

Nudo CeramicSteel

Installation Guidelines 6018

Rev. 04 7/19

Please Read Disclaimers:

PLEASE READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION!!

These guidelines are provided in good faith to help prevent any problems caused by common errors in installation. Carefully inspect all panels for color, size, irregularities and uniformity of the surface. If a panel is defective, STOP, contact Nudo immediately at 800.826.4132. Failure to do so shall be at the sole risk of the installer. The manufacturer and/or distributor of this product shall not be held responsible for installation actions taken or not taken. There are many details of installation that are assumed to be general construction knowledge to experienced installers; which are not included in these instructions. These installation guidelines are intended to be strictly recommendations and are NOT to serve as a step-by-step, fail-safe installation checklist. Selection of an experienced installer is the sole responsibility of the project owner and architect. If you have any questions regarding installation, contact NUDO at (800.826.4132)

Nudo Products, Inc. does not accept any responsibility for job failure resulting from or associated with improper site environmental conditions.

Safety Instructions:

When cutting or drilling, always wear protective glasses or goggles and a face mask which covers the face and mouth. Itching due to fibers may be avoided by the use of barrier creams on exposed skin areas.

Tools Needed

- Power panel saw or skill saw with metal cutting, high tooth count carbide or tungsten tipped blades (liberally lubricated with blade wax).
- Power drill with metal cutting carbide or tungsten bits
- Trowel recommended by adhesive manufacturer
- Trim Cutters

Materials Needed

- Decorative, Standard, Laminated Composite Panels
- Heavy duty construction adhesive
- Seam Finishing: PVC molding, aluminum trim, color matched caulking (optional)
- Silicone Sealant (penetrations and exposed edges)
- Non-abrasive cleaner, soap and water, mineral spirits, for use in clean-up
- Rags
- Sandpaper for roughing up walls
- Personal protection equipment (goggles & mask)
- Tape measure
- Saw horses
- Painter's tape
- Plywood larger than panels

Preparation:

Storage



All composite panels should be stored indoors flat above floor level on a solid, flat, dry, frost-free surface. Do not stand panels on edge or stack on fresh concrete floor or any other surface that emits moisture. Lay panels flat with proper support on the ends of panels. Optimum storage conditions are 60°F (16°C) to 75°F (24°C) and 35% to 55% relative humidity.



Nudo Products, Inc.
1500 Taylor Avenue
Springfield, IL 62703
Phone 1.800.826.4132 * 1.217.528.5636
Fax 1.217.528.8722

Form 6018 Rev. 04 7/19
Info@nudo.com
www.nudo.com

Prior to Installation

Carefully inspect all Nudo CeramicSteel panels prior to installation. If panels are defective, notify Nudo Customer Service at 800.826.4132. Failure to do so shall be at the sole risk of the installer. Panel should be checked for excessive pitting, telegraphing core materials, and delamination. Due to materials and lamination process, if waterjet cut edges have not been requested prior to receipt of panels, the layup edge tolerance is $\pm 1/8"$. The porcelain can hang off of the panel edge or be back from the panel edge $1/8"$. Panels may also vary in color, consistency and tone. These variations are not to be considered defects. Make sure that all exposed edges and penetrations are sealed with silicone sealant. Installation should NOT begin until building is enclosed (windows and doors installed). Permanent heating and cooling equipment shall be in operation, and residual moisture from plaster, concrete, etc. shall be dissipated. Prior to installation, the installer must determine that the environmental conditions meets or exceeds all requirements specified in the installation guidelines. Before installing, remove packaging materials, but Do Not Remove the protective sheet on face of panels. Allow the panels to acclimate to the room temperature and humidity for 48 hours before installing. Acclimation temperature range should be 60° to 75°F (16°C to 24°) and relative humidity should be 35% to 55%. Ideally, the room temperature and humidity during acclimation and installation should be the same as the final operational conditions.

Wall Preparation

Panels should only be installed over solid wall surfaces (gypsum board, concrete board, plywood, cinder block, etc.). Walls should be flat and even. Remove high spots and fill in low spots prior to beginning installation. Remove wallpaper, soluble or loose paint, and other foreign matter that may interfere with the adhesive bond. The wall substrate must be dry and free from dirt, dust and grease. Painted surfaces will not allow water-based adhesives to dry. The substrate must be porous to enable the adhesive to cure and achieve full bond strength. Painted surfaces must be perforated to rough up the wall or gouged with a minimum of 20-grit heavy duty sandpaper to break the moisture barrier of the paint. All loose paint and dirt must be removed prior to installation. New gypsum board or drywall should NOT be painted or primed. Tapered joints need only a fill and taped coating using a setting joint compound. A finish coat is not necessary or desirable. Any extremely uneven areas should be filled. Please read adhesive manufacturer's recommendation for further preparation not covered in this paragraph.

Environmental Conditions

In *high humidity*, acclimate panels in operational room conditions for 48 hours prior to installation. It is imperative that moisture is sealed at the entry points with silicone sealant. Failure to do so may result in the substrate warping, curling, delamination or bond line separation. Use an adhesive that is recommended for high humidity, following the manufacturer's application guidelines. Check with the local building codes for specific requirements. In *low temperature* conditions, acclimate panels in operational room conditions for 48 hours prior to installation. Use an adhesive recommended for low temperature conditions, following the manufacturer's application guidelines. Check with the local building codes for specific requirements. Do NOT use composite panels, in high temperature conditions, exceeding 130° F (55°C). Prolonged exposure to direct sunlight MAY CAUSE the panels to fade and/or rapid expansion. Please use extreme caution when installing panels in these types of environments.



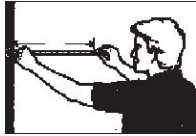
Nudo Products, Inc.
1500 Taylor Avenue
Springfield, IL 62703
Phone 1.800.826.4132 * 1.217.528.5636
Fax 1.217.528.8722

Form 6018 Rev. 04 7/19
Info@nudo.com
www.nudo.com

Pre-Installation Inspection

Panels should be inspected upon receipt. Nudo Products, Inc. inspects composite panels for physical and cosmetic abnormalities prior to shipment; however it is the installer's responsibility to fully inspect all panels for defects prior to installation. If the panels are not acceptable, please contact Nudo Products, Inc. customer services immediately. **DO NOT INSTALL QUESTIONABLE PANELS!** Nudo Corporation will NOT be responsible for installation or removal cost of unacceptable panels.

Pre-Install Planning



Measure Area. Set true plumb line. Panels should be pre-fit (and pre-drilled if rivets are required) prior to fastening and/or adhering to substrate. Adhesive should be applied AFTER all cutting and drilling is complete. Cove base molding should not restrict panel, but allow for expansion and contraction. Poured molding should be completed prior to installation of panels. Cut panels 1/4" short of where the base molding will extend.

Field Cutting



Trim NUDO CeramicSteel panels to properly fit. They should be cut "face up" with a power panel saw or skill saw with metal cutting, high tooth count carbide or tungsten tipped blades (liberally lubricated with blade wax), "face down". LEAVE PROTECTIVE FILM ON PANELS WHEN CUTTING or masking tape to cover the area where cuts are required. Cut slowly, carefully, step by step. All cut outs must be radiused as large as possible, 1/8" minimum, to avoid stress cracking. Holes for screws or bolts should be pre-drilled oversized. Use a sanding stone or fine sand paper to smooth any chipping or rough edges around the exposed area. Make sure that all exposed edges and penetrations are sealed with silicone sealant.

Method Guide

- First panel installed should be set true with a plumb line
- DO NOT REMOVE protective film until after installation. [If applicable].
- Trim panel to fit and cut out any fixture openings.
- Seal any exposed edges and penetrations are with silicone sealant
- Cut moldings as needed for proper fit. The divider, ISC & OSC moldings may need to be cut to accommodate ceiling and base finishes.
- Start installation of molding in any inside corner, mark plumb line (48^{1/8}) for vinyl trim and (48^{1/16}) for aluminum trim.
- Apply adhesive to 100% of backside of panels.
- Peel back protective film around edges for ease of installation of moldings.
- Insert panel into inside corner molding, place panel into corner of wall and align with plumb line.
- If using an end cap on top or bottom of panels, slide it completely on to panel prior to adhering to wall
- Place panel on wall leaving appropriate room for expansion and contraction
- Once panel is placed on wall, use roller to remove any air pockets
- Install dividing trim on first panel.
- Apply adhesive to the next panel, slide into the first panel division bar, align with plumb line, and use roller to remove any air bubbles.
- Repeat with next panel.

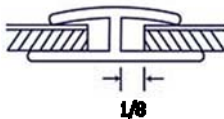
- Prior to installing the last panel on the first wall, insert an inside corner on the leading edge of the panel. The first panel on the new wall will slide into the last panels inside corner of the existing wall, completing the transition
- Continue the method working in one direction around the room.

Adhering to Wall



The method of adhering should be determined by the room and wall conditions. Typically, using an adhesive or fasteners exclusively will suffice, but sometimes a combination of both may be necessary. A vapor barrier may be required also in high moisture areas. Check with your local building codes to determine any restrictions or guidelines. Nudo CeramicSteel panels may slightly bow due to environmental conditions. Brace any bowed panels in place until the adhesive dries/cures. Environmental conditions will affect cure time. Call the adhesive manufacturer for the specific time needed for applying bracing. You should use construction grade adhesive that is recommended for your environment/ temperature/ humidity conditions and have 100% coverage when applying. Adhesive should be applied to the entire back side of the panels about 1/4" (6.4 mm) thick. Follow the adhesive manufacturer's recommendation for trowel, room conditions and application methods. Pin tack metal trim due to weight of panels to keep panels in place while adhesive cures.

Spacing



All composite panels will have some expansion and contraction due to changes in temperature and environment. It is important to allow a 1/8" gap at the ceiling, panel base and gap between panels and division bars. If face mounted moldings, allow more space for expansion and contraction of composite panels longer than 8' and in areas with high fluctuations in temperature. Pre-drilled holes should be slightly larger than the diameter of fastener shank to allow for normal expansion and contraction. Note: Allow for expansion of composite panels when installing around pipes, conduits, electrical outlets, etc.

Molding



Vinyl and aluminum moldings can be used for installation. Cut moldings as needed for proper fit. The divider, ISC & OSC moldings may need to be cut to accommodate ceiling and base finishes. Place moldings on panels before fastening edges, if required. Always use moldings in high moisture areas. The use of trim moldings and silicone sealant with composite panels is recommended to achieve a moisture resistant installation. Cut moldings to size and place silicone sealant into channel of moldings during installation. Place moldings on panels before fastening, if required. Follow silicone sealant manufacturer's recommendations for installation.

Fasteners

In high moisture areas or certain situations, composite panels should be installed with non-corroding fasteners. Fasteners should be installed to fit snug, but should not be over tightened. Carefully select the proper length and width of rivet fastener.

Finish Work

Remove all adhesive residues, cleaning panels thoroughly with warm water, a non-abrasive detergent and cloth. For cleaning with solvent based adhesive, use mineral spirits to remove residue. Installation should begin and end in an inside corner wherever possible.