

Bautechnik Ceresit

F173

Structural silicone for roofs & walls

Permanently elastic silicone sealant for expansion and connection joints

Properties

- ▶ Permanently elastic
- ▶ UV-resistant and weatherproof
- ▶ Bonds without primer to a range of surfaces including roofing felt, brickwork, glass, enamel, tiles, glazed ceramics, smooth metals, rigid PVC, polyester
- ▶ Can also be used on bitumen roof sheeting

AREAS OF APPLICATION

- For interior and exterior applications
- For expansion and connection joints in structural engineering
- For sealing structural elements, e.g. balconies, terraces, windows, metal seams, lifting doors
- For sealing chimney connections
- For sealing openings for rooflight domes, aerials and ventilation ducts
- For connection joints between glass and metal, wood, plastic and mineral materials
- For connecting bitumen coating or sheeting to the brickwork/concrete
- For sealing metal seams and connections in metal structures, apparatus constructions, air-conditioning systems, insulation systems and many more besides

SUBSTRATE PREPARATION

The joint edges must be dry, clean, free of grease and dust, and capable of bearing load. Remove all old sealant and other residue (we recommend using Ceresit F 190 silicone remover). Grease/oil should be removed using, for example, Ceresit P 819 adhesive cleaner, spirits, acetone or isopropanol-based cleaners. To achieve visually flawless joints, we recommend masking the joint edges with a suitable adhesive tape.

APPLICATION

Application:

Cut the tip off the cartridges above the thread, cut the plastic nozzle to the required joint width (at an angle) and screw it on. Then, insert the cartridge into a commercially available cartridge gun and spray the sealant into the joint.

Smoothing:

For jointing, use a suitable tool to smooth the product immediately after spraying it onto the surface. The sealant can either be lightly sprayed with a smoothing agent (approx. 5% soap solution) or the smoothing tool can be moistened with the smoothing agent. If you have

taped the joint edges, remove the adhesive tape as soon as you have finished smoothing the product in order to prevent the skin that is forming from cracking. Immediately smooth down any raised sealant edges. Remove any smoothing agent residue. The sealant surface must be protected from exposure to water (e.g. rain) until a hard skin has formed.

IMPORTANT INFORMATION

Observe all applicable health and safety regulations and the information provided in the safety data sheet. The safety data sheet is available at www.ceresit-bautechnik.de. The curing rate is dependent on the temperature, air humidity and cross-section of the joint. At low temperatures or low levels of air humidity or if the joint has a large cross-section, longer curing times must be taken into account.

Cleaning:

Fresh sealant that has not yet set can be removed with spirits. The same applies with respect to cleaning the tools. Once the sealant has set, it is insoluble in all solvents. Cured sealant can only be removed mechanically with the aid of a suitable tool (e.g. with a knife) or by using silicone remover.

For square joint cross-sections, the design of the joint must meet the requirements of standard DIN 18540. For joints with a low level of total deformation, the joint can also be designed as a fillet joint. If required to prevent the sealant from bonding on three sides and to define the joint depth, insert a backfill material, e.g. a closed-cell PE foam round profile, into the joint. Backfill materials containing bitumen, tar, oil or plasticisers are not suitable.

The product is compatible with commercially available paint, varnish and glaze systems in accordance with DIN 52452. The silicone sealant is not suitable for coating. Ceresit F 173 is not suitable for joints that are frequently walked on or driven over, or that are in direct contact with food. Furthermore, the product is not suitable for the following applications: structural glazing, underwater use and aquarium bonding.

When used on bitumen, discolouration may result.

Adhesion tests must be carried out. Ceresit F 173 may not be used on materials that can release substances or by-products over time (e.g. insulation and black coatings, butyl sealants or EPDM rubber). This can cause the sealant to become discoloured or compromise the product's adhesive properties.

When used in conjunction with copper and brass, signs of corrosion can occur during the curing phase.

Ceresit F 173 structural silicone for roofs & walls does not bond to PTFE (Teflon®) or polyethylene.

Should you need support or advice, please consult our advisory service for architects and craftsmen. Phone: +49 (0)211/797106-07/-55/-59

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TECHNICAL DATA

Base:	Oxime silicone
Temperature resistance:	-50 °C to +150 °C
Application temperature:	+5 °C to +40 °C
Skin formation time (23 °C / 50% RH):	Approx. 15 minutes
Cross-linking:	Neutral cross-linking
Odour:	Odourless after curing
Consistency:	Paste-like
Stability under load (DIN EN ISO 7390):	Stable
Tensile stress value at 100% (DIN EN ISO 8339-A):	≤ 0.4 N/mm ²

Volumetric change (DIN EN ISO 10563):	Approx. up to 7% (transparent) Approx. up to 5% (coloured)
Maximum joint width:	30 mm
Curing rate (23 °C, 50% RH, cross-section 20 x 10 mm):	Approx. 2-3 days / 5 mm
Shore A hardness (DIN 53505):	20
Permissible total deformation (DIN EN ISO 11600):	25%
Density (DIN EN ISO 2811-1):	Approx. 1.0 g/ml (transp.) Approx. 1.4 g/ml (coloured)
Amount required:	The amount required can be approximated for fillet joints as follows: 0.5 x joint width (mm) x joint depth (mm) = ml per running metre of joint. And for square joint cross-sections: joint width (mm) x joint depth (mm) = ml per running metre of joint.
Shelf life:	Approx. 18 months if stored in a cool, dry place and in a tightly sealed container
Disposal:	Dried-out product residue can be disposed of with domestic/industrial waste. Dispose of large quantities separately. Waste code/EWC code on request. Recycle empty packaging.

The information contained herein, particularly recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted on the basis of the contents of this data sheet or any verbal advice given, unless there is a case of wilful misconduct or gross negligence on our part.

This technical data sheet supersedes all previous editions relevant to this product.

Apart from the information given in this data sheet, it is also important to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards of the German Standards Institute (DIN).

All data refers to an ambient and material temperature of +23 °C and 50% relative air humidity unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.

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