Adhering of Core

An edge of ALPOLIC/fr can be connected to another edge by means of hot melt adhesive with hot jet gun. The connected point is less strong, and so, normally reinforcement is necessary after adhering of the core.

1. Tools for adhering:
   a. Hot melt applicator or glue gun (e.g. 3M Polygun for hot melt)
   b. Hot air supply machine: Hot jet gun for thermoplastic resin. Or a dryer for industrial use can be applicable with a small nozzle attachment.

2. Adhesive
   Hot melt adhesive rods e.g. 3M scotch weld

3. Milling for adhering (preparation)
   Mill or rout ALPOLIC/fr panel edge with grooving or routing machine, to fit to adhering.

4. Adhering
   Prior to adhering, pre-heat the tip of the hot melt adhesive rod and ALPOLIC/fr core surface with hot jet gun. When the ALPOLIC/fr core surface becomes wet, slide the nozzle of the hot jet gun with a feeding speed of 10 to 15cm (4 to 6 inches) per min. Then apply hot melt glue by the applicator.

   **Note 1:** The temperature of the air blown from the hot jet gun is approx. 130°C (270°F) around the adhering area.

   **Note 2:** Heating too much will cause a thermal decomposition of the core material, and the hot melt will not adhere to the core.

5. Reinforcement with support plate
   Finally, adhere a support plate of ALPOLIC/fr or aluminum sheet with a suitable adhesive or a both-sided tape, to reinforce the adhered point.

   **Note 3:** In case adhesives are applied for the reinforcement, pre-testing is necessary to confirm that the adhesive does not cause a distortion on the surface side, since some adhesives will cause a distortion due to shrinkage after hardening.