



## ERS-Polyester 170

P/N: 050-0015

For Professional Use Only



### Hot-Applied Uncoated Polyester

#### PRODUCT DESCRIPTION:

ERS-Polyester 170 represents a significant step forward in the technology of built-up roofing ply sheets. Finished membrane assemblies of ERS-Polyester 170 offer high strength and long-term performance in addition to superior elongation and recovery properties. ERS-Polyester 170 is an excellent choice for use with high performance modified mopping asphalts but can be used with standard asphalts as well.

#### RECOMMENDED USES:

ERS-Polyester 170 can be used as a high performance ply sheet to provide the maximum fatigue resistance available in a composite roof membrane, especially at insulation joints which is a primary cause of membrane failure. It can also be used to construct high performance base flashing systems.

#### ADVANTAGES:

- Contractor friendly for ease of application
- Finished membrane provides excellent elongation and recovery to accommodate roof movement
- Exceeds proposed industry criteria for load-deformation properties and retention of watertightness
- Toughness properties provide added performance in areas of wear
- Exceeds requirements of ASTM D 5726, Type II

#### INSTALLATION:

**Surface Preparation:** Surface must be clean and dry. Prior to the installation of the roof membrane, apply ERS-403 base sheet in drain recess and sump areas using ERS-300 mastic to seal the insulation and close the drain opening so no bitumen gets to the leaders.

**Application:** For a uniform interply mopping, bitumen must be applied within the recommended EVT range. By applying the bitumen within the EVT temperature range (never over 475°F (246°C)) and brooming lightly in the roll direction during application, the proper application rate will be achieved and will result in proper ply lamination.

It is important to avoid point-loading during the time of application, as it may displace the interply moppings from between the reinforcing plies. Every effort should be made to allow the waterproofing bitumen to take a set before being exposed to traffic, either with foot or wheeled implement traffic. An adhered, coated base sheet is recommended to minimize the possibility of bitumen displacement from applicator errors and is required at drain bowls.

When access to the work area is limited and standard application starting from the low point will create traffic over the newly laid plies, it may be necessary to change the typical ply sheet layout and starting points; such as, running plies parallel to the direction of the roof slope (strapping method).

Run starter strips (headers) and finish strips parallel to parapet walls and perimeter details that are aligned with the felt direction. Use a paint roller or soft broom to embed ERS-Polyester 170 from deck side of roll. Do not roll out from behind roll. Because asphalt obscures lap lines and back edge of lower ply, it may be necessary to chalk line the deck (or insulation) side to maintain alignment. End laps should be a minimum of 6" and staggered a minimum of 4 feet. When end laps are in line, cover with a full width of ERS-Polyester 170. Keep equipment off the finished roof surface. Finishing strips should be run parallel to expansion joints or any penetrations through the membrane.

During installation, uncoated polyester membranes should be glazed or flood and graveled daily.

**Flashings:** Organic felts or ERS-403 must be used for envelopes.

**Flashings:** Use 40" felt layers such as the Garlock Aluminum U100 (Universal) Felt Layer; Mops – use nylon or cotton. **COVERAGE:**

One roll of ERS-Polyester 170 covers 10 squares (1,000 square feet).

**PACKAGING:**

ERS-Polyester 170 is available in a 39" x 333' roll – 10 squares (990.6 mm x 101,498 mm); 20 rolls per pallet.

**STORAGE LIFE:**

One (1) year from date of shipment when stored in a cool dry place, preferably indoors.

**PRECAUTIONS:**

- Light brooming of ERS-Polyester 170 is recommended. Run the soft broom in the roll direction while standing on the insulation or deck side.
- Throw of the mop should be limited to 10 – 12' to ensure adequate supplies of bitumen are installed in front of reinforcing roll. In cool weather, a 5 – 8' throw is recommended.
- Fishmouths and wrinkles cannot be walked down. These defects must be physically cut and then patched with polyester fabric. One-ply repair required.
- Bitumen must be no hotter than 475° (246°C) when embedding ERS-Polyester 170. Place mop at least 5 feet from roll and pull towards roll.
- During installation, uncoated polyester membranes should be glazed or flood and graveled daily.
- Not recommended for use with coal tar pitch.

**PHYSICAL PROPERTIES:**

Property	Typical Value	Test Method
Breaking Load	75 lbf/in. MD 45 lbf/in. XMD	ASTM D 5726
Elongation	42% MD 43% XMD	ASTM D 5726
Trapezoid Tear Strength	38 lbf. MD 27 lbf. XMD	ASTM D 5726
Puncture Strength	46 lbf.	ASTM D 5726
Weight	5.1 oz/yd <sup>2</sup>	ASTM D 5726
Thickness	0%	ASTM D 5726
Asbestos Content	Class A	EPA 600/R-93/116

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