

# SPECIFICATION INFORMATION

## 1.0 PRODUCT NAME

Ensure® Quad Flex High Performance Roofing Underlayment

## 2.0 MANUFACTURER



**Insulation Solutions®**

Insulation Solutions, Inc.  
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East Peoria, IL 61611

Engineering Assistance  
Toll Free: 866 698-6562  
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## 3.0 PRODUCT DESCRIPTION

### 3.1 BASIC USE:

Ensure Quad Flex is a cross-woven synthetic underlayment designed to replace 15 lb. felt underneath various types of roofing materials.

Ensure Quad Flex is durable, tear resistant and lightweight.

### 3.2 COMPOSITION & MATERIALS:

Ensure Quad Flex consists of HDPP laminated to point bonded PP coated with high COF co-polymers for traction.

### 3.3 SIZE

Ensure Quad Flex is available in 4' x 250' rolls.

### 3.4 WEIGHT

Ensure Quad Flex 15/30 weighs approximately 19 lbs per roll.

## 3.5 BENEFITS & FEATURES

Cross woven construction provides superior tear strength and durability compared to 15 lb. felt.

Covers 10-Squares per roll

## 4.0 TECHNICAL DATA

### 4.1 APPLICABLE STANDARDS

- *ICC-ES AC 188 Acceptance Criteria for Roof Underlayments*
- *ASTM D 751 Standard Test Methods for Coated Fabrics*
- *ASTM D 1910 Test Methods For Construction Characteristics of Woven Fabrics*
- *ASTM 4869 Standard Specification for Asphalt Saturated Organic Felt Underlayment Used in Steep Slope Roofing*
- *ASTM D 1777 Test Methods for Thickness of Textile Materials*
- *ASTM E 108 Standard Test Method for Fire Tests of Roof Coverings*

## 5.0 INSTALLATION

### PREPARATION

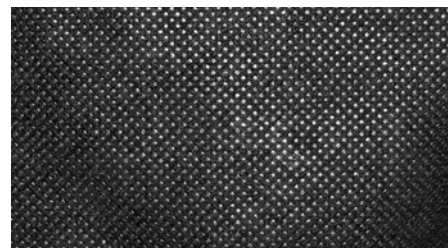
- 5.1 Make certain the roof deck is clean, smooth, dry and free from debris and damages.

### PLACEMENT

- 5.2 Ensure Quad Flex is laid horizontally (parallel to eave) with printed side up. Plastic cap fasteners recommended to

secure properly. The plastic cap fastener should be a minimum of 1" in diameter.

- 5.3 Top and bottom overlap should be 4" as indicated on the product. Place the fasteners 2" in 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.
- 5.4 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.
- 5.5 Ensure Quad Flex should be extended 12" past all hips and valleys.
- 5.6 Ensure Quad Flex 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.
- 5.7 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, two layers of underlayment must be cemented together with a roofing cement complying with ASTM D 4586 and extended for at least 24 inches inside the exterior wall line of the building.



PROPERTIES	TEST METHOD	ENSURE® QUAD FLEX
Thickness (Nominal)	ASTM D 1777	6 mil
Tensile Strength	ASTM D 228, ASTM D 146	93 MD / 99 CD
Tear Strength	ASTM D 228, ASTM D 1922	Pass
UV Weathering	Accelerated Weathering	60 days
Thermal/UV Stability	Thermal Stabilizers	Yes
Pliability	ASTM D 226	Pass
Liquid Water Transmission	ASTM D 4869	Pass
Permeability	ASTM E 96	Pass
Dimensional Stability	ASTM D 1087	Pass
Temperature Range	N/A	-40° F to 240° F
Class A Fire Rating	ASTM E 108	Pass

## **6.0 AVAILABILITY & 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.

## **7.0 WARRANTY**

25 Year Warranty. Contact Insulation Solutions (866-698-6562) for further information.

## **8.0 MAINTENANCE**

Ensure Hi-Tac requires no maintenance.

## **9.0 TECHNICAL SERVICES**

Technical information and detailed test results can be obtained by calling our corporate office at 866-698-6562.

## **10.0 FILING SYSTEMS**

Additional information can be obtained by calling our corporate office at 866-698-6562 or online at [www.insulationsolutions.com](http://www.insulationsolutions.com).

*Note: To the best of our knowledge, the specification chart on page one lists typical property values and are intended as guides only, not as specification limits. Insulation Solutions Inc.® makes no warranties as to the fitness for a specific use or merchantability of products referred to, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage.*

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