



BUILDING
COMMON GROUND



Stremaform[®] stay-in-place formwork for expansion joints

Separation of concrete
components



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Stremaform® stay-in-place formwork for expansion joints

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The joint material

Styrodur® is used as standard for the joint filling. For higher fire protection or sound insulation requirements, a mineral fibre board can be used as an option. The standard thickness of at least 20 mm can be flexibly adapted to the project.

The steel mesh mat

The steel grid stabilizes the joint filling material on both sides and ensures secure fixing. Depending on requirements, it can also be used on one or both sides as a practical elevation.

The waterstop cage

The one-sided waterstop cage ensures precise positioning of the expansion joint tape. Its proven V-shape with 15° upstand reliably prevents voids during concreting, ensuring that the expansion joints remain permanently tight and secure.

What is an expansion joint setting?

Stremaform® expansion joint elements enable the targeted formation of expansion joints in concrete structures. They compensate for movements in the individual concrete components – the Stremaform® expansion joint provides a secure sealing structure, particularly in waterproof structures. But how does the system work?

Expansion joint with integrated seal

The elements remain in the concrete and separate the concrete components at the planned joint. An integrated waterstop cage holds the selected expansion joint tape and ensures a reliable seal against water ingress. This means that expansion joint tapes can be easily installed and securely fixed without any major installation work.

Standard lengths and molded parts

Stremaform® expansion joints are available in a length of 2.40 m. Suitable molded parts with a length of 1.20 m are available for transitions or height jumps. This means that even complex joint patterns can be implemented safely.

Installation in two concreting sections

After installing the Stremaform® expansion joint elements and fixing the joint tape, the concreting sections are produced. At transitions into the wall, the vertical Stremaform® expansion joint elements are placed on the existing expansion joint tape and fixed in place – for a continuous and secure seal.



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Stremaform® stay-in-place formwork for expansion joints

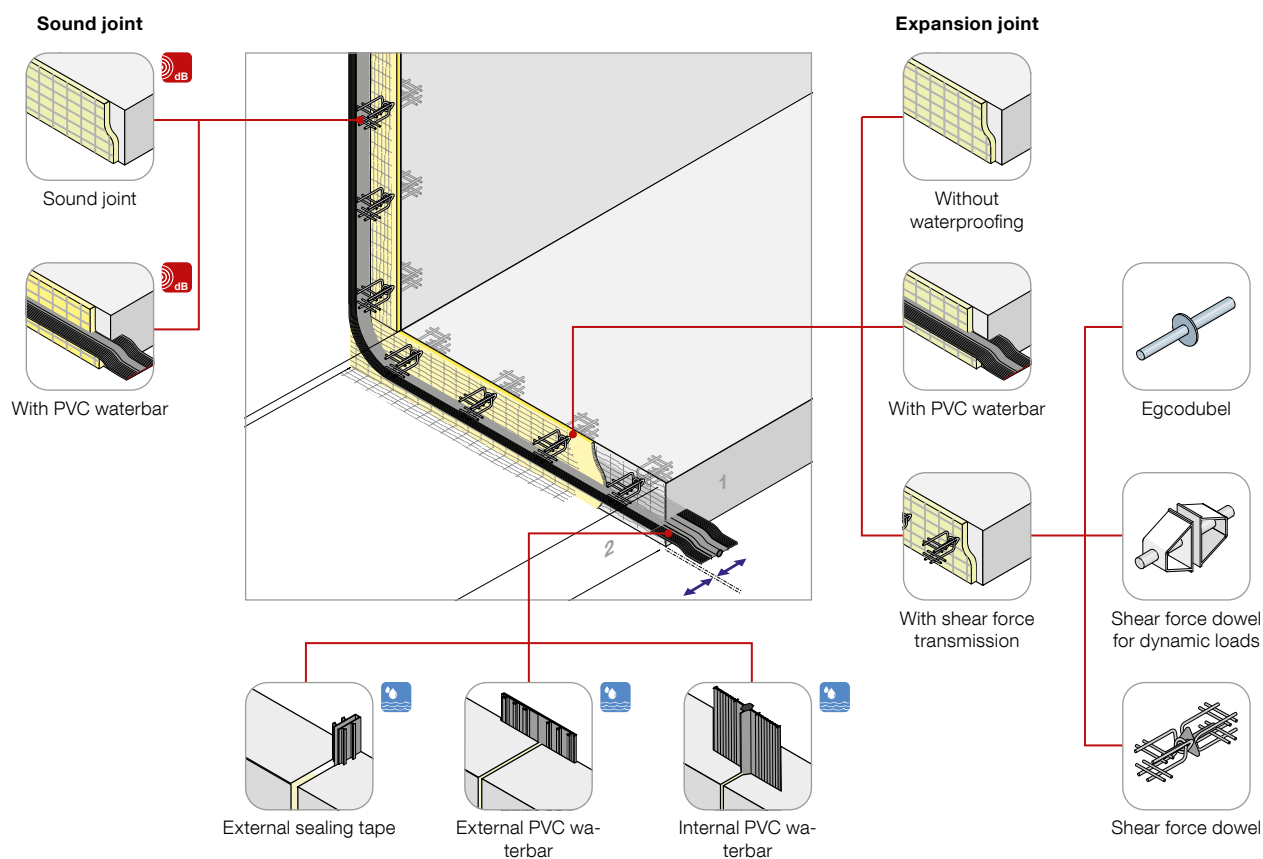
Separation of concrete components

Stremaform® formwork elements for expansion joints decouple components and absorb their movements within the joint. The elements are used as permanent formwork in floor slabs, ceilings and walls. The formwork elements are prefabricated by us to size, no stripping is required. Reinforcement and concreting can be continued independently and without interruption.

We produce the expansion joint elements with the joint insert of your choice: Rigid foam, heat-resistant mineral wool or sound-insulating mineral fibre.

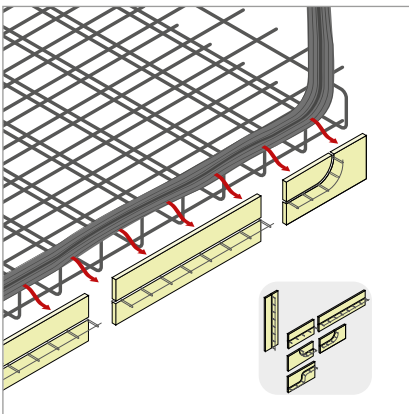
★ Advantages

- Faster and more cost-effective formwork compared to timber formwork
- Reliable and functional formwork element
- No dismantling or disposal of formwork material
- Proven quality: Engineered in Germany for over 35 years



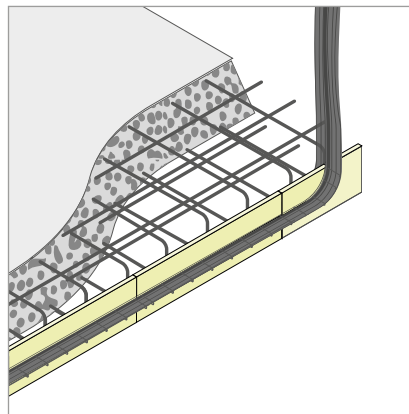


Principles of application



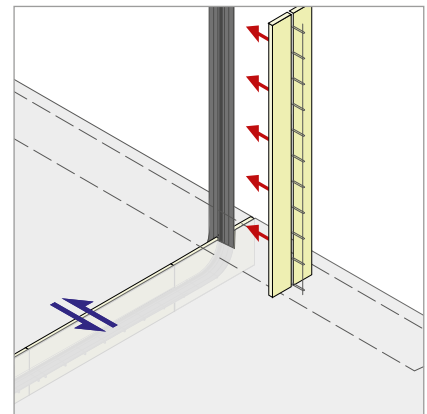
Laying the Stremaform® expansion joint elements

The Stremaform® expansion joint elements are available with various mounting constructions that are precisely adapted to the planned design of the expansion joint tape. The individual elements are available in a standard length of 2.40 m or, for shaped parts such as transitions or height jumps, in 1.20 m. Matching molded parts are available for demanding joints with expansion joint tape sealing. The elements are lined up according to the factory planning and fixed in place on site.



Concreting of the first concreting section

Once the elements have been fixed and the joint tape has been secured into position, concreting of the first section can begin. Ensure that the elements in the second concreting section are sufficiently supported against the concrete pressure.



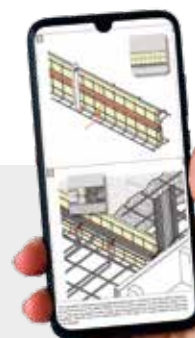
Concreting of the second concreting section and wall construction

Once the reinforcement and formwork has been completed in the second concreting section, the concrete can be poured without any further effort. After concreting the floor slab, the wall elements are simply slipped over the protruding joint tape and integrated into the wall construction accordingly. Walls can be constructed in sections.

Further information can be found in the installation instructions.



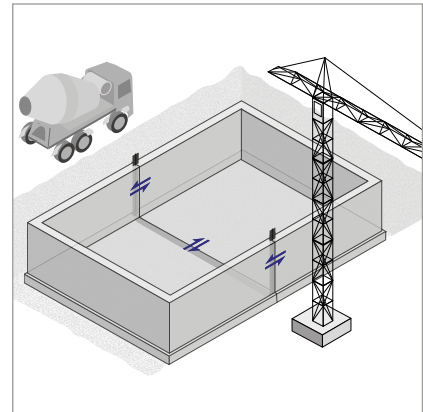
Simply scan the QR code!



Technical information

Expansion joints in concreted building components

Expansion joints are used to compensate for the shrinkage process when the concrete hardens and to absorb thermal movements of the individual concrete components. Particularly in waterproof structures, appropriate joint tapes must be used to ensure that expansion joints are securely and continuously sealed against water ingress.

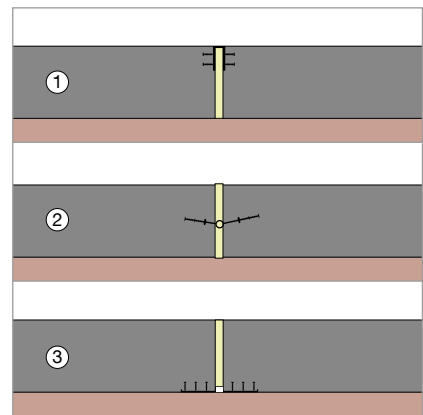


Slab sealing variants

Depending on the sealing concept and the requirements of the respective expansion joint, the joint tape can be arranged differently:

1. Expansion joint end tape
2. Internal expansion joint tape
3. External expansion joint tape

For all three design options, appropriate support structures are provided for the correct positioning and professional installation of the waterstop. The waterstops can be combined as required to meet more demanding expansion joint requirements.

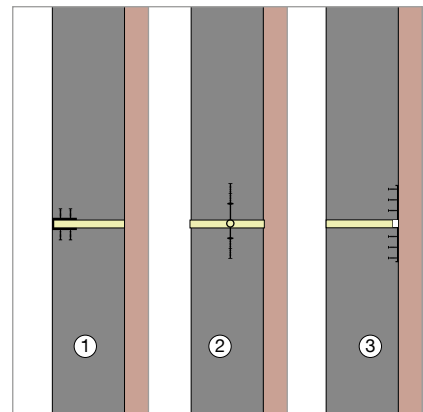


Wall sealing variants

The same sealing variants can be used for expansion joints in the wall as in the floor slab:

1. Expansion joint sealing tape
2. Internal expansion joint tape
3. External expansion joint tape

The support structures in the wall are slightly different to those in the floor slab and also enable correct and secure positioning and fixing in vertical installation.

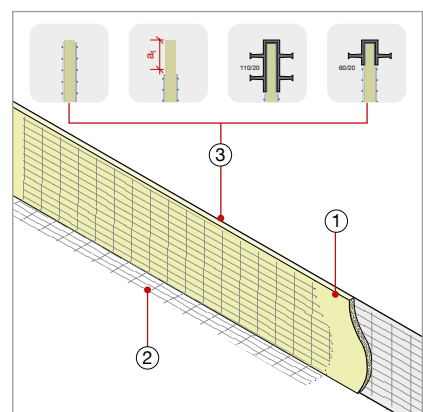


Structure of Stremaform® expansion joint elements

Our Stremaform® expansion joint elements are available with different joint inserts (1):

- Styrodur® (standard)
- Mineral fibre board (1000° heat-resistant)
- Mineral fibre board (acoustic)

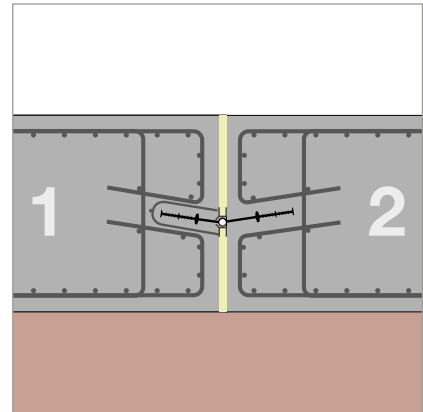
The elements can be supplied with an upright base (2) for stabilization and fastening to the cleanliness layer. Various edge designs (3) are available for the upper end of the elements.



Installation between the reinforcement

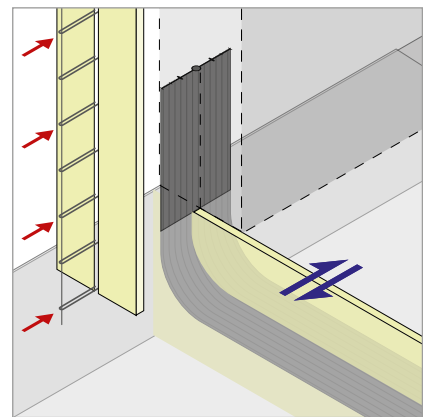
When laying the reinforcement, it must be ensured that the bracing in the area of internal expansion joint tapes provides sufficient space for their installation. The required concrete cover to the expansion joint must also be maintained and ensured using suitable spacers.

The most economical solution is to install the expansion joint elements at the same time as the on-site reinforcement on both sides of the concreting sections (1 and 2). This eliminates the need for time-consuming support in the second concreting section, which would have to be removed again later. In addition, the expansion joint elements can be attached directly to the existing reinforcement.



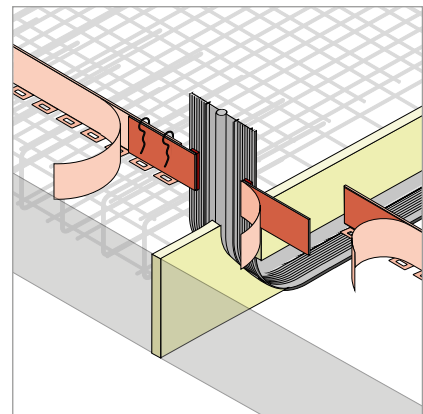
Transition to wall elements

When sealing with internal waterstops, it is particularly important to ensure that the expansion joint tape is guided correctly in the transition area between the floor slab and the wall. Our rounded transition elements enable bending radii of the waterstop in accordance with the specifications and facilitate the installation of the subsequent Stremaform® expansion joint wall elements.



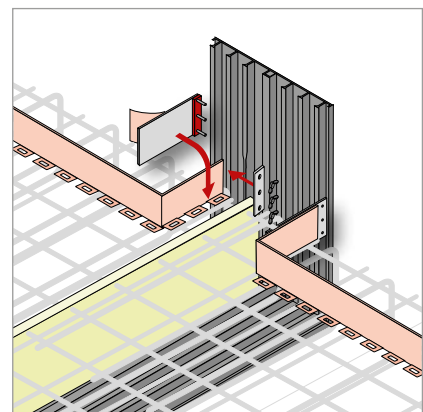
Connection of construction joints with internal waterstops

In waterproof constructions, the connection between the internal expansion joint tape and the horizontal construction joint seal must be carefully executed, for example with the coated Fradiflex® metal water stop. With our Fradiflex® expansion joint connection, such junctions can be implemented professionally. The exact arrangement is determined by the product specifications.



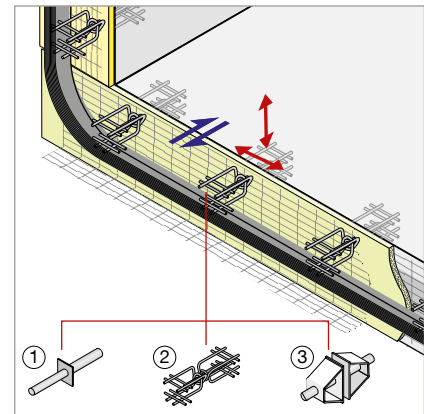
Connection of construction joints with external waterstops

If external waterstops are planned in the expansion joint, our Fradiflex® expansion joint connection enables a continuous seal between the metal waterstop and the external waterstop. In this case, the coated Fradiflex® metal waterstop must be angled before concreting and screwed to a web of the waterstop.



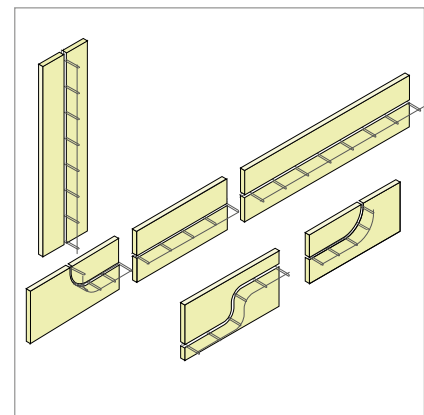
Force transmission in expansion joints

In expansion joints, vertical forces can be transmitted via shear force elements such as Egcodübel (1), Egcodorn® (2) or Egcodorn® DND (3). The shear force elements are precisely integrated into the Stremaform® expansion joint elements for on-site installation in accordance with the static dimensioning and enable quick and professional installation on the construction site. Combinations of different expansion joint tapes and shear force elements can be implemented with Stremaform® expansion joint elements in concrete components.



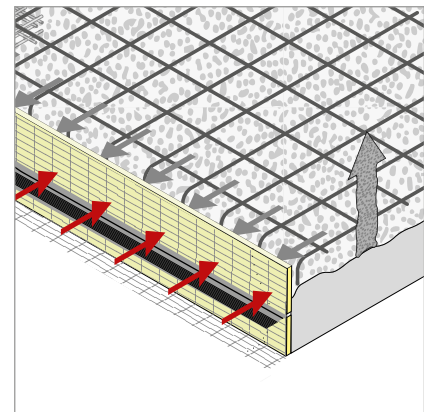
Stremaform® expansion joint formwork - the system solution for concrete construction

Stremaform® is the proven solution for the safe formation of expansion joints. The prefabricated elements are matched to the respective slab thickness and are adapted to the lengths of the expansion joint during joint planning. The factory planning includes molded parts that allow the expansion joint tapes to be installed safely and quickly in their position and function.



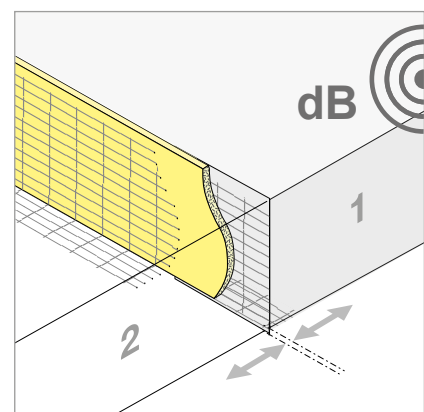
Support against the concreting pressure

Stremaform® expansion joint elements are designed in such a way that all installation parts, such as waterstops, joint inserts or shear force elements, can be installed exactly at the position specified by the planner. In order to absorb the concreting pressure during concreting, on-site support is absolutely essential.



Stremaform® acoustic separation joint

The Stremaform® sound separation joint is used for the acoustic separation of concrete components. The ready-to-install joint is installed in semi-detached and terraced houses for sound decoupling between the individual residential buildings.



Product variants

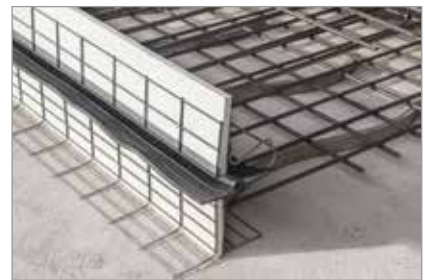
Stremaform® expansion joint formwork

- The Stremaform® expansion joint formwork consists of carrier mats and a 20 mm thick expansion joint insert in between
- This can optionally consist of Styrodur or fire-resistant mineral wool



Stremaform® expansion joint formwork with carrying cage for rubber/PVC waterstop

- The Stremaform® formwork element with integrated carrying cage for rubber/PVC waterstop for the on-site mounting of a waterstop for expansion joint
- The Stremaform® fixer ensures that the middle hose of the waterstop for expansion joint is still exactly in the middle of the joint after concreting
- Carrying cage for rubber/PVC waterstop angled by 15° available for horizontal components
- With Styrodur 20 mm expansion joint insert and carrying cage for rubber/PVC waterstop 150/90-75 mm on one side, incl. expansion joint fixer



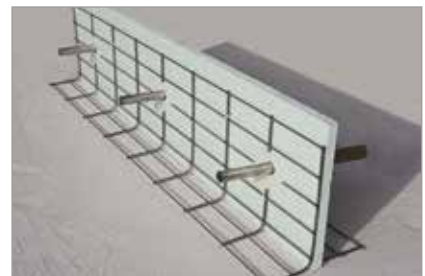
Stremaform® expansion joint formwork with two-piece carrying cage for rubber/PVC waterstop

- When installing large water stops we recommend the use of a two-piece version of the carrying cage for rubber/PVC waterstop. The PVC waterbar is rolled out onto the bottom part of the cage with the upper part being installed later
- Carrying cage for rubber/PVC waterstop angled by 15° available for horizontal components



Stremaform® expansion joint formwork with integrated shear force transmission

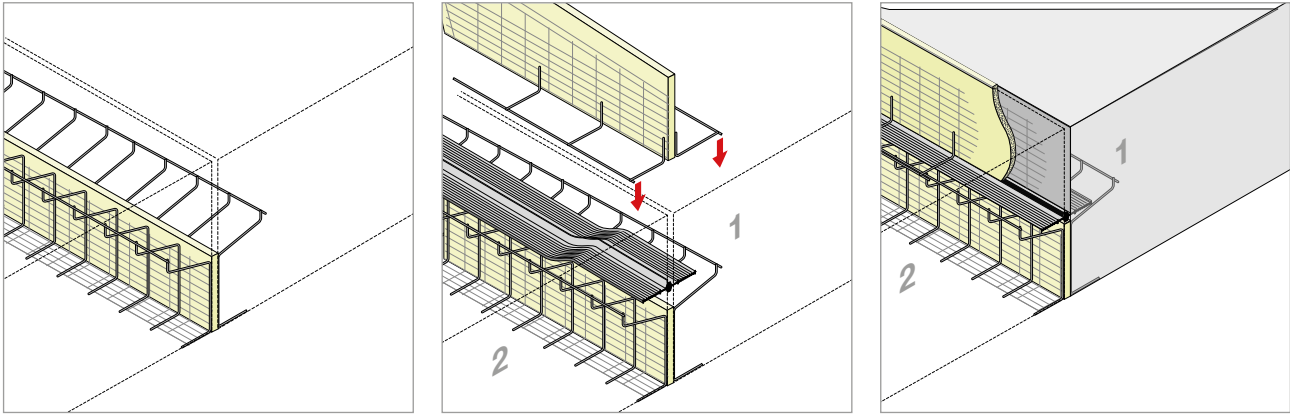
- All Stremaform® units for expansion joints can also be supplied with integrated shear force dowels
- You can find the different variants of Egcodübel and Egcodorn at www.maxfrank.com/egcodorn



How to

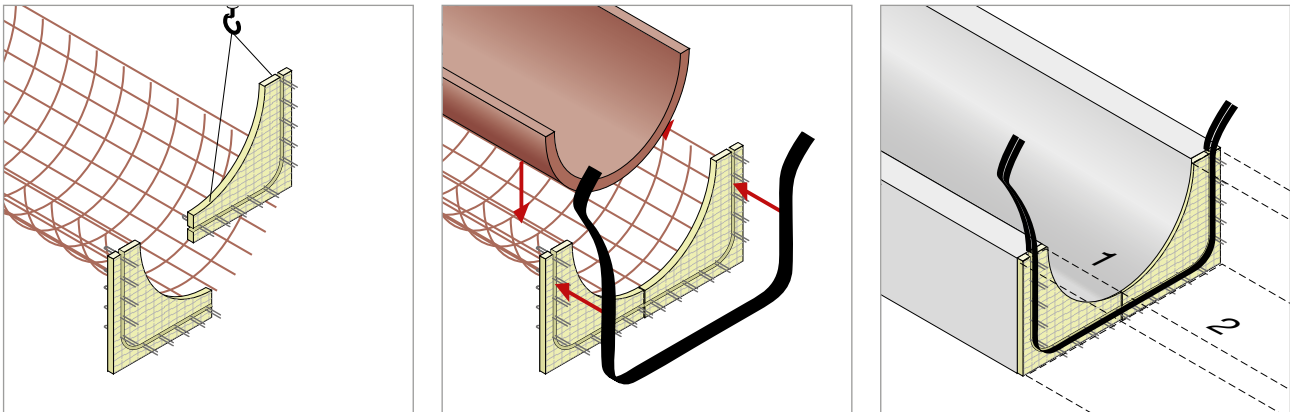
Stremaform® support elements for expansion joints with waterstop cage - two-part version

The two-part version of the Stremaform® expansion joint element is particularly suitable for expansion joints with large joint tapes. This solution makes it much easier to work with thick panels on site: the joint tape can first be conveniently rolled out onto the lower part of the element and positioned precisely. Only then is the upper section set up and securely fastened. This procedure enables precise and efficient work, especially when forming joints with voluminous sealing tapes.

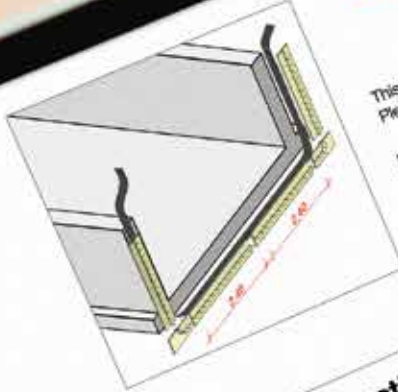


Expansion joints with complex component cross-sections

Expansion joints with complex component cross-sections are often a challenge. With Stremaform®, MAX FRANK offers an economical solution: the elements are prefabricated to project specifications and already contain a waterstop cage, expansion joint insert or shear force dowel. Formwork and reworking costs can be significantly reduced, especially for irregular geometries. The elements can be easily assembled on site, allowing the reinforcement to be laid in both concreting sections without any problems. This saves time, reduces sources of error and ensures reliable joint solutions, even for challenging designs.



Order form - Stremaform® expansion joints slab



This order sheet has been designed to document your project requirements quickly and efficiently.
Please send form to the below address and we will provide a quotation for your requirements

MAX FRANK Group
info@maxfrank.com

Project name:

Site address:

Site contact:

Tender ☐
Order ☐

Type of construction

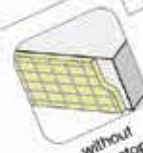


slab



wall

Waterproofing



without
waterstop



internal rubber/
PVC waterstop
Fugenband



external rubber/
PVC waterstop



black steel
(standard)

Steel type carrier mat

Joint material

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PRODUCT PAGE

On our Stremaform® for expansion joints product page you will find general information on the areas of application, product variants, supported with images and video material.



DOWNLOADS

In the download area of the Stremaform® product page you will find documents such as ordering aids, installation instructions, tender texts and environmental declarations.



PRACTICAL VIDEOS

We have created various application videos on expansion joints for your reference.



ONLINE CATALOGUE

Refer to our online catalog with practical features such as product comparison or watch list for your Stremaform® selection.



Joint Designer

The joint designer shows the range of connection joints in concrete structures according to the classification of construction joints, crack control joints, expansion joints, structural acoustic joints and settlement joints.





We are here for you!

Our aim is to support you through every phase of your project - from planning through to completion.

Find your local contact at:

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