

English

For faster construction



Sealing Guide

A Guide to the World of
Elast® Sealants and Waterproofing

www.bt-innovation.de

Call us:
+49 (0)391.73 52 0

Write to us:
export@bt-innovation.de

www.bt-innovation.de

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We will be glad to send you our current sealing guide.

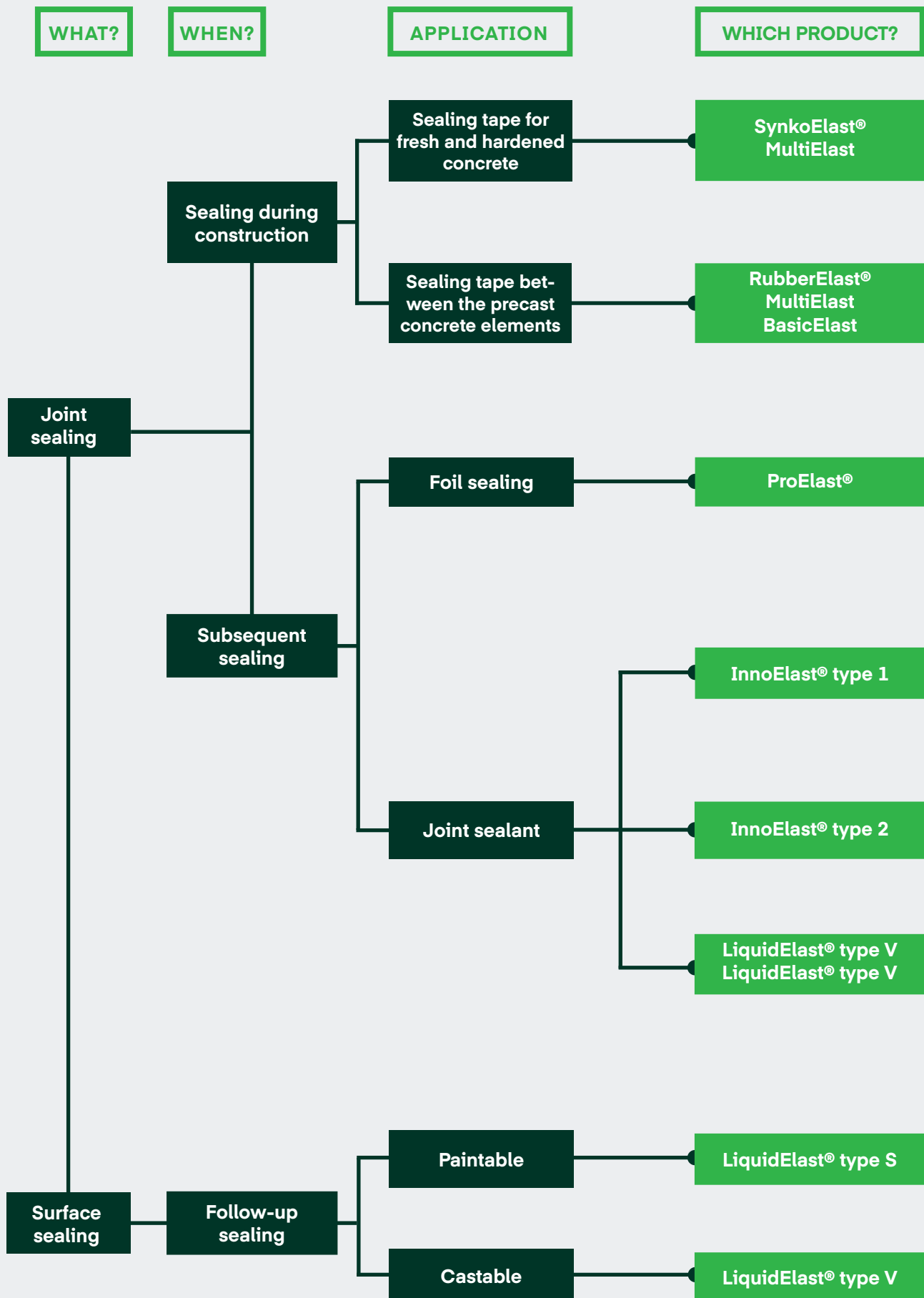
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**Alternatively, you can use the
download section on our website.**

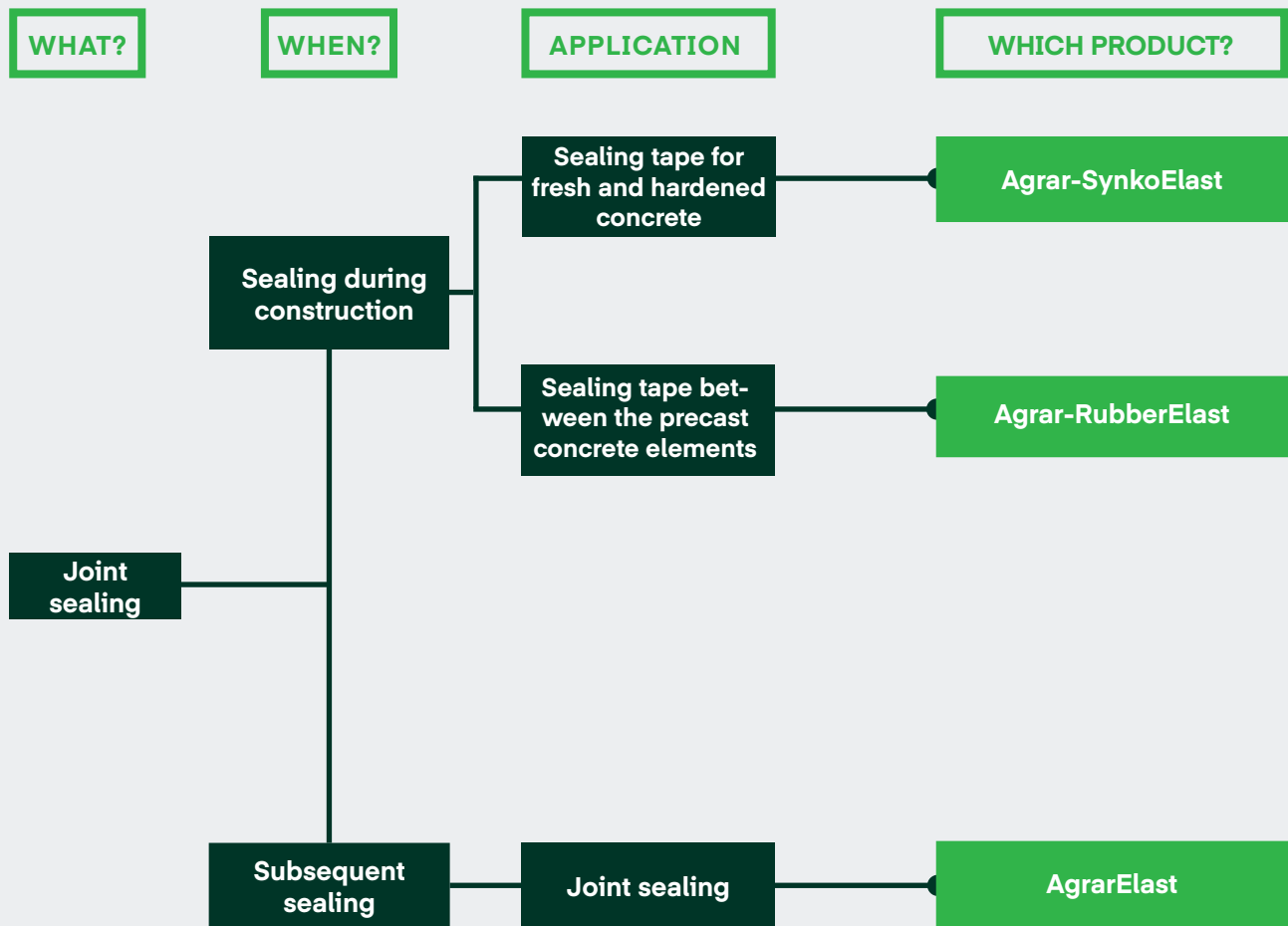
PRODUCTS FOR STRUCTURAL AND CIVIL ENGINEERING

Which sealant is the right one?



PRODUCTS FOR AGRICULTURAL CONSTRUCTION

Which sealant is the right one?



Do you have additional questions about our BT sealing products or would you like to have an individual consultation?

Phone: +49 391 7352 - 0

Email: export@bt-innovation.de

Joint sealing >> Sealing during construction >> Sealing tape for fresh and hardened concrete

SEALING TAPE FOR CONSTRUCTION JOINTS AND CRACK CONTROL JOINTS

Art. no.: 5001051 (30 mm x 20 mm, 24 m / box)

SynkoElast®

suitable for: construction joints // crack control joints

SynkoElast® is an innovative, very simple to process, cost-effective sealing tape that is manufactured on a polymer bitumen base. It is used, for example, in construction joints and crack control joints in structures made of water-impermeable in-situ concrete.

SynkoElast®



**Water pressure-tight
up to 2 bar**



**Processing from
0 °C to +35 °C**



**No swelling in
contact with water**



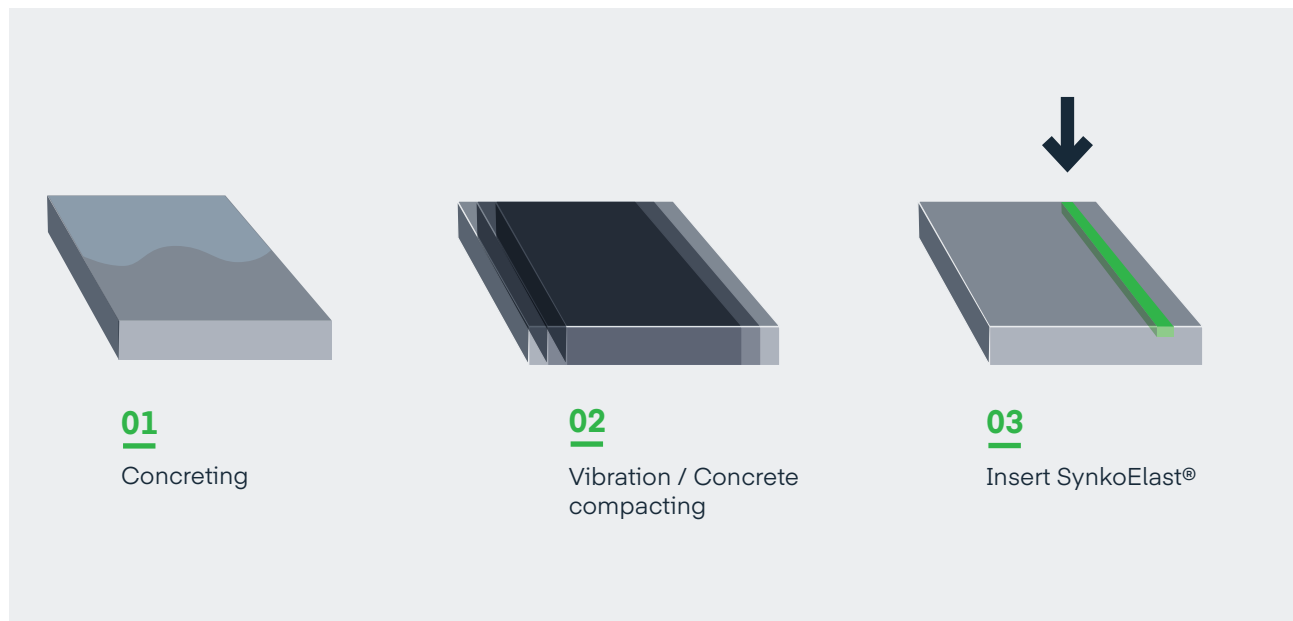
**Resistant to weather,
acid, alkali, and salt**

01. Fresh concrete variant

SynkoElast® is simply placed in the fresh concrete during concreting

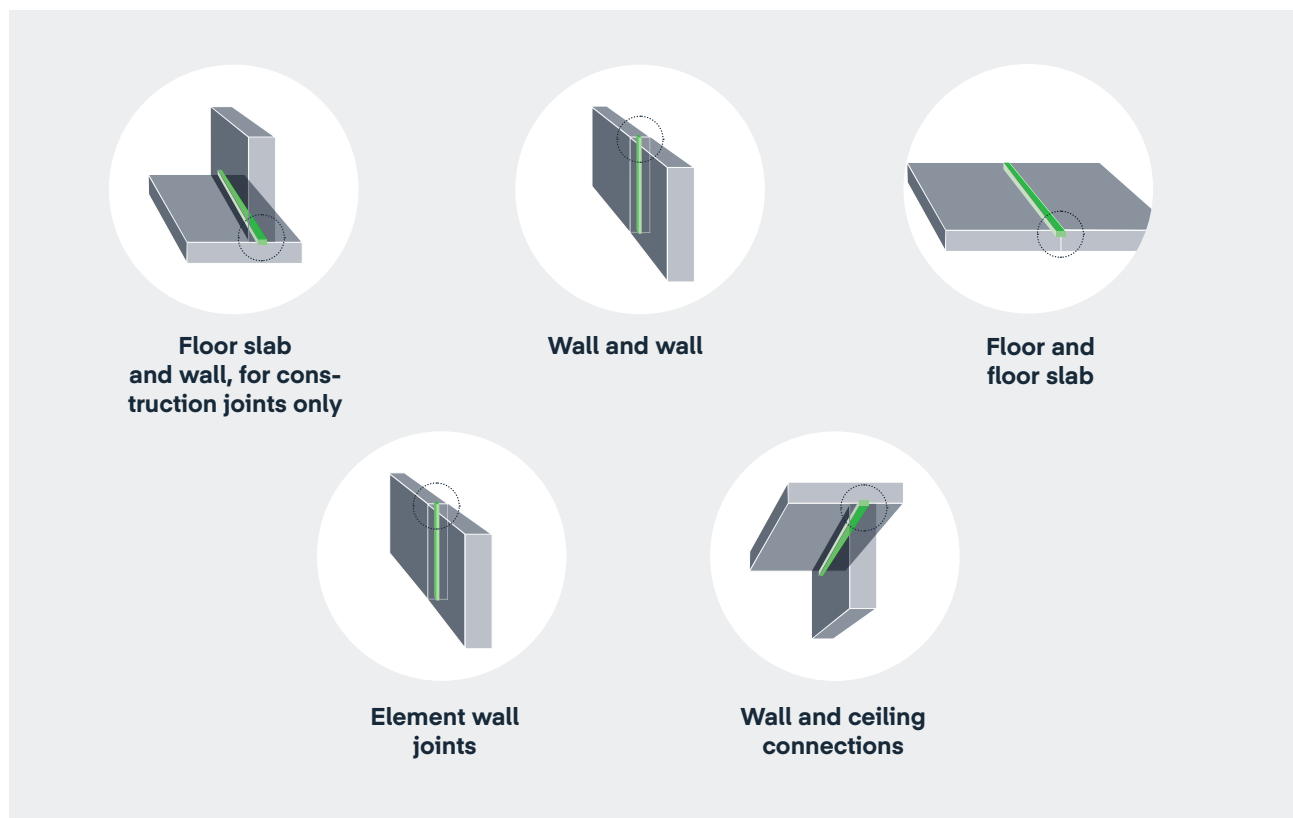


Application Fresh concrete



- ✓ simply by hand
- ✓ without aids
- ✓ no metal waterstops
- ✓ no welding

Suitable for:



02. Hardened concrete variant

SynkoElast® is applied to the hardened concrete



Application Hardened concrete

01



Concrete must be set

02



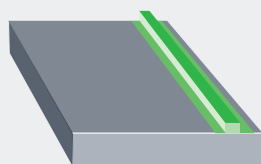
Apply primer, allow to flash off for 1 day

03



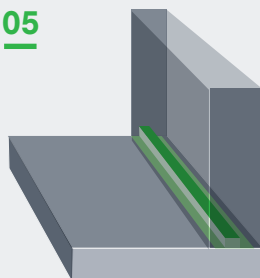
Heat the concrete

04



Press SynkoElast® onto the warm concrete

05



Concrete the adjacent element

Benefits

High application performance due to minimum installation effort

Adheres to the concrete during the hydration

Joints can absorb widening and shifts

No swelling in contact with water

Installation without further aids or tools

Application with low wall thicknesses too

Easy installation, even with a lot of reinforcement

Resistant to acids and alkali

Solvent-free

General building authority test certificate

Application tips

For the application, please read the technical data sheet with the application notes

Store the tape in the packaging to protect it against dirt and damage

Store the tape in the closed box at room temperature so that it is easy to process

Do not place SynkoElast® in the sun or expose it to great heat

At lower temperatures, SynkoElast® becomes stiffer and less easy to process

Wear protective gloves when installing

Remember that the processing time is greatly reduced in fresh concrete!

Joints must be kneaded with at least a 5 cm lateral overlap

Lay out the SynkoElast® with the protective foil facing upwards

In the case of adjoining wall joints or the shuttering of construction joints, use our SynkoElast® crack control joints or formwork profiles

FAQs

1. Does SynkoElast® swell or shrink?

No, because SynkoElast® is not a swelling tape and remains stable in its shape. It seals by means of a fixed connection between tape and concrete.

2. Do I have to connect SynkoElast® to the reinforcement?

No, because SynkoElast® is pressed into the fresh concrete when concreting.

3. What tools do I need to lay SynkoElast® in the fresh concrete?

None. SynkoElast® can simply be pressed into the fresh concrete by hand.

4. Can I also apply SynkoElast® to the concrete later?

Yes! A primer is applied to the concrete and, after flashing off, heated so that the SynkoElast® fuses with the concrete when it is pressed on.

5. Are there any supplementary products, e.g. crack control joints, that I can install in double walls?

Yes! There are two supplementary products for SynkoElast®. The crack control joints for double walls and the formwork profiles for the subdivision of larger elements into small concreting sections.

6. At what temperatures can I install SynkoElast®?

Like concrete, SynkoElast® should be installed between +5 °C and +35 °C. SynkoElast® is stiffer at lower temperatures.

The tape will be easier to process if it is stored at room temperature until just before installation.

Further information can be found at:
www.bt-innovation.de

Joint sealing >> Sealing during construction >> Sealing tape between the precast concrete elements

SEALING TAPE FOR JOINTS BETWEEN PRECAST CONCRETE ELEMENTS

Art. no.: 5002052 (17 x 17 mm, 4.50 m roll) _ Further sizes available

RubberElast®

suitable for: Component joints

RubberElast® is the multi-tested and proven compression sealant tape for the secure pressure-tight structural component joint sealing between precast concrete elements. Typical applications include the sealing of precast concrete element joints in hydraulic engineering as well as of cellars and other water-impermeable constructions and even flange connections.

The tape is characterised not only by its water and gas impermeability, but also by its excellent resistance to weather-related and mechanical wear, as well as its insulating capability. RubberElast® retains its elasticity even at very low temperatures.

In addition to its good adhesion to concrete, the sealing tape excellent adhesive qualities to metals, glass, plaster, stones and many other materials.

RubberElast®



Water pressure-tight
up to 0.5 bar



Processing from
-10 °C to +40 °C



No swelling in
contact with water



Resistant to weather,
acid, alkali, and salt



Permanently elastic

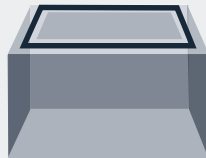


Immediately
waterproof

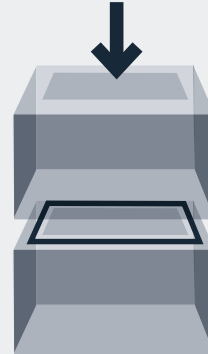
Application

**01**

Place the precast concrete element in position

**02**

Apply RubberElast® to the element to be sealed (substrate must be free from dirt, grease and oil)

**03**

Place the second precast concrete element on top (press the elements together in case of vertical joints), thereby compressing RubberElast® by 80%



simply by hand



without aids

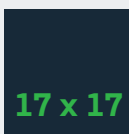


no curing

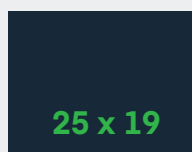


immediately waterproof

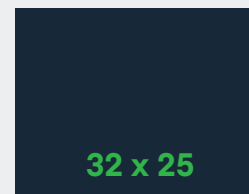
Sizes: RubberElast® is available in many sizes



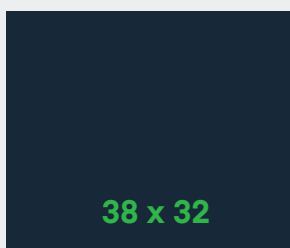
Joint width: 3.4 mm



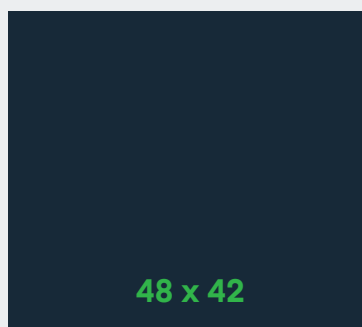
Joint width: 3.8 mm



Joint width: 5 mm

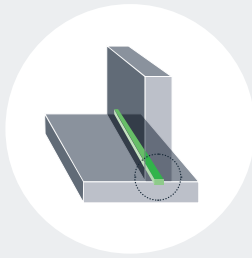


Joint width: 6.4 mm
Wall thickness at least 19 cm

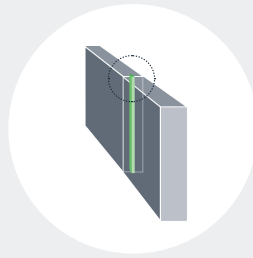


Joint width: 8.4 mm
Wall thickness at least 24 cm

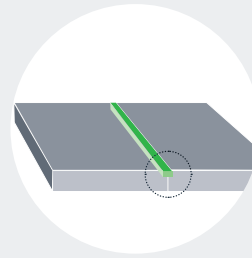
Suitable for:



Floor slab
and wall



Wall and wall



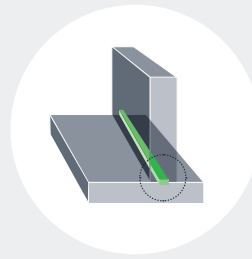
Floor and floor
slab



Wall and ceiling
connections



Frame shafts



L-shaped
retaining walls

Installation

The precast concrete element joints are sealed during construction with **RubberElast®**

RubberElast®:
Compression sealant
with tested pressure
resistance!



Benefits

Easy processing

Installation without further aids or tools

Waterproof immediately after assembly

Flexible even at low temperatures

Weather resistant

Tested water pressure-tight up to a water column of 5 m

Resistant to acid, alkali and salt

Can be combined with other Elast products

General building authority test certificate

Application tips

Store the tape in the packaging to protect it against dirt and damage

Store the tape in a cool and dry place

Read the application notes in the technical data sheet carefully

Ensure that the substrate is dry, clean and stable

RubberElast® becomes stiffer at low temperatures, so that greater force is required

Wear protective gloves when installing

Ensure compression of 70 to 90% for an optimum sealing effect

Ensure suitable load transmission with horizontally running joints

Minimum joint width 2 mm to rule out destruction of the sealing tape

FAQs

1. Do the joints have to be cleaned?

Yes, the joint flanks must be dry and free from dust, grease, loose parts and other separating materials.

2. Do I have to apply a primer so that RubberElast® will adhere?

That depends on the substrate. RubberElast® is generally applied without a primer. A primer can be used in addition if RubberElast® doesn't adhere to the substrate.

3. Which RubberElast® size should I use for my project?

The choice of the right RubberElast® size depends on the width of the joint flank and the final joint width. The RubberElast® is squeezed into the joint and compressed to 20% of its original size. This means that the material presses itself sideways into the joint. If the joint flank is too narrow, the RubberElast® will be pressed out of the joint. The sealing effect cannot be achieved if the joint width is too large or too small. Obtain professional advice on this from our employees. We will also be glad to send you our list for the selection of the correct size.

4. When can water pressure be applied to RubberElast®?

It does not react chemically with other substances, but water pressure can be applied to it as soon as it has been compressed properly.

5. How much force do I have to apply to compress the tape?

The force required depends on the chosen tape size and the prevailing ambient temperature. In order to calculate the correct force to be applied, please refer to the data in the technical data sheet.

Further information can be found at:
www.bt-innovation.de

Joint sealing >> Sealing during construction >> Sealing tape for fresh and hardened concrete

BITUMEN-FREE, FIBRE-REINFORCED SEALING TAPE AGAINST PRESSING WATER

Art. no.: 5002067 (30 mm x 20 mm, 16 m / box)

MultiElast

suitable for: Construction and component joints

MultiElast is a multi-purpose sealant for construction joints and component joints between precast concrete elements against pressing water. The MultiElast can be laid directly in the fresh concrete to seal construction joints. Since the tape is flexible even at low temperatures, the processing of the tape in winter is easier.

As a self-adhesive compression sealing tape for precast element joints, it is adhered to the joint flank of a precast concrete element/component. During the assembly of the next component, the sealing tape is compressed in the joint, thus sealing the resulting joint up to a water pressure of 10 m water column. The joint is waterproof immediately after assembly of the precast concrete elements.

If the precast and cast-in-situ concrete construction methods are combined, component joints are created between precast concrete elements and construction joints to the in-situ concrete. MultiElast can verifiably seal both types of joint, so that different types of joint in a structure can be sealed reliably and continuously.

MultiElast



**Water pressure-tight
up to 1.0 bar**



**Processing from
-5 °C to +40 °C**



**No swelling in
contact with water**



**Resistant to weather,
acid, alkali, and salt**

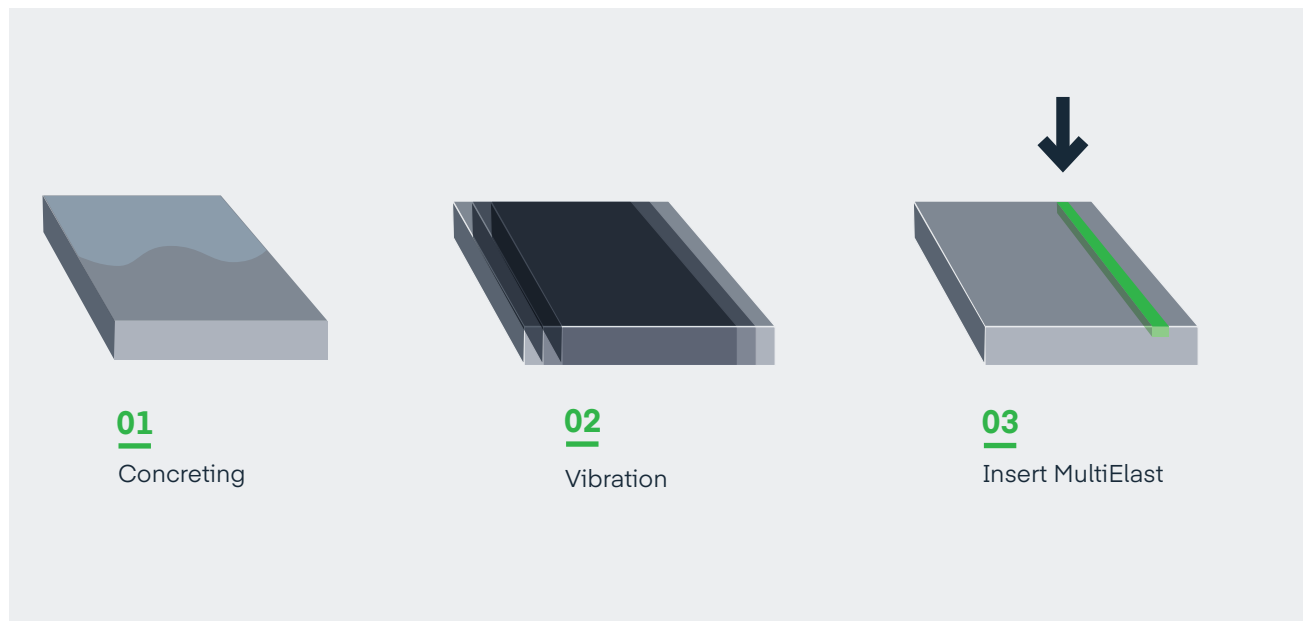


Permanently elastic



**Immediately water-
proof as a compression
sealant**

Application Fresh concrete

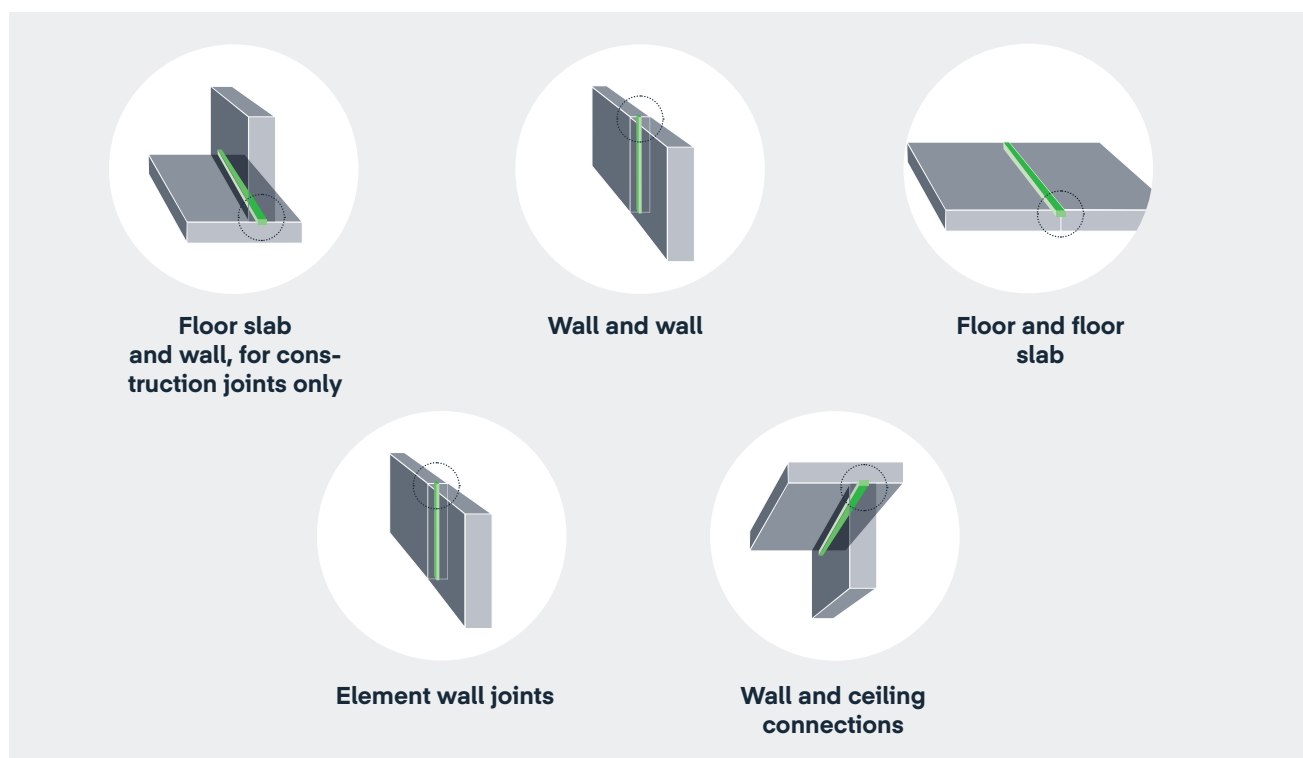


- ✓ simply by hand
- ✓ without aids
- ✓ no metal waterstops
- ✓ no welding

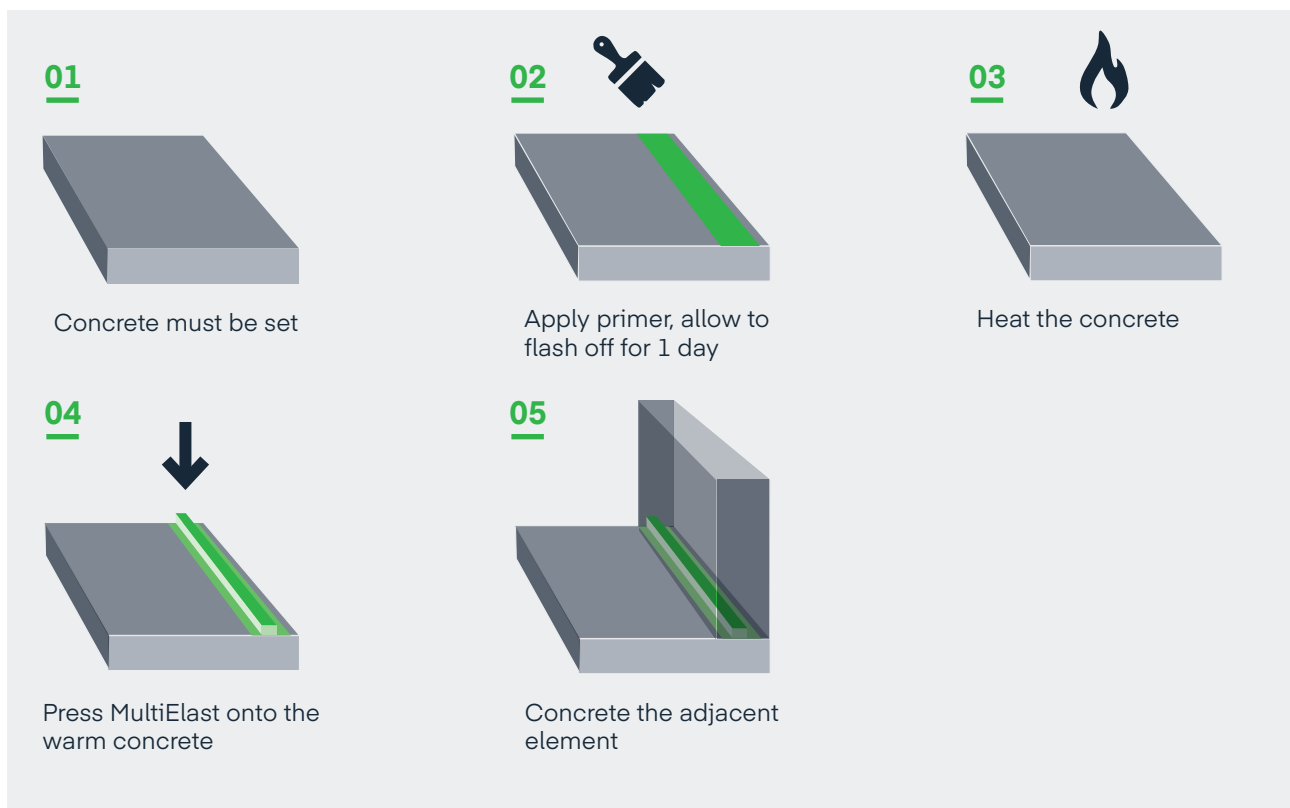


NOTE: THE PROCESSING INSTRUCTIONS IN THE TECHNICAL DATA SHEET APPLY.

Suitable for:

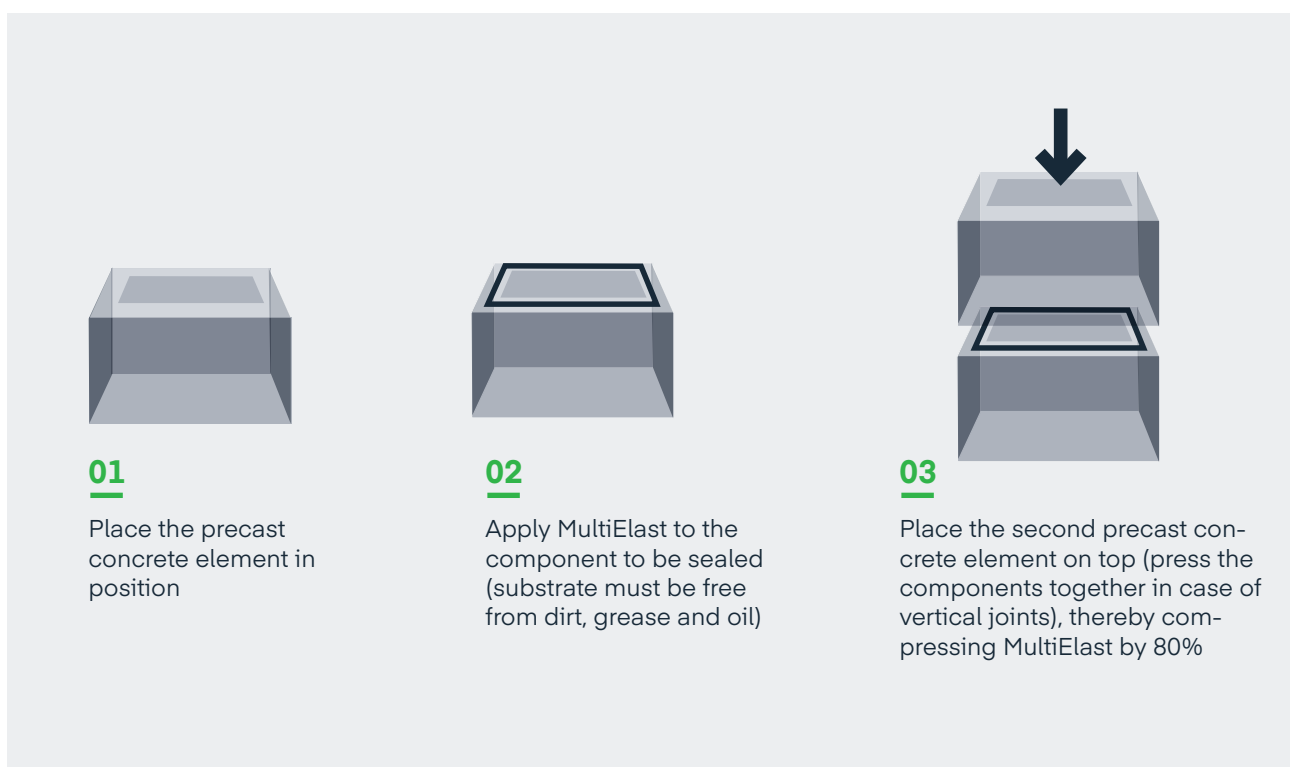


Application Hardened concrete & fresh concrete



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

Application Component joints



Benefits

Very easy to process

Installation without further aids or tools

Flexible even at low temperatures

Weather resistant

Tested water pressure-tight up to a water column of 10 m

As a compression sealant, immediately waterproof after assembly

Resistant to acid, alkali and salt

Bitumen-free

Can be combined with other Elast products

General building authority test certificate

Application tips

Store the tape in the packaging to protect it against dirt and damage

Store the tape in the closed box at room temperature so that it is easy to process

Do not place MultiElast in the sun or expose it to great heat

Remember that the processing time is greatly reduced in fresh concrete!

Joints in fresh concrete must be kneaded with at least a 5 cm lateral overlap

Lay out MultiElast with the protective foil facing upwards

As a compression sealant it is stiffer at low temperatures, so that higher forces are required for compression

Ensure compression of 70 to 90% for an optimum sealing effect

The compression sealant does not serve to transmit load

Observe the minimum joint width

FAQs

Construction joint sealing – in-situ concrete

1. Do I have to connect MultiElast to the reinforcement?

No, because MultiElast can be pressed into the fresh concrete when concreting.

2. What tools do I need to lay MultiElast in the fresh concrete?

None. MultiElast can simply be pressed into the fresh concrete by hand.

3. How must I prepare the fresh concrete?

Only draw the fresh concrete off smooth in the area of the tape, do not rub it smooth.

4. Does MultiElast swell or shrink?

No, because MultiElast is not a swelling tape and remains stable in its shape. It seals by means of a fixed connection between tape and concrete.

Compression seal – precast concrete elements

5. Do the joints have to be cleaned?

Yes, the joint flanks must be dry and free from dust, grease, loose parts and other separating materials.

6. When can water pressure be applied to MultiElast?

It does not react chemically with other substances, but water pressure can be applied to it as soon as it has been compressed properly.

7. At what temperatures can I install MultiElast?

MultiElast can be installed at between -5 °C and +40 °C as a compression sealant. At lower temperatures MultiElast becomes stiffer and more difficult to compress. The tape will be easier to process if it is stored at room temperature until shortly before installation.

Further information can be found at:
www.bt-innovation.de

Joint sealing >> Sealing during construction >> Sealing tape between the precast concrete elements

SEALING TAPE FOR JOINTS BETWEEN PRECAST CONCRETE ELEMENTS

Art. no.: 5002076 (17 x 17 mm, 4.50 m roll) _ Further sizes available

BasicElast

suitable for: Component joints

BasicElast is an elastoplastic joint tape and serves as a compression seal for sealing precast concrete joints. Typical applications are the sealing of precast concrete joints in temperate and warm climate zones, for example against standing seepage water.

The tape is characterized by its excellent resistance to weather-related and mechanical wear and tear and its insulating properties. BasicElast retains its elasticity even at very low temperatures.

In addition to its good adhesion to concrete, the sealing tape has excellent adhesive properties to metal, glass, plaster, stone and many other materials.

BasicElast



**Immediately
waterproof**



**Processing from
-5 °C to +40 °C**



**No swelling in
contact with water**



**Resistant to weather,
acid, alkali, and salt**

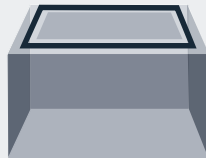


Permanently elastic

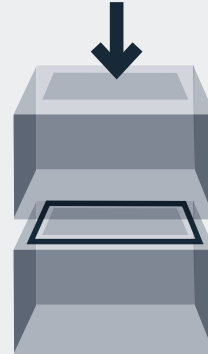
Application

**01**

Place the precast concrete element in position

**02**

Apply BasicElast to the element to be sealed (substrate must be free from dirt, grease and oil)

**03**

Place the second precast concrete element on top (press the elements together in case of vertical joints), thereby compressing BasicElast by 80%



simply by hand



without aids

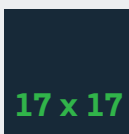


no curing

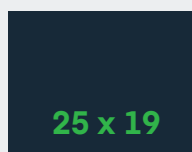


immediately waterproof

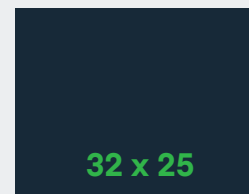
Sizes: BasicElast is available in many sizes



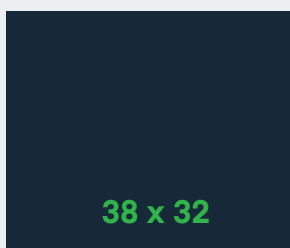
Joint width: 3.4 mm



Joint width: 3.8 mm

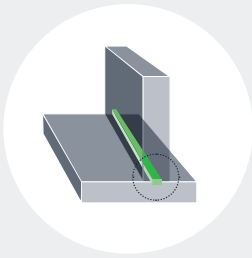


Joint width: 5 mm

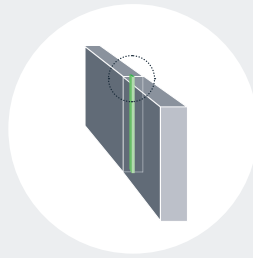


Joint width: 6.4 mm
Wall thickness at least 19 cm

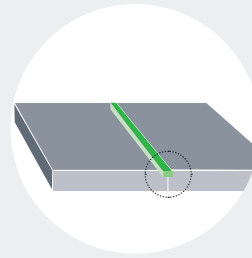
Suitable for:



Floor slab
and wall



Wall and wall



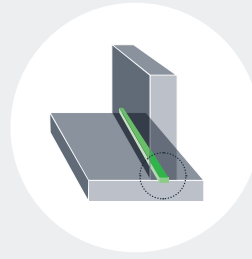
Floor and floor
slab



Wall and ceiling
connections



Frame shafts



L-shaped
retaining walls

Installation

The precast concrete element joints are sealed during construction with **BasicElast**

BasicElast:
Compression seal
for sealing of precast
concrete joints!



Benefits

Easy processing

Installation without further aids or tools

Waterproof immediately after assembly

Flexible even at low temperatures

Weather resistant

Resistant to acid, alkali and salt

Can be combined with other Elast products

Application tips

Store the tape in the packaging to protect it against dirt and damage

Store the tape in a cool and dry place

Read the application notes in the technical data sheet carefully

Ensure that the substrate is dry, clean and stable

BasicElast becomes stiffer at low temperatures, so that greater force is required

Ensure compression of 70 to 90% for an optimum sealing effect

Ensure suitable load transmission with horizontally running joints

Minimum joint width 2 mm to rule out destruction of the sealing tape

FAQs

1. Do the joints have to be cleaned?

Yes, the joint flanks must be dry and free from dust, grease, loose parts and other separating materials.

2. Do I have to apply a primer so that BasicElast will adhere?

That depends on the substrate. BasicElast is generally applied without a primer. A primer can be used in addition if BasicElast doesn't adhere to the substrate.

3. Which BasicElast size should I use for my project?

The choice of the right BasicElast size depends on the width of the joint flank and the final joint width. The BasicElast is squeezed into the joint and compressed to 20% of its original size. This means that the material presses itself sideways into the joint. If the joint flank is too narrow, the BasicElast will be pressed out of the joint. The sealing effect cannot be achieved if the joint width is too large or too small. Obtain professional advice on this from our employees. We will also be glad to send you our list for the selection of the correct size.

4. When can water pressure be applied to BasicElast?

It does not react chemically with other substances, but water pressure can be applied to it as soon as it has been compressed properly.

5. How much force do I have to apply to compress the tape?

The force required depends on the chosen tape size and the prevailing ambient temperature.

In order to calculate the correct force to be applied, please refer to the data in the technical data sheet.

Further information can be found at:
www.bt-innovation.de

Joint sealing >> Subsequent sealing >> Joint sealant

1-COMPONENT JOINT SEALANT

Art. no.: 5004113 (type 1) _ Art. no.: 5004115 (type 2)

InnoElast® type 1 and type 2

suitable for: Component joints

The InnoElast® sealants are proven 1-component systems for sealing building joints in facades, cellars, floors, paths, roofs as well as connections for windows, doors and passageways. The InnoElasts are solvent-free, low shrinkage, permanently elastic, weather- and UV-resistant sealants with a high adhesion. InnoElast® can be used indoors and outdoors.

InnoElast® type 1 is optimised for larger joint movements in facades and floors, while with InnoElast® type 2, for example, cellars can be sealed against pressing water.

InnoElast® type 1



**Solvent-free and
low shrinkage**



**Can be applied to a
moist substrate as low
as -3 °C**



**Weather and
UV resistant**



Permanently elastic



**Movement absorption
up to 25%**



**Can be used
without primer**

InnoElast® type 2



Solvent-free and low shrinkage



Can be applied to a moist substrate as low as -3 °C



Weather and UV resistant



Permanently elastic



Movement absorption up to 25%



Can be used without primer

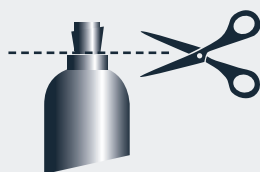


High resistance to chemicals



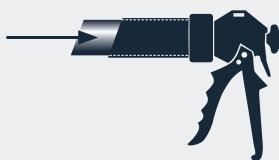
Water pressure-tight up to 0.48 bar

It's as simple as this:



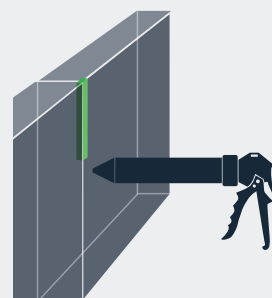
01

Cut the tubular bag open at the top with a pair of scissors



02

Insert the tubular bag in the injection gun



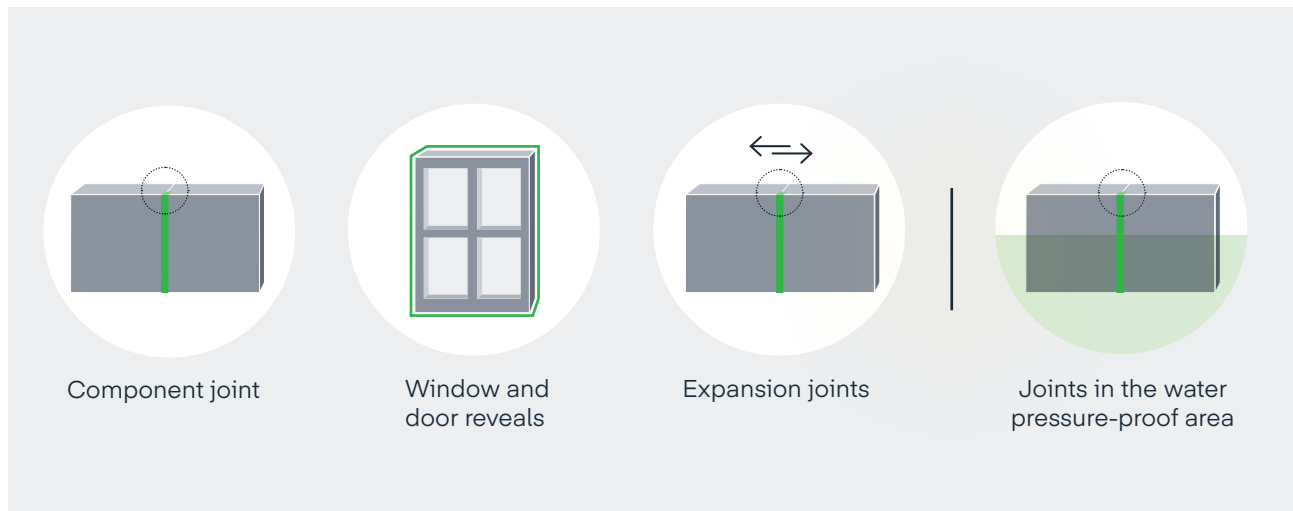
03

Fill the joint with InnoElast® type 1 or type 2



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

Suitable for:



InnoElast® type 1



InnoElast® type 1
is injected into the joint

InnoElast® type 2



InnoElast® type 2
joint sealings can be
formed as desired and are
waterproof

Benefits

1-component, permanently elastic sealant
Virtually non-shrinking
No primer necessary
Can also be applied to moist substrates
Application as low as -3 °C
Free of solvents and isocyanate
High initial adhesion even when fresh
Weather and UV resistant
Can be painted
Can be combined with other Elast products and is compatible with bitumen
InnoElast® type 2 – high chemical resistance

Application tips

For the application, please read the technical data sheet with the processing instructions
InnoElast is moisture-curing
High temperatures and humidity accelerate the hardening, lower ones slow it down
Application using an applicator gun
Insert a joint backfilling cord (prevents 3-flank adhesion and saves sealant)
When using as a joint sealant, max. sealant thickness per work step 5 cm
When using as a surface adhesive, apply to the surface and distribute evenly with a toothed spatula
Protect against wetness
Protect against mechanical damage

FAQs

1. Do the joints have to be cleaned?

Yes, the joint flanks must be dry and free from dust, grease, loose parts, ice and other separating materials. However, the joint flanks can be damp without a visible film of water.

2. When should I choose InnoElast® type 1 and when type 2?

InnoElast® type 1:

- ::: for expansion joints with movements of up to 25%
- ::: for joints on which only rain falls and no water pressure develops

InnoElast® type 2:

- ::: for joints exposed to chemicals (acids, alkalis, certain fuels)
- ::: for joints exposed to pressing water up to 4.8 m water column
- ::: for joints that adjoin bituminous materials / coatings and should be sealed

3. When does the skin formation take place? How long does it take to harden?

The first skin formation takes place after about 2 hours (15 min in the case of InnoElast 2) at 23 °C and 50% rel. humidity. The hardening of the joint sealant can be expected to progress at 2-3 mm / 24 hrs. At low temperatures, the speed of reaction and thus the hardening are slowed down.

4. Are there any material incompatibilities?

Yes, InnoElast® 1 is not compatible with solvents such as petrol, some acids and acetic acid. The product softens and swells on contact. In areas subject to chemical loads, please use our InnoElast 2, which has a high chemical resistance.

Further information can be found at:
www.bt-innovation.de

Surface sealing >> Subsequent sealing

THE FLEXIBLE SEALING FOR SURFACES AND JOINTS





Art. no.: 5004153 (type S/1 kg) _ 5004143 (type S/7 kg)
 Art. no.: 5004146 (type V/1 kg) _ 5004144 (type V/7 kg)

LiquidElast® type S and type V

suitable for: Surfaces and joints


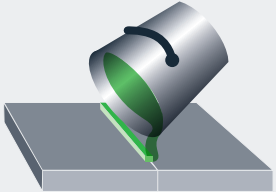

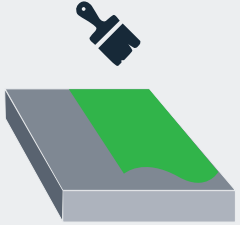
LiquidElast® types S and V are universal, 1-component, elastic sealings for vertical and horizontal surfaces and joints against pressing water in the entire field of construction. The sealants are widely used indoors and outdoors as building waterproofing, as composite sealing under floor and wall coverings or as joint sealing between concrete, wood or metal. LiquidElast® is an extremely crack-bridging, spreadable or castable sealing system, which after hardening, forms a „rubber-like“ waterproof membrane for the protection of the most diverse components.

LiquidElast® types S and V

 <p>Water pressure-tight up to 0.48 bar</p>	 <p>Can be applied to a moist substrate as low as -0 °C</p>
 <p>Crack bridging up to 5 mm</p>	 <p>Permanently elastic</p>

- ✓ simple to apply by: spreading, pouring, spraying
- ✓ high resistance

It's as simple as this:

 <p>01 Pour the contents of the bag into a bucket</p>	 <p>02 Work into the joint, pour or spread onto the surface</p>
 <p>03 Insert a fleece where necessary</p>	 <p>04 Apply 2nd layer</p>

Wall sealing with LiquidElast® type S



Joint grouting with LiquidElast® type V



Suitable for:



LiquidElast® type V



LiquidElast® type V
for the water pressure-tight surface sealing

Benefits

1-component, permanently elastic sealant

Easy processing

Type S spreadable / type V liquid consistency

Crack bridging up to 5 mm

Can be applied to moist substrates

Processing from 0 °C on ice-free surfaces

Suitable for the repair of the most diverse roof sealings (also bituminous)

Weather resistant

Free of solvents and isocyanate

Application tips

LiquidElast® type S: For vertical and horizontal surfaces and joints

LiquidElast® type V: For horizontal surfaces and joints, e.g. floor joints, as it is liquid

Substrates: firm and load bearing, as well as free of dust, grease, oils and other separating materials. Substrate moist, but not wet with visible film. Usually no primer required

Apply LiquidElast® type S (spreadable) to the substrate with a thickness of approx. 1 mm using a roller or brush. Pour LiquidElast® type V (liquid) onto the substrate and spread until about 1 mm thick.

In case of pressing water: apply second layer after stable skin formation on the first coat (after about 6 to 12 hours). In case of special loads: insert a reinforcement fabric.

For the joint sealing, ensure that the joint design is sufficiently wide (-> 5 mm) and sufficiently deep (-> 10 mm and -> ½ width). Avoid 3-flank adhesion to the joint bottom.

Usable as an adhesive / composite sealant for coverings

Can be combined with other Elast products

FAQs

1. Can I use LiquidElast® in the area with ground contact?

Yes. LiquidElast® is extremely well suited for use in the underground area. The product can be used permanently and does not decompose over time, like competitor products.

With LiquidElast®, you can create a water pressure-tight coating on your component in just 2 layers. We recommend that you lay a dimpled sheet or similar on the sealed component so that the sealing is not damaged when backfilling.

2. Does LiquidElast® have to be laid with a fleece?

Yes, whenever high resistance to water pressure is to be achieved, corners and projections are to be found and the crack bridging of 5 mm in width is to be achieved. For this purpose, a layer of LiquidElast® is applied to the component. The fleece is then rolled into the still fresh layer of LiquidElast®. After the first layer has hardened, a second layer of LiquidElast® is applied to the fleece. The fleece is thus soaked on both sides by LiquidElast® and provides permanent protection against moisture.

3. Can LiquidElast® be used as a roof sealing?

Not directly. LiquidElast® is only UV resistant to a limited extent and is designed for small mechanical stresses (e.g. hail). However, LiquidElast® can be used without restrictions as a bottom sealing with applied protection, without UV radiation and mechanical stress.

4. Are there any material incompatibilities?

In areas subject to chemical loads, please use our InnoElast 2, which has a high chemical resistance.

5. What tool should I use for rolling out and how is it best cleaned?

We recommend using a lambskin roller for rolling out LiquidElast® type S. It should be cleaned as soon as possible after use. Conventional solvents can be used for this. When choosing a lambskin roller, make sure that it cannot be destroyed by solvents.

Further information can be found at:
www.bt-innovation.de

Joint sealing >> Subsequent sealing >> Foil sealing

THE RELIABLE SEALING SYSTEM FOR PROTECTION AGAINST PRESSING WATER

Art. no.: 5004050 (1.0 x 200 mm x 25 m) _ further sizes available

ProElast® System

suitable for: Construction joints and crack control joints in water-impermeable concrete

The ProElast® system is an easy-to-process 2-part sealing system consisting of a special EPDM foil and the adhesives/sealants InnoElast® type 1 or 2. In addition to high waterproofing, the system is highly UV and weather resistant.

The ProElast® system is an external, strip-shaped sealing for construction and crack control joints. Current usages include the sealing of cracks and crevices in cellars, shafts, containers and also roofs. The ProElast® foils themselves can be used as barrier film and for surface sealing.

ProElast® System



**Water pressure-tight
up to 2 bar**



**Usable on moist,
ice-free substrates
as low as -3°C**



**Weather and
UV resistant**

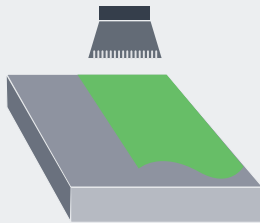


**InnoElast® type 2 =
high chemical
resistance**

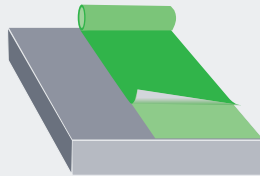


**Can be used
without primer**

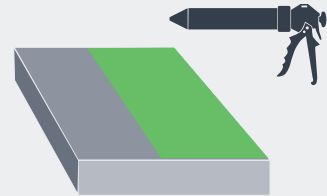
It's as simple as this:

**01**

Attach InnoElast® with a notched trowel

**02**

Roll out the ProElast® foil and smooth out the air bubbles

**03**

Seal the edges with InnoElast®



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

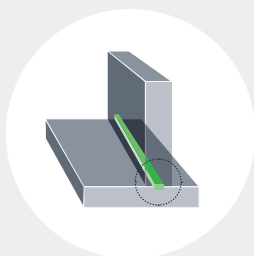


extremely secure and resistant

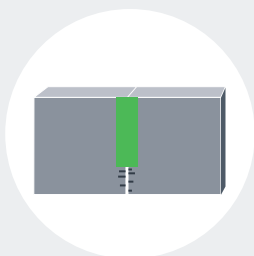


durable

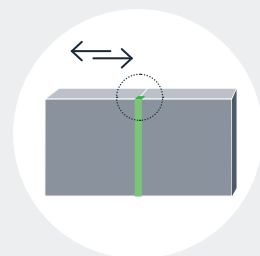
Suitable for:



construction joints



crack control joints
and repair of cracks



Expansion joints

Application Surface



ProElast® as a strip-shaped sealing

Benefits

Quick and easy processing

Can be applied as low as -3 °C

Can be applied on matt moist substrate

Normally usable without a primer

Weather and UV resistant, etc.

Very high adhesion to concrete, steel, glass, wood, bitumen and various plastics

Solvent-free

Tested water pressure-tight (AbP) up to a water column of 20 m

Application tips

The substrate must be load bearing and free of grease and dust

Apply the adhesive over the surface with a thickness of approx. 1.5 mm with the help of a toothed spatula

Place ProElast® centrally over the joint and press into the surface adhesive using a pressing roller

No air bubbles may remain under the foil

The joints are adhered with an overlap of 100 mm

Seal the free edges with InnoElast type 1 or 2

Protect ProElast® foil against external, mechanical damage

FAQs

1. Is the ProElast® foil also available in foil widths other than 30 cm?

Yes, the foil can be supplied up to a width of 170 cm on request.

2. When can loads be applied to the ProElast® system?

The foil adhesive hardens on contact with moisture from the surroundings (from the air, concrete).

With well-insulated, dry walls, it therefore takes longer for the system to harden completely through in the centre of the foil and in the case of joints.

In the case of foil widths up to 50 cm, however, the system is already loadable to a certain extent after a week.

3. Can the ProElast® system be combined with LiquidElast® S or V?

Yes, and this is a good combination with large surfaces, as LiquidElast® hardens quickly. The combination of ProElast® for the corners, the edges and the transitions to the floor slab with LiquidElast® S for sealing the large surfaces is a commonly used, good combination.

4. How can large surfaces be laid with ProElast®?

In order to seal large surfaces with ProElast®, strips are preferably laid at fixed distances. Once the foil adhesive has largely hardened, further strips are adhered over the gaps to close them.

5. Can the foil also be used without or with just a little adhesive?

Yes. The tested foil can be used, for example, as a barrier against rising moisture in walls. The foil can also be used to seal loose-laid surfaces or surfaces with edge bonding. The foil is also available on request in thicknesses other than 1 mm.

Further information can be found at:
www.bt-innovation.de

Joint sealing >> Subsequent sealing >> Joint sealant

1-COMPONENT, PERMANENTLY ELASTIC ADHESIVE AND SEALANT

Art. no. 5004273 (box: 15 x 600 ml)

Art. no. 5004275 (primer A (asphalt, 500 ml set, consisting of components A + B)

Art. no. 5004274 (primer B (concrete), 500 ml can)

AgrarElast

suitable for: Storage and filling systems with substances hazardous to water

On the basis of the AwSV (Ordinance on Installations for the Handling of Substances Hazardous to Water, effective since August 1st, 2017), only construction products, construction kits and methods of construction having the appropriate building authority proofs of usability, taking into consideration water law requirements, are to be used for the renovation and construction of agriculturally managed sealing for biogas plants and plants for the storage and transfer of slurry, liquid manure silage effluent.

The stable AgrarElast provides a complete sealing system for horizontal and vertical joints. The sealant and the associated primer A (asphalt) or B (concrete) fulfil the legally required proof of suitability and thus offer a legally secure solution for plant operators and specialist companies. In order to meet the high requirements for the permanent sealing for biogas plants and plants for the storage and transfer of slurry, liquid manure silage effluent, AgrarElast is subjected to regular product monitoring and material testing.

AgrarElast



**Solvent-free,
isocyanate-free**



**High resistance to
chemicals**



**Weather and
UV resistant**



Permanently elastic

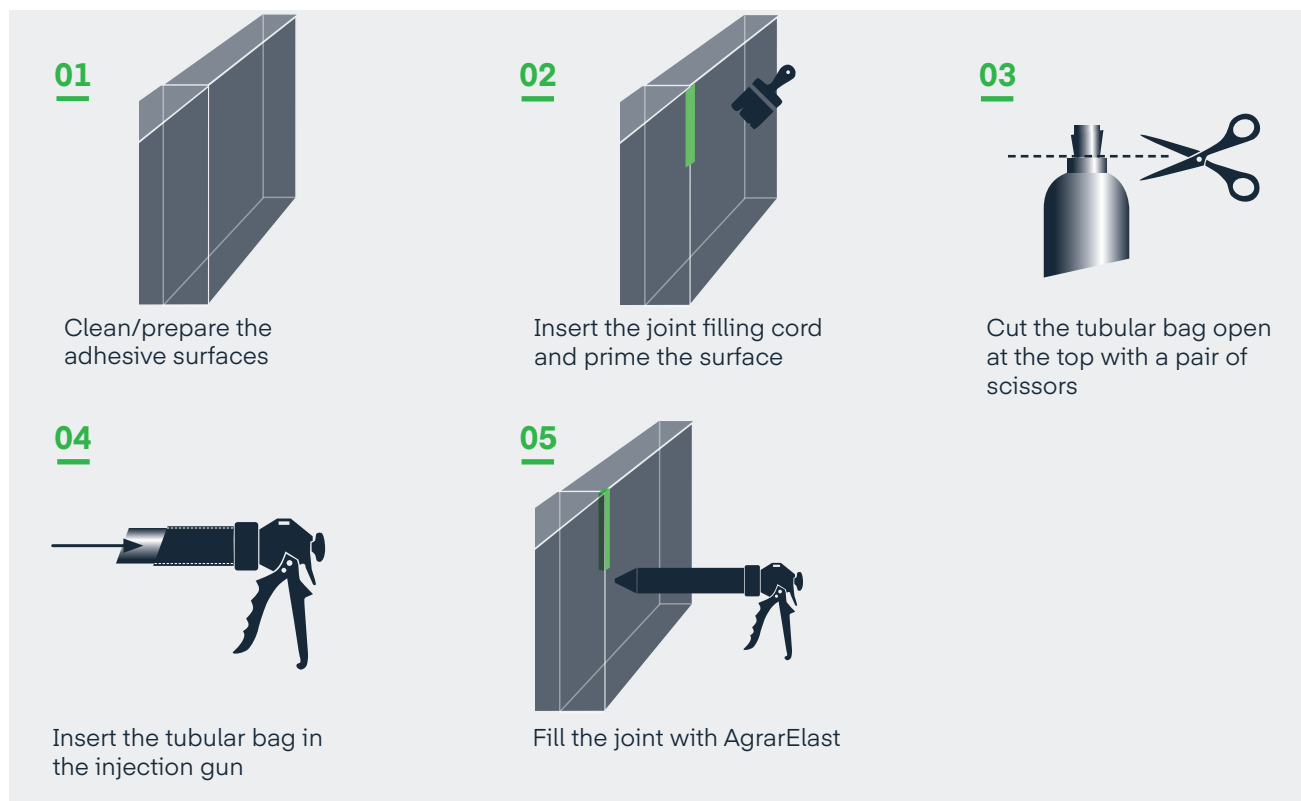


**Permissible
deformation 12.5 %**



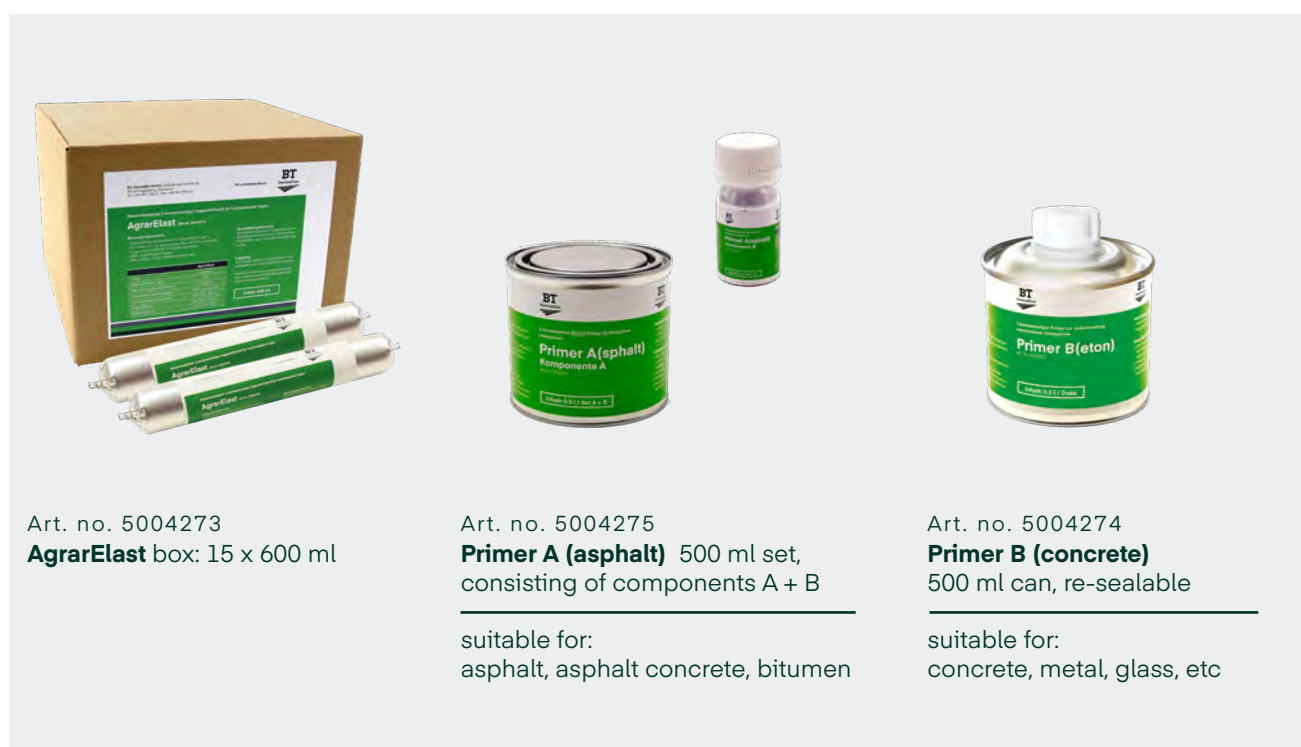
**Processing from
+5 °C to +35 °C**

It's as simple as this:



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

Article overview

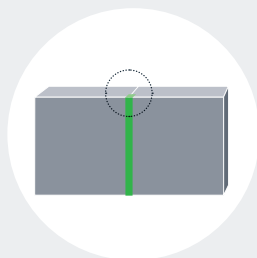


Application

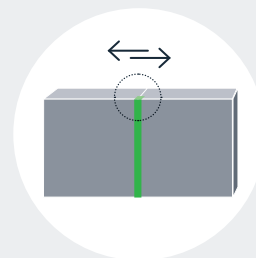


Sealing a silage clamp with **AgrarElast**

Suitable for:



Component joints



Expansion joints



NOTE: JOINTS IN SEALING FOR BIOGAS PLANTS AND PLANTS FOR THE STORAGE AND TRANSFER OF SLURRY, LIQUID MANURE SILAGE EFFLUENT

Benefits

Simple and safe processing

Approved sealing for asphalt, concrete and their combinations

Can be walked/driven on

High permissible deformation 12.5 %

Weather and UV resistance

Stable with only low shrinkage

Very high temperature resistance in compared to sealants based on PU and bitumen

Solvent-free, isocyanate-free

Approval (abZ: Z-74.62-176) from the German Institute of Building Technology (DIBt)

Application tips

For the application, please read the technical data sheet with the processing instructions

AgrarElast is moisture-curing

High temperatures and humidity accelerate the hardening, lower ones slow it down

Application using an applicator gun

Apply to a dry substrate and protect against wetness during the processing

Insert a joint backfilling cord (prevents 3-flank adhesion and saves sealant)

During application, observe joint geometries according to approval, otherwise max. sealant thickness per work step 5 cm

Primer A (asphalt) and primer B (concrete) are part of the AgrarElast system

Pay attention to their flash-off time

Protect against mechanical damage

FAQs

1. Do the joints have to be cleaned?

Yes, the joint flanks must be dry and free from dust, grease, loose parts and other separating materials.

2. Do I have to apply a primer in order to be able to use AgrarElast?

Yes, primers appropriate for the substrate must be applied when using AgrarElast.

For use on asphalt, the components A+B of the primer A (asphalt) must be mixed with each other.

Primer B (concrete) is to be used for an application on concrete.

3. When does the skin formation take place?

How long does it take to harden?

The first skin formation takes place after about 15 min. at 23 °C and 50% rel. humidity. The hardening of the joint sealant initially proceeds at about 3 mm / 24 hrs. At low temperatures, the speed of reaction and thus the hardening are slowed down.

4. Are there any material incompatibilities?

No, our AgrarElast can be used without any problems in areas subject to chemical loads. It is approved by the German Institute of Building Technology (DIBt) for the permanent sealing for biogas plants and plants for the storage and transfer of slurry, liquid manure silage effluent.

5. When is the joint capable of bearing loads?

The earliest loadability time varies with the joint depth. The joint can be fully loaded as soon as it has completely hardened. A lowered joint between chamfered concrete components can be driven on after 24 hours.

Further information can be found at:
www.bt-innovation.de

Joint sealing >> Sealing during construction >> Sealing tape for fresh and hardened concrete

SEALING TAPE FOR CONSTRUCTION JOINTS

Art. No.: 5001097 (30 mm x 20 mm, 24 m /box)

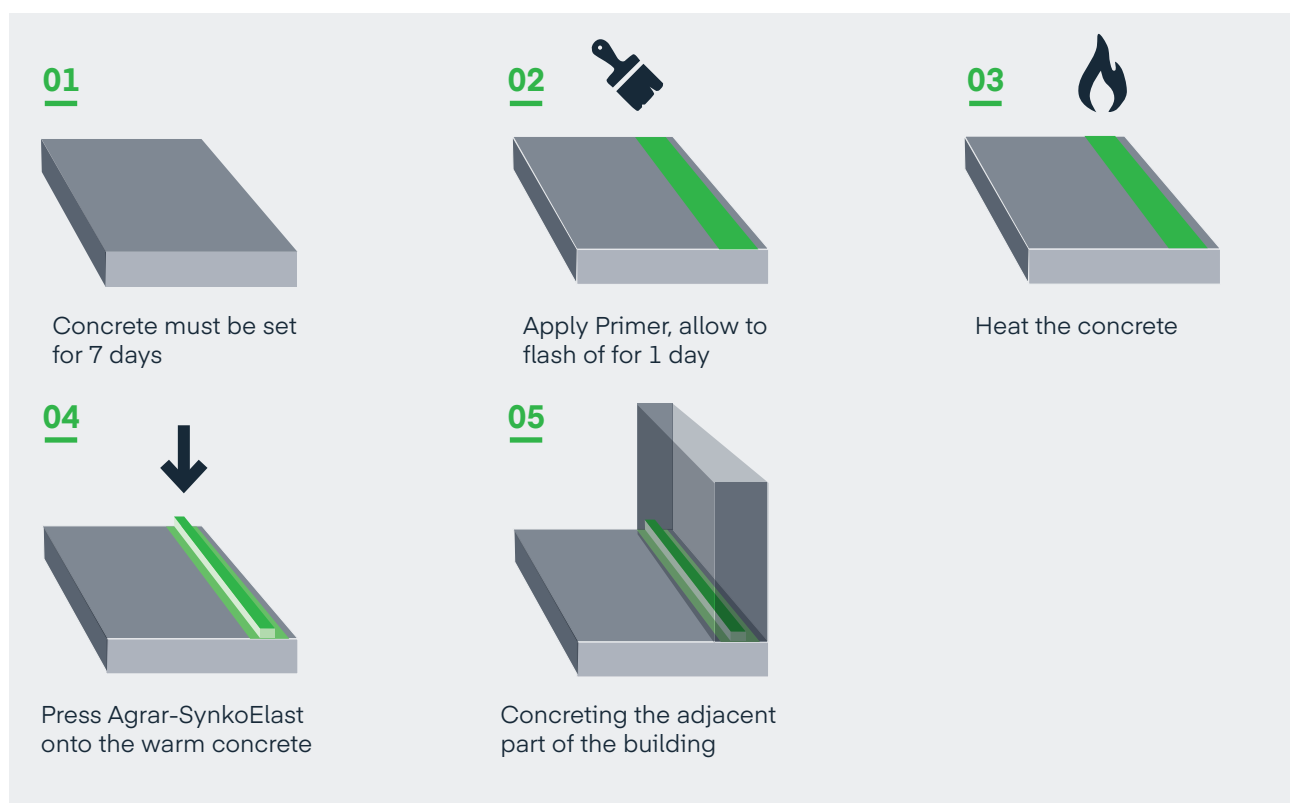
Art. No.: 5001099 Primer for hardened concrete (3,79 l / bucket)

Agrar-SynkoElast

suitable for: Sealing of construction joints in warehouses / silos and in filling stations / tanks for substances that are generally hazardous to water (manure, slurry, silage).

Installations and constructions in the agricultural area and in biogas plants require construction products that are resistant to manure, slurry, silage seepage, etc. The Agrar-SynkoElast joint tape system is approved for highly stressed joints in agricultural construction. Agrar-SynkoElast is a sealing tape for construction joints in in-situ concrete applied on hardened, solid concrete. After concreting, the tape is completely surrounded by concrete, it is then an internal seal. Based on German legal regulations only those products can be applied, that have a valid proof and certificate of usability issued by the national construction authorities in accordance with the legal requirements of water protection. The Agrar-SynkoElast tape and the corresponding primer for Agrar-SynkoElast meet the legal requirements and have a valid proof of usability. Therefore they offer a legal and secure solution for plant operators and installers / users. To meet these high requirements Agrar-SynkoElast is subject to regular product control and material testing.

It's that simple as this:



Application Solid concrete

Agrar-SynkoElast is installed on hard concrete to seal the construction joint between silo wall and base plate.



Agrar-SynkoElast



Water pressure tight
up to 0.4 bar



Processing from
0°C to +35°C

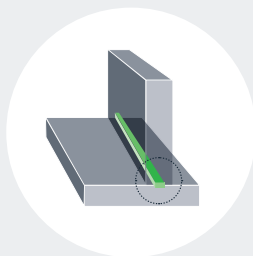


No swelling in
contact with water

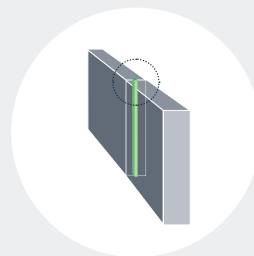


Resistant to liquid
manure, slurry, silage
leach / seepage, acids,
alkalis and salts

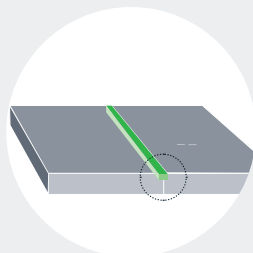
Suitable for:



Base plate and wall



Wall and wall



Base plate extension



Wall and ceiling connections

HEATING THE CONCRETE BE-
FORE AGRAR-SYNKOELAST
INSTALLATION



Benefits

Efficient application due to minimum installation effort

Bonds to the concrete during the hydration

Easy to be installed even in the presence of complex reinforcement

No swelling in contact with water

Installation without further aids or instruments

Application even within thin walls

Joints can absorb widening and shifts

Resistant to liquid manure, slurry, silage leachate, acids, alkalis and salts

Approval Z-74.51-184 from the German Institute for Structural Engineering (DIBt)

Application tips

For the application, please read the technical data sheet with the installation instructions

Store the tape in the packaging to protect it from dirt and damage

Store the tape in the closed box at room temperature so that it is easy to be processed

Do not place Agrar-SynkoElast in the sun or expose it to great heat

At lower temperatures, Agrar-SynkoElast® becomes stiffer and less easy to be processed

Wear protective gloves when installing it

Joints must be kneaded with at least a 5 cm lateral overlap

Install the Agrar-SynkoElast® with the protective foil facing upwards

FAQs

1. Do the joints have to be cleaned?

Yes, the joint flanks must be dry and free from dust, grease, loose parts and other separating materials. However, the edges of the joints can be wet, with no visible water film.

2. Do I have to apply a primer in order to be able to use Agrar-SynkoElast?

Yes! The primer is applied to the concrete and, after flushing, is heated to such an extent that Agrar-SynkoElast is welded to the concrete by applying moderate pressure.

3. Are there any material incompatibilities?

No, because Agrar-SynkoElast is not a swelling tape and remains stable in its shape. It seals through a firm connection between the tape and the concrete.

4. At what temperatures can I install Agrar-SynkoElast?

Agrar-SynkoElast can be installed on ice-free surfaces between 0°C and +35°C. By storing it at room temperature shortly before installation, the tape can be processed more easily.

Further information can be found at:
www.bt-innovation.de

Joint sealing >> Sealing during construction >> Sealing tape between the precast concrete elements

SEALING TAPE FOR JOINTS BETWEEN PRECAST CONCRETE ELEMENTS

Art. no.: 5002080 (17 x 17 mm, 4.50 m roll) _ Further sizes available

Agrar-RubberElast

suitable for: Component joints

Agrar-RubberElast is a joint tape for sealing prefabricated parts in agricultural construction.

The self-adhesive Agrar-RubberElast is simply stuck onto the joint flank of the first component. When the next component is installed with the BT-Spannschloss®, the sealing tape is pressed into the joint and thus seals the resulting joint up to a filling height of 4 m. The Agrar-RubberElast joint tape system is approved for highly loaded joints in agricultural construction (JGS and biogas plants).

The Agrar-RubberElast system fulfils the requirements of the AwSV for substances hazardous to water and the Water Resources Act.

Agrar-RubberElast



Water pressure-tight
up to 0,4 bar



Processing from
+5°C to +40°C



No swelling in
contact with water



esistant to weather,
acid, alkali, and salt



Permanently elastic



Immediately
waterproof

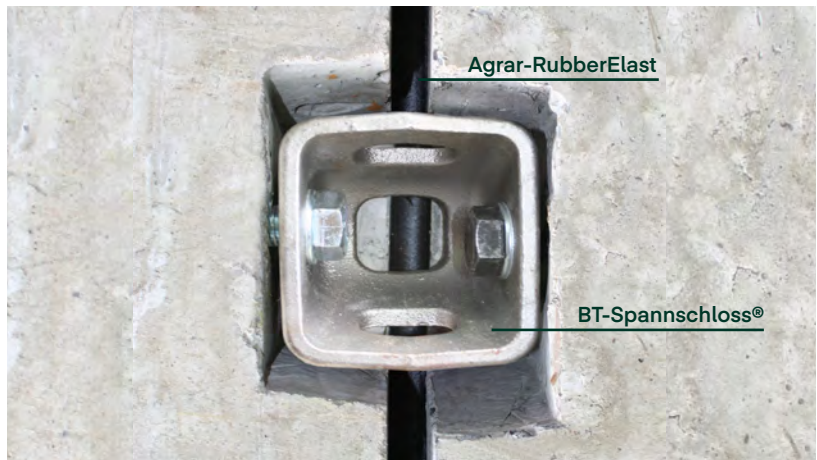


NOTE: PLEASE REFER TO THE TECHNICAL DATA SHEETS, THE SAFETY DATA SHEETS AND THE APPROVAL NOTICE (Z 74.51-208).

Article

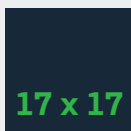


Agrar-RubberElast
Karton 8 rolls à 4,5m
(17x17mm)

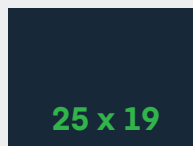


Agrar-RubberElast, in combination with BT-Spannschloss®, is **immediately waterproof** and a simple, quick and **weather-independent** precast concrete connection.

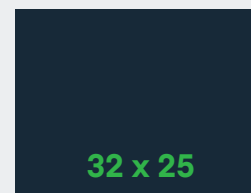
Sizes: RubberElast® is available in many sizes



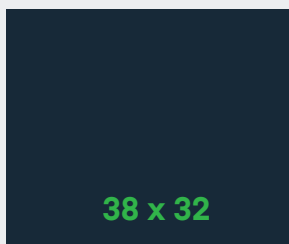
Joint width: 3.4 mm
Wall thickness at least 8,5 cm



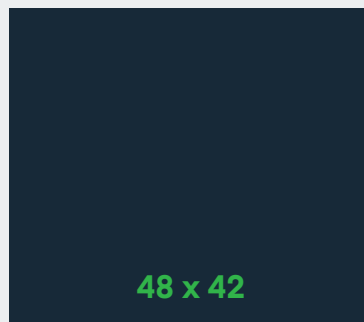
Joint width: 3.8 mm
Wall thickness at least 12,5 cm



Joint width: 5 mm
Wall thickness at least 16 cm



Joint width: 6.4 mm
Wall thickness at least 19 cm



Joint width: 8.4 mm
Wall thickness at least 24 cm

Application



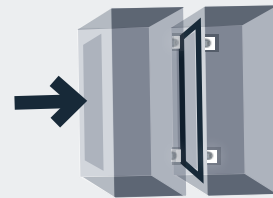
01

Place the precast concrete element in position.



02

Apply Agrar-RubberElast to the component to be sealed (substrate must be free of dirt, grease and oil).



03

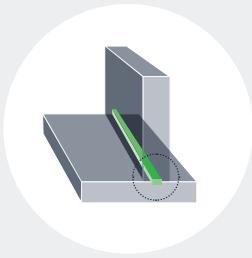
Position the next precast concrete element, insert BT turnbuckles and tighten. Compress Agrar-RubberElast by 80%.

-
- ✓ simply by hand ✓ without aids ✓ no curing ✓ immediately waterproof
-

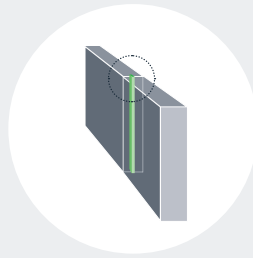
Installation



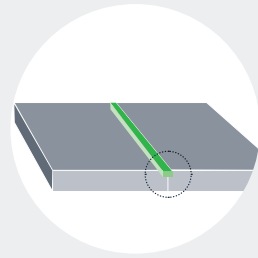
Suitable for:



Floor slab
and wall



Wall and wall



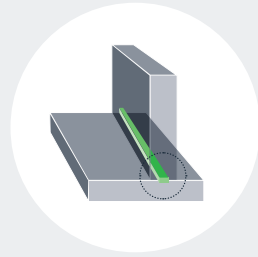
Floor and
floor slab



Wall and ceiling
connections



Frame shafts



L-shaped
retaining walls

Installation

The precast joints are sealed with **Agrar-RubberElast**

Agrar-RubberElast:
Crush seal with
tested pressure
resistance!



Benefits

Easy processing

Waterproof immediately after assembly

Flexible even at low temperatures

Witterungsbeständig

Tested water pressure-tight up to a water column of 4 m

Resistant to acid, alkali and salt

Sealant connection with AgrarElast approved

Application tips

Store the tape in the packaging to protect it against dirt and damage

Ensure suitable load transmission with horizontally running joints

Read the application notes in the technical data sheet carefully

Minimum joint width 2 mm to rule out destruction of the sealing tape

Agrar-RubberElast becomes stiffer at low temperatures, so that greater force is required

Wear protective gloves when installing

Ensure compression of 70 to 90% for an optimum sealing effect

Store the tape in a cool and dry place

Ensure that the substrate is dry, clean and stable

FAQ's

1. Do the joints have to be cleaned?

Yes, the joint flanks must be dry and free from dust, grease, loose parts and other separating materials.

2. Do I have to apply a primer so that Agrar-RubberElast® will adhere?

That depends on the substrate. Agrar-RubberElast® is generally applied without a primer. A primer can be used in addition if RubberElast® doesn't adhere to the substrate.

3. Which Agrar-RubberElast® size should I use for my project?

The choice of the right Agrar-RubberElast® size depends on the width of the joint flank and the final joint width. The Agrar-RubberElast® is squeezed into the joint and compressed to 20% of its original size. This means that the material presses itself sideways into the joint.

If the joint flank is too narrow, the Agrar-RubberElast® will be pressed out of the joint. The sealing effect cannot be achieved if the joint width is too large or too small. Obtain professional advice on this from our employees. We will also be glad to send you our list for the selection of the correct size.

4. When can water pressure be applied to Agrar-RubberElast®?

It does not react chemically with other substances, but water pressure can be applied to it as soon as it has been compressed properly.

5. How much force do I have to apply to compress the tape?

The force required depends on the chosen tape size and the prevailing ambient temperature.

In order to calculate the correct force to be applied, please refer to the data in the technical data sheet.

Further information can be found at: www.bt-innovation.de

B.T. innovation GmbH _ Sudenburger Wuhne 60 _ 39116 Magdeburg

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