

MC-FLEX PU 22 Construct

One-component, moisture-curing sealant based on polyurethane



PRODUCT PROPERTIES

- Easy application
- Thixotropic
- Permanently elastic - total deformation 25%
- Cures with the humidity in the air
- Paintable
- Resistant to weather conditions and water
- UV-resistant and color-stable
- No over joint expansion-bubble free curing
- Classification according to ASTM C920: Type S, Grade NS, Class 35, Use T, NT, A, M

AREAS OF APPLICATION

- Horizontal and vertical joint sealing applications indoors and outdoors
- Joints in the sewage treatment plant

APPLICATION ADVICE

Substrate Preparation: The joint edges must be dry, clean, stable, and free of substances that reduce adhesion, such as dust, oil, grease, etc. Loose particles must be removed. MC-FLEX PU 22 Construct achieves good adhesion results without primer on many plastics and painted surfaces. Due to the wide variety of possible substrates and areas of application, an adhesion test is recommended if the substrate conditions are unclear. Optimal adhesion is achieved when using the Mycoflex 251 primer, which should always be used on porous, absorbent substrates, especially in areas subject to frequent moisture exposure. As a solvent-free alternative, the water-emulsified epoxy resin MC-DUR 1177 WV-A can be used as a primer. The primer should be applied evenly and thinly over the entire surface with a soft, clean brush and allowed to dry sufficiently (see technical data sheet for the selected primer). MC-FLEX PU 22 Construct is not suitable for use on marble and natural stone structures. To define and control the depth of joints, it is necessary to backfill deeper joints with Mycoflex Joint Filler. If it is not possible to insert backfill, the adhesion of the sealant to the joint bottom must be prevented by inserting, e.g. polyethylene-strip.

Application: The processing is done with manual spray guns or pressurized air guns. When working with pressurized air, a pressure of 3 - 4 bar is required. The sealing compound must be inserted without bubbles or voids and the joint side must be well wetted. A strong adhesion to the joint sides should be created by pressing and smoothing. For smoothing use a moistened trowel or knife and neutralized water (neutral soap). It is advisable to mask the joint edges with self-adhesive tape, to guarantee a clean joint. The tape should be removed immediately after the sealant has been smoothed, or rather before the skin starts to form.

Consumption:

APPLICATION ADVICE

	Joint width (mm)	Joint width (mm)	Joint width (mm)	Joint width (mm)	Joint width (mm)	Joint width (mm)	Joint width (mm)
Joint depth (mm)	10	12	15	18	20	25	30
8	80 ml/m	96 ml/m					
10	100 ml/m	120 ml/m	150 ml/m	180 ml/m	200 ml/m		
12		144 ml/m	180 ml/m	216 ml/m	240 ml/m	300 ml/m	
15			225 ml/m	270 ml/m	300 ml/m	375 ml/m	450 ml/m
18				324 ml/m	360 ml/m	450 ml/m	540 ml/m
20						500 ml/m	600 ml/m

Further Information: For processing and handling MC-FLEX PU 22 Construct and Mycoflex 251 please note the information in the safety data sheet. MC-FLEX PU 22 Construct is subjected to typical ageing processes, which might be accelerated by chemical and mechanical attacks, as well as exposure to the weather. The joints must be inspected regularly with the regard to function and appearance and renewed if necessary. The information in DIN 18450 must be observed, depending on the respective area of application. Generally valid statements on terms, handling and processing are given in, for example, the current IVD data sheets No. 1 to 3, No. 7, No. 9 and No. 12, as well as in the IVD Sealant Lexicon. In general, the joint width should be between 10 and 35 mm.

TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Setting time	mm/day	approx. 2	at 23° C and 50 % rel. humidity
Flash-off time	hours	> 1 < 6	of the primer Mycoflex 251 If flash-off time is exceeded, re-prime.
Skin formation	minutes	approx. 20	at 23°C and 50% rel. humidity, high temperatures, direct sunlight and high relative humidity significantly shorten skin formation
Density	g/cm ³	approx. 1.15	
Consistency			thixotropic
Elongation at break	%	≥ 500	DIN 53504 S2
Total deformation	%	25	related to the initial joint width
Movement Capability	%	± 25 ± 35	ISO 9047 ASTM C 719
Modulus of resilience	%	> 70	EN 27389
Shore A hardness 7 d		approx. 40	
Thermal resistance	°C	> -30 < 80	cured material cured material
Application conditions	°C	≥ 5 ≤ 35	air and substrate temperatures
Condition after curing	Flexible		Only once the material has fully set may it be exposed to chemical attack and/or mechanical loading.
All technical values are laboratory results determined at 21°C ±2°C and 50% relative humidity.			
Base	1-component polyurethane resin system		
Equipment cleaning agent	MC-Cleaner eco		

Colour	Grey, Black
Delivery form	600 ml sausage (box with 20 x 600 ml sausages) 280 ml cartridge (box with 12 x 280 ml cartridges)
Storage	Can be stored in original sealed packages at temperatures between 5°C and 25°C in dry conditions for at least 12 months.
Packaging disposal	Make sure single-use containers are completely empty.

Safety instructions

Please note the safety information and advice given on the packaging labels and safety data sheets. GISCODE : PU40

Note: The information in this data sheet must be adapted by the installer, specialist planner, and/or building inspector to the respective construction project, intended use, and specific local conditions. Any non-standard local conditions must be taken into account, and application-specific conditions must be reviewed in advance by the planner/specifier. Deviations from the specified standard conditions require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may differ. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website. [2600033480]