

Standard Specification for Installation of GEOBOARD® DÉCOR for EXTERIOR VENTILATED RAIN-SCREEN WALL CLADDING

4/6/2021

SECTIONS 07480

1. GENERAL

1.01 SUMMARY OF WORK

- A.** Materials shall be **GEOBOARD® DÉCOR** as supplied by Ameriform, LLC or approved distributor.
- B.** **GEOBOARD® DÉCOR** for EXTERIOR ventilated rain-screen wall cladding to be square edge of minimum thickness 5/8" (16mm), which shall receive a compatible finish.
- C.** Comply with applicable building codes for wind, seismic, snow, uniformly distributed live-loads and other loading requirements as determined by the project architect and engineer.

1.02 SUBMITTALS

- A.** Submit to the project architect or design professional a copy of **GEOBOARD DÉCOR** product and installation specifications and one product sample measuring 4" x 4" minimum.

1.03 QUALITY ASSURANCE

- A.** Contractor shall have successfully installed wall-sheathing products of a similar type as this project. These past projects shall have resulted in construction with a record of successful in-service performance.
- B.** At frequent intervals during construction, the job site may be visited by the owner's representative, general contractor or construction manager to confirm that **GEOBOARD DÉCOR** is being installed per this specification.

1.04 DELIVERY, STORAGE, AND HANDLING

- A.** **GEOBOARD DÉCOR**, as supplied by Ameriform LLC, is normally delivered to site in factory crates bound with metal strapping, and dunnage to facilitate forklift handling.
- B.** **GEOBOARD DÉCOR** shall be stored indoors on leveled dunnage not exceeding 24" on centers. If temporarily stored outdoors boards must be elevated above ground, in an area where the material will not be sitting on mud, snow, wet conditions where moisture can soak into the board. Material must be protected from the elements including rain, snow, ice, etc with adequate waterproof covering such as a waterproof tarp. Stacking of pallets should always be on solid stable base and never be stacked higher than 3 pallets high. Acclimatize **GEOBOARD DÉCOR** by storing on site not less than three days prior to installation.

- C. All materials supplied by others shall be delivered and stored according to their instructions.
- D. Deliver, store & handle materials to prevent breakage, warping or damage caused by moisture.
 - 1. When removing boards off of a stack of boards **DO NOT DRAG / SLIDE** panels. At least two people should, at the same time, lift the panel vertically off the stack as to prevent scratching / marking /deforming the surface and edges of the boards. Use the same method if re-stacking and be sure to use protective sheets between the boards in a stack.
 - 2. When transporting loose **GEOBOARD DÉCOR** panels by truck they must be laid flat and fully protected against surface / edge damage.
 - 3. When hand carrying single **GEOBOARD DÉCOR** panels they must be carried on edge with the short side held vertically.
- E. Damaged or deteriorated materials shall be removed from the premises.
- F. Prior to installing panels be sure to inspect for damage / deterioration of any kind. If there are concerns regarding the condition of the panel contact your local rep to confirm the panels are acceptable to begin installation.
- G. Material Safety Data Sheets shall be available for all materials.

1.05 PROJECT CONDITIONS

- A. Framing to receive **GEOBOARD DÉCOR** shall be structurally sound, free from bows, twists or other malformations and in general compliance with local building code requirements. Damaged framing shall be replaced before installation of **GEOBOARD DÉCOR**.
- B. During installation of **GEOBOARD DÉCOR** the temperature shall be at least 32° F during installation if mechanically fastened. Prior to the application of wall finishes **GEOBOARD DÉCOR** must be conditioned at the same temperature as required for the wall finishes for at least 48 hours. Wall finishes shall not be applied over **GEOBOARD DÉCOR** that is wet, frozen or contains frost.

1.06 SEQUENCE AND SCHEDULING

- A. Sequence the installation of **GEOBOARD DÉCOR** with related work specified in other sections to ensure that the wall assemblies are protected against damage or abuse during and after construction.
- B. Coordinate installation with flashing, joint-sealant, and moisture barrier installation so the materials are installed in a sequence and manner that prevents exterior moisture from passing into / through the wall assembly.
- C. Provide sufficient labor and equipment to properly install all materials.
- D. Coordinate pre-finishing of **GEOBOARD DÉCOR** prior to installation.

1.07 PRODUCT WARRANTY

- A. **GEOBOARD DÉCOR** is warranted by the manufacturer for a period of 10-years from date of material purchase to be free from defects in workmanship and materials under normal use. **GEOBOARD DÉCOR** shall receive a finish. Unfinished **GEOBOARD DÉCOR**'s color and efflorescence are not covered under warranty as it is subject to the natural variations common with portland cement and the other raw materials used to manufacture **GEOBOARD DÉCOR**. Refer to product warranty for complete terms.

2. PRODUCTS

2.01 MATERIALS

- A. Wall Framing: Shall meet local building code requirements for use in the wall system. Follow manufacturer's installation instructions.
- B. Wall Sheathing: Minimum 16mm (5/8") thick **GEOBOARD DÉCOR**, as supplied by Ameriform LLC or approved distributor.
- C. Fasteners: Use corrosion resistant fasteners suitable for use with Portland Cement and the framing member being attached to.
- D. Finishes: Masonry-grade primers, paints, stains and/or sealers compatible with pH of 11 are to be applied to all sides of **GEOBOARD DÉCOR** prior to installation.

3. EXECUTION

3.01 FRAMING

- A. The wall framing and other framing components must be designed to meet the strength and deflection criteria as determined by project architect & engineer and specified in the contract documents.
- B. Framing shall be spaced a maximum of 24" on centers.
- C. A system of vertical furring (metal or wood) can be used to support the **GEOBOARD DÉCOR** rain-screen panels. Be sure to select a support system that is compatible with portland cement and will work in harmony with the elements and collateral materials to prevent corrosion, while maintaining compliance with local building code.
- D. Vertical support framing shall be terminated a minimum ¼" short from all horizontal **GEOBOARD DÉCOR** joints to allow panels to move independent of each other in consideration of expansion / contraction.
- E. Other rain-screen support framing systems / accessories must be reviewed and approved by Ameriform LLC before use.
- F. Metal framing shall be a minimum 20 gauge.
- G. All blocking, bracing and other framing components must be installed prior to the installation of **GEOBOARD DÉCOR**.
- H. Framing must be of good quality, free of bows, twists or other malformations.

3.02 PRE-FINISHING

- A. When exposed to the elements, GEOBOARD DÉCOR shall receive a compatible finish applied to all sides and edges prior to installation. Due to potential changes in the natural color of GeoBoard Décor from weathering and efflorescence, an enhancing stain or paint is suggested for uniformity in color.
- B. In areas of increased traffic or those subject to stains like finger prints, scuffing, spills, etc, a protective coating should also be considered for ease of cleaning and maintenance.
- C. Be sure to follow finish manufacturer's instructions prior to use and test in small areas first to ensure satisfaction with finish prior to applying to large areas.
- D. Prior to application of protective coatings, be sure that GEOBOARD DÉCOR is dry, is not wet, frozen or contains frost. Gently clean surfaces to remove dirt, dust, salts, or stains by using a soft dry cloth or dry bristle brush. Note that wiping down unfinished surfaces with wet cloths may trigger efflorescence in cold climates and should be avoided.

3.03 SHEATHING APPLICATION

- A. Do not install GEOBOARD DÉCOR as an exterior cladding directly to the exterior wall sheathing, or directly to the wall framing member.
- B. Install GEOBOARD DÉCOR as an exterior ventilated rain-screen with a minimum ½" of continuous vented airspace between the back face of GEOBOARD DÉCOR rain-screen panel and the exterior wall sheathing.
- C. Provide a minimum 1/8" vertical & horizontal joint between GEOBOARD DÉCOR panels and collateral building materials.
- D. Panels shall be cut to size with a circular saw equipped with sharp carbide tip blade and a dry dust collection device that limits the amount of airborne dust. Wear safety glasses and a NIOSH approved dust mask when cutting the panel. Collected dust shall be disposed in a safe manner and in compliance with local, state and federal ordinances.
- E. Be sure to apply sealer or finishes to field-cut edges using the same or similar product on the other surfaces of the board.
- F. Be sure to provide proper protection to the face of the panel so tools / cutting stations do not scratch / damage the surface during fabrication and cutting.
- G. Pre-drill all fastener holes prior to installing fastener. Fastener Holes should be oversized from the fastener thread; the fastener should not thread through the GEOBOARD DÉCOR panel.
- H. A support framing member must always occur behind fastener location.
- I. Face-fasten each panel to framing after it has been placed using the following fastening schedule:
 - 1. Fastener placement shall be a maximum of 24" on center along all supports at panel joints, edges and in the field of the panel.
 - 2. Fastener placement shall be a minimum ¾" from all panel edges.
 - 3. Fastener placement shall be a minimum 2" from panel corners. Off-set fasteners to avoid 45 degree fastener placement at board corners (to prevent cracking).

4. Begin fastening at one end and fan out across the panel. Do not fasten all the corners first.
 5. Fasteners should be snug to the GEOBOARD DÉCOR panel but not overly tightened.
- J. Control joints (where applicable and as designed by architect and/or engineer) shall be utilized to prevent transfer of any movement or stress to the GEOBOARD DÉCOR rain-screen panel. Through-wall control joints shall be designed to isolate a maximum of 250 sq. ft. of wall area. Provide separate framing member at each side of control joint. Install per manufacturer's instructions.
 - K. Do not nail or screw any collateral building materials to panels without a secure backing surface behind the panel to receive the fastener.
 - L. Cutouts in the panels should be made before installing the panel whenever possible. If a cutout is required after the panel is installed, set the depth of the saw blade to ensure that the framing is not scored. Continuous support such as blocking, bracing and bridging is required at all cutouts and/or penetrations larger than 4" in either direction or if a fixture or hardware are to be mounted in that area
 - M. Coordinate installation of moisture / vapor barriers so sheathing is not exposed to precipitation or left exposed at end of the workday when precipitation of any type is forecast.

3.04 CLEAN-UP, CARE & SAFETY

- A. Occasionally scuff marks and scratches may appear on the GEOBOARD DÉCOR due to vibrations during transit or handling on the job. Gently clean surfaces to remove dirt, dust, salts, or stains by using a soft dry cloth or soft bristle brush. Note that in cold climates wiping unfinished surfaces with a wet cloth may trigger efflorescence and should be avoided.
- B. Do not lean ladders, equipment or building materials up against installed GEOBOARD DÉCOR panels without proper protection as this can cause scratches and other deforming marks. When installing and working around GEOBOARD DÉCOR be aware of tools and clothing that may scratch the surface as you work around or lean against the surface.
- C. Make sure all trees are trimmed to prevent branches from scratching the GEOBOARD DÉCOR.
- D. Be sure to install door stops or similar protection to prevent damage to the GEOBOARD DÉCOR
- E. Left over material shall be removed from the job site.
- F. Remove foreign material from surface, including dust.
- G. To ensure safe conditions measures select a Project Safety Officer who is responsible to educate workers against abusive activity that can exceed the capacity of GEOBOARD DÉCOR during and after installation. Prior to starting work the Project Safety Officer shall conduct a meeting to educate all workers during and after GEOBOARD DÉCOR installation in a language they fully understand. Failure to warn and comply with these safety measures can cause failure of the GEOBOARD DÉCOR that may result in minor injury, serious injury or death. Measures include, but are not limited to:
 1. Make sure panels are being installed properly.

2. Avoid excessive impact loads which could cause a panel to crack. Such impacts can cause deforming marks, penetrations, cracks or failure of the sheathing and will need immediate repair or replacement.
 3. Avoid excessive loads that exceed the capacity of the GEOBOARD DÉCOR such as leaning building materials, scrap material, ladders, etc. Take into account the weight of this equipment including that of the workers using it.
 4. Avoid excessive abuse in heavy lanes of traffic or areas subject to abuse such as installation of collateral building materials, around stairways, trash removal, loading areas, cart paths, main hallways. Excessive wear, gouging, impacts and scraping on the panel may damage the panel and cause failure.
- H.** Consult with the Project Safety Officer to review areas where these types of abuses may occur. Correct any concerns and provide proper protection to the area and all workers. Project Safety Officer must confirm that proposed measures comply with loading and safety requirements of the project and with applicable local, state and federal safety regulations.

3.05 WALL FINISH

- A.** GEOBOARD DÉCOR rain-screen panels can be painted / stained using finish products compatible with portland cement or pre-applied protective finishes. Any coating that has been selected to be used on GEOBOARD DÉCOR panels must receive that same coating on both faces and all edges of the panel in order to remain in moisture balance to prevent warping / cracking.

3.06 EXPECTATIONS

- A.** GEOBOARD DÉCOR is a panel made from natural materials and exhibits natural variations in color / texture. Overall the panels in each lot will have a similar color and texture, however expect some imperfections. These may include variations in tone, texture or small deformations in the surface. Naturally occurring salts in all cement based products may migrate to the surface in certain environmental conditions, often referred to as efflorescence. Pre-finishing the panels can reduce this occurrence, but should be expected to some degree. Cleaning instructions can be provided as needed. Please contact a product representative to review any questions regarding your application.

END OF SECTION