

ULTRA-GUARD™ HA-551 APPLICATION GUIDE



Ultra-Guard HA-551

DESCRIPTION

Ultra-Guard HA-551 is a hot-applied, rubberized asphalt-based composition specifically formulated to form a seamless, fully adhered waterproofing membrane over a variety of substrates. Ultra-Guard HA-551 complies with requirements of Canadian General Standards Board specification 37.50-M89.

USES

Ultra-Guard HA-551 is a versatile waterproofing system ideal for CMU and concrete foundations, parking structures, walkways, terraces, and planter boxes as well as other instances where a monolithic waterproofing membrane is required. This flexible, high-build material is applied beneath covering surfaces such as concrete, asphalt, tile, pavers or vegetative systems.

SURFACE PREPARATION

A. Clean

Remove all foreign matter such as dust, moisture, excess laitance, curing compound, soap, oil or grease, etc. Note that some concrete decks may require shot blasting or sandblasting or other appropriate cleaning prior to membrane application. Concrete decks need to achieve a surface profile of CSP 2 or 3.

B. Dry

The surface shall also be sufficiently dry to minimize bubbling, which may occur during membrane application. Structural weight concrete must be cured/dry a minimum of 28 days prior to application.

C. Prime

Priming is required for improved adhesion. Apply Ultra-Guard Primer, which meets the requirements of ASTM D-41, by uniformly spraying or rolling to the dried surface at a rate of 125 to 175 sq. ft. per gallon.

Allow all metal surfaces that the membrane will be bonded to – HVAC ducts, vents, flashings, etc. – to completely dry before membrane application proceeds.

D. Prepare Cracks, Joints and Flashings

Proper preparation of cracks and joints is critical to the performance of the Ultra-Guard HA-551 system. The surface should be uniform and not have any surface protrusions/inconsistencies more than 1/8" (0.32 cm). Crack, joint and uniformity pre-treatments shall be performed prior to membrane application as follows:

- Less than 1/16" (0.16 cm) wide: Cracks less than 1/16" (0.16 cm) wide do not require any special treatment prior to membrane application.
- Between 1/16" - 1/4" (0.16 - 0.625 cm) wide: Apply a band of Ultra-Guard HA-551 membrane over the crack and extend a minimum of 5" (12.5 cm) on each side of the crack or joint. Embed a 6" (15 cm) wide Ultra-Guard HA-Scrim or Ultra-Guard Reinforcing Fabric into the hot membrane and centered over the crack or joint.

Overlap reinforcing strip ends a minimum of 2" (5 cm), ensuring lap receives rubberized asphalt. Please note that this pretreatment is applicable for movements up to 50% of the joint width.

c. Between 1/4" – 1/2" (0.625 - 1.25 cm) wide: Apply a band of Ultra-Guard HA-551 membrane on each side of the crack at least 6" (15 cm) on each side of the crack. Embed a 9" (22.5 cm) wide piece Ultra-Guard HA-Scrim or Ultra-Guard Reinforcing Fabric into the hot membrane centered over the crack. Overlap reinforcing strip ends a minimum of 2" (50 cm), ensuring lap receives rubberized asphalt. Topcoat the crack area with 90 mils Ultra-Guard HA 551 12" (30 cm) wide and embed a 9" (22.5 cm) wide piece of Ultra-Guard GB or Ultra-Guard GB-FR into the coating. Please note that this pretreatment is applicable for movements up to 50% of the joint width.

d. Between 1/2" – 1" (1.25 – 2.5 cm) and all control joints: Loop 18" wide Ultra-Guard Flashprene UN, uncured Neoprene flashing (min. 60 mil thick) in a U shape manner down into the crack or joint to a depth of 2 times the width of the opening. Apply Ultra-Guard HA-551 13" (33 cm) to both sides of the opening and embed the rubber flashing in the membrane while hot. Lap all ends of the flashing 6" (15 cm) and seal with Ultra-Guard HA-551. Allow to cool. Once cool, fill the looped flashing trough with Ultra-Guard HA-551 and extend over the flashing at a height of 90 mils 13" (33 cm) wide. While hot and tacky, embed an 18" wide piece of Ultra-Guard HA Scrim or Ultra-Guard Reinforcing Fabric into the coating.

e. Horizontal and vertical discontinuities (duct work, flashings, vents, etc.): Apply an initial band of membrane a minimum of 6" (15.2 cm) on the horizontal plane and at least 3" (7.6 cm) in the vertical plane. Center and apply a layer of Ultra-Guard HA-Scrim or Ultra-Guard Reinforcing Fabric at least 4" (10.1 cm) wide.

f. Confirm that all abnormalities and transition points, as detailed in the previous steps, have been reinforced.

APPLICATION

A. Melt

Ultra-Guard HA-551 must be melted in a double boiler-type melting unit equipped with both agitation and recirculation systems. The temperature of the heat transfer oil should not exceed 525°F (273.9°C). The melting unit must be capable of safely heating the product to 400°F (204.4°C). Once melted, the pot life of Ultra-Guard HA-551 is approximately 12-15 hours. Pot life may be extended by adding fresh blocks as the material is applied and the quantity remaining in the kettle decreases.

Caution: Do not agitate when adding new blocks of material.

Note: If primer has been left exposed for more than 24 hours, then re-priming is required.

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B. Apply

Apply Ultra-Guard HA-551 to the prepared surface by either pouring or pumping from the melter applicator at temperatures of 380-400 F (193.3- 204.4oC). Distribute the material evenly on the deck surface using a silicone rubber or other appropriate squeegee approximately 18" (45.7 cm) wide to a nominal thickness of 3/16 - 1/16" (.48 - .16 cm). In case of vertical applications, a roof mop may be more beneficial. First, apply one layer of Ultra-Guard HA-551 at 115 mils (0.115") thick. Next, embed Ultra-Guard HA-Scrim or Ultra-Guard Reinforcing Fabric into the hot membrane material. If the system reaches a vertical lip in the concrete, which is smaller than a flashing, turn up the reinforcement edges along the lip. On top of the reinforcement, apply an additional layer of Ultra-Guard HA- 551 at 100 mils (0.10") thick. Total system will equal at least 215 mils (0.215"). Moisture in the surface may cause bubbling in the membrane. If bubbles or other defects appear during membrane application, apply additional material. To provide a non-tacky surface for subsequent work, the membrane may be dusted with fine material powder (minus No. 200 mesh) lime or cement.

C. Install Protective Barrier

Install a protective layer over the top of the Ultra-Guard HA-551 system in horizontal applications. The correct type of protection barrier will be determined by the project's specific needs. Use approved membrane barrier, Ultra-Guard HA Scrim, Ultra-Guard GB or Ultra-Guard GB-FR. The protection course can be embedded into the hot membrane or adhered with Ultra-Guard EFS as an adhesive. The membrane should be covered as soon as possible; do not leave uncovered for more than 48 hours.

D. Cover

Following membrane application, install the protective system for the intended use. Typical types of protective surfaces include vegetative roof, pavers, decorative tiles, concrete, or asphalt pavement.

CLEAN UP

Clean equipment lines using mineral spirits or non-flammable equivalent. All heat sources must be extinguished before the clean out begins. Remove all solvent from the melting tank prior to the next use of the kettle as sealant dilution and flash problems may occur.

WEATHER CONDITIONS

Do not attempt application if ice, snow, moisture or dew is present. Bonding substrates must be clean, dry and free of dust or other inhibitors for proper adhesion. Contact your GMX Sales Representative for proper cold weather applications.

STORAGE

Store in original, undamaged packaging in a clean, dry, protected location with temperatures between 55 to 85oF (12 to 30oC). Keep away from open flames, hot surfaces and sources of ignition. Keep out of the reach of children. Do not stack pallets or remove protective covering. Pallets may be stored outdoors if the protective covering is left intact. Do not leave uncovered for more than 48 hours.



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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.

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