

## **DATA SHEET**

# Fortafix High Temperature Adhesives

#### Fortafix Fiborclad & Fortafix FlameBond Adhesives.

### **Application**

Stir/shake contents of the container prior to use, to ensure product is thoroughly mixed.

If viscosity adjustment is required "L7 Thinners (FlameBond G1)" may be used.

Thoroughly clean and degrease all surfaces to be bonded or sealed.

A light surface abrasion of the material to be bonded will increase the surface area available for adhesion and improve mechanical key.

Apply the adhesive/sealant as supplied (using a serrated spreader or mastic gun) to surfaces to be bonded and complete tooling within 5-10 minutes.

Apply moderate pressure to ensure even anchorage and solid contact of the surfaces to be bonded, so that all surfaces are fully wetted.

Secure components and allow the adhesive to set.

All application equipment should be cleaned with warm water immediately after application.

#### **Coverage Rate**

1 litre of adhesive paste will produce a coating 1 mm thick over an area of 1 sq. meter.

4-6 m2/litre equates to a wet film thickness of 0.18mm-0.25mm per sq. meter of smooth surface.

However, the surface profile & surface adsorption characteristics of materials can vary & this will affect the coverage rate & adhesive consumption – typically:

High density materials > smooth surface profile + low surface adsorption > higher coverage rate Low density materials > coarse surface profile + higher surface adsorption > lower coverage rate

Highly porous or adsorptive surfaces can be primed & sealed using a diluted solution of L7 Thinners (FlameBond G1)

#### **Application Conditions & 'Open-Time'**

The adhesive film forms, sets & hardens - by water loss to atmosphere & to the material substrate. In very warm atmospheres there is a greater tendency for the applied adhesive to dry at its exposed surface & consequently available 'open time' for use is reduced.

Higher temperature > quicker surface drying > shorter 'open time'.

High density materials > smooth surface profile + low surface adsorption > longer 'open time' Low density materials > coarse surface profile + higher surface adsorption > shorter 'open time'

If necessary, this can be retarded by the addition of a small percentage of clean water according to conditions prevailing at the time of application

The adhesive hardens by loss of moisture and too much added water may prolong hardening if the temperature reduces.

The use of a serrated spreader or comb to produce a 'ribbed' applied film, which is broken by contact between joined materials – is helpful.

#### **Drying & Curing**

This product is water based, it is necessary to fully dry and dehydrate the adhesive for use at high temperatures.

Initial curing of this product may vary depending on temperature, humidity, porosity of substrates, volume of adhesive and area etc. A rough guide for typical applications at room temperature and average humidity would be approximately 36-48 hours.

Full curing is achieved by the application of gentle and progressive heat.

Care must be taken when raising the temperature through 100°C during first curing as this may lead boiling of residual water in the glue line and product failure.

Partially cured product may be removed using steam/ boiling water (very high pH will also aid removal).