     | 62 lbf. MD/78 lbf.XMD       |
|                       | Seam strength                            | ASTM D751, Method A Grab     | 75% of original strength                                                             | Pass                        |
|                       | Static puncture resistance               | ASTM D5602, 33 lbf. @ 73 °F  | Pass                                                                                 | Pass                        |
|                       | Dynamic puncture resistance              | ASTM D5635, 20J @ 73 °F      | Pass                                                                                 | Pass                        |
| Durability            | Overall thickness                        | ASTM D751                    | ≥ 0.045 in. ±10 %                                                                    | 0.080 in. ±10 %             |
|                       | Thickness over scrim                     | ASTM D7635, Optical          | ≥ 0.016 in.                                                                          | 0.033 in.                   |
|                       | Water absorption                         | ASTM D570, Modified          | ± 3%                                                                                 | 0.9%                        |
|                       | Low temperature bend                     | ASTM D2136 @ -40 °F (-40 °C) | Pass                                                                                 | Pass                        |
| Heat Aged Performance | Retention of properties after heat aging | ASTM D3045, 56 days @ 176 °F | ≥ 90% of original                                                                    | Pass                        |
|                       | Breaking strength                        | ASTM D751, Method A Grab     | ≥ 90% of original                                                                    | Pass                        |
|                       | Elongation at break                      | ASTM D751, Method A Grab     | ≥ 90% of original                                                                    | Pass                        |
|                       | Tearing strength                         | ASTM D751, Method B          | ≥ 90% of original                                                                    | Pass                        |
|                       | Linear dimensional change                | ASTM D1204, 6 hours          | ≥ 0.5 % MD/XMD                                                                       | -0.3 % MD/0.02 % XMD        |
| Weather Performance   | Accelerated weathering                   | ASTM G154, 5000 hours        | Pass                                                                                 | Pass                        |
|                       | Cracking                                 | Optical @ 7x magnification   | No cracks                                                                            | Pass                        |
|                       | Discoloration                            | Visual                       | Negligible                                                                           | Negligible                  |
|                       | Crazing                                  | Optical @ 7x magnification   | No crazing                                                                           | Pass                        |
|                       | Moisture vapour transmission             | ASTM E96, Proc. B, Method A  |                                                                                      | 0.013 g/(h.m <sup>2</sup> ) |
| Fire Performance      | Fire resistance – UL                     | UL-790<br>CAN/ULC-S107       | NC: Incline3-Class A<br>NC: Incline Unlim.-Class B<br>C-15/32:Incline Unlim.-Class B |                             |
|                       | Fire resistance – FM Class 4470          | ASTM E108                    | External: Class A                                                                    |                             |

Further information on fire classification is available upon request or through Underwriters Laboratories and FM Global directories.

This table contains typical physical properties and characteristics based on actual test specimen data.

