MDF WALL PANELS
INSTALLATION INSTRUCTIONS

Please read these instructions carefully before installation to help you attain the desired results. These instructions are provided as guide as there are multiple effective methods to create a professional installation. **TEXTURES-3D® PANELS** are carved with CNC machines and computer designed to have a continuous pattern flowing from one panel to the next. The panels are made of MDF (Medium Density Fiberboard) and measure 4’x8’ (32 square feet per panel) with thicknesses ranging from 5/8” to 1” and weight of 60 to 80 pounds depending on the model. Installation is straightforward but the unique and directional concept of continuous pattern flow wall panels requires that the installer read the instructions carefully to gain familiarity with the product.

**WHAT IS CONTINUOUS PATTERN FLOW**
Continuous pattern flow is when two panels are set side by side or top to bottom and properly aligned so that the pattern flows visually from one panel to the next. A flowing seam pattern is attained when the seam at the point where two panels come together has been filled with a filler compound, sanded down smooth to blend the joint line between the two panels and given the final coats of primer.

Panels come in both horizontal and vertical direction depending on the specific model, and while this has no impact in the way the pattern flows on the completed installation, it can affect the number of panels required for a given wall size.

For example, on a long and narrow bar installation, a vertical pattern will work best. For installations with ceiling heights of more than eight feet vertical flow is best because we can provide you with half panels to minimize waste. If you can provide our technical desk with your wall measurements including height and length we will do a layout configuration for you to let you know exactly how many panels you will need and how they will need to be installed.
PANEL LAYOUT CONFIGURATION

It is important to note that installing a Textures-3D® Panel is not the same as installing ceramic tiles which have random patterns and there’s nothing to match. Our panels have continuous pattern match on all four sides, from factory edge to factory edge. To achieve continuous pattern flow, the panels must be aligned together and facing the same direction. All our panels will come with a directional sheet like the one below taped to the front to assist in achieving proper pattern orientation from the edge of one panel to the next:

If all the panels are installed on the wall with the directional sheets facing the same direction, you will have continuous pattern flow on all four sides. However, if you were to rotate one panel 180 degrees so that the directional sheet is up-side down, there will be no pattern flow with the rest of the panels.

Before the installation begins it is recommended that two panels be removed from the box cover and aligned on the floor to view the pattern flow on the four and eight-foot sides.

UNLOADING THE SHIPMENT

The panels will be shipped to the client in a solid wood crate. Up to 10 panels can fit in a single crate. The crate has been designed to prevent damage to the panels during shipping. All shipments will be delivered by freight truck and unless otherwise requested we will specify that the delivery truck have a lift and an advanced call be made to arrange a delivery appointment. We recommend that the contractor who will be handling the installation be on site to receive the shipment.

Inspect the crate carefully upon arrival for any signs of damage. If you notice any damage please indicate it on the Bill of Lading prior to signing for the shipment. The trucking companies will refuse liability if no indication of damage to the container is made at the time of receipt, and it will become difficult to file a damage claim if damage is not noted on the Bill of Lading. You will need a drill with a Phillips head to remove the screws and unseal the container. Remove the panels carefully and avoid dropping them as this will damage the edges or corners. Even though the panels are made of MDF they need to be handled carefully to avoid damage. Nonetheless, any damage to the surface can be easily repaired with a flexible and sandable joint filler like Flexall or similar.

ACCLIMATIZING THE PANELS PRIOR TO INSTALLATION

MDF as wood material is hygroscopic material, therefore it’s moisture content is dependent on the relative humidity and temperature of the surrounding air. As in the nature of all wood products, moisture and density affect MDF thickness swell and linear expansion resulting in expansion when the surrounding air is humid and contraction when it is dry. Per the specifications of the MDF manufacturers, the expansion and contraction of the MDF substrate can be as much as 4mm per meter or 0.048” per foot in extreme conditions. It is recommended that the installer/contractor check the air humidity during storage and installation. Woodworking industry standards specify the following ranges in humidity and temperature:
At our location in California, which is a relatively dry environment, the panels are stored with low exposure to humidity. If the panels have been exposed to extreme weather conditions in transit or storage prior to installation or even if they have not, it is recommended that after the shipment is received they be stored in a relatively stable temperature environment or the area they are to be installed. It is also recommended to wait about two days after the panels are installed to perform the seamless process. This will give the panels sufficient time to acclimatize to the environment around the wall. The reason for this is that all polyurethane adhesives including liquid nails have a tendency also to expand and contract, so the adhesive should be given time to cure completely.

Otherwise, exposing the panels to wide temperature ranges that can cause expansion and contraction or rushing the seamless process could result in cracks developing through the seams.

**CUTTING & SANDING**

TEXTURES-3D® PANELS are made from MDF so they can be cut with standard wood cutting saws and equipment. It is recommended that a fine blade be used to avoid edge chipping and proper wood cutting rules followed including the use of dust masks and eye protection. MDF is a composite of wood materials and resins so you must avoid breathing the fine dust created while cutting.

If a panel needs to be cut, the cut edge must be one that ends against a wall, ceiling or floor as there will be no pattern flow from a cut edge to an adjacent factory edge. After cutting, it is recommended that a moisture sealer be applied to seal the edges to prevent moisture absorption.

Please note that continuous pattern flow is only between original factory edge to factory edge. Any edge that has been cut will not have pattern flow if placed against a factory edge. Cut edges must be installed so they face the floor base board & ceiling or side walls.

**SETTING UP THE CONTINUOUS PATTERN TO FLOW**

TEXTURES-3D® PANELS are computer designed to have continuous pattern flow from the edge of one panel to the next. The panels align by matching a RIGHT side to a LEFT side, or a TOP side to a BOTTOM side. The installer should study and plan how the panels need to be aligned so the pattern flows continuously. The flowing lines of the pattern of the preceding panel should look like a continuation on the next panel. If the panel to be installed does not properly align with the panel next to it that you must STOP the installation as there might be three possibilities being (1) the direction sheets taped to the front of the panel are not facing the same direction, (2) the directional sheet on one of the panels has been improperly applied, or (3) the pattern flow is defective and the panel needs to be replaced. Below is a sample of what a failed pattern flow looks like:
EXAMPLE OF IMPROPERLY INSTALLED PATTERN

IF THE PATTERN FLOW DOES NOT MATCH, STOP AND CONTACT TEXTURES-3D® FOR TECHNICAL ADVICE AT 888-316-2884.

When the panels are properly aligned and the seams are filled with spackle, the seam should not be visible like the picture below that shows three panels side by side:

PICTURE SAMPLE OF PROPERLY INSTALLED PANEL
INSTALLATION PROCESS  
MOUNTING & EDGE-GLUING

FOR PRIMED READY FOR PAINTING PANELS
Once you are ready to start installing the panels, inspect the wall they are to be mounted on. It is highly recommended that a ½” to ¾” plywood underlayment be mounted on the wall first with a combination of panel adhesive like LIQUID NAILS and screws firmly attached to the studs. The underlying plywood sheets should be staggered so that the joints of the plywood are not directly underneath the joints of the 3D wall panels. The installation of a plywood underlayment will not only permit you to create a perfectly flat area but will also firmly hold the 3D wall panels in place and prevent travel or movement.

Lay out the panels with a laser level (preferred), starting from the bottom up and use a hand level or chalk line to ensure uniform installation. If panels are being placed directly up against one another, use the first panel as a reference point for adjoining panels to be installed.

The goal in the installation process is to have the panels firmly ATTACHED and GLUED to the surface to prevent any type of movement that can result in the seams cracking. Panels should be installed from the bottom up with panel adhesive applied to the wall, and screws firmly attaching the panel to the wall. The first panel sets the direction and flow for the rest of the panels, so it is imperative that the panel be straight and parallel to the floor. The purpose of the screws is to fix the panel to the wall while the panel adhesive dries.

Using again a panel adhesive like LIQUID NAILS PANEL ADHESIVE it should be THICKLY applied to the back of the panel. We recommend using A 28oz tube which sells at Home Depot for about $5 each for maximum coverage. While the LIQUID NAILS may be applied from a tube the adhesive must be TROWELLED evenly so that the entire back surface of the panel and specifically the edges are completely covered. To hold the panel in place, insert countersunk screws every 12” inches and approximately 1” inch apart from the edges all around the panels. The screws will hold the panel firmly in place until the adhesive cures and binds to the wall. Screws may be fixed on the wood studs but care must be exercised not to drive the screw so deep that it causes the screw hole to collapse or cracks to develop on the panel. A stud finder should be used to make sure that the screws are screwed to the wood studs if possible.

FOR PRE-PAINTED PANELS
The term "painted panels" refers to panels that have been pre-painted. Panels that are pre-painted cannot be screwed in, nor can the edges be made "seamless" because the process would damage the surface requiring a new coat of primer and finishing paint. Pre-painted panels are best suited for installations in which a non-visible seam is not desired or in which there is a separation between the panels. For the professional the cleanest way to install is to use LIQUID NAILS on the back of the panel and with a nail gun shoot headless nail at an angle through the edge of the panel. This will avoid damage to the front of the panel but it requires a bit of practice to avoid damaging the panel. The thickness of the panel and carving will dictate if nails can be shot through the edge.

EDGE GLUING
Once the first panel is installed apply a line of adhesive along the edge that will butt the next panel using Loctite Polyurethane Premium Construction Adhesive. Run the line of adhesive through on the edge and glue all panels in the same manner. It is not possible to force the glue between the panels after they are mounted on the wall. This will not only bind the panels and prevent shifting but will also fill in the crevice so that when you apply the filler it will not result in air-pockets where the filler sinks in.

GLUE REMOVAL
The Loctite Polyurethane Premium Construction Adhesive will expand as it sets and will require trimming before the seams are filled. If the panels butt the ceiling, trim or adjacent walls use a paintable flexible caulking along the edge. Always allow at least 24 hours for the glue to dry before applying filler to the seams.
FILLING IN THE SEAMS & SANDING
To attain a "seamless" look a filler needs to be applied between the seams, allowed to dry and then sanded. Contractors who have installed our panels have recommended the use of pre-mixed DAP FLEXALL Flexible All-Purpose Filler compound that requires no mixing because per the manufacturer DAP “it dries flexible to prevent shrinkage, it is heat and water resistant and dries within three hours”. A light coat of filler should be applied to the screw holes and approximately 1” past the seams on each side (feathering) to allow for blending between panels. Seam filler must be allowed to set before sanding begins. Sanding should be done always following the flow of the pattern. It may be necessary to apply a second coat of filler.

After application, the filler should be allowed to dry for about two to five hours and then start sanding first with a 150 grit sandpaper and finish with 220 grit sandpaper. If for any reason the filler shows line cracks or fissures after sanding this could be due to adverse weather conditions like heat or cold while the filler is setting. If that happens you can add more filler, then let it dry and sand. Sanding should be done following the direction of the pattern in much the same way that a stain is applied following the direction of the wood grain. The filler should extend at least 1” on each side of the joint and sanded smooth to the touch. Run your fingers through the sanded area to detect imperfections that are not visible. Please make sure to follow the instructions below to seal the seams and the panel. Avoid buildup of filler on the screw holes and only feather or spread the filler beyond the joints. Sloppy application of the filler will require extra labor time to sand down as well as the likelihood of bumps and imperfections.

The use of drywall mud or joint compound as well as taping is not recommended and could result in cracks and fissures.

PRIMING AND PAINTING
Once the seams are given their final sanding apply two coats of sealer, then one coat of primer over the sanded area and once that dries apply a final coat of primer over the entire panel to even out the paint.

We recommend the use of oil-base KILZ Primer-Sealer available at Home Depot to prime over the sanded area ONLY. Contractors have indicated that applying water base primer over the seams could cause the filler to absorb moisture and expand. Moisture can also penetrate the sides of the panel.
For the final coat of primer over the entire panel, we recommend water base ZINSSER BULLS EYE ZERO Primer-SEALER. It has zero VOC formula, low odor, is fast drying and can be recoated in one hour. Do not use primer paint only but rather primer with a SEALER.

Failure to properly seal the seams could result in cracking or fissures at the seams. This will also be the final opportunity to catch any surface aberrations, ripples or granules to be sanded down. If the final coat of paint to be applied is a satin or matte you can proceed. If the final coat is a gloss finish, always run your hand through the surface to feel for surface defects that are not visible. The use of a bright LED light will also uncover any surface that requires additional sanding.

It is recommended that the panels be spray-painted rather than using a brush or roller. To spray standard water based paints or metallic paints, thin with up to 16 fluid ounces/473 milliliters of water to one gallon/3.78 liters of paint. Thin carefully, as over thinning of the paint will result in loss of hide and a reduction of the desired appearance. Use an HVLP gun or a conventional cup gun with the fluid and air supply from a pressure pot and compressor. Air pressure at the HVLP spray gun needs to be approximately 30 psi, with greater pressures at the tank, approximately 60 psi. Example: Binks-Mach 1 HVLP, with a 94-nozzle set up (0.55 or 1.4mm diameter fluid tip and a 90P air nozzle). The settings for this equipment were: Fluid Pressure-25psi and Air Pressure-45psi. Binks- 2001 Conventional, with a 66SS air nozzle set up (0.70 or 1.8 fluid tips and a 66SD air nozzle). The settings for this equipment were: Fluid Pressure-30psi and Air Pressure-60psi. Use a NIOSH approved respirator when spraying. Provide adequate ventilation. Note: Do not use turbine-type “air compressors” to power the HVLP spray gun.

If this is not new construction, but a remodel where over-spray can damage furniture or surfaces, a roller can be used.
1. Inspect crate upon arrival, specially the bottom of the crate to make sure that there’s no visible damage that could have been caused by the forklift.

2. If any exterior damage to crate is seen, it must be noted on the bill of lading that is required by the truck driver to be signed. Failure to note damages to the exterior of the crate will release the shipping company from any liability.

3. Give the panels at least three days if possible to acclimatize to the temperature of the room that the panels will be installed in.

4. Remove the box from two panels and lay them on the floor with the directional sheets that are attached with blue tape to the front of the panel both facing the same direction. Align the panels next to each other at the eight-foot length and the four foot length to see how the continuous pattern flows from one panel to the next.

5. If there’s no continuous pattern flowing on either the four or eight-foot side, rotate one of the panels 180 degrees as this could signal the improper attachment of the directional sheet.

6. If there’s a failure in the continuous pattern flow, STOP and immediately call TEXTURES-3D® at 888-316-2884 and ask for our technical department. One of our technical experts will call you back as soon as possible.

7. Install ½” or ¾” plywood on the wall starting with a 4’x4’ section so that the edges of the plywood are not matched up with the edges of the TEXTURES-3D® wall panels.

8. If any TEXTURES-3D® panels need to be cut, apply a sealer to the edges that are being cut.

9. Apply a full tube of Liquid Nails to the back of the panel and trowel evenly across the entire surface and specifically right up to the edges to ensure that the panel will be solidly glued to the wall.

10. After installing the panel insert screws about one every 12” and try to find the wood studs behind the wall for better retention and adhesion.

11. Apply a bead of using Loctite Polyurethane Premium Construction Adhesive to the edges and the butt the next panel edge against it so edges are tightly bound. Allow time to dry.

12. Apply the Vinyl Spackling filler paste to the screw holes and seams. Feather or spread the filler 1” on each side of the joints/seams and allow time to dry.

13. After the filler is dry, start sanding with a rough 150 grit sandpaper and then finish with an ultra-fine 220 grit sandpaper until the filler is smooth visually and to the touch. In addition to a visual inspection, run your finger over the filler to feel for surface imperfections that will appear after the finishing paint is applied.

14. Apply one coat of primer-sealer over the filler sanded areas.

15. Apply a final coat of primer-sealer over all the panels to even out the paint.

16. Apply the final coat of finishing paint.