

# Royston® 108ARN Architectural Membrane

Royston® 108ARN Architectural Membrane is a prefabricated reinforced laminate constructed of a non-woven fiberglass core sandwiched between two layers of polymer modified asphalt. A woven polypropylene surface layer is bonded to the top of the modified asphalt to function as a protective barrier during back fill operations in vertical applications. This membrane is specifically designed for use in architectural applications and is not to be used in roadway applications as the high melting point of the polypropylene barrier will prevent sufficient bonding between the membrane and asphalt overlay. The embossed release film used with this membrane was specially designed to facilitate removal without tears or splits.

FEATURES	BENEFITS
3" Leading edge (Zip Strip)	Adhesive to adhesive bond creating a water-tight seam
Uniform thickness	Factory made sheet ensures consistent mil thickness
Flexible	Allows for minor amount of movement related to thermal expansion/contraction, settlement or shrinkage
Integrated polypropylene rock shield	No protection board required when backfilling
Cold Applied	Eliminates dangers of using hot liquids

## **USES**

## Application

 Vertical & Horizontal Waterproofing Membrane for architectural/commercial applications

#### Locations

- · Commercial & Residential Structures
- Balconies
- · Parking Garages

#### Substrate

- Concrete
- Block
- Asphalt
- SteelFoam

PHYSICAL PROPERTIES		
Properties	Test Method	Typical Values
Surface Layer		Backfill, foam, block, concrete
Top Surface		Woven polypropylene
Color		Black
Thickness		70 ± 5 mils
Weight		0.40 ± 0.05 lbs/ft <sup>2</sup>
Elongation	ASTM D1000 Mod. <sup>1</sup>	25%
Tensile Strength	ASTM D1000 Mod. <sup>1</sup>	1214 psi. (85.3 kg/cm²)
Permeance	ASTM E96 Method B	.05 u.s. perms max.
Compound Softening Point	ASTM D36	208°F min. (97.8°C)
Compound	ASTM D5	50 min @ 25°C
Penetration	ASTIVI DS	5 sec 100 needle
Puncture Resistance	ASTM E154	210 lbs. (95.2 kg) min
Pliability	ASTM D146 <sup>2</sup>	No cracks or splits @ 180° bend
	ASTM D146 <sup>3</sup>	No cracks or splits @ 180° bend
Reinforcement		Non-woven fiberglass mat: 48 g/m²

## NOTES:

- 1. ASTM D1000 Method using CRE Tester with a 4" jaw separation at a speed of 10"/min. PSI calculated from #/in. width at specified thickness.
- 2. 1" Mandrel @ -25  $^{\circ}\text{F}$  (-31.6  $^{\circ}\text{C})$
- 3. ½" Mandrel @ -20°F (-28.8°C)

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## WHAT IT DOES

Royston® 108ARN Architectural Membrane forms an impenetrable moisture barrier when used for vertical and horizontal applications. It effectively prevents moisture from infiltrating protected surface, eliminating water damage and mildew.

#### WHERE TO USE IT

Royston<sup>®</sup> 108ARN Architectural Membrane should be used in vertical applications to waterproof below grade foundation walls of block, brick wood, concrete or foam. Due to the woven polypropylene "rockshield", no protection board is required when backfilling against the membrane. It is also recommended on horizontal applications over concrete and wood decks where concrete, wood, soil, sand and a variety of pavers are to be used as a wear course. Due to the high melting point of the polypropylene "rockshield", asphalt overlays are not compatible with this membrane.

## **SURFACE PREPARATION**

<u>New Surface:</u> Should be flat, clean, dry and free from dust, dirt, mud, oil, grease and other contaminants. Holes, voids and uneven surfaces, with imperfections over 1/4" peak to valley, should be repaired with suitable material to obtain a level substrate. Ensure that all sharp protrusions are removed prior to installation.

<u>Existing Surface</u>: Existing waterproofing must be removed in its entirety. Surface must be cleaned with high pressure water or other acceptable method and allowed to dry completely. Surface must be swept and blown clean prior to primer, adhesive and membrane application.

#### **USE OF PRIMER**

Reference the applicable Roybond Primer technical data sheet for application procedures and rates. Roybond Primers should be stirred before using and applied at a rate of approximately 200 sq. ft. per gallon (without dilution) by brush, squeegee or short nap roller. The primer should be dry to the touch before application of the membrane. This will require 20 to 30 minutes depending on temperature and humidity. Brush out any puddles of primer to allow for uniform drying.

Roybond 713A: Standard Primer Roybond 713B: Low V.O.C. Primer

Roybond 740: Low temperature primer for use between 25°F (-

4°C) and 45°F (7°C)

Roybond 750: Spray-able version of the 713A standard primer

If adhering membrane directly to clean foam, no primer is required.

## **APPLICATION**

For best results, the membrane should be applied at surface and ambient temperatures of  $25\,^{\circ}$  F or higher. The membrane should be applied by hand rolling onto the application surface. The release film should be removed as the application proceeds. The membrane should be applied to the decking surface and terminated at the curb. If using Flex Flo Adhesive Sealant (FFAS), the membrane should be embedded in FFAS at all perimeter edges/termination points. A thin bead of FFAS or 104CM is to be applied on the surface of the membrane along all perimeter edges/termination points at the conclusion of the membrane installation.

When used as an architectural membrane, each roll should be applied to overlap the previous roll by a minimum of 3-6 inches. Overlapping of the membranes typically results in the loss of 10% of the usable surface area, reducing the coverage area from 200 ft² to 180 ft² per roll. The overlap at the edge is self-sealing due to the compound-to-compound contact. The transverse joint lap at the end of each roll should be sealed by heating with a propane torch to melt and fuse the surfaces together. Patching may also be done by the heat sealing method or with the use of Royston® 104CM or Royston® Flex-Flo Adhesive Sealant.

For additional instructions, reference the most current version of the "Royston® Waterproofing Membrane Installation Guidelines".

#### APPLICATION OF HOT ASPHALT OVERLAY

Royston® 108ARN Architectural Membrane is NOT designed to accept an asphalt overlay due to the high melt point of the integrated polypropylene rock shield. Concrete, block, foam insulation and other common wearing courses may be installed over the membrane.

#### **AVAILABILITY**

Rolls: 4' wide x 50' long (28 rolls per pallet)

Split Rolls (Strips):

24" wide x 50' long (2 per carton/20 cartons per skid)

12" wide x 50' long (4 per carton/20 cartons per skid)

6" wide x 50' long (6 per carton/20 cartons per skid)

SHELF LIFE: 1 year STORAGE CONDITIONS

Must be stored in a cool shaded area between 35°F and 90°F.

## **Contact Chase Construction Products**

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