

# Stiffener Bar Bonding with illbruck TN021 Foamed Acrylic Tape Guidance Notes



Stiffener bars can be made of different metals – aluminium, powder-coated aluminium and steel are the most popular. They are used in various industries, such as in elevator production, trailer panels or for metal cassettes in facades.

Panels are available in various non-corrosive metals, and composite panels. By utilising a visco-elastic tape differential movement between the panel and the stiffener can be accommodated.

illbruck high mass acrylics can be used to bond stiffener bars to metal or composite panels. Our tapes are easy to apply and require very little application equipment so reduce complexity in the manufacturing environment. They remove the requirement for drilling associated with mechanical fasteners or drying time associated with adhesives. We recommend the illbruck series of foamed acrylic tapes to bond stiffeners and reinforcement bars:

- Very high adhesion
- Very high initial tack allowing almost immediate handling of the panel
- Foamed acrylic tapes allow for varying levels of thermal expansion and once bonded can accommodate large variances in temperature.

## Surface Preparation

- For a powder coated surface or ACM panels either abrade the surface or apply illbruck AB010 primer (adhesion tests are recommended)
- Use a lint free cloth to wipe a 50/50 mix of IPA/water over both the panel to be bonded and the stiffener bar to remove any dirt.
- All surfaces should be clean, dry and dust free before tape application.

## Tape Application

- Apply the foamed acrylic tape to the stiffener bar in a straight line, taking care not to stretch the tape during application.
- Once applied firmly roll the tape onto the stiffener bar to ensure the tape has 'wet out'.
- Remove the tape liner and apply the stiffener bar in place. <sup>\*1</sup>
- Firmly roll the back of the stiffener bar to ensure the tape has 'wet out' on the surface of the panel

*\*1: For long bars or where very accurate placement is required, a small amount of the liner can be peeled back. The bar can then be placed accurately before slowly pulling out the liner from between the stiffener bar and the panel. Care should be taken not to pull too fast or with too long lengths of the liner as this can cause the liner to stretch and snap.*



**Tremco CPG UK Limited**  
Coupland Rd, Hindley Green  
Wigan WN2 4HT  
United Kingdom  
T: +44 1942 251400  
F: +44 1942 251410  
info.uk@cpg-europe.com  
www.cpg-europe.com