

FIRE STOPPING & COMPARTMENTATION SYSTEMS

Tecno-Sil 620 is a Low Modulus, one component, odourless, ready-to-use and easy to tool neutral silicone elastomer intended to produce sealing and bonding joints.

Tecno-Sil 620 has been especially formulated with professional sealant applicators in mind. It cures at room temperature in the presence of air moisture to give a flexible and strong seal with low modulus of elasticity.

Applications:

Tecno-Sil 620 is intended to seal and bond joints in the construction and glazing industries, specifically for:

- Traditional construction joints to accommodate expansion and maintain stability.
- Light duty prefabrication including curtain walls metal coverings.
- Bonding of decorative panels
- Perimeter seals in aluminium, wood and PVC frames.
- Elastic seals in glazing applications on aluminium, wood and PVC.
- Heavy duty prefabrication (terrace, wall and facade panel joints)
- Ventilation ducts, piping passages, guttering and downpipes
- Bonding of materials subject to vibrations

Joint dimensions:

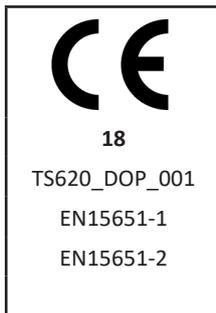
Expansion joints are generally subject to local regulations. Unless otherwise required, the following should be complied with: 2:1 ratio (width to depth).

Minimum joint width : 6mm (joint depth should be a minimum of 5mm for joints up to 10mm width)

Maximum joint width : 50 mm (with a maximum depth of 50% of joint width)



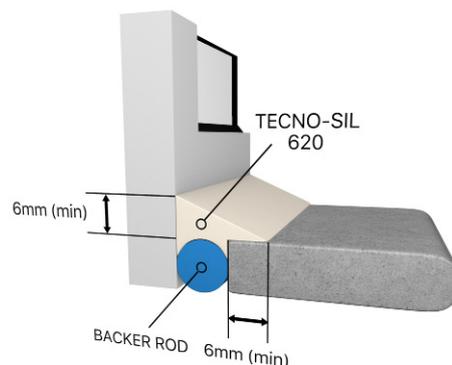
Certifications



Key Features:

- Combines the advantages of a primerless adhesion elastomer and neutral cure on most construction materials, including porous surfaces.
- Tecno-Sil 620 is low modulus of elasticity, it therefore generates low strain on bonding surfaces and gives longer life to seals.
- Tecno-Sil 620 accepts movements of 25% in continuous service accommodating a wide range of temperatures.
- Tecno-Sil 620 can be used on clear glass, layered glass and all other glazed Surfaces. It can also be used with metals, wood (painted or otherwise), PVC, polycarbonates, polymethacrylates, ABS, concrete, cellular concrete, granite and marble.
- Tecno-Sil 620 does not generally stain surfaces. However, specific testing is necessary with sensitive surfaces and particularly porous surfaces (marble, stone)
- Once cured, Tecno-Sil 620 has good resistance to diluted bases and to salt mist.
- Its mechanical and adhesive properties are not affected by solar radiation, rain, snow or ozone which enable it to perform its function over many years.

Typical Joint detail (Image of fillet joint around window)



FIRE STOPPING & COMPARTMENTATION SYSTEMS

Application:

Surface preparation:

All surfaces must be dry and clean, free from any dust and grease or anything which may be detrimental to correct adhesion of the sealant. Degreasing is performed using a pad soaked in solvent, followed by wiping with a clean cloth. Dust is removed using oil-free compressed air.

- Glass and all glazing materials: degrease with alcohol or methylethyl ketone.
- Aluminium, light alloys, stainless steel: degrease with alcohol or methylethyl ketone.
- Other metals: lightly roughen the surface then degrease.
- Wood: lightly roughen the surface then remove dust.
- Plastics: degrease using an agent recommended by the supplier
- Concrete and other alkaline surfaces: brush and dust

Primer:

Tecno-Sil 620 does not require a primer on most usual surfaces. In the case of joints likely to be immersed and especially for porous surfaces, the application of a specific primers recommended, please consult FSi technical department for more information. Comment: this choice will always be made following preliminary tests carried out on the surface in question. It should preferably be applied using a soft haired brush generally, in the case of a highly absorbent surface, a second coat will be applied after the first has dried.

Joint size (mm)	Meters/Litre
6x6	27.8
9x6	18.5
12x9	9.3
25x10	4

Applying the sealant:

Once an appropriate seal backing has been put in place (closed-cell polyethylene foam with surface skin or open cell polyurethane foam) the sealant should be applied taking care to ensure that the joint is completely filled. Smoothing off the seal ensures good contact between the sealant and the bonding surfaces. It should be carried out using a dry spatula before the surface skin is formed. Areas applied with fresh sealant may be cleaned with a dry pad or a pad soaked in a solvent. If the sealant is already cured it can be removed by scraping or using a special silicones remover. For more information, please consult FSi technical department.

Available in:

- 380ml cartridges
- 600ml foils
- Colours: PVC white

Shelf Life:

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

Limitations:

TECNO-SIL 620 must not be used:

- To produce aquariums.
- To seal swimming pool joints
- In food grade applications
- Particular attention should be paid to application on materials which can give out certain components over time (butyl sealant, EPDM rubbers, polychloroprenes, etc.)

The following features should also be considered:

- For any application where the joint is immersed, please consult FSi Technical Team.
- For any applications on sensitive surfaces, particularly porous surfaces (marble, granite, stone)

FIRE STOPPING & COMPARTMENTATION SYSTEMS

Essential Characteristics	Declared Performance
1. Before Curing	
Type of sealant	Alcoxy
Appearance	Non flowing paste
Specific gravity, approx. (g/cm ³)	1.38
Flow resistance approx. (mm)	2
2. Curing	
The sealant starts to cure as soon as the product comes into contact with air humidity.	
Skin formation time approx. (min)	10
Curing rate mm / 1 day and mm / 3 days	3 and 5
Application temperature (°C)	+5 to +40
3. After curing	
Shore A hardness approx. (ASTM D 2240)	25
Elastic recovery approx. (%) (ISO 7389)	80
Joint movement accommodation (%)	25 (maximum compression 33%, maximum elongation 100%)
Operating temperature (°C)	-50 to +150
Mechanical properties on a 2 mm thick film (NF T 46002)	
Modulus at 100% elongation approx. (MPa)	0.48
Tensile strength approx. (MPa)	1.4
Elongation at break approx. (%)	590
Mechanical properties on glass slabs (EN 28339)	
Modulus at 100% elongation approx. (MPa)	0.35
Tensile strength approx. (MPa)	0.45
Elongation at break approx. (%)	270

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.