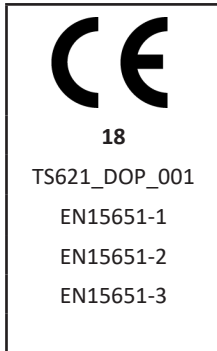


FIRE STOPPING & COMPARTMENTATION SYSTEMS

Tecno-Sil 621 is a one-component, easy to tool, silicone sealant which when exposed to atmospheric humidity cures rapidly to form a permanently flexible and extremely durable sanitary and weathertight seal. The cured sealant will accommodate joint movement of 25 % throughout a wide temperature range.



Certifications



Applications:

Tecno-Sil 621 is a high modulus sealant and should be selected for use on applications where joint loads are high and where relative movement between substrates is to be minimised and sanitary applications.

- Swimming pools
- Sanitary environments
- All classical glazing joints
- Door and window frames
- Cladding and curtain wall construction
- Shop windows, display cases, panels and signs
- Portable buildings, caravans and containers
- Conservatories and greenhouses
- Heating, ventilation and air conditioning (HVAC) ducting
- Construction joints
- Marine hardware

Key Features:

- Tecno-Sil 621 bonds strongly to clean uncoated glass, ceramics and glazed or painted surfaces without the need to prime.
- After curing, Tecno-Sil 621 will be resistant to many acids and bases diluted and salt spray and will tolerate short exposure to most industrial solvents and hydrocarbon based products, in the latter case some reversible swelling and softening will occur.
- The exceptional translucent quality of Tecno-Sil 621 is such that it is ideally suited for use where the sealant is visually prominent, examples being, display cases and shop windows.
- Can be used in sanitary areas.

Application:

Surface preparation:

The joint faces to be bonded must be clean, dry and free from dust, oil, grease, old sealant and any traces of contaminant which may affect adhesion. Surfaces should be degreased with solvent soaked cloth and then wiped with a clean cloth. To remove dust, use oil-free compressed air.

Primer:

Although Tecno-Sil 621 will bond well to most clean and dry surfaces, it is recommended that a primer be used on certain substrates in order to ensure a strong and uniform bond:

- Cast, extruded or anodised aluminium
- Steels, ferrous metals, painted and most rigid plastics
- Concrete and wood

In the case of particularly porous materials, apply a second layer after drying.

Joint dimensions:

Expansion joints are generally subject to local regulations. Unless otherwise required, the following should be complied with: 2:1 ratio (width to depth).

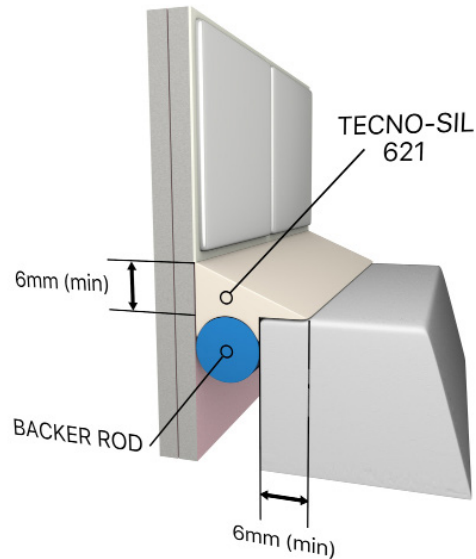
Applying the sealant:

For good performance it is essential that the sealant is only bonded to the two facing sides of the joint. To achieve this install a backing material (closed cell polyethylene or open cell polyurethane foam). Apply the sealant in a continuous operation making sure all air pockets or voids are eliminated. Tool the sealant with light pressure to spread the material against the joint surfaces. This operation should be carried out with a dry spatula before skin formation occurs.

Excess uncured sealant should be wiped and cleaned with a commercial solvent, cured sealant can only be removed by scraping or with a special silicone remover product.

FIRE STOPPING & COMPARTMENTATION SYSTEMS

Typical Joint Design



Available in:

- 310ml cartridges
- Colours: White, Trans

Shelf Life:

- 24 months when stored between 5°C and 25°C

Limitations:

- Must not be used on sensitive surfaces which could react with the acetic acid which is released during cure, nor should it be used on materials where migration of constituents can take place, e.g. certain rubbers.
- Must not be used for structural glazing applications.
- Should not be overpainted (poor coverage and adhesion of paints).
- Once cured can be used in applications in which there is a risk of occasional short term contact with water-based foodstuffs, but under no circumstances should it be used for permanent contact applications.
- Not recommended where abrasion or physical abuse will be encountered. For all uses in permanent immersion, please consult FSi Technical Department.

FIRE STOPPING & COMPARTMENTATION SYSTEMS

Essential Characteristics	Declared Performance
1. Before Curing	
Type of sealant	Acetic
Appearance	Non flowing paste
Specific gravity, approx. (g/cm ³)	1.04
Flow resistance approx. (mm)	0
2. Curing	
The sealant starts to cure as soon as the product comes into contact with air humidity.	
Tack free time approx.. (min)	
Skin formation time approx. (min)	20
Curing rate mm / 1 day, mm / 3 days, mm/7 days	4.5, 8, 10
Application temperature (°C)	+5 to +40
3. After curing	
Shore A hardness approx. (ASTM D 2240)	23
Elastic recovery approx.(%) (EN 27389)	100
Joint movement accommodation (%)	25
Operating temperature (°C)	-50 to +200
Mechanical properties on a 2 mm thick film (NF T 46002)	
Modulus at 100% elongation approx. (MPa)	0.5
Tensile strength approx. (MPa)	1.0
Elongation at break approx. (%)	500
Mechanical properties on glass slabs (EN 28339)	
Modulus at 100% elongation approx. (MPa)	0.5
Tensile strength approx. (MPa)	1
Elongation at break approx. (%)	300

The information provided including the recommendations relating to the application and end-use of FSi products are given in good faith based on FSi's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with FSi's recommendations. These should be followed as guidance only. In practice, the differences in materials, substrates and site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever can be inferred either from this information, or from any written recommendations drawing details, or from any type of advice offered. The user of the product must test the product's suitability for the intended application and purpose as a part of our product development and testing. We reserve the right to modify product specifications without giving prior notice. Users must always refer to the most recent issue of the Product Information Document (PID) for the product concerned, copies of which will be supplied on request by the FSi Technical Team.