


English

for faster construction

A black and white photograph of two construction workers on a site. They are wearing hard hats and safety harnesses. One worker in the foreground is using a hammer on a wooden formwork. The other worker is in the background, also working on the formwork. The structure appears to be a concrete slab or wall being prepared for pouring. The background shows vertical rebar and other construction elements.

Structural and Civil Engineering

Product Catalogue

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BT INNOVATION - FOR FASTER CONSTRUCTION

Products for structural and civil engineering

CONSTRUCTION SITES ARE COMPLEX. The opportunities are in the details. We have a precise understanding of the processes, including practical experience. We know what takes how long and when construction gets expensive. That's why we develop products that go a step further, tighten up processes, and make building faster.

Everything under one roof: research and development, design and sales – our multi-disciplinary teams are continuously in close communication with each other. Solutions that perfectly match the needs of customers are developed here cooperatively. Numerous patents protect our innovative ideas. The name BT innovation stands for quality products that are recognised around the world and are trusted and used by our many customers in over 70 countries. We attend national and international trade fairs and cooperate with trade partners.

Our expertise in the area of precast concrete elements is also value and frequently in demand. Our team is very experienced and globally active.

The service modules for analysis, planning, and implementation include all of the steps necessary to create sustainable competitive advantages.

BT innovation: Our name stands for pioneering product developments, solid consulting and customer orientation. We always maintain a high standard to offer the best possible solution for specific topics in the field of concrete construction, thus enabling a significant increase in the efficiency of all work processes. In this way, we send a clear signal about the strength of our innovations.

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For a current price list
please contact us:
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You can also use the download
area on our website.

PRODUCT HIGHLIGHTS

Why the BT-Spannschloss® (turnbuckle) makes construction faster:

- ⌘ dry, force-fitting, permanent connections
off precast concrete elements without concreting
- ⌘ simply screw it together by hand
- ⌘ weather-independent construction



CONNECT PRECAST CONCRETE ELEMENTS DRY AND FAST**ETA-19/0013**
European Technical Assessment

BT-Spannschloss® (turnbuckle)

The BT-Spannschloss® (turnbuckle) is part of an easy to use connection system – without additional materials and tools.

The BT-Spannschloss® (turnbuckle) enables efficient and precise assembly and durable connections for precast concrete elements. Using BT-Spannschloss® (turnbuckle) and corresponding connection materials, precast elements can be joined together without using mineral grouting. This means no curing

or standstill times due to low temperatures. The BT-Spannschloss® (turnbuckle) can be fully loaded straight away.

The building authority approval (Z-14.4-599) certifies the reliability of the product. The BT-Spannschloss® (turnbuckle) is offered in three sizes – M12, M16 and M20 – and is available in galvanised design or stainless steel.

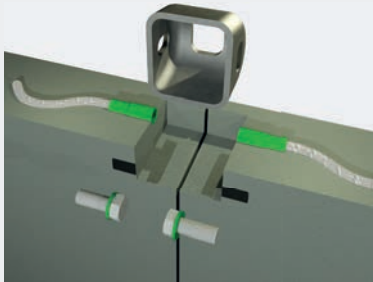
Applications

- ✓ **L-shaped retaining walls in flood protection**
- ✓ **Residential and commercial construction**
- ✓ **Agricultural systems**
(e. g. biogas plants, silos)
- ✓ **Sewer and civil engineering**
(e.g. shaft structures, media channels, amphibian tunnels)
- ✓ **Temporary structures**

Benefits

- ✓ **Dry bolted connection**
- ✓ **No joint grouting, no special tools**
- ✓ **Can be loaded immediately, no curing times**
- ✓ **Assembly regardless of weather, even at low temperatures or in case of precipitation**
- ✓ **Can be disassembled – removal of temporarily installed structures**
- ✓ **Three-point connection possible**

Application



01

Place the precast concrete elements next to each other and insert the BT-Spannschloss® in the recess provided. Then screw the bolts by hand to the fixing anchors.



02

Tighten the BT-Spannschloss® (turnbuckle) connection by using the ratchet combination wrench until the required joint width has been reached.



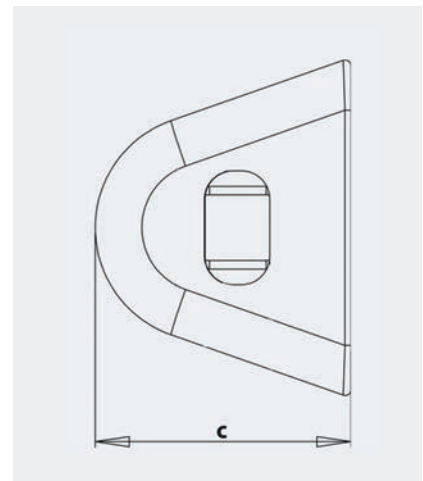
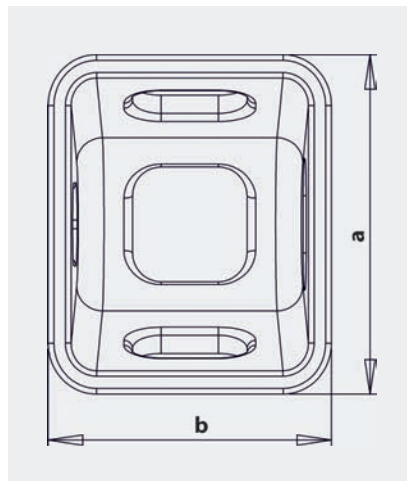
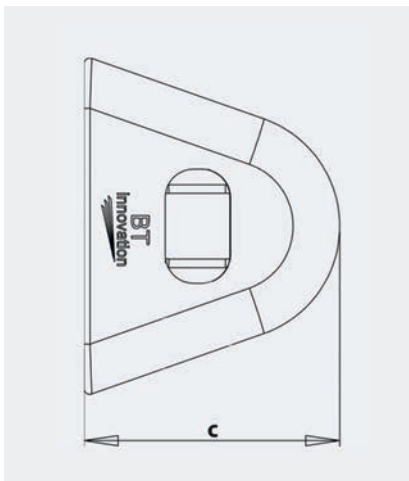
03

Fill the recess with a suitable mortar to protect the BT-Spannschloss® (turnbuckle) against corrosion.



THREE-POINT CONNECTION POSSIBLE!

Technical data



Product	a [mm]	b [mm]	c [mm]	Tensile strength N [kN]	Shear strength V [kN]
BT-Spannschloss® (turnbuckle) M12	70	70	51	33.7	9.4
BT-Spannschloss® (turnbuckle) M16	90	90	65	43.5	26.2
BT-Spannschloss® (turnbuckle) M20	120	100	90	52.2	24.8

* According to DIBt Approval Z-14.4-599

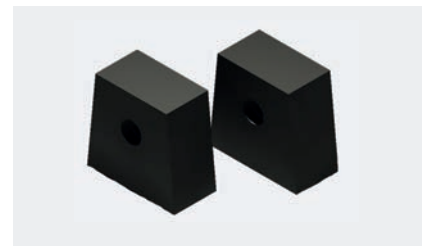
Item overview



BT-Spannschloss® (turnbuckle) available in 3 sizes,
material: Stainless steel or galvanised



Accessory fixing anchor



Accessory recess former,
available with or without magnet

BT-Spannschloss® (turnbuckle)

Item. no.	Product	Description	Info
4009086	BT-Spannschloss® (turnbuckle) M12 galvanised, set	including: 2 hexagon head bolts (ISO 4017 – M12 x 40 – 8.8 – tZn) 2 washers (ISO 7093 – 1-12-200 HV – tZn)	for wall thickness ≥ 6 cm ETA-19/0013
4009084	BT-Spannschloss® (turnbuckle) M12 stainless steel, set	including: 2 hexagon head bolts (ISO 4017 – M12 x 40 – A4-70) 2 washers (ISO 7093-1 – 12 – 200 HV – A4)	for wall thickness ≥ 6 cm
4009074	BT-Spannschloss® (turnbuckle) M16 galvanised, set	including: 1 hexagon head bolt (ISO 4017 – M16 x 40 – 8.8 – tZn) 1 hexagon head bolt (ISO 4017 – M16 x 50 – 8.8 – tZn) 2 washers (ISO 7093-1 – 16 – 200 HV – tZn)	for wall thickness ≥ 12 cm ETA-19/0013
4009083	BT-Spannschloss® (turnbuckle) M16 stainless steel, set	including: 1 hexagon head bolt (ISO 4017 – M16 x 40 – A4-70) 1 hexagon head bolt (ISO 4017 – M16 x 50 – A4-70) 2 washers (ISO 7093-1 – 16 – 200 HV – A4)	for wall thickness ≥ 12 cm
4009072	BT-Spannschloss® (turnbuckle) M20 galvanised, set	including: 2 hexagon head bolts (ISO 4017 – M20 x 60 – 8.8 – tZn) 2 washers (ISO 7093-1 – 20 – 200 HV – tZn)	for wall thickness ≥ 14 cm ETA-19/0013
4009085	BT-Spannschloss® (turnbuckle) M20 stainless steel, set	including: 2 hexagon head bolts (ISO 4017 – M20 x 60 – A4-70) 2 washers (ISO 7093-1 – 20 – 200 HV – A4)	for wall thickness ≥ 14 cm
4009123	BT-Spannschloss® (turnbuckle) starter set M16	including: 6 BT-Spannschloss® (turnbuckles) M16 galvanised, 6 M16 x 50 bolts, 6 M16 x 40 bolts, 12 washers M16, 12 T-Fixx® anchors M16 x 100	plus, free of charge: 1 ratcht combination wrench 24 mm, 6 disposable recess formers, 6 nailing plates M16
4009152	BT-Spannschloss® (turnbuckle) starter set M20	including: 6 BT-Spannschloss® (turnbuckles) M20 galvanised, 12 M20 x 60 bolts, 12 washers M20 12 T-Fixx® anchors M20	plus, free of charge: 1 ratchet combination wrench 30 mm, 6 disposable recess formers, 6 nailing plates M20

Accessories

Item. no.	Product	Description
8009132800	Recess former set for BT-Spannschloss® (turnbuckle) M12 magnetic	including: 2 cylinder head bolts ISO 4762 – M12 x 40 1 cylinder head bolt ISO 4762 – M12 x 80
8009100800	Recess former set for BT-Spannschloss® (turnbuckle) M16 magnetic	including: 2 cylinder head bolts ISO 4762 – M16 x 45 1 cylinder head bolt ISO 4762 – M16 x 90
8009099800	Recess former set for BT-Spannschloss® (turnbuckle) M20 magnetic	including: 2 cylinder head bolts ISO 4762 – M20 x 45 1 cylinder head bolt ISO 4762 – M20 x 100
3003213	T-FIXX® sleeve anchor® – M12 x 50 – gv	with European Technical Assessment ETA-13/0222
3003214	T-FIXX® sleeve anchor® – M12 x 70 – gv	with European Technical Assessment ETA-13/0222
3003203	T-FIXX® sleeve anchor® – M12 x 95 – gv	with European Technical Assessment ETA-13/0222
3003151	T-FIXX® sleeve anchor® – M16 x 60 – gv	with European Technical Assessment ETA-13/0222
3003150	T-FIXX® sleeve anchor® – M16 x 100 – gv	with European Technical Assessment ETA-13/0222
3003149	T-FIXX® sleeve anchor® – M16 x 125 – gv	with European Technical Assessment ETA-13/0222
3003212	T-FIXX® sleeve anchor® – M20 x 70 – gv	with European Technical Assessment ETA-13/0222
3003153	T-FIXX® sleeve anchor® – M20 x 100 – gv	with European Technical Assessment ETA-13/0222
3003152	T-FIXX® sleeve anchor® – M20 x 145 – gv	with European Technical Assessment ETA-13/0222
3003163	DB 682 waved anchor – M12 x 108 – gv	with European Technical Assessment ETA-11/0288
3003067	DB 682 waved anchor – M16 x 172 – gv	with European Technical Assessment ETA-11/0288
3003064	DB 682 waved anchor – M20 x 192 – gv	with European Technical Assessment ETA-11/0288
3003331	DB 682 waved anchor – M12 x 108 stainless steel	with European Technical Assessment ETA-11/0288
3003134	DB 682 waved anchor – M16 x 172 stainless steel	with European Technical Assessment ETA-11/0288
3003184	DB 682 waved anchor – M20 x 192 stainless steel	with European Technical Assessment ETA-11/0288
4009089	Three-point adapter for BT-Spannschloss® (turnbuckle) M12 galvanised	for manufacturing three-point connections ETA-19/0013
4009090	Three-point adapter for BT-Spannschloss® (turnbuckle) M16 galvanised	for manufacturing three-point connections ETA-19/0013
4009091	Three-point adapter for BT-Spannschloss® (turnbuckle) M20 galvanised	for manufacturing three-point connections ETA-19/0013



Application examples

- 01** BT-Spannschloss® (turnbuckle) in **residential construction** (Deutsche Reihenhäuser AG)
- 02** BT-Spannschloss® (turnbuckle) in **agricultural construction** (biogas plant)
- 03** BT-Spannschloss® (turnbuckle) in combination with RubberElast in **sewer construction**
- 04** **Flood protection wall** under construction
- 05** BT-Spannschloss® (turnbuckle), **three-point connection**



PRODUCT HIGHLIGHTS

Why RubberElast® makes construction more efficient:

- ⌘ easy to install
- ⌘ no curing
- ⌘ waterproof immediately after assembly
- ⌘ application from -10°C to +40°C



SEALING TAPE FOR COMPONENT JOINTS BETWEEN PREFABRICATED ELEMENTS

RubberElast®

RubberElast® is a proven, self-adhesive crushing joint tape for the secure and pressure-tight sealing of structural joints between prefabricated elements.

RubberElast® can be processed quickly and easily without additional tools. The self-adhesive RubberElast® is applied to the surface of a structural element on one side. Next, the precast element is mounted and the RubberElast® in the structural joint is compressed so that the structural joint is filled. After compression, the joint is immediately waterproof. We recommend the use of BT-Spannschloss (turnbuckle) to assemble precast walls. The material remains continuously elastic, which permanently seals the joint. Installation should take place within a temperature range from -10 °C to 40 °C.

RubberElast® also retains its elasticity at low temper-

atures. In addition to very good adhesion to concrete, the sealing tape also exhibits excellent adhesive qualities on metals, glass and other materials.

Typical usages include sealing precast concrete slabs/joints during hydraulic construction, as well as cellars and other waterproof structures, including flange joints. Thanks to its resistance to aggressive process liquids and gases, RubberElast® is the perfect option, even for applications in the wastewater sector.

A test certificate from the Material Testing Institute of Braunschweig guarantees its reliability.

Applications

- ✓ **Hydraulic construction**
(e. g. L-shaped retaining walls in flood protection)
- ✓ **Sewer and commercial engineering**
(e.g. shaft structures, media ducts, amphibian tunnels)
multi-storey
- ✓ **Residential & commercial construction**
(e.g. waterproof cellars, white tanks)

Properties



Water pressure-tight
up to 0.5 bar



Application from
-10°C to +40°C



No swelling
in contact with water



Resistant to
weather, acids, alkalis
and salt



Immediately
waterproof



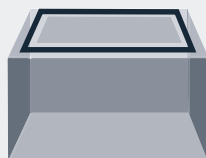
Permanently
elastic

Application



01

Set precast concrete element



02

Apply RubberElast® to the element to be sealed (the substrate must be free of soiling, grease, and oils)



03

Place the precast concrete elements on top of each other (press elements together in case of vertical joints) and compress RubberElast® up to 80%



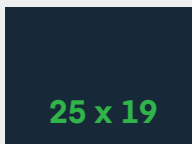
NOTE: THE PROCESSING INSTRUCTIONS IN THE TECHNICAL DATA SHEET APPLY.

Sizes: RubberElast® is available in a variety of sizes



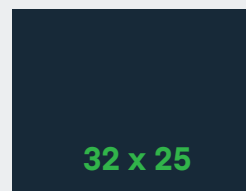
17 x 17

Joint width: 3.4 mm
wall thickness min. 8.5 cm



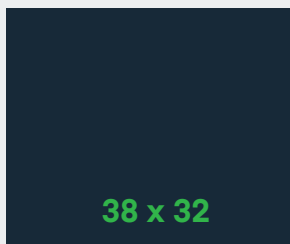
25 x 19

Joint width: 3.8 mm
wall thickness min. 12.5 cm



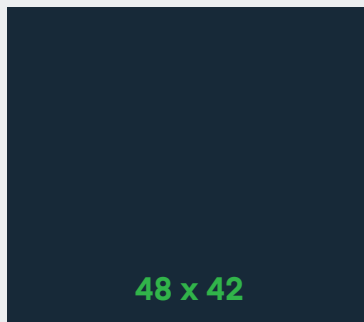
32 x 25

Joint width: 5 mm
wall thickness min. 16 cm



38 x 32

Joint width: 6.4 mm
wall thickness min. 19 cm



48 x 42

Joint width: 8.4 mm
wall thickness min. 24 cm

Item overview



RubberElast® sealing tape

RubberElast®

Item no.	Size	Joint width	Wall thickness
5002052	RubberElast® 17 x 17 mm	3.4 mm	8.5 cm
5002053	RubberElast® 25 x 19 mm	3.8 mm	12.5 cm
5002054	RubberElast® 32 x 25 mm	5.0 mm	16.0 cm
5002055	RubberElast® 38 x 32 mm	6.4 mm	19.0 cm
5002056	RubberElast® 48 x 42 mm	8.4 mm	24.0 cm

Technical information

Colour	black
Processing form	self-adhesive on rolls with protective foil
Pressure resistance	1.39 N/mm ² with fast compression by 80%
Max. joint offset	up to 7 mm for sizes: 38 x 32, 48 x 42 up to 3 mm for sizes: 32 x 25, 25 x 19, 17 x 17
Temperature resistance	-40°C to +60°C
Processing temperature	-10°C to +40°C for component and material temperature



NOTE: FOR ADDITIONAL INFORMATION, PLEASE REFER TO THE TECHNICAL DATA SHEET.



01

Application examples

- 01** RubberElast® applied to **box culverts**
- 02** RubberElast® – sealing for **manholes**
- 03** RubberElast® – sealing for **flood protection walls**
- 04** RubberElast® – sealing for **L-shaped retaining walls**



02



03



04

PRODUCT HIGHLIGHTS

Why SynkoElast® makes construction more efficient:

- ⌘ quick and easy installation
- ⌘ no swelling in contact with water
- ⌘ processing in fresh concrete
- ⌘ follow-up sealing for working joints possible



SEALING TAPE FOR WORKING JOINTS AND CRACK CONTROL JOINTS

SynkoElast®

SynkoElast® is a simple to use, internal joint tape on a polymer bitumen base. Used in working and crack control joints in waterproof in-situ concrete structures.

SynkoElast® can be applied both to fresh concrete and set concrete (primer required). Unwanted water circulation is prevented by the solid connection to the surrounding concrete. In case of contact with water, SynkoElast® does not swell, which means it can be laid during rain, or even be applied to slim

structural components without fear of concrete spalling. It also provides a durable seal where water levels fluctuate. With SynkoElast®, we offer a simple and quick-to-use sealing solution that will save you time and money.

SynkoElast® has been tested for general building approval at a water pressure of up to 2 bar.

Applications

- ✓ Working and crack control joints in in-situ concrete
- ✓ For concreting the floor slab in multiple sections
- ✓ Element wall joints in combination with crack control joints and shuttering elements
- ✓ Connection of set concrete with in-situ concrete
- ✓ Connection of the floor slab to the wall and for wall and ceiling connections

Properties



Water pressure-tight
up to 2 bar



Processing from
0°C to 35°C

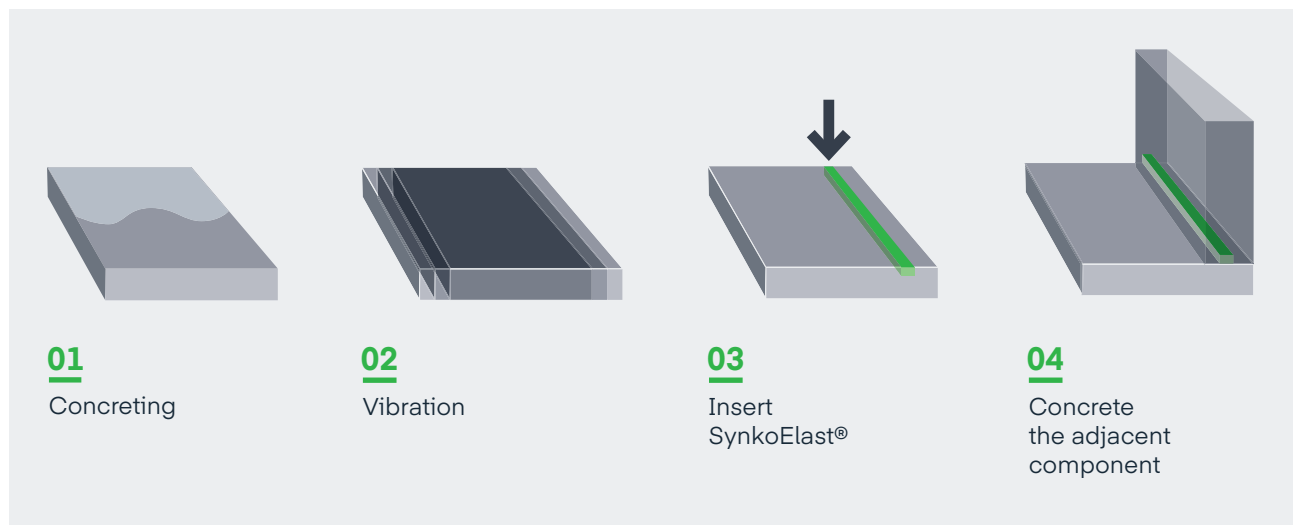


No swelling
in contact with water

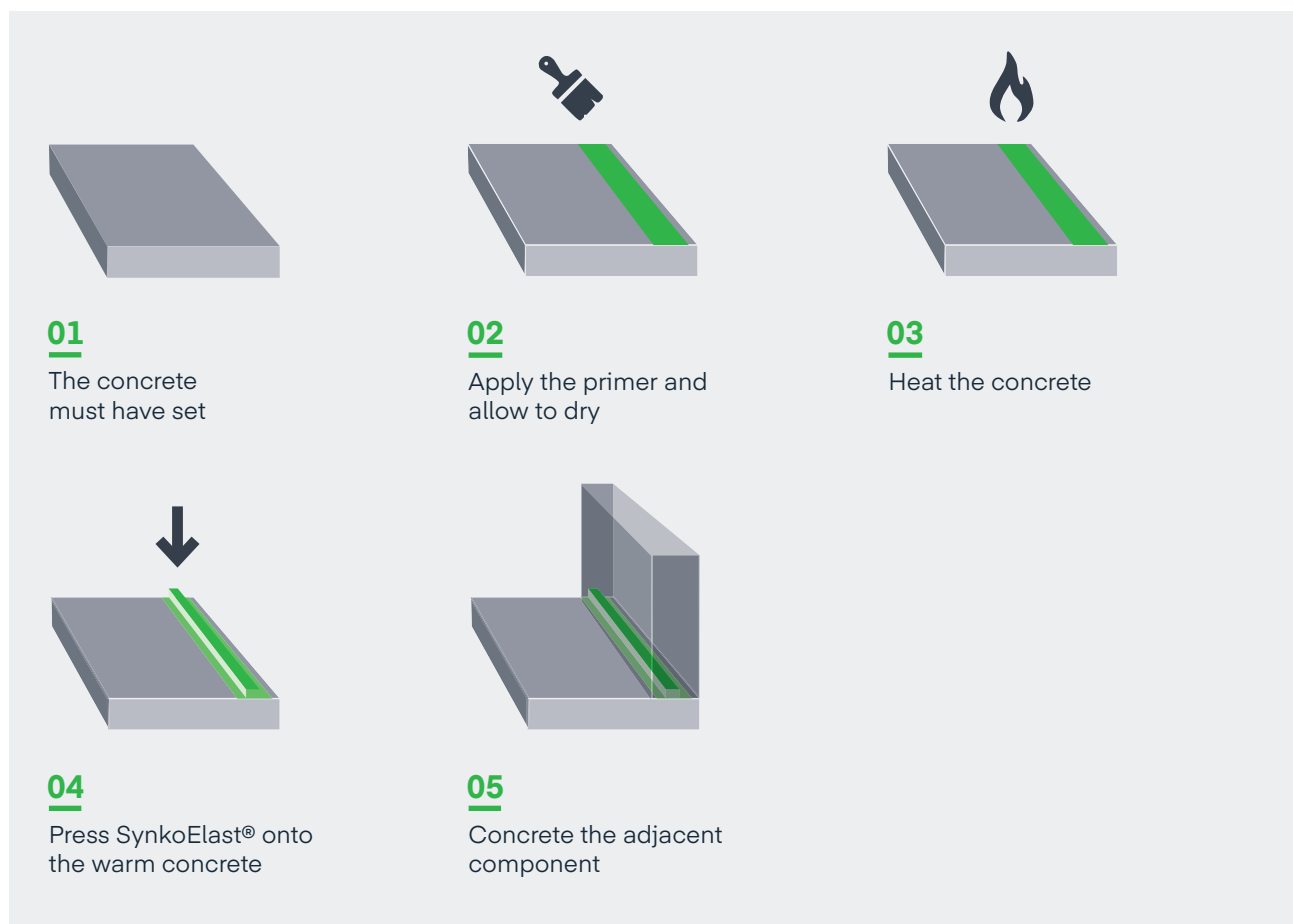


Resistant to
weather, acid, alkali,
and salt

Application fresh concrete



Application set concrete



NOTE: THE PROCESSING INSTRUCTIONS IN THE TECHNICAL DATA SHEET APPLY.

Item overview



SynkoElast® sealing tape



Accessories SynkoElast® primer

SynkoElast®

Item no.	Product	Dimensions	Application	Info
5001051	SynkoElast® 30x20	30 mm x 20 mm, 4 m/roll	Working joint sealing	24 m/box
5001054	SynkoElast® primer	3.79 l/bucket	for set concrete	other sizes available on request
5001061	SynkoElast® crack control profile	Profile width 60 mm	Element wall up to 24 cm	Length 3.0 m
5001055	SynkoElast® crack control profile	Profile width 80 mm	In-situ concrete wall up to 19 cm Element wall 25-29 cm	Length 2.75 m
5001056	SynkoElast® crack control profile	Profile width 100 mm	In-situ concrete wall up to 20-24 cm Element wall 30-37 cm	Length 2.75 m
5001057	SynkoElast® crack control profile	Profile width 125 mm	In-situ concrete wall up to 25-29 cm Element wall 38-45 cm	Length 3.0 m
5001058	SynkoElast® crack control profile	Profile width 150 mm	In-situ concrete wall up to 30-34 cm	Length 3.0 m
5001059	SynkoElast® crack control profile	Profile width 175 mm	In-situ concrete wall up to 35-40 cm	Length 3.0 m
5001063	SynkoElast® shuttering profile	Height 10 to 15 cm	Shuttering element for working joints	Length 2.25 m
5001064	SynkoElast® shuttering profile	Height 16 to 19 cm	Shuttering element for working joints	Length 2.25 m
5001065	SynkoElast® shuttering profile	Height 20 to 25 cm	Shuttering element for working joints	Length 2.25 m
5001066	SynkoElast® shuttering profile	Height 26 to 30 cm	Shuttering element for working joints	Length 2.25 m
5001087	SynkoElast® shuttering profile	Height 50 cm	Shuttering element for working joints	Length 2.25 m

Technical information

Colour	black
Processing forme	on rolls with protective foil
Adhesive tensile strength	> 18 kPa on concrete
Max. joint offset	up to 3 mm for SynkoElast® 30 x 20
Temperature resistance	-40°C to +70°C
Processing temperature	0°C to +35°C for component and material temperature



NOTE: THE PROCESSING INSTRUCTIONS IN THE TECHNICAL DATA SHEET APPLY.



01

Application examples

- 01** SynkoElast® between the floor slab and wall
- 02** Use of SynkoElast® as a shuttering element
- 03** Use of SynkoElast® as a crack control joint
- 04** Use of SynkoElast® in container construction



02



03



04

PRODUCT HIGHLIGHTS

Why InnoElast® makes construction more efficient:

- ⌘ easy to process in a single work procedure without primer
- ⌘ can be applied to moist ground as low as -3°C
- ⌘ permanently elastic, suitable for expansion joints
- ⌘ solvent-free and low shrinkage



PERMANENTLY ELASTIC, 1-COMPONENT JOINT SEALANT

InnoElast® type 1 and type 2

InnoElast® systems are modern, 1-component, universally usable sealants. InnoElast® sealants can be used to seal expansion and connection joints reliably and permanently, both indoors and out.

InnoElast® sealants possess excellent adhesive and application properties, allowing them to be used without primer on substrates such as concrete, stone, wood, metal and many others. InnoElast® can also be used on moist concrete surfaces as low as -3 °C. InnoElast sealant paste is solvent-free with exceptionally low shrinkage.

The sealant paste is so stable that joints of 5 cm width can be securely filled before it hardens into an elastic, rubber-like material.

The soft and permanently elastic InnoElast® type 1 is a sealant with a high movement absorption capacity of $\pm 25\%$. Expansion joints in facades, interior floors and exterior pathways are typical uses. The harder, permanently elastic InnoElast® type 2 is used to seal construction joints against pressing water. It is extremely robust, resistant to many chemicals and withstands pressing water up to 4.8 m water column. Joints in the cellar and wastewater sector are typical uses.

Applications type 1

- ✓ Residential and commercial construction, even in cold climates
- ✓ Exterior and interior facades
- ✓ Cellars, floors, roofs, windows, and doors
- ✓ Sealing against non-pressing water

Applications type 2

- ✓ Residential and commercial construction, even in cold climates
- ✓ Exterior and interior facades
- ✓ Cellars, floors, roofs, windows, and doors
- ✓ Sealing against non-pressing and pressing water
- ✓ Civil engineering, wastewater sector, chemically stressed areas

Properties type 1



Solvent-free and low shrinkage



Can be applied to moist substrates as low as -3°C



Weather and UV-resistant



Permanently elastic



Up to 25% expansion absorption



Can be used without primer

Properties type 2



Solvent-free and low shrinkage



Can be applied to moist substrates as low as -3°C



Weather and UV-resistant



Permanently elastic



Up to 10% expansion absorption



Can be used without primer

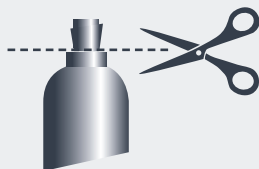


High resistance to chemicals



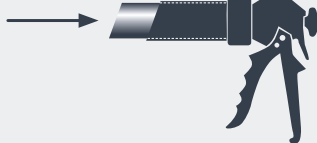
Water pressure-tight up to 0.48 bar

Application



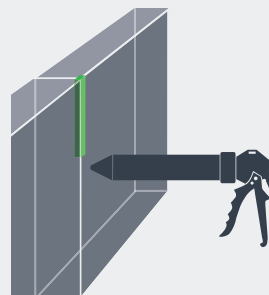
01

Cut the tubular bag open on top with scissors



02

Insert the tubular bag into the the sealing gun



03

Fill the joint with InnoElast® Type 1 or Type 2



NOTE: THE PROCESSING INSTRUCTIONS IN THE TECHNICAL DATA SHEET APPLY.

Item overview



InnoElast® type 1 // type 2
Joint sealant

InnoElast®

Item no.	Product	Description	Info
5004113	InnoElast® – type 1 grey*, 600 ml tubular bag	Special polymer sealant and adhesive	Joint thickness 10 mm < x < 50 mm
5004115	InnoElast® – type 2 black*, 600 ml tubular bag	Special polymer sealant and adhesive	Joint thickness 10 mm < x < 50 mm

*additional colours available in batch orders



01

Application examples

- 01** Masking of joint edges
- 02** Filling of joint with InnoElast® type 1
- 03** InnoElast® type 2 for sealing of drains
- 04** InnoElast® for construction of ramps



02



03



04

Application examples

- 05** InnoElast® type 1 for **staircase joints**
- 06** InnoElast® for **tunnel construction**
- 07** InnoElast® for **floor joints**
- 08** InnoElast® type 2 for **wide vertical joints**



05



06



07



08

PRODUCT HIGHLIGHTS

Why LiquidElast® makes construction easier:

- ⌘ easy to process in a single work procedure without primer
- ⌘ can be applied to moist substrate at temperatures as low as 0°C
- ⌘ permanently elastic, crack-bridging up to 5 mm
- ⌘ solvent-free and low shrinkage



THE FLEXIBLE SEALANT FOR SURFACES AND JOINTS

LiquidElast® type S and type V

LiquidElast® is a universal, elastic, and water pressure-tight sealant against pressing water for surfaces and joints in the entire construction sector. This single component sealant can be used both indoors and out.

LiquidElast® is used as a surface, bonding or joint sealant. After curing, LiquidElast® forms a rubber-like waterproof membrane to protect the structural elements behind it. After curing, the flexibility of LiquidElast® allows crack-bridging up to 5 mm. LiquidElast® can be applied to dry and damp

concrete surfaces at structural element temperatures as low as 0°C (ice-free surfaces) and seals reliably to a maximum water immersion depth of 10 m.

LiquidElast® Type S (spreadable) is brushed onto the substrate, while fluid LiquidElast® Type V (cast-ready) is poured onto horizontal surfaces or joints.

LiquidElast® is the easiest solution wherever an individual sealing membrane adapted to the structure is required as a surface barrier, even for pressing water.

Applications type S

- ✓ Residential and commercial construction, even in cold climates
- ✓ In areas of structures with soil contact
- ✓ Cellars, floors and containers
- ✓ Water pressure-tight sealing

Applications type V

- ✓ Residential and commercial construction, even in cold climates
- ✓ In areas of structures with soil contact
- ✓ Cellars and floors
- ✓ Water pressure-tight sealing
- ✓ For horizontal surfaces and joints

Properties type S and V



Water pressure-tight
up to 1.0 bar



Can be applied to
moist substrates as
low as 0°C



Crack-bridging up
to 5 mm



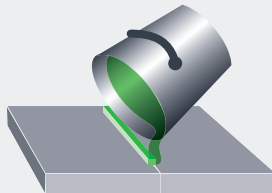
Permanently elastic

Application



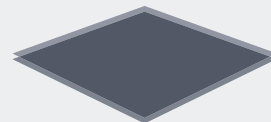
01

Fill the bag contents
into a bucket



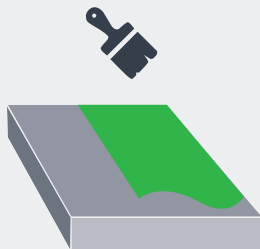
02

Apply or pour into the joint,
or spread on the surface



03

Insert fleece where necessary
(e.g. cracked concrete, corners,
joints, etc.)



04

Apply the 2nd layer



NOTE: THE PROCESSING INSTRUCTIONS IN THE TECHNICAL DATA SHEET APPLY.

Item overview



LiquidElast® type S
Sealing for surfaces and joints



LiquidElast® type V
Sealing for surfaces and joints

LiquidElast®

Item no.	Product	Description	Info
5004143	LiquidElast® – type S , 7 kg tubular bag	Special polymer sealing and adhesive	Colour: grey, spreadable
5004153	LiquidElast® – type S , 1 kg tubular bag	Special polymer sealing and adhesive	Colour: grey, spreadable
5004144	LiquidElast® – type V , 7 kg tubular bag	Special polymer sealing and adhesive	Colour: grey, Self-levelling, for surfaces and joints
5004146	LiquidElast® – type V , 1 kg tubular bag	Special polymer sealing and adhesive	Colour: grey, Self-levelling, for surfaces and joints
5004149	LiquidElast® accelerator , 420 g bottle	For curing independent of humidity, e.g. in case of deep joints	
5004235	LiquidElast® – fleece , 50 m ² /roll	For insertion into LiquidElast® in case of high load	

Technical properties

	type S	type V
Colour	grey	grey
Processing form	1-component	1-component
Crack-bridging	up to 5 mm as a membrane	up to 5 mm as a membrane
Max. expansion absorption	15% in joints	20% in joints
Temperature resistance	-40°C to +80°C	-40°C to +80°C
Processing temperature	0°C to +35°C	0°C to +35°C
Complete curing	approx. 3 mm/24h	approx. 3 mm/24h



01

Application examples

- 01** Sealing for walls with LiquidElast® type S
- 02** Sealing for joints with LiquidElast® type V
- 03** Floor sealing with LiquidElast® type V
- 04** Floor sealing with LiquidElast® type V in entrance area



02



03



04

PRODUCT HIGHLIGHTS

Why the ProElast® System makes construction more reliable:

- ⋮ pressure – resistant up to 2 bar water
- ⋮ durable – resistant to weather and UV radiation
- ⋮ high chemical resistance with InnoElast type 2



THE RELIABLE SEALING SYSTEM AGAINST PRESSING WATER

ProElast® System

The reliable ProElast® System is an external sealing system for working joints and crack-control sections that is capable of resisting high water pressure.

The proven ProElast® System is an easy-to-use, 2-part sealing system. It consists of the robust ProElast® EPDM foil and highly adhesive InnoElast® adhesive and sealant. The ProElast® System is an external strip-shaped sealant for working and crack-control joints. In addition to high watertightness, the system is highly UV and weather-resistant.

The ProElast® System benefits from the unique adhesive and processing properties of InnoElast®. The system can be processed starting at a component temperature of -3 °C and on matte-moist substrates.

Usual applications include subsequent sealing of structural element joints, cracks and crevices in cellars, shafts, containers, walls, foundations and also roofs.

Applications

- ✓ Working and crack control joints in waterproof concrete construction
- ✓ Joint, crack, and crevice sealing in new buildings and refurbishments
- ✓ For shafts, containers, cellars, underground garages, roofs, balconies, etc.
- ✓ In civil engineering, wastewater (drainage), for agricultural construction*
- ✓ Sealing with high chemical resistance with InnoElast® Type 2

*not approved by AwSV (Ordinance on Installations for the Handling of Substances Hazardous to Water)

Properties



Water pressure-tight
up to 2 bar



Application on moist,
ice-free substrates
from -3°C



Weather and
UV-resistant

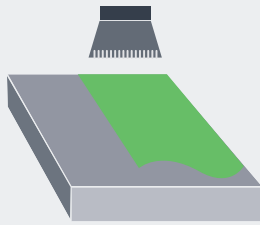


InnoElast® Type 2 =
high chemical
resistance



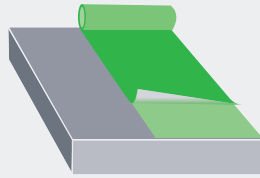
Can be used
without primer

Application



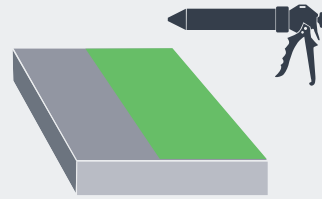
01

Apply InnoElast®, spread with a toothed trowel



02

Unroll ProElast® foil and brush out air bubbles



03

Edge sealing with InnoElast®



NOTE: THE PROCESSING INSTRUCTIONS IN THE TECHNICAL DATA SHEET APPLY.

Technical properties

	ProElast® 1.0	ProElast® 1.5
Foil thickness	1.0 mm	1.5 mm
Colour	black	black
Tensile strength	> 6.0 N/mm ²	> 9.0 N/mm ²
Continuous cracking resistance	> 50 N	> 50 N
Shearing resistance joint adhesive seam	> 175 N/50 mm	> 175 N/50 mm
Temperature resistance	up to 120°C	up to 120°C

Item overview



InnoElast® – type 1 grey
InnoElast® – type 2 black

ProElast®

ProElast® System

Item no.	Product	Contents	Application
5004050	ProElast® – 1.0, b = 200 mm	Special EPDM sealing foil, L =25 m	
5004112	ProElast® – 1.0, b = 300 mm	Special EPDM sealing foil, L =25 m	
5004128	ProElast® – 1.0, b = 400 mm	Special EPDM sealing foil, L =25 m	
5004117	ProElast® – 1.0, b = 500 mm	Special EPDM sealing foil, L =25 m	
5004147	ProElast® – 1.0, b = 750 mm	Special EPDM sealing foil, L =25 m	
5004246	ProElast® – 1.0, b = 1,000 mm	Special EPDM sealing foil, L =25 m	
5004127	ProElast® – 1.0, b = 1,500 mm	Special EPDM sealing foil, L =25 m	
5004113	InnoElast® – Type 1 grey	600 ml tubular bag	Special polymer sealant and adhesive
5004115	InnoElast® – Type 2 black	600 ml tubular bag	Special polymer sealant and adhesive



01

Application examples

- 01** ProElast® for „zebra-like“ tank
- 02** ProElast® for roof sealing
- 03** ProElast® for facade sealing
- 04** ProElast® for roof sealing



02



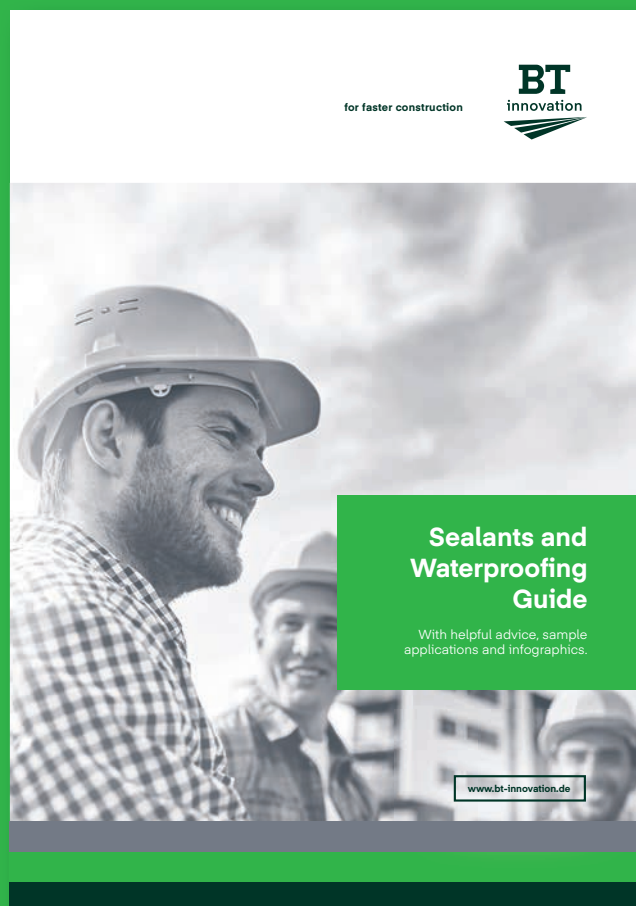
03



04

Sealants and Waterproofing Guide

WITH HELPFUL ADVICE, APPLICATION EXAMPLES AND INFOGRAPHICS.



For our Sealants and Waterproofing Guide please contact us by email **info@bt-innovation.de** or use the download area on our website.

PRODUCT HIGHLIGHTS

Why Syflex® makes construction more flexible:

- ⋮ flexible formwork system for straight lines, corners, and curves
- ⋮ durable – reusable
- ⋮ ultra-light



FLEXIBLE SHUTTERING FOR STRAIGHT LINES AND CURVES

Syflex®

Straight lines, curves and corners can be created with ease using this flexible shuttering system. Syflex® is the ideal solution for slab, edge and strip foundation shuttering.

The Syflex system consists of a shuttering plank and a system eccentric, which can be quickly fastened to or detached from a beam (using a peg or similar). It is manufactured with a special plastic, making it very flexible and light. Because of the material proper-

ties, Syflex® is suited ideally for producing curves, corners and also straights.

Profile cavities provide additional lightness and allow two planks to be joined together with a plug system. In addition, the smooth surface and flexibility of the shuttering beams allow multiple usage.

Applications

- ✓ Slabs, edge and strip foundation formwork
- ✓ Ceiling edge and ring beam formwork
- ✓ Bordering
- ✓ Silo construction
- ✓ Roundabouts

Benefits

- ✓ Ultra-light, elastic material
- ✓ Individual shaping possible by cutting on-site
- ✓ Fast assembly and disassembly

Application

01

Syflex shuttering elements can be fastened with pegs, boards or fastening brackets. The distance of the fastening depends on the subsoil properties and the maximum tolerated deflection of the shuttering elements. In order to achieve a higher profile rigidity, it is possible to stiffen the shuttering element in the cavities with a galvanised U-profile. We recommend setting the pegs/boards closer in curves to absorb the resulting tension. In case of a joint between two shuttering elements and corner formations, the pegs/boards must be positioned close to them.



02

After setting the bracing (pegs, boards, shuttering bracket), the Syflex® shuttering profile is leaned against the bracing and fastened by means of a system eccentric. To do this, the Syflex® system eccentric is positioned on the rear side of the shuttering element and turned into the groove. The shuttering element is fastened to the brace by switching over the eccentric lever.



03

To align the shuttering to the exact height, loosen the system eccentric slightly and the shuttering element can then be adjusted according to the height. Then tighten the system eccentric again. The work is then finished.



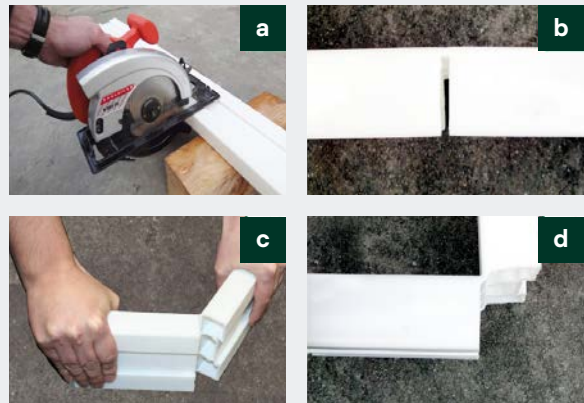
NOTE: THE PROCESSING INSTRUCTIONS IN THE TECHNICAL DATA SHEET APPLY.

Assembly

01

Outside corner

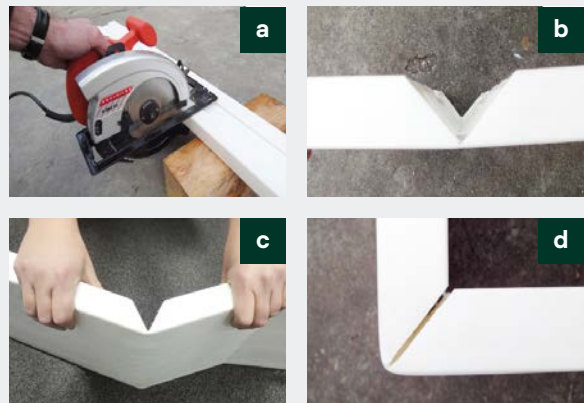
For outside corners, the shuttering elements are sawn in at appr. 3 cm at the corresponding place backside and afterwards they are being kinked.



02

Inside corner

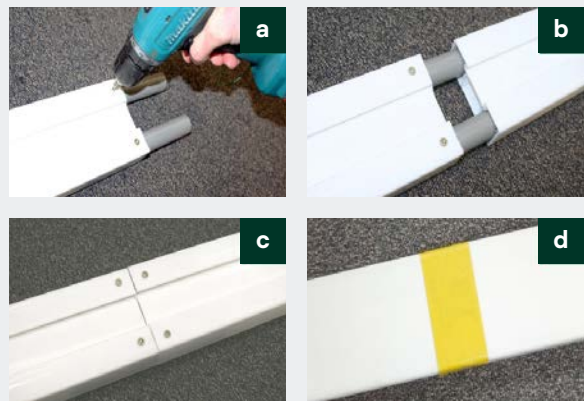
For inside corners, the shuttering elements are cut to a mitre of appr. 3 cm on the back and then kinked accordingly.



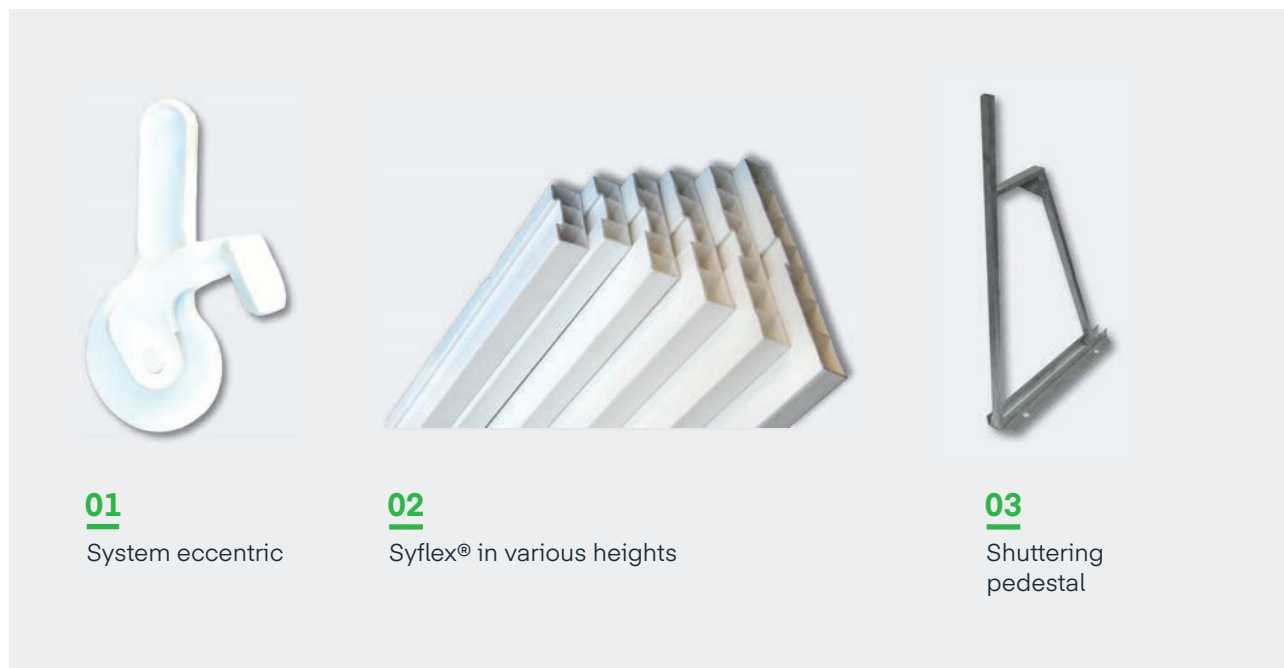
03

Connection

The connection of two shuttering elements is achieved by means of two plastic tubes which are inserted into the shuttering element. The tubes are inserted halfway into the first shuttering element and secured with a screw. Now insert the first shuttering element into the second, push them together and fix with screws. Finally, the joint is covered with adhesive tape. Finished!



Item overview



Syflex®

Item no.	Product	Description
2001066	Syflex® 100 mm flexible shuttering element	Element length 5.0 m 800 m / pallet
2001065	Syflex® 150 mm flexible shuttering element	Element length 5.0 m 260 m / pallet
2001064	Syflex® 200 mm flexible shuttering element	Element length 5.0 m 180 m / pallet
2001063	Syflex® 250 mm flexible shuttering element	Element length 5.0 m 180 m / pallet
2001062	Syflex® 300 mm flexible shuttering element	Element length 5.0 m 150 m / pallet

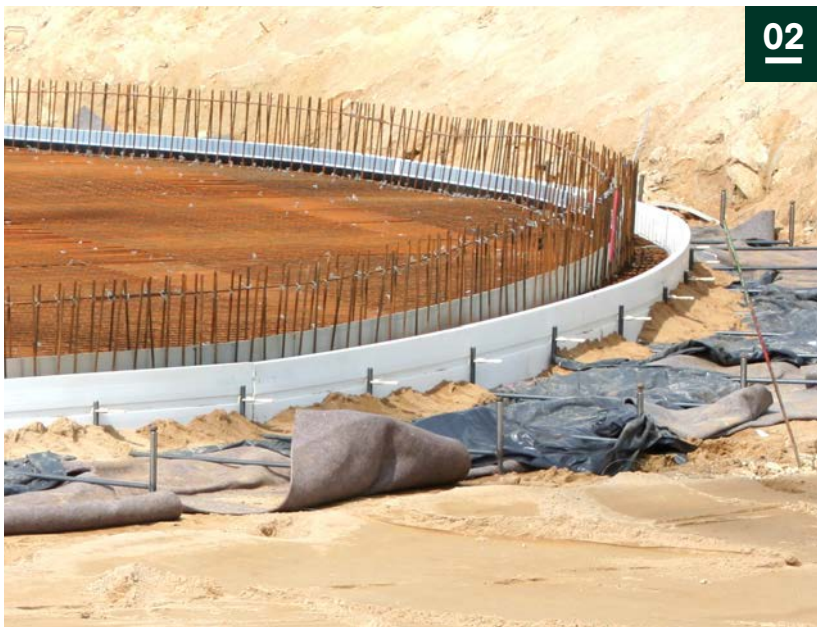
Accessories

Item no.	Product	Description
2001055	Syflex® system eccentric	50 pieces / bag
2001056	Syflex® shuttering pedestal	H = 100 cm; galvanised
2002303	Peg 110 cm; D = 20 mm	Head and square point forged
2002131	Peg 80 cm; D = 20 mm	With head



Application example

- 01** Syflex® as round slab edge shuttering
- 02** Syflex® as shuttering for tank slabs
- 03** Syflex® as strip foundation
- 04** Syflex® as round shuttering
- 05** Syflex® as strip foundation



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