



FAIRVIEW.
ARCHITECTURAL



BY FAIRVIEW ARCHITECTURAL

***vitrabond*G2**[®]

NON-COMBUSTIBLE METAL COMPOSITE MATERIAL

MACHINING GUIDELINES

2017

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PRODUCT DESCRIPTION

Manufactured by Fairview Architectural; Vitrabond G2[®] is a non-combustible metal composite material (MCM)

Visually, Vitrabond G2[®] is the same as traditional MCM panels; but what makes it different is the technology of the core, which is constructed from a 100% aluminum structure. The easier machining, light weight and rigidity make it a preferred product by many fabricators and installers.

MACHINING VITRABOND G2[®]

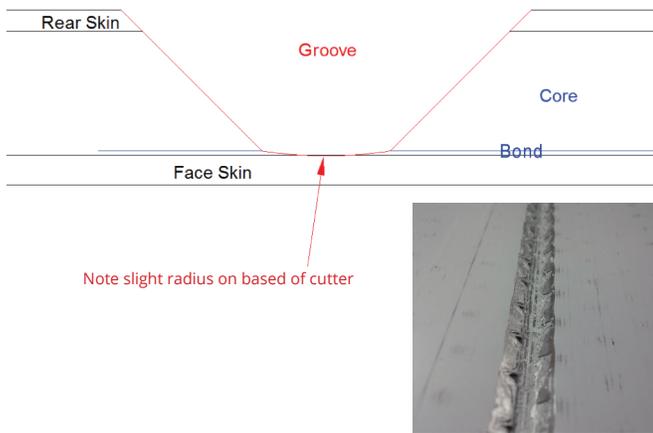
Folding Vitrabond G2[®] is done using the same basic grooving technique as traditional MCM panels. The cutter should remove all of the core material and be into the bond between the core and face skin.

Traditional 90* and 135* cutters have a 1/8" flat. This flat needs to be ground to a slight radius. This modified cutter can still be used for traditional MCM with PE and FR cores.

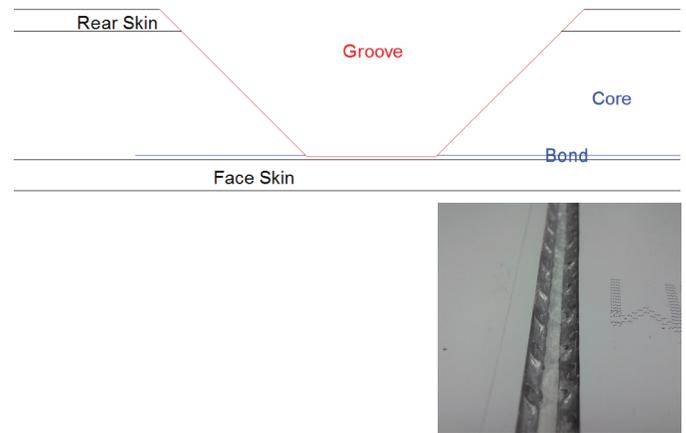
Keep cutters sharp at all times - blunt tooling increases heat and pressure on the panel, which can reduce the groove quality.

We recommend fabricators practice grooving and folding Vitrabond G2[®] to learn the perfect methods that work with their equipment and fabrication techniques. Depending on the equipment and conditions, cutter speeds and feed rates may be able to be increased thereby reducing fabrication times.

CNC GROOVE



PANEL SAW



	TOOLING	FEEDS/SPEEDS	COMMENTS
CNC ROUTER	Typical 90° ACP V-groover with 1/8" flat. Available from most tooling suppliers.	RPM: 18000 Feed: 25-40 ft/min	Keep sharp. Recommended to curve the flat on the cutter slightly.
PANEL SAW	Standard 90° grooving blade.	33-50 ft/min	Groove on a flat even surface to ensure depth accuracy.

CUTTING

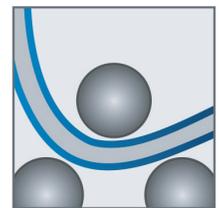
Vitrabond G2® can be cut with the same tooling that's used for Vitrabond®. For the CNC an upspiral cutter is recommended to assist with chip removal. There is no coolant required on the cutter or groover.



	TOOLING	FEEDS/SPEEDS	COMMENTS
CNC ROUTER	6.35mm Upspiral cutter. 1 or 2 flute.	RPM: 18000 Feed: 25-40 ft/min	Clean panel edges if all burrs are not removed.
PANEL SAW	Use special saw blade for aluminum.	33-50 ft/min	

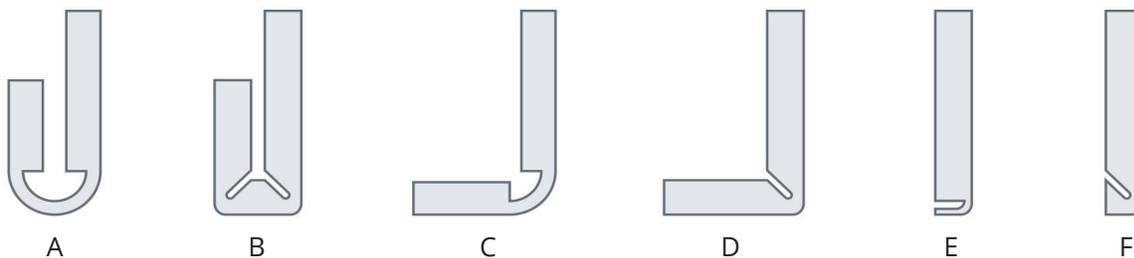
ROLLING/CURVING

Vitrabond G2® can be curved by means of a roll bending machine. It is recommended to conduct testing prior to actual production.



EDGE CLOSE-OUT DETAILS

Vitrabond G2® panel edges can be closed out as per below details:



PROTECTIVE FILM

- Make sure no damage will occur to the panel following removal of protective film
- Remove protective film within 3 months of installation to avoid glue residuals on panel surface due to weathering
- Do not apply PVC tapes, polyurethane sealant or Silicone sealant onto Vitrabond G2® protective film. The plasticiser contained in these materials can penetrate the protective film and cause a gloss change in the coating
- Do not apply spray paint or permanent marker to the film as the color may penetrate the film and affect the panel

HANDLING AND STORAGE

- Considerable care should be taken in the handling of Vitrabond G2® as the panels are sensitive to impact, particularly shocks from small, hard objects, which can dent the aluminium cover sheet
- A minimum of two people should be used when moving and stacking large sheets to avoid scratching and surface damage
- Pallets of Vitrabond G2® should be stored horizontally in a cool and dry area where temperature is stable, with adequate support to prevent sagging
- Stacked pallets should be identically sized and not more than three (3) pallets high



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