

# BISIL F

## PRODUCT DESCRIPTION

**BISIL F** is a one-part neutral silicone sealant that reacting with air moisture changes to a low modulus, rubbery material, with excellent recovery from compression and extension.

## PRODUCT CHARACTERISTICS

**BISIL F** provides excellent primerless adhesion to most of either porous or non-porous construction materials, glass, polycarbonate, vinyl, numerous plastics, treated and untreated wood, fluoropolymer and powder coated paints, conversion-coated and anodized aluminum, EIFS, brick, terra-cotta, ceramic and porcelain materials.

**BISIL F** has an outstanding long-term resistance to natural weathering, ultraviolet radiation, high and low temperatures. Its superior properties are retained after many years of exposure.

## USES (professional)

- Joints of precast panels.
- Expansion joints in concrete structures.
- For sealing glazed surfaces, acrylic sheets, poly carbonate and fiberglass.
- For glazing curtainwalls.
- For sealing perimeter joints of doors and metal, wood and uPVC window frames.
- For roofing and gutters of painted plates, copper and steel.
- For bonding mirrors to many types of substrates.



## LIMITATIONS

- **BISIL F** must not be used for insulating glass applications nor for structural glazing bonding.
- It is not recommended for the production of aquaria nor for longterm use under water.
- Not suitable for joints in swimming pools and adjacent areas that are in continuous contact with pool water.
- Non specific for sealing on to marble and natural stone, previous compatibility tests are always recommended.
- It should not be used in contact with materials bleeding oily matters or plasticizers, nor on surfaces to be overpainted. It is not suitable for use in food contact applications.
- The sealant is not recommended for use in totally confined joints not exposed to air moisture nor for use in joints submitted to abrasion. Do not use in extreme temperature conditions, or on damp, frozen, contaminated surfaces.
- Do not use on excessively acidic or basic substrates.
- For any application not listed in this document please contact our Technical Service.

## TECHNICAL DATA

<b>Polymers and curing system:</b>	100% silicone, alcoxy
<b>Consistency:</b>	tixotropic non-slumping paste
<b>Specific gravity:</b>	1,4 g/cm <sup>3</sup>
<b>Application temperature:</b>	+5°C / +40°C
<b>Tooling time:</b>	20 - 30 minutes
<b>Tack free time</b>	120 minutes
<b>Curing time:</b>	10 - 14 days depending on temperature and humidity and on cross section of applied sealant cord
<b>Shore A Hardness (ASTM D2240, ISO 868):</b>	26
<b>Tensile strength (ASTM D412, ISO 37, S2):</b>	1,45 MPa
<b>Elongation at break (ASTM D412, ISO 37, S2):</b>	750%
<b>100% Modulus (ASTM D412, ISO 37, S2):</b>	0,47 N/mm <sup>2</sup>
<b>Tensile strength (ISO 8339):</b>	0,62 N/mm <sup>2</sup>
<b>Ultimate elongation (ISO 8339):</b>	330%
<b>100% Modulus (ISO 8339):</b>	0,44 MPa
<b>Peel strength (ASTM C794):</b>	6,9 N/mm
<b>Service temperature range:</b>	-40°C / +100°C

The values in this table must not be considered as specifications.



# BISIL F

## APPROVALS

### Standard compliance



**15651-1: F-EXT-INT 25 LM** sealant for façade for interior and exterior application.

**EN 15651-2: G LM** sealant used for sealing glazing applications.

## METHOD OF USE

**Surface preparation:** all surfaces must be clean and dry.

Concrete surfaces must be free from dust, water-repellents and release matters.

Metal must be free from oil.

**BISIL F** shows an excellent adhesion onto commonly used building materials, however onto a few materials with variable surface characteristics such as concrete, aluminium, galvanized steel and painted surfaces, the use of a suitable Primer may be required.

A previous testing is always recommended.

See table of Primers for silicone sealants.

It is the responsibility of the user to test the compatibility of the sealant with the adjoining materials.

Incompatible substances like coating materials (paints, varnishes and glazes) or organic plasticizer containing rubbers (EPDM, butyl and neoprene) can lead to discoloration or other impairments like loss of adhesion of the sealant.

Materials in direct contact with the applied sealant like cleaning agents and materials in indirect contact like gaseous emissions can damage the sealant in its function or change its appearance.

Because of the multitude of these materials, Fratelli Zucchini S.p.A. cannot make a general statement to the compatibility of materials with the sealant. In case of doubt the user shall conduct appropriate preliminary tests.

The time until complete curing may be extended at lower temperature, lower humidity, increasing film thickness or by low volume of air exchange.

**Recommended joint dimension (see picture):** joint should be designed so that to produce a minimum sealant thickness not below 5 mm. and not over 10 mm.

The thickness of the sealant should be always lower than width.

In butt joints, the width should be at least twice total expected movement, in overlap joints equal or greater.

For a correct dimensioning of joint cross section, insert at the back **FILTENE**, a closed cell polyethylene foam round profile, available in several diameters.

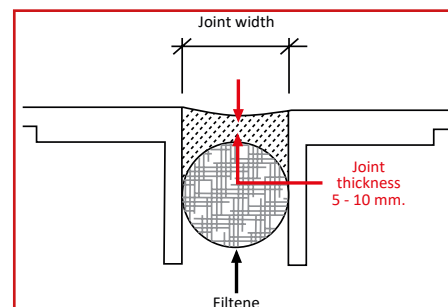
**Application:** apply sealant with hand or air operated gun extruding it in a continuous bead and forcing it in contact with joint sides.

**Tooling:** can be carried out in the 10 minutes following the extrusion.

**Solvent wiping:** dirty tools can be solvent wiped with **Solvente ST/512**.

After curing **BISIL F** can be removed mechanically.

**BISIL F** can't be overpainted.



## SAFETY AND HEALTH

See Safety Data Sheet.

## STORAGE STABILITY

- 310 ml. cartridge 12 months from the date of manufacture.
- 600 ml bag. 12 months from the date of manufacture.
- 20 kg drum 6 months from the date of manufacture.

Store the sealed product in the original packaging, in a dry place at a temperature between +5°C and +25°C.



# BISIL F

## PACKAGING

Code	Colour	Packaging	Unit
1007432	white	310 ml. cartridge	24
1007434	grey	310 ml. cartridge	24
1007435	black	310 ml. cartridge	24
1007436	limestone	310 ml. cartridge	24
1007437	dark brown	310 ml. cartridge	24

Other sizes available on request.

