

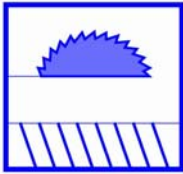


Fabrication Methods



Forming

A major feature of Alomiclad is the possibility to form the panels into a myriad of shapes using a simple routing and folding method. It enables a fabricator to produce various shapes without the need for heavy equipment such as folding machines or brake presses. Hand routers and sheet milling machines can also be used. They are inexpensive and can be used either in the workshop or onsite. Refer below for specifics on achieving the best outcomes.



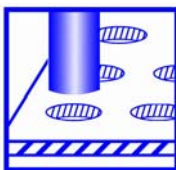
Cutting

Alomiclad PE or Alomiclad FS can be cut easily with circular saw, vertical saw or jig saw as used for metal or wood cutting. Carbide tipped blades for aluminium or plastic are recommended. Thickness of cutting teeth should be 2 – 4mm and tapered from outside in to prevent jamming. Shear cutting with a guillotine is also an efficient method for sizing a large quantity of panels. Please note that shearing will cause a slight deflection of the cut edge on the impact side and protection pads should be used to minimise any surface damage



Routing

Routing or grooving the Alomiclad panel allows it to be folded easily. For processing large quantities of material a circular saw or panel saw with a groove cutter is recommended. A carbide tip should be used and we recommend 110° of grooving angle to achieve 90 ° bends. It is important to leave 0.2-0.4mm of core material when U grooving (on the inside of the outer cover sheet).



Punching

Alomiclad PE or Alomiclad FS can be punched using conventional sheet metal punching machines or manual punches. To achieve the cleanest edges use sharp dies and tools. Please note that punching will cause a slight deflection on the impact side of the cut edge. The panels can also be drilled with high-speed steel drills with centre point



Bending

Alomiclad PE or Alomiclad FS can be bent easily using a folding table or brake press where the minimum required inside radius equates to ten times the panel thickness ($r = 10 \times t$). To protect the surface during bending use padded strips. For larger radius a 3 roll bending machine should be used. It is best to groove and slit the curving edge before bending. Rollers should be polished and free of dents and other defects.