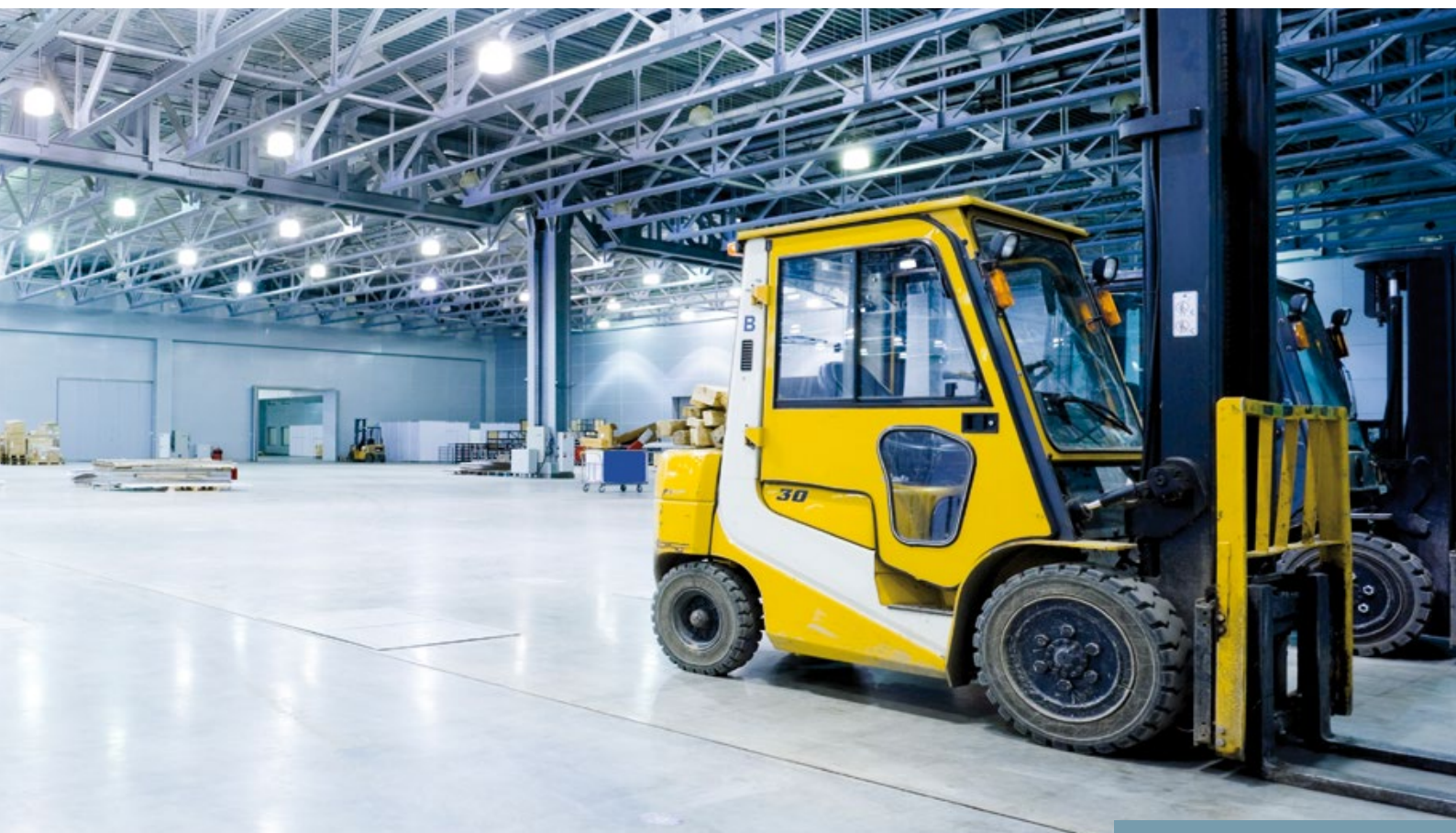


# HEAVY DUTY ALL-METAL EXPANSION JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS

HARD WEARING, MAINTENANCE-FREE AND LONG LASTING



**MIGUTRANS**

# YOU FIRST.

MIGUA is one of Europe's leading experts in the design, manufacture and installation of expansion joint systems. MIGUA expansion joint systems serve to cover, close and seal expansion joints. Our products satisfy the most rigorous standards in quality and safety and are widely used in large-scale construction projects such as airports, train stations, industrial plants, parking structures, shopping centres and hospitals. Every day, our experienced team do their utmost to ensure that our outstanding product quality and innovative approach make your building project successful. We are not satisfied until you are satisfied. Because our guiding principle is:

**MIGUA – you first.**

## **Over 600 products for one purpose:**

### **Yours**

With five brands and a total of over 600 proven expansion joint systems, we've got the diverse structural needs of today's construction projects covered. We confront problems such as heavy traffic loads and meet exacting standards in water resistance or hygiene. Floors, walls or roofs, MIGUA offers the perfect solution for any surface. Products of the highest quality are fundamental to our business; yet our ultimate priority is always customer satisfaction.



## MIGUTRANS

HEAVY-DUTY ALL-METAL  
JOINT SOLUTIONS FOR  
LARGE TRAFFIC LOADS

## MIGUTAN

WATERTIGHT EXPANSION  
JOINT SOLUTIONS

## MIGUPREN

EXPANSION JOINT STRIPS  
TO SEAL JOINTS WITH THREE-  
DIMENSIONAL MOVEMENT

## MIGUMAX

SEISMIC RESISTANT  
EXPANSION JOINT SOLUTIONS

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## WITH MIGUTRANS, MIGUA OFFERS A COMPREHENSIVE RANGE OF **SOLID FULL METAL EXPANSION JOINT COVERS FOR FLOORS WITH HIGH TRAFFIC LOADS.**

Today's modern architecture for shopping centres, stations, airports, trade centres or hospitals must meet a wide range of functions and accordingly withstand a variety of loads. The bandwidth extends from the light loads imposed by foot traffic, to cars and trucks, and through to the highest spot loads exerted by lifting trucks and forklifts. Expansion and building joints subject to traffic loads are particularly critical areas in the structure of buildings. Added to this are, depending on requirements, further criteria such as vibration-free driving for sensitive items, the ability to retrofit when renovating, or requirements with regard to special resistance to chemical attack and environmental influences through to water-proofing.

MIGUTRANS from MIGUA offers planners and architects a wide range of wear-resistant, maintenance free and long-lasting expansion joint constructions for demanding construction projects. A user-oriented, high-quality and internationally tried and tested range of expansion joints which meet the varying functional and aesthetic requirements of innovative architecture.

In addition to the delivery of our products, we also offer you the complete and professional installation of our expansion joint covers by carefully selected, competent specialist companies. Please do not hesitate to contact us. To get to know more about our MIGUA installation partners, kindly take a look at [migua.com/en/service](https://migua.com/en/service).



## Test certificates






Official test certificates attesting to the payload are available and may be supplied on request.

## Important notes

With low expansion joint heights, the low coverage requires epoxy resin strips with a bonding coat to be used.

In wet areas (industrial kitchens, sanitary rooms etc.) solid stainless steel expansion joint covers or our watertight MIGUTAN expansion joint constructions are to be used.

## Specifications regarding the load capacity

| Pictogram |  |  |  |  |  |
|-----------|---|---|---|---|---|
| Meaning   | Pedestrians   | Private cars  | Lorries<br>DIN 1072   | Forklift trucks<br>DIN 1055   | Hard castors  |

The load specifications of air-filled and solid plastic tyre trucks apply to a wheel contact patch of 200 x 200 mm.

## Behaviour for slip resistance

Accidents caused by slipping must be avoided at all costs. This is why MIGUA has commissioned the building material test centre in Wismar, Germany, to carry out extensive tests to determine the slip resistance. We are happy to provide you with the respective tests certificates on demand.

## Special features

Absolutely equal height connection of the expansion joint cover lengths thanks to connecting pins or the insertion of brackets into one another.

Factory mounted spacers ensure joint covers set to mean point which in turn ensures economic installation and safe functional seating of the expansion joint construction.

Factory presetting of the profiles is available on request – thereby maximising the movement absorption.

## Note on installation

Please contact us for assembly and installation instructions, if required. Alternatively, installation instructions are available at [migua.com](http://migua.com) for download.



When installing the MIGUTRANS joint constructions in mastic asphalt coverings, please contact us for technical advice.

## Standard mounting

A detailed list of standard mounting is available on our website.





## MIGUARCHITECT.COM THE MODULAR PLANNING SYSTEM IN WEB PAGE FORMAT

With the website miguarchitect.com, MIGUA now offers an innovative work aid especially for architects and planners. This bespoke website was developed in the form of a working tool that contains information relevant only to planning. In addition

to tender texts and BIM files, the site also offers cleverly prepared basic know-how on the subject of planning with joints.

Miguarchitect.com was recently awarded the German Innovation Award 2019.



## SETTING NEW STANDARDS ALSO IN DESIGN



There is much more to MIGUA expansion joint covers than their high quality and impressive functionality. The newly developed 'Generation X' MIGUTRANS joint covers also meet high design standards in building architecture. The distinctive stylistic vocabulary the smooth surface design is indicative of this. This special structure ensures a

harmonious appearance with the new expansion joint covers - they are all marked with an X behind the joint cover designation. Equally innovative is the beautifully designed MIGUA Befestigungsmatrix® (fastening matrix), which allows for a well thought-out, flexible positioning of the screws and thus easier installation.

## EFFICIENT PLANNING OF JOINTS WITH BIM

MIGUA is the first expansion joint cover manufacturer in Germany to support architects and planners in the efficient planning of joints using BIM objects. And that involves everything from the early design phase to the concrete execution.

This means that even in the early planning phase (service phase 3), when hardly any exact information is available about the joint cover required in the future - such as joint width, required movement absorption and load - initial planning can be carried

out very easily with a basic file, the so-called MIGUA BIM Basic. Once detailed requirements for the expansion joint cover are known (service phase 5), the planner can complete his work with the concrete BIM object without any additional effort.

At present, BIM objects for the watertight (MIGUTAN) and full metal expansion joint cover systems (MIGUTRANS) are already available - Details regarding other expansion joint cover systems will follow shortly.

## INNOVATIVE AND SUSTAINABLE SOLUTION FOR REFURBISHMENT AND MODERNISATION

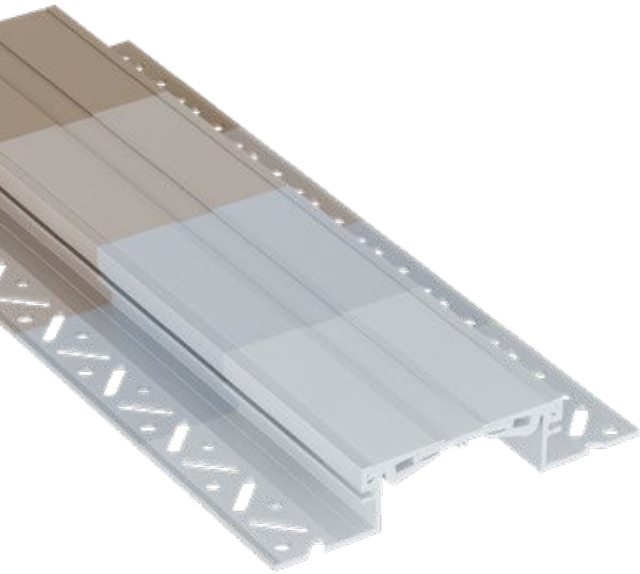
With the FSR X, MIGUA has developed a joint cover that can be replaced quickly, easily and in a cost-effective manner during operation. With this replaceable full metal joint cover, only the visible, most heavily loaded part of the joint cover is unscrewed and replaced by a new one. Time-consuming dismantling and removal of the adjacent floor covering is no longer necessary with this design. Above all, the clear advantage and added value for investors here is the reduced

downtime of the respective areas, in addition to the time saved and the minimised wage and material costs resulting from it.

In addition, the joint cover contributes to sustainability, as far less material is required for the renovation / modernisation with regard to the joint cover itself and the floor covering. The FSR X was also recently awarded the German Innovation Award and a patent application has been filed.



**GERMAN  
INNOVATION  
AWARD '19  
WINNER**



## MIGUTRANS EXPANSION JOINT COVER NOW ALSO AVAILABLE IN ANODISED COLOUR

Expansion joint covers can now be integrated into your projects in a variety of colour shades. This allows you more freedom of design when using expansion joint covers. Although initially available in just three colour

shades, we now also offer the option of defining homogeneous surfaces. And if these do not meet the demands of your current project, we will be happy to find the right tone with you on request.

### Notes




Anodising hardens the surface, but scratches cannot be ruled out if the joint cover is subjected to mechanical stress.

Slight colour and/or gloss deviations between different batches or deliveries do not constitute grounds for complaint.

The processing is carried out according to DIN 17611 (German Institute for Standardisation) and the Qualanod regulations for anodising aluminium. The joint covers must be cleaned and

maintained in accordance with Qualanod's specifications and the A5 leaflet of the Aluminiumzentrale (Aluminium Headquarters). We also offer personalised consultation on request.

Standard colours of anodised joint covers according to the EURAS colour chart:

-  C 0 Anodised Nature
-  C 31 Light
-  C 32 Light bronze

Further variations in colours are available on request.



## JOINT WIDTH

Please find your expansion joint cover according to the required joint width here.

| Joint width | Profil    | Page |
|-------------|-----------|------|
| 30 mm       | FS 50     | 13   |
|             | STS 160   | 37   |
| 35 mm       | FS 40     | 12   |
|             | FS 46     | 12   |
|             | FS 135    | 24   |
|             | STS 100   | 36   |
|             | STD 100   | 39   |
| 50 mm       | FSX 75    | 14   |
|             | FSL 77    | 15   |
|             | SFS 90    | 16   |
|             | FS 100    | 34   |
|             | FS 255    | 42   |
|             | FSRX 111  | 48   |
| 60 mm       | FSS 215   | 35   |
|             | STS 160   | 37   |
|             | STD 160   | 40   |
|             | FS 220    | 41   |
| 70 mm       | FS 99     | 17   |
|             | FS 174    | 24   |
| 75 mm       | SFS 115   | 16   |
|             | FS 105    | 19   |
|             | FSX 110   | 20   |
|             | FS 110 ES | 21   |
|             | FSRX 139  | 48   |
|             | FSRX 144  | 48   |
| 80 mm       | FSL 104   | 18   |
| 90 mm       | FSL 113   | 22   |
|             | FS 295    | 42   |
| 100 mm      | SFS 135   | 16   |
|             | FSX 130   | 23   |
|             | FS 260    | 41   |
|             | FSRX 168  | 48   |
| 116 mm      | FSRX 180  | 48   |
| 117 mm      | FSX 146   | 25   |
| 120 mm      | FS 155    | 26   |
| 130 mm      | FSX 160   | 27   |
|             | FSRX 196  | 48   |
| 135 mm      | FS 167    | 28   |
| 140 mm      | FS 185    | 29   |
| 150 mm      | FSV 235   | 30   |
| 200 mm      | FSV 280   | 31   |
| 205 mm      | FS 410    | 42   |
| 215 mm      | FS 380    | 41   |
| 240 mm      | FSV 285   | 32   |
| 250 mm      | FSV 335   | 33   |

## LOAD BEARING CAPACITY

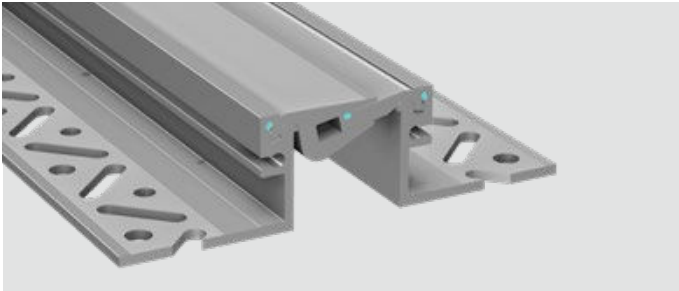
Find your expansion joint cover here using the specification for the maximum load of industrial trucks with hard plastic tyres.

| Load bearing capacity | Profil      | Page   |    |
|-----------------------|-------------|--------|----|
| PKW                   | FSL 77      | 15     |    |
|                       | FS 99       | 17     |    |
|                       | FS 110 ES   | 21     |    |
|                       | FSL 113     | 22     |    |
|                       | FSV 285     | 32     |    |
|                       | FSV 335     | 33     |    |
| 3 kg/mm               | FS 50       | 13     |    |
| 3,5 kg/mm             | FSL 104     | 18     |    |
|                       | FSX 146     | 25     |    |
|                       | FSRX 180    | 48     |    |
| 6,5 kg/mm             | FS 40       | 12     |    |
|                       | FS 46       | 12     |    |
|                       | SFS 90      | 16     |    |
|                       | SFS 115     | 16     |    |
|                       | SFS 135     | 16     |    |
|                       | FSX 110     | 20     |    |
|                       | FSX 130     | 23     |    |
|                       | FSX 160     | 27     |    |
|                       | FS 185      | 29     |    |
|                       | FSV 235     | 30     |    |
|                       | FSV 280     | 31     |    |
| 9 kg/mm               | FS 100      | 34     |    |
| 10 kg/mm              | FSX 75      | 14     |    |
|                       | FSRX 111    | 48     |    |
|                       | FSRX 144    | 48     |    |
|                       | FSRX 168    | 48     |    |
|                       | FSRX 196    | 48     |    |
|                       | FS 105      | 19     |    |
| 15 kg/mm              | FS 174      | 24     |    |
|                       | FS 155      | 26     |    |
|                       | FS 220      | 41     |    |
|                       | FS 260      | 41     |    |
|                       | FS 380      | 41     |    |
|                       | FS 255      | 42     |    |
|                       | FS 295      | 42     |    |
|                       | FS 410      | 42     |    |
|                       | FSRX 139    | 48     |    |
|                       | 15-20 kg/mm | FS 167 | 28 |
|                       | 30 kg/mm    | FS 135 | 24 |
| FSS 215               |             | 35     |    |
| 75 kg/mm              | STS 100     | 36     |    |
|                       | STS 160     | 37     |    |
|                       | STD 100     | 39     |    |
|                       | STD 160     | 40     |    |

## ALPHABETICAL ORDER

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| FS 40 / 46               | 12   |
| FS 50                    | 13   |
| FSX 75                   | 14   |
| FS 99                    | 17   |
| FS 100                   | 33   |
| FS 105                   | 19   |
| FSX 110                  | 20   |
| FS 110 ES                | 21   |
| FSX 130                  | 23   |
| FS 135 / FS 174          | 24   |
| FSX 146                  | 25   |
| FS 155                   | 26   |
| FSX 160                  | 27   |
| FS 167                   | 28   |
| FS 185                   | 29   |
| FS 220 / FS 260 / FS 380 | 41   |
| FS 255 / FS 295 / FS 410 | 42   |
| FSL 77                   | 15   |
| FSL 104                  | 18   |
| FSL 113                  | 22   |
| FSN                      | 47   |
| FSN 50                   | 43   |
| FSN 99                   | 44   |
| FSN/FSNX                 | 46   |
| FSNX 146                 | 45   |
| FSRX ... 30              | 48   |
| FSS 215                  | 34   |
| FSV 235                  | 29   |
| FSV 280                  | 30   |
| FSV 285                  | 31   |
| FSV 335                  | 32   |
| SFS 90 / 115 / 135       | 16   |
| STD 100                  | 38   |
| STD 160                  | 39   |
| STS 100                  | 35   |
| STS 160                  | 36   |
| STS 160/16 / STS 160/22  | 37   |

## EXPANSION JOINTS ACCORDING TO AREAS OF APPLICATION

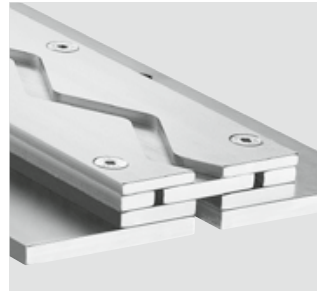


### FS – Joints for high load requirements

For a variety of applications, the traffic loads to be planned e.g. imposed by cars, lie within a normal range. MIGUA offers three tried and tested product lines for this application. No compromises are made with regard to freedom from maintenance, wear-resistance and durability thanks to the robust construction which uses solid full aluminium and mature technical 3D joint constructions.

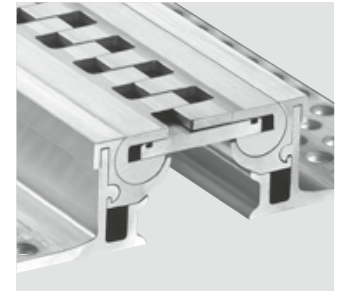
Higher traffic loads must be taken into consideration, in particular for public sector or industrial projects. MIGUA offers the most comprehensive

range for this particular sector including a range of different planning parameters. The key criteria are pronounced movement abilities, wear-resistance and durability under load and are effectively met by these profile constructions thanks to the individually adapted joint technologies.



### STS/STW – Expansion joints for maximum load bearing (wassertight)

With the STS/STW product line, MIGUA offers a programme with aluminium/steel/stainless steel constructions for highest traffic loads by industrial trucks, heavy duty trucks or special vehicles. This product line is characterized by the continuous vibration-free traversability, through which damage to the building structure and vehicles is reduced effectively. The extremely robust securing constructions ensure reliable horizontal movement absorption across and parallel to the joint. All STW versions are additionally waterproof.



### FS/FSS – Joints for vibration-free driving

Vibration-free driving is particularly relevant for the transportation of sensitive wares. The solid full aluminium expansion joint constructions FS/FSS meet this requirement in a particularly maintenance-free, wear-resistant and durable way. Fully moveable (FS 100) or with two-dimensional absorption of movement (FSS) they carry high traffic loads e.g. trucks or forklifts and are thus ideally suited to production and warehousing facilities.

| Product   | Page | Product | Page |
|-----------|------|---------|------|
| FS 40     | 12   | FS 255  | 42   |
| FS 46     | 12   | FS 260  | 41   |
| FS 50     | 13   | FS 295  | 42   |
| FSX 75    | 14   | FS 380  | 41   |
| FS 99     | 17   | FS 410  | 42   |
| FS 100    | 34   | FSL 77  | 15   |
| FS 105    | 19   | FSL 104 | 18   |
| FSX 110   | 20   | FSL 113 | 22   |
| FS 110 ES | 21   | FSS 215 | 35   |
| FSX 130   | 23   | FSV 235 | 30   |
| FS 135    | 24   | FSV 280 | 31   |
| FSX 146   | 25   | FSV 285 | 32   |
| FS 155    | 26   | FSV 335 | 33   |
| FSX 160   | 27   | SFS 90  | 16   |
| FS 167    | 28   | SFS 115 | 16   |
| FS 174    | 24   | SFS 135 | 16   |
| FS 185    | 29   | STS 100 | 36   |
| FS 220    | 41   | STS 160 | 37   |

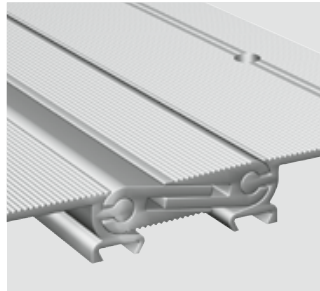
| Product    | Page |
|------------|------|
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| STD 160    | 40   |
| STS 100    | 36   |
| STS 160    | 37   |
| STS 160/16 | 38   |
| STS 160/22 | 38   |

| Product | Page |
|---------|------|
| FSS 215 | 35   |
| FS 100  | 34   |
| STD 100 | 39   |
| STS 100 | 36   |
| STD 160 | 40   |
| STS 160 | 37   |



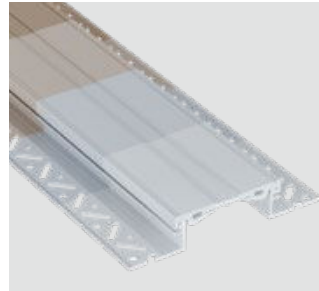
### FS - joint cover for renovation (partly without damaging the covering)

MIGUA has developed joint covers that are anchored by the joint cover itself and therefore do not need the lateral joint cover legs. In this way, joint covers can be replaced or reinstalled in a space-saving and resource-saving manner without causing any significant damage to the adjacent covering.



### FSN – Joints for subsequent installation

MIGUA FSN joint constructions have upper brackets and are thus ideal for subsequent installation, particularly in renovation and modernisation projects. The highly developed joint constructions enable three-dimension movements to be absorbed and ensure maximum functionality even under difficult conditions. Structured surfaces and gap-free visual surfaces ensure high traffic safety.



### Anodised joint covers and FS 110 ES - for special aesthetic requirements

Expansion joint covers are now available in various anodised colours. This allows you more freedom of design when using expansion joint covers. Although initially available in just four colour shades, we now also offer the option of defining homogeneous surfaces. Expansion joint cover FS 110 ES also offers you a choice of different materials - such as structured stainless steel, brass and 3M surfaces.



### FSRX - The interchangeable joint cover

With the FSR X, MIGUA has developed a joint cover that can be replaced quickly and in a cost-effective manner during operation. With this replaceable full metal joint cover, only the visible, most heavily loaded part of the joint cover is unscrewed and replaced. Time-consuming dismantling and removal of the adjacent floor covering is no longer necessary with this design. Here is the obvious advantage for investors and architects: The reduced downtime of the respective areas, in addition to the time saved and the minimised wage and material costs resulting from it.

| Product | Page |
|---------|------|
| FS 220  | 41   |
| FS 255  | 42   |
| FS 260  | 41   |
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| Product  | Page |
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| FSN 46   | 46   |
| FSN 50   | 43   |
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| FSN 99   | 44   |
| FSNX 110 | 46   |
| FSNX 130 | 46   |
| FSNX 146 | 45   |
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| Anodized expansion joint covers | 49   |
| FS 110 ES                       | 21   |

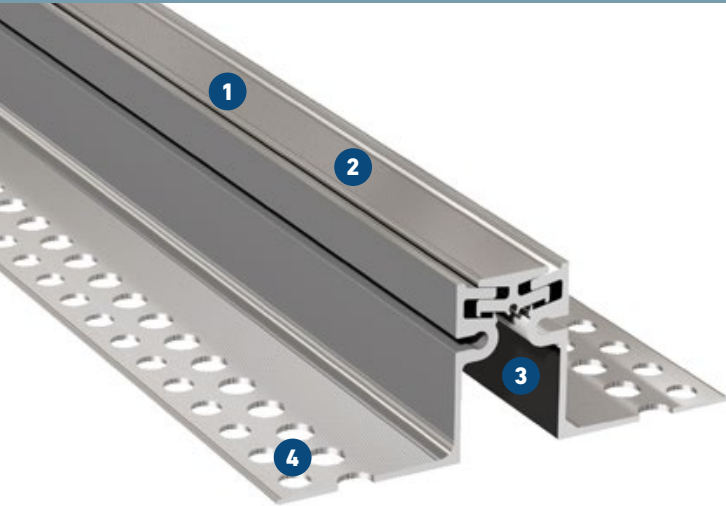
| Product  | Page |
|----------|------|
| FSRX 111 | 48   |
| FSRX 139 | 48   |
| FSRX 144 | 48   |
| FSRX 168 | 48   |
| FSRX 180 | 48   |
| FSRX 196 | 48   |

# FS 40 / FS 46

FOR HEAVY DUTY FLOORS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



- 1 Symmetrical visible surface**
- 2 Striated surface**  
ensures good skid resistance
- 3 Solid all-metal expansion joint**  
heard wearing, maintenance-free, long lasting
- 4 MultiHole mounting bracket**  
for secure fixing

### Now available Anodized!

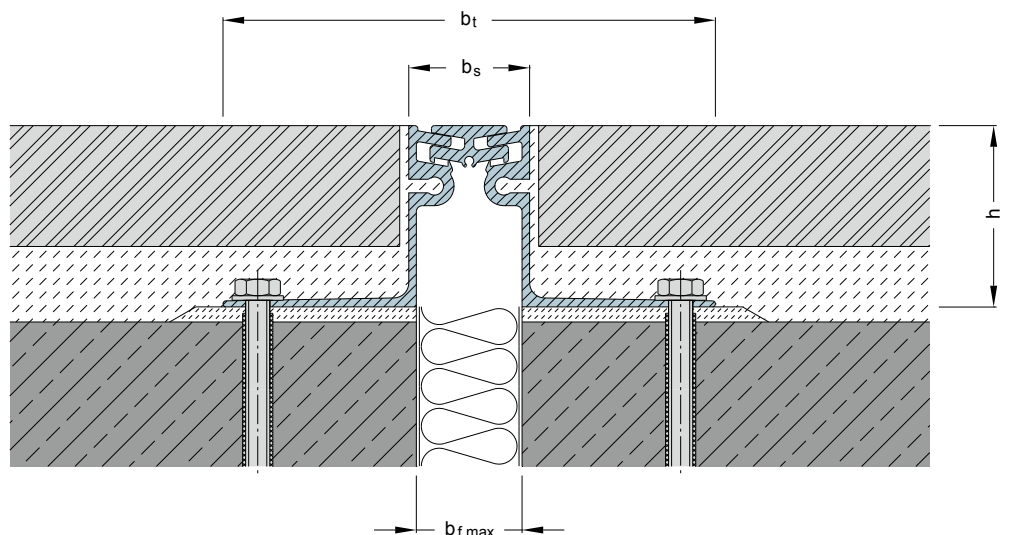
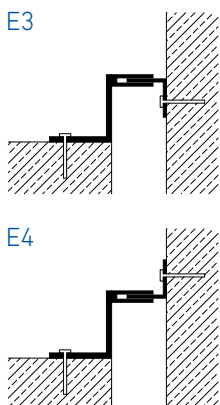
This expansion joint cover is on offer in anodized colours as of now. Available as standard in the four colours shown below, we will be pleased to offer you further colours upon request

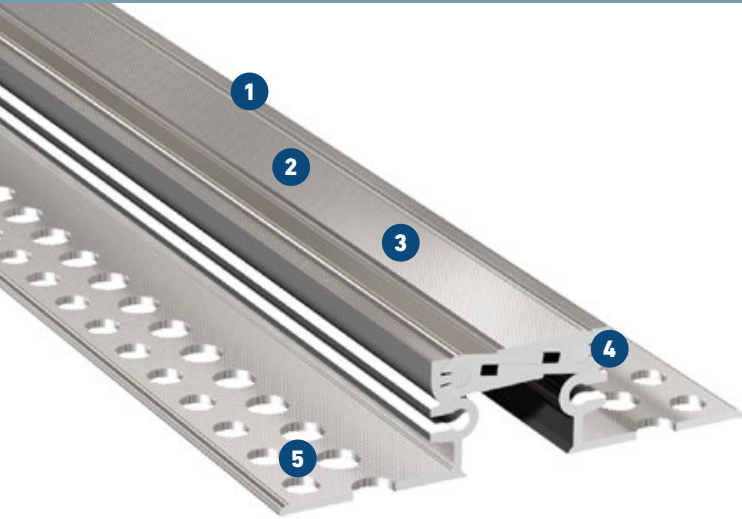
| Expansion joint cover | Joint width max.<br>$b_f$<br>[mm] | Total movement<br>$\Delta b_f$<br>[mm] | Visible width<br>$b_s$<br>[mm] | Joint width total<br>$b_t$<br>[mm] | Joint height<br>$h$<br>[mm] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>solid plastic tyres<br>[kg/mm] |
|-----------------------|-----------------------------------|--|--------------------------------|------------------------------------|-----------------------------|-----------------------------------|-----------------------------------|---|
| FS 40/19              | 35                                | 16 ( $\pm 8$ )                         | 40                             | 173                                | 19                          | 300                               | 70                                | 6,5   |
| FS 40/25              | 35                                | 16 ( $\pm 8$ )                         | 40                             | 161                                | 25                          | 300                               | 70                                | 6,5   |
| FS 40/35              | 35                                | 16 ( $\pm 8$ )                         | 40                             | 163                                | 35                          | 300                               | 70                                | 6,5   |
| FS 40/60              | 35                                | 16 ( $\pm 8$ )                         | 40                             | 163                                | 60                          | 300                               | 70                                | 6,5   |
| FS 46/50              | 35                                | 20 ( $\pm 10$ )                        | 46                             | 165                                | 50                          | 300                               | 70                                | 6,5   |

**Production length:** 4 m

**Standard colour:** Aluminium, available in anodized version, too  
Further installation heights on request.

Corner versions:





- 1 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting
- 2 Striated surface**  
ensures good skid resistance
- 3 Visible surface has no gaps**  
avoids dirt accumulation
- 4 Articulated telescoping system**  
absorbs movement in 3 directions
- 5 MultiHole mounting bracket**  
for secure fixing

**Now available Anodized!**

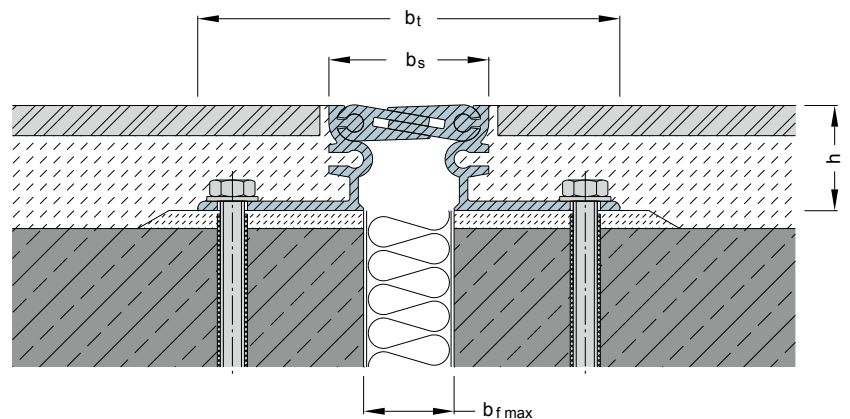
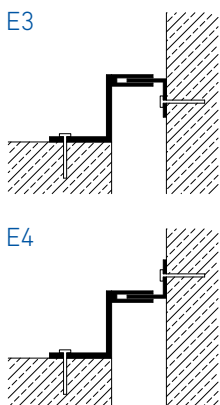
This expansion joint cover is on offer in anodized colours as of now. Available as standard in the four colours shown below, we will be pleased to offer you further colours upon request

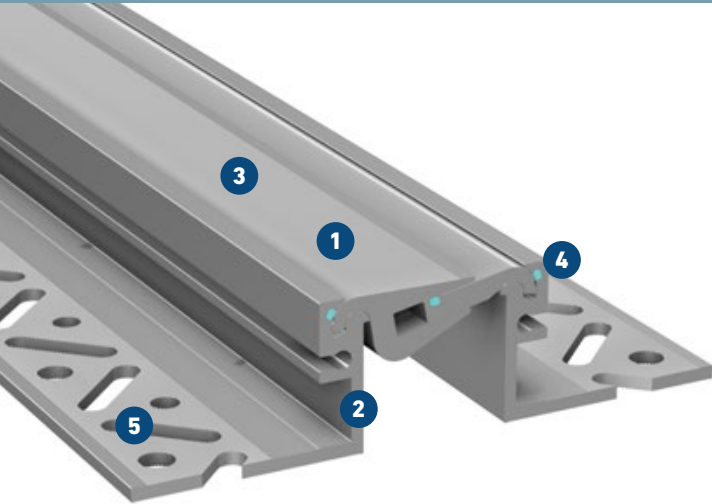
| Expansion joint cover | Joint width max. | Total movement       | Visible width | Joint width total | Joint height | Load bearing capacity | Load bearing capacity | Load bearing capacity       |
|-----------------------|------------------|----------------------|---------------|-------------------|--------------|-----------------------|-----------------------|-----------------------------|
|                       | $b_f$<br>[mm]    | $\Delta b_f$<br>[mm] | $b_s$<br>[mm] | $b_t$<br>[mm]     | $h$<br>[mm]  | [kN]                  | [kN]                  | solid plastic tyres [kg/mm] |
| FS 50/20              | 30               | 10 ( $\pm 5$ )       | 53            | 140               | 20           | 90                    | 35                    | 3                           |
| FS 50/35              | 30               | 10 ( $\pm 5$ )       | 53            | 140               | 35           | 90                    | 35                    | 3                           |
| FS 50/50              | 30               | 10 ( $\pm 5$ )       | 53            | 140               | 50           | 90                    | 35                    | 3                           |
| FS 50/90              | 30               | 10 ( $\pm 5$ )       | 53            | 138               | 90           | 90                    | 35                    | 3                           |

**Production length:** 4 m

**Standard colour:** Aluminium, available in anodized version, too  
Further installation heights on request.

Corner versions:





- 1 New, improved design**  
Innovative layout of the line
- 2 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting
- 3 Striated surface**  
ensures good skid resistance
- 4 Articulated telescoping system with optimized movement control**  
absorbs movement in 3 directions, with improved shock absorbing elements
- 5 Punctured leg with MIGUA mounting matrix®**  
Provides optimal anchoring alternatives in the underground

**Now available Anodized!**

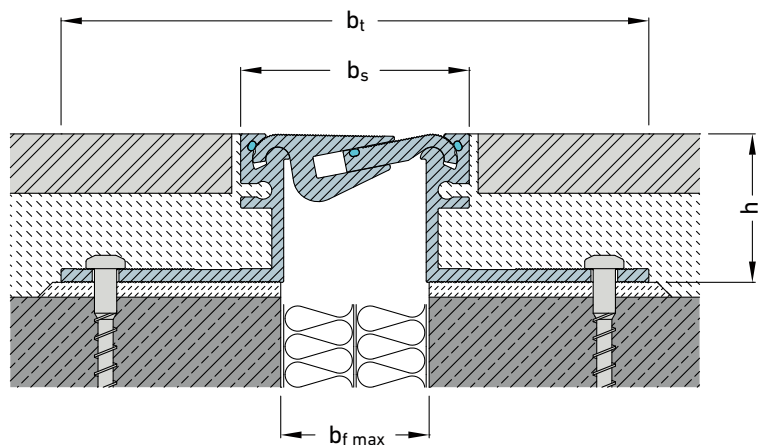
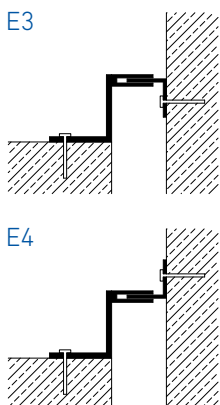
For perfect match with interior design. Different colours can be combined. Color-fast and light resistant.

| Expansion joint cover | Joint width max. | Total movement       | Visible width | Joint width total | Joint height | Load bearing capacity | Load bearing capacity | Load bearing capacity       |
|-----------------------|------------------|----------------------|---------------|-------------------|--------------|-----------------------|-----------------------|-----------------------------|
|                       | $b_f$<br>[mm]    | $\Delta b_f$<br>[mm] | $b_s$<br>[mm] | $b_t$<br>[mm]     | $h$<br>[mm]  | [kN]                  | [kN]                  | solid plastic tyres [kg/mm] |
| FSX 75/22             | 50               | 20 (±10)             | 77            | 198               | 22           | 300                   | 130                   | 10                          |
| FSX 75/30             | 50               | 20 (±10)             | 77            | 198               | 30           | 300                   | 130                   | 10                          |
| FSX 75/40             | 50               | 20 (±10)             | 77            | 198               | 40           | 300                   | 130                   | 10                          |
| FSX 75/50             | 50               | 20 (±10)             | 77            | 198               | 50           | 300                   | 130                   | 10                          |
| FSX 75/60             | 50               | 20 (±10)             | 77            | 198               | 60           | 300                   | 130                   | 10                          |
| FSX 75/80             | 50               | 20 (±10)             | 77            | 198               | 80           | 300                   | 130                   | 10                          |
| FSX 75/100            | 50               | 20 (±10)             | 77            | 198               | 100          | 300                   | 130                   | 10                          |

**Production length:** 4 m

**Standard colour:** Aluminium, available in anodized version, too  
Further installation heights on request.

Corner versions:

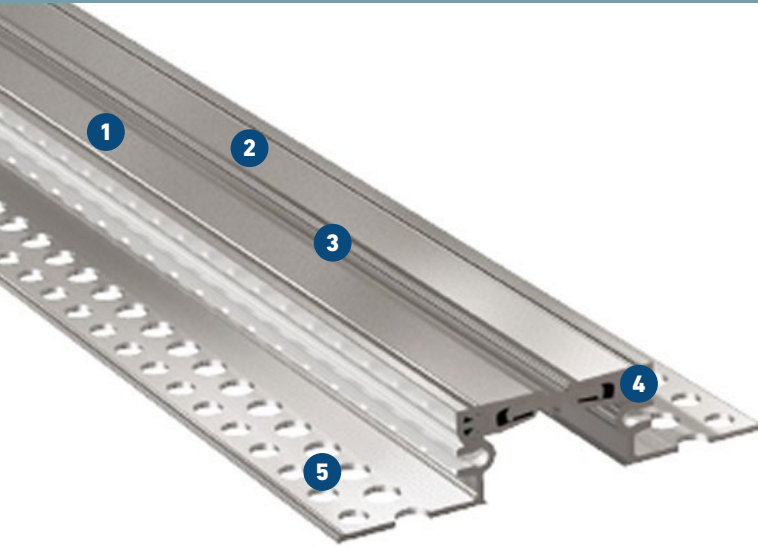


# FSL 77

FOR FLOORS WITH LARGE MOVEMENT – TO BE USED BY LIGHT FORK LIFT TRUCKS AND PALLET TRUCKS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



- 1 **Solid all-metal expansion joint cover**  
hard wearing, maintenance-free, long lasting
- 2 **Striated surface**  
ensures good skid resistance
- 3 **Symmetrical visible surface has no gaps**  
prevents accumulation of dirt
- 4 **Articulated telescoping system**  
absorbs movement in 3 directions
- 5 **MultiHole mounting bracket**  
for secure fixing

### Now available Anodized!

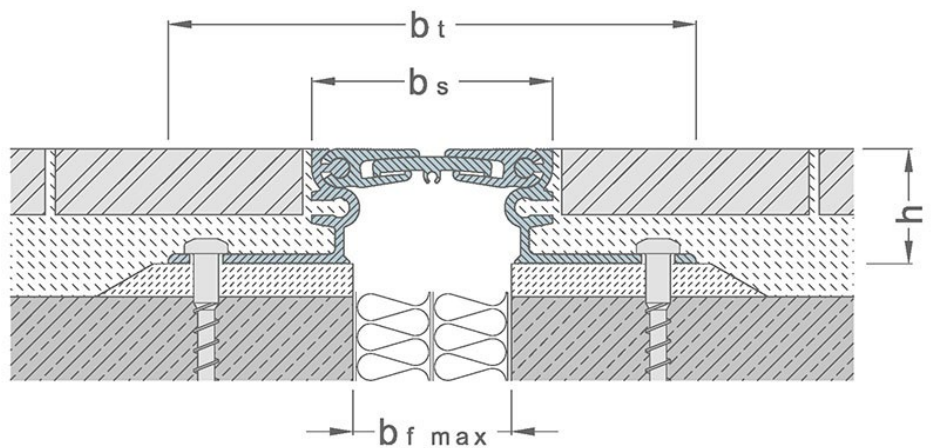
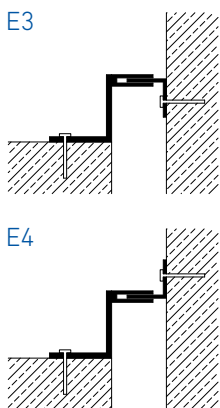
This expansion joint cover is on offer in anodized colours as of now. Available as standard in the four colours shown below, we will be pleased to offer you further colours upon request

| Expansion joint cover | Joint width max. | Total movement  | Visible width | Joint width total |            | Joint height | Load bearing capacity |
|-----------------------|------------------|-----------------|---------------|-------------------|------------|--------------|-----------------------|
|                       | $b_f$ [mm]       |                 |               | $\Delta b_f$ [mm] | $b_s$ [mm] |              |                       |
| FSL 77/20             | 50               | 22 ( $\pm 11$ ) | 77            | 164               | 77         | 20           | 12                    |
| FSL 77/35             | 50               | 22 ( $\pm 11$ ) | 77            | 164               | 77         | 35           | 12                    |
| FSL 77/50             | 50               | 22 ( $\pm 11$ ) | 77            | 164               | 77         | 50           | 12                    |
| FSL 77/90             | 50               | 22 ( $\pm 11$ ) | 77            | 164               | 77         | 90           | 12                    |

**Production length:** 4 m

**Standard colour:** Aluminium, available in anodized version, too  
Further installation heights on request.

Corner versions:

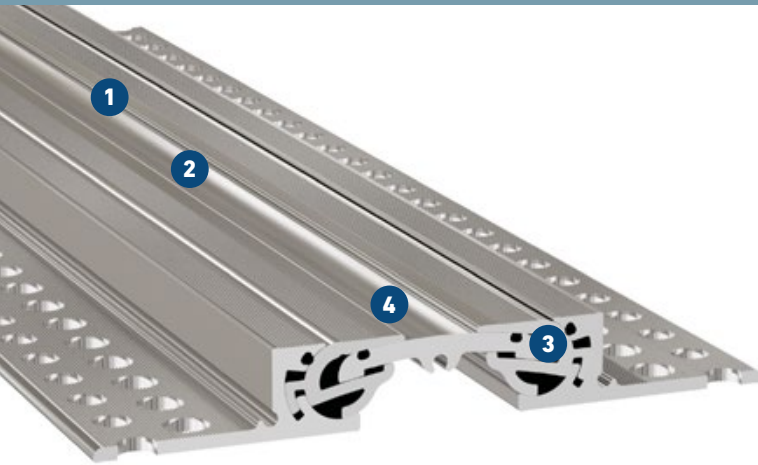


# SFS 90 / 115 / 135

FOR HEAVY DUTY FLOORS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



- 1 Improved transit over joints**  
reduces wear on wheels
- 2 Symmetrical visible surface**
- 3 Super efficient design**  
for smoother transit and even load distribution
- 4 Visible surface has no gaps**  
avoids dirt accumulation, easy cleaning
- 5 Minimal vibration when trafficked**  
more efficient and safer work environment

### Now available Anodized!

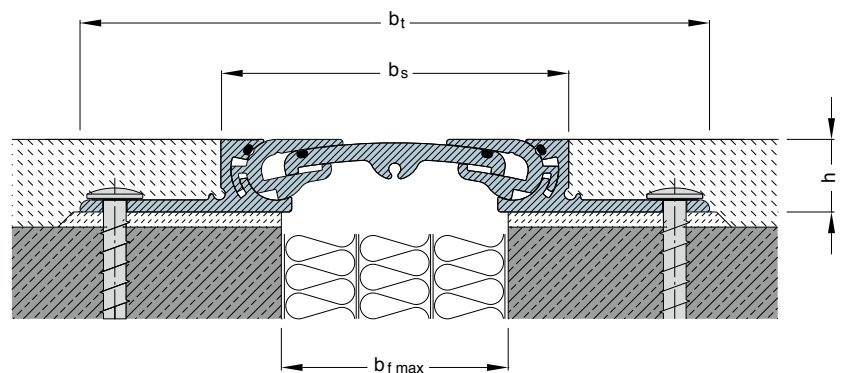
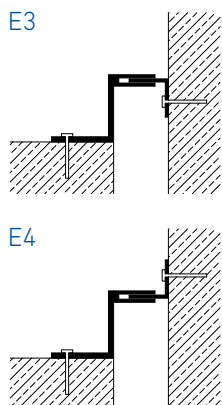
This expansion joint cover is on offer in anodized colours as of now. Available as standard in the four colours shown below, we will be pleased to offer you further colours upon request.

| Expansion joint cover | Joint width max. | Total movement       | Visible width | Joint width total | Joint height | Load bearing capacity | Load bearing capacity | Load bearing capacity       |
|-----------------------|------------------|----------------------|---------------|-------------------|--------------|-----------------------|-----------------------|-----------------------------|
|                       | $b_f$<br>[mm]    | $\Delta b_f$<br>[mm] | $b_s$<br>[mm] | $b_t$<br>[mm]     | $h$<br>[mm]  | [kN]                  | [kN]                  | solid plastic tyres [kg/mm] |
| SFS 90/24             | 50               | 20 ( $\pm 10$ )      | 90            | 183               | 24           | 300                   | 69                    | 6,5                         |
| SFS 90/30             | 50               | 20 ( $\pm 10$ )      | 90            | 183               | 30           | 300                   | 69                    | 6,5                         |
| SFS 90/42             | 50               | 20 ( $\pm 10$ )      | 90            | 183               | 42           | 300                   | 69                    | 6,5                         |
| SFS 115/24            | 75               | 30 ( $\pm 15$ )      | 115           | 205               | 24           | 300                   | 69                    | 6,5                         |
| SFS 115/30            | 75               | 30 ( $\pm 15$ )      | 115           | 205               | 30           | 300                   | 69                    | 6,5                         |
| SFS 115/42            | 75               | 30 ( $\pm 15$ )      | 115           | 205               | 42           | 300                   | 69                    | 6,5                         |
| SFS 135/24            | 100              | 40 ( $\pm 20$ )      | 135           | 228               | 24           | 300                   | 46                    | 6,5                         |
| SFS 135/30            | 100              | 40 ( $\pm 20$ )      | 135           | 228               | 30           | 300                   | 46                    | 6,5                         |
| SFS 135/42            | 100              | 40 ( $\pm 20$ )      | 135           | 228               | 42           | 300                   | 46                    | 6,5                         |

**Production length:** 4 m

Larger installation heights on request.

Corner versions:



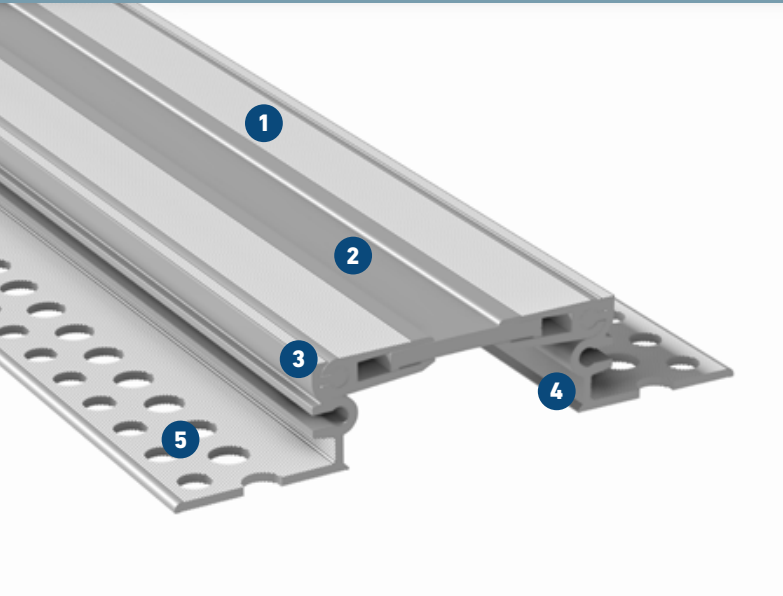


# FS 99

FOR FLOORS WITH LARGE MOVEMENT – TO BE USED BY PRIVATE CARS AND PEDESTRIANS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



- 1 Striated surface**  
ensures good skid resistance
- 2 Symmetrical visible surface shows no gaps**  
avoids dirt accumulation
- 3 Articulated telescoping system**  
absorbs movement in 3 directions
- 4 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting
- 5 MultiHole mounting bracket**  
for secure fixing

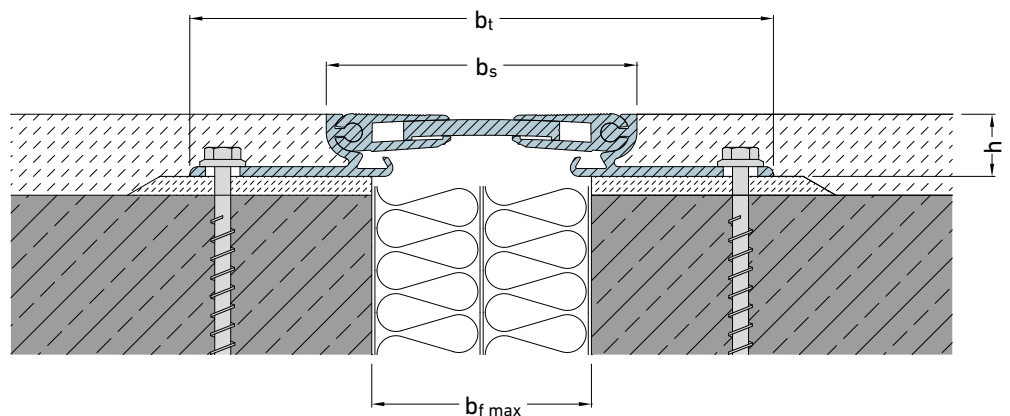
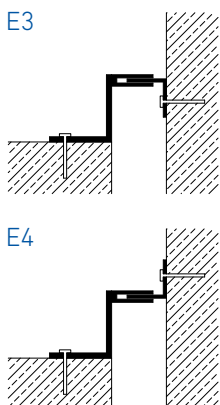
| Expansion joint cover | Joint width max. | Total movement  | Visible width | Joint width total |            | Joint height | Load bearing capacity |
|-----------------------|------------------|-----------------|---------------|-------------------|------------|--------------|-----------------------|
|                       | $b_f$ [mm]       |                 |               | $\Delta b_f$ [mm] | $b_s$ [mm] |              |                       |
| FS 99/20              | 70               | 40 ( $\pm 20$ ) | 99            | 186               | 20         | 12           |                       |
| FS 99/35              | 70               | 40 ( $\pm 20$ ) | 99            | 186               | 35         | 12           |                       |
| FS 99/50              | 70               | 40 ( $\pm 20$ ) | 99            | 186               | 50         | 12           |                       |
| FS 99/90              | 70               | 40 ( $\pm 20$ ) | 99            | 184               | 90         | 12           |                       |

**Production length:** 4 m

**Standard colour:** Aluminium

Larger installation heights on request.

Corner versions:

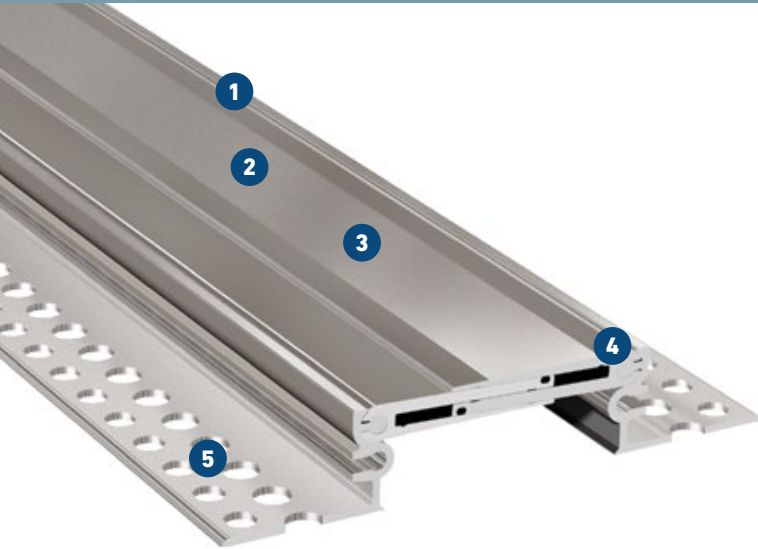


# FSL 104

FOR FLOORS WITH LARGE MOVEMENTS AND REGULAR LOADS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



- 1 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting
- 2 Striated surface**  
ensures good skid resistance
- 3 Visible surface has no gaps**  
avoids dirt accumulation
- 4 Articulated telescoping system**  
absorbs movement in 3 directions
- 5 MultiHole mounting bracket**  
for secure fixing

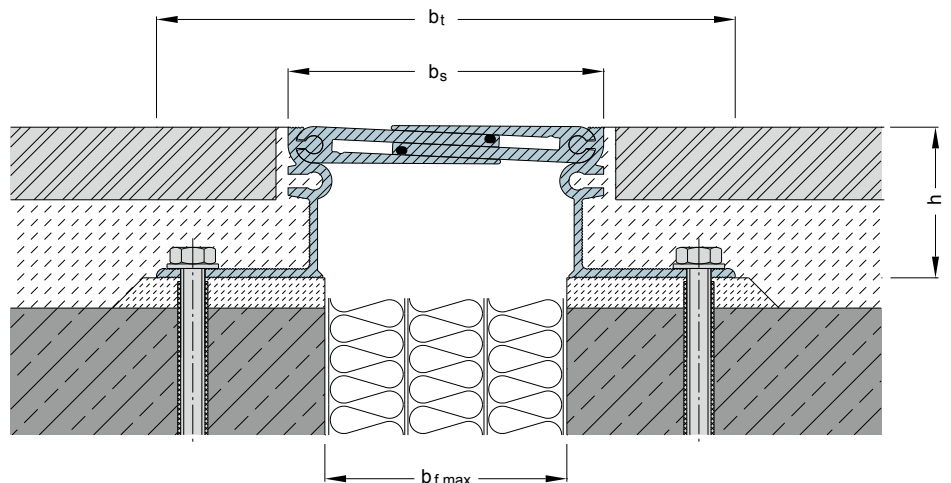
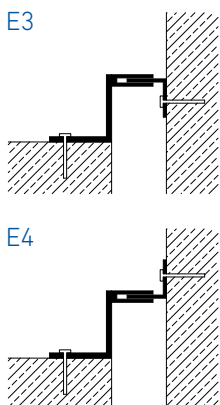
| Expansion joint cover | Joint width max.<br>$b_f$<br>[mm] | Total movement<br>$\Delta b_f$<br>[mm] | Visible width<br>$b_s$<br>[mm] | Joint width total<br>$b_t$<br>[mm] | Joint height<br>$h$<br>[mm] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>solid plastic<br>tyres<br>[kg/mm] |
|-----------------------|-----------------------------------|--|--------------------------------|------------------------------------|-----------------------------|-----------------------------------|-----------------------------------|--|
| FSL 104/20            | 80                                | 40 ( $\pm 20$ )                        | 104                            | 191                                | 20                          | 90                                | 35                                | 3,5  |
| FSL 104/35            | 80                                | 40 ( $\pm 20$ )                        | 104                            | 191                                | 35                          | 90                                | 35                                | 3,5  |
| FSL 104/50            | 80                                | 40 ( $\pm 20$ )                        | 104                            | 191                                | 50                          | 90                                | 35                                | 3,5  |
| FSL 104/90            | 80                                | 40 ( $\pm 20$ )                        | 104                            | 189                                | 90                          | 90                                | 35                                | 3,5  |

**Production length:** 4 m

**Standard colour:** Aluminium

Larger installation heights on request.

Corner versions:





- 1** **Symmetrical visible surface has no gaps**  
avoids dirt accumulation
- 2** **Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting
- 3** **Articulated telescoping system**  
absorbs movement in 3 directions
- 4** **MultiHole mounting bracket**  
for secure fixing

**Now available Anodized!**

This expansion joint cover is on offer in anodized colours as of now. Available as standard in the four colours shown below, we will be pleased to offer you further colours upon request

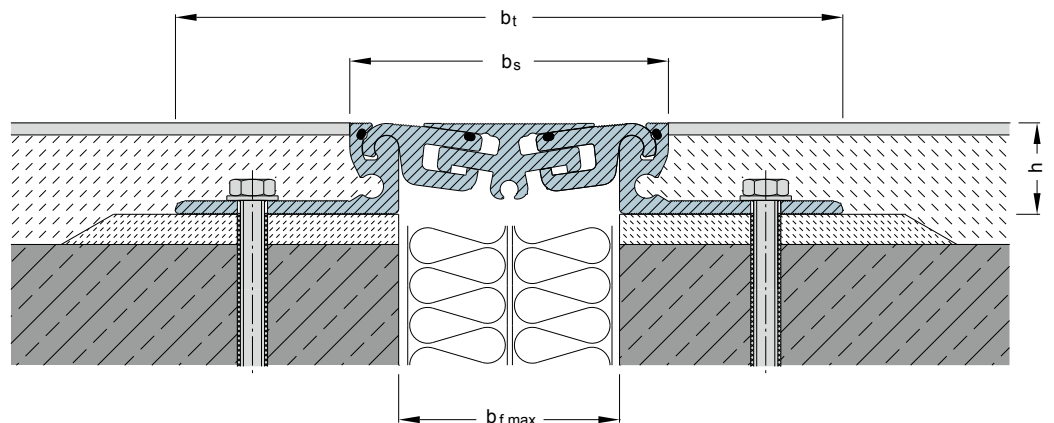
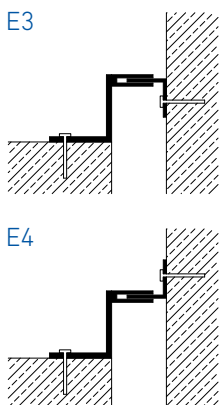
| Expansion joint cover | Joint width max.<br>$b_f$<br>[mm] | Total movement<br>$\Delta b_f$<br>[mm] | Visible width<br>$b_s$<br>[mm] | Joint width total<br>$b_t$<br>[mm] | Joint height<br>$h$<br>[mm] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>solid plastic tyres<br>[kg/mm] |
|-----------------------|-----------------------------------|--|--------------------------------|------------------------------------|-----------------------------|-----------------------------------|-----------------------------------|---|
| FS 105/22*            | 75                                | 20 ( $\pm 10$ )                        | 105                            | 221                                | 22                          | 600                               | 130                               | 15  |
| FS 105/30             | 75                                | 20 ( $\pm 10$ )                        | 105                            | 221                                | 30                          | 600                               | 130                               | 15  |
| FS 105/42             | 75                                | 20 ( $\pm 10$ )                        | 107                            | 223                                | 42                          | 600                               | 130                               | 15  |
| FS 105/52             | 75                                | 20 ( $\pm 10$ )                        | 107                            | 223                                | 52                          | 600                               | 130                               | 15  |
| FS 105/62             | 75                                | 20 ( $\pm 10$ )                        | 107                            | 223                                | 62                          | 600                               | 130                               | 15  |

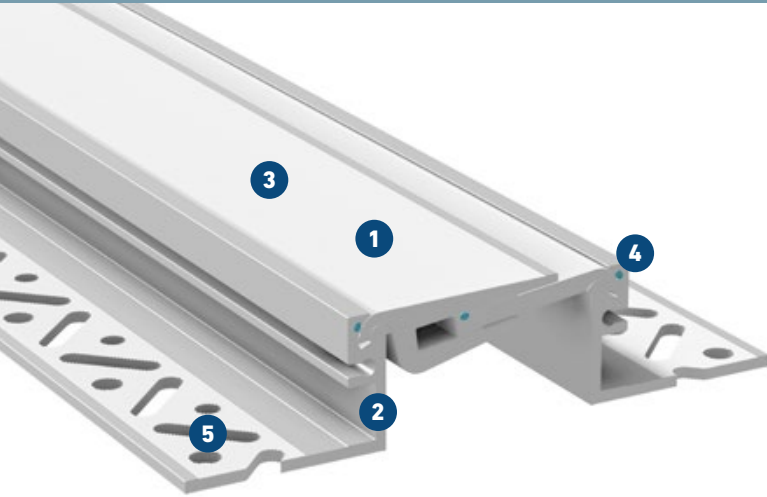
\* Minimum joint width 75 mm.

**Production length:** 4 m

**Standard colour:** Aluminium, available in anodized version, too  
Further installation heights on request.

Corner versions:





- 1 New, improved design**  
Innovative layout of the line
- 2 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting
- 3 Striated surface**  
ensures good skid resistance
- 4 Articulated telescoping system with optimized movement control**  
absorbs movement in 3 directions, with improved shock absorbing elements
- 5 Punctured leg with MIGUA mounting matrix®**  
Provides optimal anchoring alternatives in the underground

**Now available Anodized!**

For perfect match with interior design. Different colours can be combined. Color-fast and light resistant.

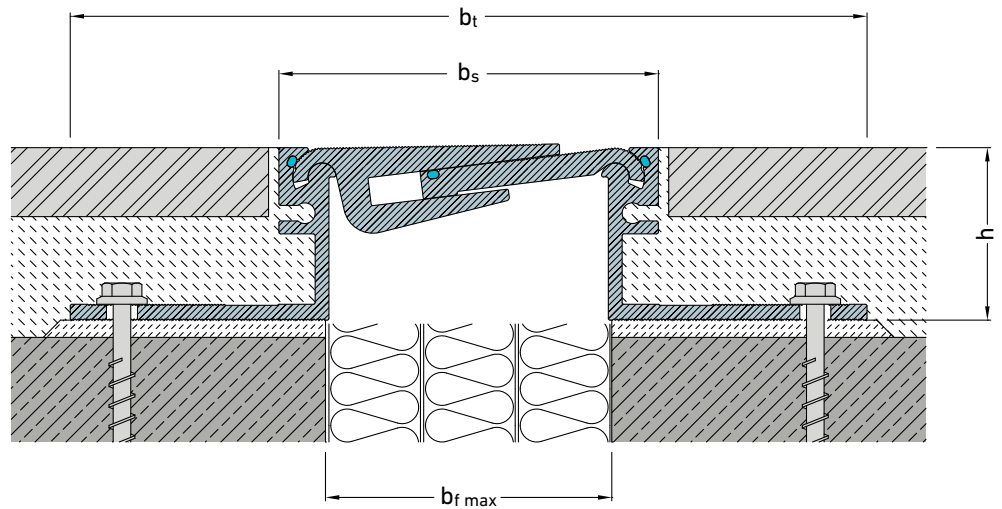
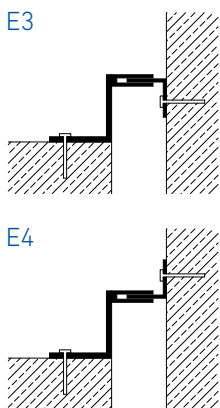
| Expansion joint cover | Joint width max. | Total movement    | Visible width | Joint width total | Joint height | Load bearing capacity | Load bearing capacity | Load bearing capacity       |
|-----------------------|------------------|-------------------|---------------|-------------------|--------------|-----------------------|-----------------------|-----------------------------|
|                       | $b_f$ [mm]       | $\Delta b_f$ [mm] | $b_s$ [mm]    | $b_t$ [mm]        | $h$ [mm]     | [kN]                  | [kN]                  | solid plastic tyres [kg/mm] |
| FSX 110/22*           | 75               | 30 (±15)          | 110           | 231               | 22           | 300                   | 130                   | 10                          |
| FSX 110/30            | 75               | 30 (±15)          | 110           | 231               | 30           | 300                   | 130                   | 10                          |
| FSX 110/40            | 75               | 30 (±15)          | 110           | 231               | 40           | 300                   | 130                   | 10                          |
| FSX 110/50            | 75               | 30 (±15)          | 110           | 231               | 50           | 300                   | 130                   | 10                          |
| FSX 110/60            | 75               | 30 (±15)          | 110           | 231               | 60           | 300                   | 130                   | 10                          |
| FSX 110/80            | 75               | 30 (±15)          | 110           | 231               | 80           | 300                   | 130                   | 10                          |
| FSX 110/100           | 75               | 30 (±15)          | 110           | 231               | 100          | 300                   | 130                   | 10                          |

\* Minimum joint width 75 mm.

**Production length:** 4 m

**Standard colour:** Aluminium, available in anodized version, too  
Further installation heights on request.

Corner versions:



# FS 110 ES



FOR FLOOR SURFACES WITH HIGH DEMANDS ON DESIGN AND APPEARANCE

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



- 1** **Stainless Steel, brass or 3M tape surface**  
for highest demands and skid resistance (R9 - R13)
- 2** **Visible surface has no gaps**  
avoids dirt accumulation
- 3** **Articulated telescoping system**  
absorbs movement in 3 directions
- 4** **Solid all-metal expansion joint**  
hard wearing, maintenance free, long lasting
- 5** **Optically attractive, high quality surface**

| Expansion joint cover | Joint width max. | Total movement    |            | Visible width | Joint width total | Joint height | Load bearing capacity<br> [kN] | Load bearing capacity<br> [kN] |
|-----------------------|------------------|-------------------|------------|---------------|-------------------|--------------|--|--|
|                       | $b_f$ [mm]       | $\Delta b_f$ [mm] | $b_s$ [mm] | $b_t$ [mm]    | $h$ [mm]          |              |  |  |
| FS 110/22 ES*         | 75               | 30 (±15)          | 113        | 226           | 23                | 300          | 70   |  |
| FS 110/30 ES          | 75               | 30 (±15)          | 113        | 226           | 31                | 300          | 70   |  |
| FS 110/42 ES          | 75               | 30 (±15)          | 113        | 230           | 43                | 300          | 70   |  |
| FS 110/52 ES          | 75               | 30 (±15)          | 113        | 230           | 53                | 300          | 70   |  |
| FS 110/62 ES          | 75               | 30 (±15)          | 113        | 230           | 63                | 300          | 70   |  |
| FS 110/77 ES          | 75               | 30 (±15)          | 113        | 230           | 78                | 300          | 70   |  |
| FS 110/87 ES          | 75               | 30 (±15)          | 113        | 230           | 88                | 300          | 70   |  |
| FS 110/97 ES          | 75               | 30 (±15)          | 113        | 230           | 98                | 300          | 70   |  |

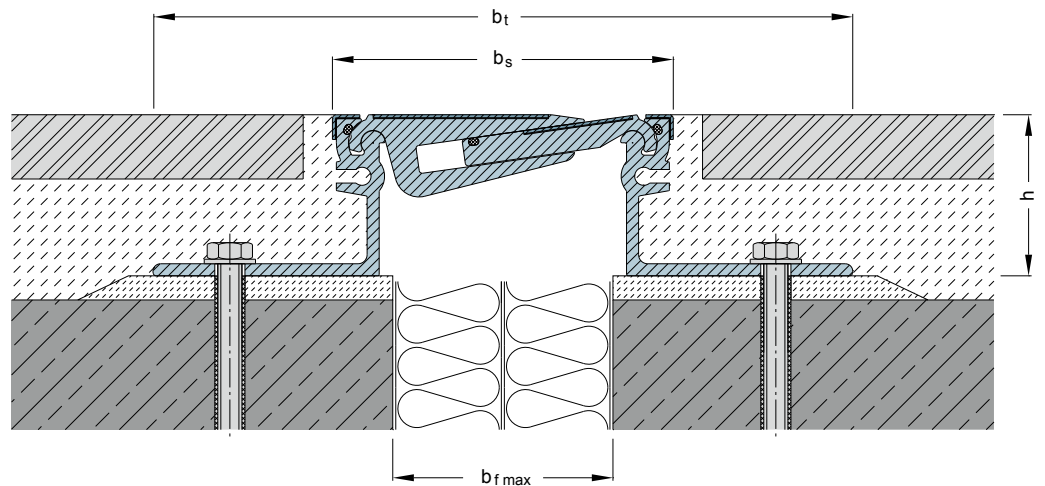
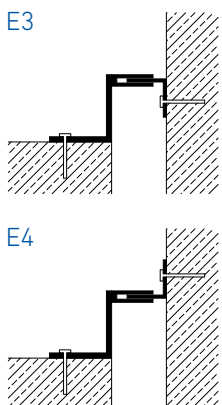
\* Minimum joint width 75 mm.

**Production length:** 4 m, metal inserts: 2 x 2 m

**Standard colour:** aluminum, inserts: stainless steel, brass or black

Larger installation heights on request. Also available with different inserts.

Corner versions:

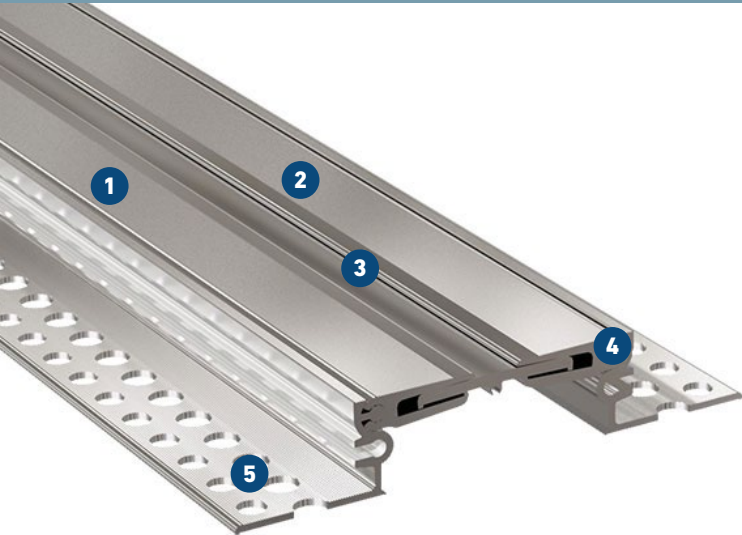


# FSL 113


FOR FLOORS WITH LARGE MOVEMENT – TO BE USED BY LIGHT FORK LIFT TRUCKS AND PALLET TRUCKS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



- 1 Solid all-metal expansion joint cover**  
hard wearing, maintenance-free, long lasting
- 2 Striated surface**  
ensures good skid resistance
- 3 Symmetrical visible surface without gaps**  
prevents accumulation of dirt
- 4 Articulated telescoping system**  
absorbs movement in 3 directions
- 5 MultiHole mounting bracket**  
for secure fixing

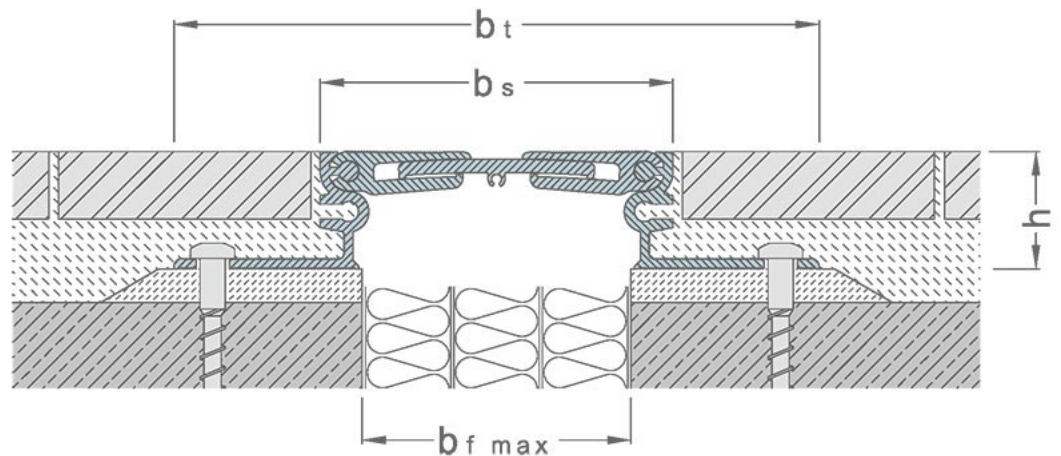
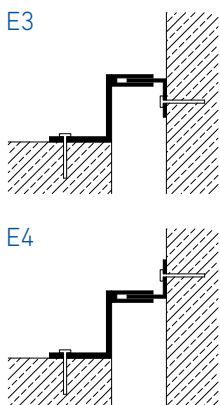
| Expansion joint cover | Joint width max. | Total movement    |  | Visible width | Joint width total | Joint height | Load bearing capacity<br> [kN] |
|-----------------------|------------------|-------------------|--|---------------|-------------------|--------------|--|
|                       | $b_f$ [mm]       | $\Delta b_f$ [mm] |  | $b_s$ [mm]    | $b_t$ [mm]        | $h$ [mm]     |  |
| FSL 113/20            | 90               | 45 ( $\pm 22,5$ ) |  | 113           | 200               | 20           | 12   |
| FSL 113/35            | 90               | 45 ( $\pm 22,5$ ) |  | 113           | 200               | 35           | 12   |
| FSL 113/50            | 90               | 45 ( $\pm 22,5$ ) |  | 113           | 200               | 50           | 12   |
| FSL 113/90            | 90               | 45 ( $\pm 22,5$ ) |  | 113           | 200               | 90           | 12   |

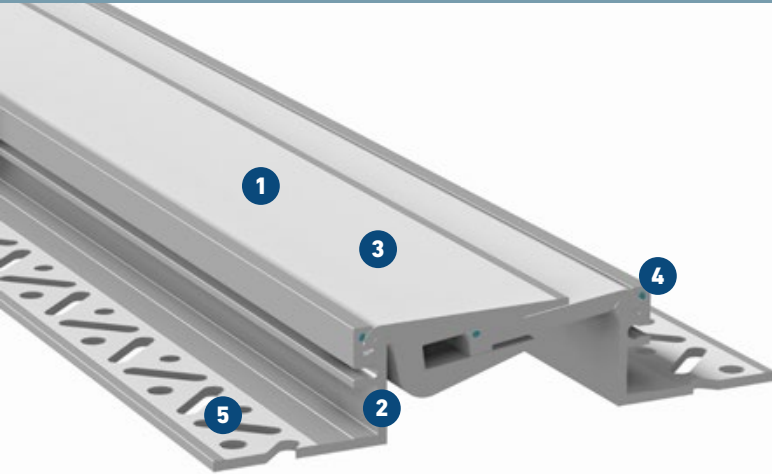
**Production length:** 4 m

**Colour:** Aluminium

Larger installation heights on request.

Corner versions:





- 1 New, improved design**  
Innovative layout of the line
- 2 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting
- 3 Striated surface**  
ensures good skid resistance
- 4 Articulated telescoping system with optimized movement control**  
absorbs movement in 3 directions, with improved shock absorbing elements
- 5 Punctured leg with MIGUA mounting matrix®**  
Provides optimal anchoring alternatives in the underground

**Now available Anodized!**

For perfect match with interior design. Different colours can be combined. Color-fast and light resistant.

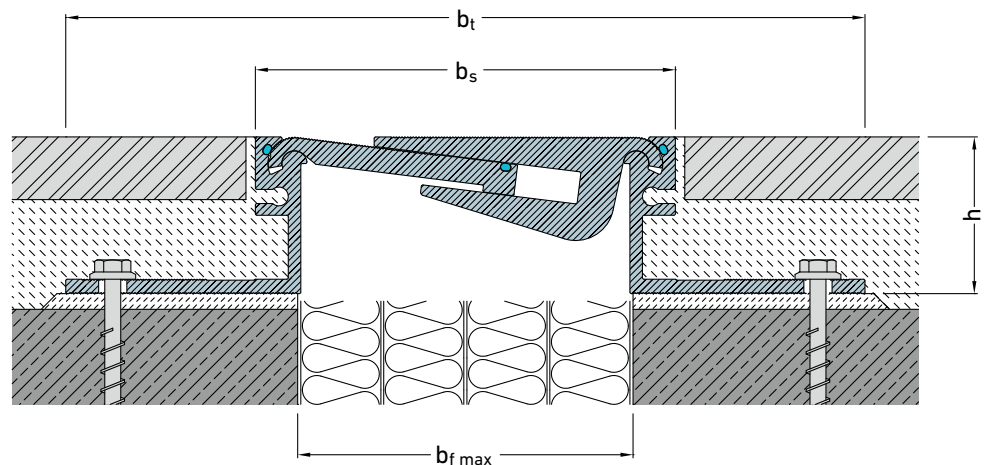
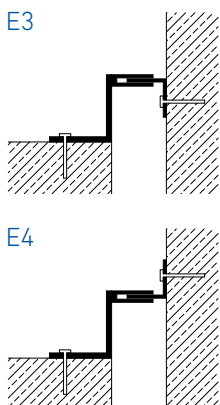
| Expansion joint cover | Joint width max. | Total movement    | Visible width | Joint width total | Joint height | Load bearing capacity | Load bearing capacity | Load bearing capacity       |
|-----------------------|------------------|-------------------|---------------|-------------------|--------------|-----------------------|-----------------------|-----------------------------|
|                       | $b_f$ [mm]       | $\Delta b_f$ [mm] | $b_s$ [mm]    | $b_t$ [mm]        | $h$ [mm]     | [kN]                  | [kN]                  | solid plastic tyres [kg/mm] |
| FSX 130/22*           | 100              | 40 (±20)          | 134           | 255               | 22           | 300                   | 130                   | 10                          |
| FSX 130/30*           | 100              | 40 (±20)          | 134           | 255               | 30           | 300                   | 130                   | 10                          |
| FSX 130/40            | 100              | 40 (±20)          | 134           | 255               | 40           | 300                   | 130                   | 10                          |
| FSX 130/50            | 100              | 40 (±20)          | 134           | 255               | 50           | 300                   | 130                   | 10                          |
| FSX 130/60            | 100              | 40 (±20)          | 134           | 255               | 60           | 300                   | 130                   | 10                          |
| FSX 130/80            | 100              | 40 (±20)          | 134           | 255               | 80           | 300                   | 130                   | 10                          |
| FSX 130/100           | 100              | 40 (±20)          | 134           | 255               | 100          | 300                   | 130                   | 10                          |

\* Minimum joint width 100 mm

**Production length:** 4 m

**Standard colour:** Aluminium, available in anodized version, too  
Further installation heights on request.

Corner versions:



# FS 135 / FS 174

FOR HEAVY DUTY FLOORS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



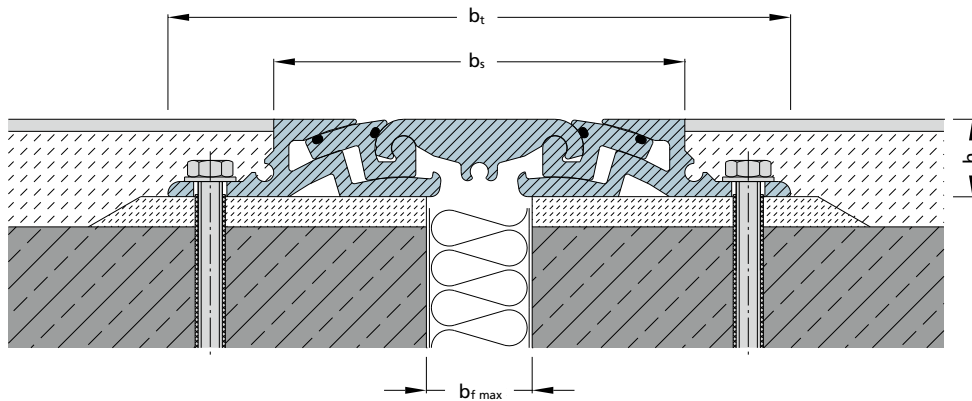
- 1** **Symmetrical visible surface has no gaps**  
avoids dirt accumulation, fast cleaning
- 2** **Striated surface**  
ensures good skid resistance
- 3** **Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting
- 4** **Extremely flat 25 mm**
- 5** **Articulated telescoping system**  
absorbs movement in 3 directions

| Expansion joint cover | Joint width max.<br>$b_f$<br>[mm] | Total movement<br>$\Delta b_f$<br>[mm] | Visible width<br>$b_s$<br>[mm] | Joint width total<br>$b_t$<br>[mm] | Joint height<br>$h$<br>[mm] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>solid plastic tyres<br>[kg/mm] |
|-----------------------|-----------------------------------|--|--------------------------------|------------------------------------|-----------------------------|-----------------------------------|-----------------------------------|---|
| FS 135/25             | 35                                | 20 ( $\pm 10$ )                        | 135                            | 206                                | 25                          | 600                               | 250                               | 30  |
| FS 174/25             | 70                                | 20 ( $\pm 10$ )                        | 174                            | 245                                | 25                          | 600                               | 130                               | 15  |

**Production length:** 4 m

**Standard colour:** Aluminium

We recommend installation using epoxy adhesive



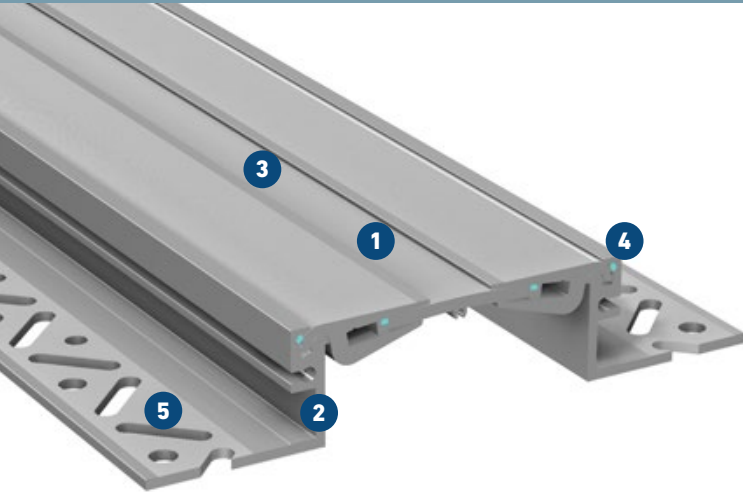


# FSX 146

FOR FLOORS WITH LARGE MOVEMENT – TO BE USED BY PRIVAT CARS AND PEDESTRIANS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



- 1 New, improved design**  
Innovative layout of the line
- 2 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting
- 3 Striated surface**  
ensures good skid resistance
- 4 Articulated telescoping system with optimized movement control**  
absorbs movement in 3 directions, with improved shock absorbing elements
- 5 Punctured leg with MIGUA mounting matrix®**  
Provides optimal anchoring alternatives in the underground

### Now available Anodized!

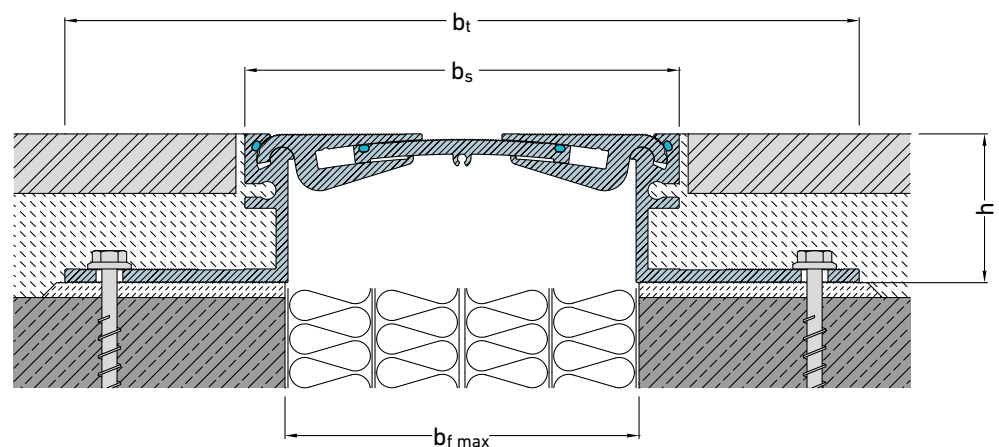
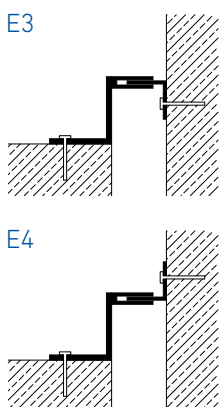
For perfect match with interior design. Different colours can be combined. Color-fast and light resistant.

| Expansion joint cover | Joint width max. | Total movement       | Visible width | Joint width total | Joint height | Load bearing capacity<br> <b>DIN 1072</b><br>[kN] | Load bearing capacity<br> <b>solid plastic tyres</b><br>[kg/mm] |
|-----------------------|------------------|----------------------|---------------|-------------------|--------------|---|---|
|                       | $b_f$<br>[mm]    | $\Delta b_f$<br>[mm] | $b_s$<br>[mm] | $b_t$<br>[mm]     | $h$<br>[mm]  |   |   |
| FSX 146/22            | 117              | 50 (±25)             | 146           | 267               | 22           | 30  | 3,5   |
| FSX 146/30            | 117              | 50 (±25)             | 146           | 267               | 30           | 30  | 3,5   |
| FSX 146/40            | 117              | 50 (±25)             | 146           | 267               | 40           | 30  | 3,5   |
| FSX 146/50            | 117              | 50 (±25)             | 146           | 267               | 50           | 30  | 3,5   |
| FSX 146/60            | 117              | 50 (±25)             | 146           | 267               | 60           | 30  | 3,5   |
| FSX 146/80            | 117              | 50 (±25)             | 146           | 267               | 80           | 30  | 3,5   |
| FSX 146/100           | 117              | 50 (±25)             | 146           | 267               | 100          | 30  | 3,5   |

**Production length:** 4 m

**Standard colour:** Aluminium, available in anodized version, too  
Further installation heights on request.

Corner versions:



# FS 155

FOR HEAVY DUTY FLOORS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



- 1** **Symmetrical visible surface has no gaps**  
avoids dirt accumulation
- 2** **Striated surface**  
ensures good skid resistance
- 3** **Articulated telescoping system**  
absorbs movement in 3 directions
- 4** **Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting
- 5** **MultiHole mounting bracket**  
for secure fixing

| Expansion joint cover | Joint width max.<br>$b_f$<br>[mm] | Total movement<br>$\Delta b_f$<br>[mm] | Visible width<br>$b_s$<br>[mm] | Joint width total<br>$b_t$<br>[mm] | Joint height<br>$h$<br>[mm] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>solid plastic<br>tyres<br>[kg/mm] |
|-----------------------|-----------------------------------|--|--------------------------------|------------------------------------|-----------------------------|-----------------------------------|-----------------------------------|--|
| FS 155/22*            | 120                               | 40(±20)                                | 155                            | 271                                | 22                          | 600                               | 130                               | 15   |
| FS 155/30             | 120                               | 40(±20)                                | 155                            | 271                                | 30                          | 600                               | 130                               | 15   |
| FS 155/42             | 120                               | 40(±20)                                | 157                            | 273                                | 42                          | 600                               | 130                               | 15   |
| FS 155/52             | 120                               | 40(±20)                                | 157                            | 273                                | 52                          | 600                               | 130                               | 15   |
| FS 155/62             | 120                               | 40(±20)                                | 157                            | 273                                | 62                          | 600                               | 130                               | 15   |

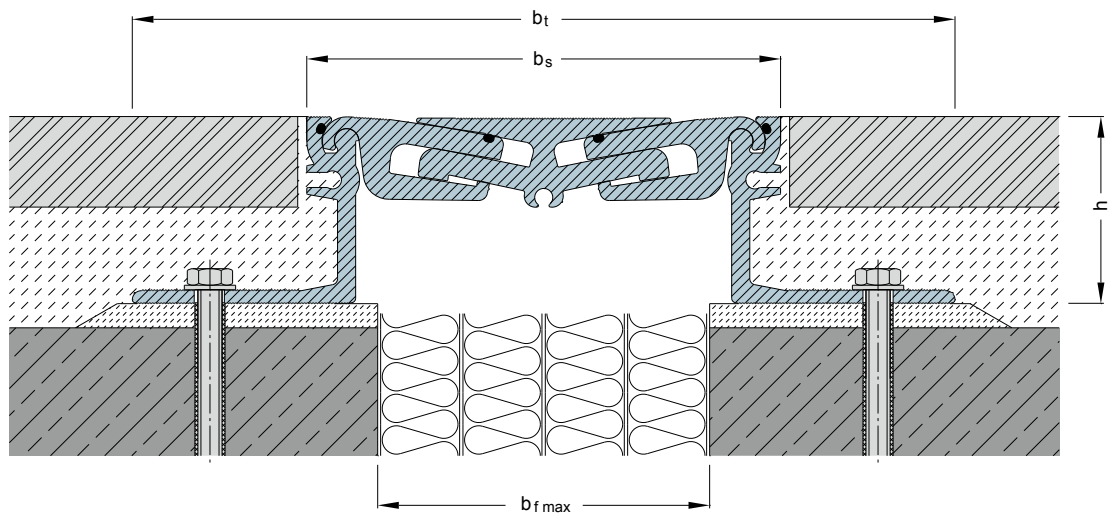
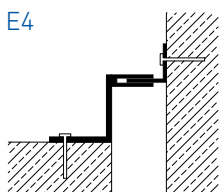
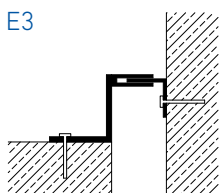
\* Minimum joint width 120 mm

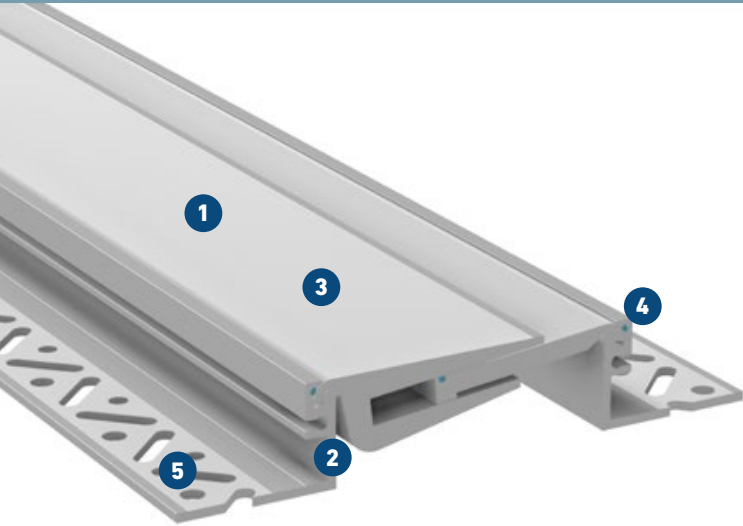
**Production length:** 4 m

**Standard colour:** Aluminium

Larger installation heights on request.

Corner versions:





- 1 New, improved design**  
Innovative layout of the line
- 2 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting
- 3 Striated surface**  
ensures good skid resistance
- 4 Articulated telescoping system with optimized movement control**  
absorbs movement in 3 directions, with improved shock absorbing elements
- 5 Punctured leg with MIGUA mounting matrix®**  
Provides optimal anchoring alternatives in the underground

**Now available Anodized!**

For perfect match with interior design. Different colours can be combined. Color-fast and light resistant.

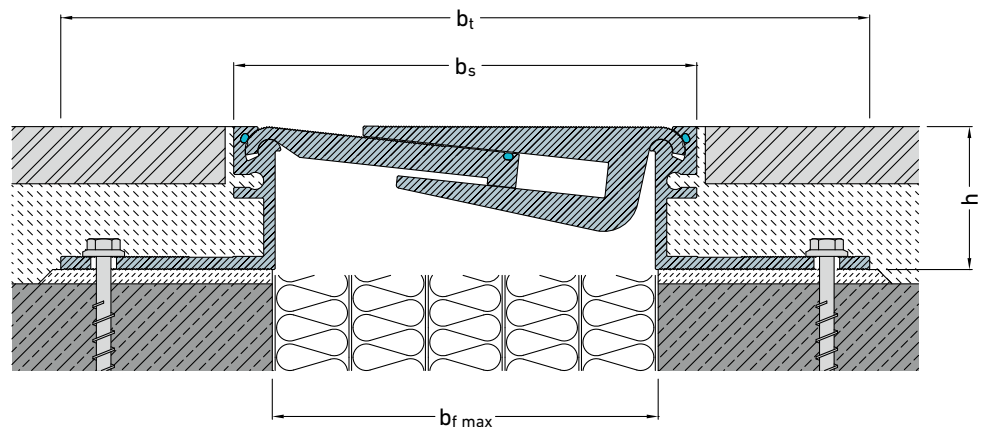
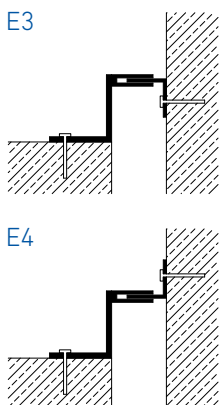
| Expansion joint cover | Joint width max. | Total movement       | Visible width | Joint width total | Joint height | Load bearing capacity | Load bearing capacity | Load bearing capacity       |
|-----------------------|------------------|----------------------|---------------|-------------------|--------------|-----------------------|-----------------------|-----------------------------|
|                       | $b_f$<br>[mm]    | $\Delta b_f$<br>[mm] | $b_s$<br>[mm] | $b_t$<br>[mm]     | $h$<br>[mm]  | [kN]                  | [kN]                  | solid plastic tyres [kg/mm] |
| FSX 160/22*           | 130              | 60 (±30)             | 162           | 283               | 22           | 300                   | 100                   | 10                          |
| FSX 160/30*           | 130              | 60 (±30)             | 162           | 283               | 30           | 300                   | 100                   | 10                          |
| FSX 160/40            | 130              | 60 (±30)             | 162           | 283               | 40           | 300                   | 100                   | 10                          |
| FSX 160/50            | 130              | 60 (±30)             | 162           | 283               | 50           | 300                   | 100                   | 10                          |
| FSX 160/60            | 130              | 60 (±30)             | 162           | 283               | 60           | 300                   | 100                   | 10                          |
| FSX 160/80            | 130              | 60 (±30)             | 162           | 283               | 80           | 300                   | 100                   | 10                          |
| FSX 160/100           | 130              | 60 (±30)             | 162           | 283               | 100          | 300                   | 100                   | 10                          |

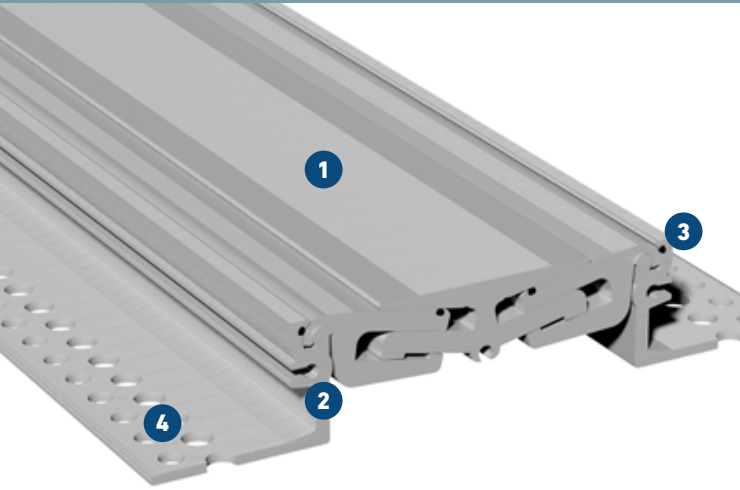
\* Minimum joint width 130 mm

**Production length:** 4 m

**Standard colour:** Aluminium, available in anodized version, too  
Further installation heights on request.

Corner versions:





- 1** **Symmetrical visible surface has no gaps**  
avoids dirt accumulation
- 2** **Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting
- 3** **Articulated telescoping system**  
absorbs movement in 3 directions
- 4** **MultiHole mounting bracket**  
for secure fixing

**Now available Anodized!**

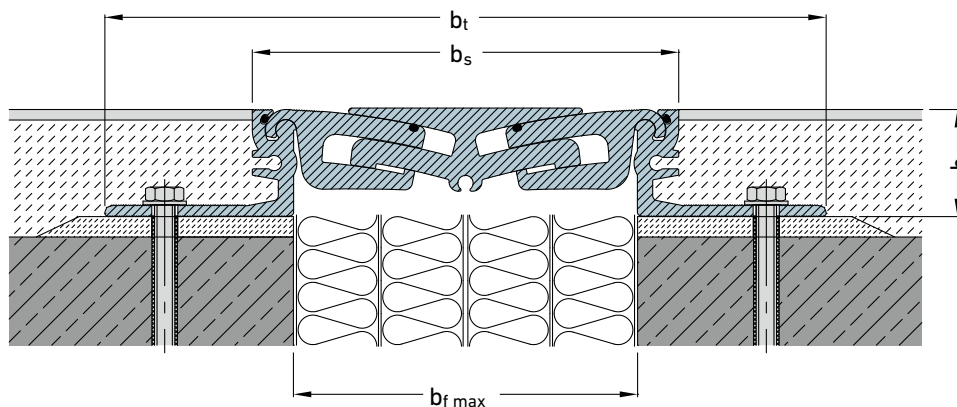
This expansion joint cover is on offer in anodized colours as of now. Available as standard in the four colours shown below, we will be pleased to offer you further colours upon request

| Expansion joint cover | Joint width max. | Total movement    | Visible width | Joint width total | Joint height | Load bearing capacity | Load bearing capacity | Load bearing capacity       |
|-----------------------|------------------|-------------------|---------------|-------------------|--------------|-----------------------|-----------------------|-----------------------------|
|                       | $b_f$ [mm]       | $\Delta b_f$ [mm] | $b_s$ [mm]    | $b_t$ [mm]        | $h$ [mm]     | [kN]                  | [kN]                  | solid plastic tyres [kg/mm] |
| FS 167/30             | 135              | 45 ( $\pm 22,5$ ) | 167           | 283               | 30           | 600                   | 130                   | 20                          |
| FS 167/42             | 135              | 45 ( $\pm 22,5$ ) | 167           | 283               | 42           | 600                   | 130                   | 20                          |
| FS 167/52             | 135              | 45 ( $\pm 22,5$ ) | 167           | 283               | 52           | 600                   | 130                   | 15                          |
| FS 167/62             | 135              | 45 ( $\pm 22,5$ ) | 167           | 283               | 62           | 600                   | 130                   | 15                          |

**Production length:** 4 m

**Standard colour:** Aluminium

Further installation heights on request.



# FS 185

FOR HEAVY DUTY FLOORS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



- 1 Visible surface has no gaps**  
avoids dirt accumulation
- 2 Striated surface**  
ensures good skid resistance
- 3 Extremely flat (27 mm)**  
ideal for redevelopment, refurbishment, renovation
- 4 Articulated telescoping system**  
absorbs movement in 3 directions
- 5 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting

**MultiHole mounting bracket**  
for secure fixing

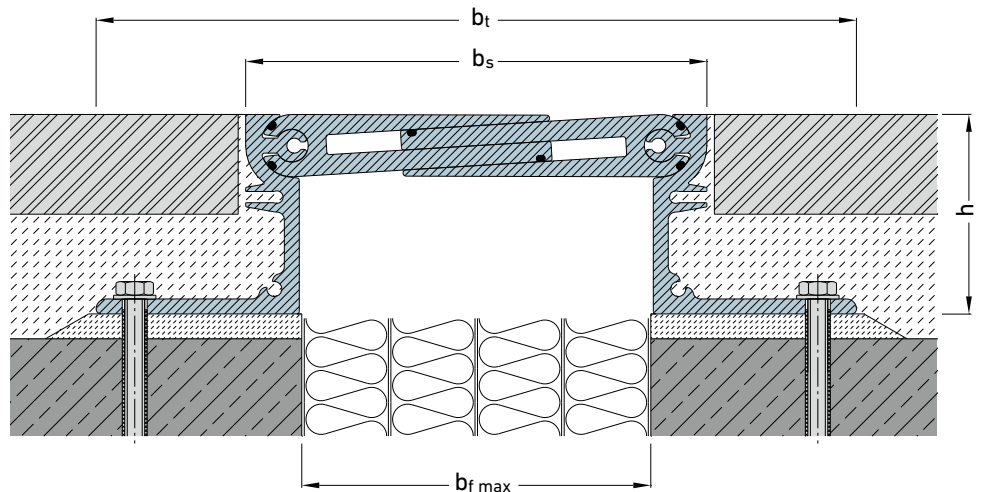
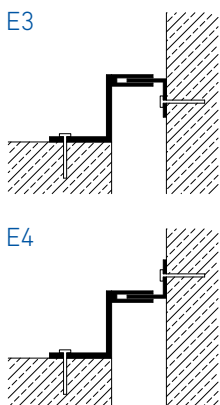
| Expansion joint cover | Joint width max.<br>$b_f$<br>[mm] | Total movement<br>$\Delta b_f$<br>[mm] | Visible width<br>$b_s$<br>[mm] | Joint width total<br>$b_t$<br>[mm] | Joint height<br>$h$<br>[mm] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>solid plastic tyres<br>[kg/mm] |
|-----------------------|-----------------------------------|--|--------------------------------|------------------------------------|-----------------------------|-----------------------------------|-----------------------------------|---|
| FS 185/27             | 140                               | 60 (±30)                               | 185                            | 305                                | 27                          | 300                               | 70                                | 6,5   |
| FS 185/40             | 140                               | 60 (±30)                               | 185                            | 305                                | 40                          | 300                               | 70                                | 6,5   |
| FS 185/80             | 140                               | 60 (±30)                               | 185                            | 305                                | 80                          | 300                               | 70                                | 6,5   |

**Production length:** 3 m

**Standard colour:** Aluminium

Larger installation heights on request.

Corner versions:



# FSV 235


FOR HEAVY DUTY FLOORS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS

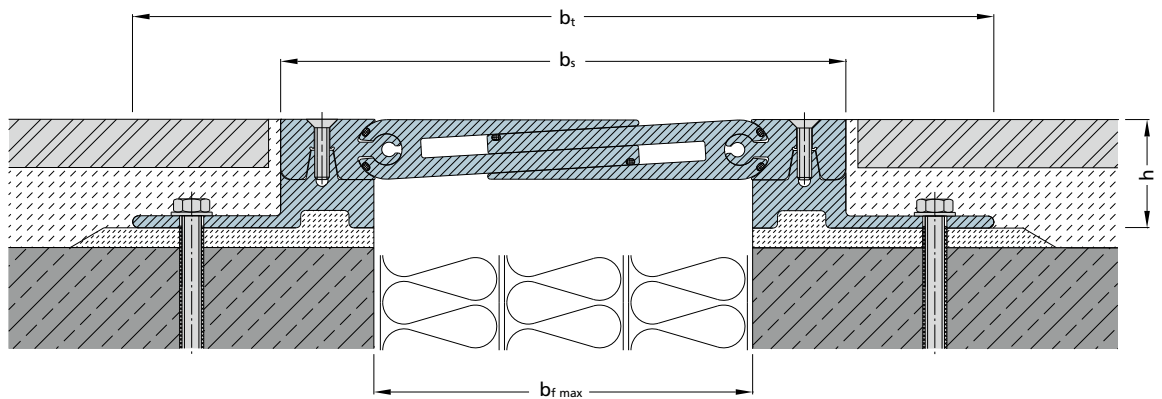
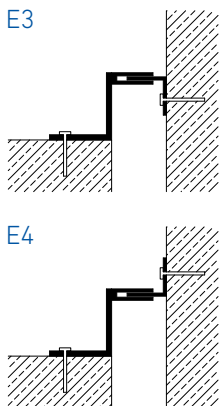


- 1 Visible surface has no gaps**  
avoids dirt accumulation
- 2 Removable bridging unit**  
serviceable for inspection, replaceable centre parts
- 3 Striated surface**  
ensures good skid resistance
- 4 Articulated telescoping system**  
absorbs movement in 3 directions
- 5 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting

| Expansion joint cover | Joint width max. | Total movement       | Visible width | Joint width total |             | Joint height | Load bearing capacity<br> |
|-----------------------|------------------|----------------------|---------------|-------------------|-------------|--------------|---|
|                       | $b_f$<br>[mm]    | $\Delta b_f$<br>[mm] | $b_s$<br>[mm] | $b_t$<br>[mm]     | $h$<br>[mm] | [kN]         |   |
| FSV 235/45            | 150              | 60 ( $\pm 30$ )      | 235           | 357               | 45          | 300          |   |
| FSV 235/80            | 150              | 60 ( $\pm 30$ )      | 235           | 357               | 80          | 300          |   |
| FSV 235/130           | 150              | 60 ( $\pm 30$ )      | 235           | 357               | 130         | 300          |   |

**Production length:** 3 m  
**Standard colour:** Aluminium  
 Alternative heights on request.

Corner versions:

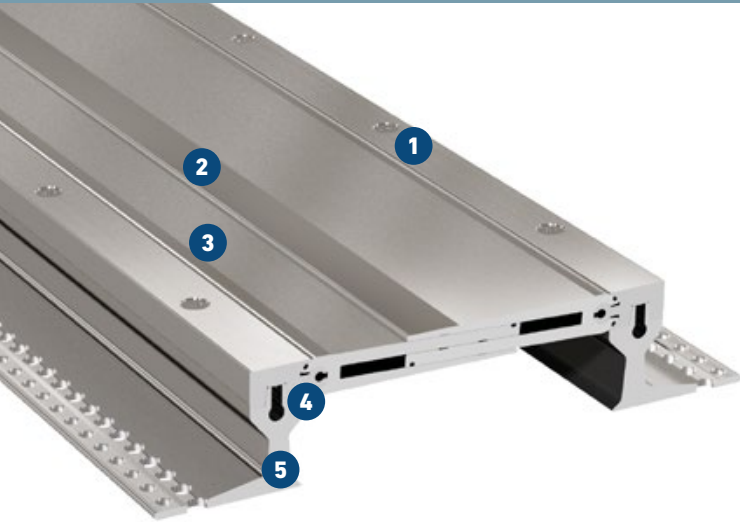


# FSV 280

FOR HEAVY DUTY FLOORS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



- 1 Removable bridging unit**  
serviceable for inspection, replaceable centre parts
- 2 Visible surface has no gaps**  
avoids dirt accumulation
- 3 Striated surface**  
ensures good skid resistance
- 4 Articulated telescoping system**  
absorbs movement in 3 directions
- 5 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting

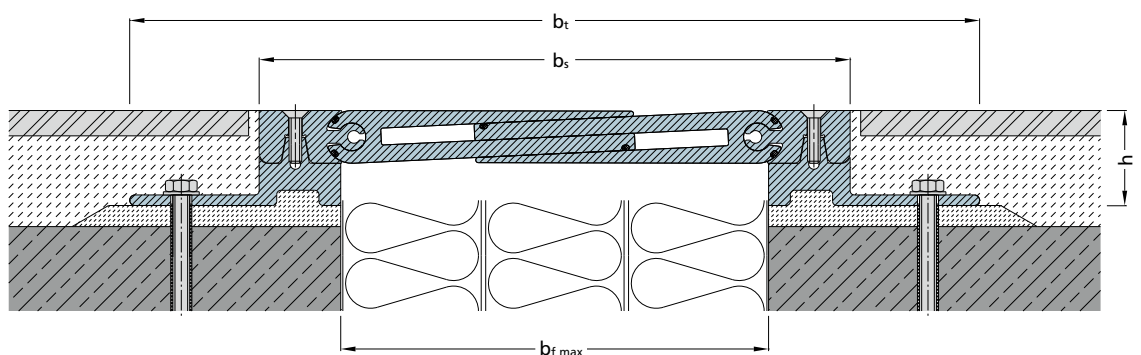
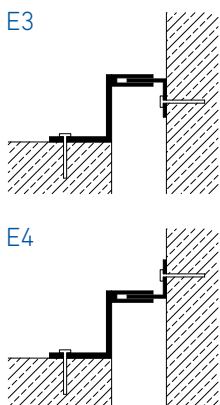
| Expansion joint cover | Joint width max. | Total movement    | Visible width | Joint width total | Joint height | Load bearing capacity<br>[kN] | Load bearing capacity<br>[kN] | Load bearing capacity<br>solid plastic tyres [kg/mm] |
|-----------------------|------------------|-------------------|---------------|-------------------|--------------|-------------------------------|-------------------------------|--|
|                       | $b_f$ [mm]       | $\Delta b_f$ [mm] | $b_s$ [mm]    | $b_t$ [mm]        | $h$ [mm]     |                               |                               |  |
| FSV 280/45            | 200              | 85 ( $\pm 42.5$ ) | 280           | 403               | 45           | 35                            | 35                            | 6,5  |
| FSV 280/80            | 200              | 85 ( $\pm 42.5$ ) | 280           | 403               | 80           | 35                            | 35                            | 6,5  |
| FSV 280/130           | 200              | 85 ( $\pm 42.5$ ) | 280           | 403               | 130          | 35                            | 35                            | 6,5  |

**Production length:** 3 m

**Standard colour:** Aluminium

Larger installation heights on request.

Corner versions:

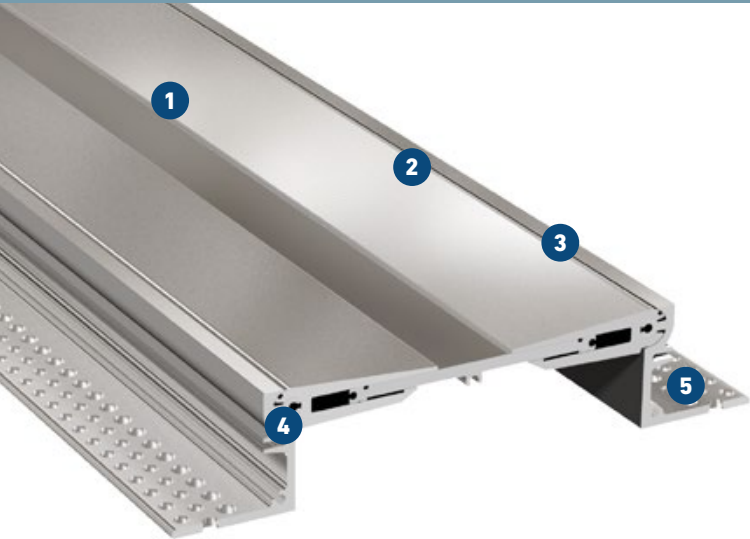


# FSV 285


FOR HEAVY DUTY FLOORS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



- 1 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting
- 2 Symmetrical visible surface has no gaps**  
avoids dirt accumulation
- 3 Extremely flat (27 mm)**  
ideal for redevelopment
- 4 MultiHole mounting bracket**  
for secure fixing
- 5 Articulated telescoping system**  
absorbs movement in 3 directions

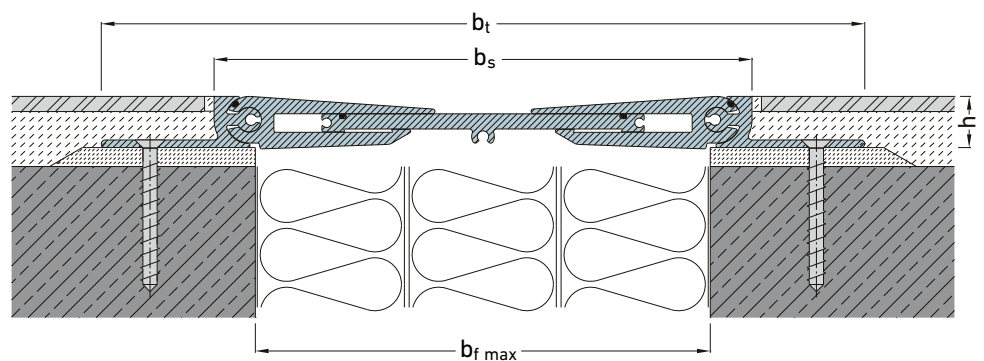
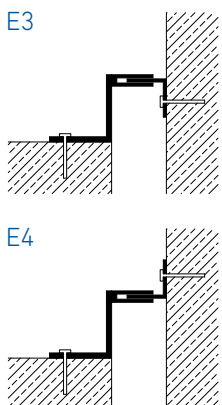
| Expansion joint cover | Joint width max.<br>$b_f$ [mm] | Total movement<br>$\Delta b_f$ [mm] | Visible width<br>$b_s$ [mm] | Joint width total<br>$b_t$ [mm] | Joint height<br>$h$ [mm] | Load bearing capacity<br> [kN] |
|-----------------------|--------------------------------|-------------------------------------|-----------------------------|---------------------------------|--------------------------|--|
| FSV 285/27            | 240                            | 100 ( $\pm 50$ )                    | 284                         | 404                             | 27                       | 35   |
| FSV 285/40            | 240                            | 100 ( $\pm 50$ )                    | 284                         | 404                             | 40                       | 35   |
| FSV 285/80            | 240                            | 100 ( $\pm 50$ )                    | 284                         | 404                             | 80                       | 35   |

**Production length:** 3 m

**Standard colour:** Aluminium

Larger installation heights on request.

Corner versions:



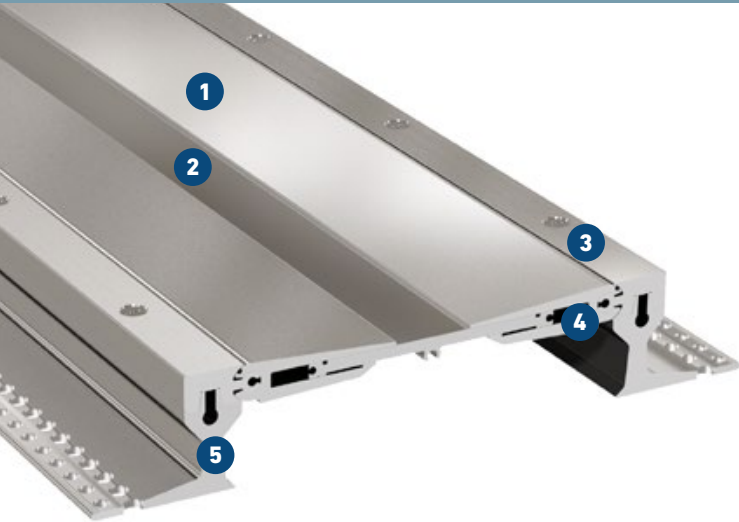


# FSV 335


FOR HEAVY DUTY FLOORS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS

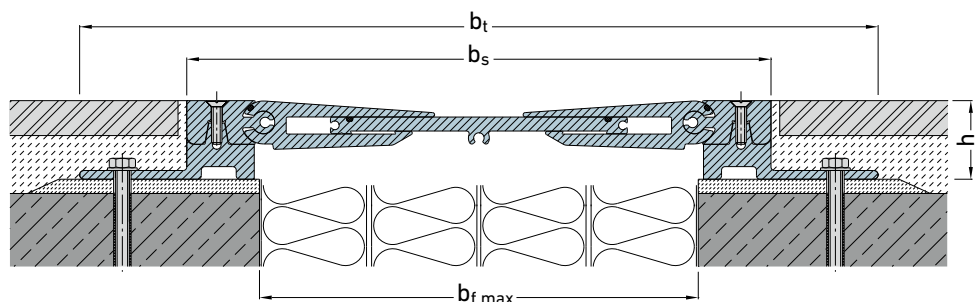
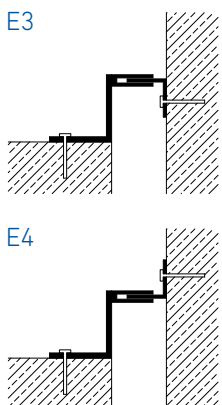


- 1 Striated surface**  
ensures good skid resistance
- 2 Symmetrical visible surface has no gaps**  
avoids dirt accumulation
- 3 Removable bridging unit**  
serviceable for inspection, replaceable centre parts
- 4 Articulated telescoping system**  
absorbs movement in 3 directions
- 5 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting

| Expansion joint cover | Joint width max. | Total movement       | Visible width | Joint width total | Joint height | Load bearing capacity<br> |
|-----------------------|------------------|----------------------|---------------|-------------------|--------------|---|
|                       | $b_f$<br>[mm]    | $\Delta b_f$<br>[mm] | $b_s$<br>[mm] | $b_t$<br>[mm]     | $h$<br>[mm]  |   |
| FSV 335/45            | 250              | 100 ( $\pm 50$ )     | 335           | 457               | 45           | 35  |
| FSV 335/80            | 250              | 100 ( $\pm 50$ )     | 335           | 457               | 80           | 35  |
| FSV 335/130           | 250              | 100 ( $\pm 50$ )     | 335           | 457               | 130          | 35  |

**Production length:** 3 m  
**Standard colour:** Aluminium

Corner versions:

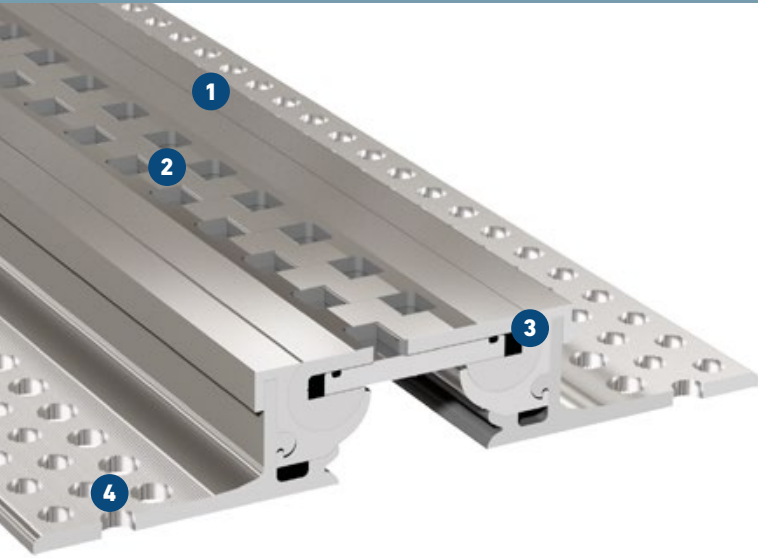


# FS 100

HEAVY DUTY EXPANSION JOINT FOR TRANSPORT FREE FROM VIBRATION

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS

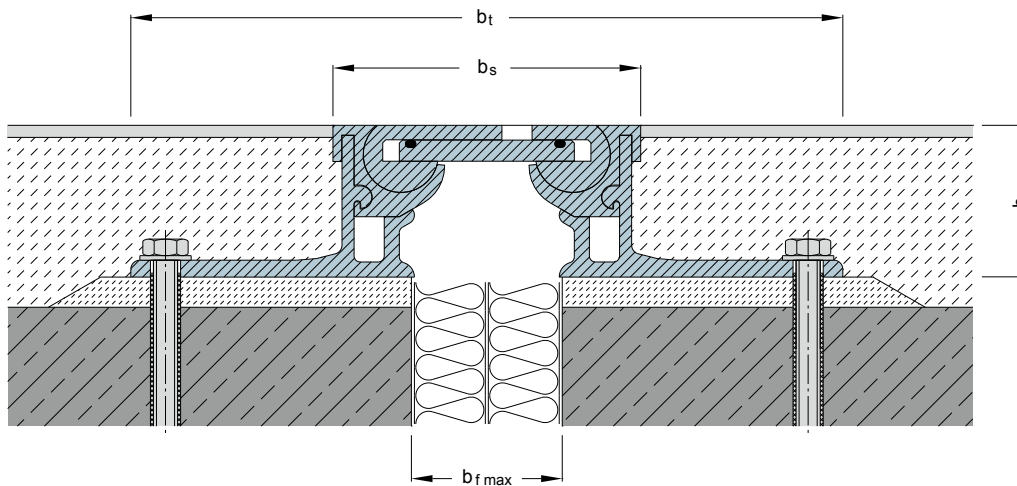


- 1 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting
- 2 Transportation free from vibration**  
suitable for transport of sensitive goods
- 3 Articulated telescoping system**  
absorbs movement in 3 directions
- 4 MultiHole mounting bracket**  
for secure fixing

**Official test certificate on load capacity available**

| Expansion joint cover | Joint width max. | Total movement       | Visible width | Joint width total | Joint height | Load bearing capacity | Load bearing capacity | Load bearing capacity       |
|-----------------------|------------------|----------------------|---------------|-------------------|--------------|-----------------------|-----------------------|-----------------------------|
|                       | $b_f$<br>[mm]    | $\Delta b_f$<br>[mm] | $b_s$<br>[mm] | $b_t$<br>[mm]     | $h$<br>[mm]  | [kN]                  | [kN]                  | solid plastic tyres [kg/mm] |
| FS 100/30             | 50               | 20 ( $\pm 10$ )      | 102           | 236               | 30           | 300                   | 75                    | 9                           |
| FS 100/40             | 50               | 20 ( $\pm 10$ )      | 102           | 236               | 40           | 300                   | 75                    | 9                           |
| FS 100/50             | 50               | 20 ( $\pm 10$ )      | 102           | 236               | 50           | 300                   | 75                    | 9                           |

**Production length:** 4 m  
**Standard colour:** Aluminium

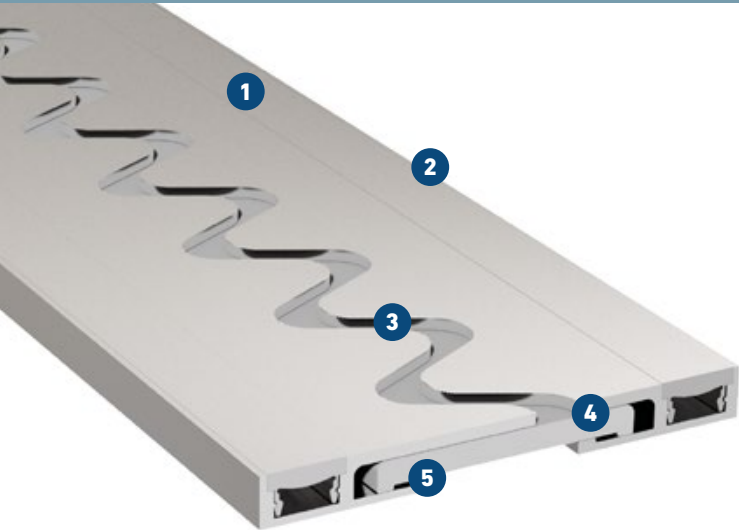


# FSS 215

HEAVY DUTY EXPANSION JOINT FOR TRANSPORT FREE FROM VIBRATION

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



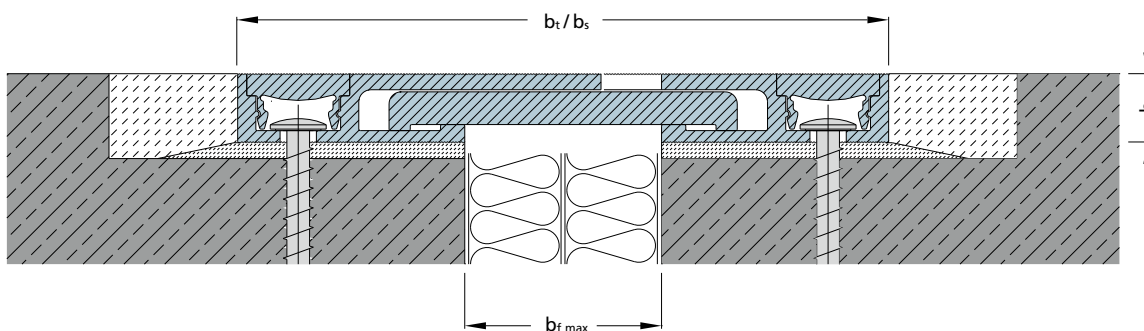
- 1 Innovative aluminium alloy**  
for highest load capacity
- 2 Extremely flat 23 mm, fixing without arms**  
Time and cost saving installation, ideal for redevelopment
- 3 Transportation free from vibration from a wheel width of 100 mm**  
suitable for transport of sensitive goods
- 4 Absorbs horizontal movement (transverse and parallel)**  
not suitable for vertical movement
- 5 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting

| Expansion joint cover | Joint width max.<br>$b_f$<br>[mm] | Total movement<br>$\Delta b_f$<br>[mm] | Visible width<br>$b_s$<br>[mm] | Joint width total<br>$b_t$<br>[mm] | Joint height<br>$h$<br>[mm] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>solid plastic tyres<br>[kg/mm] |
|-----------------------|-----------------------------------|--|--------------------------------|------------------------------------|-----------------------------|-----------------------------------|-----------------------------------|---|
| FSS 215/23            | 60                                | 40 ( $\pm 20$ )                        | 215                            | 215                                | 23                          | 600                               | 130                               | 30  |

**Production length:** 3 m

**Standard colour:** Aluminium

We recommend fixing with galvanized Multi-Monti Screws MMS P 10 x 70 mm (available ex stock).

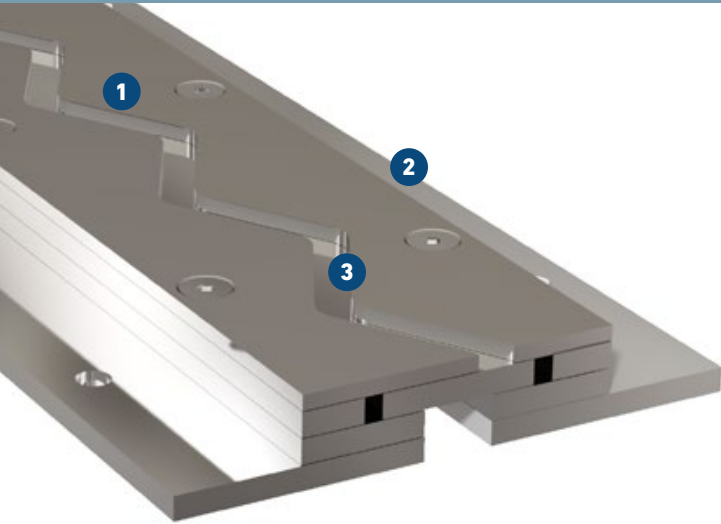


# STS 100

FOR HEAVY DUTY FLOORS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



- 1 Steel-/Stainless steel-Combination**  
for highest load capacity by pallet trucks, fork lift trucks, heavy lorries, special vehicles, etc.
- 2 Transportation free from vibration from a wheel width of 100 mm**  
suitable for transport of sensitive goods
- 3 Absorbs horizontal movement (transverse and parallel)**  
Not suitable for vertical movement

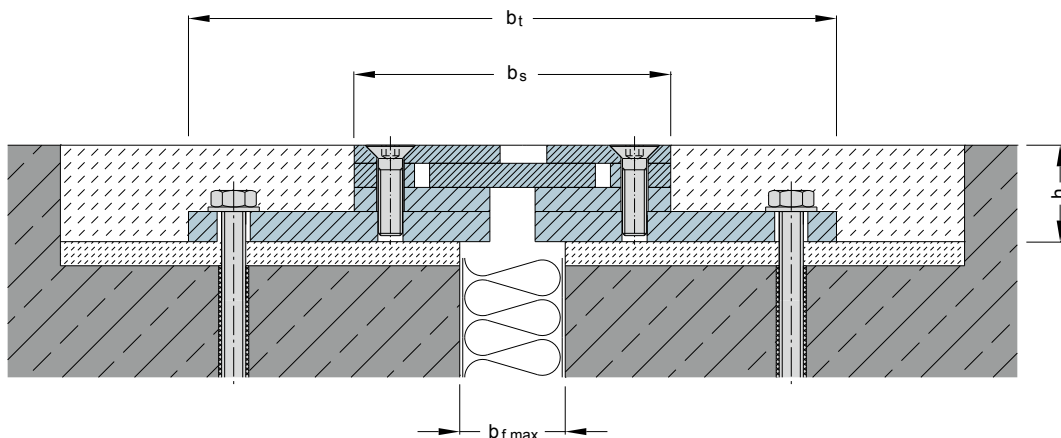
| Expansion joint cover | Joint width max.<br>$b_f$<br>[mm] | Total movement<br>$\Delta b_f$<br>[mm] | Visible width<br>$b_s$<br>[mm] | Joint width total<br>$b_t$<br>[mm] | Joint height<br>$h$<br>[mm] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>solid plastic<br>tyres<br>[kg/mm] |
|-----------------------|-----------------------------------|--|--------------------------------|------------------------------------|-----------------------------|-----------------------------------|-----------------------------------|--|
| STS 100/30 ES         | 35                                | 20 ( $\pm 10$ )                        | 102                            | 182                                | 29                          | 600                               | 150                               | 75   |
| STS 100/50 ES         | 35                                | 20 ( $\pm 10$ )                        | 102                            | 182                                | 49                          | 600                               | 150                               | 75   |
| STS 100/60 ES         | 35                                | 20 ( $\pm 10$ )                        | 102                            | 182                                | 59                          | 600                               | 150                               | 75   |

**Production length:** 1,96 m

**Material - Visible surface:** stainless steel 304 or 316Ti **Underlying construction:** black steel, galvanized steel or stainless steel (please specify while ordering).

Larger joint width or movement capacity or special heights on request.

**Mounting distance:** 300 mm



# STS 160




FOR HEAVY DUTY FLOORS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



- 1 Steel-/Stainless steel-Combination**  
for highest load capacity by pallet trucks, fork lift trucks, heavy lorries, special vehicles, etc.
- 2 Transportation free from vibration from a wheel width of 100 mm**  
suitable for transport of sensitive goods
- 3 Absorbs horizontal movement (transverse and parallel)**  
Not suitable for vertical movement

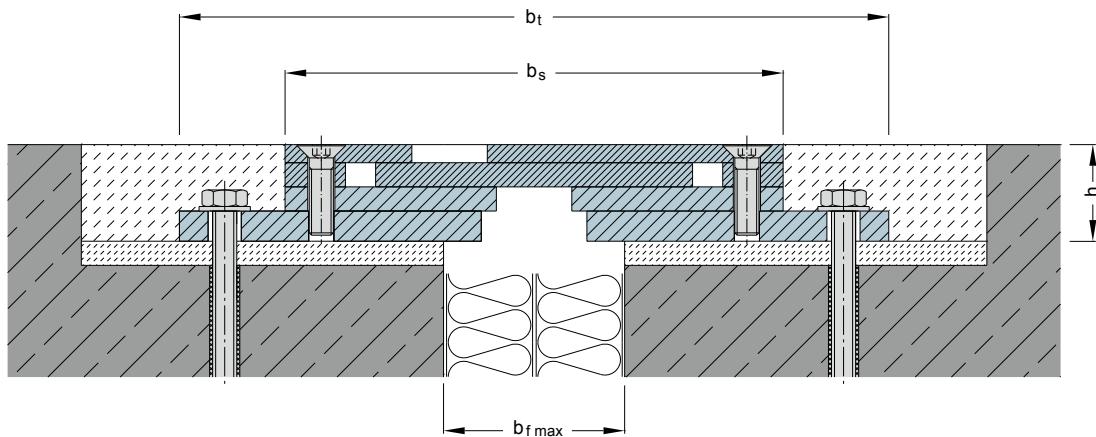
| Expansion joint cover | Joint width max. | Total movement    | Visible width | Joint width total | Joint height | Load bearing capacity<br> [kN] | Load bearing capacity<br> [kN] | Load bearing capacity<br><br>solid plastic tyres<br>[kg/mm] |
|-----------------------|------------------|-------------------|---------------|-------------------|--------------|--|--|---|
|                       | $b_f$ [mm]       | $\Delta b_f$ [mm] | $b_s$ [mm]    | $b_t$ [mm]        | $h$ [mm]     |  |  |   |
| STS 160/30 ES         | 60               | 40 ( $\pm 20$ )   | 163           | 233               | 29           | 600  | 150  | 75  |
| STS 160/45 ES         | 60               | 40 ( $\pm 20$ )   | 163           | 233               | 44           | 600  | 150  | 75  |
| STS 160/60 ES         | 60               | 40 ( $\pm 20$ )   | 163           | 233               | 59           | 600  | 150  | 75  |

**Production length:** 1,96 m

**Material - Visible surface:** stainless steel 304 or 316Ti **Underlying construction:** black steel, galvanized steel or stainless steel (please specify while ordering).

Larger joint width or movement capacity or special heights on request.

**Mounting distance:** 300 mm



# STS 160/16 / STS 160/22

FOR HEAVY DUTY FLOORS WITH SMALLER INSTALLATION HEIGHTS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



- 1 Steel-/Stainless steel-Combination**  
for highest load capacity by pallet trucks, fork lift trucks, heavy lorries, special vehicles, etc.
- 2 Transportation free from vibration from a wheel width of 100 mm**  
suitable for transport of sensitive goods
- 3 Extremely flat (16 mm), fixing without arms**  
Time and cost saving installation, ideal for redevelopment
- 4 Absorbs horizontal movement (transverse and parallel)**  
Not suitable for vertical movement

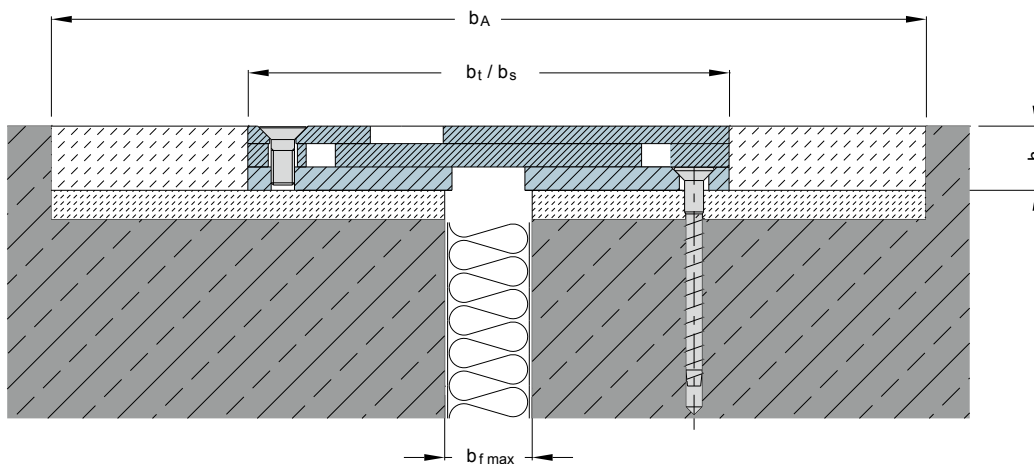
| Expansion joint cover | Joint width max.<br>$b_f$<br>[mm] | Total movement<br>$\Delta b_f$<br>[mm] | Visible width<br>$b_s$<br>[mm] | Joint width total<br>$b_t$<br>[mm] | Joint height<br>$h$<br>[mm] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>solid plastic tyres<br>[kg/mm] |
|-----------------------|-----------------------------------|--|--------------------------------|------------------------------------|-----------------------------|-----------------------------------|-----------------------------------|---|
| STS 160/16 ES         | 30                                | 40 ( $\pm 20$ )                        | 163                            | 163                                | 16                          | 600                               | 150                               | 75  |
| STS 160/22 ES         | 30                                | 40 ( $\pm 20$ )                        | 163                            | 163                                | 21                          | 600                               | 150                               | 75  |

**Production length:** 1,96 m

**Material - Visible surface: stainless steel 304 or 316Ti Underlying construction:** black steel, galvanized steel or stainless steel (please specify while ordering).

Larger joint width or movement capacity or special heights on request.

**Mounting distance:** 300 mm

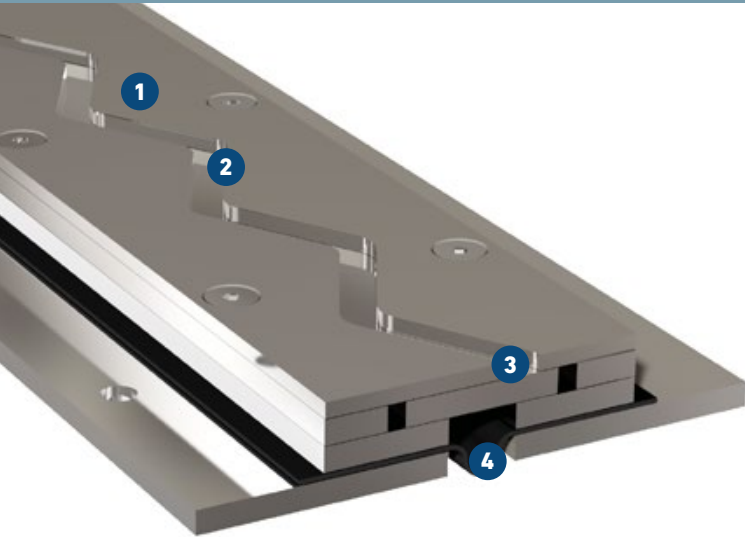


# STW 100

WATERTIGHT – FOR HEAVY DUTY FLOORS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



- 1 Steel-/Stainless steel-Combination**  
for highest load capacity by pallet trucks, fork lift trucks, heavy lorries, special vehicles, etc.
- 2 Transportation free from vibration from a wheel width of 100 mm**  
suitable for transport of sensitive goods
- 3 Absorbs horizontal movement (transverse and parallel)**  
Not suitable for vertical movement
- 4 Additional sealing layer**  
Watertight in connection with connection joint

| Expansion joint cover | Joint width max.<br>$b_f$<br>[mm] | Total movement<br>$\Delta b_f$<br>[mm] | Visible width<br>$b_s$<br>[mm] | Joint width total<br>$b_t$<br>[mm] | Joint height<br>$h$<br>[mm] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>solid plastic tyres<br>[kg/mm] |
|-----------------------|-----------------------------------|--|--------------------------------|------------------------------------|-----------------------------|-----------------------------------|-----------------------------------|---|
| STD 100/30 ES         | 35                                | 20 ( $\pm 10$ )                        | 102                            | 182                                | 31                          | 600                               | 150                               | 75  |
| STD 100/50 ES         | 35                                | 20 ( $\pm 10$ )                        | 102                            | 182                                | 51                          | 600                               | 150                               | 75  |
| STD 100/60 ES         | 35                                | 20 ( $\pm 10$ )                        | 102                            | 182                                | 61                          | 600                               | 150                               | 75  |

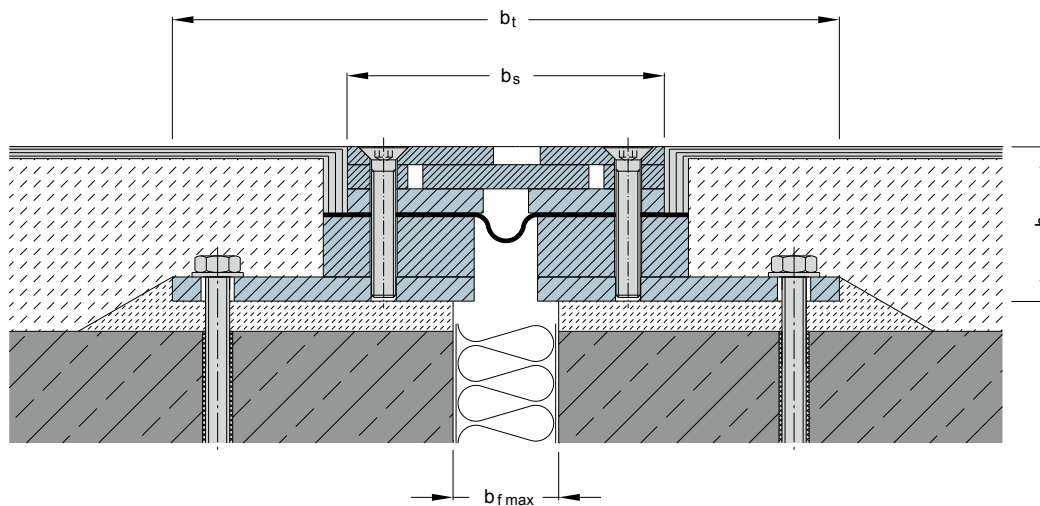
**Production length:** 1,96 m

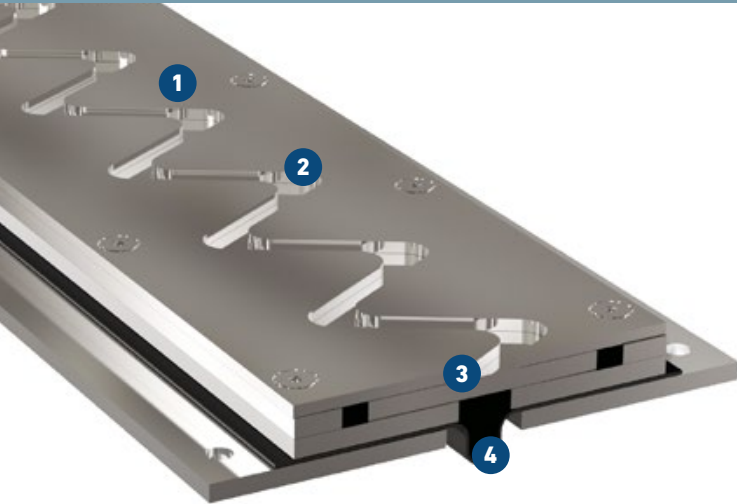
**Sealing layer:** Wolfin IB

**Material - Visible surface:** stainless steel 304 or 316Ti **Underlying construction:** black steel, galvanized steel or stainless steel (please specify while ordering).

Larger joint width or movement capacity or special heights on request.

**Mounting distance:** 300 mm





- 1 Steel-/Stainless steel-Combination**  
for highest load capacity by pallet trucks, fork lift trucks, heavy lorries, special vehicles, etc.
- 2 Transportation free from vibration from a wheel width of 100 mm**  
suitable for transport of sensitive goods
- 3 Absorbs horizontal movement (transverse and parallel)**  
Not suitable for vertical movement
- 4 Additional sealing layer**  
Watertight in connection with connection joint

| Expansion joint cover | Joint width max.<br>$b_f$<br>[mm] | Total movement<br>$\Delta b_f$<br>[mm] | Visible width<br>$b_s$<br>[mm] | Joint width total<br>$b_t$<br>[mm] | Joint height<br>$h$<br>[mm] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>solid plastic tyres<br>[kg/mm] |
|-----------------------|-----------------------------------|--|--------------------------------|------------------------------------|-----------------------------|-----------------------------------|-----------------------------------|---|
| STD 160/30 ES         | 60                                | 40 (±20)                               | 163                            | 233                                | 31                          | 600                               | 150                               | 75  |
| STD 160/45 ES         | 60                                | 40 (±20)                               | 163                            | 233                                | 46                          | 600                               | 150                               | 75  |
| STD 160/60 ES         | 60                                | 40 (±20)                               | 163                            | 233                                | 61                          | 600                               | 150                               | 75  |

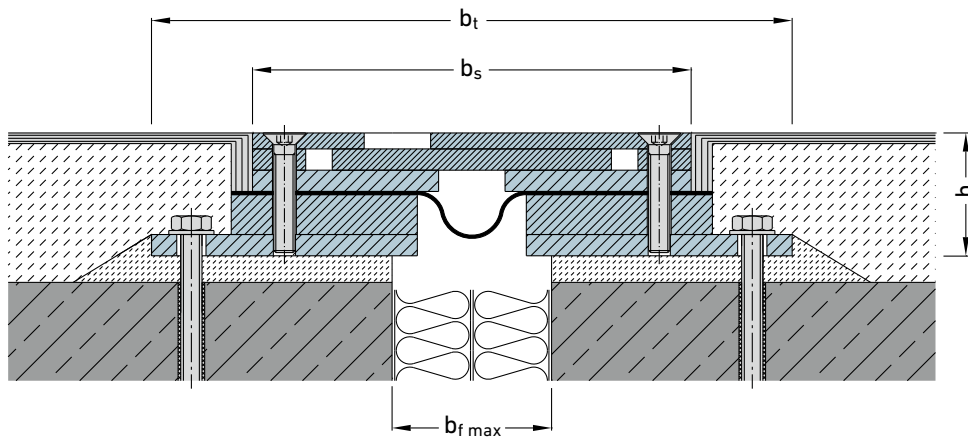
**Production length:** 1,96 m

**Sealing layer:** Wolfin IB

**Material - Visible surface:** stainless steel 304 or 316Ti **Underlying construction:** black steel, galvanized steel or stainless steel (please specify while ordering).

Larger joint width or movement capacity or special heights on request.

**Mounting distance:** 300 mm





# FS 220 / FS 260 / FS 380

FOR FLOORS WITH SMALL INSTALLATION HEIGHTS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



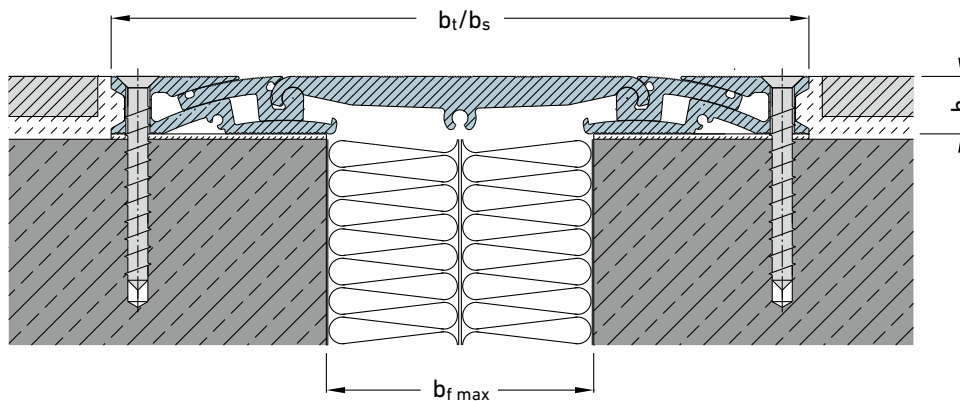
- 1** **Symmetrical visible surface has no gaps**  
avoids dirt accumulation
- 2** **Striated surface**  
ensures good skid resistance
- 3** **Extremely flat, fixing without arms**  
ideal for redevelopment, refurbishment, renovation
- 4** **Articulated telescoping system**  
absorbs movement in 3 directions
- 5** **Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting

| Expansion joint cover | Joint width max.<br>$b_f$<br>[mm] | Total movement<br>$\Delta b_f$<br>[mm] | Visible width<br>$b_s$<br>[mm] | Joint width total<br>$b_t$<br>[mm] | Joint height<br>$h$<br>[mm] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>solid plastic tyres<br>[kg/mm] |
|-----------------------|-----------------------------------|--|--------------------------------|------------------------------------|-----------------------------|-----------------------------------|-----------------------------------|---|
| FS 220/20             | 60                                | 40 ( $\pm 20$ )                        | 220                            | 220                                | 21                          | 600                               | 130                               | 15  |
| FS 260/20             | 100                               | 40 ( $\pm 20$ )                        | 260                            | 260                                | 21                          | 600                               | 130                               | 15  |
| FS 380/20             | 215                               | 40 ( $\pm 20$ )                        | 378                            | 378                                | 21                          | 300                               | 70                                | 15  |

**Production length:** 3 m

**Standard colour:** Aluminium

**We recommend fixing with Multi-Monti Stainless steel screws MMS F 7,5 x 95/30 ES (available ex stock), fixing distance:** 200 mm.



# FS 255 / FS 295 / FS 410

FOR FLOORS WITH SMALL INSTALLATION HEIGHTS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



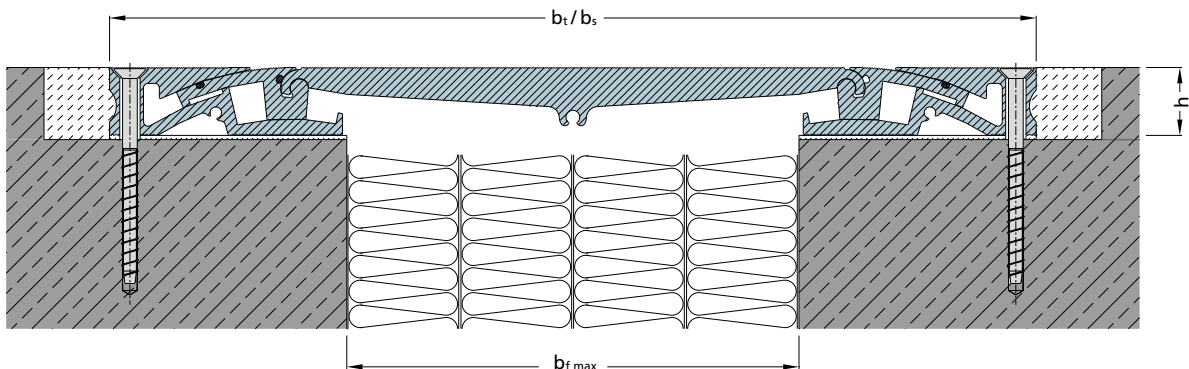
- 1 Removable**  
without destruction of the adjacent floor
- 2 Symmetrical visible surface has no gaps**  
avoids dirt accumulation
- 3 Extremely flat, fixing without arms**  
ideal for redevelopment, refurbishment, renovation
- 4 Articulated telescoping system**  
absorbs movement in 3 directions
- 5 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting

| Expansion joint cover | Joint width max.<br>$b_f$<br>[mm] | Total movement<br>$\Delta b_f$<br>[mm] | Visible width<br>$b_s$<br>[mm] | Joint width total<br>$b_t$<br>[mm] | Joint height<br>$h$<br>[mm] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>solid plastic tyres<br>[kg/mm] |
|-----------------------|-----------------------------------|--|--------------------------------|------------------------------------|-----------------------------|-----------------------------------|-----------------------------------|---|
| FS 255/30             | 50                                | 60 (±30)                               | 253                            | 253                                | 30                          | 600                               | 130                               | 15  |
| FS 295/30             | 90                                | 60 (±30)                               | 293                            | 293                                | 30                          | 600                               | 130                               | 15  |
| FS 410/30             | 205                               | 60 (±30)                               | 410                            | 410                                | 30                          | 300                               | 70                                | 15  |

**Production length:** 3 m

**Standard colour:** Aluminium, FS 410: Aluminium anodized

**We recommend fixing with Stainless steel Multi-Monti Screws MMS F 7,5 x 115/50 ES (available ex stock), fixing distance:** 200 mm.



# FSN 50

ALL-METAL EXPANSION JOINT. FOR SUBSEQUENT INSTALLATION


# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



- 1 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting
- 2 Visible surface has no gaps**  
avoids dirt accumulation
- 3 Striated surface**  
ensures good skid resistance
- 4 Articulated telescoping system**  
absorbs movement in 3 directions

**Ideal for redevelopment, refurbishment, renovation**

| Expansion joint cover | Joint width max.<br>$b_f$<br>[mm] | Total movement<br>$\Delta b_f$<br>[mm] | Visible width<br>$b_s$<br>[mm] | Joint width total<br>$b_t$<br>[mm] | Joint height<br>$h$<br>[mm] | Thickness of alu side plates<br>$h_1$<br>[mm] | Load bearing capacity<br> |
|-----------------------|-----------------------------------|--|--------------------------------|------------------------------------|-----------------------------|---|---|
| FSN 50                | 55                                | 10 ( $\pm 5$ )                         | 173                            | 173                                | 15                          | 3   | pedestrians   |

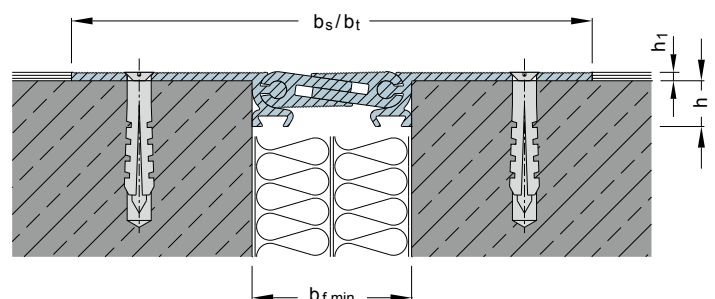
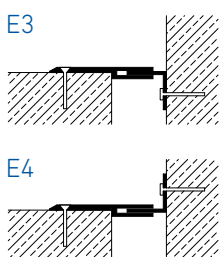
\* Light vehicles on request.

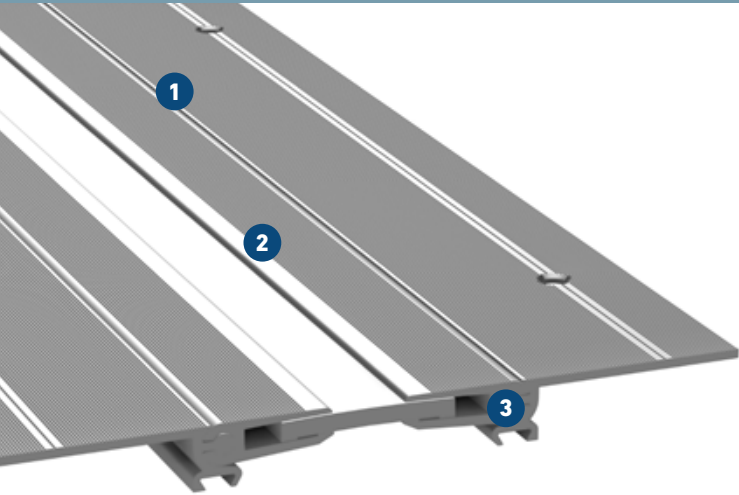
**Production length:** 4 m

**Standard colour:** Aluminium

**Mounting distance:** 300 mm

Corner versions:






- 1 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting
- 2 Symmetrical visible surface has no gaps**  
avoids dirt accumulation
- 3 Striated surface**  
ensures good skid resistance

**Articulated telescoping system**  
absorbs movement in 3 directions

**Ideal for redevelopment, refurbishment, renovation**

| Expansion joint cover | Joint width max.<br>$b_f$ [mm] | Total movement<br>$\Delta b_f$ [mm] | Visible width<br>$b_s$ [mm] | Joint width total<br>$b_t$ [mm] | Joint height<br>$h$ [mm] | Thickness of alu side plates<br>$h_1$ [mm] | Load bearing capacity<br> |
|-----------------------|--------------------------------|-------------------------------------|-----------------------------|---------------------------------|--------------------------|--|---|
| FSN 99                | 100                            | 40 ( $\pm 20$ )                     | 219                         | 219                             | 15                       | 3  | pedestrians   |

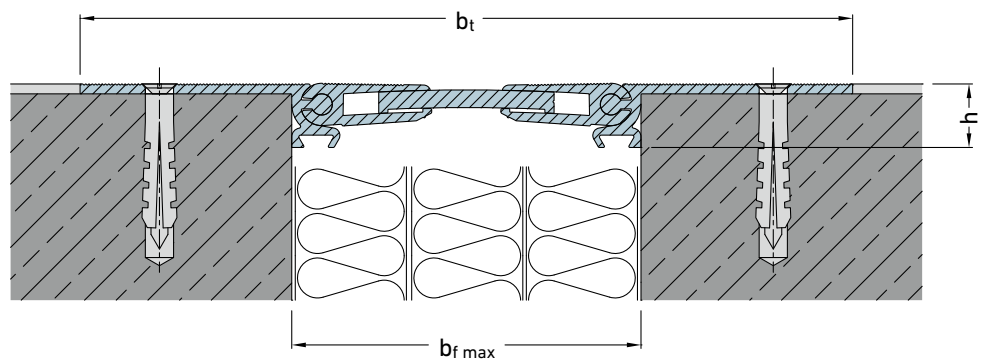
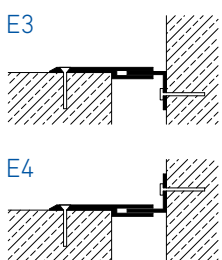
\* Light vehicles on request.

**Production length:** 4 m

**Standard colour:** Aluminium

**Mounting distance:** 300 mm

Corner versions:

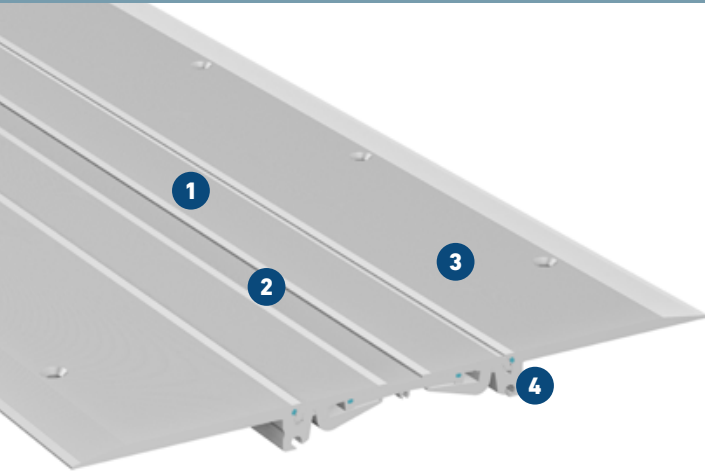


# FSNX 146

ALL-METAL EXPANSION JOINT. FOR SUBSEQUENT INSTALLATION

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



- 1 New, improved design**  
Innovative layout of the line
- 2 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting
- 3 Striated surface**  
ensures good skid resistance
- 4 Articulated telescoping system with optimized movement control**  
absorbs movement in 3 directions, with improved shock absorbing elements

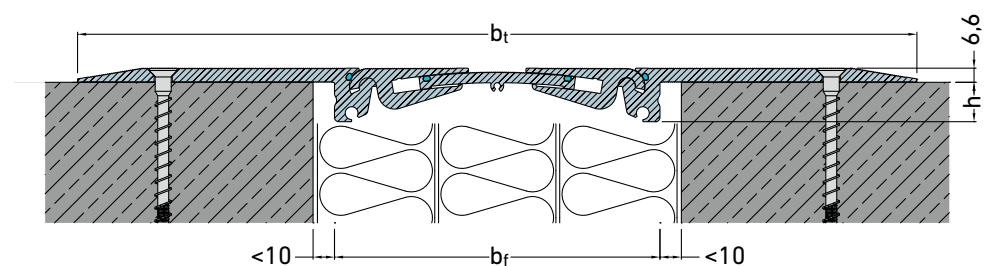
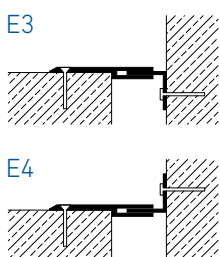
| Expansion joint cover | Joint width max.<br>$b_f$<br>[mm] | Total movement<br>$\Delta b_f$<br>[mm] | Visible width<br>$b_s$<br>[mm] | Joint width total<br>$b_t$<br>[mm] | Joint height<br>$h$<br>[mm] | Thickness of alu side plates<br>$h_1$<br>[mm] | Load bearing capacity<br><br>[kN] | Load bearing capacity<br><br>solid plastic tyres<br>[kg/mm] |
|-----------------------|-----------------------------------|--|--------------------------------|------------------------------------|-----------------------------|---|-----------------------------------|---|
| FSNX 146              | 152                               | 50 ( $\pm 25$ )                        | 392                            | 392                                | 18                          | 6,6   | 30                                | 3,5   |

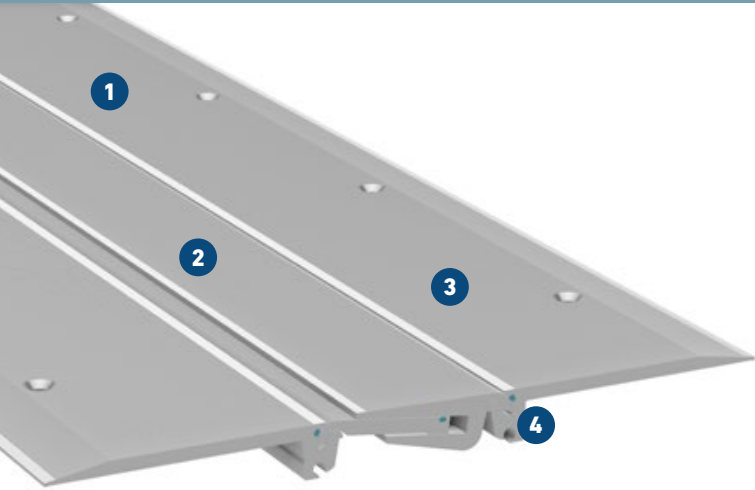
**Production length:** 4 m

**Standard colour:** Aluminium

**Installation instructions:** Any unevenness in the surface to which the expansion joint is being fixed must be remedied by using an epoxy adhesive e.g. Reckli-Adhesive EP. The aluminium brackets must then be fixed at both sides with countersunk stainless

Corner versions:





- 1 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting
- 2 Visible surface has no gaps**  
avoids dirt accumulation
- 3 Striated surface**  
ensures good skid resistance
- 4 Articulated telescoping system**  
absorbs movement in 3 directions

| Expansion joint cover | Joint width min. | Total movement    | Visible width | Joint width total | Installation height | Thickness of alu side plates | Load bearing capacity | Load bearing capacity | Load bearing capacity                      |
|-----------------------|------------------|-------------------|---------------|-------------------|---------------------|------------------------------|-----------------------|-----------------------|--|
|                       | $b_f$ [mm]       | $\Delta b_f$ [mm] | $b_s$ [mm]    | $b_t$ [mm]        | $h$ [mm]            | $h_1$ [mm]                   | [kN]<br>              | [kN]<br>              | [kN]<br><br>solid plastic tyres<br>[kg/mm] |
| FSN 46 *              | 50               | 20 ( $\pm 10$ )   | 276           | 276               | 21                  | 6,6                          | 90                    | 70                    | 6,5  |
| FSNX 75               | 84               | 20 ( $\pm 10$ )   | 320           | 320               | 21                  | 6,6                          | 90                    | 70                    | 6,5  |
| FSN 105**             | 112              | 20 ( $\pm 10$ )   | 348           | 348               | 25                  | 6,6                          | 90                    | 70                    | 6,5  |
| FSNX 110              | 118              | 30 ( $\pm 15$ )   | 354           | 354               | 21                  | 6,6                          | 90                    | 70                    | 6,5  |
| FSNX 130              | 142              | 40 ( $\pm 20$ )   | 378           | 378               | 28                  | 6,6                          | 90                    | 35                    | 6,5  |
| FSN 155**             | 162              | 40 ( $\pm 20$ )   | 398           | 398               | 24                  | 6,6                          | 90                    | 35                    | 6,5  |
| FSNX 160              | 170              | 60 ( $\pm 30$ )   | 406           | 406               | 34                  | 6,6                          | 90                    | 35                    | 6,5  |
| FSN 185**             | 200              | 60 ( $\pm 30$ )   | 409           | 409               | 18                  | 6,6                          | 90                    | 35                    | 6,5  |
| FSN 280**             | 240              | 85 ( $\pm 42,5$ ) | 454           | 454               | 21                  | 6,6                          | 35                    | 35                    | 6,5  |
| FSN 285**             | 290              | 100 ( $\pm 50$ )  | 508           | 508               | 28                  | 6,6                          | 35                    |                       |  |

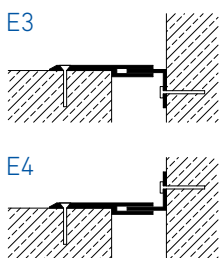
\* cannot take settlements

\*\* The joint width should not differ substantially from the necessary joint width  $b_f$ .

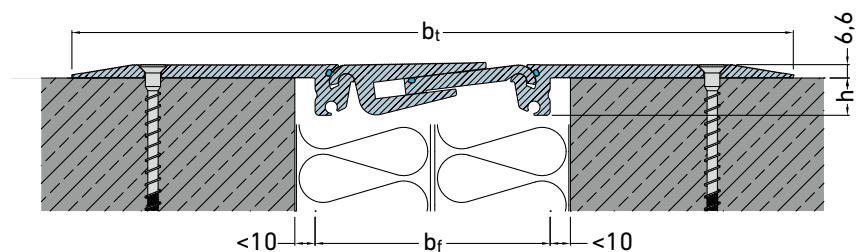
**Production length:** 4 m (FSN 185, FSN 280 and FSN 285: 3 m)

**Standard colour:** Aluminium

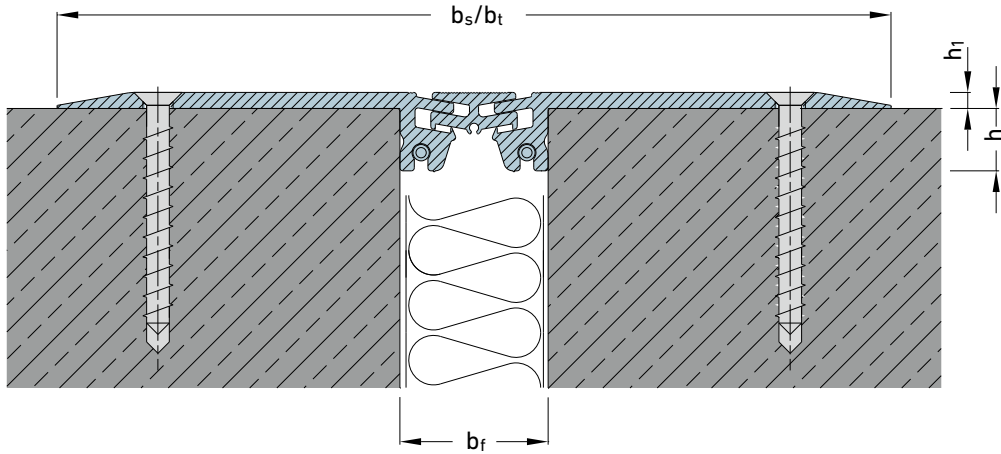
Corner versions:



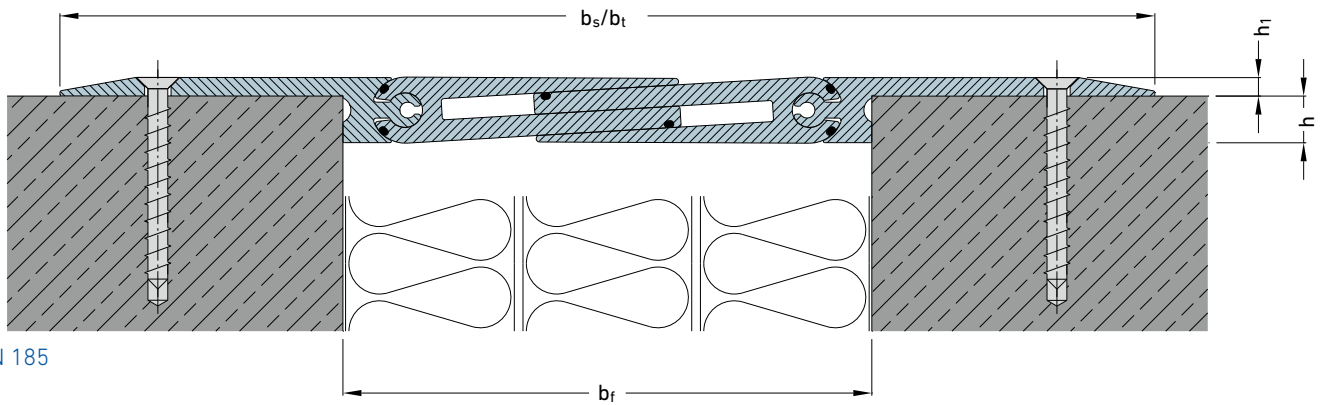
FSNX 110



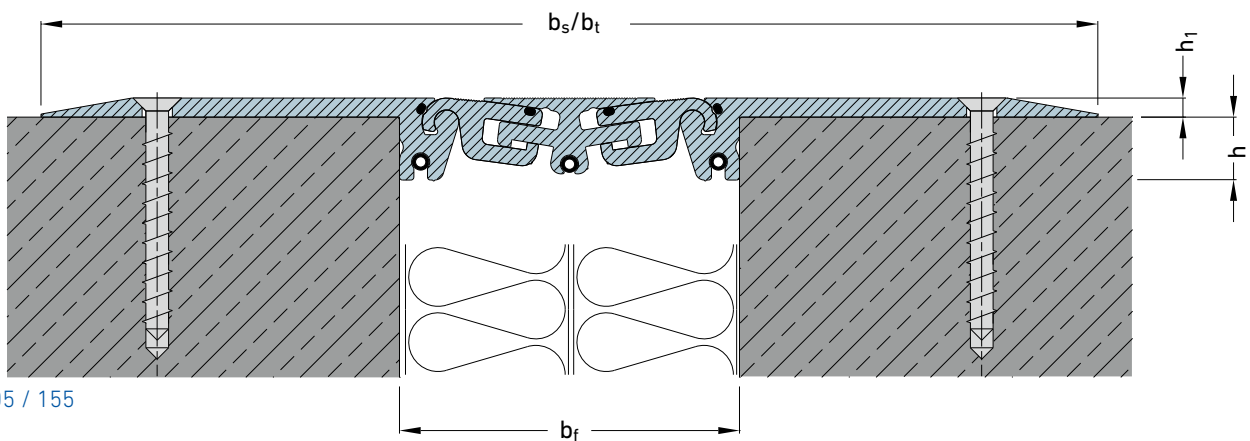
FSN 46



FSN 185

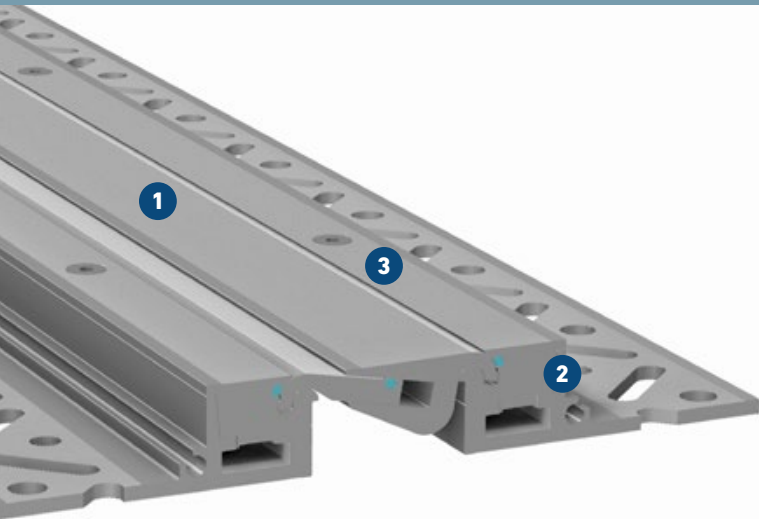


FSN 105 / 155



**Installation Instructions:**

The lateral support legs of the profiles must be glued into a thin levelling layer of epoxy resin, e.g. Reckli-Kleber EP. Then the support legs are anchored on both sides with thread-cutting stainless steel screws, e.g. MMS-F 7.5 ES for concrete at intervals of 200 mm.



### New innovative design Generation X

- 1 Visible surface has not gaps**  
prevents accumulation of dirt, minimized cleaning time and effort
- 2 Solid all-metal expansion joint**  
hard wearing, maintenance-free, long lasting
- 3 Striated surface**  
ensures good skid resistance

**Articulated telescoping system**  
absorbs movement in 3 directions

**Renovation-friendly installation height of only 30 mm**  
**Punctured leg with MIGUA mounting matrix®**  
Provides optimal anchoring alternatives in the underground

**Now available Anodized!**  
For perfect match with interior design. Color-fast and light resistant.

| Expansion joint cover | Joint width max. | Total movement    | Visible width | Joint width total | Joint height | Load bearing capacity | Load bearing capacity | Load bearing capacity       |
|-----------------------|------------------|-------------------|---------------|-------------------|--------------|-----------------------|-----------------------|-----------------------------|
|                       | $b_f$ [mm]       | $\Delta b_f$ [mm] | $b_s$ [mm]    | $b_t$ [mm]        | $h$ [mm]     | [kN]                  | [kN]                  | solid plastic tyres [kg/mm] |
| FSRX 111/30           | 50               | 20 ( $\pm 10$ )   | 111           | 240               | 30           | 300                   | 130                   | 10                          |
| FSRX 139/30           | 75               | 20 ( $\pm 10$ )   | 139           | 268               | 30           | 300                   | 150                   | 15                          |
| FSRX 144/30           | 75               | 30 ( $\pm 15$ )   | 144           | 273               | 30           | 300                   | 130                   | 10                          |
| FSRX 168/30           | 100              | 40 ( $\pm 20$ )   | 168           | 297               | 30           | 300                   | 130                   | 10                          |
| FSRX 180/30           | 116              | 50 ( $\pm 25$ )   | 180           | 309               | 30           | 30                    |                       | 3,5                         |
| FSRX 196/30           | 130              | 60 ( $\pm 30$ )   | 196           | 325               | 30           | 300                   | 100                   | 10                          |

### The movement component is easy to install and can be replaced without damage.

Thus, the FSRX joint cover can easily be renewed or replaced, e.g. in case of mechanical damage, wear, if a change of colour is desired or the actual joint movements turn out to be different than expected.

**Production length:** 4 m

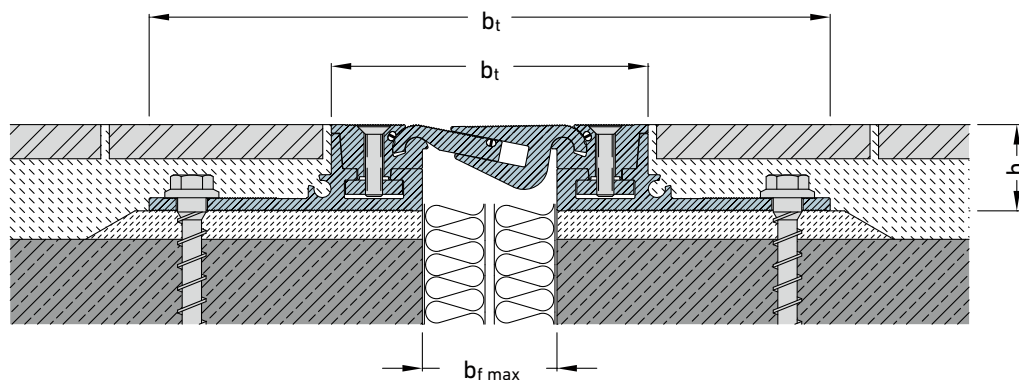
**Standard colour:** Aluminium, available in anodized version, too

Slip resistance according to DIN 51130 rating group R10 (across the joint), R9 (along the joint).

Wall connections and molded parts available on request.

The joint covers FSRX 139 and FSRX 180 are equipped with symmetrical movement components.

For details on the anodized version, see page 49.



FSRX 111 /30

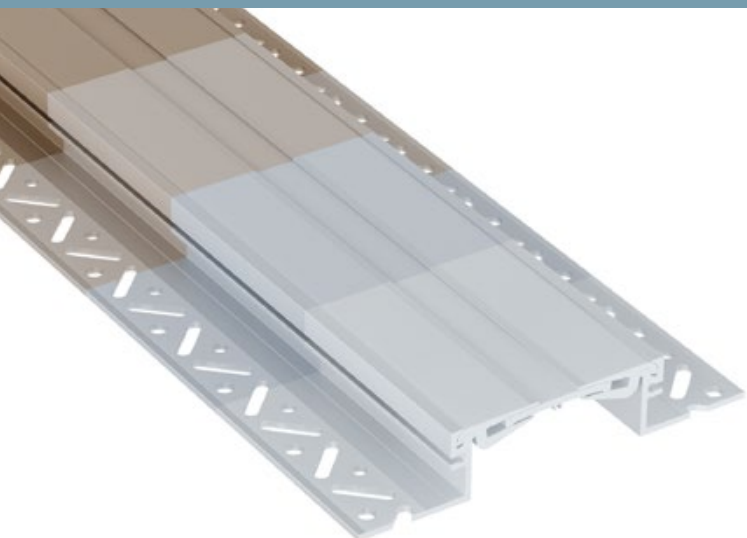


# ANODIZED EXPANSION JOINT COVERS

FOR HEAVY DUTY FLOORS

# MIGUTRANS

HEAVY-DUTY ALL-METAL JOINT SOLUTIONS FOR LARGE TRAFFIC LOADS



Selected expansion joint covers can now be integrated into your projects in different colour shades. This gives you even more freedom of design when working with expansion joint covers. Initially available in four colour shades, we now offer you the possibility of defining homogeneous surfaces.

And if these do not match your current project, we will be happy to find the right colour shade together with you on request.

Whether tone-in-tone with the adjacent floor covering or deliberately contrasting colours for an additional effect - it's all your choice ...

| Expansion joint cover | Joint width max. | Total movement       | Visible width | Joint width total | Load bearing capacity | Load bearing capacity | Load bearing capacity                 |
|-----------------------|------------------|----------------------|---------------|-------------------|-----------------------|-----------------------|---------------------------------------|
|                       | $b_f$<br>[mm]    | $\Delta b_f$<br>[mm] | $b_s$<br>[mm] | $b_t$<br>[mm]     | <br>[kN]              | <br>[kN]              | <br>solid plastic<br>tyres<br>[kg/mm] |
| ESF 10 AL             | 10               | 4 (±2)               | 10            | 77                | 600                   | 130                   | 6,5                                   |
| FS 40                 | 35               | 16 (±8)              | 40            | 161-173           | 300                   | 70                    | 6,5                                   |
| FS 50                 | 30               | 10 (±5)              | 53            | 138-140           | 90                    | 35                    | 3                                     |
| FS 75                 | 50               | 20 (±10)             | 77            | 193-197           | 300                   | 100                   | 9                                     |
| FSX 75                | 50               | 20 (±10)             | 77            | 198               | 300                   | 130                   | 10                                    |
| FSL 77                | 50               | 22 (±11)             | 77            | 164               | 12*                   |                       |                                       |
| SFS 90                | 50               | 20 (±10)             | 90            | 183               | 300                   | 69                    | 6,5                                   |
| FS 105                | 75               | 20 (±10)             | 105-107       | 221-223           | 600                   | 130                   | 15                                    |
| FSX 110               | 75               | 30 (±15)             | 110           | 231               | 300                   | 130                   | 10                                    |
| FSX 130               | 100              | 40 (±20)             | 134           | 255               | 300                   | 130                   | 10                                    |
| FS 146                | 114              | 50 (±25)             | 146           | 262-266           | 12*                   |                       |                                       |
| FSX 146               | 117              | 50 (±25)             | 146           | 267               | 30                    |                       | 3,5                                   |
| FSX 160               | 130              | 60 (±30)             | 162           | 283               | 300                   | 100                   | 10                                    |

\* Load bearing capacity private cars

As well as all expansion joints of type FSRX

**Profile height:** The profiles are available in all profile heights of the basic profiles (see data sheet there)

**Production length:** 4 m

**Standard colour:** Aluminium, available in anodized version, too

Further installation heights on request.

### Applicable for anodized expansion joint covers:

By anodizing the surface is hardened, but scratches can not be ruled out under mechanical stress of the profiles.

Slight color and / or gloss deviations between different batches or deliveries do not constitute a reason for complaint.

The processing is carried out in accordance with DIN 17611 and the Qualanod (Quality Label for Sulphuric Acid-Based Anodizing of Aluminium) regulations for the anodization of aluminum.

The expansion joint covers must be cleaned and maintained in accordance with the specifications of the Qualanod and the leaflet A5 of the aluminum center.

We are happy to advise you.

### Standard colors based on EURAS color fans:

C 0 Nature C 31 Light C 32 Light bronze

Other colors on request.

## WALL-CONNECTION VERSIONS DIMENSIONS

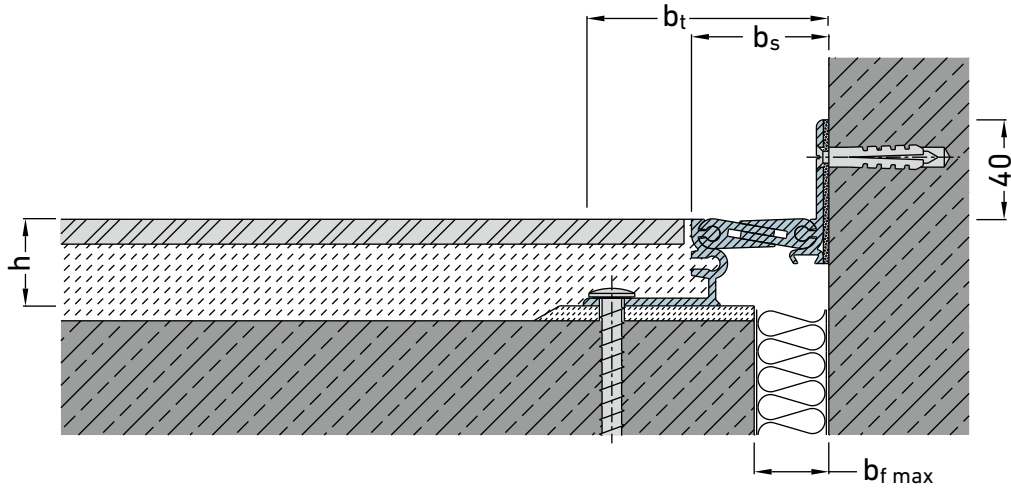
| Expansion joint cover | Joint height*<br>h<br>[mm]  | Wall-connection version E3 |                        |   | Wall-connection version E4 |                        |   |
|-----------------------|-----------------------------|----------------------------|------------------------|---|----------------------------|------------------------|---|
|                       |                             | b <sub>s</sub><br>[mm]     | b <sub>t</sub><br>[mm] | Joint depth<br>min h <sub>E</sub><br>[mm] | b <sub>s</sub><br>[mm]     | b <sub>t</sub><br>[mm] | Joint depth<br>min h <sub>E</sub><br>[mm] |
| FS 40 **              | 19, 25, 35, 60              | 40                         | 101                    | 44  | 40                         | 101                    | 40  |
| FS 46                 | 50                          | 48                         | 109                    | 35  | 52                         | 113                    | 46  |
| FS 50                 | 20, 35, 50, 90              | 55                         | 99                     | 31  | 55                         | 99                     | 40  |
| FSX 75                | 22, 30, 40, 50, 60, 80, 100 | 79                         | 140                    | 60  | 81                         | 142                    | 40  |
| FS 99                 | 20, 35, 50, 90              | 101                        | 145                    | 31  | 101                        | 145                    | 40  |
| FS 105                | 30, 42, 52, 62              | 110                        | 168                    | 60  | 110                        | 169                    | 40  |
| FSX 110               | 30, 40, 50, 60, 80, 100     | 112                        | 173                    | 60  | 114                        | 175                    | 40  |
| FS 110 ES             | 42, 52, 62, 77, 87, 97      | 116                        | 173                    | 60  | 116                        | 173                    | 40  |
| FSX 130               | 40, 50, 60, 80, 100         | 136                        | 197                    | 60  | 138                        | 199                    | 40  |
| FSX 146               | 22, 30, 40, 50, 60, 80, 100 | 148                        | 209                    | 60  | 150                        | 211                    | 40  |
| FS 155                | 30, 42, 52, 62              | 159                        | 218                    | 60  | 159                        | 218                    | 40  |
| FSX 160               | 40, 50, 60, 80, 100         | 164                        | 225                    | 60  | 166                        | 227                    | 40  |
| FS 167                | 30, 42, 52, 62              | 169                        | 227                    | 60  | 169                        | 227                    | 40  |
| FS 185                | 27, 40, 80                  | 186                        | 246                    | 75  | 186                        | 246                    | 50  |
| FSV 235               | 45, 80, (90), (130), (140)  | 210                        | 271                    | 75  | 210                        | 271                    | 50  |
| FSV 280               | 45, 80, (90), (130), (140)  | 256                        | 317                    | 75  | 256                        | 317                    | 50  |
| FSV 285               | 27, 40, 80                  | 285                        | 345                    | 75  | 285                        | 345                    | 50  |
| FSV 335               | 45, 80, (90), (130), (140)  | 310                        | 372                    | 75  | 310                        | 372                    | 50  |
| FSRX 111              | 30                          | 96                         | 160                    | 60  | 98                         | 162                    | 40  |
| FSRX 139              | 30                          | 124                        | 188                    | 60  | 126                        | 190                    | 40  |
| FSRX 144              | 30                          | 129                        | 193                    | 60  | 131                        | 195                    | 40  |
| FSRX 168              | 30                          | 153                        | 217                    | 60  | 155                        | 219                    | 40  |
| FSRX 180              | 30                          | 165                        | 229                    | 60  | 167                        | 231                    | 40  |
| FSRX 196              | 30                          | 181                        | 245                    | 60  | 183                        | 247                    | 40  |
| FSN 46                |                             |                            | 168                    | 35  |                            | 172                    | 46  |
| FSN 50                |                             |                            | 115                    | 31  |                            | 115                    | 40  |
| FSNX 75               |                             |                            | 202                    | 60  |                            | 204                    | 40  |
| FSN 99                |                             |                            | 161                    | 31  |                            | 161                    | 40  |
| FSN 105               |                             |                            | 231                    | 60  |                            | 231                    | 40  |
| FSNX 110              |                             |                            | 235                    | 60  |                            | 237                    | 40  |
| FSNX 130              |                             |                            | 259                    | 60  |                            | 261                    | 40  |
| FSNX 146              |                             |                            | 271                    | 60  |                            | 273                    | 40  |
| FSN 155               |                             |                            | 281                    | 60  |                            | 281                    | 40  |
| FSNX 160              |                             |                            | 287                    | 60  |                            | 289                    | 40  |
| FSN 185               |                             |                            | 298                    | 75  |                            | 298                    | 50  |
| FSN 280               |                             |                            | 342                    | 75  |                            | 342                    | 50  |
| FSN 285               |                             |                            | 397                    | 75  |                            | 397                    | 50  |
| FSL 77                | 20, 35, 50, 90              | 79                         | 123                    | 31  | 79                         | 123                    | 40  |
| FSL 104               | 20, 35, 50, 90              | 107                        | 150                    | 31  | 107                        | 150                    | 40  |
| FSL 113               | 20, 35, 50, 90              | 115                        | 159                    | 31  | 115                        | 159                    | 40  |
| SFS 90                | 24, 30, 42                  |                            |                        |   | 96                         | 141                    | 50  |
| SFS 115               | 24, 30, 42                  |                            |                        |   | 121                        | 166                    | 50  |
| SFS 135               | 24, 30, 42                  |                            |                        |   | 141                        | 186                    | 50  |

\* Further expansion joint heights available on request

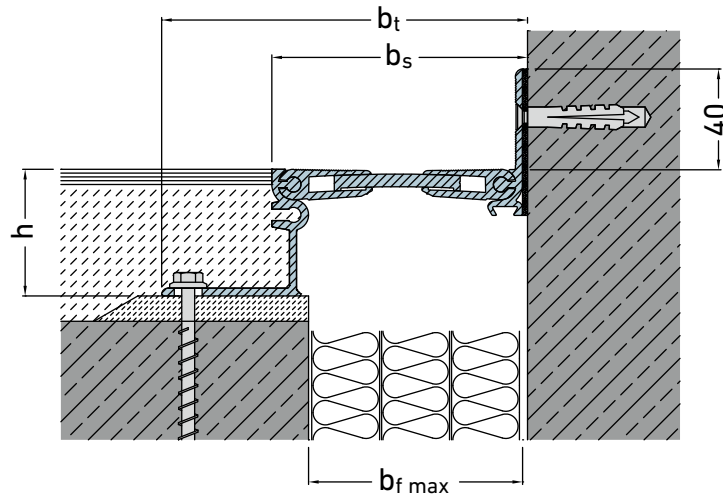
\*\* Corner versions on demand only

## WALL-CONNECTION VERSIONS

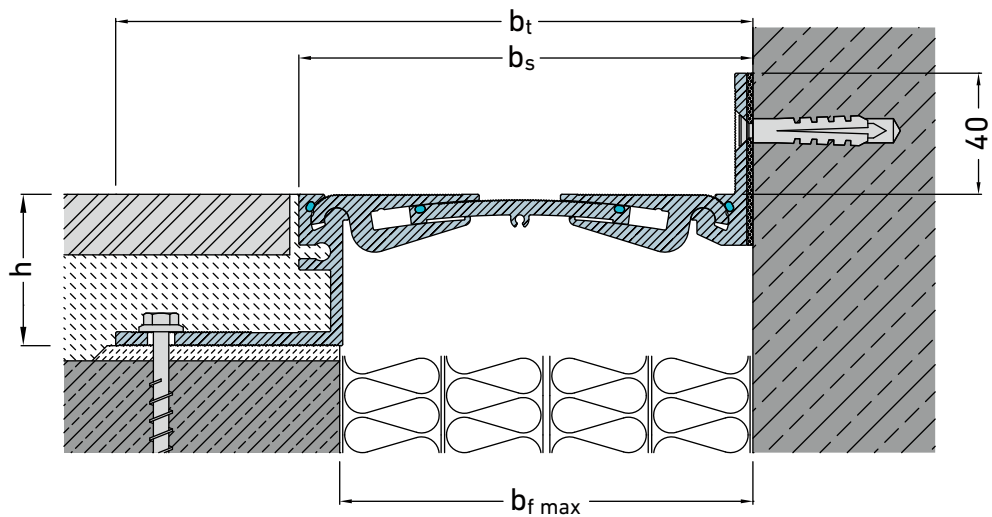
### FS E4



FS 50 E4



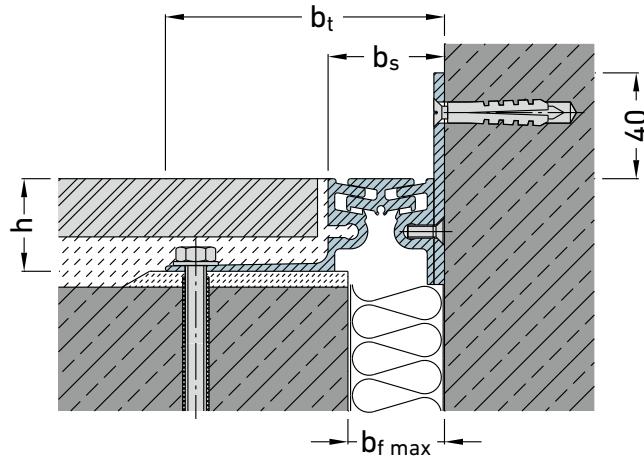
FS 99 E4



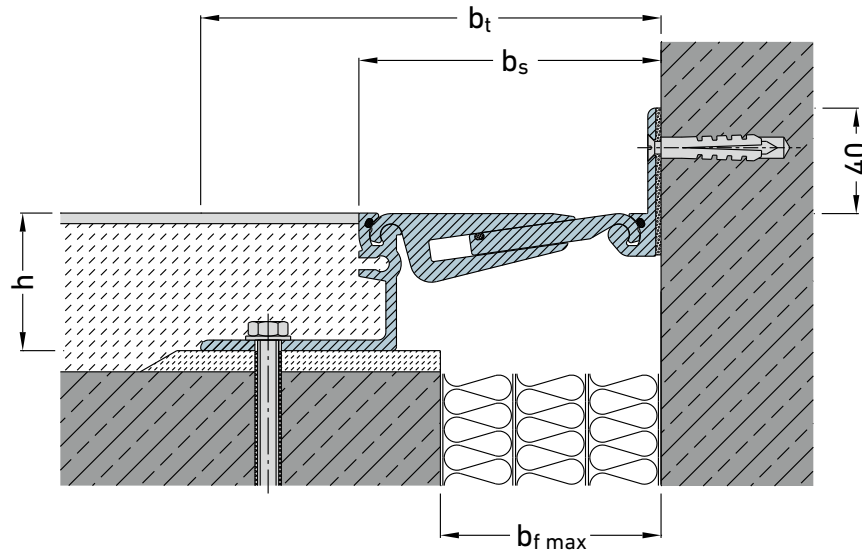
FSX 146 E4

## WALL-CONNECTION VERSIONS

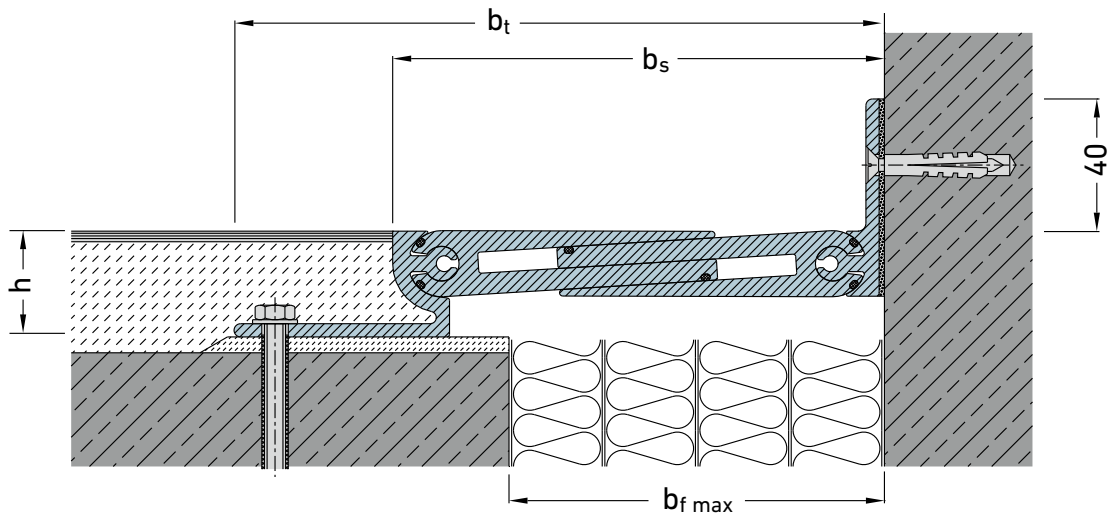
### FS E4



FS 40 E4



FSX 75 E4  
FSX 110 E4  
FSX 130 E4  
FSX 160 E4

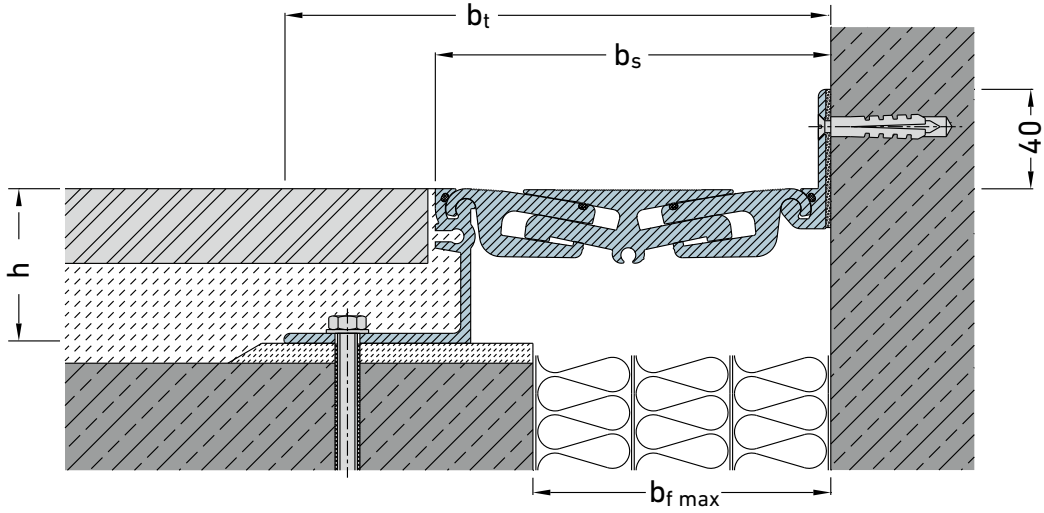


FS 185 E4

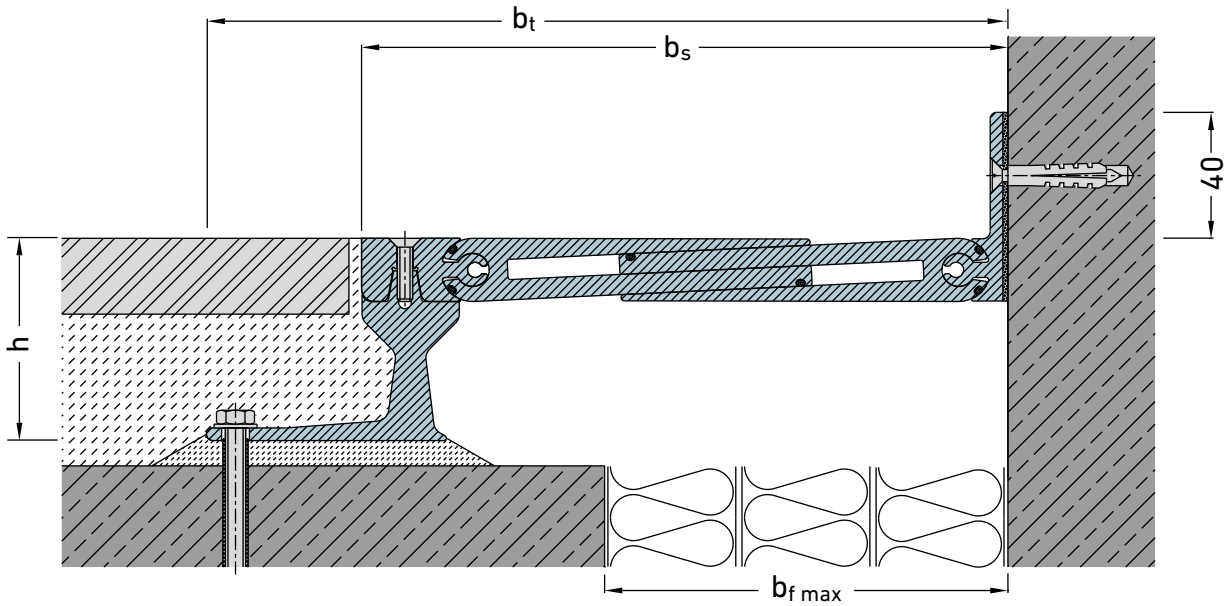
## WALL-CONNECTION VERSIONS

FS / FSV E4

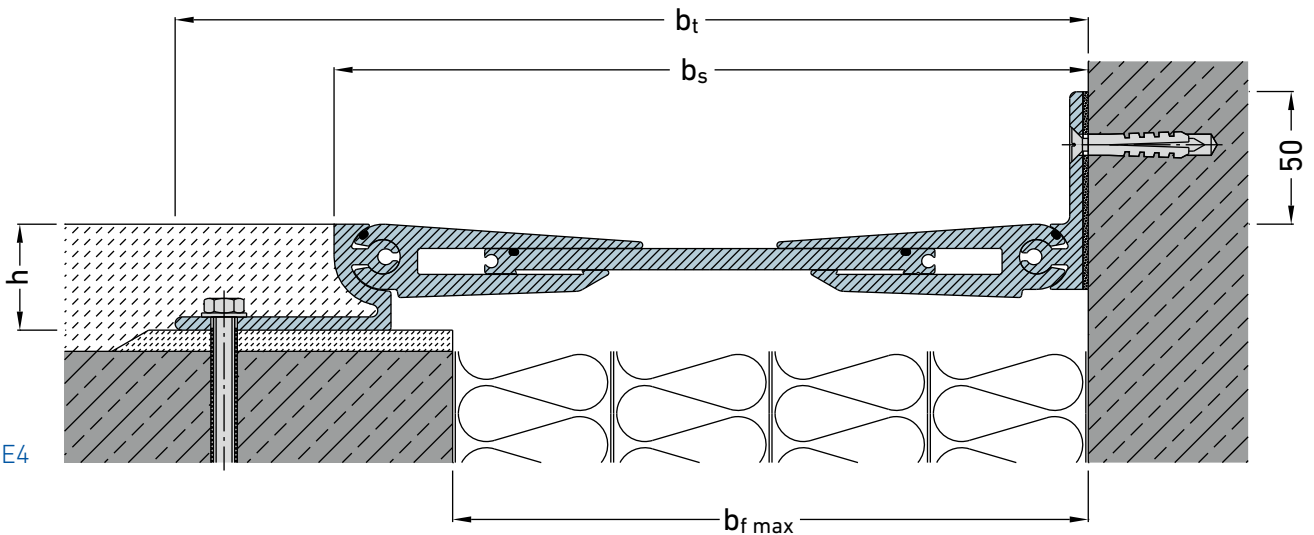
FS 105 E4  
FS 155 E4



FSV 235 E4  
FSV 280 E4

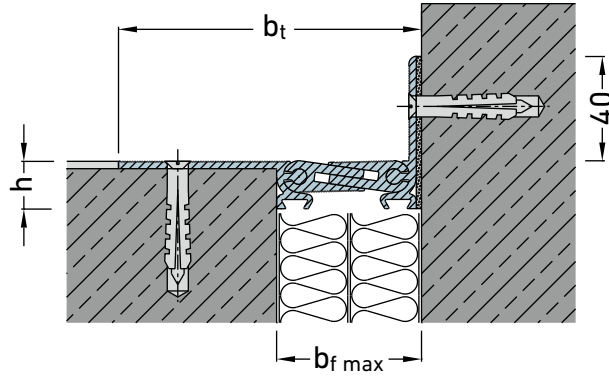


FSV 285 E4

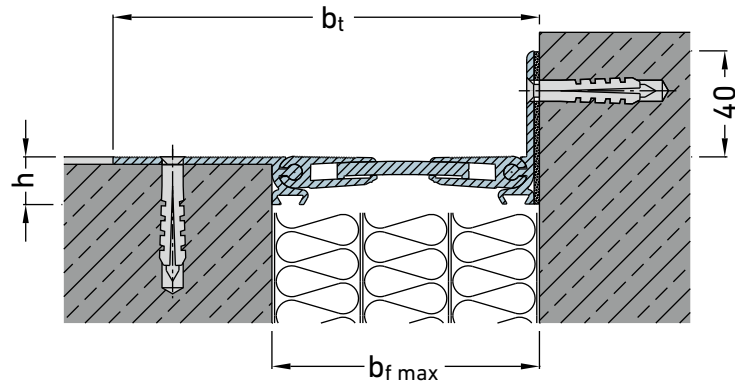


## WALL-CONNECTION VERSIONS

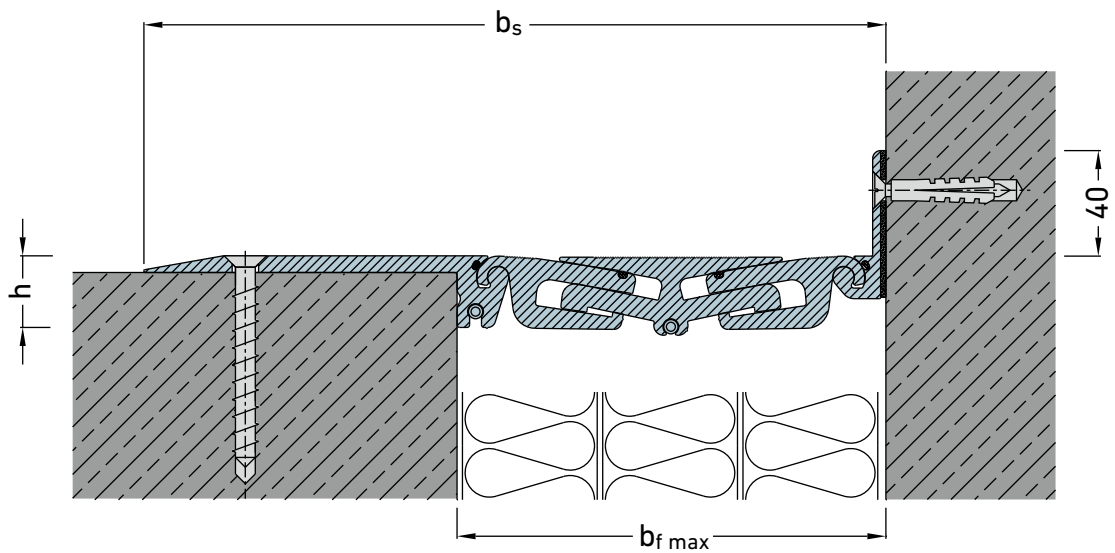
### FSN E4



FSN 50 E4



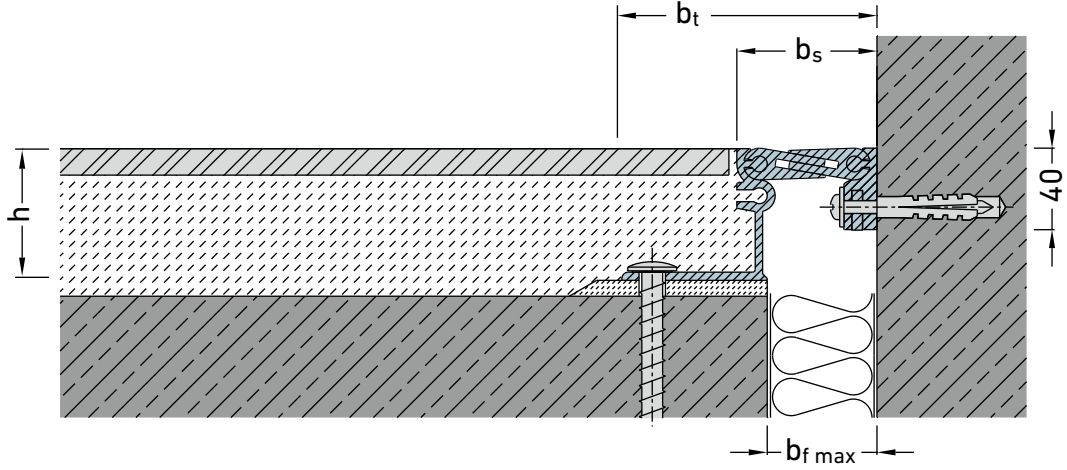
FSN 99 E4  
(FSNX 146 E4)



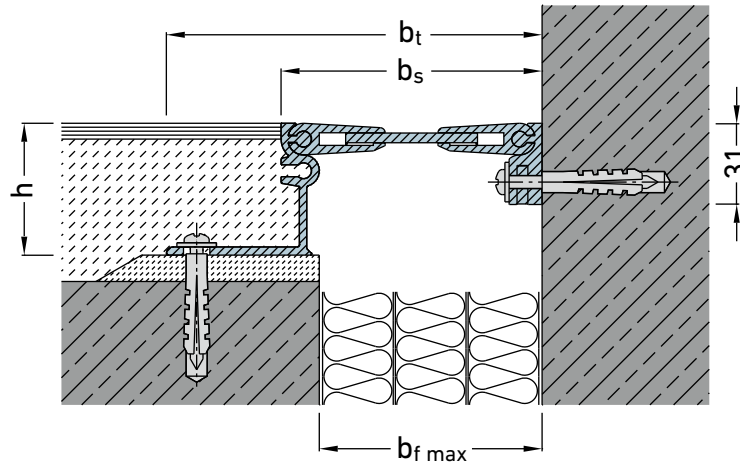
FSN 105 E4  
FSN 155 E4

## WALL-CONNECTION VERSIONS

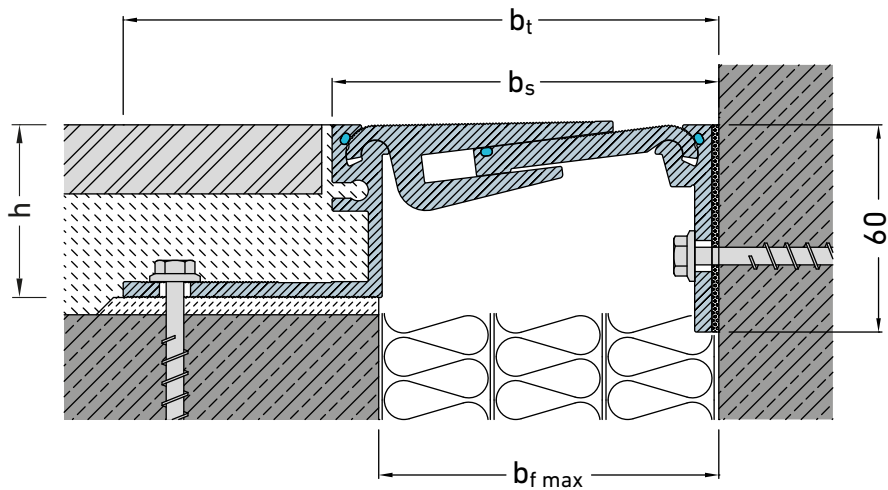
### FS E3



FS 50 E3



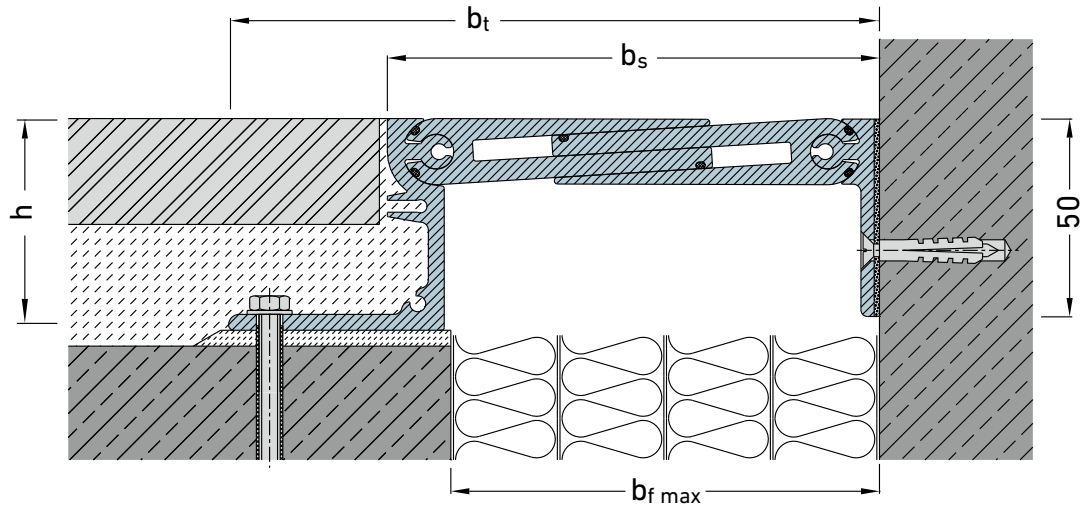
FS 99 E3



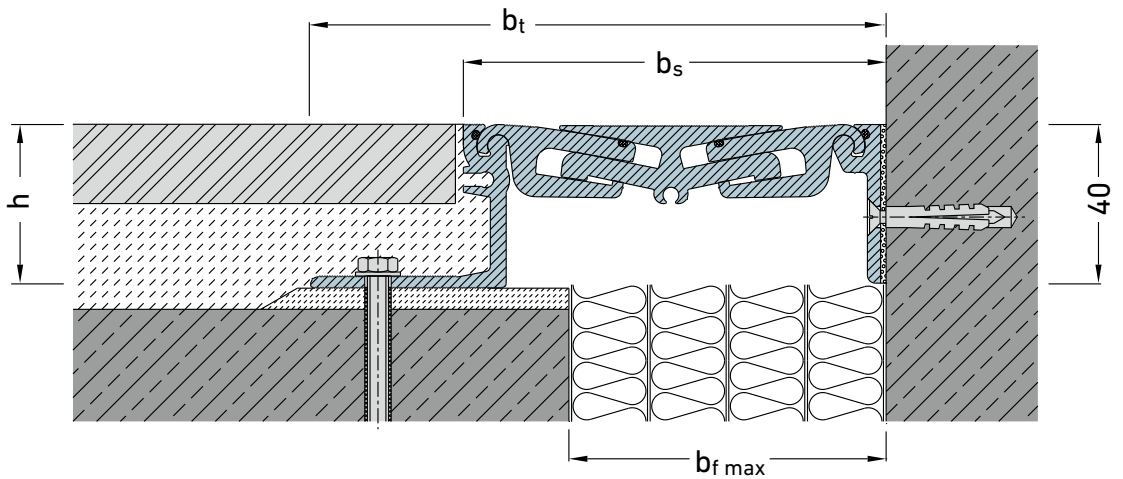
FSX 75 E3  
 FSX 110 E3  
 FSX 130 E3  
 FSX 160 E3

## WALL-CONNECTION VERSIONS

### FS E3



FS 185 E3



FS 155 E3

When using the E3 versions, please make use of our technical consultation services.

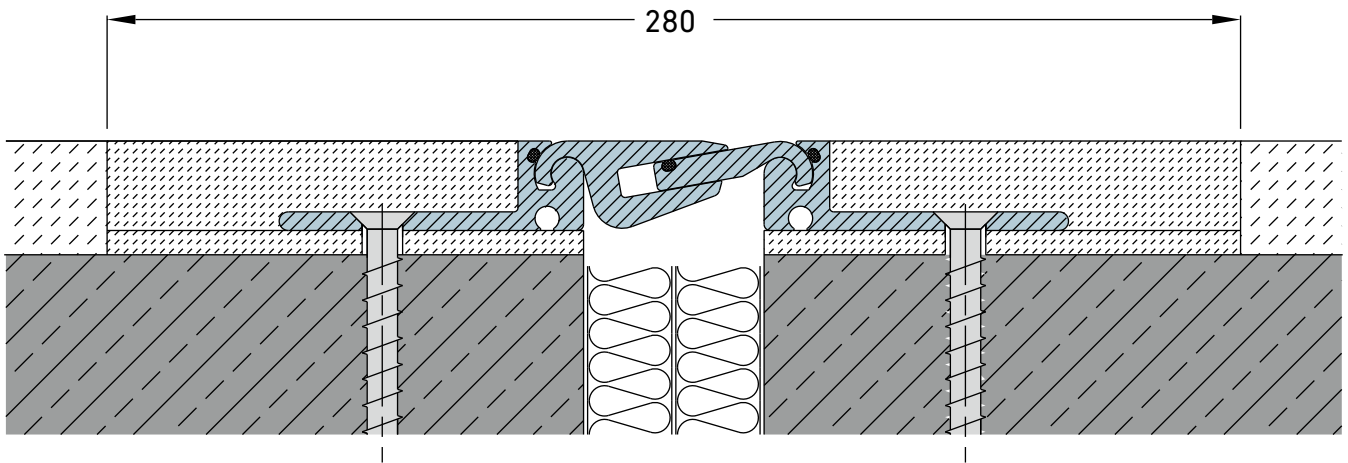
Kindly take the fixing facility into account when installing the E3 connection



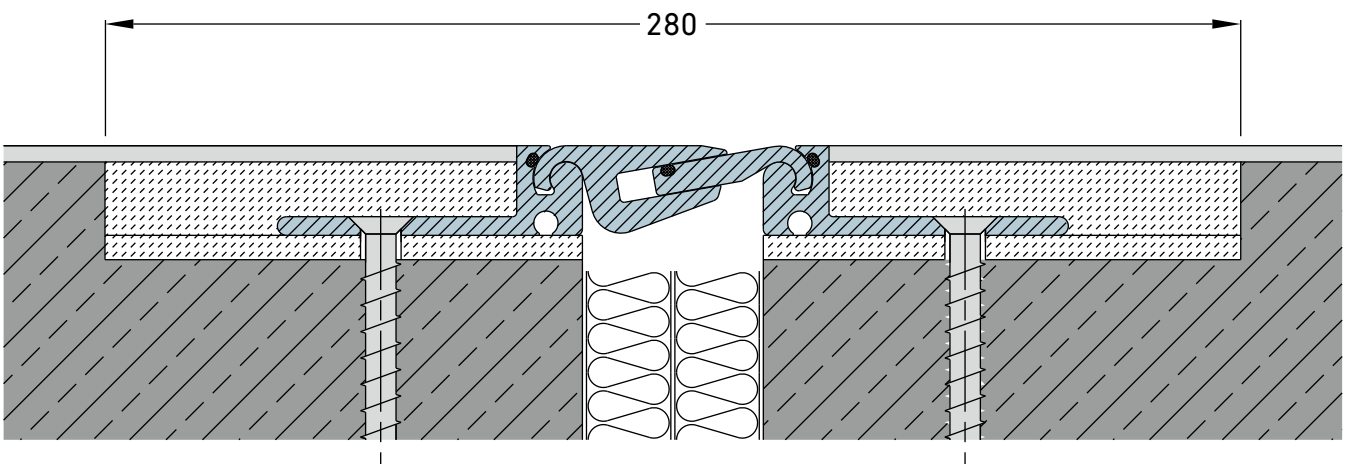
## INSTALLATION SUGGESTIONS

IN SCREED

IN EXISTING CUT-OUTS



MIGUTRANS expansion joint construction, e.g. in conjunction with hard-aggregate floor screed, magnesite screed: FSX 75/22

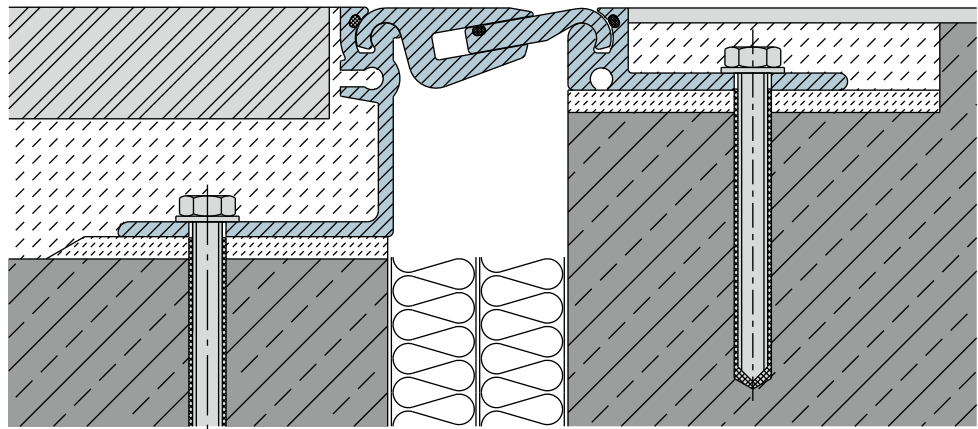


MIGUTRANS expansion joint construction in existing on-site cut-out with mounted expansion joint cover: FSX 75/22

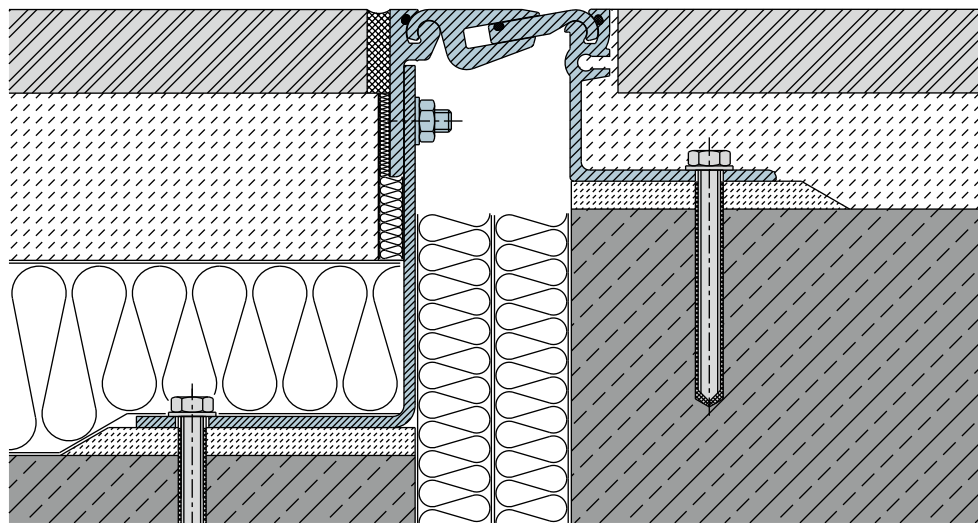
## INSTALLATION SUGGESTIONS

### EXPANSION JOINT COMBINATIONS

FSX 75/22-60

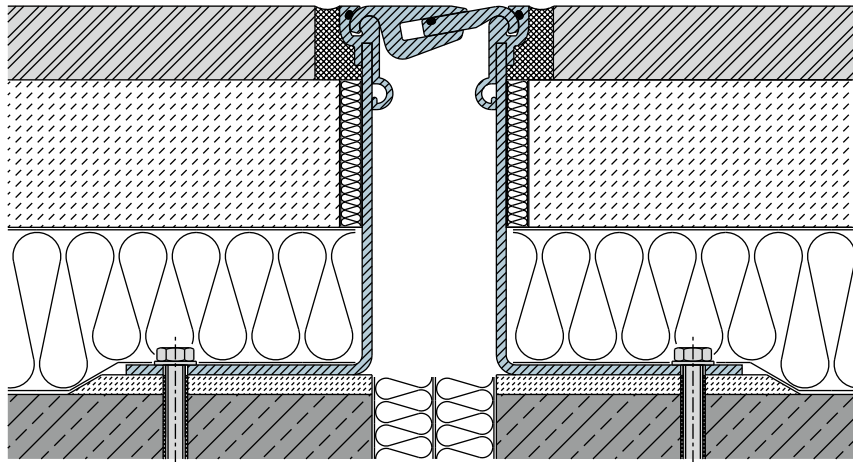


FSX 75/60-150

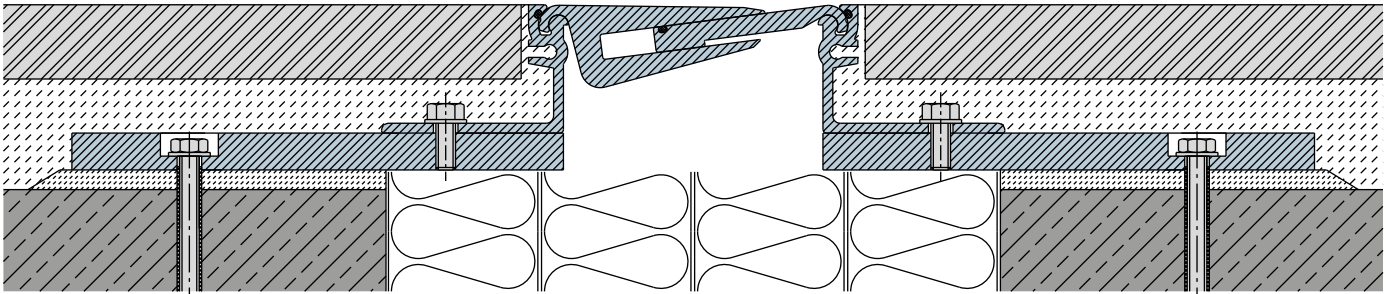


## INSTALLATION SUGGESTIONS

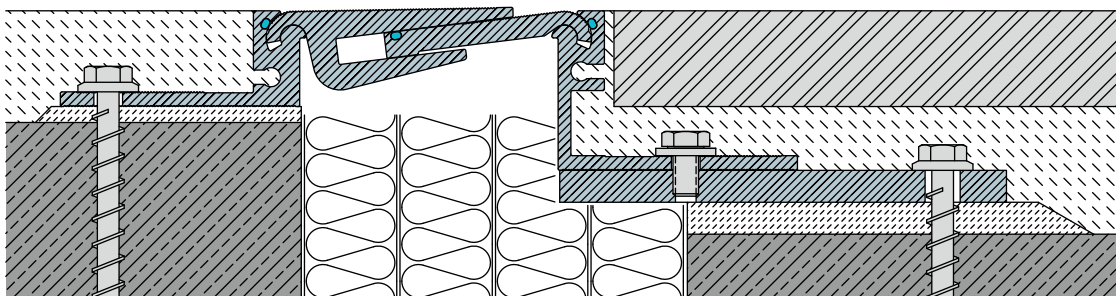
### LARGE CONSTRUCTION HEIGHT EXTREMELY WIDE CONSTRUCTION JOINTS



MIGUTRANS expansion joint construction for large construction heights

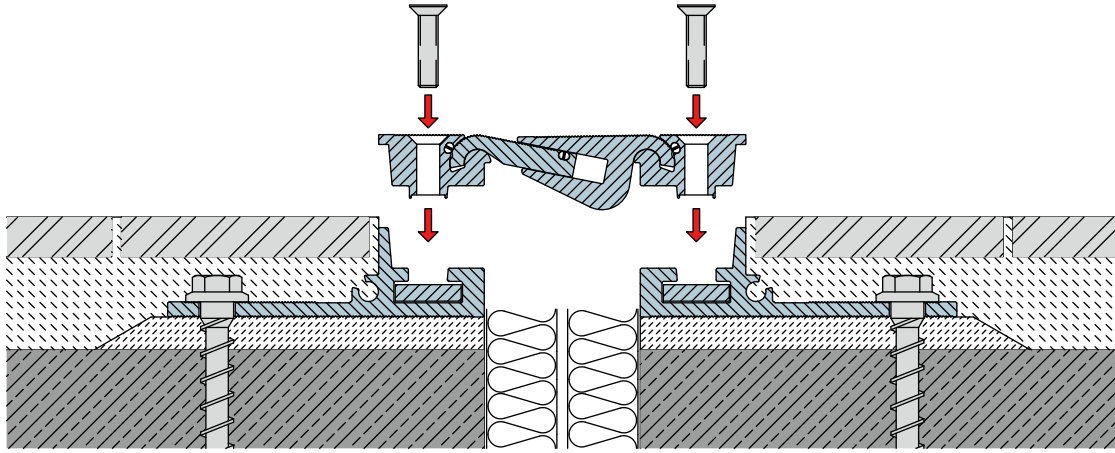


MIGUTRANS expansion joint construction with factory-supplied aluminium plates for extremely wide construction joints

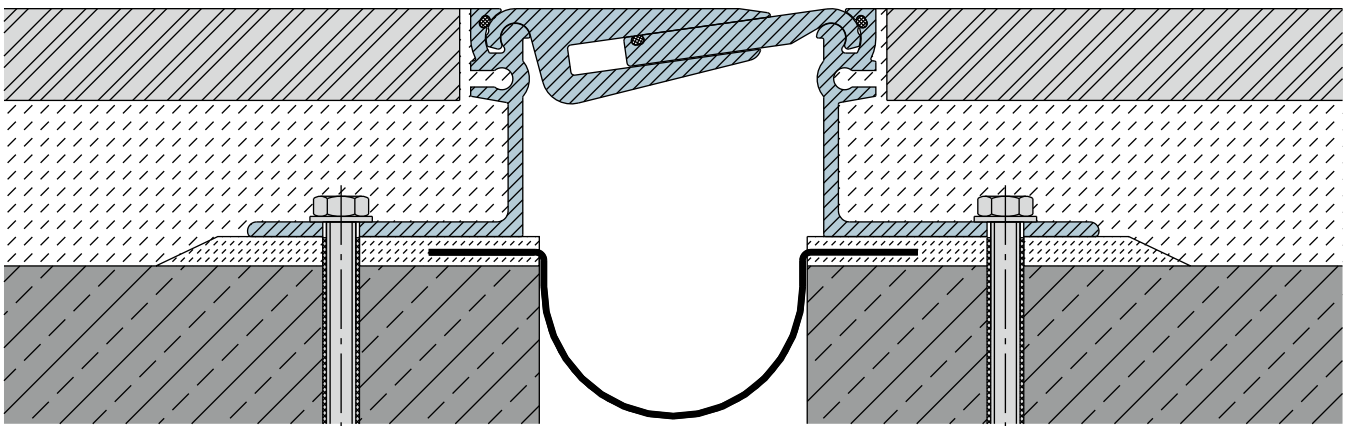


MIGUTRANS expansion joint construction with one-sided carry-over

## INSTALLATION SUGGESTIONS



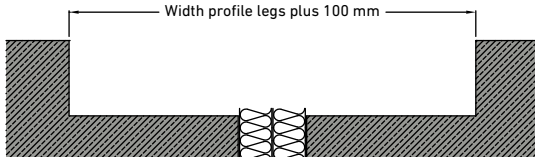
MIGUTRANS expansion joint construction FSRX with visible part that is exchangeable



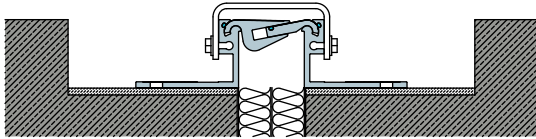
MIGUTRANS expansion joint construction with MIGUFOL tape

## INSTALLATION STEPS FSX-EXPANSION JOINTS USING THE EXAMPLE OF THE FSX 75

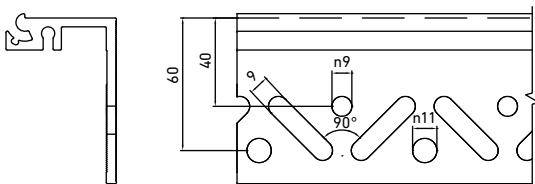
- 1** Cleaning and priming of the load bearing ground.



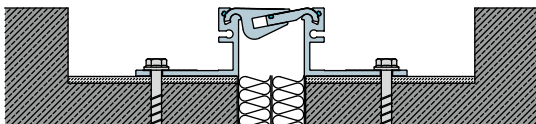
- 3** Cleaning, degreasing und priming - if necessary - of joint cover mounting brackets and levelling of the joint cover at the correct height into the still soft smoothing material. Pls adjust the thickness to the upper surface of the finished floor and coating - if applicable.



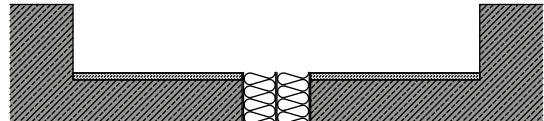
- 5** Mounting kann be effected through the holes or slots. Pls choose the furthest possible distance to the cover edge. When using compound anchors, the outer bor-hole is to be used.



- 7** Remove spacers immediately after dowelling of the covers.

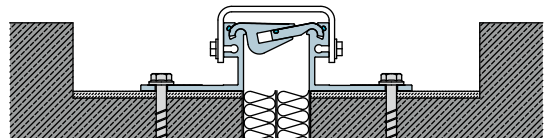


- 2** Application of leveling layer with a pressure-resistant mortar that does not shrink (e.g. PCC or epoxy resin mortar)

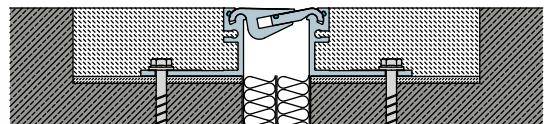


- 4** The joint covers have to be fully lined with no hollows. Pls make sure that mortar does not break into he joint while pushing in the joint covers. If necessary, let the joint cover filler plates protrude. Start with the mould-ed parts. Mounting brackets must not extend into the joint. Several joint cover lengths are to be linked with connection pins at the same level. Pls pay attention to the same optical alignment (arrows) of assymetric joint covers.

- 6** Double-sided anchoring immediately after the mortar has hardened with Heco MMS-plus SS 10x90 vz (or an alternativ anchor from our standard mouting list publishe on our website) with a 300 mm gap. When using countersunk screws, the holes in the mounting brackets must be countersunk, too.



- 8** Filling the cut-out to the expansion joint cover. Fill the joint gap up to the level of the upper surface minus possible coating. While choosing the appropriate filling material, please pay attention to the subsequent application. In any case, pls ensure that the upper edge of the neighboring surface has the same height as the upper edge of the cover.



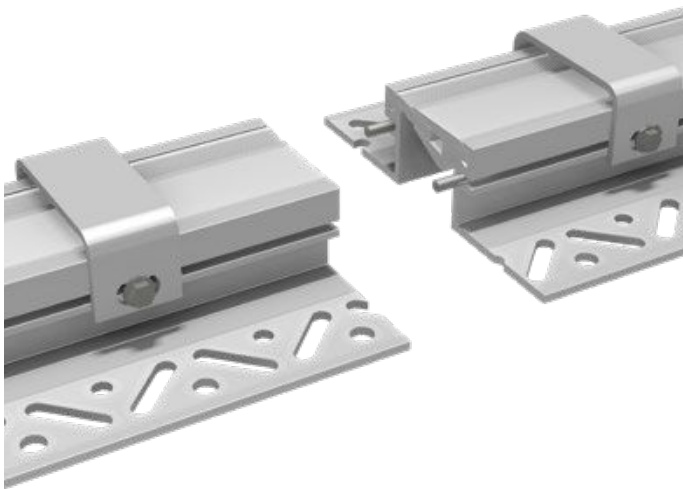
Given that qualitatively equivalent results are achieved otherwise, it is permitted to deviate from the described procedures. For more information please visit [migua.com](http://migua.com)

## JOINT CONNECTIONS

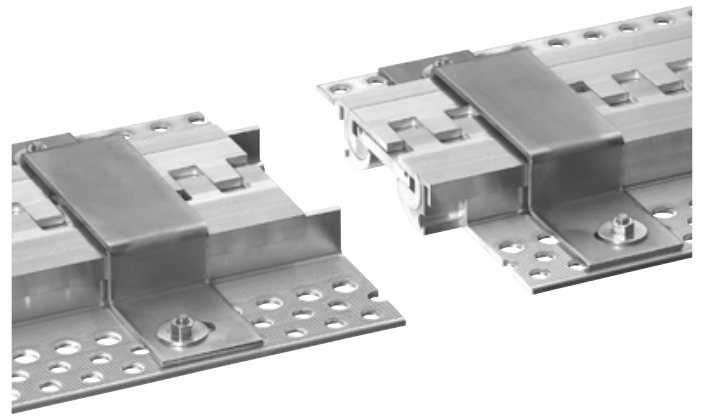
### EXAMPLES FS

In case of **one-piece joint cover constructions**, the joint cover lengths are connected at the same height and on the same side by means of **insertable connecting pins**.

With **multi-part joint cover constructions**, the connection is made by pushing the **connecting brackets into one another**.



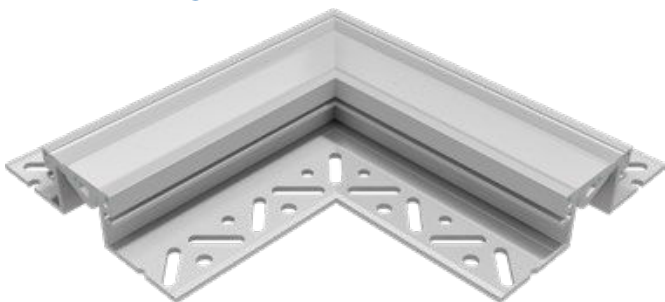
FS 75/42 (one-piece expansion joint construction)



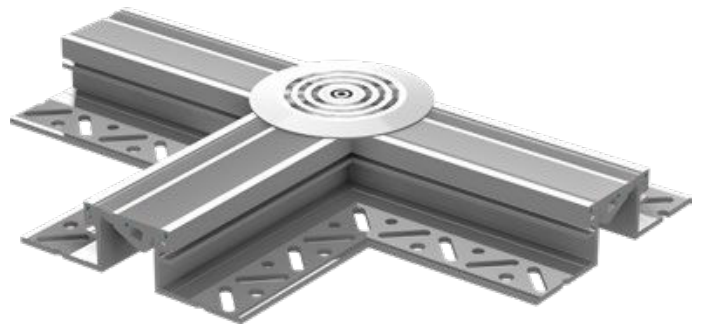
FS 100/30 (one-piece expansion joint construction)

## MOULDED PARTS

### EXAMPLES



Only asymmetrical joint covers require an additional plate at crossings or T-pieces. The direction of the groove bar and female multipoint connector can be freely selected for production.

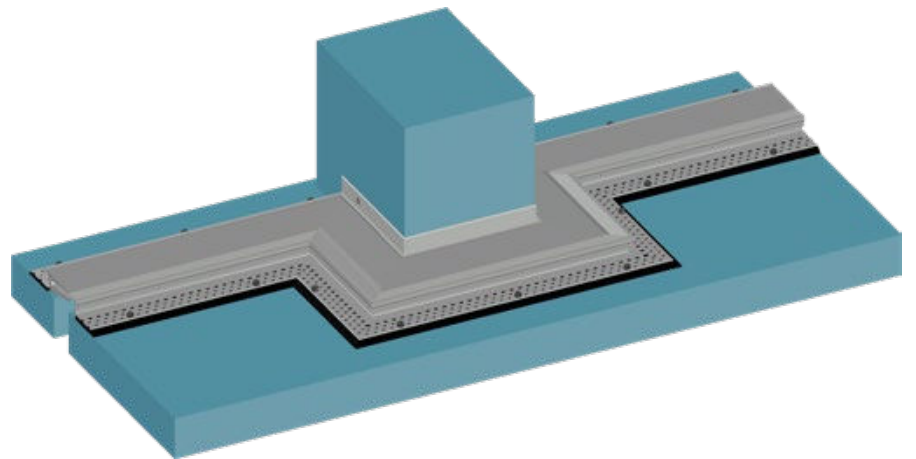
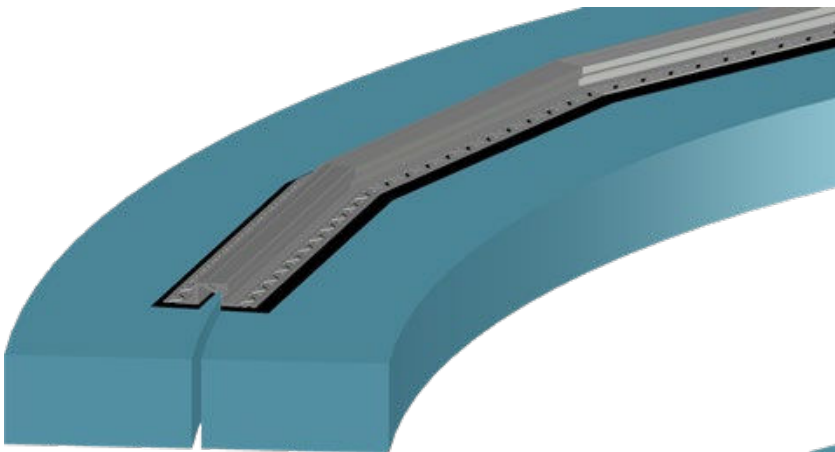
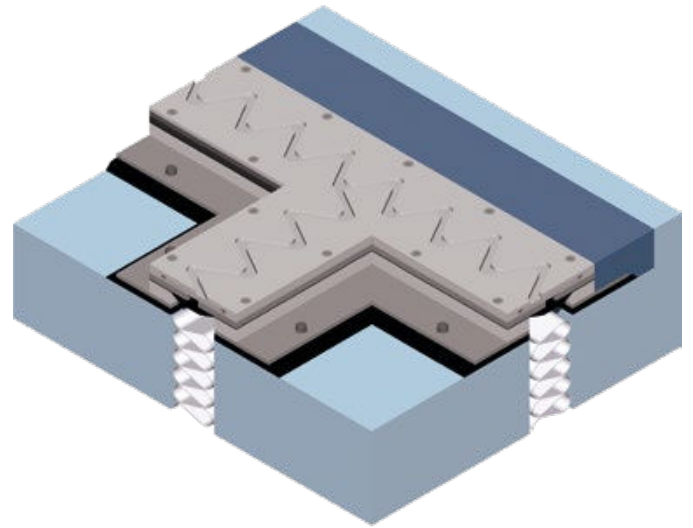
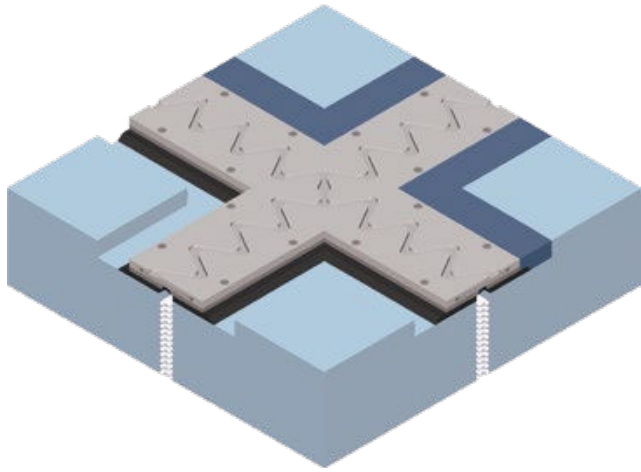


Further intersection variations are available on request

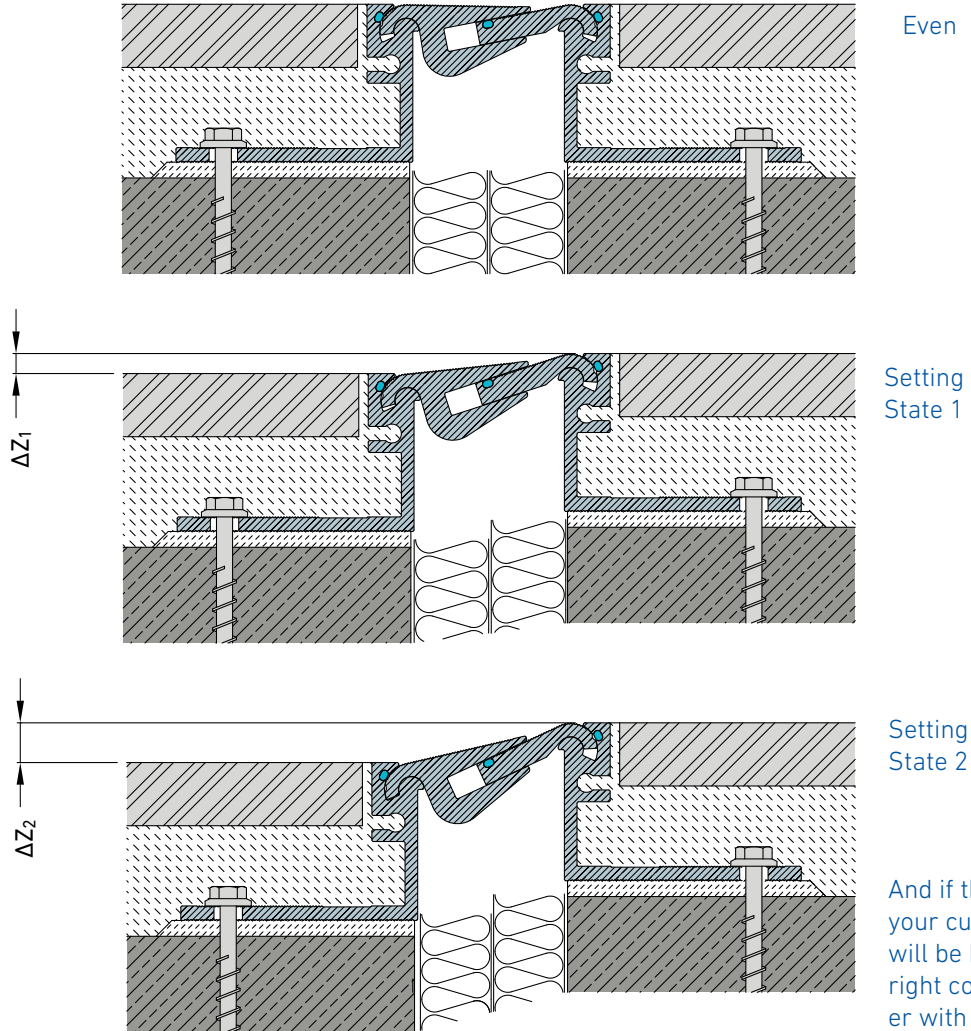
# MIGUTRANS

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## MOULDED PARTS EXAMPLES



## RECORD OF THE SETTLEMENT AND VIBRATION ABSORPTION VIA SMART JOINT CONSTRUCTION



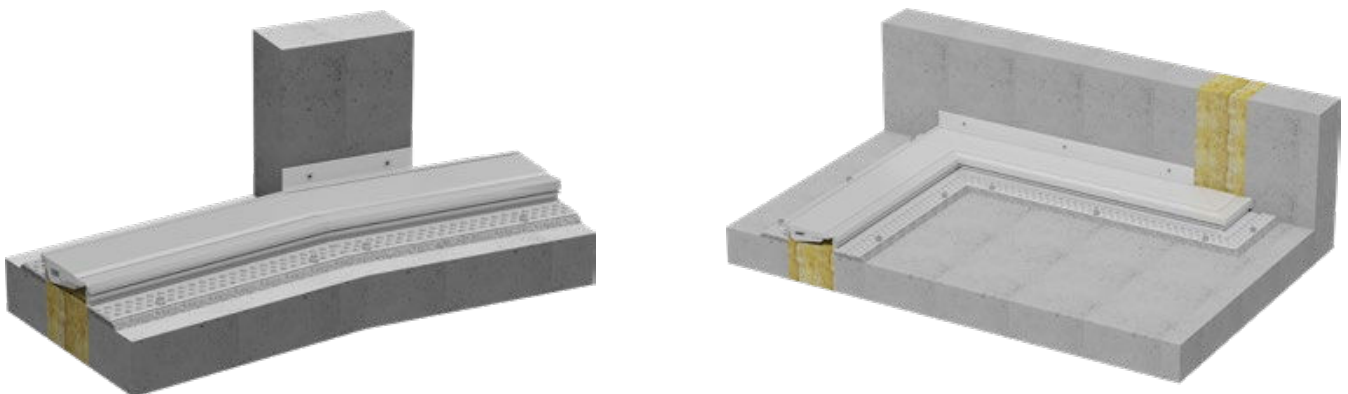
Even

Setting State 1

Setting State 2

And if these do not match your current project, we will be happy to find the right colour shade together with you on request.

## INSTALLATION SUGGESTIONS CORNER SOLUTIONS

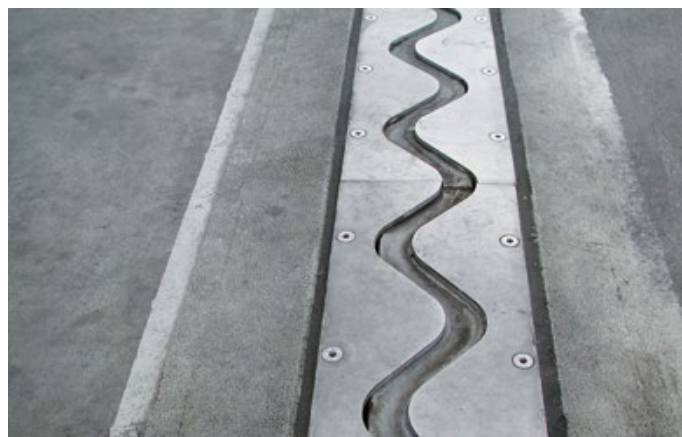




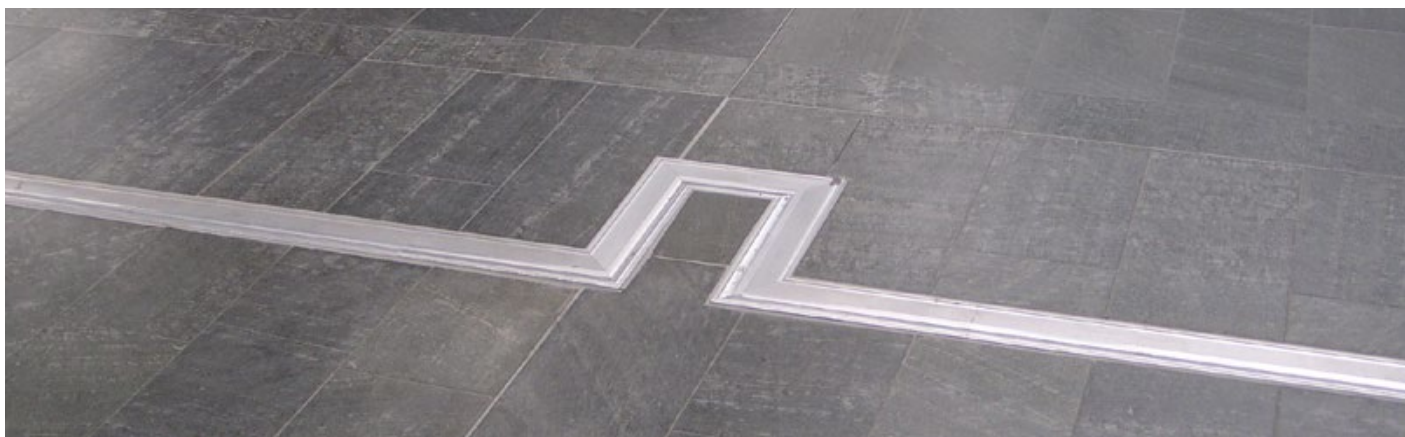
## PRACTICAL APPLICATIONS



Shopping mall, Goete gallery, Jena, Germany



Frankfurt airport



University Hospital Jena, Germany



Hamburg airport, underground



Emergency Hospital, Berlin, Germany

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Frankfurt airport



Trade fair, Leipzig, Germany



Millennium Bridge, London, GB



City Centre Halle shopping centre



Commercial building, Neumarkt, Germany

## LEGAL NOTES

All specifications in this catalogue, in particular the suggestions for processing and use of our products correspond to our current knowledge state. Despite the greatest possible care, we are not able to guarantee that the non-binding information is without errors.

Further, the installation details shown in this catalogue are theoretical in nature and do not represent real objects. We reserve the right to make technical changes.

The current version requested from us or downloaded from [www.migua.com](http://www.migua.com) applies.

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