

Moisture Resistant Wall and Ceiling Panel



Nudo Utilite™ Installation Guidelines

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. 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.

Nudo Products, Inc. does not accept any responsibility for job failure resulting from or associated with improper site environmental conditions and installation failure due to expansion contraction issues. The warranty on Utilite is void, if not installed according to installation guidelines.

Inspection: Upon delivery carefully inspect all cartons, packages, pallets, and protective wrap for damage or shortage. Open and inspect suspect packages, cartons, or wrapped pallets for damage. Contact shipper immediately to report any damaged or missing materials. Failure to do so shall be at the sole risk of the installer. If defective materials are discovered, notify Nudo @ 800-826-4132 immediately (24 hours of receipt of panels). Failure to do so shall be at the sole risk of the installer.

Uses & Applications: Utilite panels are and easy to maintain interlocking wall and ceiling panel. These panels are versatile and can be installed quickly, both vertically or horizontally, directly to studs or a substrate. Utilite panels are commonly used in a wide arrange of applications from clean rooms to farm building facilities.

RESPONSIVENESS

CONSISTENCY

SOLUTIONS

NUDO® • 1500 Taylor Avenue Springfield, Illinois 62703 • 800-826-4132

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	• Circular saw with fine tooth carbide tipped saw blade • Power Drill with Carbide Bits • Trim Cutter • Pencil • Tape Measure • Sawhorses • Ladders or Scaffolding
Materials Needed	• Utilite Panels • Poly Vapor Barrier sheeting • Fasteners (Masonry, Metal, or Wood Frame Screws) • Nail-In Anchors • Heavy Duty Construction Adhesive • Seam Finishing: PVC Inside Corner (IC), Outside Corner (OC), and J-Cap (J) • Silicone Sealant (for installation in high moisture areas) • Non-abrasive cleaner, soap and water, or mineral spirits for use in clean up • Rags • Painter's tape • Personal Protective Equipment (goggles & mask) • 1' – 2X4 Wood

Note: DO NOT USE Power nail guns or staplers

Storage & Preparation: All Utilite panels should be stored indoors on a solid, flat, dry 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.

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 they panels are not acceptable, please contact Nudo Products, Inc. customer services immediately. **DO NOT INSTALL QUESTIONABLE PANELS!** Nudo Products will NOT be responsible for installation or removal cost of unacceptable panels.

Environmental Conditions: Temperature is always a factor when working with composite vinyl materials. In warm temperature conditions, above 70°F (21°C) cool panels to a minimum of 60°F (16°C) overnight. In cold temperature conditions, below 40°F (4°C) warm panels to a minimum of 60°F (16°C) overnight. When installation conditions of under 60° (16°) is unavoidable, insert penny between panels. When below 32°F (0°C), insert a nickel between panels to allow spacing for expansion in hot weather. Use a silicone and adhesive recommended for low temperatures, following the manufacturer's application guidelines. Check with the local building codes for specific requirements. Do NOT use Utilite panels in high temperature conditions; PVC has a heat distortion threshold in temperatures exceeding 120° F (55°C). Please discuss with your HVAC contractor prior to install. Ceiling fans and blowers may need to be installed, along with shielded Tube Radiant Heaters with a maintained clearance of 24" to distribute heat uniformly throughout facility. 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 will not warranty any panels distorted because of excessive heat exposure due to improper installation and operation of heaters and furnaces in areas where Utilite has been installed.

Cutting Instructions: Always use proper personal protection equipment when cutting Utilite panels. Read and follow manufacturer's guidelines for use of cutting tools. Panels can be cut using a power miter saw with fine tooth blade, utility knife with guiding straight edge (cutting panel 5-7 times to score and cut through panel), and table saw with fine tooth carbide blade. DO NOT RUSH. CUT THROUGH PANELS SLOW AND STEADY. A test cut is always recommended to see performance of cutting tool with Utilite panels.

Prior to Installation: Installation should NOT begin until building is enclosed (windows and doors installed). Permanent heating and cooling equipment is in operation, and residual moisture from plaster, concrete, etc. is dissipated. Prior to installation, the installer must determine that the environmental conditions meets or exceeds all requirements specified in the installation guidelines. CEILINGS SHOULD BE INSTALLED PRIOR TO WALLS. Before installing remove packaging materials. 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%. Maximum temperature exposure during installation 32°-120°. Ideally, the room temperature and humidity during acclimation and installation should be the same as the final operation conditions. DO NOT install panels tight when cold (below 60°), panels will expand in warmer temperatures (above 70°). Allow room for expansion contraction between each panel.

Ceiling Pre-Installation Planning: CEILING PANELS SHOULD BE INSTALLED PRIOR TO WALLS (if possible). Take proper measurements. The panels should NOT SPAN LONGER than 24" between ceiling trusses. If building is insulated, PRIOR TO INSTALLING PANELS, use 3mm poly sheeting to create a vapor barrier on walls and ceilings. A 24" clearance shield should be maintained between panels and Radiant Tube Heaters and ceiling furnaces. The panels have a 120° F (55°C) heat distortion threshold. Installing ceiling fans and blowers around heating devices to circulate hot air throughout facility is highly recommended. It is the installer responsibility to select the proper fasteners for the application.

Ceiling Installation Method:

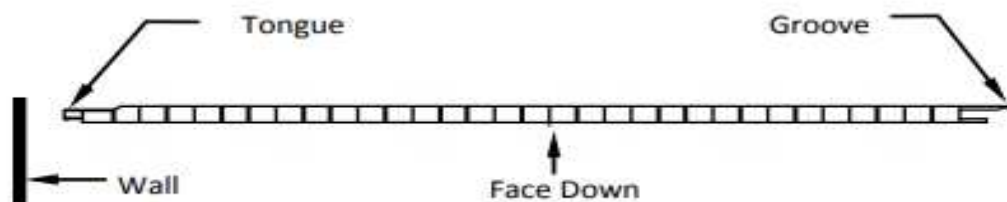
Walls and Ceiling Inside Corner Flange Up



Walls Only Inside Corner Flange Down



1. Panel installed should run 90° to the ceiling trusses or furring strips.
2. When installing wall and ceilings place inside corner around the perimeter of the ceiling with the wide flange up.
3. When installing walls only, fasten inside corner around the perimeter of building wall flush with the ceiling panels, wide flange down or with J-Cap creating a channel to terminate wall panel.
4. To accommodate expansion and contraction, cut panel $\frac{1}{2}$ shorter, leaving a $\frac{1}{4}$ on each end and oversize the fastening holes to allow for movement when installed.
5. Take first panel and place face down (shiny side) at one end of the ceiling with the tongue facing wall and the groove flange facing the direction you are installing panels (parallel with outside wall). The perimeter trim must be able to cover fasteners, keep within 1" of wall.



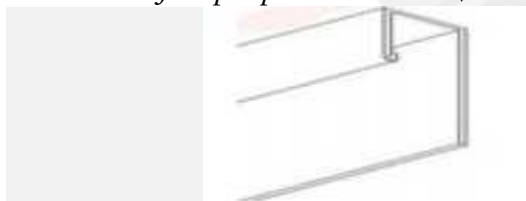
6. For the 1st panel only, you must fasten both the tongue and groove sides of panel. All other panels, fasten through the groove flange, oversizing the holes, every 16" - 24" at each rafter with the recommended screw for type of substrate.
7. Continue installing panels, by placing the tongue of the second panel into the groove of the first panel. Push and lock panels together loosely and fasten the second panel through flange at every rafter, just like the 1st panel. Periodically, check to make sure you are installing the panel square with the outside wall or the panels will look uneven.
8. You may need to trim down last panel to complete install. Measure remaining space distance at the groove edge of panel. Cut panel $\frac{1}{4}$ short of measurement, allowing 1" wall trim to cover edge. Slide the last panel in to complete ceiling.

Vertical Wall Preparation: THE CEILINGS SHOULD BE INSTALLED PRIOR TO WALLS. If the ceiling has just been installed use the existing inside corner trim to edge wall panels. Panels can be installed over masonry block, metal, and wood framing studs, so make sure you have selected the proper fasteners for the application.

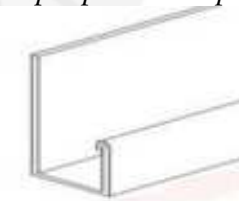
Vertical Wall Pre-Installation Planning: Measure Area. Panels should be pre-fit cut $\frac{1}{2}$ shorter than actual wall height to allow for expansion and contraction. Cove base molding should not restrict panel but allow for expansion and contraction. Poured molding should be completed prior to installation of panels. Cut panels $\frac{1}{4}$ " short of where the base molding will extend.

Vertical Wall Installation Method:

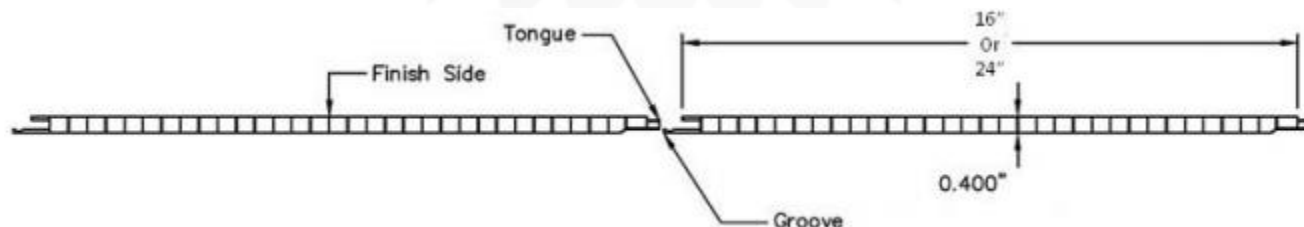
J-Cap Open Face-down (Ceiling)



J-Cap Open Face-up (Floor)



1. Start in one corner and lay J-Cap edge, open face-up, along the floor and open face-down along ceiling creating a channel to insert wall panel (unless inside corner is installed at ceiling). Insert a thin bead of clear silicone caulking along the inside of J-Trim to provide a waterproof seal and fasten oversizing holes, every 16" or 24" along top and bottom of wall.
2. Make a nice clean border around doors and windows openings by installing J-Cap or OC, prior to installing wall panels.
3. Depending on the application and conditions, you may want to apply adhesive to the back center of the panels from top to bottom and add a small bead of clear silicone caulking on channel opening of trim piece to provide waterproofing.
4. Take first wall panel which is $\frac{1}{2}$ " shorter than actual wall, and place in corner, tongue first and raise up into the ceiling trim (IC or J-Cap) and then bend slightly in the middle as to get the panel to fit into J-Cap channel at base of wall.



5. To allow for expansion and contraction, raise the panel $\frac{1}{4}$ off the floor and fasten the panels groove flange oversizing holes, every 16" - 24", to allow for movement. On the first panel you must also fasten the tongue side with screws near the corner, within 1" from the edge allowing the trim piece to cover them.

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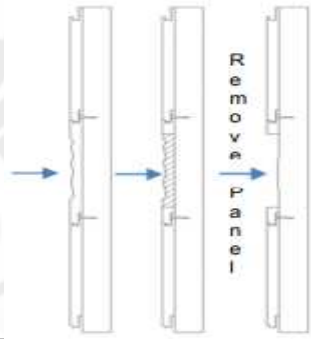
SOLUTIONS

Vertical Wall Installation Method (Cont.):

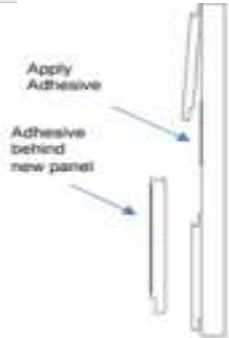
6. Make sure First panel is level in place and proceed to install the remaining panels in the same fashion. You may choose to use a 2x4 wood piece to tap groove flange onto tongue of panels. Continue to add trim pieces to terminate top and bottom of panel in the process.
7. To create a water-tight corner at door and window openings please insert a small bead of clear silicone caulking on channel opening of trim pieces before installing panels.
8. Continue the method working in one direction around the room.
9. You may need to trim down last panel to complete install. Measure remaining space distance at the groove edge of panel. Cut panel $\frac{1}{4}$ short of measurement, allowing 1" wall trim to cover edge. Insert a small bead of clear silicone caulk into edge trim piece, slide the last panel in to terminating trim channel, fasten screws, oversizing the holes along the cut edge within 1" of the corner, allowing trim to cover screws completing installation.

Horizontal Wall Installation Method: Review vertical panel installation guidelines above. During horizontal installation, start hanging wall panels from top down to floor. Install first panel, horizontally at ceiling with the groove flange pointing to floor. Insert small clear silicone bead to insure no water will nest in groove of panel. Continue the method working in one direction to the floor terminating in channel edge cap.

Removing and Replacing Panels:

Cut out and Remove damaged panels leaving 1" along both edges.	
Remove tongue section of damaged panel Pry our and remove nail flange section of damaged panel.	

Removing and Replacing Panel (Cont.):

Cut new panel to length and remove nail flange.	 Nail Flange
Apply adhesive under existing panel tongue section and also behind new panel.	 Apply Adhesive Adhesive behind new panel
Align and interlock new panel with tongue section of existing panel away from wall and/or stud.	 Align & Interlock
Press new panel and existing panel flat into adhesive. (Brace if necessary, until adhesive is cured).	 Press flat & brace if necessary

Finish Work: Waste materials shall be disposed of in a safe manner and in compliance with site, local, state and/or federal requirements.