



MASTERTEC

SPECIAL ARTICLES FOR REINFORCED CONCRETE CONSTRUCTION



SWELLING TAPES

PRODUCT RANGE

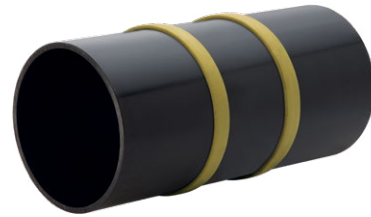
PRODUCT GROUP 1

2024/2025

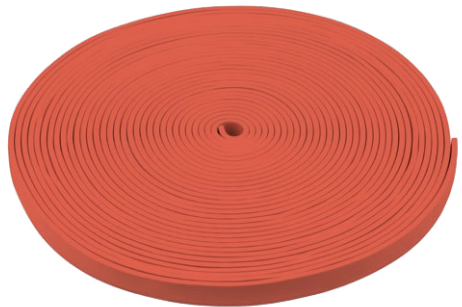
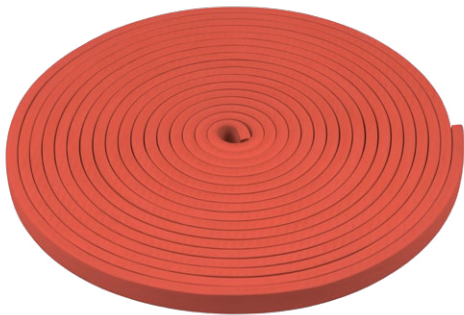
SWELLING TAPES



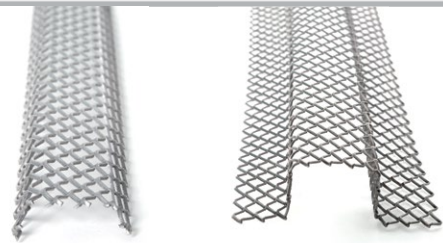
MASTERSTOP
Bentonite swelling tape
page 4



MASTERSTOP SK
Self-adhesive
bentonite swelling tape
page 5



FLOWSTOP
High-pressure swelling tape
page 5



Accessories for swelling tapes
pages 6 – 7

SWELLING TAPES

MASTERSTOP bentonite swelling tapes

for the waterproofing of construction joints Technical details pages 8 – 11



Art. no.	Description	PU	Secondary packaging	Weight per carton
010011	MASTERSTOP bentonite swelling tape Size: 25 x 20 mm, colour: black, Carton 30 m (6 rolls of 5 m each), Pressure-tight up to 80 m water column on rough and smooth surfaces (For technical details see page 8)	1 carton	1 pallet = 36 cartons	22.65 kg
010012	MASTERSTOP LONG TIME Bentonite swelling tape with protective film, Size: 25 x 20 mm, colour: black, Carton 30 m (6 rolls of 5 m each), Pressure-tight up to 50 m water column	1 carton	1 pallet = 36 cartons	23.20 kg
010020	MASTERSTOP bentonite swelling tape Size: 20 x 15 mm, colour: green, Carton 30 m (6 rolls of 5 m each), Pressure-tight up to 20 m water column	1 carton	1 pallet = 36 cartons	13.95 kg



MASTERSTOP bentonite swelling tapes

for subordinate waterproofing

Art.Gr. 110

Art. no.	Description	PU	Secondary packaging	Weight per carton
010016	MASTERSTOP bentonite swelling tape Size: 15 x 10 mm, colour: black, Carton 90 m (9 rolls of 10 m each)	1 carton	1 pallet = 36 cartons	21.80 kg
010017	MASTERSTOP bentonite swelling tape Size: 20 x 10 mm, colour: black, Carton 54 m (9 rolls of 6 m each)	1 carton	1 pallet = 36 cartons	16.90 kg



MASTERSTOP SK



Self-adhesive bentonite swelling tape [Technical details page 12](#)

Art.Gr.
101

Art. no.	Description	PU	Secondary packaging	Weight per carton
010025	MASTERSTOP SK Size: 20 x 5 mm, self-adhesive, Carton 90 m (5 rolls of 18 m each), Pressure-tight up to 50 m water column	1 carton	1 pallet = 36 cartons	14.95 kg



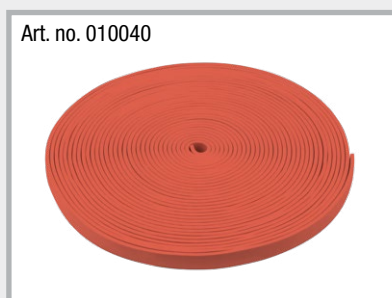
FLOWSTOP



High-pressure TPE swelling tapes for waterproofing of construction joints [Technical details pages 13 – 15](#)

Art.Gr.
102

Art. no.	Description	PU	Secondary packaging	Weight per carton
010040	FLOWSTOP Size: 20 x 5 mm, Carton 120 m (6 rolls of 20 m each), Pressure-tight up to 80 m water column	1 carton	1 pallet = 36 cartons	19.60 kg
010045	FLOWSTOP Size: 20 x 10 mm, Carton 60 m (6 rolls of 10 m each), Pressure-tight up to 80 m water column	1 carton	1 pallet = 36 cartons	17.80 kg




FLOWSTOP is fixed using POWER swelling tape adhesive.

Suitable installation accessories such as swelling tape adhesive and grids can be found on pages 6/7.

Adhesives and swelling paste

Technical details pages 16 – 18

Art.Gr.
103

Art. no.	Description	PU	Secondary packaging	Weight per carton
010050	Swelling tape adhesive for bentonite swelling tape Cartridge 310 ml Usage: 1 cartridge = approx. 7 m suitable for damp substructures	1 pc.	1 carton = 20 cartridges	11.00 kg
010052	POWER swelling tape adhesive High-pressure adhesive for fixing MASTERSTOP and FLOWSTOP swelling tapes or for fixing the foil flange, Cartridge 310 ml, Usage: 1 cartridge = approx. 7 m, suitable for damp substructures	1 pc.	1 carton = 20 cartridges	9.80 kg
010030	MasterMastic PU swelling paste  Polyurethane-based swelling paste, for waterproofing construction joints (20 m water column) and penetrations (40 m water column) or for fixing swelling tapes, Cartridge: 310 ml, Usage: Construction joint approx. 300-350 ml/m Usage: Penetration approx. 80-100 ml/m Usage: Fixing swelling tape approx. 45-50 ml/m	1 pc.	1 carton = 12 cartridges	5.65 kg

Art. no. 010050



Art. no. 010052



The **POWER** swelling tape adhesive can do more in construction:

- Very good adhesion to many substrates
- Bonding of stone, natural stone and ceramics
- Bonding and mounting of all kinds of different materials, such as wood, wood materials, plastics and metals
- Extremely water-resistant – for bonds with high water load
- Paintable
- Free from silicone and isocyanate

Art. no. 010030



Art.Gr.
105

Fastening grids

Art. no.	Description	PU	Secondary packaging	Weight per carton
010060	Universal swelling tape grid for bentonite swelling tapes 25 x 20 mm and 20 x 15 mm, Carton 30 m (30 grids of 1 m each)	1 carton	1 pallet = 250 cartons	2.40 kg
010065	Swelling tape grid for MASTERSTOP LONG TIME 25 x 20 mm, Carton 30 m (30 grids of 1 m each)	1 carton	1 pallet = 99 cartons	5.50 kg



Fastening nails

Art.Gr.
106

Art. no.	Description	PU	Weight
010080	Nails for bolt-firing tool Length: 42 mm with big washer	1 bag of 100 pcs.	1.10 kg per bag
010090	Nails for manual fastening Length: 40 mm with washer	1 carton of 250 pcs.	0.95 kg per carton



Place the swelling tape grid over the MASTERSTOP bentonite swelling tape and fasten to the concrete with nails. Nailing can be performed manually or with a bolt-firing tool. The spacing between the nails must not exceed 20 cm.

MASTERSTOP bentonite swelling tapes



- European Technical Assessment ETA
- General Building Supervisory Test Certificate (abP) for smooth and rough construction joints
- Standard test 50 m water column with swelling tape adhesive
- High pressure testing for smooth and rough construction joints with water column up to 80 m. In this case, POWER swelling tape adhesive or MasterMastic PU swelling paste must be used for fastening.
- Complies with the directive for water-impermeable structures. Wear classes 1 + 2: continuously or periodically pressurised water or soil moisture and utility class A + B

Product description

MASTERSTOP bentonite swelling tapes have a proven track record which goes back many years in construction practise. They swell upon contact with water and seal cracks or construction joints reliably and permanently. The test certificates confirm the product's suitability for various applications.

The convincing advantages of MASTERSTOP bentonite swelling tapes

- Produced with high-grade sodium bentonite
- Easy and safe installation
- No foundation curb
- Self-injecting effect: the swelling tape components penetrate cracks and cavities
- Environmentally friendly
- No fittings or welding
- Swelling and shrinking process is reversible
- Dimensionally stable and not sticky
- No cuttings or oddments
- Safety proved by extensive testing

Resistances of MASTERSTOP bentonite swelling tapes and MASTERSTOP SK

Medium	resistant	not resistant
Alkalis in general	✓	
Urea	✓	
Liquid manure/slurry	✓	
Biogas	✓	
Radon	✓	
De-icing salt	✓	
Substances obtained by means of composting	✓	
Petrol		✓
Diesel		✓
Heating oil		✓

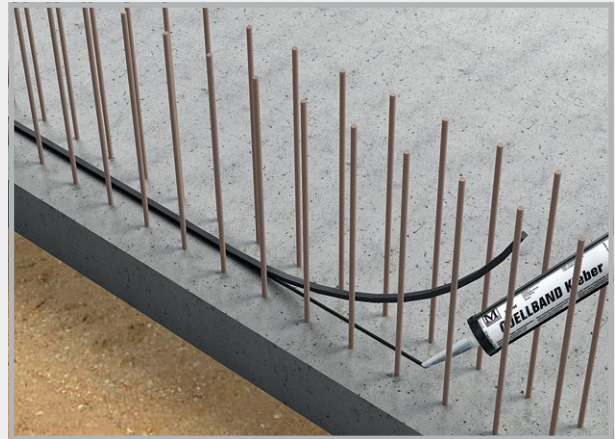
Further resistances are available on request.

Installation

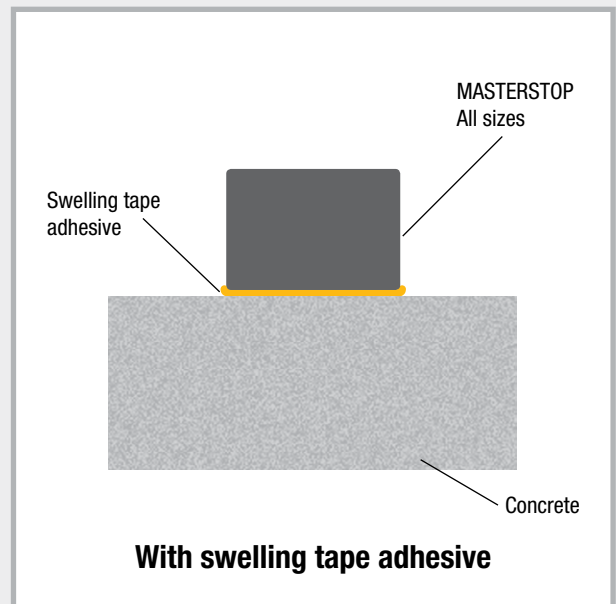
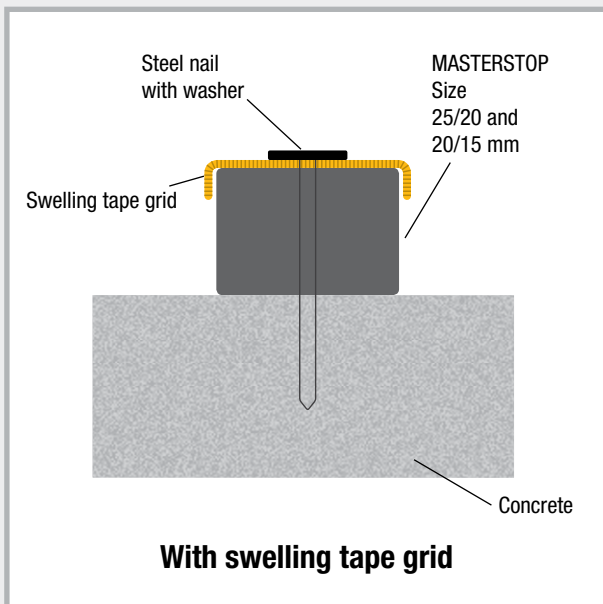
MASTERSTOP bentonite swelling tapes are fixed with a swelling tape grid, swelling tape adhesive or with MasterMastic PU swelling paste. They are laid inside the reinforcement with a concrete cover of at least 8 cm.



Installation with fastening grid and nails



Installation with swelling tape adhesive

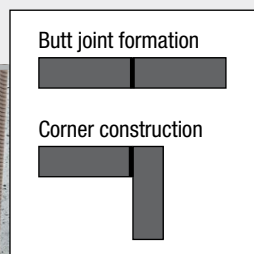


Laying

Size 25/20 mm



Straight butt joint



Corner butt joint

MASTERSTOP LONG TIME

All-weather bentonite swelling tape

Product description and function

MASTERSTOP LONG TIME 25 x 20 mm is a bentonite swelling tape for the waterproofing of foundation/foundation, foundation/wall and wall/wall construction joints.

MASTERSTOP LONG TIME is equipped with a protective film which enables installation in all kinds of weather.

The protective film ensures that the swelling tape can be exposed to rain and in-situ water for at least 10 days without expanding.

This changes when it is encased in concrete. The composition of the concrete causes the protective film to lose its effect after few days so that the swelling tape is set free and seals the joints safely and permanently in case of water ingress.

The tape is not suitable for installation underwater or long-term immersion in water.

Safety

MASTERSTOP LONG TIME is not a hazardous substance and is uncomplicated to use and handle.

Storage

MASTERSTOP LONG TIME must be stored in a dry place and protected from contamination and mechanical damage. Swelling tapes which have already started expanding as well as swelling tapes with an altered geometry or damaged protective film must not be installed.



Rain protection 10 days

Pressure-tight 50 m water column



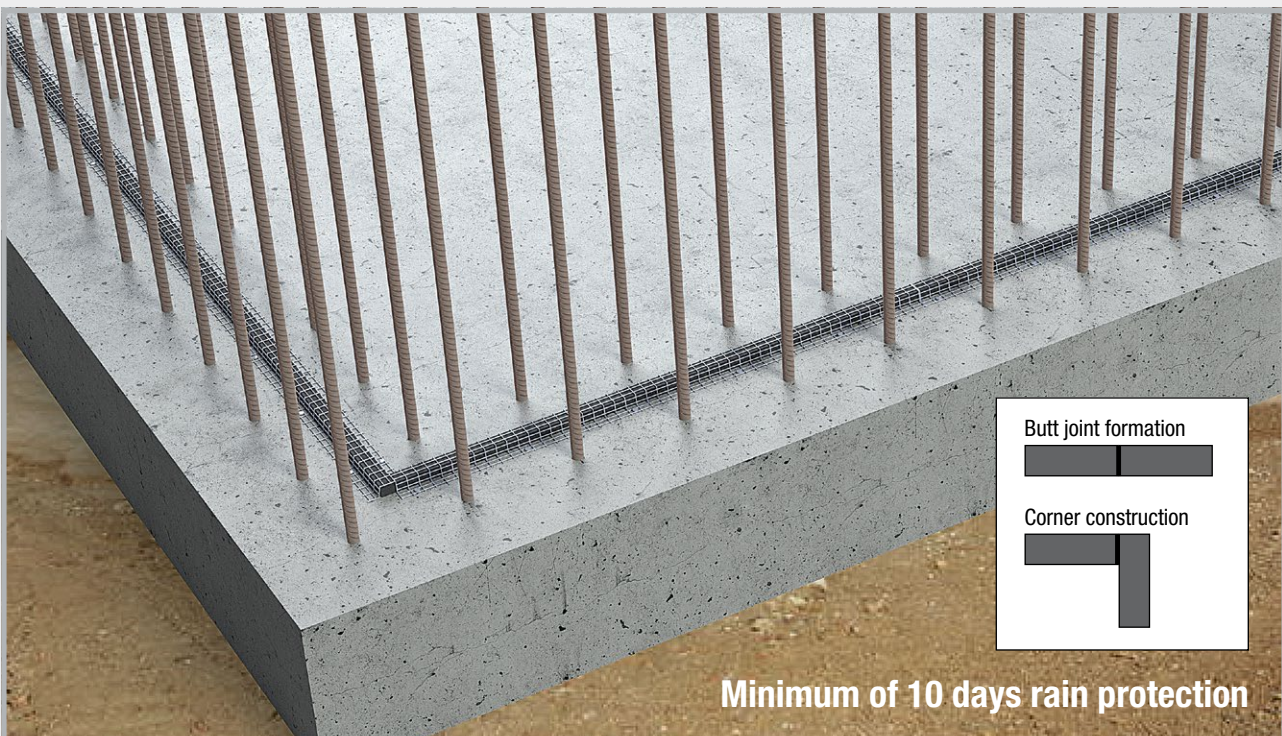
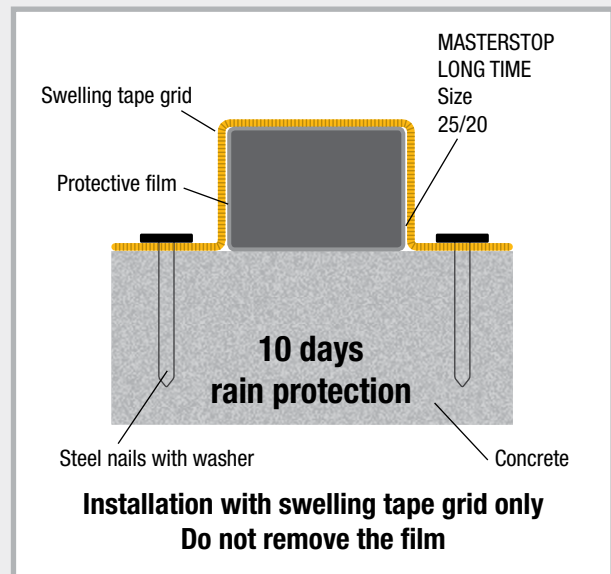
Comparison of swelling tape with and without protective film

The convincing advantages of MASTERSTOP LONG TIME

- All-weather installation
- No foundation curb
- Self-injecting effect: the swelling tape components penetrate cracks and cavities
- Environmentally friendly
- No fittings or welding
- Swelling and shrinking process is reversible
- Dimensionally stable and not sticky
- No cuttings or oddments
- Safety proved by extensive testing

Installation

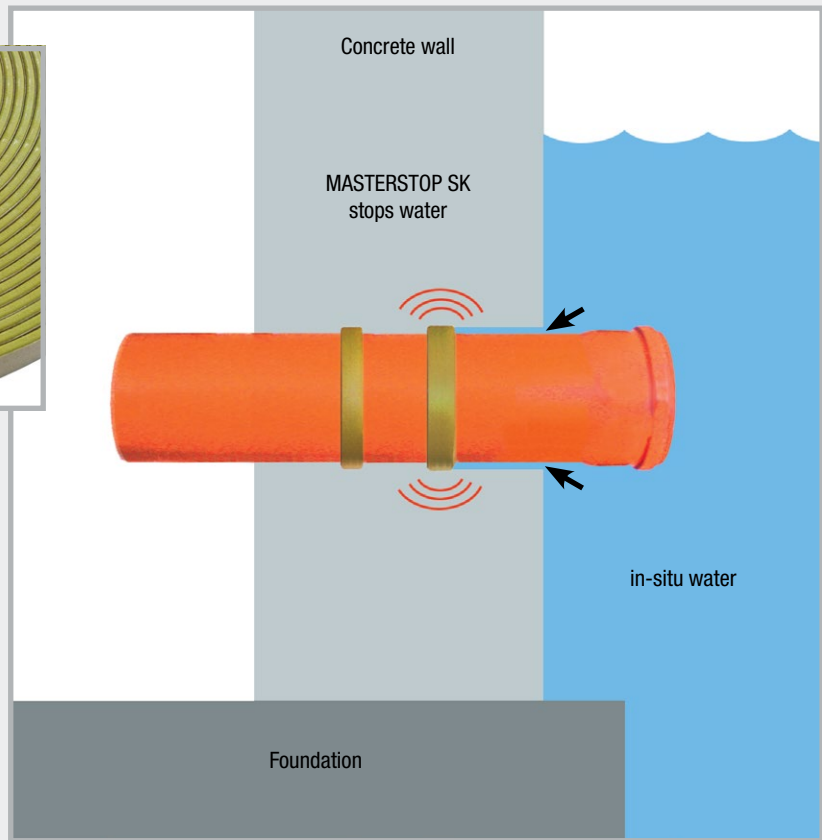
- MASTERSTOP LONG TIME is installed in the centre of the joint within the reinforcement.
- An adequate concrete cover of at least 8 cm must be ensured.
- The swelling tape cannot be glued and instead must be fixed to the substrate using a swelling tape grid. To ensure that the swelling tape lies flat on the concrete substrate, the grid usually needs to be fixed to the concrete using nails every 20 cm in the longitudinal direction. The distance between the nails can be reduced if necessary.
- Make sure that the protective film is not damaged.
- The tape ends are butt jointed. If tape sections are used, pull back the protective film, cut off approx. 5 cm of the swelling tape and turn down the film in order to prevent contact with water.
- The concrete substrate must be level and free of loose or separating particles and must not be excessively rough.



Installation of MASTERSTOP LONG TIME with swelling tape grid
8 cm concrete cover within reinforcement

MASTERSTOP SK

Self-adhesive bentonite swelling tape



Product description

MASTERSTOP SK is a self-adhesive bentonite swelling tape which expands on contact with water and prevents water penetration.

Testing

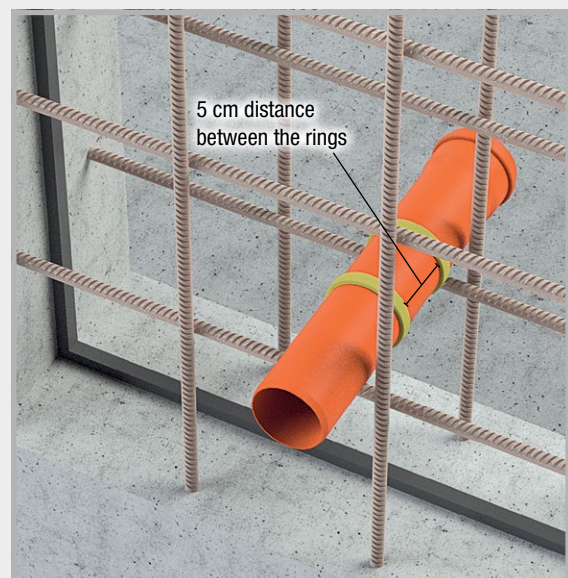
- Test report MFPA Leipzig, up to 50 m water column
- Environmentally friendly

Application

- Water-impermeable integration of pipe ducts in concrete buildings
- Waterproofing of reinforcement connections
- Waterproofing of ground drains

Installation

- Pull off silicone paper and affix 2 rings of MASTERSTOP SK around the pipe to be waterproofed.
- Butt joint ends, no overlaps
- The pipe surface must be rigid
- MASTERSTOP SK adheres to metal, plastic, PVC and stone.
- Secure MASTERSTOP SK with binding wire if necessary.



MASTERSTOP SK is affixed around the pipe inside the reinforcement with 6 cm concrete cover.

FLOWSTOP



High-pressure swelling tapes

Product description

For waterproofing construction joints and penetrations in concrete structures. With a proven ability to withstand the pressure of an 80 m water column, FLOWSTOP 20 x 5 mm meets the requirements of the German directive on water-impermeable concrete structures (WU Directive) for a continuous pressure of 2 bar, as well as international standards that require high pressure resistance.



- European Technical Assessment ETA
- General Building Supervisory Test Certificate
- Suitable for zones with frequently varying water levels
- Good chemical resistance
- Dimensionally stable
- Maximum pressure of 80 m water column with size 20 x 5 mm
- Long-term testing for more than 250 days
- Easy installation with POWER swelling tape adhesive
- No foundation curb required
- Chemical basis: Modified TPE
- Temperature range: -30°C to +60°C
- Storage: Dry and protected

Resistances of FLOWSTOP



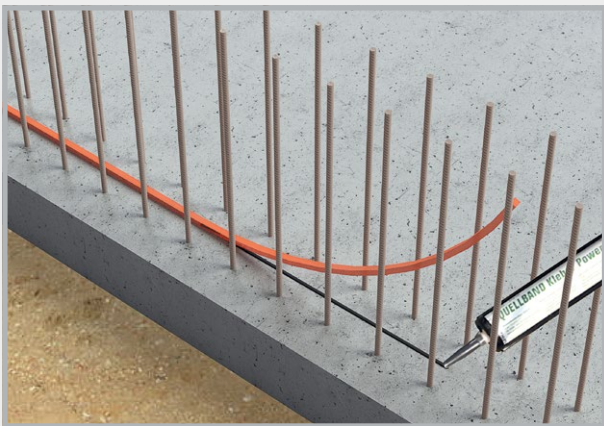
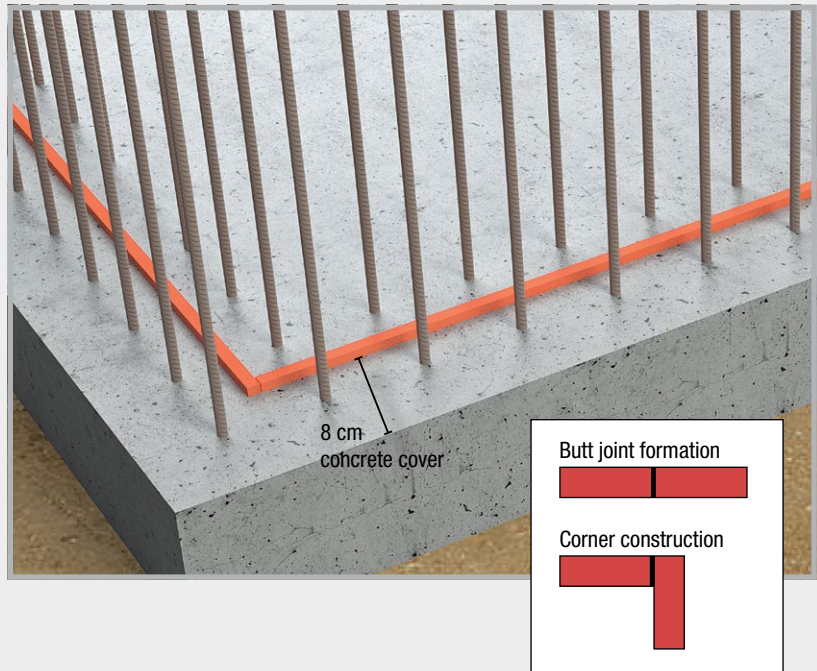
Further resistances are available on request.

Medium	resistant
Soapy water	✓
Sodium hydroxide solution	✓
Caustic potash solution	✓
Liquid manure/slurry	✓
Mineral oil 15W-40	✓
Motor oil 0W-40	✓
Hydraulic oil HVL 46	✓
Salt water 3-4% NaCl	✓
Chlorinated water 0.95-1 mg/l	✓
Chlorinated water 10 mg/l (shock chlorination)	✓
Sodium carbonate	✓
Bitumen	✓

Installation

The substrate must be clean, dry and free of loose particles. Once the POWER swelling tape adhesive has been applied in the centre of the joint, the tape is placed on the adhesive and gently pressed in. A concrete cover of at least 8 cm inside the reinforcement must be ensured.

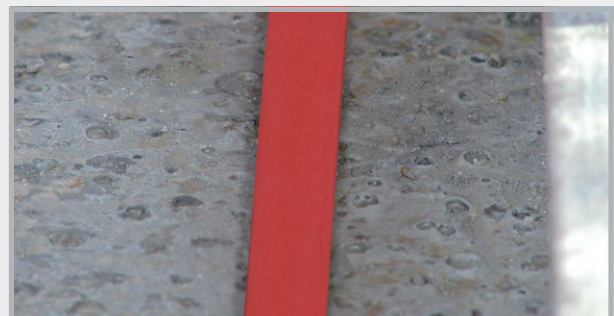
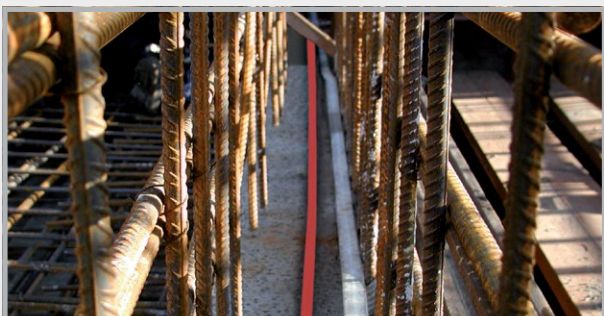
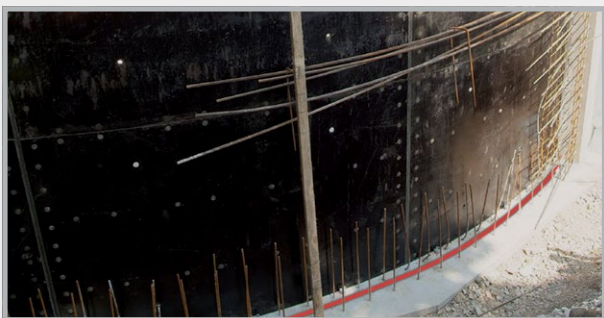
Not suitable for installation with swelling tape grid. Prior to concreting the tape must not lie in water for an extended period. Rain water that runs off does not activate the swelling.



Spray on the POWER swelling tape adhesive and place the FLOWSTOP swelling tape on top of the adhesive.



Waterproofing of a construction joint



Swelling behaviour

The swelling behaviour of FLOWSTOP was tested over 180 days through immersion in 4 test liquids.

Test liquid	Maximum expansion in all test cycles
Neutral liquid with pH value 7	600%
Alkaline liquid with pH value 13	350%
Liquid aggressive to concrete with pH value 4.5	200%
Salt water	100%



The final expansion was reached after 6 to 10 days, depending on the test liquid. These periods provide adequate time for secure installation.

FLOWSTOP test procedure

Water pressure [bar]	Test duration days	Water passage	Remarks
0.03	3	not measurable	Adjustment of the construction joint to 0.25 mm and water filling without pressure Water penetration from all sides, quickly reducing with increased swelling
0.2	1	0	Start of the first exposure to pressurised water
0.4	1	0	impermeable
0.6	1	0	impermeable
0.8	1	0	impermeable
1.0	3	0	impermeable
2.0	1	0	impermeable
3.0	1	0	impermeable
4.0	1	0	impermeable
5.0	14	0	impermeable
–	43	–	Six weeks of drying with hot air supply
0.03	3	0	Water filling without pressure, impermeable
0.2	1	0	Start of the second exposure to pressurised water, impermeable
0.4	1	0	impermeable
0.6	1	0	impermeable
0.8	1	0	impermeable

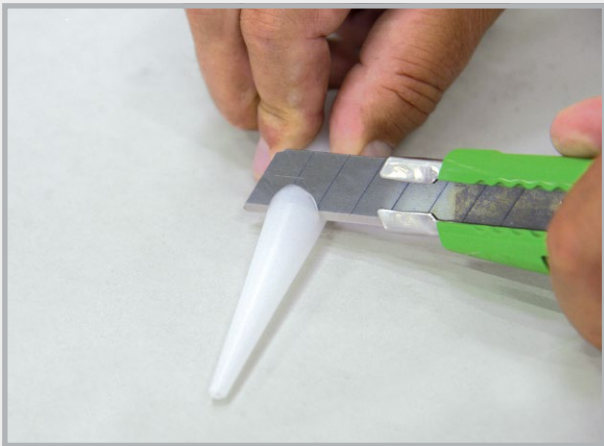
Water pressure [bar]	Test duration days	Water passage	Remarks
1.0	3	0	impermeable
2.0	1	0	impermeable
3.0	1	0	impermeable
4.0	1	0	impermeable
5.0	14	0	impermeable
–	43	–	Six weeks of drying with hot air supply
0.03	3	0	Water filling without pressure, impermeable
0.2	1	0	Start of the third exposure to pressurised water, impermeable
0.4	1	0	impermeable
0.6	1	0	impermeable
0.8	1	0	impermeable
1.0	3	0	impermeable
2.0	1	0	impermeable
3.0	1	0	impermeable
4.0	1	0	impermeable
5.0	14	0	impermeable
6.0	28	0	Additional pressure level, impermeable
7.0	28	0	Additional pressure level, impermeable
8.0	28	0	Additional pressure level, impermeable

Adhesives and swelling pastes

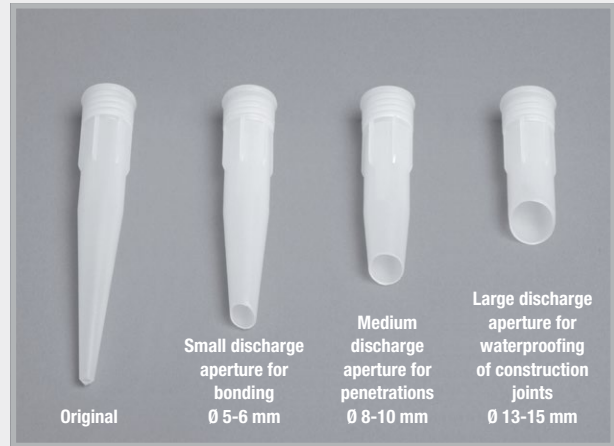
MASTERTEC produces adhesives for swelling tapes and swelling pastes for waterproofing various types and qualities of construction joints and wall penetrations.

Preparatory work

Cutting the cartridge tips



The nozzle is cut off to suit the various areas of application.

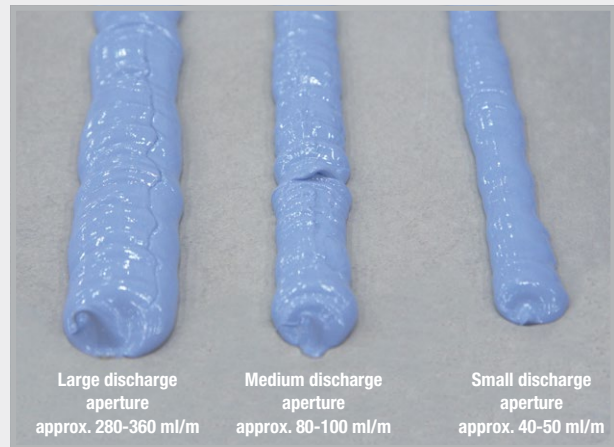


Cuts

Application of the adhesive or pastes



Example: Large discharge aperture
Usage approx. 280-360 ml/m



Swelling tape adhesive

Single-component, solvent-free sealant for bonding of MASTERSTOP bentonite swelling tapes.

Usage:	40-50 ml/m \triangle approx. 7 m per cartridge
Application:	For dry and slightly moist substrates
Bonds with:	Concrete
Application temperature:	+5°C to +45°C
Thermal stability after curing:	-20°C to +70°C
Setting time:	approx. 8 hrs. at +20°C
Environmental aspects:	Once cured, the product is odourless and physiologically harmless.
Supplied as:	Cartridge 310 ml



Apply adhesive to clean substrate



Position the swelling tape

POWER swelling tape adhesive

Single-component solvent-free sealant for bonding of MASTERSTOP and FLOWSTOP swelling tapes or for fixing the foil flange. The POWER version is a high-pressure adhesive.

Usage:	40-50 ml/m = approx. 7 m per cartridge
Application:	for dry and damp substrates
Bonds with:	Concrete, steel, rigid PVC, soft PVC, stone Achieves a very high mechanical strength.
Application temperature:	+5°C to +45°C
Thermal stability after curing:	-30°C to +80°C
Setting time:	approx. 8 hrs. at +20°C
Environmental aspects:	Once cured, the product is odourless and physiologically harmless. Highly recommended environmentally compatible building product
Supplied as:	Cartridge 310 ml



Press the swelling tape into the adhesive bed



POWER high-pressure adhesive for MASTERSTOP and FLOWSTOP swelling tapes

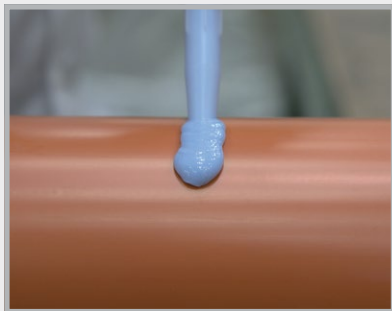
MasterMastic PU swelling paste



Single-component, swellable polyurethane paste for sealing construction joints and penetrations in water-impermeable concrete structures or for fixing swelling tapes:



- For dry and damp substrates
- Solvent-free
- Application: +5°C to +45°C
- Physiologically harmless
- Setting speed:
approx. 6 – 7 mm/24 hrs.



Openings

**Certified waterproofing up to 40 m water column
(test report MFPA Leipzig)**

Application: Circular Ø approx. 8-10 mm

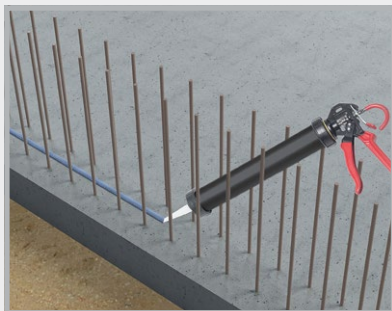
Usage: approx. 80-100 ml/m

Adheres to: Concrete, steel, stone, hard PVC

Not suitable for polypropylene!

Installation: Inside the reinforcement with at least 8 cm concrete cover

Protect against premature swelling from moisture and rain.



Construction joints

**General Building Supervisory Test Certificate according to WU
guideline up to 20 m water column**

Application: Bead approx. 35 x 12 mm

Usage: approx. 300-350 ml/m*

Adheres to: Dust-free, dry or matt damp concrete surfaces

Installation: Inside the reinforcement with at least 8 cm concrete cover

Protect against premature swelling from moisture and rain.



Fixing of swelling tape

Application: Bead Ø approx. 6-8 mm

Usage: approx. 45 – 50 ml/m*

Adheres to: Dust-free, dry or matt damp concrete surfaces

* Depending on the concrete roughness



BENTONITE SWELLING TAPES

SELF-ADHESIVE SWELLING TAPE

HIGH-PRESSURE SWELLING TAPES

SWELLING PASTES

ADHESIVES

GRIDS

MASTERTEC GmbH & Co. KG
Special articles for reinforced concrete construction

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