Bonding Steel Panels with High Shear Bonding Tapes

Client	Large National Bank City, London EC2
Lift System	H H Martyn
Manufacturer	Cheltenham, Glos
Bonding Tape	Technibond
Manufacturer	Bourne End, Bucks
Product	HDF High Shear Loading Bonding Tape

Project

Prestigious glass lift manufacturer producing several personnel lifting systems for the corporate offices of a major national bank (name withheld for security reasons)

Application Problem

The building's architect specified that the lift shaft had be lined with quality metal cladding to cover the unsightly concrete shuttering. A decorative perforated stainless steel sheeting was chosen for the cladding cover, but H H Martin were not allowed to show any welding marks through the metal facing when attaching the supporting metal struts.

Solution

Technibond, who already supply their high performance double sided bonding tapes for mirror mounting in the glass lifts, were approached to resolve the strut fixing problem. From their large range of quality bonding tapes they recommended the **HDF** product as it has a superb high shear adhesion, which provides a secure bond over an extended number of years.

The Product

The **HDF** product is a highly conformable and elastic PE foam, with a very strong internal strength, which allows thermal movement between the decorative stainless steel sheeting and the aluminium support frame. The adhesive coating is based on a pure solvent acrylic compound, which provides an exceptional high shear adhesion that according to Technibond, outperforms all the acrylic foam tape products currently available. It also acts as an insulator against electrolytic corrosion

Application

For the application, the tape is accurately cut to match the width of the aluminium struts, and then applied to the cleaned surfaces of the supporting framework. With tape correctly applied, the frame is simply offered to the back of the decorative stainless steel. By leaving the tape's special film liner in place, the framework can be slid and moved into the correct positioning on the sheeting. Once in place, the film

liner is simply slipped out from between the framework and the sheeting, and the bond instantly occurs, thus avoiding misalignment and mistakes in the correct positioning

On site, the concrete lift shaft is already pegged with locating pins and supporting bars, ready for the application of the stainless steel panels to be quickly slotted into place.

Technibond based in Bourne End, with national technical sales through the UK, are major manufacturers of these high performance adhesive tape products, and can supply in rolls, pads, sheets or diecut shapes to match specific component tolerances.

Free technical advice and samples are available for actual production trials to validate the tapes adhesion performance - contact Technibond at <u>HDF@technibond.co.uk</u>

Concrete lift shaft lined with decorative stainless steel panels, bonded onto support frame with Technibond's HDF high shear adhesion tape

Support frame and sheet being bonded with Technibond's **HDF** product. Once correctly aligned, the film liner can be slipped easily out from between the two surfaces, creating a long term permanent bond.