Royston® 10A-65P Waterproofing Membrane

Royston® 10A-65P Waterproofing Membrane is a prefabricated reinforced laminate consisting of an impregnated woven fiberglass and polyester blend, high strength inner fabric reinforcement, sandwiched between two layers of a polymer modified bitumen. The Royston® 10A-65P Membrane was specially formulated to meet agency specifications that include elongation requirements. A unique 3- inch leading edge guarantees a positive compound-to-compound seal at the overlap. Transverse seals are easily made using Royston® Flex-Flo Adhesive Sealant (FFAS), Royston® 104 Caulkable Mastic (104CM) or via heat sealing.

FEATURES	BENEFITS
3” Leading edge	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
Cold applied	Eliminates dangers of hot liquids
Woven fiberglass/polyester reinforcement	Balance of high flexability, high tensile strength and puncture resistance
65 mil thickness	Enhanced protection

USES

Application
- General Purpose Waterproofing Membrane

Locations
- Bridges/Highways/Tunnels/Airport Runways
- Balconies
- Parking Garages

Substrate
- Concrete
- Asphalt
- Steel
- Wood

PHYSICAL PROPERTIES		
Properties	*Test Method*	*Typical Values*
Wearing Surface		Asphalt, concrete, terrazzo, block, backfill
Color		Black
Top Surface		¼ mil mylar film
Thickness		70±5 mils
Weight		0.38 ± 0.05 lbs/ft²
Elongation at break, %	ASTM D 882	35%
Tensile Strength	ASTM D882	60 lbs/in
Permeability, perms	ASTM E96 Method B	0.05perms
Compound Softening Point	ASTM D36	225˚F (107˚C)
Compound Penetration	ASTM D5	55±15 @ 77˚F 5 sec 100 needle
Puncture Resistance	ASTM E154	175 lbs.
Pliability	ASTM D146[2]	No cracks or splits at 180˚ bend
Crack Cycling	ASTM C836 @ 32˚F	Constant load @ 10 cycles No damage
Water Absorption	ASTM D1228 72 hours	.25% max.
Peel Adhesion	180˚ Peel after 1 hour, Primed Steel T Peel self/self after 1 hour	15 lb/in min. 3 lb/in min.
Reinforcement		Woven Glass Fiber 10x 20 mesh

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. 1/2" Mandrel @ -10˚F (-23.3˚C)

WHAT IT DOES

Royston® 10A-65P Waterproofing Membrane forms an impermeable barrier between the concrete decks and the surfacing material. It effectively prevents moisture, salts and deicing chemicals from infiltrating the underlying concrete surfaces, thus eliminating the damage to steel reinforcing and adverse effects of freeze-thaw cycles.

The driving of rubber tired trucks, pavers and other vehicles is permitted on the membrane covered bridge deck. The hot asphalt forms a strong bond to the bituminous compound during compaction.

WHERE TO USE IT

Royston® 10A-65P Waterproofing Membrane should be used to cover concrete decking of new highway bridges prior to the application of the surfacing material. It may also be used during resurfacing of old bridges to prevent further ingress of corrosive agents. Also, excellent for use on parking decks, balconies, plazas and other locations where waterproofing is required.

SURFACE PREPARATION

New Surface: Ensure that surface is clean, dry and free of any dirt, dust, debris or any other contaminant. Surface must be swept and blown clean prior to primer and membrane application.

Existing Surface: Should be profile milled using minimal tooth spacing (3/16" (4.75mm) or less). Ensure that the previous water proofing system has been completely removed. Grooves left in the concrete deck must be less than 3/16" (4.75mm). Surface must be swept and blown clean prior to primer and membrane application.

Milled Surface: If grooves in the concrete deck are ¼" (6.35mm) or greater tenting will occur. A scratch coat of asphalt must be applied prior to the primer and membrane installation. All unstable locations in the deck must be patched/repaired prior to the application of the scratch coat. The asphalt scratch coat should be allowed to cool to ambient temperature (2-3 hours). Surface must be swept and blown clean prior to membrane application. No primer is required when applying the membrane to a fresh asphalt scratch course.

Existing Asphalt: If the membrane is being applied over the surface of existing asphalt that is less than one (1) year old, no primer is required. The existing asphalt surface must be clean prior to membrane installation. If the asphalt surface is greater than 1 year in age, use the appropriate primer.

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. 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

APPLICATION

For best results, the membrane should be applied at surface and ambient temperatures of 25˚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.

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 placement of the spun bonded polyester mat providing 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 the spun bonded polyester mat 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.

Narrow strips (curb strips) are available for easy application to curb areas. If a curb strip is required by the specifying agency or engineer, the membrane should be brought up the curb to a point ½ inch below the top of the overlay, or as otherwise indicated by the engineer. Care should be taken to avoid rupture of the membrane when molding it to irregular contours.

Membrane should not be applied if weather will not permit for the paving of asphalt on top of the membrane prior to rain. If inclement weather occurs prior to paving and water is able to migrate under the membrane, the removal, drying of the deck and reinstallation of the membrane is required.

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

APPLICATION OF HOT ASPHALT OVERLAY

The asphalt MUST be between 290˚F and 340˚F at the time of application. Rubber tired pavers and trucks may be driven on the membrane provided care is taken to prevent sudden starts, stops or turns. As the hot asphalt is compacted, it bonds firmly to the surface of the membrane. A minimum of 1 ½ inches (32mm) of compacted asphalt is required to ensure proper bond between overlay and substrate.

AVAILABILITY

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

SHELF LIFE: 1 year

STORAGE CONDITIONS

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

Contact Chase Construction Products

Global Operations Center
295 University Avenue
Westwood, MA 02090
USA
www.chasecorp.com

Toll Free (US only): 800-323-4182
Tel: 781-332-0700
Fax: 781-332-0701
Email: info@chasecorp.com