



## **GLUING OF CONTINUOUSLY ANODISED ALUMINIUM**

### **Background**

The surface of continuous anodised aluminium is perfectly clean, stable, corrosion and weather resistant. So, it is a sound surface preparation for bonding because the surface will not age after bonding and the initial adhesion characteristics will be preserved.

Due to our pre-treatment process, in which we degrease and etch the coils, a certain surface roughness or 'key' is created. This roughness or 'key' is preserved after anodising, which, due to the pore structure, actually increases the surface area for gluing.

### **Type of glue**

Anodised aluminium can be glued with different types of glues, such as epoxy, polyurethanes, acrylic, silicone etc. The selection of the correct glue is critical for good bonding and depends on numerous factors, such as the nature of material to join with anodised aluminium (glass, wood, etc.) the environment to which the material will be exposed, the design of the adhesive joints, working temperature and mechanical performance. It is recommended to select the right type of glue from a recognised glue manufacturer.

Continuously anodised aluminium is already used today in kitchen applications (plywood), furniture and kick plates for doors, with proven durability.

### **Bonding techniques**

It is recommended to use bonding techniques with a maximum temperature of 180 °C, of a period of 2-7 minutes. Above 180 °C or for longer periods, thermal crazing may occur which will damage the anodised surface. Our C-Bond product is specially adapted for hot gluing processes on a PE core and well suited for the aluminium composite panel market.

Continuously anodised aluminium can also be employed for sandwich panels, where PUR foam is sprayed directly onto the anodised surface, with very good bonding properties.

### **Adhesive tape**

Bonding with double side adhesive tapes can give very good results even for structural bonding.