

## Michael Garn

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**From:** John Pellerin <john.pellerin@ahharris.com>  
**Sent:** Monday, September 08, 2014 1:19 PM  
**To:** Michael Garn  
**Subject:** Fwd: PC-2 Protection board  
**Attachments:** image001.jpg; image002.png

Typo...

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**From:** Taylor, Maribeth [<mailto:MTaylor@chasecorp.com>]  
**Sent:** Monday, September 08, 2014 12:22 PM  
**To:** Rick Colburn  
**Cc:** Ezequelle, Allison  
**Subject:** RE: PC-2 Protection board

Hi Rick,

Please accept this email as confirmation that I've solicited input from members of our technical team regarding the use of protection board with Royston 10AN membrane. We see no immediate reason that this application would not work so long as the contractor follow standard installation procedures by both manufacturers.

The use of the protection board and Rosyton membrane should be applied in accordance with the agency's specification and at the discretion of the State engineer on site.

Kind regards,

*Maribeth*

Maribeth Taylor | Sales Manager - Bridge & Highway Products | Chase Corporation

Cell: 518-641-9806

**Chase Global Operation Center**

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[mtaylor@chasecorp.com](mailto:mtaylor@chasecorp.com), [constructionsales@chasecorp.com](mailto:constructionsales@chasecorp.com), [www.chasecorp.com](http://www.chasecorp.com)

CEVA SYSTEM: click <http://www.youtube.com/watch?v=TNhzC-xRuu0>

Please consider the environment before printing this email

**ROYSTON BRIDGE MEMBRANE - 10AN EASY PAVE**

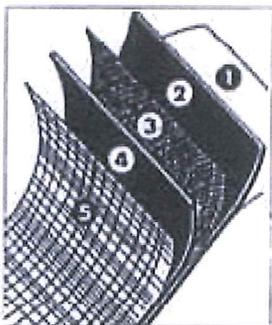
**CSI Section 071326  
No. 514**

**ROYSTON BRIDGE MEMBRANE 10AN EASY PAVE is a prefabricated reinforced laminate consisting of an impregnated fiberglass, non-woven, high strength inner mat sandwiched between layers of a polymer modified bitumen. An “open” spun-bonded polyester top film (mat).**

**PRODUCT DESCRIPTION:**

ROYSTON BRIDGE MEMBRANE 10AN EASY PAVE is a prefabricated reinforced laminate consisting of an impregnated fiberglass, non-woven, high strength inner mat sandwiched between layers of a polymer modified bitumen. An “open” spun-bonded polyester top mat provides ease of installation, mechanical protection against foot and vehicular traffic and instant adhesion to the compacted pavement interface. A unique 3-inch leading edge guarantees a positive compound-to-compound seal at the overlap. Transverse seals are easily made using a simple propane torch.

1. Embossed Release Film
2. Rubberized Asphalt Compound
3. Non-woven Fiberglass Reinforcement
4. Rubberized Asphalt Compound
5. Spun Bonded Polyester Mat



**WHAT IT DOES:**

ROYSTON 10AN EASY PAVE forms an impenetrable water barrier between the concrete decks and subsequently applied traffic bearing toppings or surfacing material. It effectively prevents moisture, salts and deicing chemicals from infiltrating concrete surfaces, eliminates damage to steel reinforcing and eliminates concrete damage as a result of freeze-thaw cycles.

This waterproof, impermeable membrane furnishes a tough, flexible, bituminous compound, which assures the highest degree of resistance to moisture dissolved salts and corrosive chemicals. The reinforced high strength non-woven fiberglass mat adds strength and aid in eliminating ruptures of the membrane during application.

The thin spun bonded polyester mat imparts sufficient strength to the membrane to permit driving rubber tired trucks, pavers and other vehicles on the membrane covered bridge deck. Although the spun polyester facing mat has a high melting point, the hot asphalt forms a strong bond to the bituminous compound during compaction.

**WHERE TO USE IT:**

ROYSTON BRIDGE MEMBRANE 10AN EASY PAVE 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 provided corrosive elements have not already penetrated the decking layer. Also excellent for use on parking decks, balconies, plazas and other locations where waterproofing is required.

**SURFACE PREPARATION:**

Concrete surfaces should be clean, dry and free from dust, dirt, mud, oil, grease and other contaminants. Laitance and loose concrete

PHYSICAL PROPERTIES		
Properties	Test Method	Typical Value
Color		Black with spun bonded polyester to surface
To Surface		Spun bonded polyester
Thickness		0.15 cm ± 0.0127 cm (60 ± 5 mils)
Weight		0.35 ± 0.05
Elongation of Compound Only	ASTM D 1000 Mod. (see note #1)	1000% min.
Tensile Strength	ASTM D 1000 Mod. (see note #1)	4.46 kg/cm (15 lb/inch width)
Water Vapor Permeability	ASTM E 96 Method B	.05 US Perms max.
Compound Softening Point	ASTM D 36	97.8°C (208°F) min..
Compound Penetration	ASTM D 5	40-60 @ 77°F 5 sec 100 needle
Puncture Resistance	ASTM E 154	11 k (25lbs)
Low Temperature Pliability	ASTM D 146 1" Mandrel -31°C (-25°F)	No cracks or splits at 180° bend
Cycling Shear Strength	RTM 30 (see note #2) 5.08 cm (2")/min @ 0°C (32°F) w/0" opening & .3175 com (.125") displacement	1.76 kg/cm <sup>2</sup> (25 lb/sq.in.) min.
Cycling Shear Strength Recovery	RTM 30 (see note #2) .635 cm (.25") Recovery 0°C (32°F)	Constant load @ 1000 cycles, no damage
Resistance to Hydrostatic Head	RTM 29 (see note #3)	45.75 m (150 ft) min.
Water Absorption	ASTM D 1228 - 72 hrs	.25% max
Peel Adhesion	180° peel after 1 hour primed steel	1.784 kg/cm (10 lb/in.) min.
Reinforcement		48 g/m <sup>2</sup>
NOTES:		
1. ASTM D 1000 Method using CRE Tester with a 4" jaw separation at a speed of 10"/min. PSI calculated from #/in. width at specified thickness.		
2. RTM 30 uses membrane properly applied to two primed steel panels with a 1" gap between panels. At specified test temperature the gap is cycled to the specified opening for the specified No. of cycles. For Shear Strength, the force/unit of the first cycle is recorded. For Shear Stress recovery any damage after the No. of cycles to constant load and the No. of cycles required to reach constant load is noted.		
3. Hydrostatic Head tests are performed on membrane properly applied to primed concrete. The surface is sealed with a pressure chamber and water is introduced under pressure equal to specified head.		

**WARRANTY**

Manufacturer WARRANTS that the product conforms to its chemical description and is reasonably fit for the purpose stated on its Technical Bulletin when used in accordance with its directions. Manufacturer makes NO OTHER WARRANTY either expressed or implied. Buyer assumes all risk in handling. For further Technical or Application Information, contact Chase Construction Products

**ROYSTON BRIDGE MEMBRANE - 10AN EASY PAVE**

CSI Section XXXXX

should be removed by sand blasting or mechanical abrasion. Holes and voids in the concrete should be patched with a suitable material.

**USE OF ADHESIVE:**

Royston Roybond 713A should be stirred before using and applied at a rate of approximately 200 sq. ft. per gallon, without dilution, by brush squeegee, roller or other acceptable methods. The adhesive should be allowed to dry to the touch before application of the membrane. This will require 20 to 30 minutes depending on temperature and humidity. If the adhesive tends to puddle in low spots, it should be brushed out thoroughly to complete drying. Wet adhesive should be removed from holes in the concrete to avoid solvent bubbling when the traffic surface is applied.

Add 713B, 740, 750

**APPLICATION:**

For best results, the membrane should be applied at ambient temperatures of 35°F or higher. The membrane should be applied by hand rolling onto the application. The release film should be removed as the application proceeds. The membrane should be applied to the decking surface and should be brought up the curb to a point 1/2 inch below the top of the overlay, or as otherwise provided by the engineer. Care should be taken to avoid rupture of the membrane when molding it to irregular contours. Narrow strips (curb strips) are available for easy application to curb areas.

Each roll should be applied to overlap the previous roll by a minimum of 3-6 inches. 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 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 Flex-Flo Adhesive Sealant (FFAS). Follow the appropriate data sheets for proper use of these products.

**APPLICATION OF HOT ASPHALT OVERLAY:**

The asphalt should 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 1/2 inches of compacted asphalt is desirable.

**AVAILABILITY:**

Call your local Royston representative or distributor or call Royston's direct at 800-245-3209 for prices, delivery, additional information or technical service.

**TECHNICAL SERVICES:**

Chase Specialty coatings

800-245-3209

128 First Street, Pittsburgh, PA 15238

**WARRANTY**

Manufacturer WARRANTS that the product conforms to its chemical description and is reasonably fit for the purpose stated on its Technical Bulletin when used in accordance with its directions. Manufacturer makes NO OTHER WARRANTY either expressed or implied. Buyer assumes all risk in handling. For further Technical or Application Information, contact Chase Construction Products



CSI Code: 07 10 00

NO. 712

DECEMBER 2008  
(Supersedes March 2006)

## PROTECTION COURSE

### Waterproofing Protection

#### DESCRIPTION

PROTECTION COURSE from W. R. MEADOWS is a multi-ply semi-rigid core composed of a mineral-fortified asphalt core formed between two outside layers of asphalt-impregnated reinforced mats, manufactured in accordance with ASTM D 6506.

When properly applied by personnel trained in good waterproofing techniques, PROTECTION COURSE will absorb the impact of aggregate shock and normal jobsite foot traffic. It also protects the membrane waterproofing from penetration by sharp aggregate during backfilling and later settlement. PROTECTION COURSE is available in two types: PC-2, Standard Duty and PC-3, Heavy Duty. Both types are economical and convenient to use.

#### USES

PROTECTION COURSE is used in between slab construction, such as plaza decks, roof terraces, promenade decks, pedestrian concourses, tunnels, bathroom floors, showers, kitchens, mechanical rooms, parking garage decks, planter boxes, reflective pools, and foundation walls. PROTECTION COURSE is compatible with most currently popular dampproofing and waterproofing materials.

#### LEED INFORMATION

May help contribute to LEED credits:

- MR Credit 4.1: Recycled Content: 10%
- MR Credit 4.2: Recycled Content: 20%
- MR Credit 5.1: Regional Materials: 10%  
Extracted, Processed & Manufactured Regionally
- MR Credit 5.2: Regional Materials: 20%  
Extracted, Processed & Manufactured Regionally

#### FEATURES/BENEFITS

- Tough, durable and lightweight ... panels are easily handled, quickly installed.
- Full width fiberglass matting improves flexural strength.
- Highly resistant to chemical action.
- Performance is equally effective in above- or below-grade installations.
- Unique dual facing offers compatibility with most currently popular waterproofing materials.
- Economical and convenient to use.

#### PACKAGING

4' X 8' (1.22 m X 2.44 m) panels

### PHYSICAL PROPERTIES AND TEST RESULTS

ASTM D 6506

#### PROTECTION BOARD REQUIREMENTS

	TYPE 2	TYPE 3
<b>Puncture Strength</b> (Classes A & B)	312 N (70 lbf) minimum	365 N (82 lbf) minimum
<b>Thickness</b> (Classes A & B)	2.4 to 3.9mm (0.095 to 0.155in.)	5.6 to 7.1mm (0.220 to 0.280in.)
<b>Water Absorption</b> (Classes A & B)	10.0% maximum	10.0% maximum
<b>Asphalt, % by weight</b> (Class A)	65% minimum	65% minimum
<b>Asphalt, % by weight</b> (Class B)	40% minimum	40% minimum
<b>Resistance to Decay</b> (Classes A & B)	Meets puncture requirements after completion of test	Meets puncture requirements after completion of test

CONTINUED ON REVERSE SIDE...

## APPLICATION

NOTE: Prior to application, consult the waterproofing manufacturer to determine whether the polyethylene film facing on one side, or the asphalt-impregnated reinforced mat on the other side of PROTECTION COURSE, is approved as "compatible" to the specific waterproofing product being protected.

PROTECTION COURSE is installed to form a continuous protective layer over the membrane waterproofing. The sheets can be easily cut with a roofer's knife for fitting at protrusions.

**Surface Condition ...** The waterproofing membrane must be free of sharp projections, dirt, and dust. If water testing is desired, it should be made prior to placing PROTECTION COURSE. Note: PROTECTION COURSE should be applied at the end of each day's waterproofing to both horizontal and vertical surfaces.

**Horizontal Surfaces ...** PROTECTION COURSE should be installed over the waterproofing membrane as soon as permissible by the membrane applicator or manufacturer. PROTECTION COURSE sheets should be butted together and cut to fit all intersecting surfaces and protrusions. If desired, joints may be covered with DETAIL STRIP from W. R. MEADOWS or roofer's glass reinforced tape embedded in hot asphalt as a secondary waterproofing system. (See point 2 under Precautions.)

**Vertical Surfaces ...** For dampproofed and/or waterproofed vertical walls to receive backfill, PROTECTION COURSE should be butt jointed and, if necessary, temporarily held in place while backfilling.

**Backfilling ...** Backfilling against vertical walls should be done immediately using care and caution to avoid damaging the waterproofing application. Backfill material should not be dropped against PROTECTION COURSE in such a manner that it could drag the sheet down as the backfill drops. For horizontal applications, the waterproofing and PROTECTION COURSE should be installed just prior to the installation of the wearing surface.

## PRECAUTIONS

1. Where PROTECTION COURSE is adhered to waterproofing membrane, use the adhesive recommended by the membrane manufacturer.
2. Where taped joints are desired with tape set in hot asphalt, consult membrane manufacturer.
3. PROTECTION COURSE is shipped on pallets with the polyethylene anti-stick sheet on the top or exposed side. PROTECTION COURSE should be stored on pallets and placed on a level surface.
4. CAUTION... Do not apply PROTECTION COURSE over liquid waterproofing membranes containing volatile solvents until all of the solvent has evaporated. Consult membrane manufacturer for specific application details prior to placing PROTECTION COURSE. Read and follow application information and precautions. Refer to Material Safety Data Sheet for complete health and safety information.

**For most current data sheet, further LEED information, and MSDS, visit [www.wrmeadows.com](http://www.wrmeadows.com).**



## LIMITED WARRANTY

"W. R. MEADOWS, INC. warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order." Read complete warranty. Copy furnished upon request.

## Disclaimer

The information contained herein is included for illustrative purposes only, and to the best of our knowledge, is accurate and reliable. W. R. MEADOWS, INC. cannot however under any circumstances make any guarantee of results or assume any obligation or liability in connection with the use of this information. As W. R. MEADOWS, INC. has no control over the use to which others may put its product, it is recommended that the products be tested to determine if suitable for specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, application and proper installation of each product. Specifier and user shall determine the suitability of products for specific application and assume all responsibilities in connection therewith.