



MirroFlex™ Structures – Ceiling Tiles Fabrication and Installation Instructions

MirroFlex™ Structures are deeply textured ceiling tiles. MirroFlex Ceiling Tiles are opaque, thermoplastic square and rectangular panels available in Glue-Up, Lay-In, Acoustic/Perforated and Faux Mineral Fiber.

General

Sizes: 2' x 2' and 2' x 4' Lay-In (grid) ceilings tiles; 2' x 2' and 2' x 4' Glue-Up tiles.

MirroFlex™ Structures ship with a clear protective film or with TuffCote™, a revolutionary scratch-resistant protective shield, which is added to some MirroFlex and MirroFlex Structures finishes.

Storing

Store flat and acclimatize in the same environment for at least 24 hours before fabrication.

Cutting/Fabricating

MirroFlex™ Structures can easily be cut to size with razor knife and scissors, saw blades, and drilling tools for thermoplastics. When fabricating MirroFlex™, always cut from the decorated side, through the finish. Never cut from the back.

Cleaning and Care

Clean only with warm soapy water or a typical window cleaner. Never use abrasive cleaners.

GridMax™

GridMax is a patented ceiling grid cover system that fits all 15/16" suspension grid systems. GridMax 4' Mains, 2' & 4' Tees, and 4' Wall Covers are available in most MirroFlex Structures finishes. Please inquire for availability.

100 sqft GridMax kits are available in most Structures finishes and are the preferred method of our inventory.

CAUTION:

All MirroFlex sheets being applied to surfaces with any recommended adhesive systems must be acclimatized.

- All components to be joined must be acclimatized for 24 hours prior to installation.
- Installation between 65° F and 80° F and humidity of 80% or less is necessary.



Adhesives

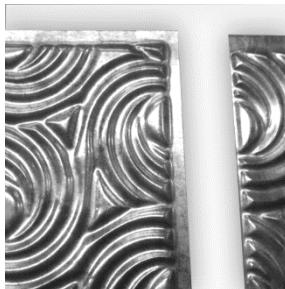
Trowel on latex adhesives are recommended for adhering MirroFlex sheets to a surface. Brush-on or roller-on types, non-flammable, and water-based contact adhesives which are suitable for PVC, can also work well.

The following is meant as a guideline for adhesives that have been tested and work well with MirroFlex product:

- Titebond® Fast Grab FRP
- Loctite® PL Premium
- Loctite® PL Premium Fast Grab
- DAP® Weldwood FRP
- 3M™ 77 (spray on aerosol)

Seams

Many MirroFlex Structures Ceiling Tiles have a BIO (Built-In-Overlap) which is a flat edge on the top and right of each panel, allowing the next panel to overlap and make the seam less visible. Certain MirroFlex patterns that do not have a BIO may have a Bead and Button feature. To install, overlap two or more sheets or tiles on the bead and button perimeter which will join at the pre-determined connection points.



BIO

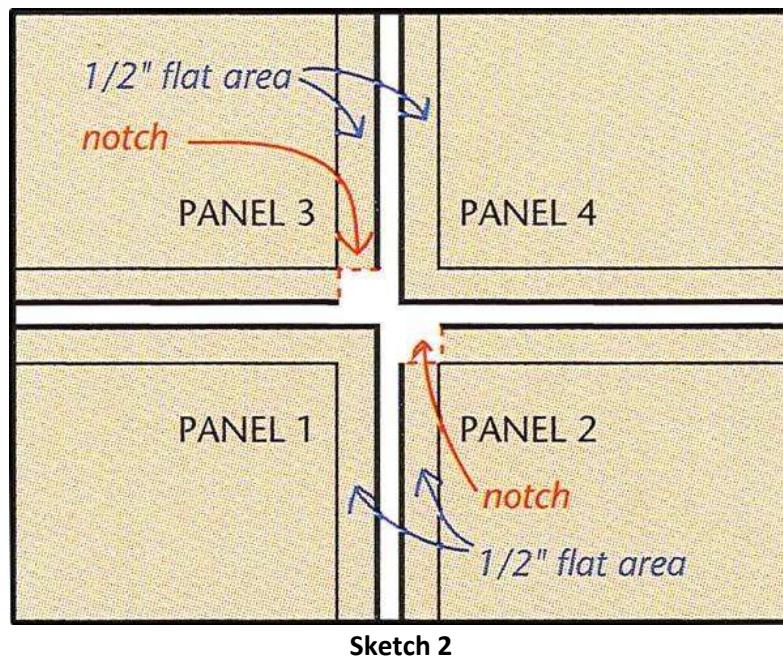


Bead + Button

Installations

Glue-Up Ceiling Tiles

1. Before starting the installation surface must be dry, smooth, and free from dust, grease, wax, and other particles*.
2. Measure the area to be covered to determine how many tiles you will need. Draw a plan to visualize how the edges and corners will work. When drawing your plan, it is best to center MirroFlex panels on the ceiling leaving equal margins on opposite sides of the room.
3. Now transfer the plan to the ceiling snapping chalk lines to help you keep the tiles aligned.
4. MirroFlex ceiling tiles should be installed from left to right, starting at the farthest point away from the room entrance. Some MirroFlex ceiling tiles are designed with a BIO (Built-In-Overlap) which is a flat edge on the top and right of each panel, allowing the next panel to overlap and make the seam less visible. As you work from left to right you want to make sure that the flat edge is always on the right.
5. When overlapping 4 MirroFlex panels, it is necessary to cut a $\frac{1}{2}$ " notch in panel numbers 2 and 3 to avoid an overlap buildup that causes a "bump" (see sketch 2).



Sketch 2

6. Carefully apply the adhesive to the ceiling (or wall for 2' x 2' wall applications) and lay up your first tile applying pressure as you hold it. (If installing a tile with protective masking, you can remove it at this step of the installation. Make sure the tile is straight before you continue with the next one.)
7. Repeat this process, working left to right (and removing the protective masking after installing each panel, if applicable). When finished, use a paint roller on an extension pole to apply additional pressure to the ceiling. Filler strips can be installed around the perimeter of the room if desired.
8. Depending on what type of adhesive is being used, bracing or temporary supports may be required while the adhesive cures.

* The method you choose for cleaning prior to application must be compatible with the surface you are cleaning (e.g. denatured alcohol, degreaser, soap & water, TSP, Greased Lightning, etc.). Check the manufacturer's label directions for instructions on using the product.

Lay-In Ceiling Tiles

1. Count how many tiles you will need for the installation. For panels that need to be trimmed, use the mineral tile as a template and using your marker and utility knife (razor, scissors, etc.) score the MirroFlex tile to size and then snap the pieces apart. Some 2' x 2' and 2' x 4' sizes might produce sag and require a small amount of panel adhesive in the center to adhere to an existing mineral fiber tile. We also recommend installing under existing mineral fiber tiles to increase sound absorption and to avoid discarding large quantities of tiles.
2. ATI also offers an easy-to-install, hold-down clip system to help support lay-in ceiling tiles, attaching to the top of any existing grid to hold the tiles (low or high profile) in place. This will prevent the tiles from



Design Beyond the Surface

flipping out of place from air leaks and create a smooth visual. This clip system is only necessary if there are no existing tiles in place to support the new MirroFlex lay-in tiles.

3. Install the Grid Max covers to the t-bar suspension grid to allow for a seamless look on your ceiling. Be sure to install all the 4' **Main** covers first and then install the 2' or 4' **Tee** covers. The **Main** covers already come with sections notched out where the **Tee** grid crosses under it.
4. After all the covers are in place, begin to install all the panels into the suspension grid.
5. If your ceiling needs a place for recessed lighting, be sure to cut out an opening on the tile where the lamp will be attached.

Painting Guide

If a custom color is desired, choose our standard MirroFlex Gloss White Paintable or EccoFlex Tan Paintable finish or inquire about our custom color matching program. Use recommended paints in accordance with manufacturer's recommendations. Due to the high chemical resistance of it, only certain paints adhere well. It is very important to use recommended paints to paint MirroFlex Gloss White Paintable and EccoFlex Tan Paintable sheets.

The following paints have been tested and are recommended:

MirroFlex Paintable Painting Guide			
Vendor	Product	Prep 1	Prep 2
Sherwin Williams	Acrolon 218HS	SSPC-SP1 Solvent Cleaner	DTM Bonding Primer
Lowes	Signature Interior or American Tradition Exterior Duramax Paints	TSP Cleaner	Plastic Primer Spray
Benjamin Moore	Benjamin Moore Latex or Oil Paint	TSP Cleaner	Fresh Start Primer
Pratt & Lambert	Pratt&Lambert Latex Paint	Scuff Sanding/TSP Cleaner	Supreme Interior / Exterior Multi Purpose Primer

EccoFlex Paintable Painting Guide			
Vendor	Product	Prep 1	Type
Sherwin Williams	SuperPaint® or Duration™ or similar	Wiping the sheet with Isopropyl Alcohol (IPA) will	Brush application



Design Beyond the Surface

Sherwin Williams	Polane™ Series* or Similar	help promote paint adhesion. To prepare the surface: EccoFlex sheet surface can be wiped using IPA or rubbing alcohol prior to painting. This method of treatment helps paint attack the surface and create a strong bond to the EccoFlex sheet.	Spray application
Cardinal	Polyurethane 6400 Series		Spray application

* For external applications using Sherwin-Williams Polane Series, use exterior catalyst V66V27. The ratio is 6 parts paint, one part catalyst.

Installation Videos

MirroFlex Structures Installation Videos can be found on our website at www.atilaminates.com/resources/video

Conditions & Warranty

ATI Decorative Laminates warrants to the original consumer purchaser for one (1) year after date of purchase that, under normal use and service, MirroFlex products are free from manufacturing defects and conform to published specifications. MirroFlex products are intended for primarily interior applications.

ATI Decorative Laminates believes all information contained herein to be correct. It is the responsibility of the fabricator/customer to completely test the adhesives and methods of fabrication to ensure that the results are satisfactory.

The seller's only obligation will be to replace product on a one-to-one basis. Neither the manufacturer nor the seller shall be liable for any additional damage or loss, directly or indirectly, arising as a result of using its products.

Slight imperfections and color variations can occur and are considered normal. Please inspect each product carefully before fabrication to ensure it meets your needs. ATI is not responsible for any fabrication or ancillary costs involved with using its products.

Visit us online at ATILaminates.com/MirroFlex for the latest additions to MirroFlex.