



1. PRODUCT NAME

Ultra-Shield AG (Vapor Permeable)

2. MANUFACTURER

GMX, Inc.
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3. PRODUCT DESCRIPTION

Ultra-Shield AG (Vapor Permeable) is a single component, polymer modified, asphalt emulsion air/vapor barrier. It is designed to provide a flexible, monolithic air, vapor and water barrier when applied over a wide variety of construction surfaces including masonry, concrete, exterior gypsum board, stone, wood and metal. It cures to a tough, durable film with excellent elastomeric and crack bridging capabilities.

Ultra-Shield AG is manufactured to the highest quality standards and in accordance with ISO 9001 requirements. ISO certification ensures that every gallon produced meets the most stringent quality control standards in the industry and provides outstanding performance in the field.

Ultra-Shield AG cures to a tough, flexible, membrane capable of accommodating building movement while controlling air leakage into and out of conditioned living space. Tests indicate that air leakage rates for Ultra-Shield AG are below the detectable limits of the mass flow equipment used to measure air flow. Ultra-Shield AG has leakage rates of less than 0.001 L/s/sq. m. when tested in accordance with ASTM E 2178-03 – considerably below the 0.004 minimum required. Ultra-Shield AG also meets and exceeds the Commonwealth of Massachusetts Building Code requirements for moisture control and air leakage.

Numerous studies have shown that air leakage contributes to condensation,

moisture development and energy loss in the wall assembly. Ultra-Shield AG minimizes the negative impact of air leakage by providing a flexible blanket of protection over the exterior wall assembly prior to the application of the decorative façade. Ultra-Shield AG controls the movement of air through the building envelope. It eases the load on the HVAC system thereby making the building more cost effective and energy efficient. Controlled air flow is also less likely to contribute to mold growth inside the building walls. The net result is a more comfortable, healthier, energy efficient building environment.

Ultra-Shield AG is an environmentally friendly, water-based construction material. It does not contain any solvents, and there are no storage, handling, and VOC restrictions. It does not produce any odors, and it is safe for both the applicator and any other personnel employed at or visiting the job site. In addition, Ultra-Shield AG is only installed by GMX Authorized Applicators to ensure the highest quality, professional application.

Storage and Handling

Considerations: Store materials in a dry area and protect from direct sunlight. Ideally, the materials should be stored inside in a temperature controlled environment (interior temperatures between 60°-80° F). Do not allow Ultra-Shield AG to freeze. Any materials exposed to the elements should be elevated above the ground and covered by a tarpaulin. Materials should not be exposed to excessive heat or direct flame.

Ultra-Shield AG should not be applied during inclement weather, and the installation should not proceed in the event that precipitation is probable during the application. Consult your local GMX representative or the GMX Technical Department for application recommendations when application temperatures are less than 20° F. Store waterproofing materials until immediately prior to use when the ambient

temperature is less than 40° F. Discontinue application if the material can not be stored at temperatures which permit even distribution of product. Avoid inhaling the spray mist and take precautions to ensure adequate ventilation. Consult the product MSDS Sheet prior to spraying.

Note: Ultra-Shield AG is a water based material. KEEP FROM FREEZING DURING TRANSIT AND STORAGE.

4. INSTALLATION

Prior to the application of Ultra-Shield AG, the applicator shall examine the substrate, job site and surrounding area to ensure that conditions are suitable before commencing work. Poured concrete walls and mortar joints should be permitted to cure a minimum of 16 hours before the application of Ultra-Shield AG. The application surface should be sound, dry, even and free of oil, grease, dirt, excess mortar or other contaminants. All masonry joints must be flush and completely filled with mortar. All excess mortar sitting on masonry ties should be removed. All penetrations should be grouted and filled. If the surface can not be made smooth to the satisfaction of the owner's representative, apply a parge coat over the entire surface to receive Ultra-Shield AG.

Apply flashings and transition sealants prior to spraying. Consult GMX's application specifications for more detailed instructions. Spray a continuous, uniform film of Ultra-Shield AG at a minimum 60 wet mils. Alternate horizontal and vertical passes when spraying to ensure even thickness and coverage.

Protect the air/vapor system from damage during application and for the remainder of the construction period. Clean spillage and overspray from adjacent construction with an appropriate cleaning agent or consult GMX for a suitable cleaning method. Schedule work to ensure that the air/vapor barrier system is covered as soon as possible after installation. Do not leave the air/vapor barrier exposed to the elements

TECHNICAL DATA**TYPICAL VALUES**

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| Color: | Black |
| Solids: | 62% (+ or - 5% by weight) |
| Density: | 8.4 lbs. per gal |
| Application: | Airless spray, brush, roller |
| Cure Time: | 12 - 24 hours |
| Availability: | 55 gallon drums |
| Adhesion to Concrete: | Exceeds ASTM C 836 |
| Elongation (ASTM D 412 die C): | Exceeds 1000% |
| Low Temp. Flex: | Passes - 12 deg. C |
| Water Vapor Permeance (ASTM E 96) | 10 perms |
| Liquid Water Absorption: (ASTM D 1228) | < .91% by weight |
| Air Leakage Rate: (ASTM E 2178-03) | < 0.001 L/s/sq. m |
| Exceeds the requirements of the Massachusetts Commercial Energy Code for Building Envelope Systems. | |
| Complies with the 2005 National Building Code of Canada. | |

May help to contribute to LEED® credits:

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| EA Credit 1: Optimize Energy Performance |
| EQ Credit 3.1: Construction IAQ Management Plan: During Construction |
| EQ Credit 4.2: Low Emitting Materials: Paints and Coatings |
| MR Credit 5.1: Regional Materials: 10% Extracted, Processed and Manufactured Regionally |
| MR Credit 5.2: Regional Materials: 20% Extracted, Processed and Manufactured Regionally |

for more than 30 days. Consult GMX if it is necessary to leave the system exposed prior to the application.

Spray Equipment Recommendations:

Gasoline powered, airless spray units with a minimum 4,000 p.s.i. rating will effectively spray any GMX waterproofing product. For efficient spraying, use a heat exchanger to warm product to 100 - 130° F. immediately prior to spraying. A reverse-a-clean spray tip with an orifice between .030 and .039 is recommended for spraying Ultra-Shield AG. Most spray systems utilize 150' of hose. Use ½ inch, 5,400 p.s.i. rated hose for the first 100 feet. Use 3/8", 4,700 p.s.i. hose for the next 50 feet. A 4 foot, ¼" whip line is used immediately before the spray gun to facilitate spraying. Do not mix water and

solvent based material in the hose lines. Clean lines with mineral spirits before switching materials. Clean spray equipment with mineral spirits.

5. WARRANTY

For specific warranty terms and conditions, contact your local GMX representative or the Cleveland office.

6. TECHNICAL SERVICES

Your local GMX representative is available to assist you in selecting the appropriate product and to provide on-site application assistance. For further information, please contact our Technical Service Dept. at 866-228-7743.

7. AVAILABILITY AND COST

GMX materials are produced in and shipped from our plant in Cleveland, OH. For the name and number of the nearest GMX representative, call us at 866-228-7743. Our representatives can provide pricing and put you in contact with our nearest stocking distributor.

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