

UltraGuard ICF Foundation Waterproofing Membrane

I. Where to Use

- A. UltraGuard is a water-based acrylic asphalt foundation waterproofing membrane to prevent water penetration through vertical concrete walls. Use UltraGuard on the soil side face of below grade concrete foundations and retaining walls.

II. Site Conditions

- A. Substrate surfaces must be dry, clean and free of standing water, dust, dirt, loose material, frost, ice, snow, fins, wires and metal projections and any other substance that can prevent a continuous placement of UltraGuard or cause damage to the applied membrane
- B. On concrete walls, tie holes shall be filled with membrane mastic or non-shrinking grout. Any voids or honeycombs shall be filled with non-shrinking grout and allowed to cure before application.
- C. Seal all pipes and penetrations through the wall with non-shrinking grout.

III. Materials

- A. UltraGuard Foundation Waterproofing Membrane
- B. Applied Technologies Membrane Mastic
- C. DrainGuard 400 (optional)
- D. FibR-Dri (optional)

IV. Preparation Detail Work

- A. Refer to detail drawings for preparation of cracks, gaps, control joints and other waterproofing situations.
- B. Form ties shall be removed inside and out prior to application.
- D. Tie holes shall be filled with membrane mastic or non-shrink grout. Any voids and honeycombs shall be filled with non-shrink grout and be fully cured prior to application. Gaps in the ICF shall be filled with grout or spray foam insulation.

V. Application of UltraGuard

- A. Substrate temperature shall be above 32°F for the entire cure time of UltraGuard. Minimum ambient temperature shall be 32°F during the entire cure time period. Pump pressure should be between 2,000 and 2,700 psi for best results. Spray tip orifice size should be between .027" and .035".
- B. Spray UltraGuard in a one coat, two-pass pattern. First apply a thin vertical coat 10-20 mils thick and re-apply horizontal coat at 40-50 mils to give the required 60 mil wet thickness. Coat the panel seams in poured foundations vertically to prevent shadow effect. Check at regular intervals with a wet-mil gauge to ensure a proper membrane thickness of 60 mils wet.
- C. Apply UltraGuard to the height of the finished grade. If the foundation wall has a brick ledge, application is to continue to 12" minimum above finished grade height.

- D. Coverage rates vary due to porosity of the substrate. Concrete and pre-cast concrete will have an approximate coverage rate of 3 gallons per 100 sq. ft.
- E. **Roller or Brush Application:** Do not thin. Roll on UltraGuard with 1" knap roller or large brush. Start at the base of the wall and work way up. Do not apply in ambient temperature less than 32°F for the entire cure time period. Build thickness to 60 mils wet. Check at regular intervals with a wet mil gauge to ensure proper thickness. If additional coats are necessary, apply after previous coats have cured.
- F. **DrainGuard 400 Installation (Optional):** Unroll DrainGuard 400 and run courses horizontally to wall. Plastic core side to the wall and geotextile out to soil. Start at the bottom of the wall on top of the footer. Work way up the wall. Be sure to wrap the loose geotextile flap behind the plastic core side prior to placing to wall. End runs shall have 4" of plastic core cut away and removed from geotextile. Wrap 4" flap of geotextile behind the plastic core. Secure with powered activated mechanical fasteners with washers at least 1 ½" diameter within the top 6". Use approximately 3 fasteners per lineal foot. Overlap 4" minimum onto lower DrainGuard 400 course. End joints shall be overlapped 4" minimum and secured with mechanical fasteners. Cover footer with aggregate backfill to a depth to allow adequate water drainage to foundation drain tile.
- G. Inspect UltraGuard membrane prior to backfilling. Inspect for pinholes, blisters or voids in the membrane. Re-apply to needed areas, overlapping over existing and undamaged areas by 2". Re-apply enough material to give 40 mils thickness when cured.
- H. Curing takes 24 hours. Do not backfill prior to 24 hours.

VI. Safety

- A. Review the Material Safety Data Sheet (MSDS) for complete safety information
- B. Ground spray equipment, truck and barrels prior to application.
- C. Avoid direct contact with skin. Prolonged and repeated exposure can cause skin irritation.
- D. In a confined space at temperatures less than 212°F, vapors may accumulate and flash caused by an ignition source. Product will not support combustion and will not burn under normal conditions.
- E. Use a NIOSH approved organic vapor cartridge for ammonia for respiratory protection. Self contained breathing systems must be used if spray application in a confined space.
- F. Wear goggles or approved safety glasses to protect eyes from misting of the membrane. If contact with eyes happens, flush the eyes with water. If irritation persists, seek medical attention.

VII. Equipment Clean Up

- A. No flushing of the pump is necessary if spray equipment is continually used to spray UltraGuard.
- B. Soap and water are the recommended solvents to flush the lines and clear the pump of UltraGuard.

VII. Membrane Protection

- A. Protect the foundation waterproofing membrane from damage caused by other trades.