

# **Quick-construction waterproofing**

Seam sheet WU-B.

**Grouting hose.** 





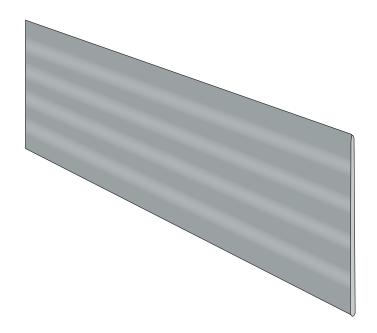
### **Quick WU-B active**

#### Quick has been developing technical products for the construction industry for 40 years.

The basic idea is to optimize and speed up work processes on construction sites. Naturally, we also set new standards in terms of quality.

Due to ever shorter planned construction times and high construction costs as well as the decline in well-trained skilled workers, it is now more important than ever to develop products that can be processed quickly, safely and rationally.

It is just as important to conserve resources and to produce in an environmentally conscious manner - both we as manufacturers and the building contractors.



#### Quick-WU-B active

Galvanized sheet with special mineral coating on both sides.

Dimension 150 x 0.75 mm, single sheet length 2,000 mm

#### **Advantages**

- ETA approval by DIBT and drinking-water tested by the Hygiene Institute
- Active sealing
  - Crystallization
  - Active mineralization
  - Chemical bond
- No risk of premature destructive activation (by rain)
  - ► Crystallization starts with moisture no damage occurs
- UV resistant
- Independent of temperature and weather
- No joint bonding required
  - ► The joint seals actively through crystallization and sintering

- No protective film required
  - ▶ Concrete splashes are actively crystallized/ mineralized and are therefore not weak points
- Tested tight up to 8 bar
- Approval of drinking water
- Slurry-resistant
- Minimum concrete insertion depth ≥ 3 cm
- Joint overlap ≥ 5cm
- Joint connection either with the omega bracket or the joint clamp

## Advantages at a glance

Drinking-water tested Active sealing

No protective film required

ETA approval

UV resistant

Without joint bonding

Independent of temperature and weather

### **Approval and testing**



#### Bautechnisches Prüfamt

An institution established by the Federal and Laender Governments



#### **European Technical Assessment**

of 21 November 2018

English translation prepared by DIBt - Original version in German language

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Trade name of the construction product

Product family to which the construction product belongs

Manufacturer

Manufacturing plant

This European Technical Assessment

This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of

Deutsches Institut für Bautechnik

QUICK WU-B aktiv

Coated metal water stop sheet for construction and controlled crack joints in waterproof concrete

Quick Bauprodukte GmbH Westendamm 3 58239 Schwerte DEUTSCHLAND

Manufacturing plant 8239

8 pages including 4 annexes which form an integral part of this assessment



#### Hygiene-Institut des Ruhrgebiets

lastitut für Umwelthygiene und Toxikologie Direktor: Prof. Dr. rer. nat. L. Dunemann Träger: Verein zur Bekämpfung der Volkskrankheiten im Ruhrkohlengebiet e.V.

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K-303475-18-Ko 21 09 2018

TEST CERTIFICATE
according to the DVGW Code of Practice W 347
"hygienic requirements for cement-bound
materials for drinking water supply"
(issue date 2006-05)

Product:

QUICK WU-B aktiv

Test Specimen:

all side coated metal sheets (grey)

The test specimen meets the requirements of the DVGW Code of Practice W 347 according to the test report no.: K-221120-12-Ko dated 20.09.2012 for the following scopes:

Scope	Products / Components	Assessment
Į.	mortar lining of cast iron pipes and steel pipes	
II	concrete pipes ≥ DN 300, reservoirs, cementitious coatings of reservoirs	
Ш	cement for tiles, joint filler, coating of fittings (e.g. for welding joints)	passed
IV	concrete components in protective areas of drinking water plants I, II, III	passed

as far as the material is qualified technically.

This test certificate is valid beginning with the date of issue and is ending by 20.09.2022 as far as there are no changes

The Director of the Hygiene-Institute



The assessment was based on the assumption that the used starting substances and monomers used to manufacture the product may completely known and no other substances are present in the product. The validity of this document expires in case of modifications in the composition of the product or the processing conditions. The results and evaluations refer to the groups of test intern. This document may not be published without our written permission only complete and unchanged or displacement.

Träger: Verein zur Bekämpfung der Volkskrankheiten im Ruhrköhlengebiet a.V., Vereinsregister: VR 518 Amtsgericht Gelsenkirchen, USt-ID: DE125018356 Vorstand: Prof. Dr. Werner Schlake (Vors.), Prof. Dr. Jürgen Kretschmann, Dr. Emanuel Grün, Dr. Dirk Waider, Prof. Dr. Lothar Dunemann (geschäftsf. Vorstand)



### How WU-B seals "actively" in a safe and permanent manner

The "active" sealing process of the WU-B seam sheet is triggered by the reaction of the various ingredients in the patented special coating in combination or contact with the constituents of the concrete. The crystallisation penetrates deep into the capillary system of the concrete through the active process of osmosis. The combination of different ingredients creates microfine crystallisation or sintering in the structure of the concrete building structure, which seals capillaries and shrinkage cracks securely and permanently, even displacing moisture.

This process takes place both on the side under water pressure and on the side away from water pressure. Without moisture, the components of the special coating are not active. Should they come into contact with moisture again at some point, the chemical reaction starts automatically along with the sealing process.

WU-B is an "active" sealing sheet with international patent protection.



Particles of the sheet coating



Particles of the sheet coating under the influence of water



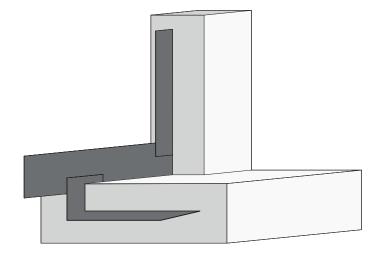
Pointed needle-like primary crystallites form a fibrous coating on the particles of the special coating, allowing to actively displace the water.

#### Installation example

- Labryrinth seal and swelling
- Crystallization seal "active"
- Promotion of sintering through limestone formation "active"
- Unique bond due to the structure of the special coating
- General test certificate from the building authorities (abP) is available

Insert the WU-B seam sheet actively with coating on both sides centrally in the joint and fix with the Q bracket. Joints are to be overlapped by only 5 cm. These are to be fixed with the joint clamp and actively self-seal. No joint bonding and no annoying film peeling.

Storage: Always store in a dry place. For curves and corners, simply bend the seam sheet into the appropriate shape.

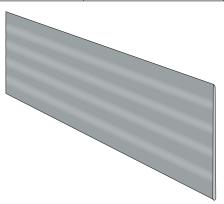




### **Product overview**

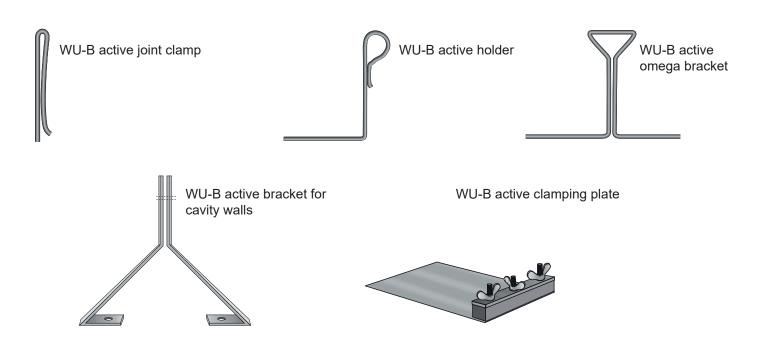
#### WU-B active seam sheet

Item no.	Туре	Dimensions mm	m / PU	Weight (kg/PU)
15660	WU-B active seam sheet	2,000 x 150 x 1.25	100	125.00



#### **WU-B** active accessory

Item no.	Туре	Requirement	Item / PU	Weight (kg/PU)
15664	WU-B active joint clamp	1 item / sheet	100	0.70
15663	WU-B active omega bracket	2 item / sheet	100	10.00
15661	WU-B active holder	2 item / sheet	100	10.20
15665	WU-B active bracket for cavity walls	2 item / sheet	100	5.50
15666	WU-B active clamping plate	1 item per joint	1	0.41



#### **Uncoated seam sheet**

Item no.	Туре	Dimensions mm	m / roll	Weight (kg/PU)
15671	Steel seam sheet, black	1.5 x 250	30	90.00
15672	Steel seam sheet, black	1.5 x 300	30	108.00
15673	Steel seam sheet, black	2.0 x 250	30	120.00
15674	Steel seam sheet, black	2.0 x 300	30	144.00

15675	Steel seam sheet, galvanized	1.5 x 250	30	90.00
15676	Steel seam sheet, galvanized	1.5 x 300	30	108.00
15677	Steel seam sheet, galvanized	2.0 x 250	30	120.00
15678	Steel seam sheet, galvanized	2.0 x 300	30	144.00



Quick building products

Innovative solutions

**WU-B** active seam sheet

### Injection hoses

#### Injection hose

IS 1 = 06/11 mm, easy to grout

Grouting media: PU resin, PU foam resin,

EP resin, acrylate

Maximum grouting length: 10 m

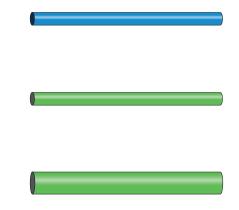
IS 2 = 06/11 mm, repeatedly groutable

**Grouting media:** PU resin, PU foam resin, EP resin, acrylate, cement paste, fine cement **Maximum grouting length:** 12 - 15 m

IS 3 = 11/19 mm, repeatedly groutable

Grouting media: PU resin, PU foam resin, EP resin, acrylate, cement paste, fine cement

Maximum grouting length: 12 - 15 m



#### Hose ends

Grouting end 11 mm





Grouting nipple 11 mm



Formwork packer M8 two-piece







Grouting nipple 19 mm



#### Injection agents

Cement-containing injection agents (as per ZTV-Ing, Part 3, Section 5 and associated TL/TP FG-ZL/ZS) for grouting gaps and cavities:

- ZCement suspension (ZS) for gap widths > approx.
   0.25 mm
- Cement paste (ZL) for gap widths > approx. 0.80 mm
- Cement mortar for larger cavities (e.g. backfilling weton-wet following the concreting process)

Plastic injection agents for grouting gaps with widths smaller than approx. 0.25 mm or for eliminating leaks:

- AAcrylic gels: 0.10 mm > gap widths < 0.25 mm (Attention: corrosion behaviour)
- Synthetic resins: 0.20 mm > gap widths < 0.25 mm</li>
   Polyurethanes (PUR) (as per ZTV-ING, Part 3, Section 5 and associated TL/TP FG-PUR)

### **Product overview**

#### Injection hose IS 1 (material W-PVC / colour blue)

Item no.	Туре	Inner Ø mm	Outer Ø mm	Max. grou- ting length m	m / roll	Weight (kg/m)
13653	IS 1	6	11	10	50	0.12

Grouting media: PU resin (crack seal), PU foam resin,

EP resin, acrylate\*

Openings: Every 12-14 mm in cross-axis arrangement

(size 3-5 mm)

Number of injections: resins: single, gels repeatedly

Labelling: control numbers

\*Only if the acrylate has no corrosion-promoting properties



#### Injection hose IS 2 (material PVC / colour green)

Item no.	Туре	Inner Ø mm	Outer Ø mm	Max. grou- ting length m	m / roll	Weight (kg/m)
13654	IS 2	6	11	12-15	100	0.11

Grouting media: PU resin (crack seal), PU foam resin,

EP resin, acrylate\*, cement paste, fine cement

Openings in inner hose: every 20 mm extended by 90°

- results in 60 openings per 1 metre Openings in outer hose: 5 mm Number of injections: multiple

**Labelling:** control numbers and metre marking \*Only if the acrylate has no corrosion-promoting properties



#### Injection hose IS 3 (material PVC / colour green)

Item no.	Туре	Inner Ø mm	Outer Ø mm	Max. grou- ting length m	m / roll	Weight (kg/m)
13655	IS 3	11	19	12-15	100	0.25

Grouting media: PU resin (crack seal), PU foam resin,

EP resin, acrylate\*, cement paste, fine cement

Openings in inner hose: every 20 mm extended by 90°

- results in 60 openings per 1 metre Openings in outer hose: 10 mm Number of injections: multiple

**Labelling:** control numbers and metre marking \*Only if the acrylate has no corrosion-promoting properties



#### LS ventilation hose

Item no.	Туре	Inner Ø mm	m / roll	Weight (kg/m)
13663	LS DN 11 transparent	11	50	0.10
136631	LS DN 11 red	11	50	0.10
136632	LS DN 19 transparent	19	50	0.18



#### **KVS** hose connector

Item no.	Туре	Outer Ø mm	Item / PU	Weight (kg/ PU)
13658	KSV DN 11	11	100	0.216
136581	KSV DN 19	19	100	0.670



### Sealing plug

Item no.	Туре	Size mm	Item / PU	Weight (kg/PU)
13662	Sealing plug DN 11	11	500	0.12
136621	Sealing plug DN 19	19	500	0.12



#### **Hose clamp**

Item no.	Туре	Size mm	Item / PU	Weight (kg/PU)
13656	Hose clamp DN 11	11	100	1.60
136561	Hose clamp DN 19	19	100	1.60



(Recommended distance: 15 cm)

Item no.	Туре	Size mm	Item / PU	Weight (kg/PU)
13661	Plastic clip DN 11	11	100	0.20
136611	Plastic clip DN 19	19	100	0.20



(For drill hole Ø: 5 mm, recommended distance: 15 cm)

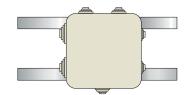
#### Hose clamp

Item no.	Туре	Size mm	Item / PU	Weight (kg/PU)
13676	SK DN 11	11	100	0.30
136761	SK DN 19	19	100	0.30



### **Custody box**

Item no.	Туре	Item / PU	Weight (kg/PU)
13664	Custody box	42	5.50
15624	Foam tape (10 m length x 19 mm width x 6 mm thickness, 20 items / box)		



### Formwork packer

Item no.	Туре	Size mm	Item / PU	Weight (kg/PU)
13657	Formwork packer 1-part M6	11	100	1.40
136571	Formwork packer 2-part M8	11	100	1.40
136572	Super formwork packer M8	11	100	1.03



(including injection nipple)

Item no.	Туре	Item / PU	Weight (kg/PU)
13672	Foam rubber sheet, black	100	0.30
136574	Extension tube for formwork packer M8	100	-
136573	Closing piece for formwork packer M8	100	1.85



#### Reinforcement holder

Item no.	Туре	Item / PU	Weight (kg/PU)
13673	Reinforcement holder, simple	250	19.50
136731	Reinforcement holder, double	250	19.50



#### **Grouting nipple**

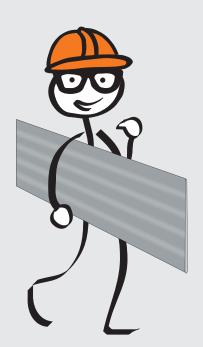
Item no.	Туре	Outer Ø mm	Item / PU	Weight (kg/PU)
13674	Grouting nipple complete M6 including nipple	11	100	1.50



#### **Grouting ends**

Item no.	Туре	Outer Ø mm	Item / PU	Weight (kg/PU)
13675	VE DN 11	11	50	1.75
136751	VE DN 19	19	50	1.85





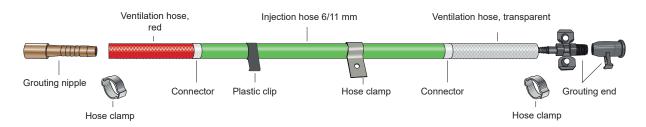


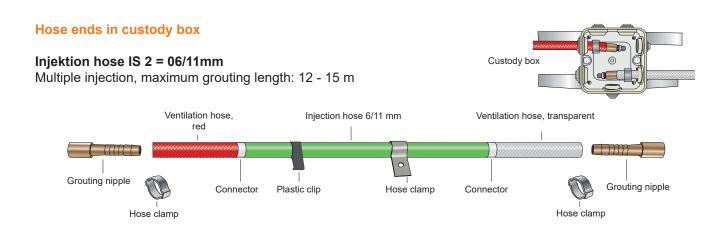
Our name stands for service, advice, development and delivery!

#### Hose ends outside the concreting

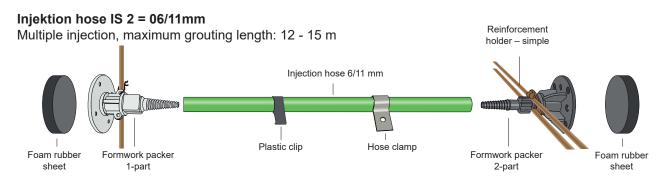
#### Injektion hose IS 2 = 06/11mm

Multiple injection, maximum grouting length: 12 - 15 m





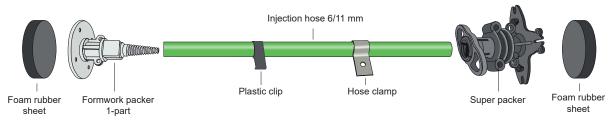
#### Hose ends fixed to reinforcement



#### Hose ends fixed to formwork

#### Injektion hose IS 2 = 06/11mm

Multiple injection, maximum grouting length: 12 - 15 m

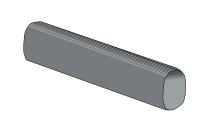


# **Joint tapes**

### Betonit swelling tape

Type	Coating	Rain protection	Sealing via	Swelling capacity
BQ	Talc-coated	-	Swelling	> 300%
BQR	Rain protection coating	2 - 3 days	Swelling	> 500%
BQR2	Rain protection coating	2 - 3 days	Swelling + sintering	> 300%

Item no.	Туре	Dimension mm	m / PU	Weight (kg/m)
13647	Betonit swelling tape BQ	10 x 20	50	0.32
13646	Betonit swelling tape BQ	16 x 21	20	0.61
13648	Betonit swelling tape BQ	18 x 24	30	0.70
136471	Betonit swelling tape Plus BQR	16 x 21	20	0.62
136481	Betonit swelling tape Plus BQR	18 x 24	30	0.78
136472	Betonit swelling tape Plus 2-phase BQR2	16 x 21	20	0.62
136482	Betonit swelling tape Plus 2-phase BQR2	18 x 24	30	0.78



Item no.	Туре	Length m	m / PU	Weight (kg/m)
13650	Holding rail	1	20	0.225



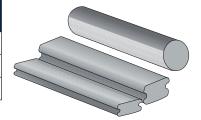
Item no.	Туре	Length m	m / PU	Weight (kg/m)
13649	Fixing grid	1	20	0.065

Item no.	Туре	Cartridge content/ml		Gewicht (kg/Stk.)
13652	CEMSTAR adhesive	300	20	0,3



### Swelling rubber

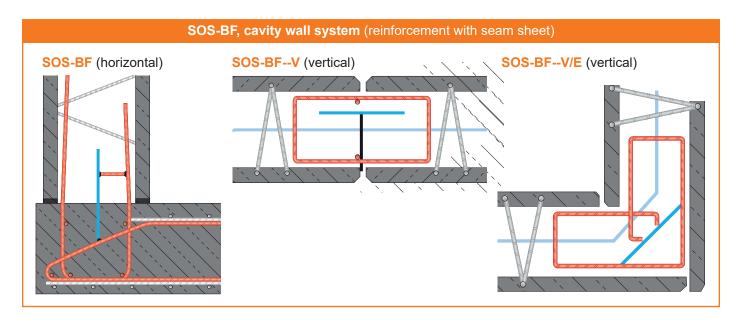
Item no.	Туре	Dimension mm	m / Rolle	m / VPE	Weight (kg/m)
13642	Swelling rubber CEMswell, angular	18 x 7	12	72	0.16
13643	Swelling rubber CEMswell, angular	23 x 15	6	30	0.40
13644	Swelling rubber CEMswell, round	23	5	20	0.57



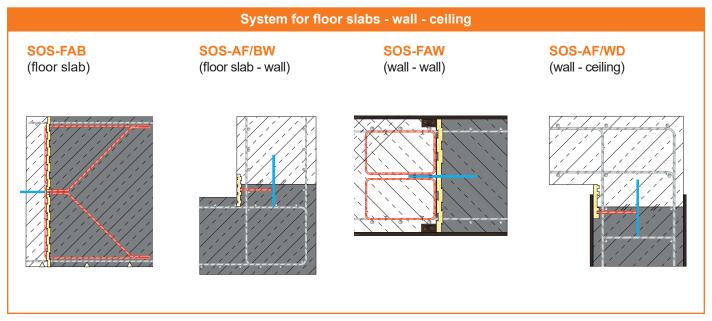
(swelling capacity > 400%; minimum concrete cover: 8 - 10 cm)

Item no.	Туре	ml		Gewicht (kg/Stk.)
13645	PU adhesive CEM 805 "active"	310 ml	12	0.51

## Other systems for construction waterproofing







# **Our location**





