

Usage Suggestion letter of Construction and Installation of Aluminum Composite Panel

1. Types and specification of ACP

a. Normal Aluminum Composite Panel

● 4mm Aluminum Composite Panel

PVDF coating (FC) Thickness of aluminum skin: 0.50mm 0.40mm 0.30mm

Polyester coating (PET) Thickness of aluminum skin: 0.50mm 0.40mm 0.30mm 0.20mm 0.15mm

● 3mm Aluminum composite panel

Polyester coating (PET) Thickness of aluminum skin: 0.20mm 0.15mm 0.12mm

b. Fireproof Aluminum Composite Panel

c. Stone Grain ACP □ Brushed finished ACP, Mirror finished ACP, double face sign board

2. Processing of ACP

a. Cutting and forming



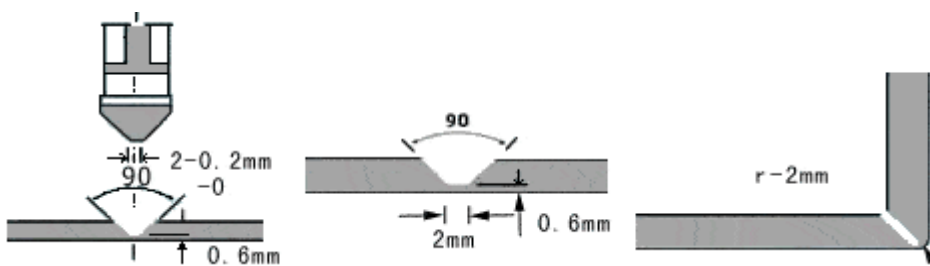
Sawing: adopt vertical sheet cutting machine,
note the

circular saw or linear saw

Cutting: cut with shearing machine, please

sheet protection and cutting direction

b. Making Groove and fold



Remark: other angle fold should adjust the grooving angle accordingly



c. Punch

ACP can be punched by steel mold (please note the direction of the panel)



d. Roll bending

Rolling: roller press can be used to roll round arc, please note the sheet surface protection. suggestion: use above 0.20mm aluminum skin thickness ACP for rolling round decoration. Or making a part test.



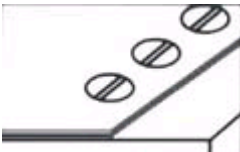
e. Pressing bend



f. Connecting and fixing

Drilling: adopt drills specially used for aluminum panel and plastic cement panel.

(for connecting)



Screw or bolt: adopt normal stainless steel screw or bolt used for wooden products and metallic panel.



g. Jointing

Adhesion: special adhesive for aluminum coated panel, special double side adhesive tape.



Sweet soldering: adopt thermal welding gun or PVD film

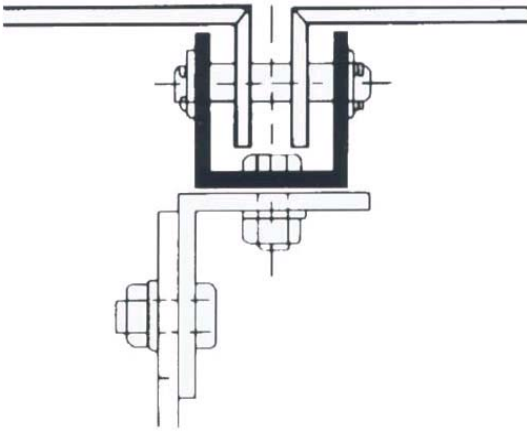
3. Installation of aluminum composite panel for inner or outer curtain wall

a. Suggestion: above 0.20mm aluminum skin ACP, according the request of the project or other related factors, first, process the ACP into box shape through aluminum square pipe, rivet and other fittings, then fix ACP by tapping bolts on the frame brandreth, after that, fill and seal the seam by silicon glue. A close curtain wall system is finished.

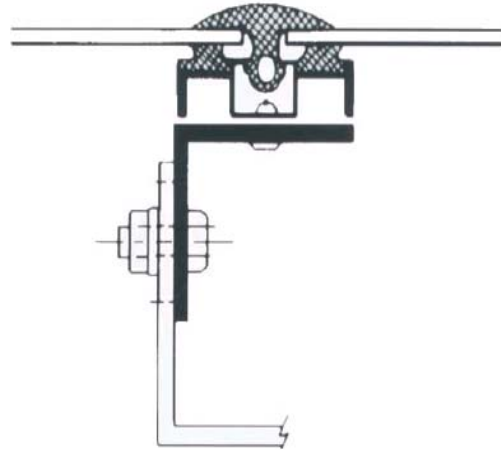
b. Suggestion: under 0.20mm aluminum skin ACP and 3mm thickness ice grain ACP,

adopt the method of plane stickup install the ACP on the wall, frame or prefabricated woody base layer.

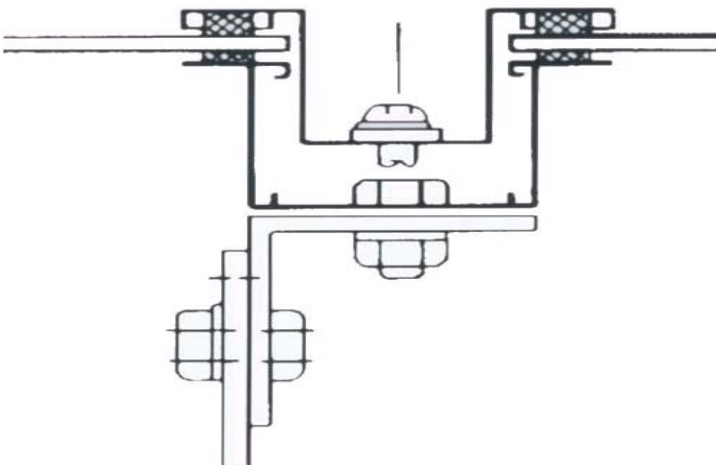
Fixing method of hang



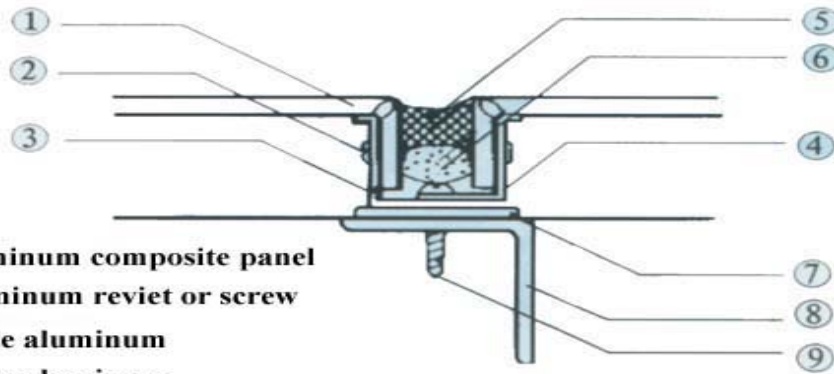
Fixing method of press strip



Fixing method of bolt and press strip

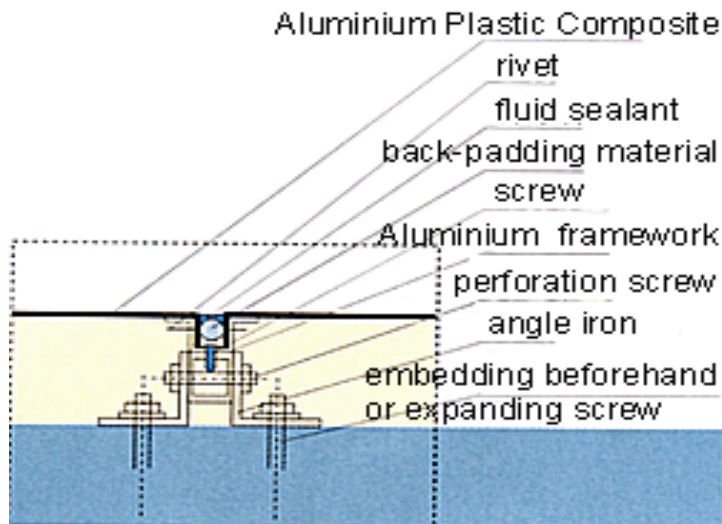


Fixing method of pulling bolt

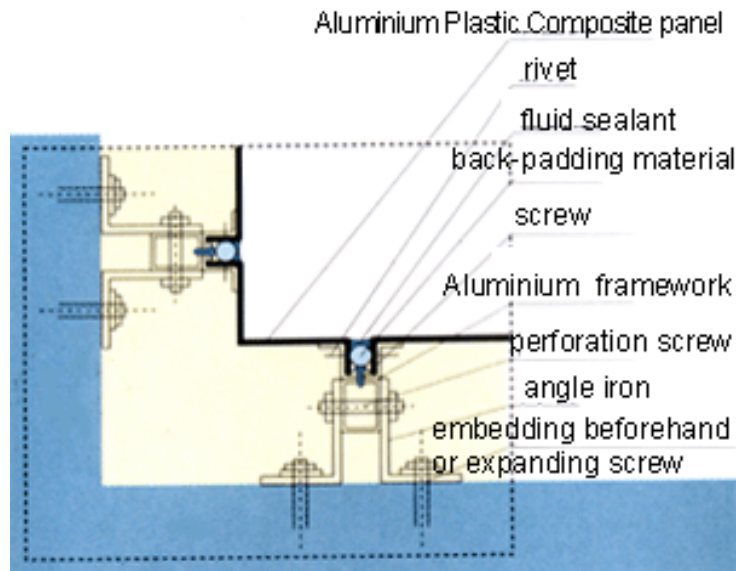


- 1, Aluminum composite panel
- 2, Aluminum rivet or screw
- 3, Angle aluminum
- 4, Angle aluminum
- 5, Seal material/silicon
- 6, Pad materials (PE)
- 7, Spacer
- 8, Angle steel
- 9, Obtuse bolt

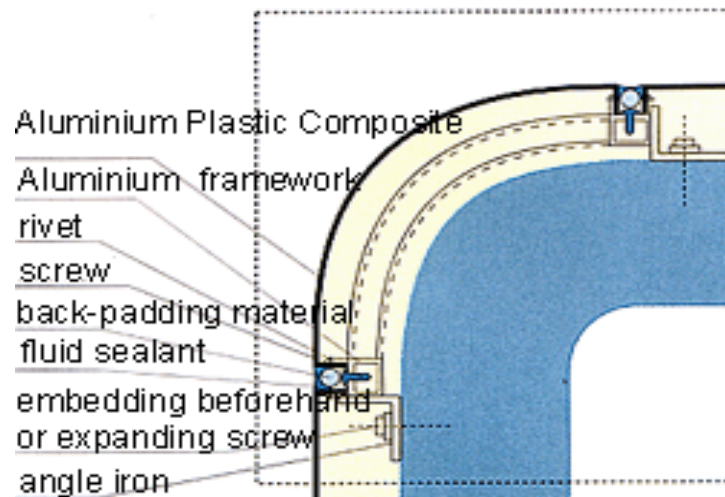
Standard shop drawing



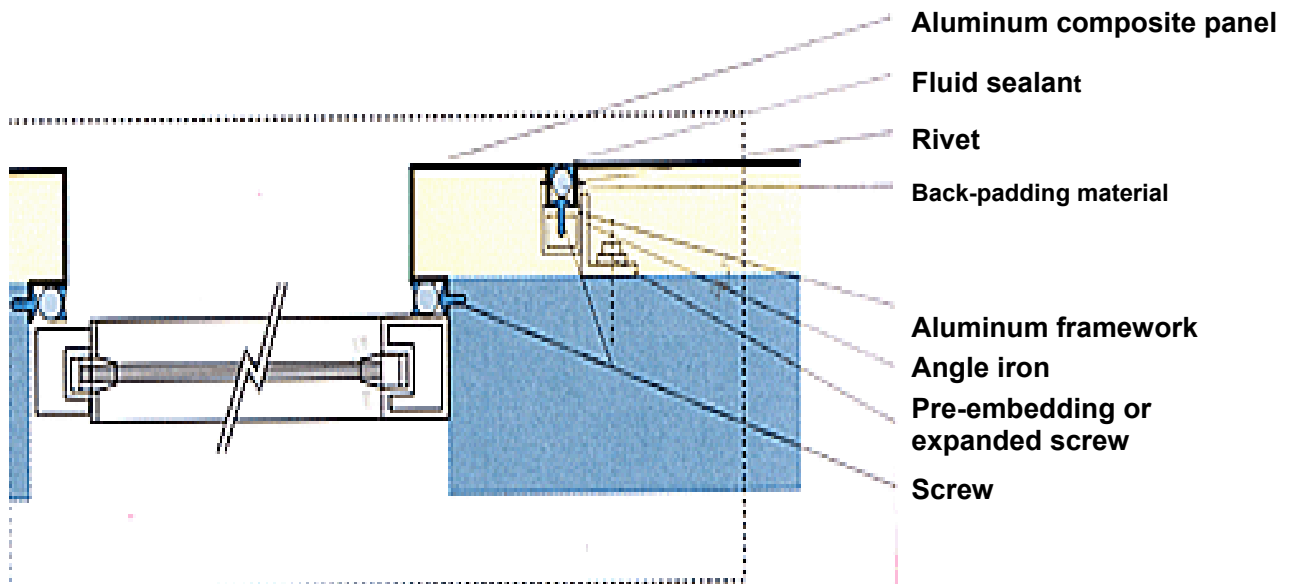
Interior shop drawing



Column shop drawing



□ Shop drawing of window and door



4. Usage of aluminum composite panel

Aluminum composite panel can be easily processed into a lot of forms, can be made into a lot of box structures, can be widely used in decoration and modeling of buildings.

Usage guide of aluminum composite panel

Generally □4mm ACP are applied to outdoor decoration

3mm ACP are applied to indoor decoration

Special situation: buildings under 24 meter, the decorative effect is not requested keeping very long time (within 10 years), 3mm ACP with above 0.20mm aluminum skin can be used, but pressing bend and roll bending need exactly construction technics and need to make a part test.

Usage guide of sealant and structural sealant for aluminum composite panel curtain wall.

- a. When you are choosing the structural sealant, you should choose the one which is good adhesion to aluminum composite panel**
- b. When you are choosing the sealant, you should choose the silicone ketone sealant in good quality, to avoid the pollution of panels and influence of the decorative effect.**