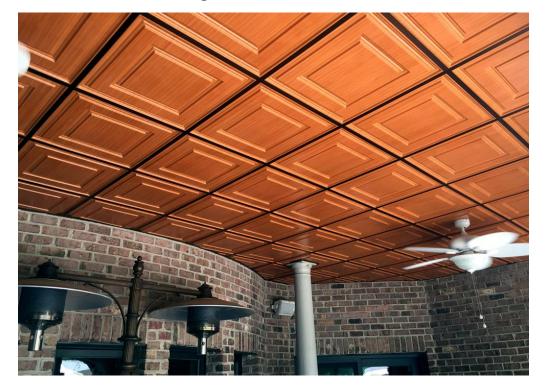
MirroFlex[™] Structures – Ceiling Tiles Fabrication and Installation Instructions



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.

<u>General</u>

Sizes: 2'x2' and 2'x4' Lay-In (grid) ceiling tiles; 2'x2' and 2'x4' 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[™] "tructures 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.

<u>GridMax</u>™

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 between 65° F and 80° F and humidity of 80% or less is necessary

Adhesives

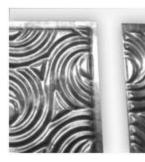
Trowel on latex adhesives are recommended for adhering MirroFlex sheets to a surface. Brush-on or roller-on types, non-flammable, and water-based contact adhesives which are suitable for PVC, can also work well.

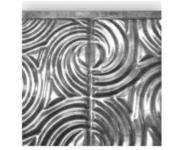
The following is meant as a guideline for adhesives that have been tested and work well with MirroFlex product:

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

<u>Seams</u>

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



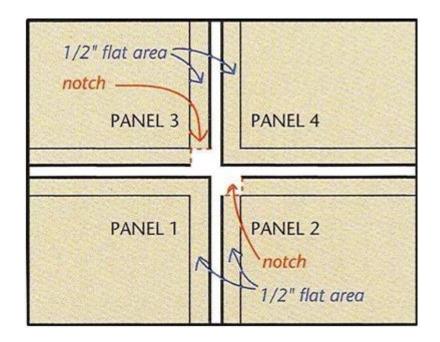
Bead + Button

Installations

Glue-Up Ceiling Tiles

- Before starting the installation surface must be dry, smooth, and free from dust, grease, wax, and other particles*.
- Measure the area to be covered to determine how many tiles you will 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
- 4. MirroFlex ceiling tiles should be installed from left to right, starting at the farthest point away from the room 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.

When overlapping 4 MirroFlex panels, it is necessary to cut a ½" notch in panel numbers
2 and 3 to avoid an overlap buildup that causes a "bump" (see 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 (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 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.

* 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

 Count how many tiles you will need for the 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 This will prevent the tiles from 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
- 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				
Product	Prep 1	Prep 2		
Acrolon 218HS	SSPC-SP1Solvent Cleaner	DTM Bonding Primer		
Signature Interior or American Tradition Exterior Duramax Paints	TSP Cleaner	Plastic Primer Spray		
Benjamin Moore Latex or Oil Paint	TSP Cleaner	Fresh Start Primer		
Pratt&Lambert Latex Paint	Scuff Sanding/TSP Cleaner	Supreme Interior / Exterior Multi Purpose Primer		
	Product Acrolon 218HS Signature Interior or American Tradition Exterior Duramax Paints Benjamin Moore Latex or Oil Paint Pratt&Lambert Latex	ProductPrep 1Acrolon 218HSSSPC-SP1Solvent CleanerSignature Interior or American Tradition Exterior Duramax PaintsTSP CleanerBenjamin Moore Latex or Oil PaintTSP CleanerPratt&Lambert LatexScuff Sanding/TSP Cleaner		

EccoFlex Paintable Painting Guide				
Vendor	Product	Prep 1	Туре	
Sherwin Williams	SuperPaint® or Duration™ or similar	Wiping the sheet with Isopropyl Alcohol (IPA) will 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.	Brush application	
Sherwin Williams	Polane™ "eries* or Similar		Spray application	
Cardinal	Polyurethane 6400 Series		Spray application	
