AIR GUARD INSTALLATION INSTRUCTIONS

GENERAL:

The Air Guard Weather Resistant Barrier System by GMX, Inc. is designed to coat and seal the exterior surface of the sheathing and to protect the sheathing material from the elements prior to the installation of the exterior cladding while allowing the transmission of excess water vapor from the structure.

The Air Guard System is an approved water-resistive barrier as specified in section 1404.2 for the 2006 International Building Code and section R703.2 of the 2006 International Residential Code for application to plywood, oriented strand board and impregnated fiberboard (blackboard) sheathing.

Air Guard System materials include:

* Air Guard Membrane
* Air Guard Joint Sealant
* Air Guard Joint Fabric
* Air Guard Window Wrap
* Air Guard Counter Flashing

MATERIAL STORAGE AND HANDLING:

1. Air Guard Membrane and Air Guard Joint Sealant are water based materials. They must be kept from freezing. Both materials should be stored off the floor at temperatures above 50 deg. F.
2. Opened drums should be tightly sealed prior to storage to minimize film development on the top of the liquid.
3. Shipping water borne material during cold weather months can be problematic because the material can freeze during shipment. In cold weather months, the bill of lading will contain a Keep from Freezing notification and freeze tabs will be placed on the material containers. If the freeze tab is broken upon delivery, mark the bill of lading accordingly and notify GMX immediately.
4. Maximum storage temperature should not exceed 100 deg. F and the containers should not be exposed to direct sunlight.
5. Typically, it is not necessary to mix Air Guard Membrane prior to use. If the applicator elects to mix Air Guard, do so in a manner which will not entrain air into the coating. Avoid the use of paddle mixers and other mechanical means of mixing material.

SUBSTRATE INSPECTION:

1. Confirm that the substrate is referenced in the Air Guard System specification and approved by the local code authority.
2. Confirm that the sheathing is structurally sound, intact, securely fastened, free of loose material, voids, projections or other conditions that may interfere with the application of the Air Guard System.
3. Confirm that all rough openings are in place and properly sloped.
4. Confirm that the substrate is sufficiently dry. There should be no visible water in any joints and the substrate should not be wet to the touch. Sheathing moisture content should not exceed 24% (measured with a moisture meter).
5. Confirm that the facing paper is intact and firmly bonded to the core of exterior grade gypsum.
6. Notify builder of any deficiencies. Do not proceed with the application unless and until they are corrected.

SITE PREPARATION:

1. The substrate shall be free of foreign materials such as oil, dust, dirt, paint, wax, water repellents, liquid water, frost, snow, ice and any other materials which could adversely impact adhesion. Dirt and mud can be removed with a scraper or brush. Some materials may require the use of soap and water to ensure that the substrate is properly cleaned. If soap and water are used, allow the substrate to dry before the application of the Air Guard System.
2. Air Guard Membrane and Air Guard Joint Sealant do not require the use of primers.
3. If Air Guard Joint Sealant is not used, joints should be sealed with Air Guard Membrane and Air Guard Joint Fabric. Air Guard Membrane should be applied over and on each side of the joint to be sealed to a thickness of 30 -35 wet mils. Air Guard Joint Fabric is then embedded into the membrane and brushed or rolled into place. Ensure that the joint fabric is firmly embedded into the base coat of Air Guard Membrane. Standard construction staples may be required to ensure that the fabric is tightly embedded into the Air Guard Membrane. The Air Guard Joint Fabric is then top coated with Air Guard Membrane applied at a rate of 25 – 30 wet mils. Brush or roll the top coat to ensure that the joint fabric is completely coated and fully adhered to the exterior surface of the sheathing. Do not apply more Air Guard Joint Fabric than can be completely coated and fully adhered in a day or before any precipitation.

SYSTEM APPLICATION:

1. Air Guard Joint Sealant can be applied by trowel or brush. Air Guard Membrane can be applied by brush, roller (manual or power assisted) or spray.
2. Air Guard Joint Sealant and Air Guard Membrane are ready for application as is. In cooler weather, it may be necessary to heat Air Guard Membrane for ease of application. Do not heat the material above 130 deg. F. Air Guard should not be installed during rain or if rain is imminent. Air Guard can be applied when air and surface temperatures are between 0 deg. F and 130 deg. F.
3. The vertical and horizontal sheathing joints should be treated as per item # 3 in the Site Preparation Section prior to the application of Air Guard Membrane.
4. The sheathing should be fully and evenly coated with Air Guard Membrane applied at a minimum thickness of 20 wet mils (approximately 80 sq. ft. per gallon). The application thickness of the wet coating can be checked with a notched wet film thickness gauge.
5. The coverage rate on individual installations will vary due to the porosity of the surface, sheathing condition etc.
6. If Air Guard Joint Sealant is used in lieu of Air Guard Membrane and Air Guard Joint Fabric to treat the joints, a general rule of thumb is that sealant usage is roughly 25 – 40% of the volume of Air Guard Membrane used on the job.
7. Air Guard Membrane and Air Guard Joint Sealant require 2 to 4 hours cure time at 70 deg. F and 50% relative humidity. Cool, damp conditions will retard cure time; hot, dry conditions will accelerate cure. Air Guard Membrane and Joint Sealant are subject to wash off if they are not sufficiently cured prior to the advent of inclement weather conditions.
8. The Air Guard Membrane System should not be left exposed more than 120 days prior to being covered with exterior cladding.

PENETRATION TREATMENT:

1. The Air Guard System is not designed to seal penetrations through the sheathing exterior such as window and door openings, utilities, electrical fixtures, vents etc. Sealing of penetrations is a separate action item which should be agreed upon by the installation contractor and the builder before the installation of the Air Guard System.
2. The builder, at his discretion, may opt to have another trade install the flashing and counter flashing around the various penetrations through the sheathing.
3. In all cases, GMX recommends adherence to good construction practices in regard to installing flashing and counter flashing details.
4. In the event that the Air Guard System installer assumes responsibility for sealing and/or flashing the penetrations, the following installation procedures are recommended.
5. All window sills should be constructed with an outward slope (prior to the installation of the Air Guard System).
6. The inner surface of the jambs and sill should be treated with Air Guard Membrane or Air Guard Joint Sealant.
7. Cut a section of Air Guard Window Wrap (or approved equal) the width of the rough window opening plus 8 inches. Install wrap at the sill by removing the release liner, centering the tape and installing across the sill.
8. Make two cuts as the corner of the window opening so that the tape may be folded down the face of the outer wall. Open areas will be covered when the side sections of the window wrap are installed.
9. Set the window into the rough opening, level and fasten to the substrate as per the window manufacturer’s recommendation. Wrap should be visible below the sill flange. Do not apply wrap over the bottom flange. This area remains open to permit water to drain in the event of a window leak.
10. Adhere vertical sections of window wrap over the jamb (side) flanges of the window and exterior sheathing. Vertical sections of wrap should overlap the tape at the bottom and extend 3 inches above the rough opening at the top, preferably onto the exposed sheathing.
11. Adhere window wrap to the header flange and shear wall. Head section must extend beyond jamb (side) sections on either side. Jamb sections should not extend above the head section.
12. Roll the entire surface of the window wrap with a hand roller to ensure good adhesion.
13. Alternative # 1
14. Air Guard Membrane and Joint Sealant are applied only to the exterior surface of the sheathing.
15. The joint between the interior of the sheathing and the jamb and sill framing are sealed with Air Guard Joint Sealant. Sealant should be applied a minimum 1 inch onto the jamb and sill framing.
16. The joint between the jamb and sill framing should be sealed with Air Guard Joint Sealant or suitable sealant approved by GMX.
17. Air Guard Counter Flashing Fabric or approved equal is applied at the top of the rough opening so that the bottom edge of the flashing is even with the top of the rough opening. Counter Flashing Fabric should extend a minimum 5 inches beyond the rough opening on each side.
18. Alternative # 2
19. Air Guard Membrane and Air Guard Joint Sealant are applied only to the exterior surface of the sheathing with no continuation into the rough opening.
20. Air Guard Counter Flashing Fabric is applied at the top of the rough opening so that the bottom edge of the fabric is even with the top of the rough opening. The fabric should extend a minimum 5 inches beyond the rough opening on each side.

DISCLAIMER

Neither GMX nor any application contractor applying GMX products is responsible for any damage to the Air Guard System or for any consequential damage resulting from damage to the Air Guard System. Information contained in these application instructions conforms to standard detail and product recommendations for the Air Guard System as of the date of publication and is presented in good faith. GMX assumes no liability, expressed or implied, as to the architecture, engineering or workmanship of any project. Contact GMX at the address listed below to ensure that you are using the current and most complete information available:

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