ADDENDUM #1 & ACKNOWLEDGEMENT

To: All Vendors
Date: August 15, 2018

Changes to Specifications

<table>
<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Questions &amp; Answers</td>
<td>Vendor questions with responses and accompanying documents.</td>
</tr>
</tbody>
</table>

The information contained herein revises, supplements and/or supersedes the specific parts of the documents referred to and shall be attached to and become part of those documents as if originally forming a part thereof. Except herein as modified, all other provisions of the documents shall remain in full force and, unless otherwise described in this Addendum, shall comply with the requirements originally specified. All other conditions of this IFB will remain in effect.

Please direct any questions to bids@rowan.edu

ADDENDUM #1 & ACKNOWLEDGEMENT

I acknowledge that I have received and reviewed Addendum #1.

________________________________________________________________________
Company Name (please print)

________________________________________________________________________
Name (please print)

________________________________________________________________________
Signature

________________________________________________________________________
Date

This acknowledgement is required with bid submission.
### #1 - Question & Answer

Due to the summer and our current bid schedule, we request that the bid opening be rescheduled to Tuesday August 28th. Please let us know if this is possible.

The University will not be extending the submission due date.

### #2 - Question & Answer

Please provide product information on the basis of design epoxy flooring product EP1.

The basis of design epoxy flooring product, EP1 as indicated on A-1100, shall be as follows:

- **Manufacturer:** Milamar or approved equal.
- **Product:** PM DCS 200-500
- **Description:** Decorative chipflake floor system consisting of a primer coat, fully pigmented color receiving coat with full broadcast colored flakes, and two coats of urethane finish with 80 mesh aluminum oxide slip resistant aggregate.
- **Color:** To be selected from manufacturer’s full range of colors.
- **Chips/flakes:** To be selected from manufacturer’s full range of colors.
- **Installation:** Test water vapor transmission of concrete slab to ensure it is within an acceptable range prior to application. Prepare concrete slab and install per manufacturers requirements.

Please refer to the attached product literature for more information.

### #3 - Question & Answer

Can the GCP Applied Technoligies Preprufe 300R be substituted with W.R. Meadows PRECON.

See the attached document for the approved membrane system.

If you submitted questions to bids@rowan.edu by the due date indicated in the bid document, but they were not received and answered here, please contact:

Robert Yufer  
Office of Contracting & Procurement  
Yufer@rowan.edu  
856.256.4196
Milamar PM DCS 200-500

Full Broadcast System

Milamar’s PM DCS system is a decorative chip/flake floor system with good chemical and abrasion resistance. It is comprised of an epoxy primer and/or color receiving coat and a chemical resistant urethane topcoat.

COMPONENTS

**Primer** (suggested for rough, porous or shot blasted concrete)

PM100 - Clear Epoxy

PM 125, PM 126 or PM 127 - Hardeners

**Receiving Coat**

PM200 “A” - Fully Pigmented Industrial Epoxy

PM200 “B” - Hardener

Chips/flakes - Mini, or 1/4 “ inch

**Finish Coat**

PM 500 - Part “A” Ultra Chemical Resistant Urethane

PM 500 - Part “B” Hardener

(Mix ratio is 2 parts “A” to 1 part “B” by volume)

Optional Finish Coat (Not for exposure to UV)

PM 101 - Clear Epoxy

PM 125 - Hardener

OPTIONAL: Various grades of silica, quartz, white aluminum oxide or glass aggregate can be added for additional slip resistant properties.

RECOMMENDED COVERAGE RATE

150-200 sq. ft. per gallon Epoxy Primer

150-200 sq. ft. per gallon Epoxy Receiving Coat

150-200 sq.ft. per gallon, per coat, Epoxy Finish Coat

175-250 sq. ft. per gallon, per coat, Urethane Finish

NOTE: Consumption rate will be dramatically higher on non-primed or porous substrate.
PREPARATION
(See Floor Preparation Section)

CAUTION

Make certain all personnel has read and fully understood all safety precautions on product labels and Material Safety Data Sheets.

INSTALLATION

Step 1. Mixing

Carefully mix 1 gallon of Milamar PM Epoxy Part “A” with 1/2 gallon of appropriate Milamar PM Part “B” Hardener (see above). Mixing should be done with a 1 gal. Jiffy Mixer and a low speed drill (max. 650 rpm) for a minimum of 2 minutes. NOTE: Larger quantities of epoxy may be mixed if there is sufficient manpower to squeegee and roll before epoxy begins to set up.

Step 2. Priming (Optional)

Milamar PM epoxy primer, PM 100 is designed to be applied by a squeegee or trowel then slowly back rolled. Do not entrain air into the primer by vigorous rolling action.

Application of Primer

Pour entire contents of mix onto floor in a continuous ribbon. Slowly move and level the mixture with a flat squeegee or trowel, then back roll with a medium nap 1/4”-3/8” phenolic core roller to remove any squeegee or trowel marks. A standard 1 ½ gallon mix should cover approximately 300 sq. ft. (200 sq.ft. per gallon) but this will vary depending upon the porosity and texture of the concrete.

NOTE: Larger quantities of epoxy may be mixed if there is sufficient manpower to squeegee and roll before epoxy begins to set up. Working time is approximately 30 minutes for PM 100/125, 20 minutes of PM 100/126 and 10 minutes for PM 100/127 @ 75°F.

Cure Time: Allow to cure until surface is tack free.

CAUTION: If oily film caused by unusual environmental conditions is present on first coat, call TELE TECH at 1-800-459-7659 for information on removal before applying additional coats.

NOTE: If first coat has cured over 24 hours before additional coats can be applied, the receiving coat should be lightly sanded with a medium grit sanding pad and then vacuumed or swept and wiped with solvent.

Step 3. Application of Receiving Coat

When epoxy primer is no longer tacky, mix PM 200 Parts “A” & “B” as noted above in Step 1. Pour entire contents of mix onto floor in a continuous ribbon. Slowly move and level the mixture with a flat squeegee or trowel, then back roll with a medium nap 1/4”-3/8” phenolic core roller to remove any squeegee or trowel marks. A standard 1 ½ gallon mix should cover approximately 300 sq. ft. (200 sq.ft. per gallon) but this may vary depending upon the job specification.

NOTE: Larger quantities of epoxy may be mixed if there is sufficient manpower to squeegee and roll before epoxy begins to set up. Working time is approximately 30 minutes @ 75°F for PM 200.

Full Broadcast

Immediately while PM 200 is still wet, broadcast blended chips/flakes. Broadcasting is done by tossing chips/flakes into the air and letting it rain down on the wet epoxy. Continue broadcasting till floor looks dry, completely covered with no wet spots on surface. A blower can be used to spread excess chips/flakes from heavy to light areas for chip uniformity after chips/flakes have had time to set into the wet epoxy, approximately 20-30 minutes. Be careful not to blow dirt into chips/flakes.

To enhance even distribution of the chips/flakes, it is recommended that the broadcast installer wear spiked shoes (old golf shoes are acceptable) to allow him to walk in the wet epoxy and stay close to the broadcast area.
Cure Time: Allow to cure until surface is tack free or a minimum of 12 hours before coating with epoxy or urethane finish.

After fully cured blow excess chips into a corner and collect for future use. A hard bristle push-broom will remove all other excess chips not bonded to epoxy.

**Step 4. Application of Urethane**

**First topcoat of Urethane**

Lightly scrape off any high points prior to coating. Carefully mix 1 gallon of PM 500 Part “A” with 1/2 gallon PM 500 Part “B”. Mixing should be done with a Jiffy Mixer and a low speed drill (maximum 650 rpm to avoid bubbling) for a minimum of 2 minutes. Be sure to premix PM 500 Part “A” before mixing with Part “B” as settling may occur during shipping and storage.

Apply PM 500 with a sturdy, long handled, roller frame and a 3/8” napped, non-shedding roller cover being careful not to work the material which may introduce air into the application. A standard 1 1/2 gallon mix should cover approximately 225 sq. ft. (150 sq. ft. per gallon) on a partial broadcast surface and 260 sq. ft. (175 sq. ft. per gallon) on a full broadcast surface. Working time is approximately 30 minutes @ 75°F for PM 500.

Additional topcoat may be installed in the same manner as above after overnight cure at 75°F.

**Second topcoat of Urethane**

Full broadcast systems typically require a second topcoat of Urethane for best uniformity and gloss. Sand surface to knock off any irregularities and any high points created by the chip distribution. Surface should be lightly sanded with a medium grit sanding pad and then vacuumed or swept and wiped with solvent. Apply the final coat as detailed above.

**For skid resistance**, fine transparent slip resistant aggregate can be used. PM500 should be mixed thoroughly before adding slip resistant aggregate. Amount of slip resistant aggregate will vary in amount and texture depending on materials used. We recommend a sample of the slip resistant aggregate be tested with the PM500 prior to application for acceptance of texture and appearance by the owner.

**Optional Step 4. Clear Epoxy Finish (for interior, non UV exposure)**

When applying a Clear Epoxy Finish, two coats of clear are recommended.

First coat. Lightly scrape off any high points prior to coating. Carefully mix 1 gallon of PolyMax PM101 Epoxy Part “A” with 1/2 gallon of PolyMax PM125 Part “B” Hardener. Mixing should be done with a 1 gal. Jiffy Mixer and a low speed drill (max. 650 rpm) for a minimum of 2 minutes. NOTE: Larger quantities of epoxy may be mixed if there is sufficient manpower to squeegee and roll before epoxy begins to set up.

Pour entire contents of mix onto floor in a continuous ribbon. Slowly move and level the mixture with a flat squeegee or trowel, then back roll with a medium nap ¼” phenolic core roller to remove any squeegee or trowel marks. A standard 1 ½ gallon mix should cover approximately 225 sq. ft. (150 sq. ft. per gallon) but this will vary depending upon the texture of the chips/flakes to be covered. NOTE: Larger quantities of epoxy may be mixed if there is sufficient manpower to squeegee and roll before epoxy begins to set up. Working time is approximately 30 minutes for PM 101/125. Fast cure hardeners are not recommended for this step.

Cure Time: Allow to cure until surface is tack free, minimum 10 hours.

Second coat. Sand surface to knock off any irregularities and any high points created by the chip distribution. Surface should be lightly sanded with a medium grit sanding pad and then vacuumed or swept and wiped with solvent. Apply PM 101 and/or PM 500 as the final coat as detailed above.

**Return to Service**

Normally allow new floor to cure a minimum of 24 hours @ 75°F before returning floor to light duty service and 48 hours @ 75°F before returning floor to full service. Be certain that the floor is no longer tacky and hard before turning over to customer. Vehicles with rubber tires should not be parked on finished system within 72 hours of installation at 75°F.

The Decorative Chip system can be installed in different ways varying the amount of chips and top coats. The information above is to be used as a guideline. The coverages and times provided may vary due to temperature, humidity, mixing time, concrete surface and preparation used.
PRODUCT DESCRIPTION

Milamar Decorative Chip System is a medium duty industrial or heavy duty commercial grade, decorative seamless flooring system. It is comprised of a durable fluid applied, pigmented, high build epoxy coating with decorative plastic chips embedded in ultra-clear, high durability epoxy or urethane. This decorative floor system will withstand the rigors of medium duty industrial and commercial applications. Surface finish can be slightly textured or glass smooth.

This specially formulated epoxy has very good chemical, excellent abrasion and impact resistance and good color stability. Three times stronger than concrete, this beautiful easily maintained floor will last two to three times longer than premium vinyl tile or sheet vinyl.

TYPICAL USE

The versatile PM DCS flooring system is most often used in schools, community centers, fire houses, locker rooms and restrooms, and retail stores. But it is ideal for any area where a low maintenance, decorative, economical floor is required.

Use PM DCS anywhere a decorative, low maintenance, seamless floor that is an alternative to vinyl tile is desired.

FEATURES

- Top Quality Formulation
- Low Maintenance
- Variety of Color Combinations
- Very Low VOC
- Very Good Chemical and Abrasion Resistance
- Good Impact Resistance
- Longer Lasting Than Vinyl Tile
- Easily Cleaned, No Seams to Harbor Dirt

INSTALLATION

The performance of any floor coating is highly reliant upon proper preparation of the substrate. Substrate must be free of all contamination such as latex, curing compounds, dirt, and oil. Concrete should be lightly shot blasted or acid etched and neutralized to a smooth, even finish similar in texture to 100 grit sand paper.

Step 1. A bond/color coat of PM200 epoxy coating is normally squeegeed and back rolled. While bond coat is still fluid, broadcast Milamar Color Flakes into wet surface. Coverage can be partial, showing background color or full flake coverage.

Step 2. Apply a thin coat of PM100 clear epoxy by squeegee and back roll method to lock in color flakes. Allow to cure.

Step 3. Apply a finish coat of either PM100 clear epoxy or for Ultra Violet protection and better scuff resistance a coat of PM500 Chemical Resistant Urethane by squeegee and back roll method.

Additional coats of PM100/PM500 can be applied to further smooth surface. If a slip resistant finish is required, the appropriate aggregate can be pre-mixed with the A and B components or it may be broadcast on the surface once the coating has been applied.

PACKAGING

Liquid components are normally packaged in 5 gallon pails. Color Flakes are packaged in 55 lb. boxes. Larger or smaller packaging is available by special order with minimum quantity restrictions.

STORAGE

For best shelf life, store PM DCS epoxy in a dry area at temperatures between 50°F and 90°F. Protect product from freezing. Minimum shelf life is one year from date of manufacture when properly stored.

LIMITATIONS

Avoid on or below grade applications where water vapor transmission is greater than 5 lbs./1000 sq. ft. per 24 hours or where ambient operating temperatures exceed 170°F. Apply at temperatures above 55°F or below 90°F. For UV protection use PM-500 finish over full flake coverage.

COMPLIANCES

PM DCS is compliant with EPA architectural coatings volatile organic compound (VOC) rule, New York City AQMD Rule 205 and the New Jersey VOC requirements.

CHEMICAL RESISTANCE

PM DCS System is very resistant to most common industrial chemicals and solvents. An abbreviated list follows. For more comprehensive chemical resistance analysis, contact Milamar Tele-Tech.

Note: See the PM-500 Urethane Product Data Sheet for chemical resistance when using as a finish coat on the PM DCS system.
### REAGENT

<table>
<thead>
<tr>
<th>REAGENT</th>
<th>30 MIN.</th>
<th>24 HRS.</th>
<th>7 DAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>NA</td>
<td>F</td>
<td>F</td>
</tr>
<tr>
<td>Acetic Acid</td>
<td>NA</td>
<td>F</td>
<td>F</td>
</tr>
<tr>
<td>Ammonium Hydroxide (28%)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Clorox</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Ethylene Glycol</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Gasoline</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Isopropyl Alcohol (98%)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Mineral Spirits</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Nitric Acid (10%)</td>
<td>NA</td>
<td>F</td>
<td>F</td>
</tr>
<tr>
<td>Nitric Acid (70%)</td>
<td>D</td>
<td>F</td>
<td>F</td>
</tr>
<tr>
<td>Skydrol #500</td>
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<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Sulfuric Acid (10%)</td>
<td>NA</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Sulfuric Acid (45%)</td>
<td>NA</td>
<td>NA</td>
<td>D</td>
</tr>
<tr>
<td>Sodium Hydroxide (30%)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Toluene</td>
<td>NA</td>
<td>F</td>
<td>F</td>
</tr>
<tr>
<td>Urine-Synthetic (6.6% urea)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

N/A = NO ATTACK       D = DISCOLORED       F = FAILED

### PHYSICAL PROPERTIES

- **Compressive Strength**: ASTM C-579, >12,000 psi
- **Tensile Strength**: ASTM D-638, 5,992 psi
- **Flexural Strength**: ASTM C-580, 7,127 psi
- **Bond Strength**: ACI 503R, >300 psi, Concrete Failure 546 psi (Steel)
- **Linear Shrinkage**: ASTM C-883, Nil
- **Hardness**: ASTM D-2240, 82 - 85 Shore D
- **Water Absorption**: ASTM D-413, <.01
- **Flammability**: MIL-D-3134F, Fire Retardant
- **Indentation**: MIL-D-3134F, .003"
- **Elongation**: ASTM D-638, 14%

Actual test results may vary due to the use of various aggregates, application methods and floor finish. The foregoing test results are based upon laboratory prepared samples and results may vary if not prepared by a professional technician.

### AVAILABILITY

Milamar products are available only through selected and approved applicators and distributors. This material is intended for commercial and industrial installations and should be installed by skilled, seamless flooring technicians.

It is neither designed for nor available for consumer use. Custom design assistance may be obtained by contacting Milamar Tele-Tech at 405-755-8448 8:00 AM through 4:00 PM Central time.

### COLOR SELECTION

Color combination is virtually unlimited with decorative chips available in a minimum of 30 solid colors and epoxy background colors in off white, gray, dark gray, tile red, and mocha.

### CAUTION:

COMPONENTS OF OR PRODUCTS USED WITH AND DURING THE INSTALLATION OF MILAMAR PRODUCTS MAY INCLUDE HAZARDOUS MATERIALS. All personnel exposed to or handling materials before and during installation must read and fully understand label precautions and Material Safety Data Sheets.

### LIMITED WARRANTY

Milamar Coatings products are manufactured to be free of defects in material and workmanship in meeting the properties specified on its individual Product Data Sheets. Users and installers of Milamar Coatings products are solely responsible for determining the suitability of the products for specific product applications. Milamar Coatings makes no Warranty or Guarantee, express or implied, including warranties of fitness, design compatibility or merchantability, for any particular use and shall have no responsibility or liability, including direct, indirect or consequential damages, due to injury, delay or third party claims for installation or repair. Likewise, Milamar Coatings assumes no liability of any nature for products that are adjusted in the field or that do not utilize all specified Milamar Coatings components. Should any Milamar Coatings product be proved to be defective within one year from the date of shipment, Milamar Coatings will, at its sole discretion, either replace the material; issue a credit to the customer’s account; or provide a cash refund for the initial, paid purchase price of the material. Potential claims regarding product quality must be received in writing by Milamar Coatings within 30 days of the discovery of such potential defect.

This Warranty is exclusive of all other warranties, expressed or implied, and may only be adjusted in writing, signed by an officer of Milamar Coatings.

Milamar Coatings  
311 NW 122nd St., Suite 100  
Oklahoma City, OK 73114  
405.755.8448  
www.milamar.com
WR MEADOWS ALTERNATE REQUEST

Project: Esbjornson Gymnasium Men's Team Locker Replacement

To: George Hibbs  
From: Taylor Wodzinski / Tim Durso

Clarke Caton Hintz  
Date: 8/14/2018

Re: Alternate Approval:

PRECON®

SPECIFICATION

SPECIFIED PRODUCTS

Name of Product: Preprufe 300R
Manufacture: WR Grace

PROPOSED SUBSTITUTION

Name of Product: Preprufe 300R
Manufacture: W.R. MEADOWS, INC.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.

Firm: W.R. MEADOWS  
Submitted by: Taylor Wodzinski / Tim Durso
Address: 300 Industrial Dr.  
E-mail: TWodzinski@wrmeadows.com
Hampshire, IL  
Telephone: 847-214-2100 / 215-817-2916
60140-0338

Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
Substitution rejected - Use specified materials.
Substitution Request received too late - Use specified materials.

Signed by: Thomas Ryan, Project Coordinator  
Date: 8/15/2018
Clarke Caton Hintz

ENVIRONMENTALLY RESPONSIBLE CONCRETE PERFORMANCE PRODUCTS
DESCRIPTION
PRECON® is a composite sheet membrane comprised of a non-woven fabric, elastomeric membrane, and W. R. MEADOWS' exclusive, patented plasmatic core (U.S. Patent No. 7,179,761). The plasmatic core is a seven-layer matrix designed for toughness and provides the lowest water vapor transmission (WVT) rating on the market. Once concrete is poured against PRECON and the concrete cures, a mechanical bond forms that secures the concrete to the membrane.

USES
PRECON® is used as a blindside membrane in vertical applications where access to the positive side is limited. The membrane can also be used for horizontal applications for underslab waterproofing and vaporproofing.

FEATURES/BENEFITS
- Provides a waterproof seal between the membrane and poured concrete wall.
- Helps prevent moisture migration into the structure.
- Acts as a barrier against termites.
- Reduces methane and radon gas intrusion.

PACKAGING
4’ (1.2 m) wide x 50’ (15.2 m) long rolls, one roll per carton.

STORAGE AND HANDLING
Store membrane cartons on pallets and cover if left outside. Keep materials away from sparks and flames.

SPECIFICATIONS
- ASTM E1993-98 - Standard Specification for Bituminous Water Vapor Retarders used in Contact with Soil or Granular Fill under Concrete Slabs.
- LARR Report 26023

APPLICATION
Surface Preparation … Inspect all surfaces for any conditions detrimental to the proper completion of the work. Surfaces should be structurally sound. Remove debris or any other foreign material that could damage the membrane.

PRECON® can be used with a caisson wall shoring system without the use of a drainage board, such as MEL-DRAIN™ from W. R. MEADOWS. W. R. MEADOWS recommends proper site drainage, but due to certain site conditions this sometimes cannot be done effectively. The decision to remove the drainage board should be at the discretion of the engineer. In situations where a drainage board is not applied, surface preparation is important. The substrate needs to be sound, solid, and smooth. Any gaps or voids >1” (25 mm) need to be grouted. When PRECON® is used with MEL-DRAIN from W. R. MEADOWS, the system can bridge gaps <2” (50.8 mm). However, gaps >2” (50.8 mm) will need to be grouted.

CONTINUED ON REVERSE SIDE…
Application Method ...

PRECON may be applied at temperatures down to 40° F (5° C); however, in less than ideal environments or marginal conditions, consider the use of PRECON LOW TEMP below 60° F (16° C). PRECON LOW TEMP can be used in temperatures down to 25° F (-4° C). MEL-PRIME™ from W. R. MEADOWS should be used to enhance the bond at the selvedge edge when conditions warrant with both PRECON and PRECON LOW TEMP.

Prior to application of the blindside membrane, attach MEL-DRAIN™ rolled matrix drainage system from W. R. MEADOWS to lagging or soil retention system.

In vertical applications of PRECON, mechanically attach with fasteners every 12" (304.8 mm) across the top, within ½” (13 mm) of the top edge of the membrane. Install the membrane with the fabric side facing toward the concrete pour.

Remove release paper on 6” (152.4 mm) overlap. Apply membrane and roll press into place with a tile type roller.

End Laps ...

Overlap membrane 6” (152.4 mm). Prior to overlap, apply BEM, HYDRALASTIC 836, or MEL-ROL LIQUID MEMBRANE* (two-component) from W. R. MEADOWS in area to be lapped. Roll press membrane into BEM, HYDRALASTIC 836, or MEL-ROL LIQUID MEMBRANE. At terminations of membrane, apply BEM, HYDRALASTIC 836, or MEL-ROL LIQUID MEMBRANE 12” (304.8 mm) wide centered over the termination and while still wet, embed 12” (31 cm) wide DETAIL FABRIC into the HYDRALASTIC 836 or MEL-ROL LIQUID MEMBRANE and roll press into place. Ensure that DETAIL FABRIC is centered over the termination with 6” (152.4 mm) on each side of lap edge. Apply additional HYDRALASTIC 836 on all terminations of DETAIL FABRIC.

Penetrations and Protrusions ...

Detail around all horizontal and vertical penetrations using BEM or MEL-ROL LIQUID MEMBRANE (two-component) from W. R. MEADOWS. Apply BEM or MEL-ROL LIQUID MEMBRANE by forming a fillet around the pipe or protrusion, overlapping the fabric side of PRECON and the protrusion a minimum of 2.5” (64 mm). If the gap between the protrusion and the membrane is greater than ½” (13 mm), apply PRECON FABRIC TAPE over uncured BEM or MEL-ROL LIQUID MEMBRANE. All penetration and protrusion surfaces must be clean, rust-free, and sound prior to application of BEM or MEL-ROL LIQUID MEMBRANE.

*MEL-ROL LIQUID MEMBRANE is a two-component material, not to be confused with MEL-ROL LM.

For horizontal applications involving a cluster of penetrations, consider the use of HYDRALASTIC 836. Prior to application of HYDRALASTIC 836, prepare the surfaces of the penetrations as above and provide a block out using 2’ x 4’ (.6 x 1.2 m) lumber or other in order to create a “pitch pan” area to receive HYDRALASTIC 836.
Patching ... Prior to pouring, inspect membrane for punctures or damage and repair as necessary with HYDRALASTIC 836 and/or DETAIL FABRIC. (BEM or MEL-ROL LIQUID MEMBRANE may be used in place of HYDRALASTIC 836.) In addition, ensure the membrane is free of standing water and has been cleaned of any deleterious materials that will affect the bond of the concrete to the membrane.

Underslab Application ... Refer to ACI 302.1R-04: Chapter 4 – Site Preparation and Placing Environment for sub-grade preparation prior to PRECON placement.

PRECAUTIONS
Concrete should be poured within 60 days of membrane installation. For installations below 40° F (4° C), contact W. R. MEADOWS technical services. When using bar supports, use those with a flat bottom.

LEED INFORMATION
May help contribute to LEED credits:
- EA Credit 1: Optimize Energy Performance
- EAp2: Minimum Energy Performance
- EAe2: Optimize Energy Performance
- MRc9: Construction and Demolition Waste Management

For BIM assemblies, CAD details, most recent data sheet, further LEED information, and SDS, visit www.wrmeadows.com.
### TECHNICAL DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>PRECON Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Black</td>
<td></td>
</tr>
<tr>
<td>Thickness</td>
<td>ASTM D1000</td>
<td>73 mil (1.85 mm)</td>
</tr>
<tr>
<td>Low Temp Flexibility</td>
<td>ASTM D1970, 180° @ -25° F (-32° C)</td>
<td>Pass</td>
</tr>
<tr>
<td>Resistance to Hydrostatic Head</td>
<td>ASTM D5385-93</td>
<td>230’ (70 m)</td>
</tr>
<tr>
<td>Elongation, Polymeric Membrane</td>
<td>ASTM D412-06</td>
<td>&gt; 400%</td>
</tr>
<tr>
<td>Tensile Strength, Film</td>
<td>ASTM D882</td>
<td>9200 psi (63.4 MPa)</td>
</tr>
<tr>
<td>Crack Cycling</td>
<td>ASTM C836 @ -15° F (-26° C)</td>
<td>Pass</td>
</tr>
<tr>
<td>Puncture Resistance</td>
<td>ASTM E154</td>
<td>&gt; 210 lb. (&gt; 934 N)</td>
</tr>
<tr>
<td>Peel Adhesion to Concrete</td>
<td>ASTM D903</td>
<td>10 lb./in (1754 N/m)</td>
</tr>
<tr>
<td>Moisture Vapor Transmission</td>
<td>ASTM E96B</td>
<td>0.0011 perms</td>
</tr>
<tr>
<td>Radon Transmittance</td>
<td></td>
<td>(0.0004 grains/ft.²/hr)</td>
</tr>
<tr>
<td>Resistance to Penetration by Termites</td>
<td>Texas A&amp;M Method</td>
<td>0.0%</td>
</tr>
<tr>
<td>Resistance to Penetration by Pesticides</td>
<td>ASTM F 2130</td>
<td>0.0%</td>
</tr>
<tr>
<td>Resistance to Fungi in Soil</td>
<td>GSA-PBS 07115 – 16 Weeks</td>
<td>No Effect</td>
</tr>
<tr>
<td>Radon Transmittance (m/s)</td>
<td>k124/02/95</td>
<td>&lt;3.0 x 10⁻⁹</td>
</tr>
<tr>
<td>Radon Coefficient (m²/s)</td>
<td>k124/02/95</td>
<td>&lt;5.6 x 10⁻¹²</td>
</tr>
</tbody>
</table>

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### 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.

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WARRANTY
PRECON™
Blindside/Underslab Membrane
============================================================================= 
NAME OF BUILDING: __________________________________________________________
LOCATION OF BUILDING: ______________________________________________________
NAME OF OWNER: ______________________________________________________________
WATERPROOFING CONTRACTOR: _________________________________________________
DATE OF INSTALLATION COMPLETION: ____________________________________________

W. R. MEADOWS, INC. hereby warranties that for a period of (10) year(s) from the date of completion of installation of PRECON at the subject building, PRECON will be of good quality and will conform with our published specifications in force at the time of installation.

If at any time during such (10) year period the PRECON does not perform as warranted above, W. R. MEADOWS, INC. will supply replacement PRECON to the owner in exchange for and to the extent that the PRECON is found by W. R. MEADOWS, INC. not to comply with this warranty.

This warranty does not apply to any PRECON sheet unless installed and maintained in conformance with the printed instruction of W. R. MEADOWS, INC. from time to time in effect. Further, this warranty does not cover damage caused by abuse or abnormal use of the PRECON, acts of God, inadequate or faulty design of the subject building, and disclaims all liability where any failure results from structural cracks or defects or repairs, installations, designs, materials or products made by other persons. In addition, this warranty does not cover any costs or expenses associated with the removal, excavation or replacement of concrete or other substrates in connection with the testing, repair, removal or replacement of PRECON.

The foregoing warranty is exclusive and is in lieu of any and all other guarantees or warranties, express or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose. The remedies of the buyer for any breach of the warranty shall be limited to those herein provided to the exclusion of any and all other remedies, including without limitation incidental or consequential damages. W. R. MEADOWS, INC. shall not be liable in any case for any damage to the building or the contents thereof. Any lawsuit based on this warranty must be filed within one year (or within the shortest time period permitted to be established by agreement, if this period is longer than one year) from the date during the (10) year period described above on which the buyer discovers or should have discovered a breach of this warranty. No agreement varying or extending the foregoing warranty remedies will be binding upon W. R. MEADOWS, INC. unless it is in writing, and is signed by a duly authorized officer of W. R. MEADOWS, INC.

W. R. MEADOWS, INC.
BY: SAMPLE
DATE: ________________________________