



## Material Processing Manual

Thank you for purchasing our Goldbond Aluminium Honeycomb Panel (hereinafter called the AHP). Regarding our AHP's good quality and performance, considerable care should be taken in the layout and handling of our AHP. This "How To" manual has developed to assist fabricators to work with our Goldbond AHP in the most efficient and effective manner

**Warning:** Failure to follow these guidelines may void your warranty!

**Attention:** while on the work site, AHP panels should be kept in a clean and dry location. If outside storage is necessary, the panels MUST be kept in their original packaging under a tarp.

If there is any questions, please contact our technical support team:

Our website: [www.alcochina.com](http://www.alcochina.com)

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### Before You Start...

GOLDBOND® AHP panels are available from 8mm to 30mm thicknesses in standard widths of 1220mm ,1250mm and 1500mm and in standard lengths of 2440mm, 2500mm, 5000mm.

A range of custom sizes is available:

≈ Width : 800mm- 1500mm

≈ Length : 800mm-5000mm

#### Receiving & Storage

Panels should be stacked horizontally on pallets. No more than 1500 pounds should be stacked on one pallet. Depending on panel size, this should be fewer than 50 panels at 30 pounds per panel and less than 21/2 feet high. Panels should be kept dry and stored in a ventilated space under a breathable cover. **DO NOT STACK OTHER MATERIALS ON PANEL PALLETS**

#### Panel handling

Use clean work gloves to prevent smudging of the prefinished surfaces and to avoid hand injury from any sharp edges. Although panels are shipped with protective masking on both sides, always lift one panel completely off the next to prevent scratches. Do not slide one panel across another.

#### Protect panels from construction hazards

Good architectural practice provides for panel protection and cleaning in the contract documents.

Normally these are the general contractor's responsibility. Temporary protection may be required if welding, cutting, sandblasting, or other potentially damaging construction activities are scheduled nearby.

Goldbond AHP panel edges may be factory covered and sealed before delivery.

### MAINTENANCE

#### For scratches and rub-marks

Goldbond touch-up paint and re-paint instructions are available from our coating company. For larger paint repairs, call us for standard paints designed for aluminium surfaces available at paint stores.

#### Keep harsh solvents away from finish

Panel finishes (Kynar 500® and Polyester) are resistant to most solvents and chemicals, but not all. If in doubt, call us for compatibility charts. You can safely

use mineral spirits to remove uncured sealants and paints.

#### Routine cleaning

Goldbond panels should be washed periodically to keep them bright. Plain water and a clean cloth are all you need to remove ordinary dirt buildup.

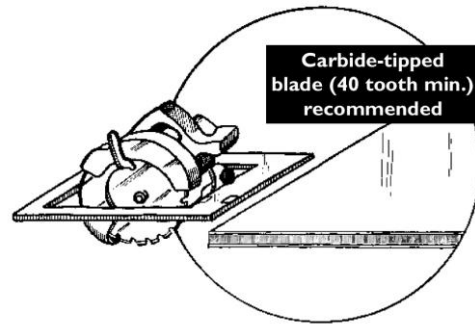
A mild, non-abrasive household detergent with a clean-water rinse can be used for more stubborn stains.



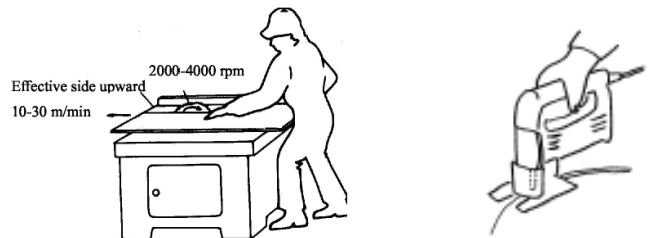
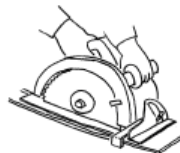
## FABRICATION: CUTTING THE PANELS

Field cut panels as necessary to the required sizes. If panels have been received cut to size, some minor cutting may be necessary to account for areas of an elevation that may be out of square. A circular saw with a carbide-tipped or sharp, high-speed steel blade (40 tooth min.) is best for this kind of cutting. Use a screwdriver or deburring tool to remove any burrs from the cut panel edges.

Panels cut on-site for Clip and Caulk installations must be pre-caulked immediately (see pages 3-4 for detailed instructions).

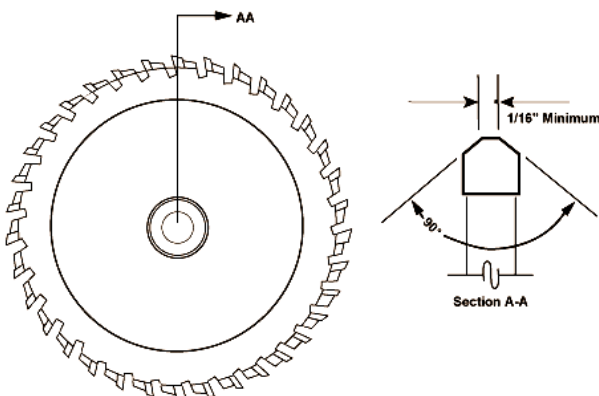


Various types of circular saws including table saw, hand circular saw and panel saw can cut AHP. Suitable saw blade is carbide-tipped blades for aluminium use



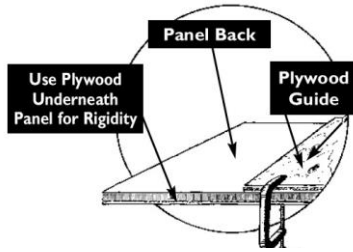
## FABRICATION: ROUTING AND BENDING

How to V-groove and bend



We recommend Hand Circular Saw for onsite V-grooving as the panels are up to 10mm thick. For fabrication of a large number of sheets that require routing, the hand circular saw fitted with a special blade is advisable. This blade is often referred to as a "V" Routing Blade. These blades, used with a quality industrial saw, will produce the required tolerances at a much faster rate than hand routers.

Hand router is recommended for less than 10mm panels.



**Set up for routing**

Set up a jig for V-grooving the panels. Minimum set-up requirements for routing are as follows: Place a piece of 3/4" plywood on top. The plywood should be at least as large as the panel to be routed. Place the panel with the finished face down on the plywood. Draw a line precisely where you want the bend.

**Routing the bend line**

The router should be run from left to right. Maintain a consistent speed and pressure on the router.

We strongly recommend that you use Hand Circular Saw  
Depth of route: please score metal slightly.

**Bending**

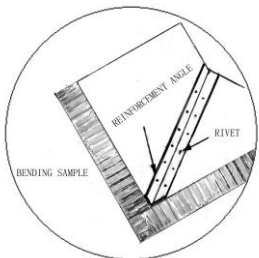
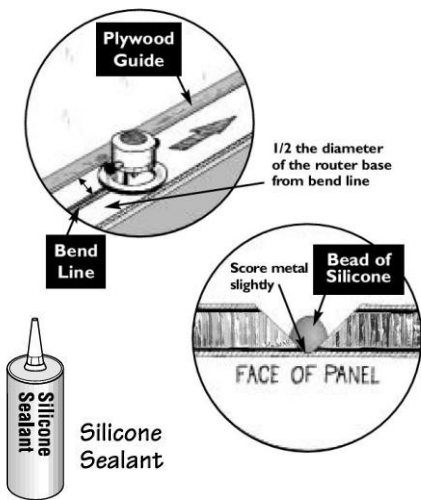
Prior to bending the panel, place a bead of silicone caulk inside the entire length of the V-groove to seal the panel and strengthen the bend.

In most cases, panels with flanges over 3" wide and larger can be bent by hand if done carefully. Wear gloves to bend the panels. While a brake may be the best choice for achieving a good bend for flashing or sheet metal, it is not necessary with our panels.

**Reinforcement**

When the panels are bended, it is better a reinforcement angle profile is attached for thickness more than 10mm AHP panels, the angle can be attached by rivets in order to make strong anti-wind load ability.

Curved panel are produced in curved shape, contact our sales department for details.



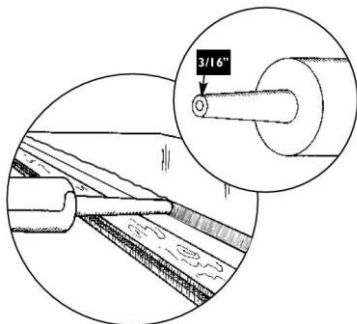
**CLIP AND CAULK**

GOLDBOND AHP panels may be factory caulked and edge covered before delivery.

Please caulk any open flute panel edge before installation.

Cut the end of the caulk tip at a 90° angle and a 3/16" diameter hole at the tip. Squeeze out a small amount of caulk, release the pressure, and wipe off the tip.

Holding the caulking gun perpendicular to the worktable and panel edge, run a bead into the panel edge, forcing as much caulk as possible into the flutes. Cover the entire length of open edges.



## How to cover the AHP edge

Step 1, Fix the panels to the plywood, and face side downward. (Do not remove the protective film before fabrication).

Use Hand circular saw to cut a line on the back side of panel, please see the left drawing.

Figure "D" is the length between line and edge, it gives face aluminium space to bend over and cover the open core edge.

If the panel is 20mm thick, aluminium thickness of both sides is 1mm, so the "D" will be at least : $20+1+1=22$ mm.

Some of the aluminium angle profile has been fixed to the face aluminium cover, so the value of "D" is depending on your installation, please consult your engineers.

Please score metal slightly, so it can be easy for bending over the face aluminium.

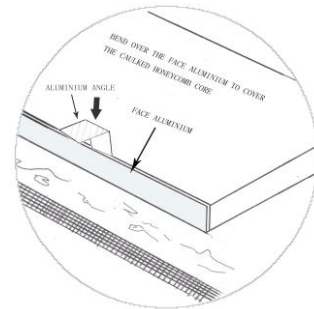
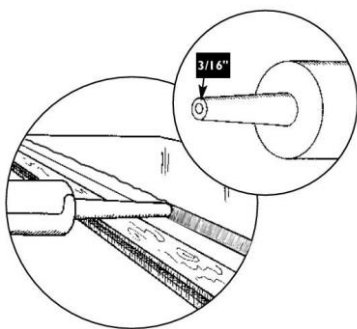
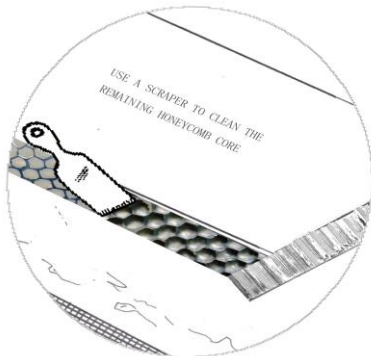
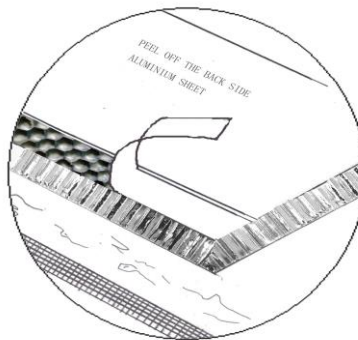
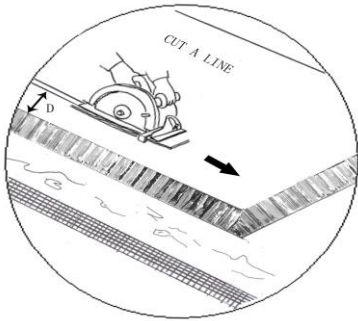
Step 2, peel off the back side aluminium sheet, see as the left drawing, use tools and wear gloves. Be careful of the sharp edges.

Step 3, Use a steel scraper to clean the remaining honeycomb core.

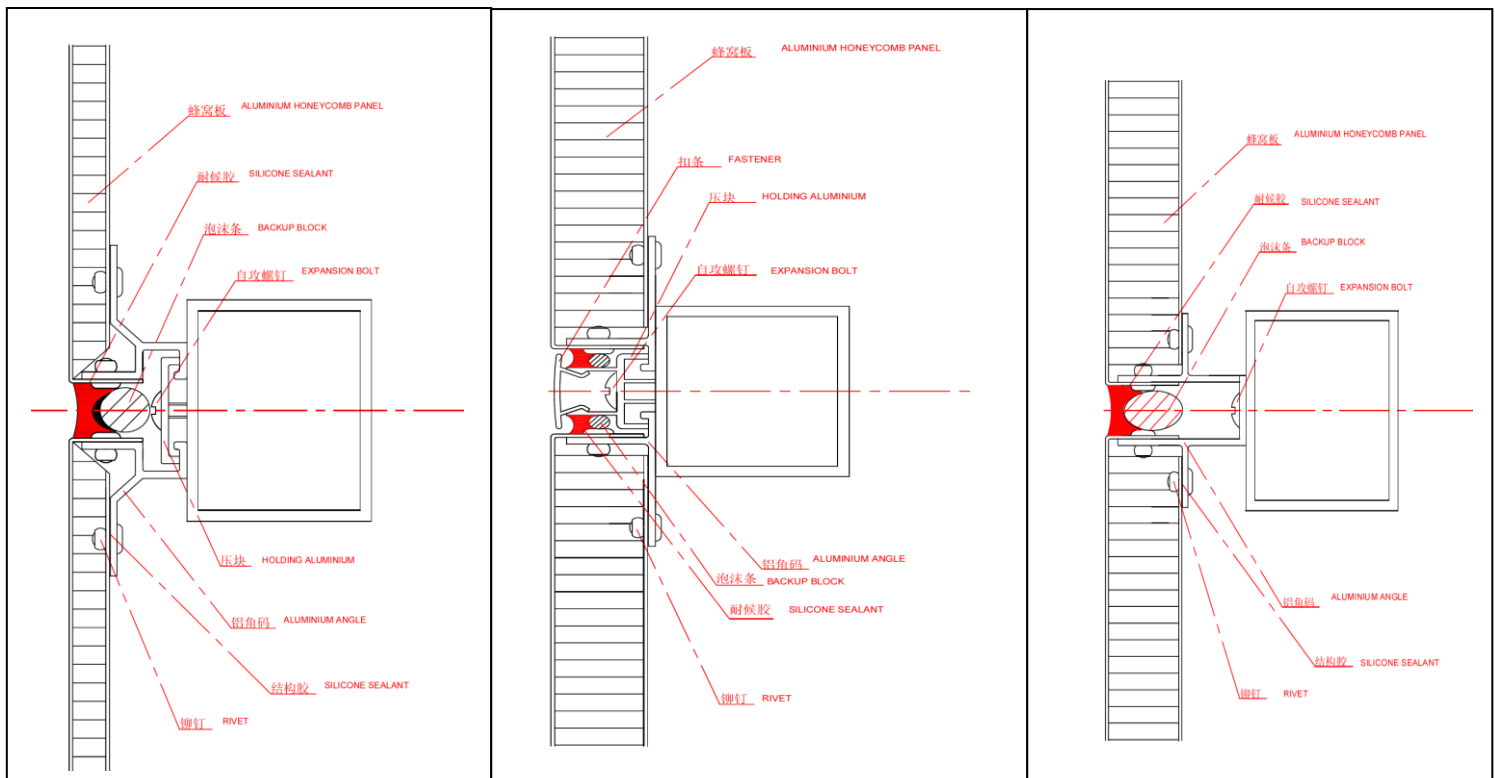
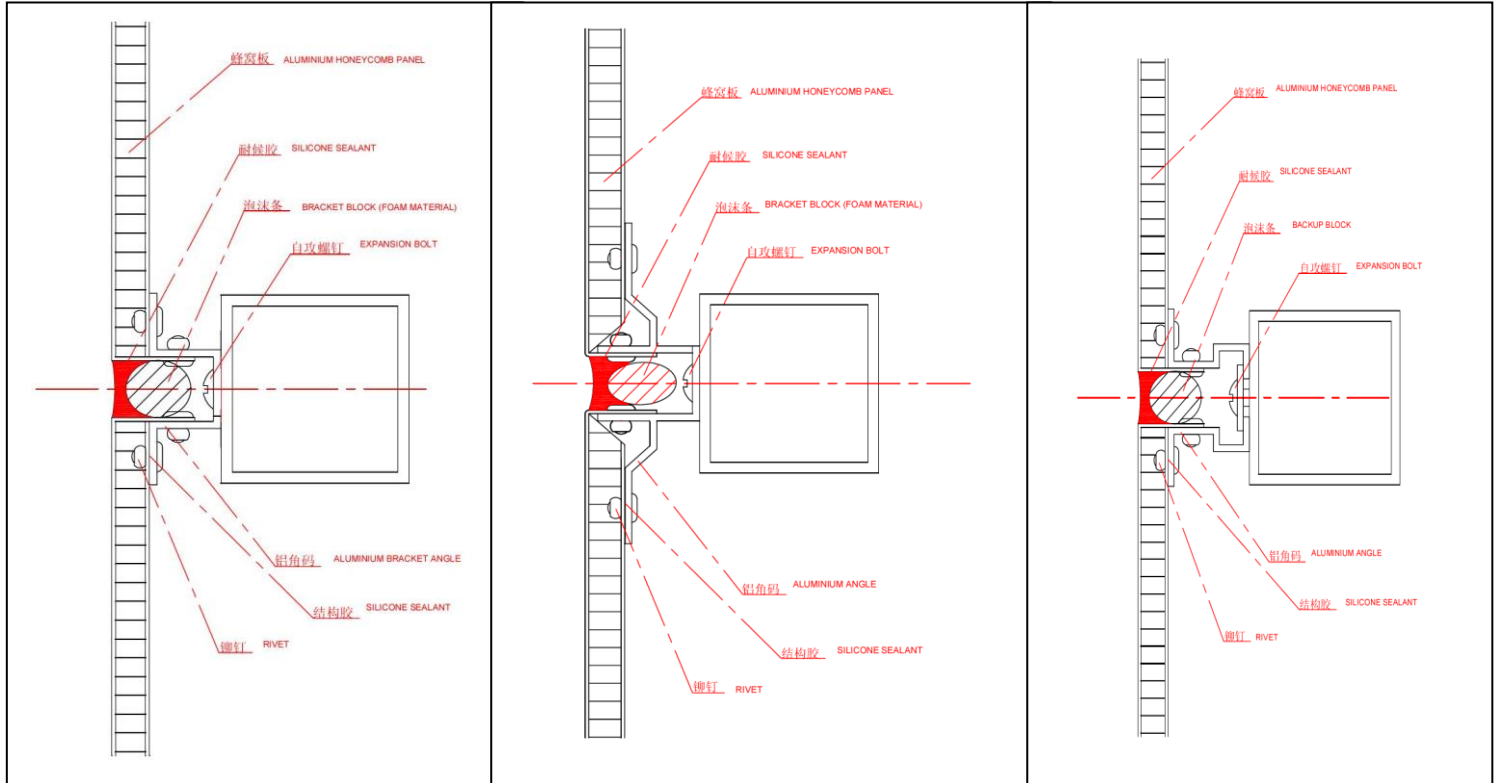
Step 4, When the core has been cleaned, caulk the inside honeycomb core as pictures showing.

Step 5, Bend over the face aluminium to cover the honeycomb core.

Aluminium angle can be easily installed by rivet to the panels. Insert one side of "L" size angle to the groove, rivet to the face aluminium. Then Caulk it, and make sure no water can slip inside the AHP panel.



# INSTALLATION TIPS





### **Remove the protecting film in time.**

The function of the self-adhesive film (hereinafter called the film) is to protect the AHP to avoid any damages to the face in transportation, processing and installation. It is unnecessary to keep the film when finished installation. Please remove the film within 30 days after installed in order to avoid any problems of removing.

Note: Please do not remove the film in sunshine.

**Finally, but most important thing, normal safety and health precautions practiced in any fabricating environment should be used when fabricating Goldbond Material. Goggles or other face protection, as well as hearing protection should always be worn.**

Store aluminium honeycomb panel properly and ensure dryness. Do not store AHP panels in contact with other materials that might cause staining, denting, or other surface damage. Do not allow storage space to exceed 120 deg F (49 deg C).

If you have any questions or problems unclear, please feel free to tell us.

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