

TDS TECHNICAL DATA SHEET



ISI BUILDING PRODUCTS
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VERSION 18.3

SPECIFICATION INFORMATION

ROOFING FELT &
UNDERLAYMENT

DIVISIONS

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1 PRODUCT NAME

Ensure™ Hi-Tac
High Performance Roofing Underlayment

2 MANUFACTURER

ISI BUILDING PRODUCTS

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3 PRODUCT DESCRIPTION

3.1 BASIC USE

Ensure Hi-Tac is a four-layer synthetic underlayment engineered to last the lifespan of the roof. It is ideally used under fiberglass, asphalt and modified bitumen shingles, tile, slate and metal roofs.

3.2 COMPOSITION & MATERIALS

Ensure Hi-Tac consists of a polypropylene woven core, polypropylene non-woven on top and an anti-slip polyolefin coating on the bottom.

3.3 SIZE

Size: 4' x 250' - 10 sq. roll

3.4 WEIGHT

A roll of Ensure Hi-Tac weighs approximately 23 lbs.

3.5 BENEFITS & FEATURES

- ASTM D 4869 and ASTM D 226 compliant
- Easy installation with printed lap lines and fastening points
- Lighter and stronger than traditional 15 lb. asphalt felt
- More material per roll than traditional 15 lb. asphalt felt
- UV resistant up to 60 days exposure
- Non-woven top and anti-slip coating offer a dynamic steep slope traction
- 100% water and air resistant
- No buckling, warping or cracking
- No mold growth, rot or dry out

4 TECHNICAL DATA

4.1 APPLICABLE STANDARDS

ICC-ES AC 188 Acceptance Criteria for Roof Underlayments

ASTM D 226 Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing

ASTM D 4869 Standard Specification for Asphalt-Saturated Organic Felt Used in Steep Slope Roofing

ASTM D 751 Standard Test Methods for Coated Fabrics

ASTM D 5261 Standard Test Method for Measuring Mass per Unit Area of Geotextiles

ASTM D 3776 Standard Test Methods for Mass Per Unit Area (Weight) of Fabric

ASTM D 4533 Standard Test Methods for Trapezoid Tearing Strength of Geotextiles

ASTM D 1894 Standard Test Method for Static and Kinetic Coefficients of Friction of Plastic Film and Sheeting

ASTM D 4586 Standard Specification for Asphalt Roof Cement, Asbestos-Free

ASTM E 96 Standard Test Methods for Water Vapor Transmission of Materials

ASTM E 108 Standard Test Method for Fire Test of Roof Coverings

5 INSTALLATION

5.1 PREPARATION

Make certain the roof deck is clean, smooth, dry and free from debris and damages.

5.2 PLACEMENT

Ensure Hi-Tac is laid horizontally (parallel to eave) with printed side up. Plastic cap fasteners are recommended to secure properly. The plastic cap fasteners should be a minimum of 1" in diameter.

Top and bottom overlap should be 4" as indicated on the product. Place the fasteners 2" from the edge of the top and bottom laps. End overlaps should be 12" minimum and fastened at 12" OC, vertically along the overlaps and 2" in from the end of the top layer. Roofing nails are acceptable for metal roofs.

The plastic cap fasteners should be driven tight to the surface without cutting the sheet. For seams, joints or tears, repairs may be made by using flashing tape or equivalent.

Ensure Hi-Tac should be extended 12" past all hips and valleys.

Ensure Hi-Tac installed on less than 4:12 slopes should be applied in a double coverage method. Overlapping by the normal 4" application is acceptable and the use of staples will be sufficient. Fastening can be through both layers.

In areas when the requirement of the roof is to have an ice dam membrane or an ice barrier under Chapter 15 of the IBC (International Building Code), two layers of underlayment must be cemented together with a roofing cement complying with ASTM D 4586 and extended for at least 24" inside the exterior wall line of the building.

These are very general installation instructions. Instructions on architectural or structural drawings should be reviewed and followed. Detailed installation instructions can be obtained by calling our corporate office at 866.698.6562 or online at www.isibp.com.

6 AVAILABILITY AND COST

Ensure Hi-Tac is sold through construction supply houses across the United States and Canada.

Ensure Hi-Tac current cost information can be obtained by calling our corporate sales office at 866.698.6562.

7 WARRANTY

Warranty information can be obtained by calling our corporate office at 866.698.6562 or online at www.isibp.com.

8 MAINTENANCE

Requires no maintenance once installed.

9 TECHNICAL SERVICES

Technical information and detailed test results can be obtained by calling ISI Building Products toll free at 866.698.6562.

10 FILING SYSTEMS

Additional information can be obtained by calling our corporate office at 866-698-6562 or online at www.isibp.com.

PROPERTIES

TEST METHOD

RESULTS

SPECIFICATION	APPLICABLE STANDARDS	TYPICAL VALUE
NOMINAL THICKNESS	ASTM D 5261	7 MIL
FINISHED WEIGHT	ASTM D 3776	100 GM./M ²
TENSILE	ASTM D 751	50 LBS (MD) 50 LBS (CD)
ELONGATION	ASTM D 751	20% (MD) 20% (CD)
TEAR RESISTANCE	ASTM D 4533	20 LBS (MD) 20 LBS (CD)
TEMPERATURE RANGE	N/A	-40° F TO 240° F
COF	ASTM D 1894	0.7 (TOP) 0.7 (BOTTOM)
PERMIABILITY	ASTM E 96	0.06 PERMS
PLIABILITY	ASTM D 226	PASS
FIRE RATING "CLASS A"	ASTM E 108	PASS

NOTE:

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