

MIPOLAM WALL PROTECTION INSTALLATION INSTRUCTIONS



Notes

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DECOCHOC DECOCLEAN DECOWOOD & DECOPRINT PANELS

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Warning

Because technology is constantly changing and evolving, it is up to the installer, contractor the verify with our Technical Services that this document is the latest version before the installation begins. The installation contractor must comply with local and national regulations applicable at the date of installation. The material must be inspected before installing to avoid any visible defect. Once the material is installed, Gerflor USA, Inc. will not accept any claims related to visual defect or imperfections in the products.

Decochoc, Decoclean, Decowood & Decoprint Panels

1. Tools Required



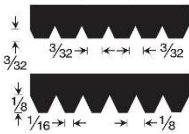
- Tape measure and pencil



- Dolphin knife Romus 91150 - Blades 692416

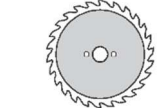


- Mozart trimmer Romus 95130 Blades 95129



- Recommended trowel size is 3/32" x 3/32" x 3/32" 'V' for walls

- Recommended trowel size is 1/8" x 1/8" x 1/8" 'V' for ceilings



- Circular saw with fine-toothed carbide blade for aluminum/PVC for straight cuts



- Humidity tester Tramex Moisture Encounter or similar



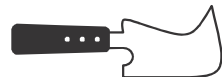
- Double-handed pressure roller Romus 93153



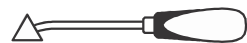
- Gerflor recommended Acrylic Adhesive for wall panels



- LEISTER TRIAC S, 120V, 1550W with Ultra speed welding nozzle for 5mm rod



- Gerflor Silicon caulking



- Quarter moon knife/spatula knife Romus 95140



- Triangular scraper Romus 95178



- Wood planer

- Denatured alcohol, Ethanol, heptane or Isopropyl alcohol

- Damp rags

2. Conditions for Installation

2.1 BEFORE FITTING AND ADJUSTING

- Check the humidity levels of the surface to be glued at several points using a humidity tester. Humidity levels must not exceed 25 %.
- Check that the surface of the wall is not greasy or loose and that there are no large holes.
- Holes larger than 1 in. or deeper than ½ in. must be filled with plaster before the installation.
- Wall panels must be at the same temperature as the premises in which they are to be installed (for at least 24 hours) in order to prevent distortion.
- Any tests of the HVAC systems of the building must be performed before the installation of the panels.
- If the installation is carried out at temperature significantly different from 68°F (i.e. Improper heating in winter), bear in mind the variations shown in the table below when installing.
- If the panels will be exposed to temperature changes in excess of 15°F (e.g., behind a bay window), expansion joints must be provided.

2.2 TABLE OF WALL PANEL DIMENSIONAL VARIATIONS

Temperature in °F	Variation for each for each 3 lin. Ft.	NOTES
60 °F	-1/32 in.	Minimum temperature
68 °F	0	Ideal temperature
75 °F	+1/32 in.	Acceptable temperature
85 °F	+1/16 in.	Maximum temperature

IMPORTANT: If the work has to be performed under very hot conditions, and before the HVAC system comes into service, it is of the utmost importance to understand that the dimensional variations of the wall panels will be excessive. This is why we recommend that the temperature at the time of installation be the same or close to the ambient temperature that the room will be once in service.

3. Recommended Adhesive

Wall panels may be adhered using different adhesive, depending on the type of surface needing protection. The table below shows the assembly procedures to be used for the main types of materials used in buildings. For each procedure, it is important to press down on the bonding surfaces with a minimum pressure of 14 psi.

TYPE OF WALL	INSTALLATION PROCEDURE
Sheetrock	Acrylic Adhesive
Brick	Acrylic Adhesive
Wood	Acrylic Adhesive
Sheet metal	Acrylic Spray adhesive (metal protected by anti-rust paint), double-sided adhesive

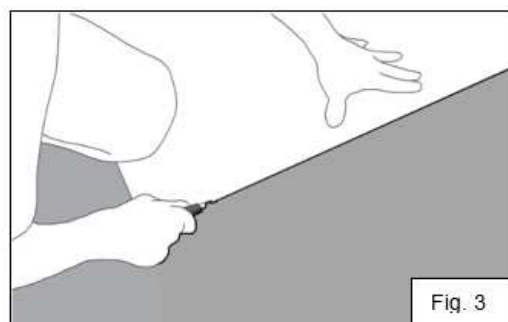
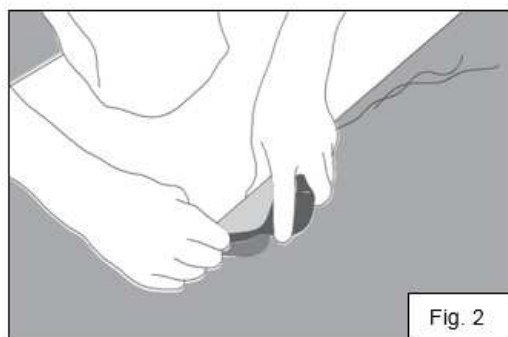
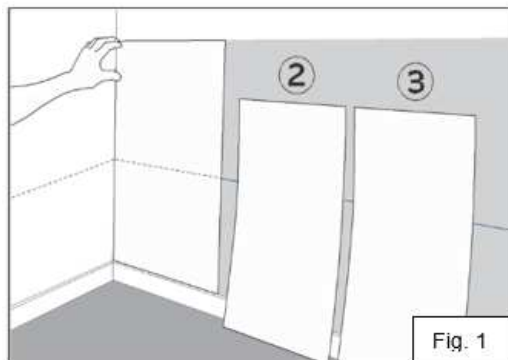
3.1 IMPORTANT INFORMATION ABOUT ACRYLIC ADHESIVES

- GERFLOR recommend 2 adhesives for the installation of the wall panels:
 - MAPEI ECO 901 FRP Panel Acrylic Adhesive
 - SPRAYLOCK FRP Panel Adhesive
- Fresh adhesive smudges can be removed with warm water. Dried adhesive can be removed using a PVC spatula.
- Acrylic adhesive can be stored for 12 months but must be protected from freezing.

4. Installation Procedure

4.1 CUTTING OUT AND ADJUSTING THE WALL PANELS

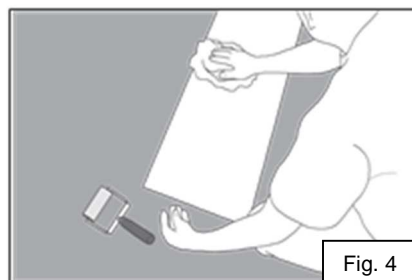
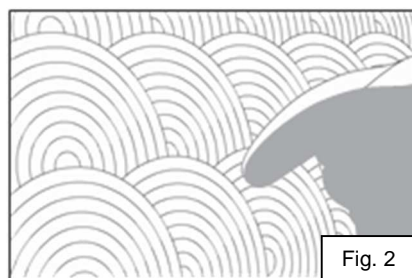
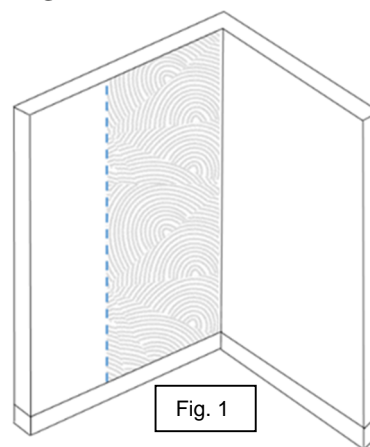
- Trace a leveled line at 4-5 ft. high on the walls to be installed. See fig.1.
- Trace a line on the panel to allow for proper measurements of the cuts to be done at both ends of the panel.
- Measure each section of wall up and down starting from the leveled line and then cut the panels to the heights and lengths required.
- Use a hooked blade or a circular saw to cut the panels to shape.
- Use numbers to mark the location of the panels on the sections of walls.
- Place the panels against their respective wall sections and check for alignment against moldings, flashcoving and floors.
- To align properly, place the panel against the wall and press it against the floor (or flashcoving).
- Adjusting the alignment (or re-cutting, where necessary) should be done with a hooked knife or a planer.
- Once the panels' alignment is completed, place each panel against its respective wall section and use a pencil to draw the limits of the area to be glued on the wall (1/4 inch inside the edges of the panel).
- Cut-outs for wall switches and sockets should be made using a jigsaw.
- Always pre-groove the edges of the panels that will be welded. See Fig. 2 and 3.



4. Installation Procedure

4.2 APPLYING THE ADHESIVE AND INSTALLING THE PANELS

- Apply the adhesive with the recommended notched trowel or spray the required quantity.
- Apply the adhesive over the entire wall surface as marked earlier (fig.1).
- Once the surface is completely covered, allow 10-minute open time before installing the panel.
- Check the adhesive open time by placing a fingertip against the glued surface.
- For the ECO 901, do not let the adhesive create a skin.
- For the Spraylock FRP adhesive, the adhesive should be dry and tacky before installing the panels (fig.2).
- It is important to properly clean the panel's surface (side applied into the adhesive) using a damp rag or denatured alcohol before installing the panels.
- Set the panel in place, being sure to allow the space needed between each panels for expansion.
- Press down over the entire surface of the panel, using a roller, and apply pressure to the panel (fig.3).
- Using a rag damped with warm water, clean off any excess adhesive (fig. 4).

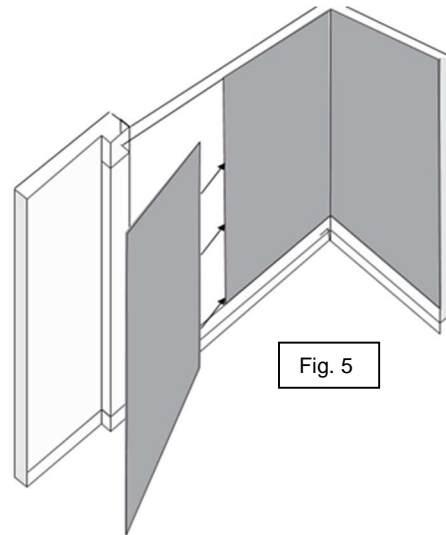


4. Installation Procedure

Where the length of the wall requires multiple panels, these must be fitted and adjusted one after the other. Always allow for proper spacing between each panels (fig.5).

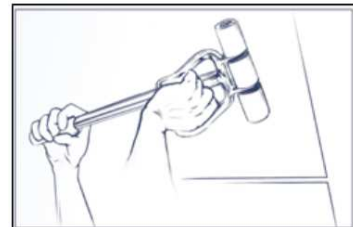
Panels will be bent and adjusted for inside and outside corners before adhering any panels.

As a general rule, leave a 1/8" gap between panels, outlets and fixed elements such as millwork, piping, wall sockets, handrail brackets etc.



4.3 CEILING INSTALLATION

- Pre-fit each panel before adhering in place.
- All cuttings and holes or fixtures drilling must be done prior to the application of adhesive.
- Mark panels position on the ceiling according to the desired layout.
- Make a straight line using a chalk-line or a laser.
- Measure and cut each panel to be installed as the perimeter of the ceiling (walls) will probably not be straight.
- Trim the panel to fit accordingly.
- Allow 1/8" for expansion on the perimeter and at the seams.
- The edges of the panels that will be welded should be pre-beveled before installing on the ceiling.
- Apply the adhesive on the ceiling using a 1/8" x 1/8" x 1/8" 'V' notched trowel.
- Place panel on the ceiling leaving appropriate space at panel joints and edges for expansion and contraction.
- Using a hand roller, remove air pockets by rolling out toward the edges of the panel.
- Install the next panel.
- The nature of panels is to expand and contract.



4. Installation Procedure

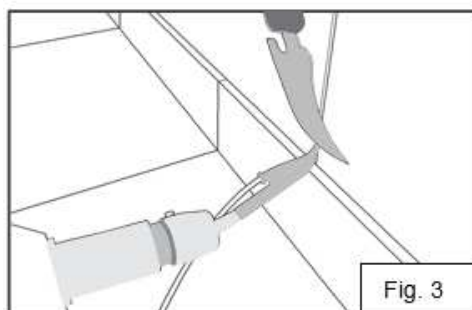
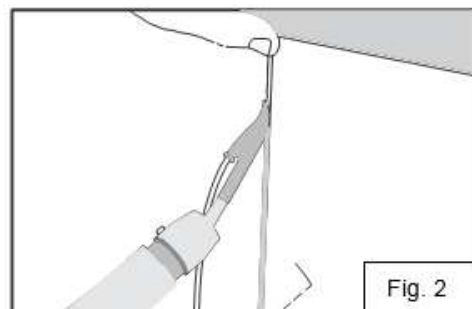
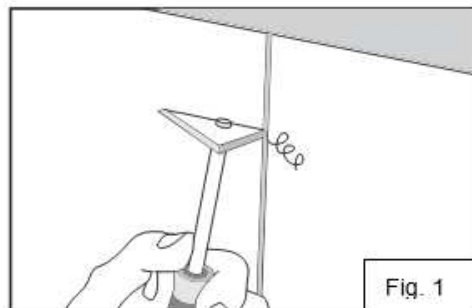
- Without leaving required room for expansion and contraction, panels can develop buckles and/or bulges because panel movement will occur.

NOTE: When installing panels on a ceiling, using a solvent free contact adhesive is also recommended. Using contact adhesive is very challenging and requires skills that not every installer have. Repositioning the panel when using contact adhesive is merely impossible.

4.4 HEAT WELDED SEAMS

Heat welded seams are used to provide a good seal between two wall panels or any wall panel against flashcovered Gerflor Mipolam floorings.

- Check that there is a 1/8" gap between the panels.
- Use the triangular grooving tool between the two panels if the groove was not done prior to the installation of the panels (fig.1). Cut a length of welding rod, adding 4" to the length needed.
- Make sure that the welding tip is clean.
- Set the gun temperature to 5 (for a 1600W gun).
- Let the gun warm up for 3-5 minutes until it reaches its working temperature.
- Feed the welding rod into the nozzle and begin the weld.
- Start the weld from top to bottom, maintaining pressure on the start point with a finger (fig.2).
- Work slowly downwards along the length of the seam, ensuring proper fusion of the panels and the rod without burning the panel. The speed should be about 8" per second.

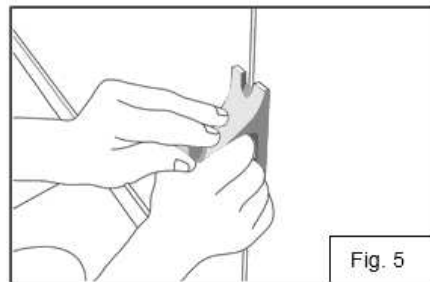
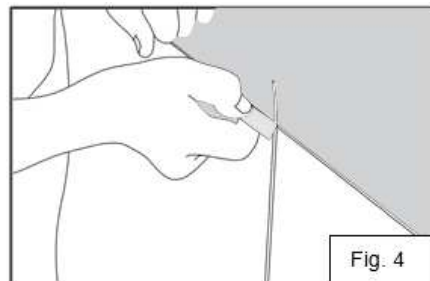


4. Installation Procedure

- At the end of the seam, use a knife to cut off any excess rod but keep pressure on the end of the seam for about 15 seconds (fig.3).
- Reset the gun to the 0 setting until it has cooled down properly and then switch the gun off.
- Clean the nozzle using a brass wire brush.

Note: Always practice on left over pieces before working the welds on the finished walls

- Cut back any excess of welding rod above the seam using a knife (fig.4).
- Let the weld cool completely for about ten to 20 minutes.
- Finally, use the Mozart skiving tool to remove any excess of welding rod. This must be done in 2 passes. (fig.5).

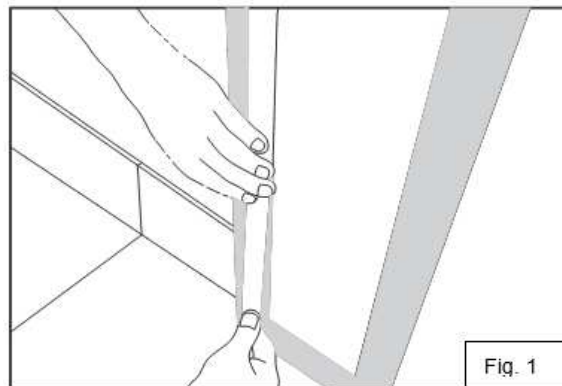


4. Installation Procedure

4.5 APPLYING SILICONE CAULK

Silicon caulking is used to provide a good seal between wall panels and frames, flashcovered flooring and between the panels themselves at corners where needed.

- Check that there is a 1/8" gap between the panels and the fixed elements.
- Apply strips of masking tape to protect each side of the joint (fig.1).
- Use a caulking gun to apply a bead of silicon along the length of the joint (fig.2).
- Spread the silicon caulk with a finger or a caulking applicator (fig.3 & 4).
- Remove the masking tapes.

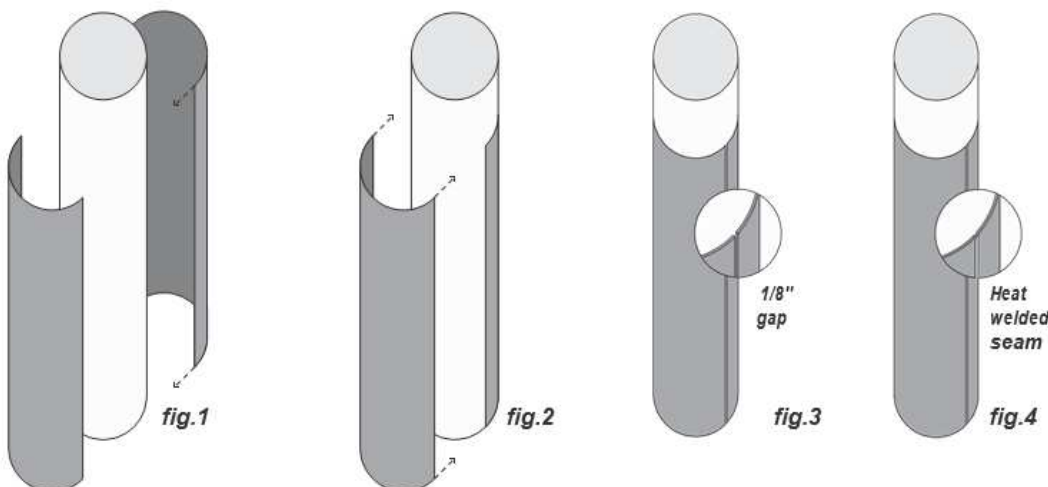


4. Installation Procedure

4.6 INSTALLING WALL PANELS ON ROUND COLUMNS

Adjusting and installing wall panels on a round column will be achieved with pre-bent wall panels, curved by hot-forming to fit the dimensions of the column. Each column will need 2 pieces of wall panels (i.e., in two halves).

- Wall panels for columns need pre-bending and hot-forming when the diameter is less than 30".
- Any column with a diameter over 30" can be installed without pre-bending the panels.
- Hot-formed panels should be made 1/2" oversize in both directions to allow for adjustment and fitting.
- Fit the first hot-formed panel using the correct procedure for fitting panels (fig.1).
- Given the rounded shape, two coats of adhesive will be needed to attach the hot-formed panels to the column.
- Outline the areas to be glued and then apply the adhesive to both, the panel and the column and install the panel.
- Then fit the second panel, leaving gaps of 1/8" between the panels on each side (fig.2 and fig.3).
- Once the two panels are installed and the adhesive has setup overnight, heat weld the seam on both sides to finish the installation (fig.4).



4. Installation Procedure

4.7 INSTALLING WALL WITH BENDS FOR ANGLES

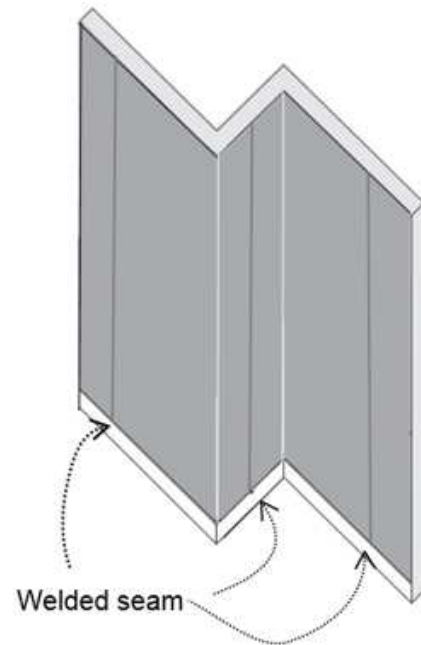
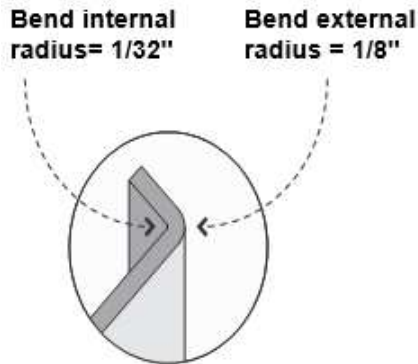
Where wall panels are to be installed in operating rooms or clean rooms, it is important to properly seal the wall panels themselves and the flooring. To achieve this level of seal tightness, the inside and outside corners must be bent using the Gerflor bending machine.

While installing wall panels with bent corners, fit and install all the internal and external corners first, then install the flat panels.

Install the corners and the flat panels using the right procedures.

Leave a gap of 1/8" between each panel to allow for the welding rod.

Finally weld the seams as indicated in section 4.3.



5. Mipolam Wall Panel Maintenance

Wall panels have been tested for their resistance to most of the cleaners, disinfectants and antiseptic products used by clean industry and healthcare establishments.

Amongst others, the products listed below have been tested and proved to efficient without causing any damages to the Mipolam Wall Panels:

DETERGENTS	SURFANIOS DETERGANIOS UNIT PLUS
DETERGENT DISINFECTANTS	DS5001 DIVOSAN S4
DESCALERS	TASKI CALCACID
PAINT STRIPPERS	TASKI radical SUMA D9.7
DEGREASER DISINFECTANTS	DDM
OTHERS	70% surgical alcohol Household bleach Eosin Betadine Ammonia

For better results when cleaning the Mipolam Wall Panels, we recommend the following products:

- Ammonia
- Ethanol
- Isopropyl alcohol
- Heptane

IT IS IMPORTANT TO USE SOLVENTS THAT LEAVE NO RESIDUE, EITHER GREASY OR DRY.

In all cases, test the product first on a left over piece of panel. Reactions will vary depending on the color of the panels and the solvents used and the concentration.

SOLVENTS NOT TO BE USED



Mineral spirit
Paint thinners
Petroleum

For any information, please refer to Gerflor Technical Services.



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