

QUELLMAX[®]

BENTONITE TAPE

consistent with drinking water
and not harmful to environment



You face any problems with water?



We recommend QUELLMAX®

**Simple, reliable and priceworthy solution -
easy to fit.**

QUELLMAX® is the very reliable alternative for joint-sealing tapes and sheets.

QUELLMAX® is a swellable bentonite tape for sealing of construction joints in grounds, walls and ceilings.

QUELLMAX® without coating



- QUELLMAX® not swollen



- Basic dimensions 18 x 24 mm. After 2 hours, the basic dimensions have grown to 28 x 36 mm.



- Test profile section 12 x 25 mm. After 2 hours, the test profile section has grown to 24 x 48 mm

QUELLMAX® consists mainly of bentonite natural clay. The volume of bentonite swells when getting in touch with water.

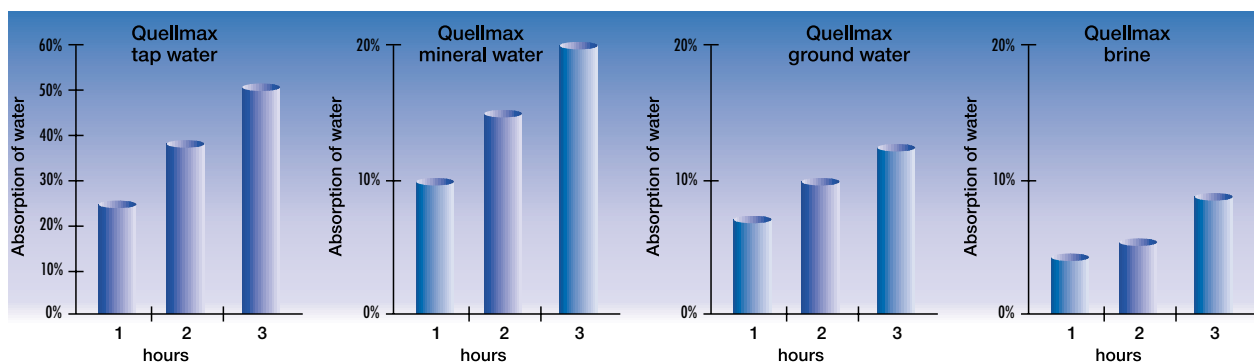
QUELLMAX® with coating



QUELLMAX® incorporated in the construction joint starts swelling as soon as water is added. The whole swellable tape is surrounded by concrete. For this purpose, some contact pressure gets developed to seal the construction joint.

You probably want to know what will happen when it is raining after incorporation of the swellable waterstop tape. For this purpose, there is our patented "Resistrol RP10" coating. That synthetic polymer prevents from swelling for several days. The alkaline pH value of concrete causes Resistrol RP10 to disintegrate, that is to say, the swelling capacity is restored immediately.

Illustration of swelling behaviour in various kinds of water:



6 steps to realizing tight joints.



- Remove detached stones and dirt from joints.



- Put swellable waterstop tape in cleaned joint



- Spray or brush Resistrol RP10 onto swellable waterstop tape. Resistrol RP10 may also be applied after shooting on.



- Rain-protection coatings have been applied by machine from 1997 onwards. This was some absolute, worldwide novelty.



- Put the mounting rail onto the swellable waterstop tape, shoot-fasten in order to get the tape pressed down flat and steadily.

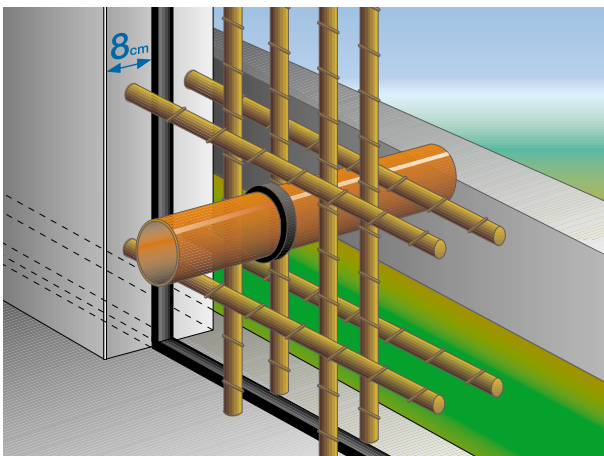


- Before shooting on the mounting rail, make sure that the swellable waterstop tape is centered in the joint.

Swellable bentonite waterstop tape rated-crack joint rail with swellable waterstop tape



- The new dimensions 11/15 and 16/21 allow additional use.



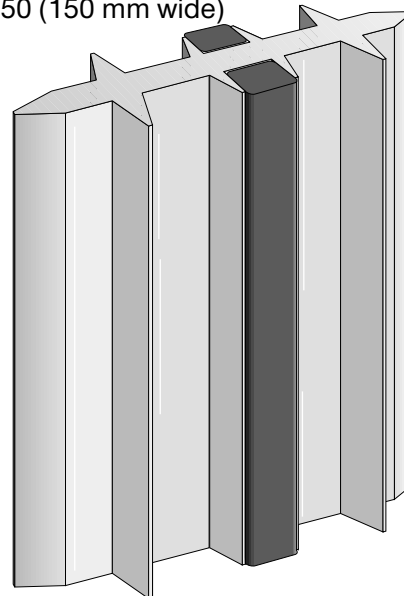
- e.g. pipe openings and steel-door frames

The rated-crack joint rail (SRF)

The rated-crack joint rail (SRF) is an important element of the "white trough". With this rated-crack joint rail incorporated, you will realize some intentional weakening of the cross section with scheduled cracking.

There are rated-crack joint rails of suitable widths for the various fields of application and wall thicknesses:

- SRF 125 (125 mm wide)
- SRF 150 (150 mm wide)



- Rated-cracks joint rail of 1.25 - 3.0 m long sections



- For pipe openings, spread Cemstar-gluten on Quellmax tape.



- Put around the pipe and fasten with wire

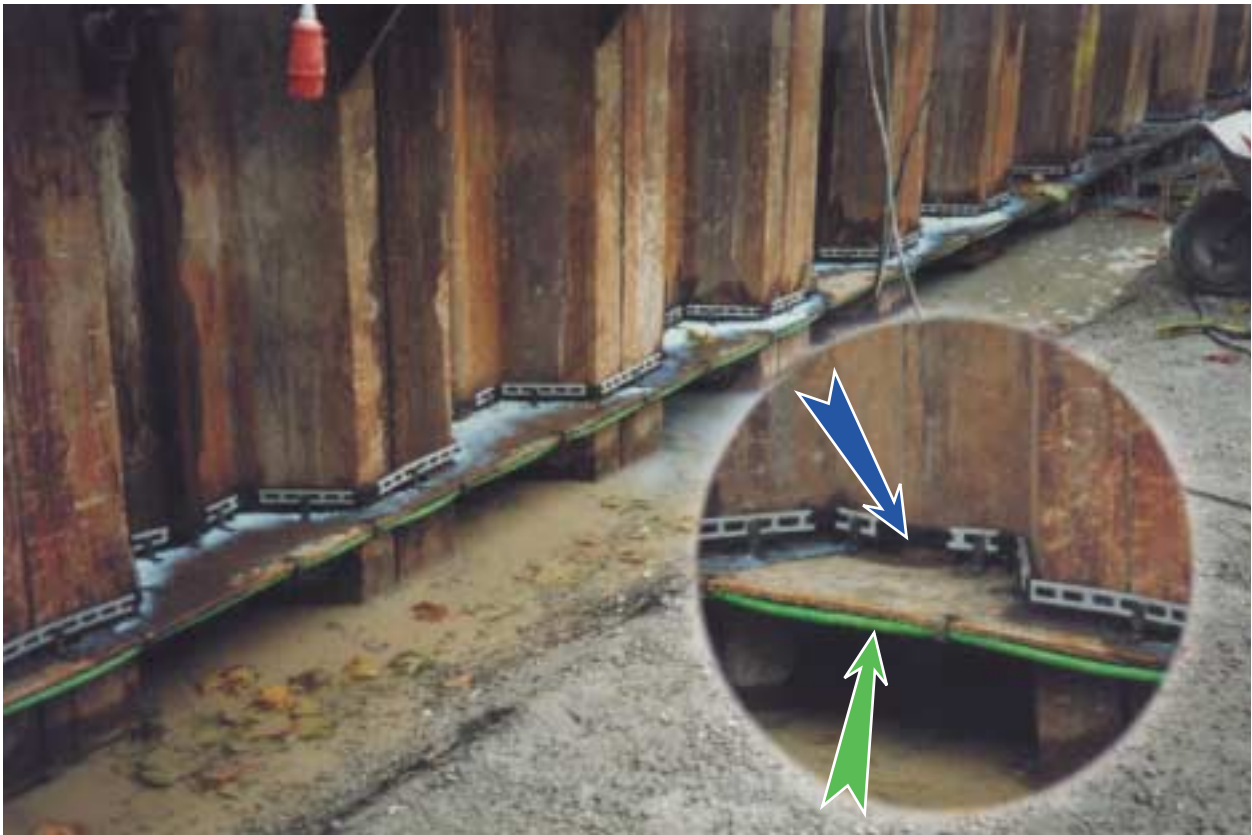


- In this building, the joints between floor and wall are secured by **PREDIMAX®** injection hoses. The joints on the park deck are protected by **QUELLMAX®** whereas the outside walls receive rated-cracks joint rails.



- Sewage treatment plant bottom plate Predimax 19. Construction joints vertical Quellmax.

Particular use of
QUELLMAX[®] and PREDIMAX[®]



➡ The swellable waterstop tape was incorporated above the welded joint plate and sprayed with anti-swell agent Restirol

➡ An injection hose for protection against flow around is attached above the steel plate (middle of floor plate)



• Sealing of joints between floor/wall by **PREDIMAX[®]**



• Sealing of joint between floor/wall by **QUELLMAX[®]**

Safety joint (max. 10 years guaranty to VOB and BGB)

100 % sealing

With the bentonite waterstop tape and the injection hose, we may offer you another procedure for safe and impermeable constructional joints. No manufacturer of joint-sealing tapes or jointing plates has been able so far to guarantee for tight constructional joints. We can do it provided that ourselves or one of our contracting agents assure incorporation at site. Double safety is reached when you incorporate both **QUELLMAX®** and **PREDIMAX®** injection hose. We may say by practical experience that just **QUELLMAX®** incorporated in the joint affords better safety than obtained in the past.

Further details are given in our special leaflet on **PREDIMAX®** - absolutely tight.

When you incorporate both QUELLMAX® and PREDIMAX® in a joint, however, you may be sure of having a 100% tight joint with 2 - 10 years guaranty given to VOB and BGB. The ends for injection of the **PREDIMAX®** are kept in bushings, that is to say, injections in the joint are feasible at any time if there is any leakage. **The safety joint is absolutely tight with warranty assured, and the contractor gets permanently relieved from responsibility.**



- The picture shows stabling on the floor plate viz. a floor/floor joint as safety joint with bushing. The bushing is above the reinforcement.

- The picture shows a stationary crane. Safety joint incorporated on the granular subbase. The floor plate is to be concreted to short off the crane. No water will escape any more between the granular subbase and the floor plate when the wall forming is stabled.



Special cardboard box:

- Capacity 20 x 1 m
- Weight 15,8 kg

Standard design with punched rail

Alternative (price increase) with coarse screen or with open fitting rail.



20 m carton without rails

- on reels of 5 m each
- Weight: 12,7 kg



Mounting rails type 1 or type 2 are supplied pro rata.
Screens available by request.

Form of availability and packages for delivery of QUELLMAX® and accessories

- 5 m reels **QUELLMAX®**
- 1 m piece **QUELLMAX®**
- Screen type 3
- Open mounting rail type 2
- Mounting rail with holes type 1
- Cartouches, bolts with round, 1 shooting unit

Minimum orders:
20 m run



Please contact us directly whenever you want further information.

BUNDESREPUBLIK DEUTSCHLAND

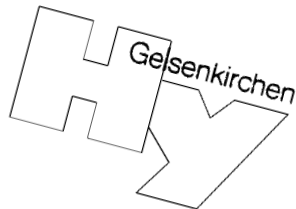


URKUNDE

über die Eintragung des umstehenden Gebrauchsmusters

Hygiene-Institut
des Ruhrgebiets, Gelsenkirchen
Institut für Umwelthygiene und Umweltmedizin
Direktor: Prof. Dr. med. Martin Exner

Hygiene-Institut · Postfach 10 12 45 · 45812 Gelsenkirchen



Rotthauer Straße 19
45879 Gelsenkirchen
Telefon (02 09) 15 86-0
Telefon Durchwahl (02 09) 15 86- 163
Telefax (02 09) 15 86- 300
45879 Gelsenkirchen 07.03.1994
Dir. Tgb.-Nr.: C 104/94/st

BPA GMBH
Beratung · Planung · Ausführung
Siedlerstraße 46

71126 Gäufelden-Nebringen

Betr.: Trinkwasserhygienische Untersuchung und Beurteilung der Fugenabdichtung
Bezug: "QUELLMAX"
Ihr Schreiben vom 30.11. und 16.12.1993, Zeichen: pfl/wei

10
ehrte Damen und Herren,
Ihr Schreiben vom 16.12.1993 übersandten Sie uns ein Muster des Quellbandes "QUELLMAX" sowie eine Flasche Dispersion DBC 2620 BA, eingehend bei uns am 20.12.1993 sowie eine Lieferung des Quellbandes, eingehend bei uns am 21.01.1994.
Auftragten uns, dieses Material aus trinkwasserhygienischer Sicht zu untersuchen.
Ihre Anfrage zum Material:
Quellband "QUELLMAX" in 1000 Stücken
Ihre Anteile

A **QUELLMAX®** bentonite tape having been installed thoroughly to rules of workmanship is safe and dense. We may offer you these services upon your demand through our agents or the company whose address is stated below:

QUELLMAX®

Wititunnel N5	1998 CH	Marti AG, Astrada AG, Batigroup AG Conti AG, Hoch- & Tiefbau AG Meier + Jäggi AG, Murer AG Schlitter AG, Zetter AG Zschokke Locher AG	25.000 lfm
Birchitunnel N5	1998 CH	Astrada AG, Hoch - & Tiefbau AG Schenk + Cie. AG, Murer AG Schlitter AG, Zetter AG Zschokke Locher AG	2.000 lfm
Lüsslingen N5	1998 CH	Marti AG, Batigroup AG Conti AG, Meier + Jäggi AG	5.400 lfm
Blisadona Tunnel	2000 A	Östu-Stettin GmbH Beton- und Monierbau Universale Bau AG, AST	6.800 lfm
Asia Center Budapest	2001 HU	Strabag	6.400 lfm

Numerous other projects and references for overground and underground working, civil engineering and tunneling all over Europe, e.g.

underground parking, sewage treatment plants, RÜB, tunnel constructions, trough constructions, water reservoirs, cellars, civil engineering buildings, special-purpose solutions.

QUELLMAX® means tested safety up to 7 bar water pressure.

- General test certificate issued by building supervisors MPA material-testing laboratories Braunschweig iBMB
- MA 39 Magistrate Vienna (density test max. 7 bar)
- MA 39 Magistrate Vienna (performance test for use in areas of changing water)
- Material-testing laboratories MPA Braunschweig iBMB
- Hygiene Institute Gelsenkirchen, approval of drinking water
- ACL GmbH analytical chemical laboratories
- EMI material-testing laboratories Budapest/Hungary
- Vattenfall Certificate of Approval Scandinavian



QUELLMAX®
with patented coating
protecting against rain