# **ULTRA-GUARD® ELASTOMERIC HB**

7 FLUID APPLIED | Membrane Waterproofing





APPLICATION GUIDE

All surfaces must be sound, dry, clean and free of oil, grease, dirt, excess mortar, frost or other contaminants. Fill spalled areas in substrate to provide an even plane and remove spalling concrete. Remove curing compounds or any foreign matter detrimental to the adhesion of the primary waterproofing membrane or membrane flashings. Masonry joints should be flush to the surface of the units or a continuous parge coat of non shrink mortar should be applied.

New concrete should be cured for a minimum of 3 days and must be free from surface water before waterproofing membranes are applied. Concrete in vented metal pan decks must be cured for a minimum of seven days.

Concrete shall have a wood float finish. Decks with a steel float finish must be sandblasted or equivalent prior to the application of the waterproofing system.

Prefabricated expansion joint assemblies should be in place prior to the application of the primary waterproofing assembly.

#### **Acceptable Substrates:**

- Cast-in-Place Concrete/Composite Deck
- Precast Concrete
- Sheathing over Metal Deck (Steel Deck)
- Exterior Grade Plywood (not OSB)
- AdvanTech(™) (in conditioned deck applications only, see Technical Letter)
- Masonry Units
- Exterior Grade Sheathing (above grade only)
- Metal (test for adhesion, prep surface if adhesion is unacceptable)
- Contact GMX for guidance on any other substrates.

The contractor shall review and determine that all surfaces are in accordance with GMX's recommendations to receive the membrane and request technical assistance for all discrepancies prior to installing the waterproofing system.

#### **Seal all Substrate Joints:**

- 1. Center 12 inch wide crack treatment membrane over joint
- 2. Embed crack treatment membrane in 60 mils cold fluid applied waterproofing prior to installation on waterproofing membrane. Refer to manufacturer published literature.

Form Release Agents: Contact GMX

**Cast-in-Place Concrete/Composite Deck:** Precast Concrete Strength/Density: Minimum 2,500 psi (17,235 kPa) compressive strength and minimum 115 pcf (1842 kg/m3) density

**Finish:** Broom, wood-float, or wood-troweled equivalent finish. Steel float finishes are too smooth and compromise the adhesion of the waterproofing system. Decks with a steel float finish must be sandblasted or equivalent prior to the application of the waterproofing system.

**Concrete Hydration (Cure):** Method of Cure: Water cure, wet coverings, paper sheets, plastic sheets or approved liquid curing compound (sodium silicate preferred).

**Duration of Cure/Dry:** Recommend 24 hours minimum after concrete forms have been removed. Contact GMX when less than the minimum is desired. <u>Lightweight insulating concrete is not an acceptable substrate.</u>

**Structural Lightweight Concrete:** Metal pan decks to which concrete is poured shall be venting type. Contact GMX if metal pan deck is not <u>venting type.</u> Strength/Density: Minimum 2,500 psi (17,235 kPa) compressive strength and minimum 115 pcf (1842 kg/m3) density.

**Finish:** Broom, wood-float, or wood-troweled equivalent finish. Steel float finishes are too smooth and compromise the adhesion of the waterproofing system. Decks with a steel float finish must be sandblasted or equivalent prior to the application of the waterproofing system.

**Concrete Hydration (Cure):** Method of Cure: Water cure, wet coverings, paper sheets, plastic sheets or approved liquid curing compound (sodium silicate preferred).

**Duration of Cure/Dry:** Recommend 7 days minimum after concrete forms have been removed. Contact GMX when less than the minimum is desired.

For wooden substrates, contact GMX for specific recommendations.

### PROJECT/SITE CONDITIONS

**Environmental Requirements:** No Work shall be performed during rain or inclement weather. No Work shall be performed on frost or wet covered surfaces.

**Protection:** Temporary protection of the membrane shall be provided to prevent mechanical damage or damage from spillage of oil or solvents until such time as permanent protection is installed.

Do not permit traffic of any kind over unprotected waterproof membranes. Apply protection course as soon as possible in accordance with published literature after waterproofing membrane installation.

Ensure all preparation work is complete prior to installing waterproofing membrane.

### FIELD QUALITY CONTROL

**Final Observation and Verification:** Prior to overburden installation, final inspection of waterproofing assembly shall be carried out by the owner's representative, the contractor, or manufacturer as required by warranty. Contact manufacturer for warranty requirements.

# **ULTRA-GUARD® ELASTOMERIC HB**

7 FLUID APPLIED | Membrane Waterproofing





## **CLEAN-UP**

Promptly as the work proceeds, and upon completion, clean up and remove from the premises all rubbish and surplus materials resulting from the foregoing work.

Clean to the consultant's approval, soiled surfaces, spatters, and damage caused by work of this Section.

Check area drains to ensure cleanliness and proper function, and remove debris, equipment, and excess material from the site.

## Recommendations:

## SINGLE COAT SYSTEMS

#### **Horizontal Application:**

- Apply Ultra-Guard® Elastomeric HB over cleaned flange of drains, taking care not to fill weep holes.
- Drain flange of 3" minimum width recommended.
- Apply details: wall to deck, inside/outside corners, joints treatments, etc. before installing the membrane on the deck.
- If surface is pitted, prime with a 10-mil coat of Ultra-Guard®
   Elastomeric HB to fill in the irregularities or voids that might
   cause pin-holing. Any pitting large enough to place a thumb
   into should be patched.
- Using a ½" notched squeegee, roller, trowel, in a single coat up to a 120-mil thickness.
- Squeegee application is optimal for horizontal application.
- Plan the installation so that you can progress across the deck without walking on the installed membrane, if possible.
- Work in strips across the deck that are an inch or two wider than the reinforcing fabric (if installed).
- The membrane can be applied wet on wet or wet on dry.
- Flood test after allowing the assembly to cure for 7-10 days.
   Electronic Vector Testing is recommended.
- See GMX website for construction details.

#### **Vertical Application:**

- If surface is pitted, prime with a 10-mil coat of Ultra-Guard®
   Elastomeric HB to fill in the irregularities or voids that might
   cause pin-holing. Any pitting large enough to place a thumb
   into, should be patched.
- Substrate must be clean and continuous, fill voids, unconsolidated concrete, etc. with non-shrinking mortar.
- A parge coat of non-shrinking mortar can also correct deficiencies in a block wall.
- Remove all fins and windows by grinding.
- Apply using a roller, trowel, or brush, apply in a single coat of a minimum 60-mil thickness.
- A fabric reinforced cant at the wall to footer is recommended.
- Fabric reinforcement is recommended at joints between dissimilar materials.
- Ultra-Guard Elastomeric HB is perfect for waterproofing Insulated Concrete Forms.
- See GMX website for construction details.

#### **Priming:**

- Priming is not required for adhesion to dry, damp, or non-porous concrete.
- In the case a pinhole and blister problem occur, the cause is likely air and/or moisture vapors being trapped or emitted from the concrete and or environmental conditions.
- It is recommended that a thin-mil coat application be applied to remove trapped air/vapor.
- This thin-mil application is intended to advocate and establish a constant bond with the substrate.

## HIGH BUILD SYSTEMS

## **Horizontal Applications:**

- Start by inspecting the substrate for deficiencies. Make any corrections necessary before starting the installation.
- Begin by attending to details first, before you start the installation of the deck.
- Pour membrane onto surface and spread evenly with a ¼" notched squeegee or roller to a nominal 60 mils.
- Work in strips across the deck allowing for a little wider band of membrane than the width of the fabric. Once you have gaged 60 mils. on the first course, immediately embed fabric into the wet membrane. Use the flat edge of the squeegee, or a broom, to smooth out any wrinkles and bubbles. Apply the second coat at 60 mils., in the same manner as the first, then back-roll with a %" nap roller to smooth out the material. Apply TegoBase directly into the wet membrane.
- Begin the second stripe across, repeating the steps. Work your way off the deck.
- Install a barricade and prevent traffic for 24 to 72 hours, depending on the temperature and humidity.
- If a flood test is required, we recommend waiting a minimum of 7-10 days after completion of the installation to perform the test. In that time, the membrane should complete the crossbonds and be at peak strength. Electronic Vector Testing is recommended.

## **Vertical Applications:**

- Inspect the wall for deficiencies and make the necessary repairs.
- Begin by installing the detail cant and membrane at the footer.
- Apply with an appropriate airless pump, ¾" nap roller, trowel or brush to a nominal 60 mils.
- Let the first course set (usually 24 hours), then apply the second 60 mil course. Install drainage or protection course once the second course has cured.
- Drainage or protection can be adhered with a termination bar, pins or spray adhesive that is compatible with HB.

### **PRECAUTIONS**

- Wearing proper PPE is advised, direct contact may cause skin and eye irritation.
- Do not thin.
- Do not clean up with water.

# **ULTRA-GUARD® ELASTOMERIC HB**

GMX
A Garland Industries Subsidiary



7 FLUID APPLIED | Membrane Waterproofing

#### **Hot Weather/High Humidity:**

 To minimize blisters from vapor drive, it is best to schedule installation when temps are falling or install multiple coats of reduced mil. thickness.

#### **Cold Weather/Low Humidity:**

 For ease of application, material may be kept warm at 90°F, prior to and during installation. Contact GMX for specific installation recommendations in cold or dry weather.

### **Theoretical Maximum Yield per Gallon:**

- 60 mils = 26 sq. ft.
- 120 mils = 13 sq. ft.

Surface profile and waste will impact yield.

## SUGGESTED TOOLS

- ¼" squeegee for 60 mil. thickness
- ½" squeegee for 120 mil. thickness
- Razor knife and straight edge to cut TegoBase
- Gloves for TegoBase (contains glass fibers)
- Blower or broom to clean surfaces
- Scissors to cut fabric
- 6" putty knife for rapid installation of membrane at details
- Icing blade to remove membrane from bottom and sides of bucket
- Orange-based solvent for cleanup
- Paper towels for cleanup
- Builders paper (Trimaco® Masking Paper) to protect walk off surfaces
- Table to prepare materials





GMX, Inc. 3014 Chamber Dr. Monroe, NC 28110 Toll Free: 866-228-7743 www.gmxwaterproofing.com

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperatures, application methods, test methods, actual site conditions and curing conditions. Installation conditions and methods can impact product performance. Consult your local GMX Sales Representative for Questions.

PRIOR TO EACH USE OF ANY GMX PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS & INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT **WWW.GMXCO.COM** OR BY CALLING GMX AT 866-228-7743. NOTHING CONTAINED IN ANY GMX MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH GMX PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.