



PRODUCTS FOR OUR ENVIRONMENT

## TECHNICAL DATA SHEET

### ERS-505

P/N: 045-0040

For Professional Use Only



#### PRODUCT DESCRIPTION:

ERS-505 is 120 mils (3 mm) thick and formulated with high quality asphalt which is modified with styrene-ethylene-butylene-styrene (SEBS) and styrene-butadiene-styrene (SBS) copolymers. This product is reinforced with a core of 180 g/m<sup>2</sup> non-woven, high-strength polyester. This unique blend of components allows the membrane to absorb significant thermal shock and remain flexible at very low temperatures.

#### RECOMMENDED USES:

ERS-505 can be used as a fully adhered surfacing ply in a modified roof assembly and as a flashing membrane for new construction or maintenance applications.

#### ADVANTAGES:

- May be applied by either hot mopping with asphalt or with cold-application asphalt adhesives.
- Weather resistant for long-term performance.
- Excellent cold weather performance.
- Contains no asbestos.
- Uniform layer of protection provided by quality control during manufacture.
- Meets or exceeds ASTM D 6164, Type II, Grade (S) requirements.
- Meets requirements of Factory Mutual Research Corporation® Standard 4470.
- Classified by Underwriters Laboratories, Inc.® as to an external fire exposure.

#### APPROVALS:



#### INSTALLATION:

**Surface Preparation:** The roof surface must be free of dust, dirt or moisture before applying ERS-505. Apply ERS-301 (asphalt primer) to all metal, concrete and other porous surfaces and allow to dry prior to installation of the roofing membrane and flashing.

**Application:** Roofing shall commence at the lowest point of the roof (running rolls perpendicular to the slope) with laps installed so that water flows over, rather than against, the lap. On inclines exceeding 1" per foot, the membrane may be installed with side laps running parallel to the direction of the roof slope (strapping method) and insulation stops and backnailing are required. Type IV asphalt is recommended.

At walls and vertical surfaces the roofing membrane field sheet shall extend over the full width of the cant strip and a minimum of 4" onto the vertical surfaces. The membrane is fully adhered to the vertical surface. The base ply should always extend over the cant by 2". Side laps shall be 3" and end laps a minimum of 6". End laps must be staggered a minimum of 3'.

Set the membrane and unroll to position. Align the membrane to have 3" side laps and 6" end laps. Stand on the membrane and re-roll one half. Apply the hot asphalt or ERS-309 to surface. Install at hot asphalt's labeled EVT. Asphalt temperature should not exceed 475°F (246°C) at point of application. A maximum mop lead of 5', starting away from the roll, is recommended.

Slowly unroll the membrane, taking care to retain the proper alignment. A small bead or "roll" of molten asphalt is desirable in front of the roll as it is installed and must also bleed out at the lap edge to ensure good adhesion.

When this section of the membrane is secure, re-roll the unbounded section and install into the adhesive in the same manner. Check all seam laps after the full roll has been applied.

**COVERAGE:**

Lapping width determines actual coverage of roll – i.e., 3" side and 6" end laps provide actual coverage of 97.5 sq.ft.

**PACKAGING:**

ERS-505 comes in a 39" x 33' roll; 30 rolls per pallet.

**STORAGE:**

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

**PRECAUTIONS:**

- Do not apply directly to previously coated surfaces without conducting an adhesion test. The use of a mechanically attached insulation or base sheet separator is recommended.
- Protect all components of Ecology's assemblies from discharges such as petroleum products, grease, oil (petroleum and vegetable) and constant contact with water in excess of 140°F (60°C).
- When ambient temperatures are below 50°F (10°C), material should be kept in a warm area (60°F (15.6°C) or higher) and brought to the roof no more than one hour prior to the application.
- Do not apply directly to the following surfaces unless they are primed with ERS-301 (asphalt primer): Gypsum, Stucco, Textured Masonry, any Metal.
- Copper flanges may be weathered or coated with an anti-tarnish lacquer, which impair adhesion. Clean with acetone and clean rags. Prime with ERS-301 (asphalt primer) before applying flashing membrane.
- T-joints and end laps must be carefully inspected after installation. All suspect T-joints shall be repaired with strip of new membrane.
- Do not apply flashing membranes directly to fresh mopping asphalt with asphalt mastic, as poor adhesion will result.

**PHYSICAL PROPERTIES: (Typical Value)**

Physical Property per ASTM D 6164, Type II, Grade S	MD	XD
Tensile – Max Load at 0 ± 3.6°F lbf/in	117	83
Elongation at 0 ± 3.6°F %	29	22
Tensile – Max Load at 73.4 ± 3.6°F lbf/in	70	70
Elongation at 73.4 ± 3.6°F %	56	61
Tear Strength at 73.4 ± 3.6°F lbf	120	87
Low Temperature Flex °F max	-15	-15
Dimensional Stability % max	<0.5	<0.5
Compound Stability Temp °F	230	230
Granule Embedment g/max	NA	NA

Minimum values before and after heat conditioning.

## *Ecology Roof Systems*®

Corporate Offices

9821 Olde Eight Road, Unit F, Northfield, OH 44067

PHONE: 330-467-4220 FAX: 330-467-4225

[www.ecologyroof.com](http://www.ecologyroof.com)

**REGIONAL OFFICES LOCATED ACROSS THE U.S.**

To the best of our knowledge, all technical data contained herein is true and accurate as of the date of issuance and subject to change without prior notice. User must contact Ecology Roof Systems to verify correctness before specifying or ordering. We guarantee our products to conform to the quality control standards established by Ecology Roof Systems. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any is limited to replacement of the product. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY ECOLOGY ROOF SYSTEMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.