

MIGUA®

MIGUTRANS EXPANSION JOINT SYSTEMS



FOR USE BY
FORK LIFT TRUCKS
PALLET TRUCKS

HARD WEARING
MAINTENANCE-FREE
LONG LASTING





EXPANSION JOINT SYSTEMS

be regarded as a high standard since more than 45 years of service and are well known for their fully developed designs.

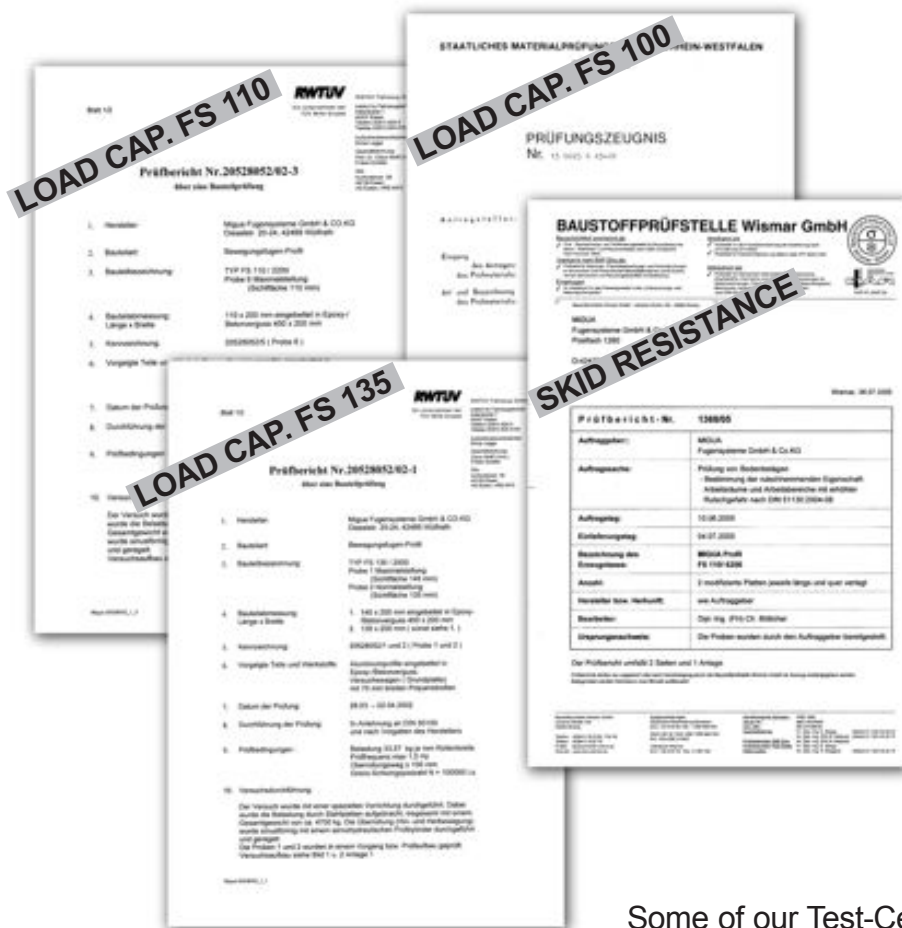
Over 10 million metres of profiles have been performing to complete satisfaction of Architects, Builders and Owners through out decades of use.

This is our assurance of high quality standard and lasting peace in mind.

Our dedicated and innovative engineering department ensures that you will get exactly the expansion joint system you need, independent if a profile from our standard program or a special construction is required.

Several certificates about e.g. load capacity, duration or skid resistance of well known, independent institutes in Germany and foreign countries confirm our commitment.

Our experience, our advanced engineering department and our passion are your guarantee for expansion joint systems on the highest possible standard.



Some of our Test-Certificates

Our advice as to applications and other recommendations are based on comprehensive research work and years of experience. They are, however without liability (also in respect of third parties) and do not relieve our customers of the responsibility to check the suitability of our products and processes for their intended purposes.

We reserve the right to make technical changes without prior notice.



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CATALOGUE NO 2

MIGUTRANS

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Our Catalogue No.3 – **MIGUTAN**-Expansion Joint Systems – informs you on watertight systems for car parks, ramps, garages, pedestrian bridges, canteen kitchens and swimming-pool-areas. Please order on request.

EXPANSION JOINT SYSTEMS

FOR FLOORS TO BE USED BY FORK LIFT AND PALLET TRUCKS

MIGUTRANS

HARD WEARING, MAINTENANCE-FREE, LONG LASTING

TEST CERTIFICATE

Official test certificates on load capacity are available and can be forwarded on request.

QUALITY

The profiles have been installed in various buildings all over the world for more than 15 years.

A number of reference projects can be provided.

IMPORTANT NOTES

For installation of the MIGUTRANS profiles in asphalt, please ask for our technical advice.

In wet areas (canteen kitchens, sanitary rooms etc.), we recommend the use of stainless steel profiles or our watertight MIGUTAN profiles.

When installing small installation heights, we recommend the use of epoxy for the filling of the block out, due to the thin coverage above the profile (see page 25).

The visible surface of the profiles is protected by adhesive tapes.

Load capacities for fork lift trucks are based on pneumatic or rubber tyres with a contact surface of 200 x 200 mm.

Production length of 4 m: Series FS 40/..., FS 46/...
Series FS 50/...
Series FS 75/...
Series FS 100/...
Series FS 110/...
Series FS 130/...
Series FS 135/..., FS 174/...
Series FS 155/...
Series FS 160/...
Series FS 167/...
Series ESF 10/... AL
Series ESF 16/... AL
Series ESF 27/... AL
Series FSN /...

Production length of 3 m: Series FS 185/...
Series FSV 235/...
Series FSV 280/...

Larger installation heights on request.

Colour: aluminium

TYPICAL USES

Shopping centres, supermarkets, airports, factories, warehouses, exhibition halls, railway stations, hospitals.

MATERIAL

MIGUTRANS Expansion Joint Systems:

Aluminium cover with striated top surface and perforated and striated mounting brackets and flexible rubber cords (Series FS 40/... and FS 50/... without rubber cords).

MIGUTRANS Contraction Joint Systems:

Aluminium side plates with perforated and striated mounting brackets. Flexible insert made of cellular rubber.

SPECIAL PROPERTIES

MIGUTRANS Expansion Joint Systems

High load resistant solid extrusion (hard wearing, maintenance-free, long lasting).

Visible surface shows no gaps to reduce dirt accumulation.

Capable of absorbing movement in three directions (Articulated telescoping system).

Good skid resistance given by striated surface.

Flash water protected by rubber cords.

Profiles are set to the mid-point by means of spacer in our works, this guarantees easy installation and correct function of the profile.

The profiles can be pre-adjusted on request, to achieve single sided enlargement on the movement capacity.

Production lengths can be connected by staggering the joint in the individual aluminium profiles or by using connection pins.

Secure fixing with perforated mounting brackets.

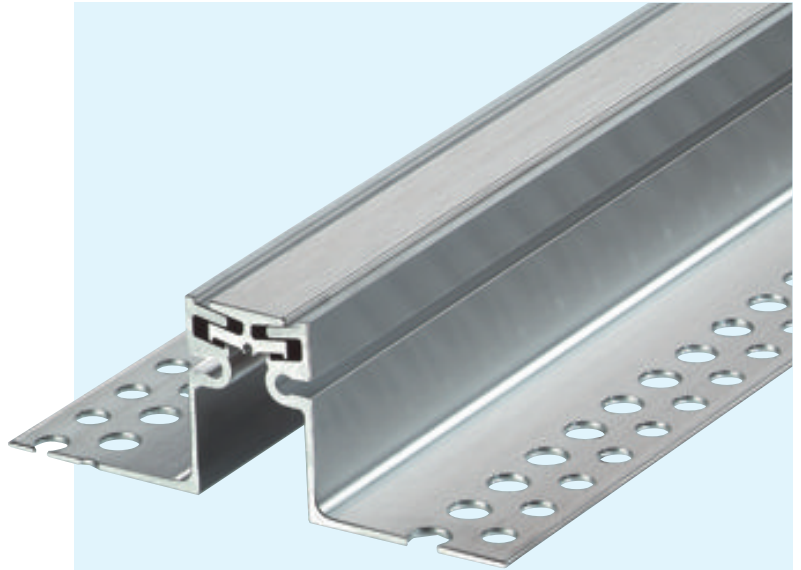
To be used by fork lift trucks and pallet trucks free from vibrations - due to special interlocking design (FS 100/... series).

SERIES FS 40/...

FOR HEAVY DUTY FLOORS – TO BE USED BY FORK LIFT AND PALLET TRUCKS

MIGUTRANS

- **SOLID ALL METAL-PROFILE
(HARD WEARING, MAINTENANCE-FREE, LONG LASTING)**
- **SMALL VISIBLE SURFACE**
- **LARGE MOVEMENT CAPACITY
UP TO 16 MM**
- **INSTALLATION HEIGHT
FROM 19 MM UPWARDS**



TECHNICAL DATA

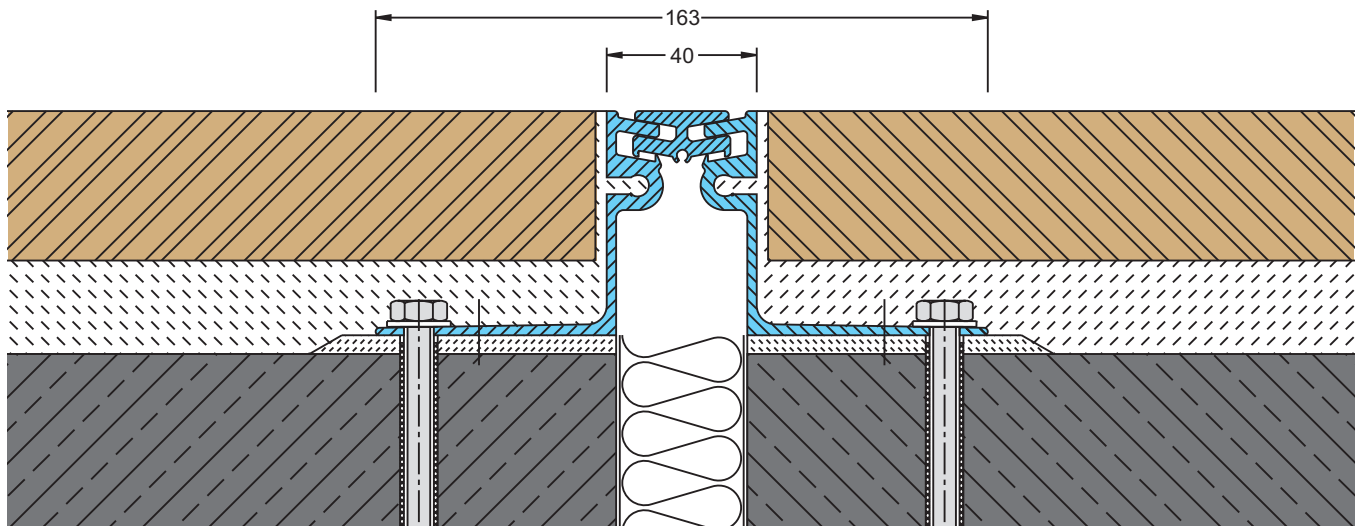
Profile	Joint width max. mm	Total Movement mm	Visible Width of Profile mm	Total Width of Profile mm	Installation Height mm	Load capacity Lorries (DIN 1072) kN	Load capacity Fork lift trucks (DIN 1055) kN	Load capacity Solid plastic tyres kg/mm width of wheel
FS 40/1900	35	16 ± 8	40	173	19	300	70	6,5
FS 40/3500	35	16 ± 8	40	163	35	300	70	6,5
FS 40/6000	35	16 ± 8	40	163	60	300	70	6,5
FS 46/5000	35	20 ± 10	46	165	50	300	70	6,5

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Additional examples for application = Page 24–28

Installation instruction = Page 36



FS 40/6000

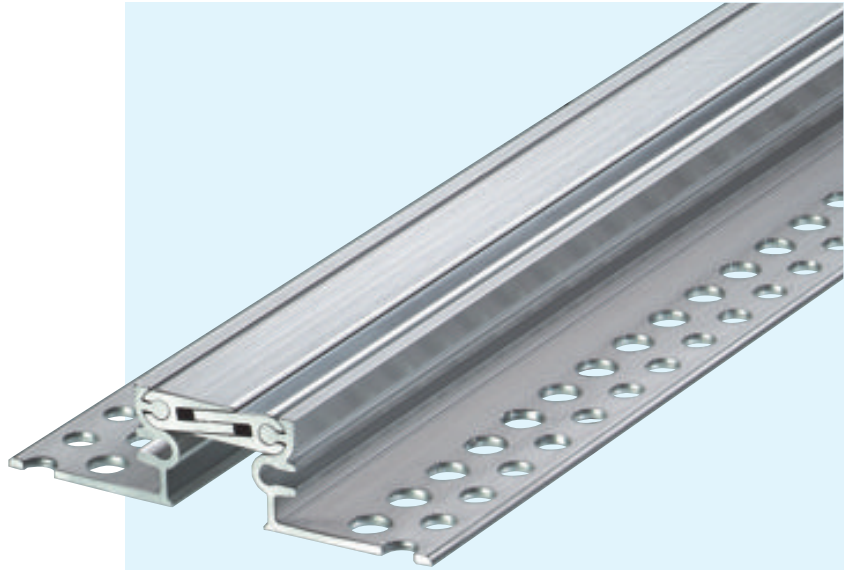
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SERIES FS 50/...

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

MIGUTRANS

- **VISIBLE SURFACE SHOWS NO GAPS (TO AVOID DIRT ACCUMULATION)**
- **SOLID ALL METAL-PROFILE (HARD WEARING, MAINTENANCE-FREE, LONG LASTING)**
- **PROFILE ABSORBS MOVEMENT IN THREE DIRECTIONS**
- **INSTALLATION HEIGHT FROM 20 MM UPWARDS**



TECHNICAL DATA

Profile	Joint width max. mm	Total Movement mm	Visible Width of Profile mm	Total Width of Profile mm	Installation Height mm	Load capacity Lorries (DIN 1072) kN	Load capacity Fork lift trucks (DIN 1055) kN	Load capacity Solid plastic tyres kg/mm width of wheel
FS 50/2000	30	10 ± 5	53	140	20	90	35	3
FS 50/3500	30	10 ± 5	53	140	35	90	35	3
FS 50/5000	30	10 ± 5	53	140	50	90	35	3

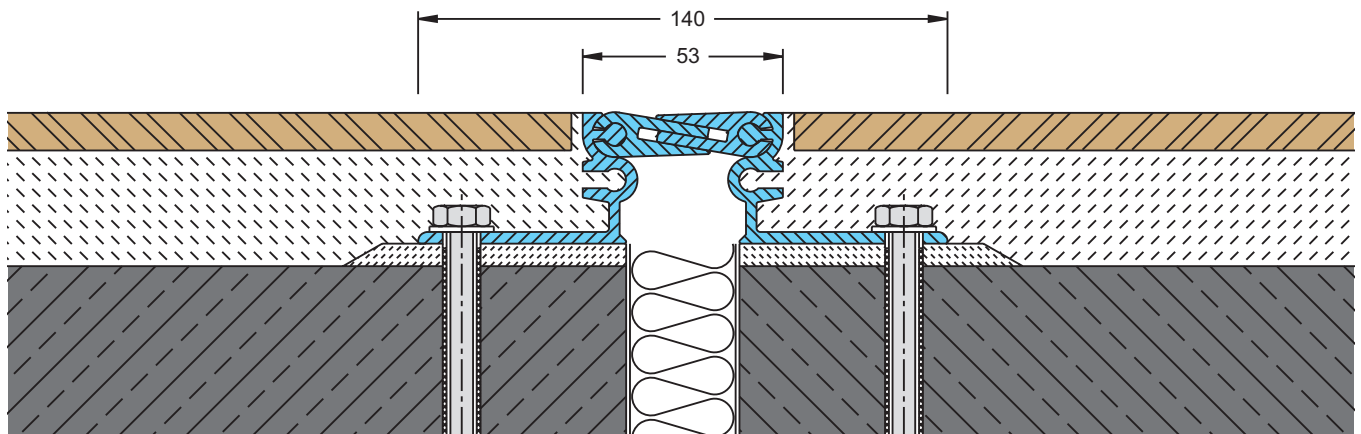
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FS 50/3500

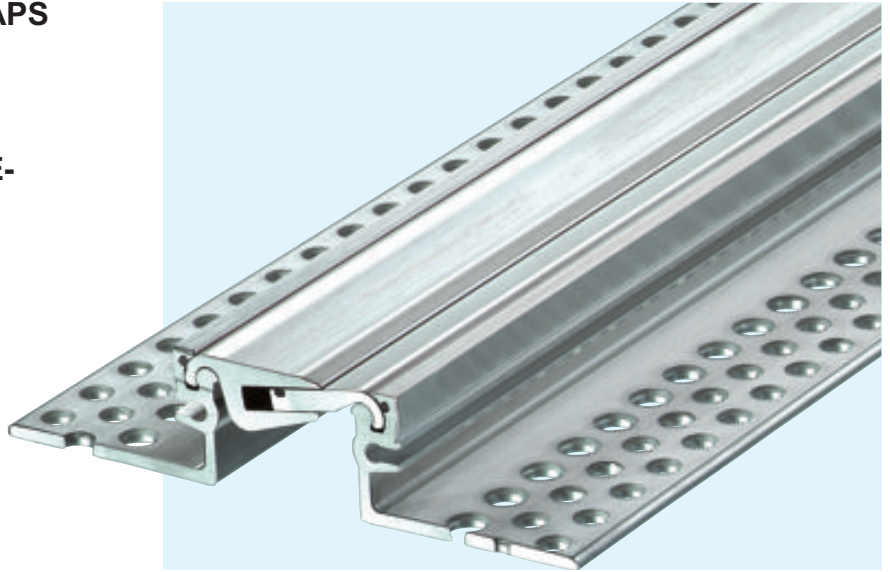
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SERIES FS 75/...

FOR HEAVY DUTY FLOORS – TO BE USED BY FORK LIFT AND PALLET TRUCKS

MIGUTRANS

- **VISIBLE SURFACE SHOWS NO GAPS (TO AVOID DIRT ACCUMULATION)**
- **SOLID ALL METAL-PROFILE (HARD WEARING, MAINTENANCE-FREE, LONG LASTING)**
- **OFFICAL TEST CERTIFICATE ON LOAD CAPACITY AVAILABLE**
- **PROFILE ABSORBS MOVEMENT IN THREE DIRECTIONS**
- **INSTALLATION HEIGHT FROM 22 MM UPWARDS**



TECHNICAL DATA

Profile	Joint width max. mm	Total Movement mm	Visible Width of Profile mm	Total Width of Profile mm	Installation Height mm	Load capacity Lorries (DIN 1072) kN	Load capacity Fork lift trucks (DIN 1055) kN	Load capacity Solid plastic tyres kg/mm width of wheel
FS 75/2200	50	20 ± 10	77	193	22	300	100	9
FS 75/3000	50	20 ± 10	77	193	30	300	100	9
FS 75/4200	50	20 ± 10	77	197	42	300	100	9
FS 75/5200	50	20 ± 10	77	197	52	300	100	9
FS 75/6200	50	20 ± 10	77	197	62	300	100	9
FS 75/7700	50	20 ± 10	77	197	77	300	70	9
FS 75/8700	50	20 ± 10	77	197	87	300	70	9
FS 75/9700	50	20 ± 10	77	197	97	300	70	9

Material description, important notes and special properties = Page 2

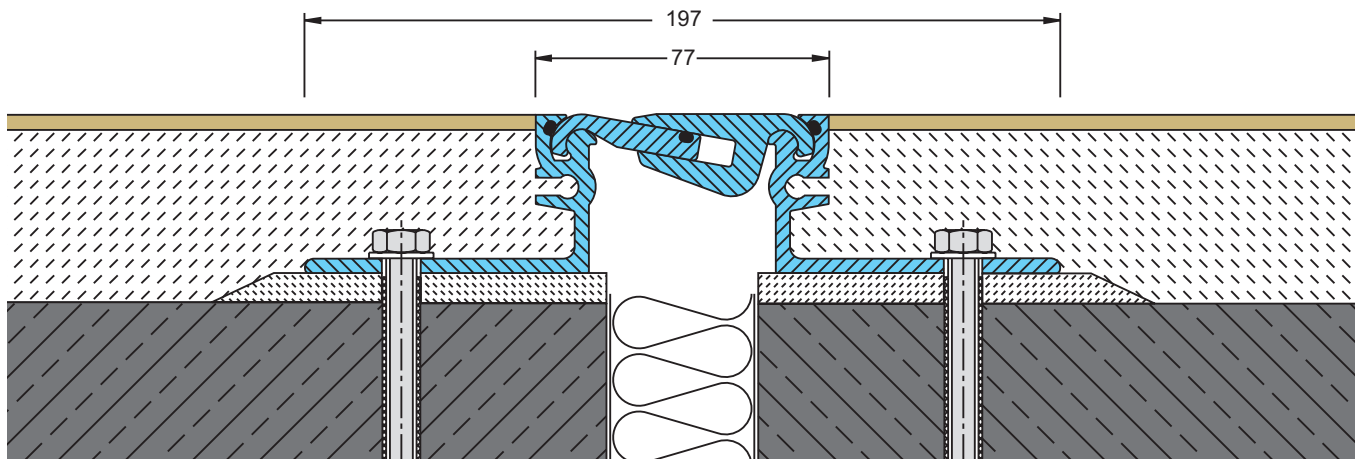
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FS 75/4200

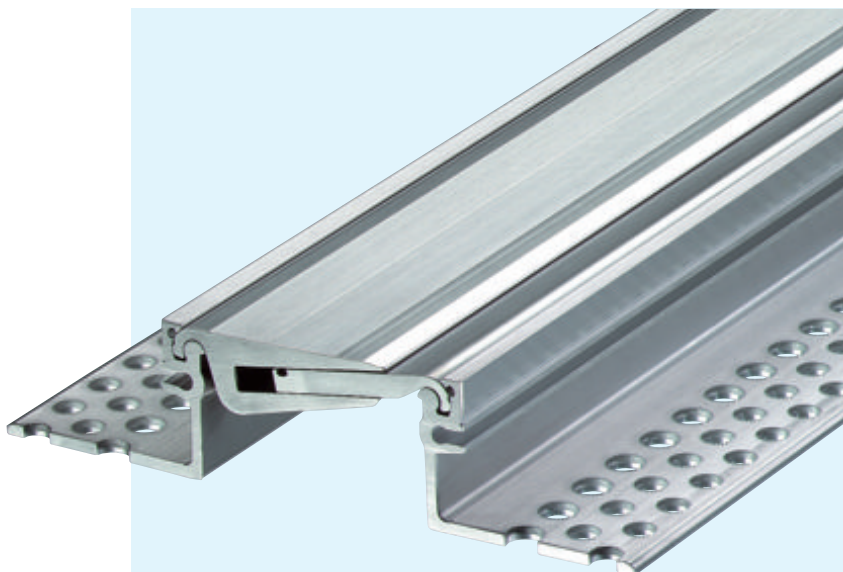
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SERIES FS 110/...

FOR HEAVY DUTY FLOORS – TO BE USED BY FORK LIFT AND PALLET TRUCKS

MIGUTRANS

- **VISIBLE SURFACE SHOWS NO GAPS (TO AVOID DIRT ACCUMULATION)**
- **SOLID ALL METAL-PROFILE (HARD WEARING, MAINTENANCE-FREE, LONG LASTING)**
- **PROFILE ABSORBS MOVEMENT IN THREE DIRECTIONS**
- **MOVEMENT CAPACITY 30 MM**
- **FOR JOINT WIDTHS UP TO 75 MM**



TECHNICAL DATA

Profile	Joint width max. mm	Total Movement mm	Visible Width of Profile mm	Total Width of Profile mm	Installation Height mm	Load capacity Lorries (DIN 1072) kN	Load capacity Fork lift trucks (DIN 1055) kN	Load capacity Solid plastic tyres kg/mm width of wheel
FS 110/3000	75	30 ± 15	110	226	30	300	70	6,5
FS 110/4200	75	30 ± 15	110	230	42	300	70	6,5
FS 110/5200	75	30 ± 15	110	230	52	300	70	6,5
FS 110/6200	75	30 ± 15	110	230	62	300	70	6,5
FS 110/7700	75	30 ± 15	110	230	77	300	70	6,5
FS 110/8700	75	30 ± 15	110	230	87	300	70	6,5
FS 110/9700	75	30 ± 15	110	230	97	300	70	6,5

Material description, important notes and special properties = Page 2

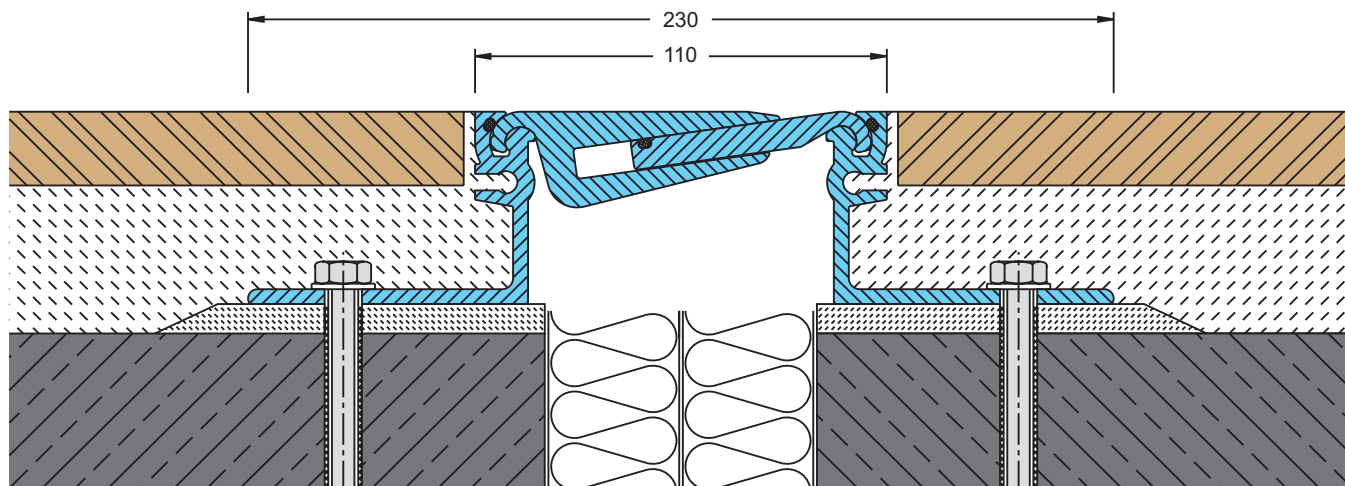
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FS 110/5200

Scale 1 : 2

SERIES FS 130/...

FOR HEAVY DUTY FLOORS – TO BE USED BY FORK LIFT AND PALLET TRUCKS

MIGUTRANS

- **VISIBLE SURFACE SHOWS NO GAPS (TO AVOID DIRT ACCUMULATION)**
- **SOLID ALL METAL-PROFILE (HARD WEARING, MAINTENANCE-FREE, LONG LASTING)**
- **PROFILE ABSORBS MOVEMENT IN THREE DIRECTIONS**
- **MOVEMENT CAPACITY 40 MM**
- **FOR JOINT WIDTHS UP TO 100 MM**



TECHNICAL DATA

Profile	Joint width max. mm	Total Movement mm	Visible Width of Profile mm	Total Width of Profile mm	Installation Height mm	Load capacity Lorries (DIN 1072) kN	Load capacity Fork lift trucks (DIN 1055) kN	Load capacity Solid plastic tyres kg/mm width of wheel
FS 130/4200	100	40 ± 20	134	254	42	300	70	6,5
FS 130/5200	100	40 ± 20	134	254	52	300	70	6,5
FS 130/6200	100	40 ± 20	134	254	62	300	70	6,5
FS 130/7700	100	40 ± 20	134	254	77	300	70	6,5
FS 130/8700	100	40 ± 20	134	254	87	300	70	6,5
FS 130/9700	100	40 ± 20	134	254	97	300	70	6,5

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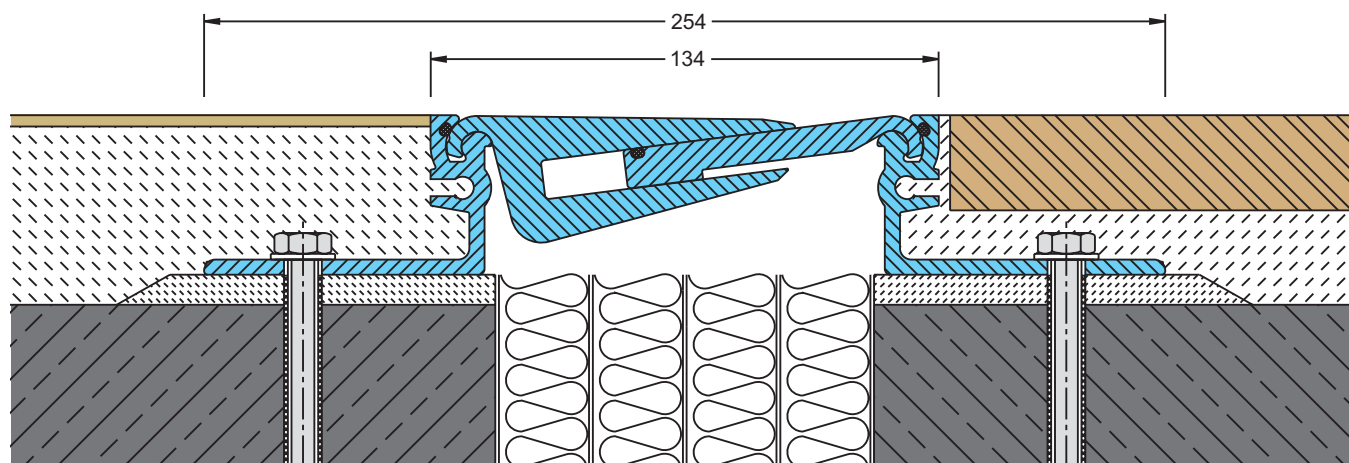
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FS 130/4200

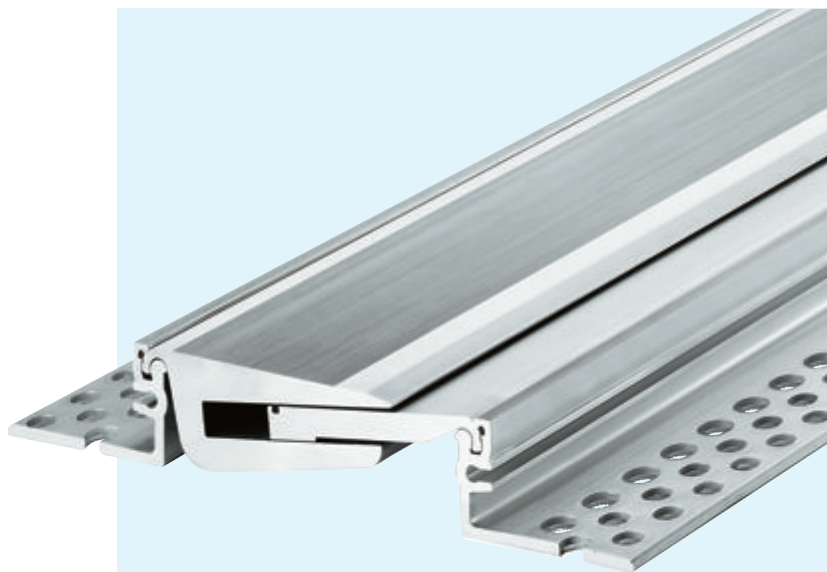
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SERIES FS 160/...

FOR HEAVY DUTY FLOORS – TO BE USED BY FORK LIFT AND PALLET TRUCKS

MIGUTRANS

- **VISIBLE SURFACE SHOWS NO GAPS (TO AVOID DIRT ACCUMULATION)**
- **SOLID ALL METAL PROFILE (HARD WEARING, MAINTENANCE-FREE, LONG LASTING)**
- **PROFILE ABSORBS MOVEMENTS IN THREE DIRECTIONS**
- **MOVEMENT CAPACITY 60 MM**
- **FOR JOINT WIDTHS UP TO 130 MM**



TECHNICAL DATA

Profile	Joint width max. mm	Total Movement mm	Visible Width of Profile mm	Total Width of Profile mm	Installation Height mm	Load capacity Lorries (DIN 1072) kN	Load capacity Fork lift trucks (DIN 1055) kN	Load capacity Solid plastic tyres kg/mm width of wheel
FS 160/4200	130	60 ± 30	162	284	42	300	70	6,5
FS 160/5200	130	60 ± 30	162	284	52	300	70	6,5
FS 160/6200	130	60 ± 30	162	284	62	300	70	6,5
FS 160/7700	130	60 ± 30	162	284	77	300	70	6,5
FS 160/8700	130	60 ± 30	162	284	87	300	70	6,5
FS 160/9700	130	60 ± 30	162	284	97	300	70	

Material description, important notes and special properties = Page 2

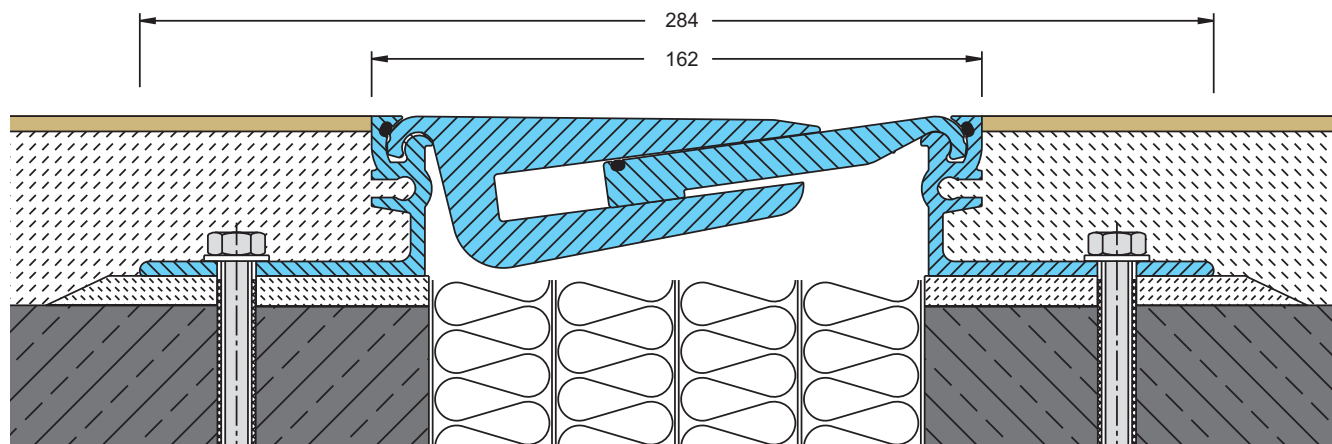
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FS 160/4200

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SERIES FS 185/...

FOR HEAVY DUTY FLOORS – TO BE USED BY FORK LIFT AND PALLET TRUCKS

MIGUTRANS

- **VISIBLE SURFACE SHOWS NO GAPS (TO AVOID DIRT ACCUMULATION)**
- **SOLID ALL METAL-PROFILE (HARD WEARING, MAINTENANCE-FREE, LONG LASTING)**
- **PROFILE ABSORBS MOVEMENT IN THREE DIRECTIONS**
- **MOVEMENT CAPACITY 60 MM**
- **FOR JOINT WIDTHS UP TO 140 MM**



TECHNICAL DATA

Profile	Joint width max. mm	Total Movement mm	Visible Width of Profile mm	Total Width of Profile mm	Installation Height mm	Load capacity Lorries (DIN 1072) kN	Load capacity Fork lift trucks (DIN 1055) kN	Load capacity Solid plastic tyres kg/mm width of wheel
FS 185/4000	140	60 ± 30	185	305	40	300	70	6,5
FS 185/8000	140	60 ± 30	185	305	80	300	70	6,5

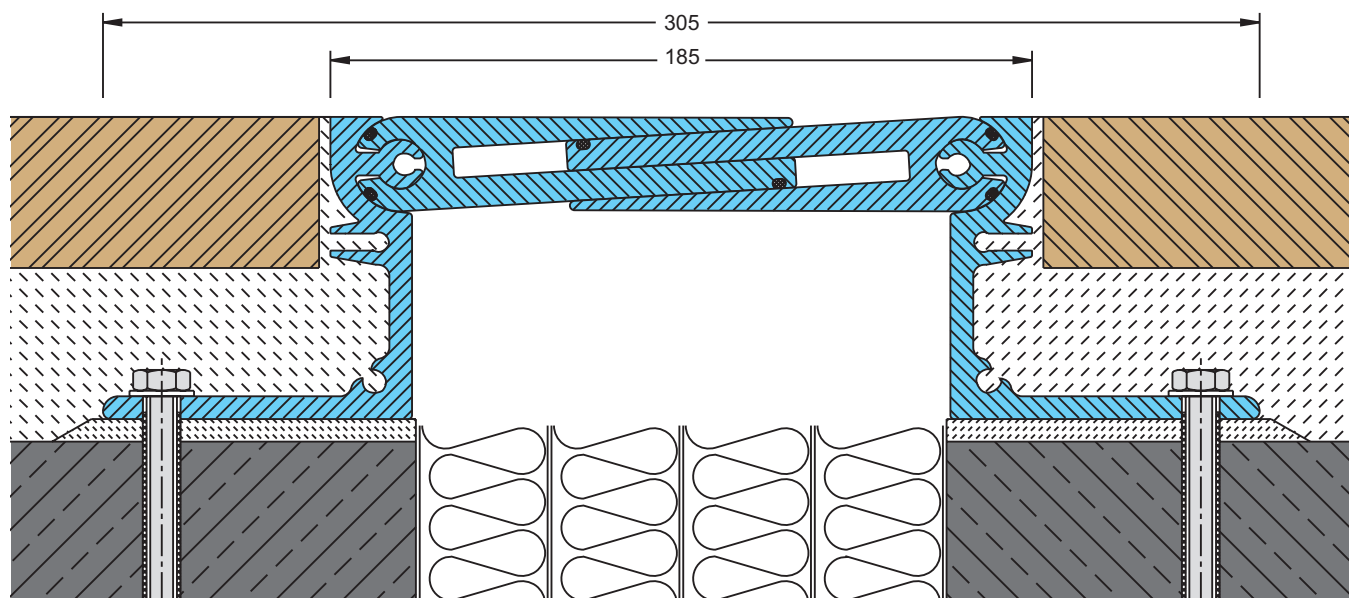
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FS 185/8000

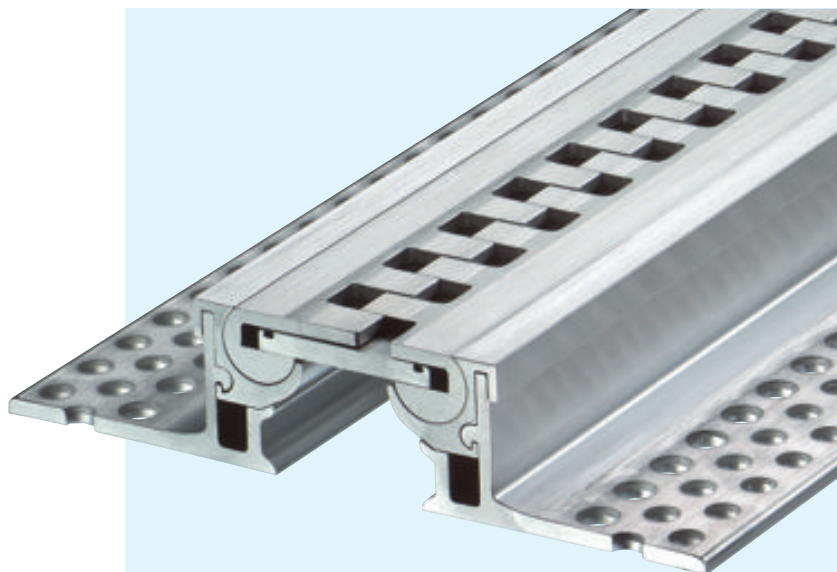
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SERIES FS 100/...

FOR FLOORS WITH HIGH LOAD CAPACITY (WITH EVEN LOADBEARING SURFACE)

MIGUTRANS

- TRANSITION FREE FROM VIBRATION
- SOLID ALL METAL-PROFILE (HARD WEARING, MAINTENANCE-FREE, LONG LASTING)
- OFFICAL TEST CERTIFICATE ON LOAD CAPACITY AVAILABLE
- PROFILE ABSORBS MOVEMENT IN THREE DIRECTIONS
- FOR JOINT WIDTHS UP TO 50 MM



TECHNICAL DATA

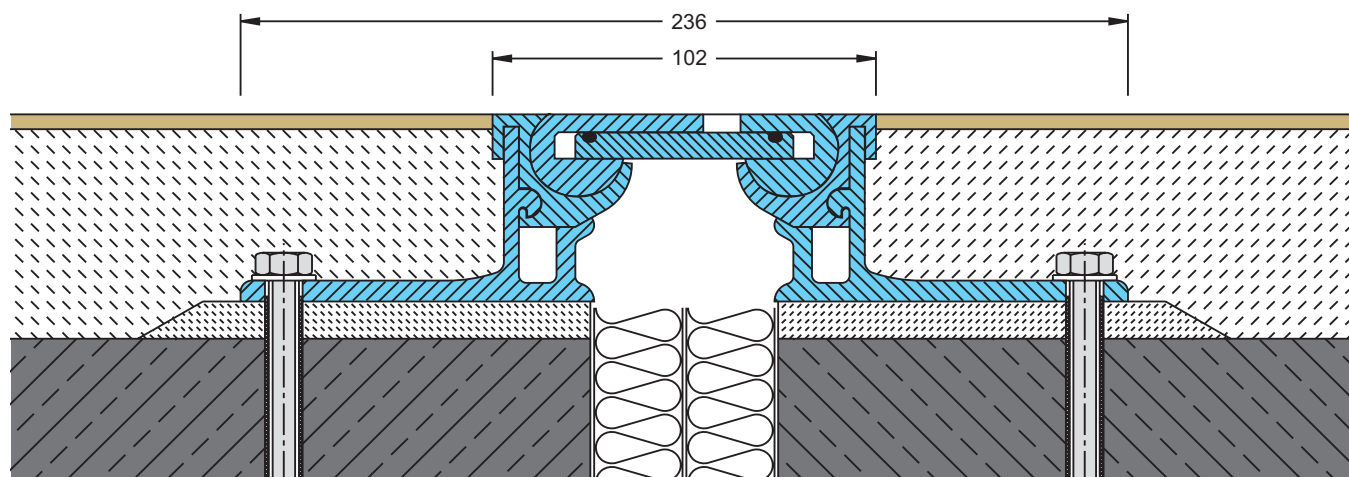
Profile	Joint width max. mm	Total Movement mm	Visible Width of Profile mm	Total Width of Profile mm	Installation Height mm	Load capacity Lorries (DIN 1072) kN	Load capacity Fork lift trucks (DIN 1055) kN	Load capacity Solid plastic tyres kg/mm width of wheel
FS 100/3000	50	20 ± 10	102	236	30	300	75	9
FS 100/4000	50	20 ± 10	102	236	40	300	75	9
FS 100/5000	50	20 ± 10	102	236	50	75	9	

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FS 100/5000

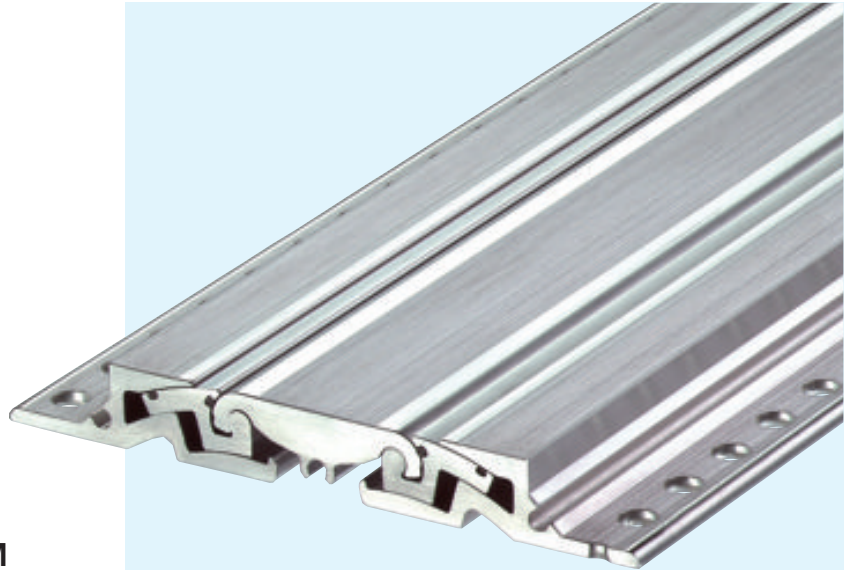
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SERIES FS 135/...

FOR FLOORS WITH EXTRA HIGH LOAD CAPACITY

MIGUTRANS

- **VISIBLE SURFACE SHOWS NO GAPS (TO AVOID DIRT ACCUMULATION)**
- **SOLID ALL METAL-PROFILE (HARD WEARING, MAINTENANCE-FREE, LONG LASTING)**
- **PROFILE ABSORBS MOVEMENT IN THREE DIRECTIONS**
- **EXTREMELY HIGH LOAD CAPACITY**
- **INSTALLATION HEIGHT ONLY 25 MM**



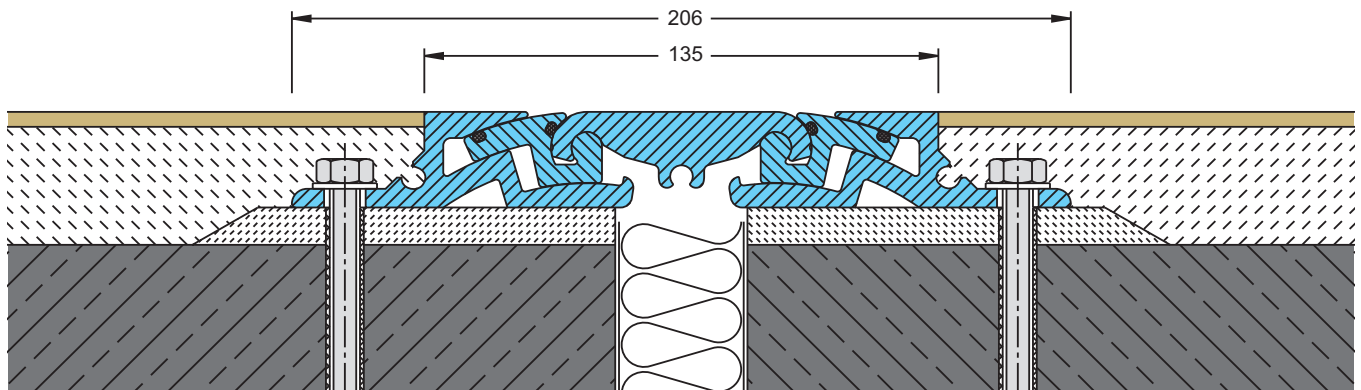
TECHNICAL DATA

Profile	Joint width max. mm	Total Movement mm	Visible Width of Profile mm	Total Width of Profile mm	Installation Height mm	Load capacity Lorries (DIN 1072) kN	Load capacity Fork lift trucks (DIN 1055) kN	Load capacity Solid plastic tyres kg/mm width of wheel
FS 135/2500	35	20 ± 10	135	206	25	600	250	30

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Also available for joint width up to 70 mm as FS 174/2500

Profile	Joint width max. mm	Total Movement mm	Visible Width of Profile mm	Total Width of Profile mm	Installation Height mm	Load capacity Lorries (DIN 1072) kN	Load capacity Fork lift trucks (DIN 1055) kN	Load capacity Solid plastic tyres kg/mm width of wheel
FS 174/2500	70	20 ± 10	174	245	25	600	130	15



FS 135/2500

Scale 1 : 2

SERIES FS 155/...

FOR HEAVY DUTY FLOORS

MIGUTRANS

- **VISIBLE SURFACE SHOWS NO GAPS (TO AVOID DIRT ACCUMULATION)**
- **SOLID ALL METAL PROFILE (HARD WEARING, MAINTENANCE-FREE, LONG LASTING)**
- **PROFILE ABSORBS MOVEMENTS IN THREE DIRECTIONS**
- **MOVEMENT CAPACITY 40 MM**
- **FOR JOINT WIDTHS UP TO 120 MM**



TECHNICAL DATA

Profile	Joint width max. mm	Total Movement mm	Visible Width of Profile mm	Total Width of Profile mm	Installation Height mm	Load capacity Lorries (DIN 1072) kN	Load capacity Fork lift trucks (DIN 1055) kN	Load capacity Solid plastic tyres kg/mm width of wheel
FS 155/3000	120	40 ± 20	157	273	30	600	130	15
FS 155/4200	120	40 ± 20	157	273	42	600	130	15
FS 155/5200	120	40 ± 20	157	273	52	600	130	15
FS 155/6200	120	40 ± 20	157	273	62	600	130	15
FS 155/7700	120	40 ± 20	157	273	77	600	130	15
FS 155/8700	120	40 ± 20	157	273	87	600	130	15
FS 155/9700	120	40 ± 20	157	273	97	600	130	15

Profile angles for heights 77 mm and upwards will be supplied in steel.

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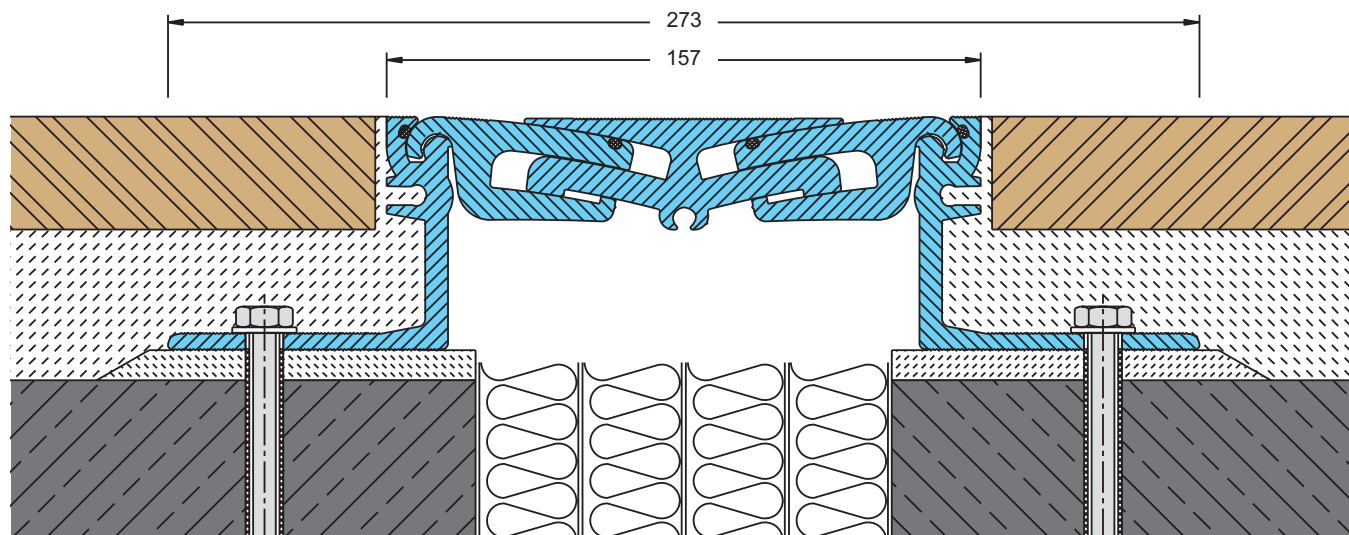
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FS 155/6200

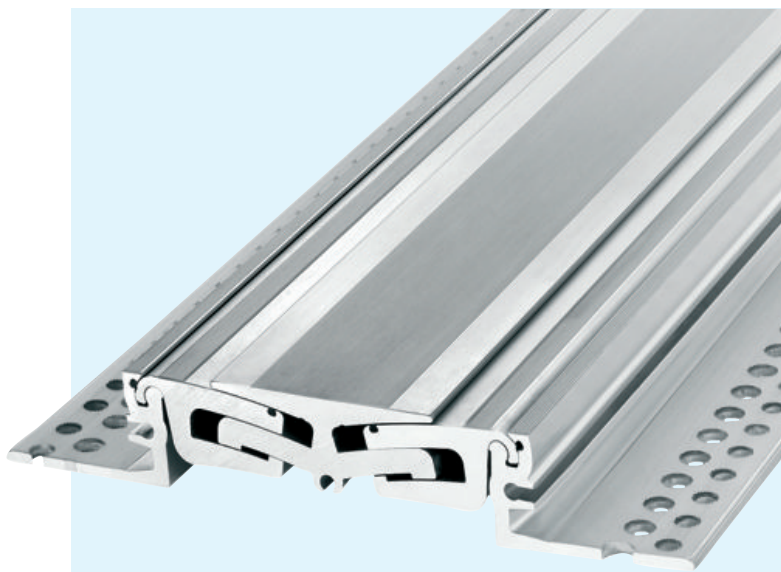
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SERIES FS 167/...

FOR HEAVY DUTY FLOORS

MIGUTRANS

- **VISIBLE SURFACE SHOWS NO GAPS (TO AVOID DIRT ACCUMULATION)**
- **SOLID ALL METAL PROFILE (HARD WEARING, MAINTENANCE-FREE, LONG LASTING)**
- **PROFILE ABSORBS MOVEMENTS IN THREE DIRECTIONS**
- **MOVEMENT CAPACITY 45 MM**
- **FOR JOINT WIDTHS UP TO 135 MM**



TECHNICAL DATA

Profile	Joint width max. mm	Total Movement mm	Visible Width of Profile mm	Total Width of Profile mm	Installation Height mm	Load capacity Lorries (DIN 1072) kN	Load capacity Fork lift trucks (DIN 1055) kN	Load capacity Solid plastic tyres kg/mm width of wheel
FS 167/3000	135	45 ± 22,5	167	283	30	400	70	20
FS 167/4200	135	45 ± 22,5	167	283	42	400	70	20
FS 167/5200	135	45 ± 22,5	167	283	52	300	70	15
FS 167/6200	135	45 ± 22,5	167	283	62	300	70	12

Other heights and load capacities on request

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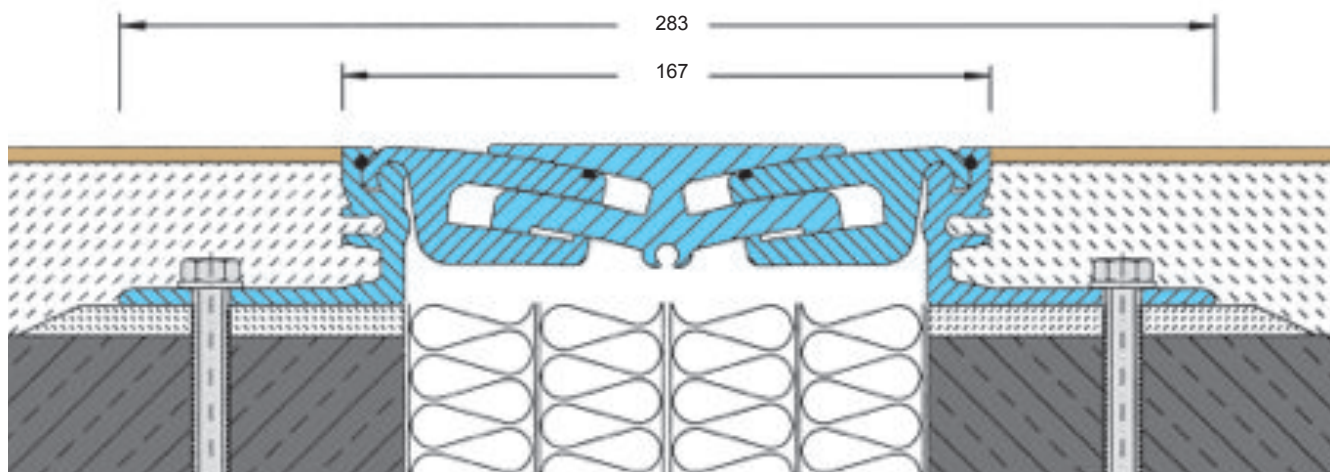
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Distance between fixings: Profile FS 167/3000 = 300 mm; Profile FS 167/4200, FS 167/5200 and FS 167/6200 = 200 mm



SERIES FSV 235/...

FOR FLOORS WITH HIGH LOAD CAPACITY AND EXTREME MOVEMENTS

MIGUTRANS

- **VISIBLE SURFACE SHOWS NO GAPS (TO AVOID DIRT ACCUMULATION)**
- **SOLID ALL METAL-PROFILE (HARD WEARING, MAINTENANCE-FREE, LONG LASTING)**
- **PROFILE ABSORBS MOVEMENT IN THREE DIRECTIONS**
- **REPLACEABLE BRIDGING UNIT**
- **FOR JOINT WIDTHS UP TO 150 MM**



TECHNICAL DATA

Profile	Joint width max. mm	Total Movement mm	Visible Width of Profile mm	Total Width of Profile mm	Installation Height mm	Load capacity Lorries (DIN 1072) kN	Load capacity Fork lift trucks (DIN 1055) kN	Load capacity Solid plastic tyres kg/mm width of wheel
FSV 235/4500	150	60 ± 30	235	357	45	300	70	6,5
FSV 235/8000	150	60 ± 30	235	357	80	300	70	6,5
FSV 235/9000*	150	60 ± 30	235	357	90	300	70	6,5
FSV 235/13000*	150	60 ± 30	235	357	130	300	70	6,5
FSV 235/14000*	150	60 ± 30	235	357	140	300	70	6,5

* available on request

Material description, important notes and special properties = Page 2

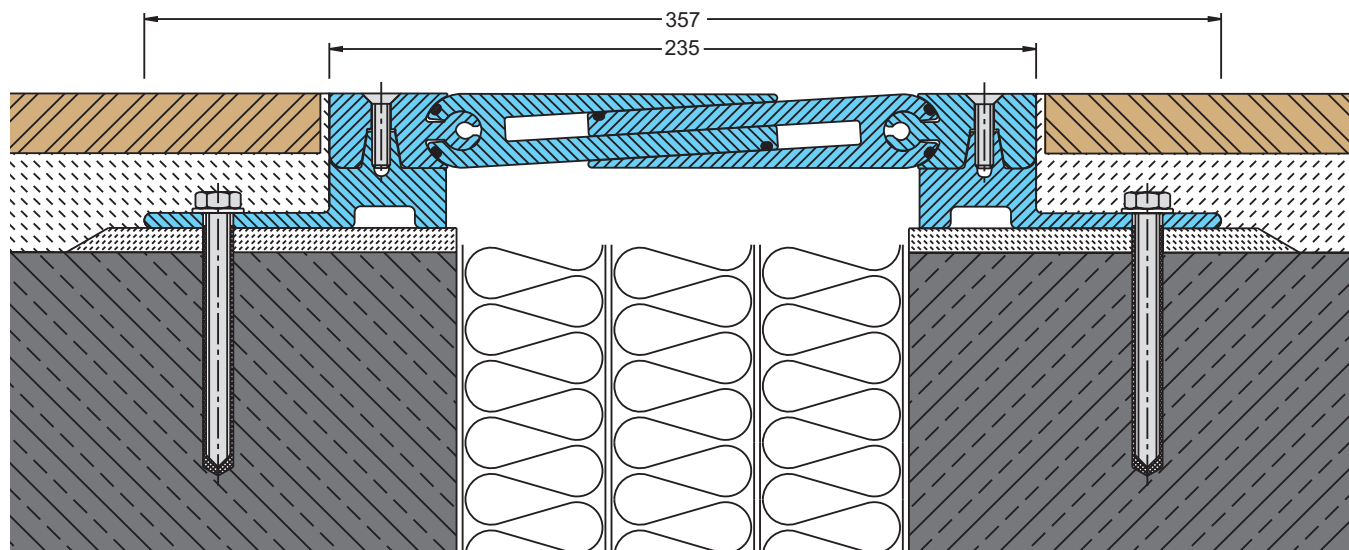
Replacement instruction = Page 27

Corner versions = Page 18–22

Intersections = Page 30

Additional examples for application = Page 24–28

Installation instruction = Page 36



FSV235/4500

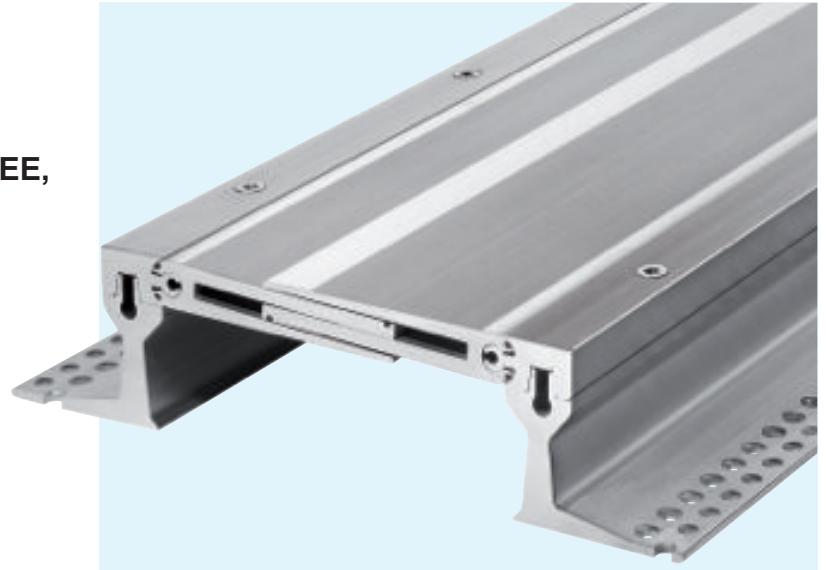
Scale 1 : 2

SERIES FSV 280/...

FOR HEAVY DUTY FLOORS - TO BE USED BY FORK LIFT AND PALLET TRUCKS

MIGUTRANS

- **VISIBLE SURFACE SHOWS NO GAPS
(TO AVOID DIRT ACCUMULATION)**
- **SOLID ALL METAL-PROFILE
(HARD WEARING, MAINTENANCE-FREE,
LONG LASTING)**
- **PROFILE ABSORBS MOVEMENT
IN THREE DIRECTIONS**
- **MOVEMENT CAPACITY
UP TO 85 MM**
- **FOR JOINT WIDTHS
UP TO 200 MM**



TECHNICAL DATA

Profile	Joint width max. mm	Total Movement mm	Visible Width of Profile mm	Total Width of Profile mm	Installation Height mm	Load capacity Lorries (DIN 1072) kN	Load capacity Fork lift trucks (DIN 1055) kN	Load capacity Solid plastic tyres kg/mm width of wheel
FSV 280/4500	200	85 ± 42,5	280	403	45	35	35	6,5
FSV 280/8000	200	85 ± 42,5	280	403	80	35	35	6,5
FSV 280/9000	200	85 ± 42,5	280	403	90	35	35	6,5
FSV 280/13000	200	85 ± 42,5	280	403	130	35	35	6,5
FSV 280/14000	200	85 ± 42,5	280	403	140	35	35	6,5

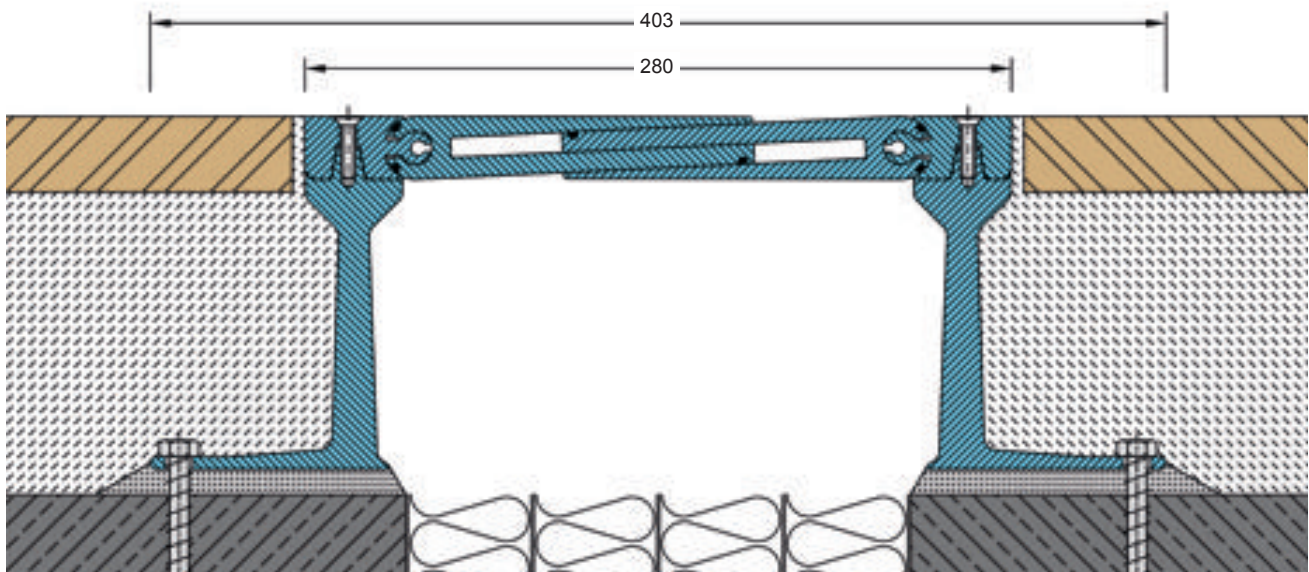
Material description, important notes and special properties = Page 2

Corner versions = Page 18–22

Intersections = Page 30

Additional examples for application = Page 24–28

Installation instruction = Page 36



FSV 280/14000

Scale 1 : 3

SERIES FSN – SURFACE FIXING

FOR HEAVY DUTY FLOORS

MIGUTRANS

- **VISIBLE SURFACE SHOWS NO GAPS
(TO AVOID DIRT ACCUMULATION)**
- **SOLID ALL METAL-PROFILE
(HARD WEARING, MAINTENANCE-FREE,
LONG LASTING)**
- **PROFILE ABSORBS MOVEMENT
IN THREE DIRECTIONS**
- **MOVEMENT CAPACITY
UP TO 60 MM**
- **FOR JOINT WIDTHS
UP TO 170 MM**



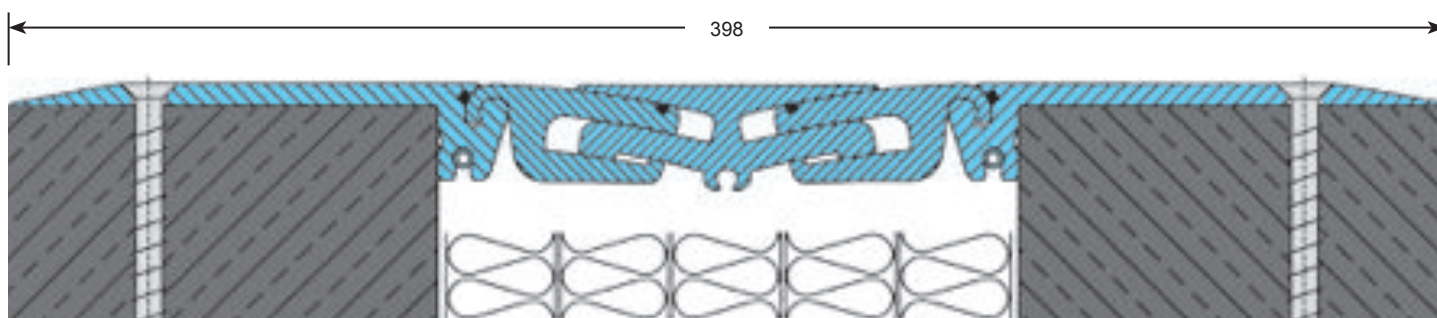
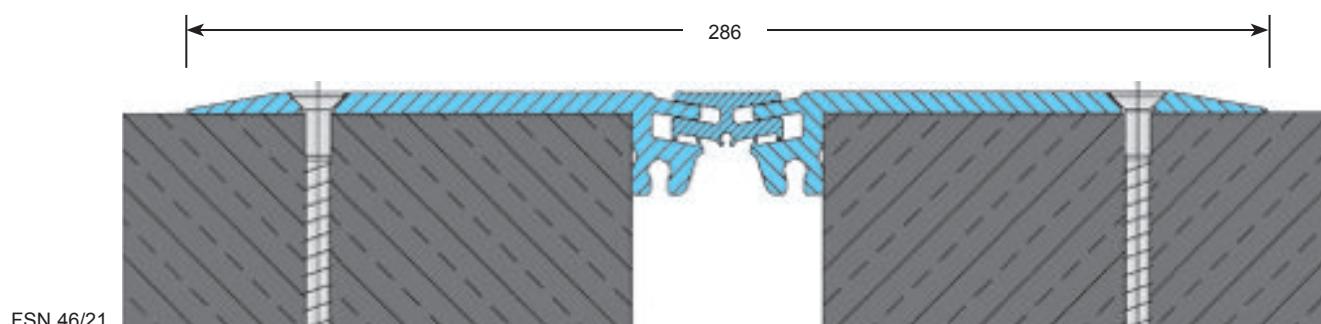
TECHNICAL DATA

Profile	Joint width max. mm	Total Movement mm	Visible Width of Profile mm	Total Width of Profile mm	Installation depth mm	Load capacity Lorries (DIN 1072) kN	Load capacity Fork lift trucks (DIN 1055) kN	Load capacity Solid plastic tyres kg/mm width of wheel
FSN 46/21	50	20 ± 10	286	286	21	90	35	6,5
FSN 155/24	162	40 ± 20	398	398	24	90	35	6,5
FSN 75/21	84	20 ± 10	320	320	21	90	35	6,5
FSN 110/21	118	30 ± 15	354	354	21	90	35	6,5
FSN 130/28	142	40 ± 20	378	378	28	90	35	6,5
FSN 160/34	170	60 ± 30	406	406	34	90	35	6,5

Material description, important notes and special properties = Page 2

Intersections = Page 30

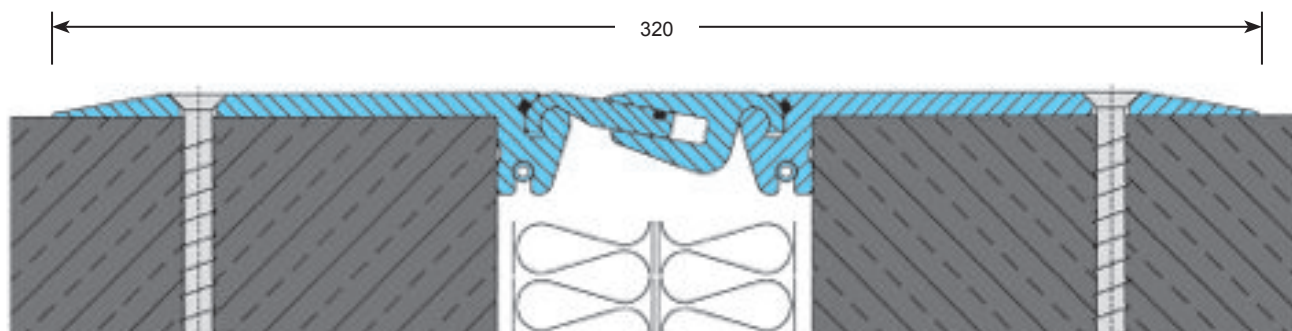
Corner-versions available



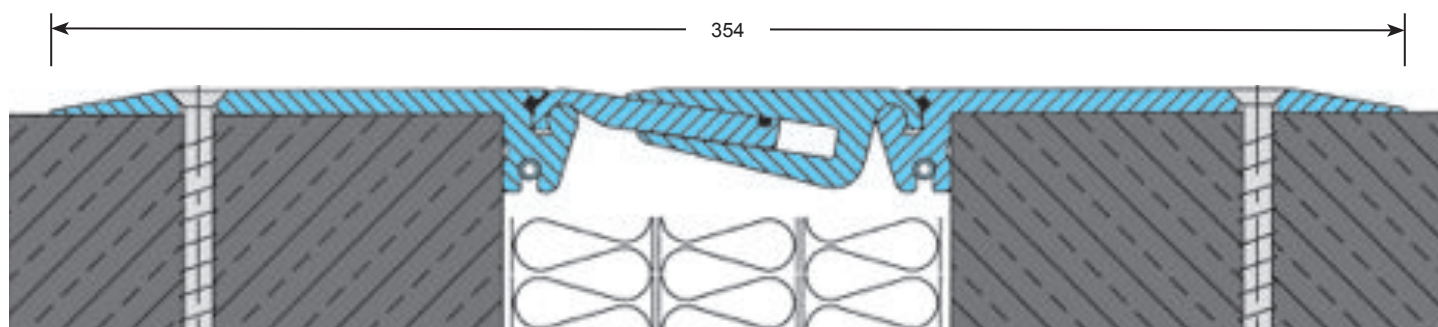
Scale 1 : 2

SERIES FSN – SURFACE FIXING FOR HEAVY DUTY FLOORS

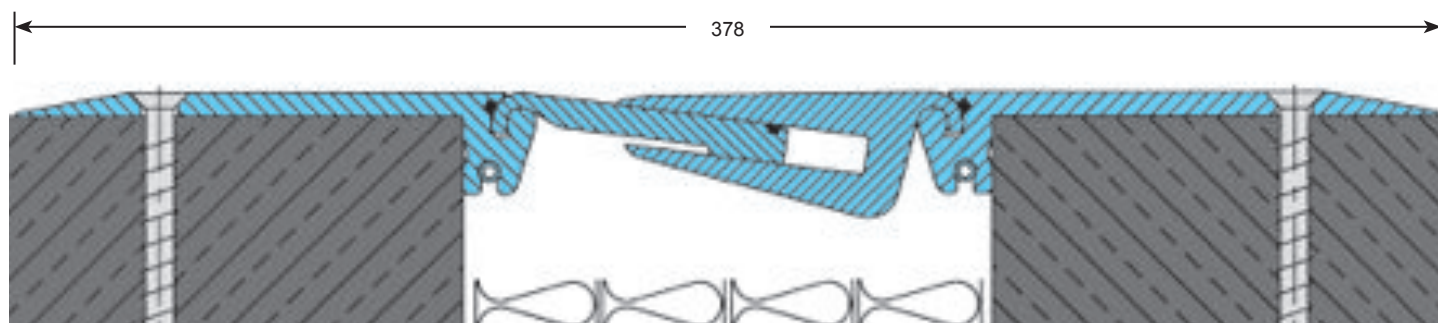
MIGUTRANS



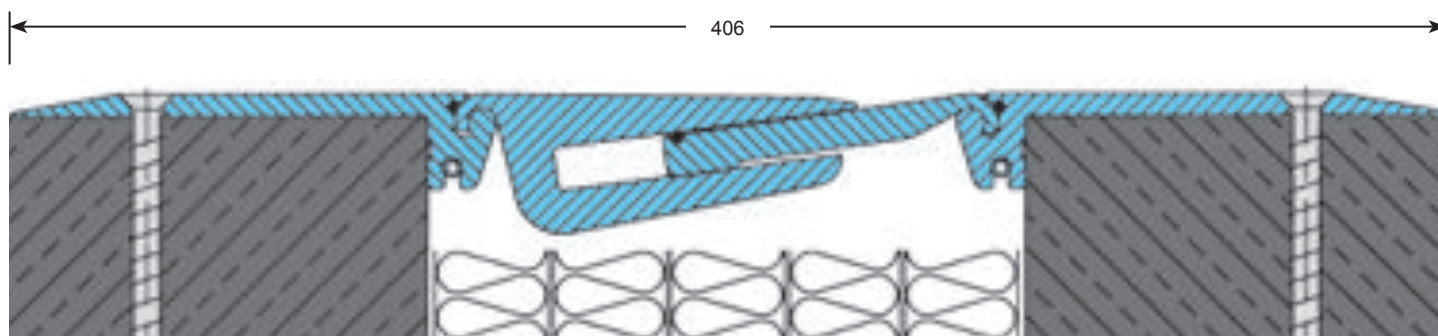
FSN 75/21



FSN 110/21



FSN 130/28



FSN 160/34

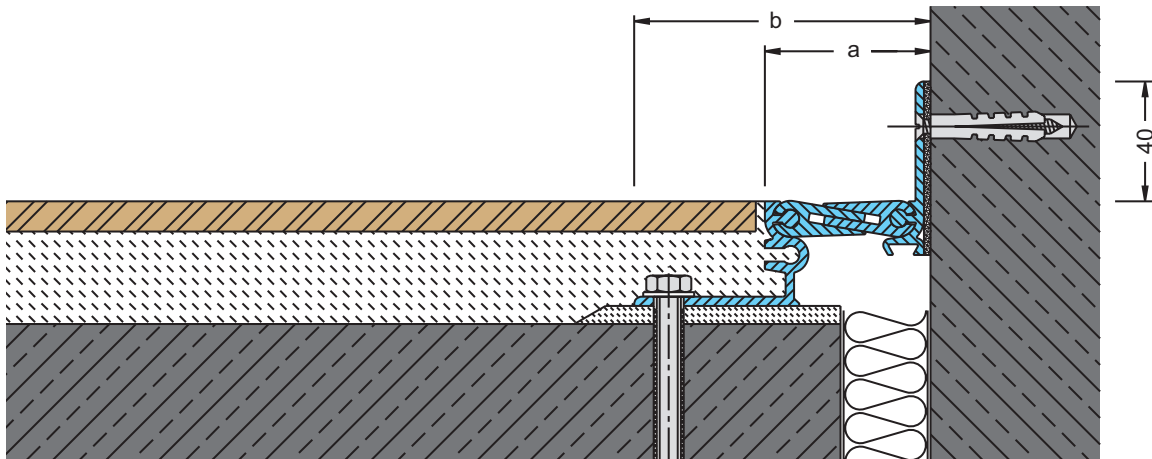
Installation Instructions:

To adjust every slight unevenness the profile has to be glued by Epoxy, e.g.: Reckli-Adhesive EP.
After that the aluminium angles need to be fixed on both sides with stainless steel screws,
e.g.: Multi Monti Screws MMS-F 7,5 ES for concrete in a distance of 200 mm each.

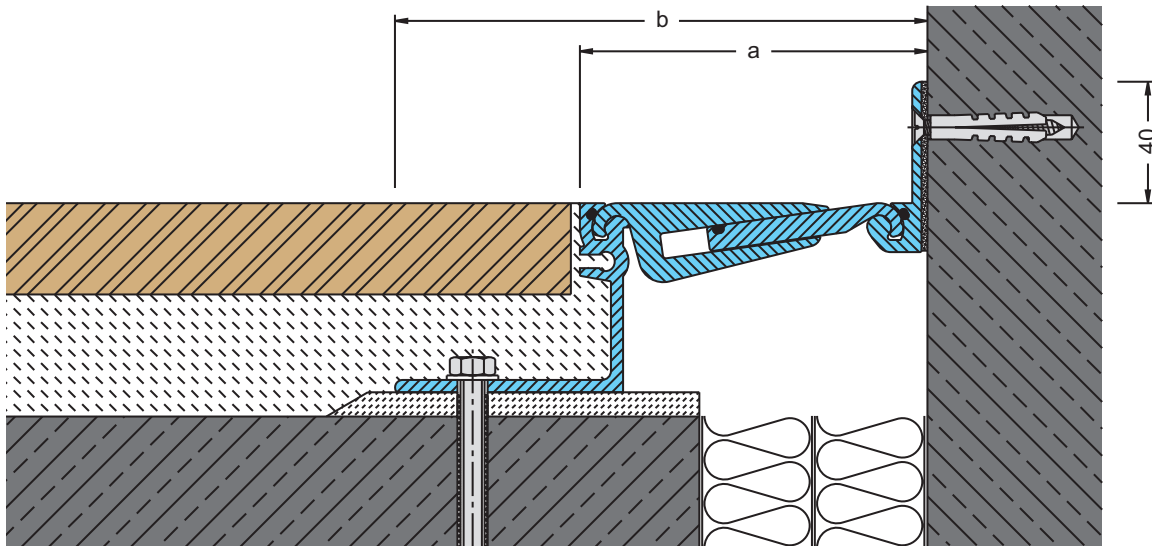
CORNER VERSION E4

EXPANSION JOINT SYSTEMS

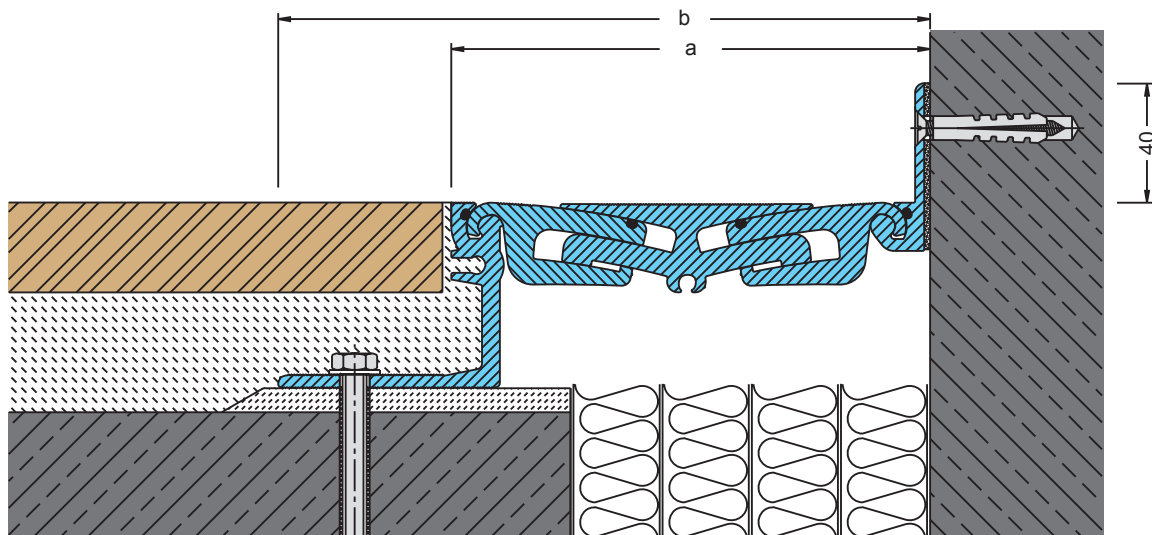
MIGUTRANS



FS 50/3500 E 4



FS 75/6200 E 4 • FS 110/6200 E 4 • FS 130/6200 E 4 • FS 160/6200 E 4

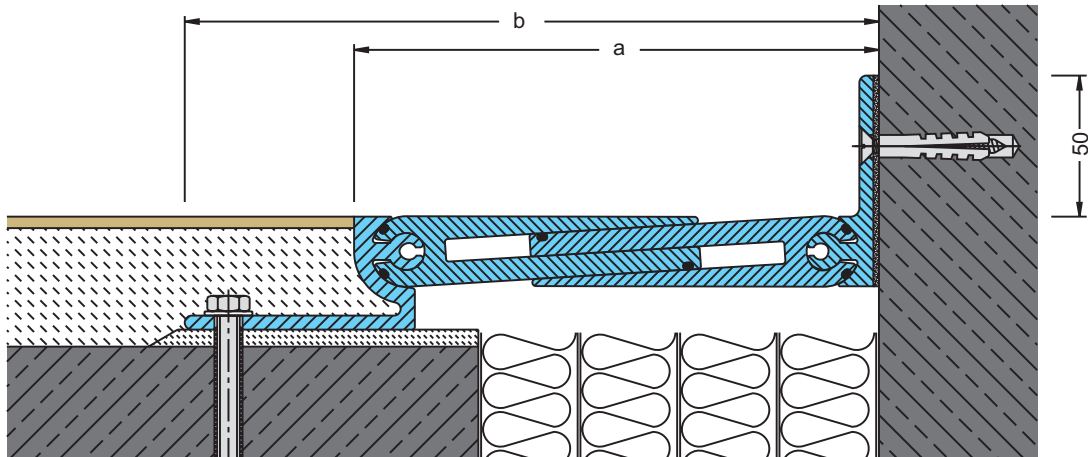


FS 155/6200 E 4 • FS 167/6200 E 4

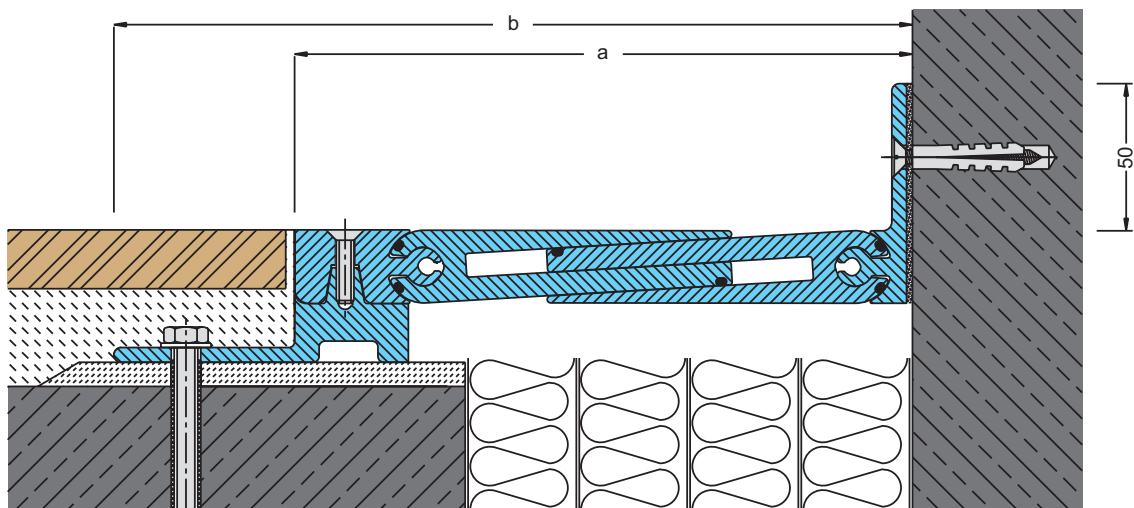
CORNER VERSION E4

EXPANSION JOINT SYSTEMS

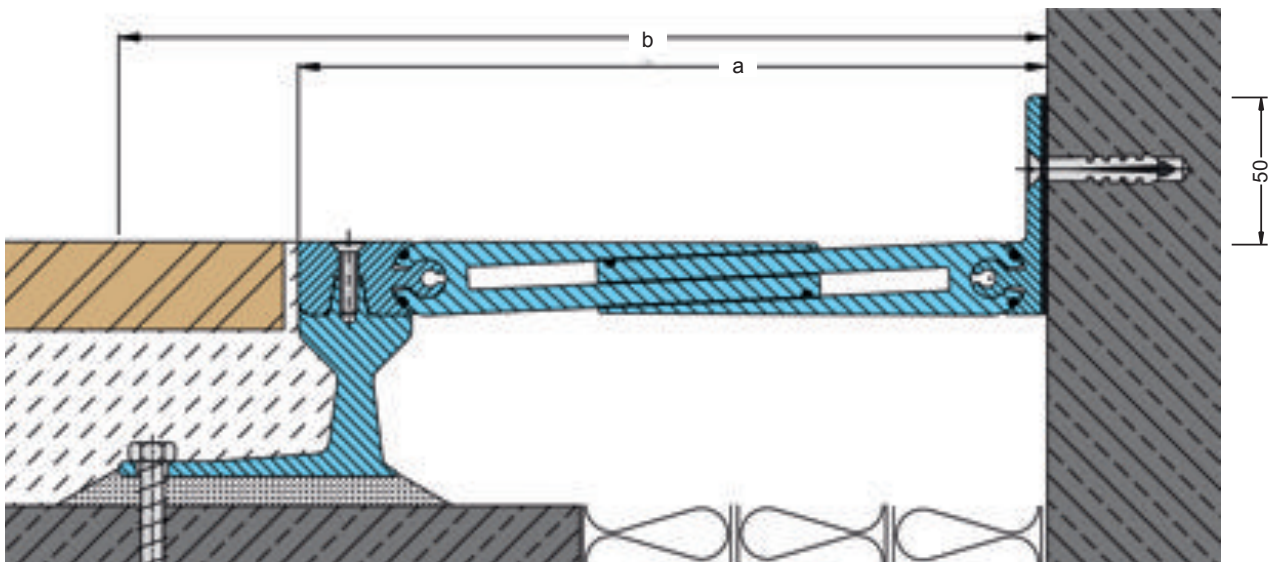
MIGUTRANS



FS 185/4000 E 4



FSV 235/4500 E 4

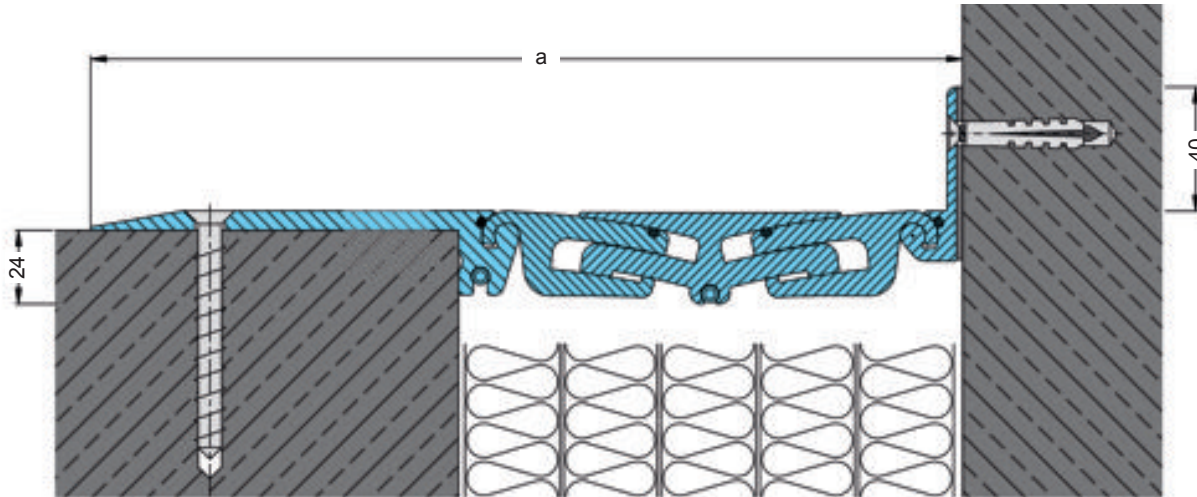


FSV 280/8000 E 4

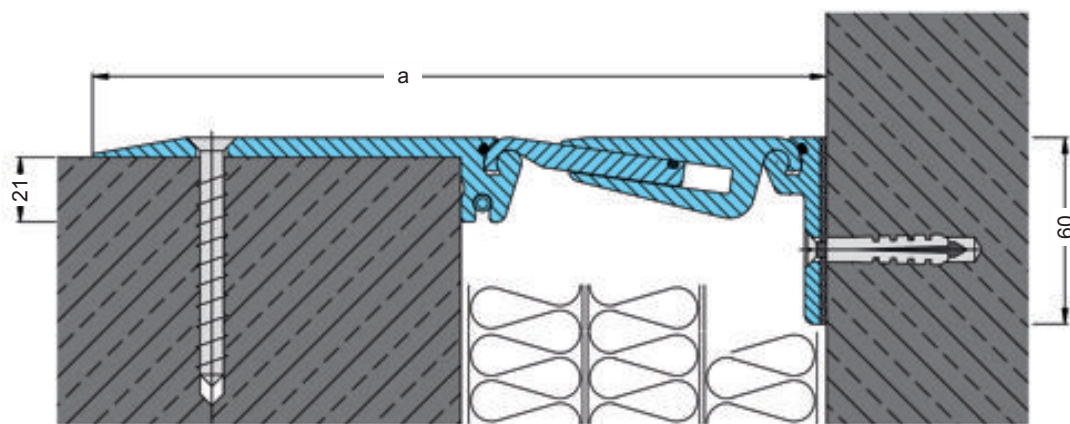
CORNER VERSIONS E4 AND E3 FOR SERIES FSN

EXPANSION JOINT SYSTEMS

MIGUTRANS



FSN 75/21 E 4 • FSN 110/21 E 4 • FSN 130/28 E 4 • **FSN 155/24 E 4** • FSN 160/34 E 4

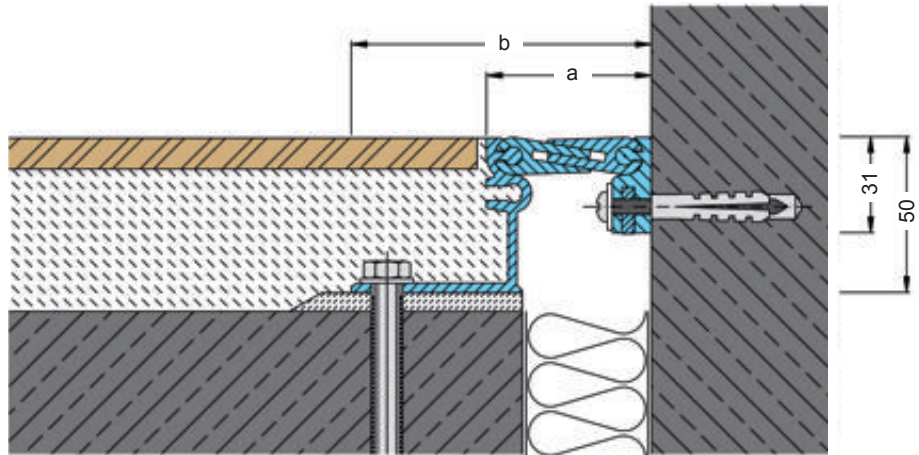


FSN 75/21 E 3 • **FSN 110/21 E 3** • FSN 130/28 E 3 • FSN 155/24 E 3 • FSN 160/34 E 3

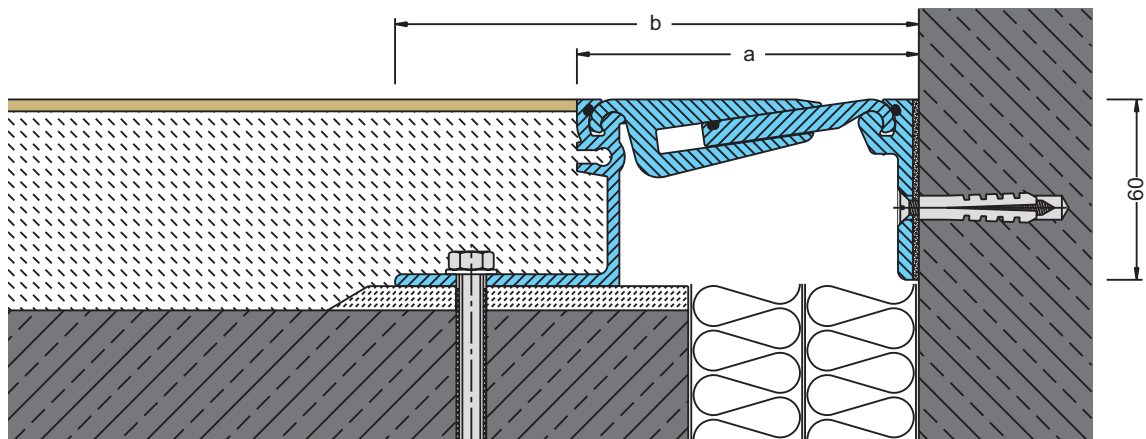
CORNER VERSION E3

EXPANSION JOINT SYSTEMS

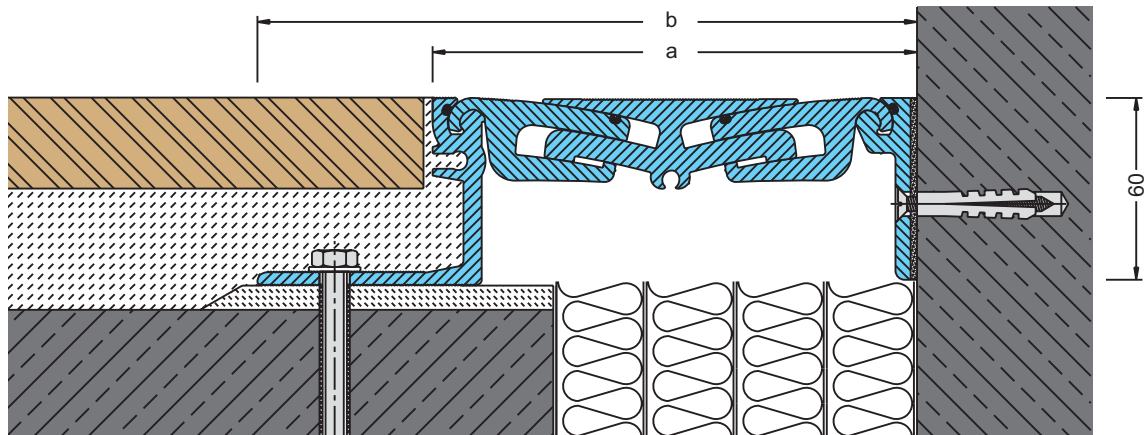
MIGUTRANS



FS 50/5000 E 3



FS 75/6200 E 3 • FS 110/6200 E 3 • FS 130/6200 E 3 • FS 160/6200 E 3

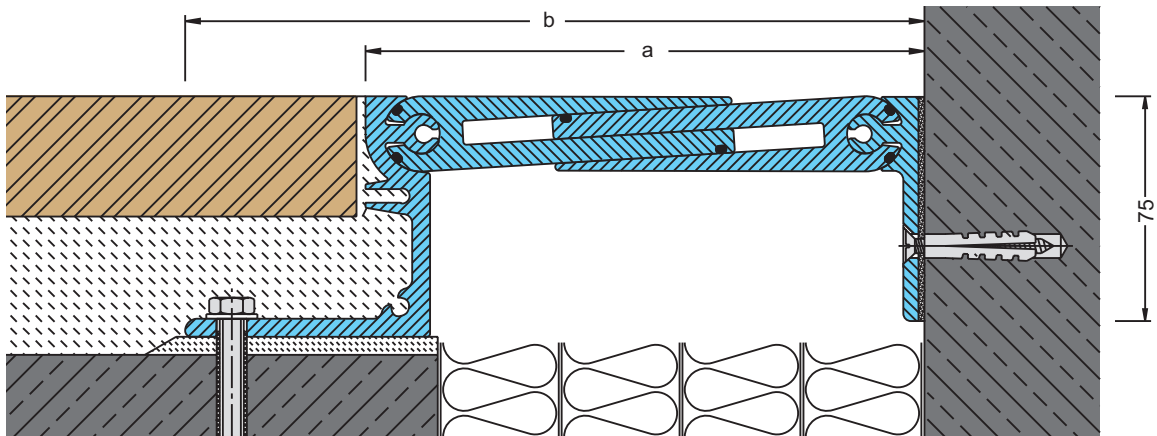


FS 155/6200 E 3 • FS 167/6200 E 3

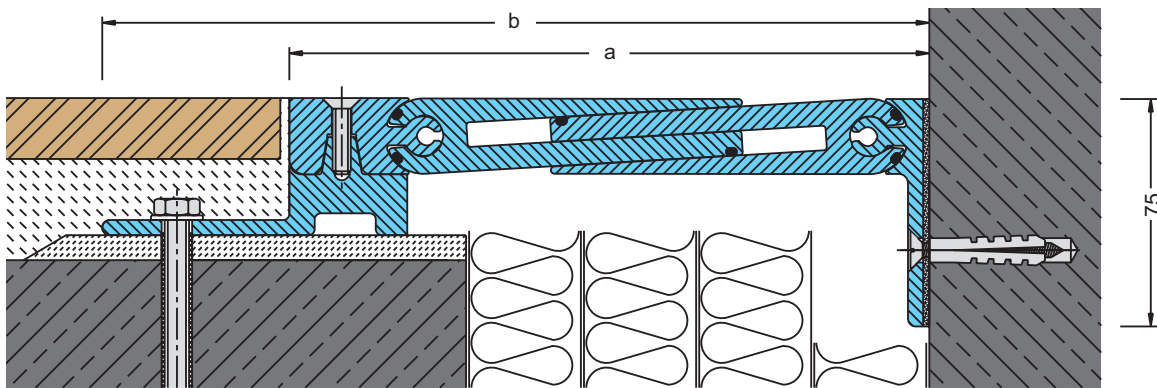
CORNER VERSION E3

EXPANSION JOINT SYSTEMS

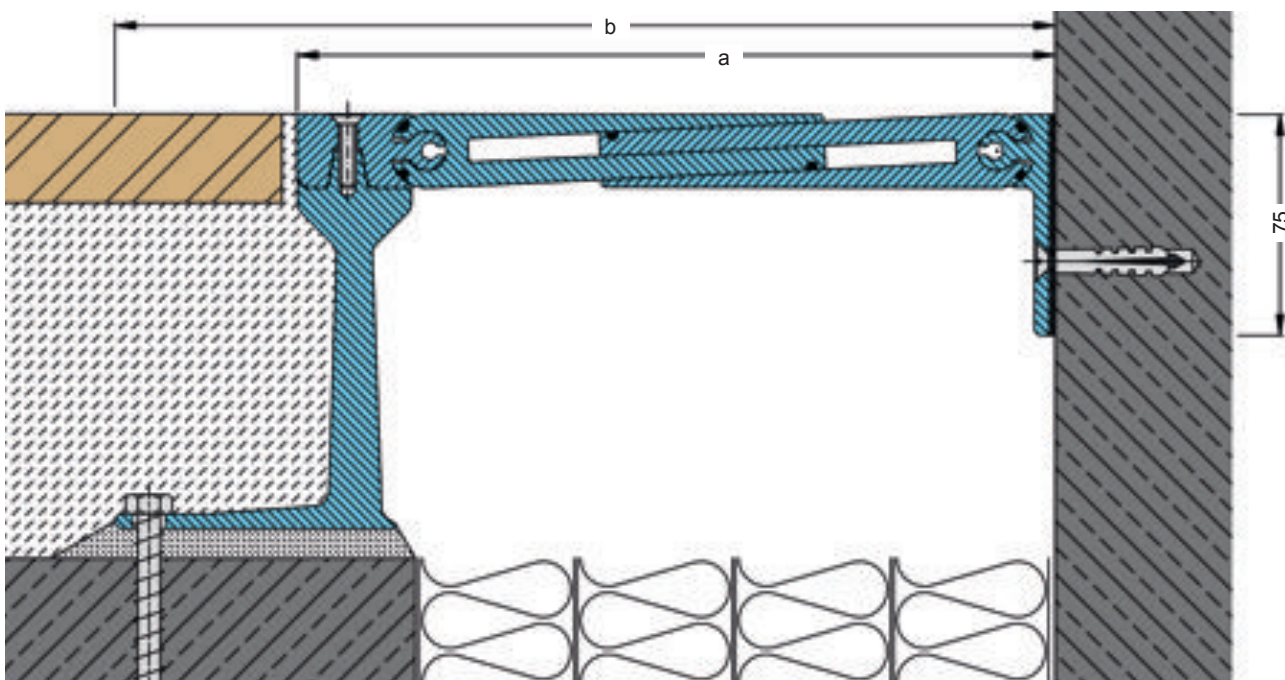
MIGUTRANS



FS 185/8000 E 3



FSV 235/4500 E 3



FSV 280/14000 E 3

CORNER VERSIONS

DIMENSIONS

MIGUTRANS

CORNER VERSION E 4

Profile	Installation height *	a (mm)	b (mm)	min. joint depth (mm)
FS 50/...	20, 35, 50	55	99	–
FS 75/...	22, 30, 42, 52, 62, 77, 87, 97	81	141	–
FS 110/...	30, 42, 52, 62, 77, 87, 97	114	174	–
FS 130/...	42, 52, 62, 77, 87, 97	138	198	–
FS 160/...	42, 52, 62, 77, 87, 97	166	226	–
FS 155/...	30, 42, 52, 62, 77, 87, 97	161	218	–
FS 167/...	30, 42, 52, 62	171	228	–
FS 185/...	40, 80	186	246	–
FSV 235/...	45, 80, 90, 130, 140	210	271	–
FSV 280/...	45, 80, 90, 130, 140	256	317	–
FSN 75/21	–	202	–	21
FSN 110/21	–	236	–	21
FSN 130/28	–	260	–	28
FSN 155/24	–	281	–	24
FSN 160/34	–	288	–	34

* other heights available on request

CORNER VERSION E 3

Profile	Installation height *	a (mm)	b (mm)	min. joint depth (mm)
FS 50/...	20, 35, 50	53	97	for install. height 20 mm: 11 mm
FS 75/...	22, 30, 42, 52, 62, 77, 87, 97	81	141	for install. heights below 62 mm: 60 mm less install. height
FS 110/...	30, 42, 52, 62, 77, 87, 97	114	174	for install. heights below 62 mm: 60 mm less install. height
FS 130/...	42, 52, 62, 77, 87, 97	138	198	for install. heights below 62 mm: 60 mm less install. height
FS 160/...	42, 52, 62, 77, 87, 97	166	226	for install. heights below 62 mm: 60 mm less install. height
FS 155/...	30, 42, 52, 62, 77, 87, 97	161	218	for install. heights below 62 mm: 60 mm less install. height
FS 167/...	30, 42, 52, 62	171	228	for install. heights below 62 mm: 60 mm less install. height
FS 185/...	40, 80	186	246	for install. height 40 mm: 35 mm
FSV 235/...	45, 80, 90, 130, 140	210	271	for install. height 45 mm: 30 mm
FSV 280/...	45, 80, 90, 130, 140	256	317	for install. height 45 mm: 30 mm
FSN 75/21	–	202	–	53
FSN 110/21	–	236	–	53
FSN 130/28	–	260	–	53
FSN 155/24	–	281	–	53
FSN 160/34	–	288	–	53

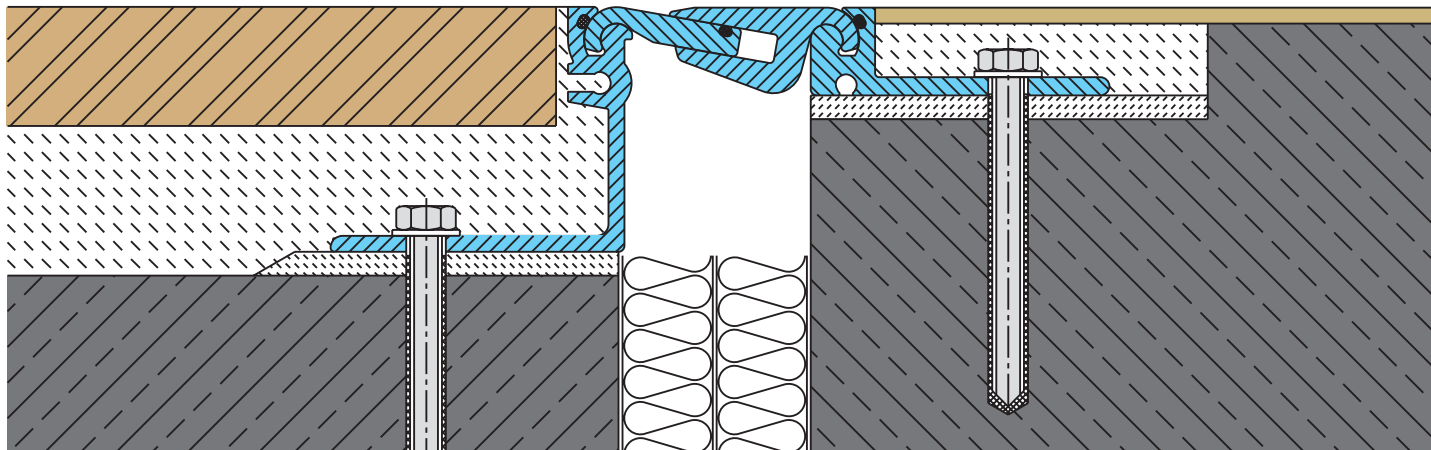
* other heights available on request

EXAMPLES FOR APPLICATION

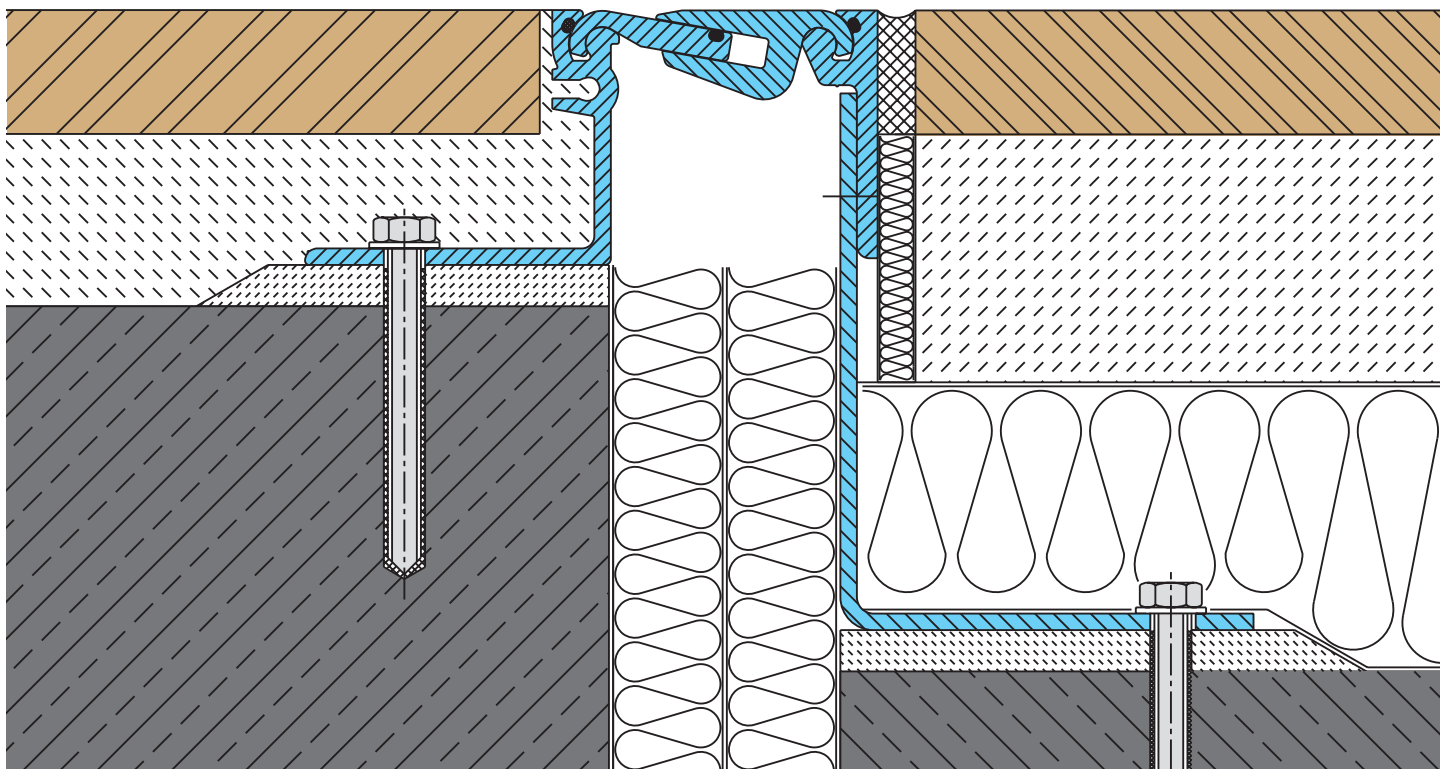
COMBINED EXPANSION JOINT SYSTEMS

MIGUTRANS

Example: Combined expansion joint profile FS 75/6200 with FS 75/2200



Example: Combined expansion joint profile FS 75/6200 with FS 75/15000

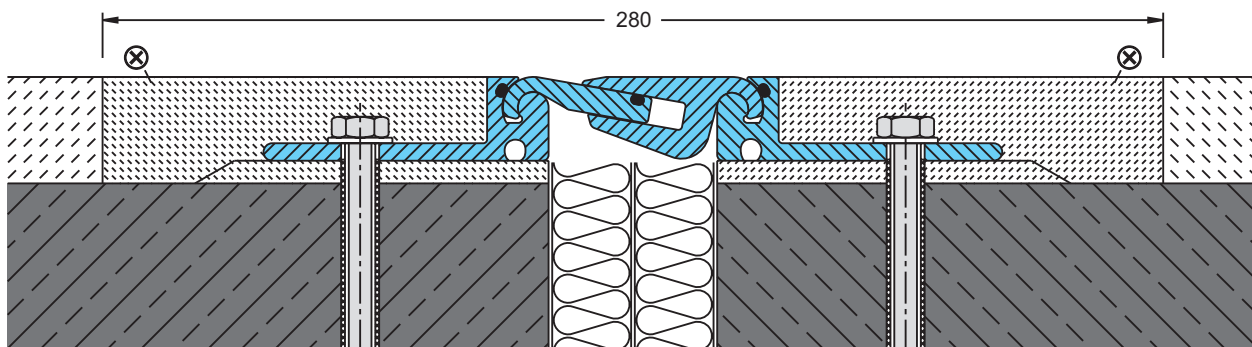


EXAMPLES FOR APPLICATION

EXPANSION JOINT SYSTEMS

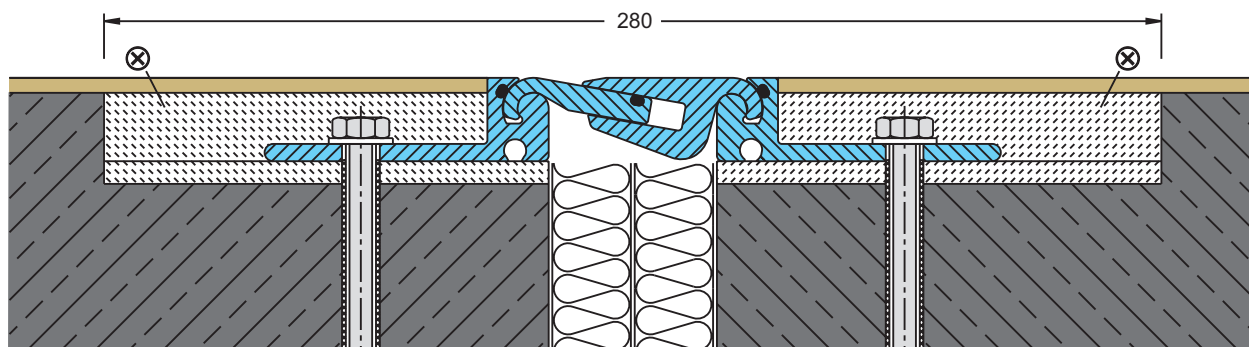
MIGUTRANS

Installation proposal: MIGUTRANS expansion joint profile e.g. in combination with magnesite floors
Profile: FS 75/2200



⊗ Epoxy

Installation proposal: MIGUTRANS expansion joint profile installed in existing block out
Profile: FS 75/2200



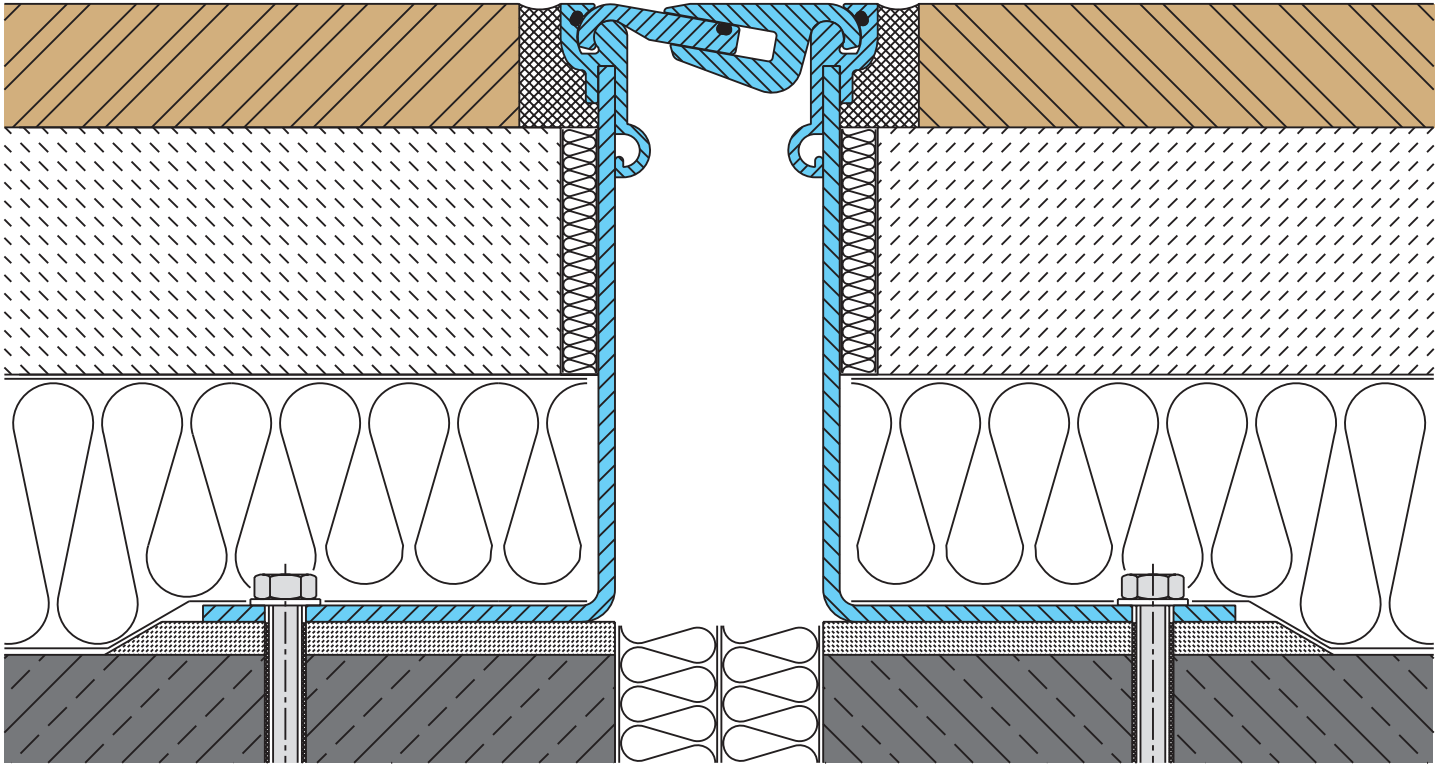
⊗ Epoxy

EXAMPLES FOR APPLICATION

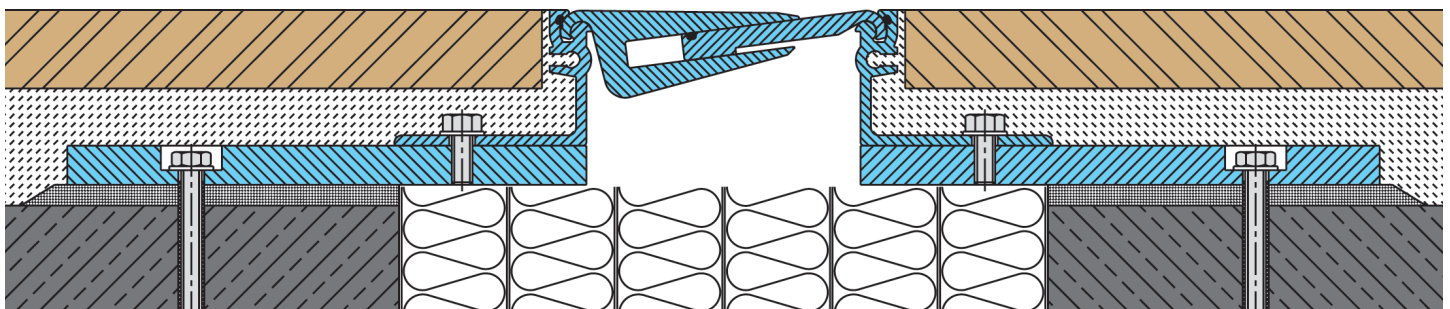
EXPANSION JOINT SYSTEMS

MIGUTRANS

Installation proposal: MIGUTRANS expansion joint profile for large installation heights



Installation proposal: MIGUTRANS expansion joint profile with supplied aluminium support plates for extremely wide expansion joints

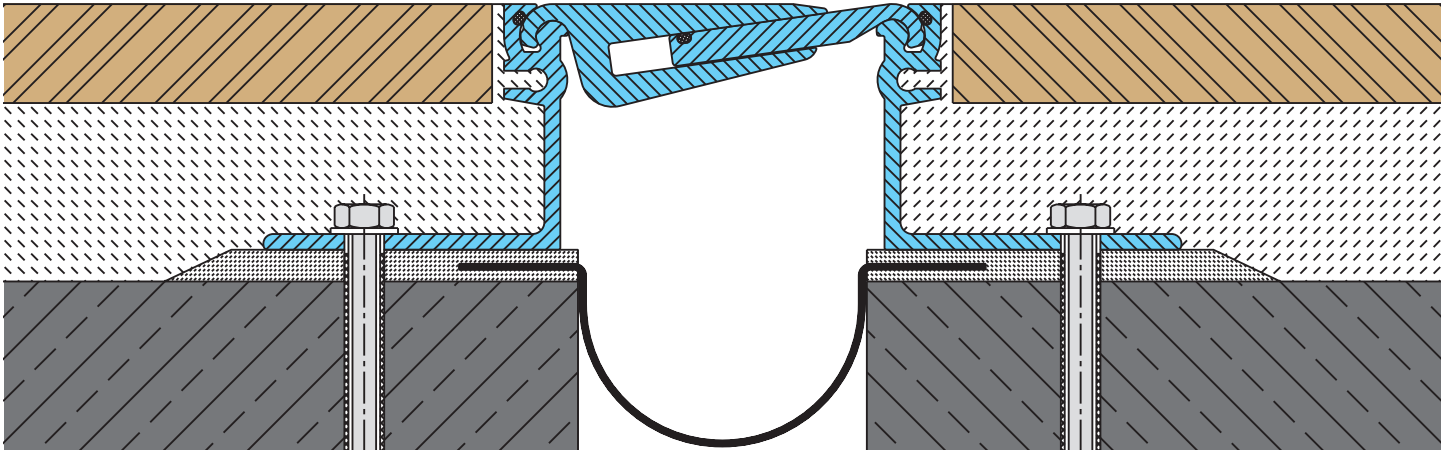


EXAMPLES FOR APPLICATION

EXPANSION JOINT SYSTEMS

MIGUTRANS

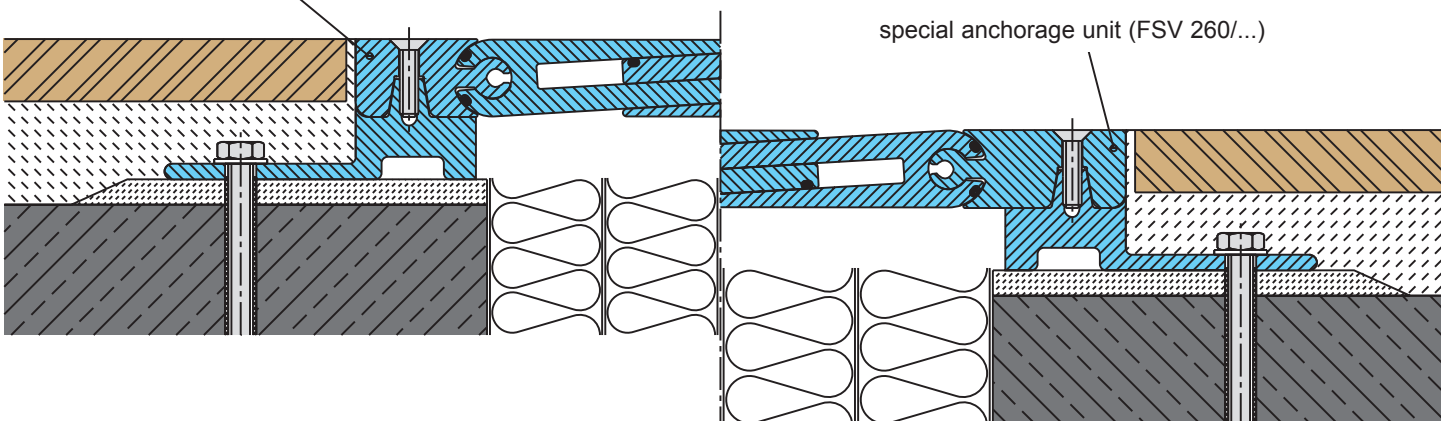
Installation proposal: MIGUTRANS expansion joint profile with MIGUFOL-vapour barrier



Bridging unit of FSV 235/4500 replaceable at any time (screwed connection) –
special anchorage unit for profile enlargement from 235 to 260 mm

standard anchorage unit

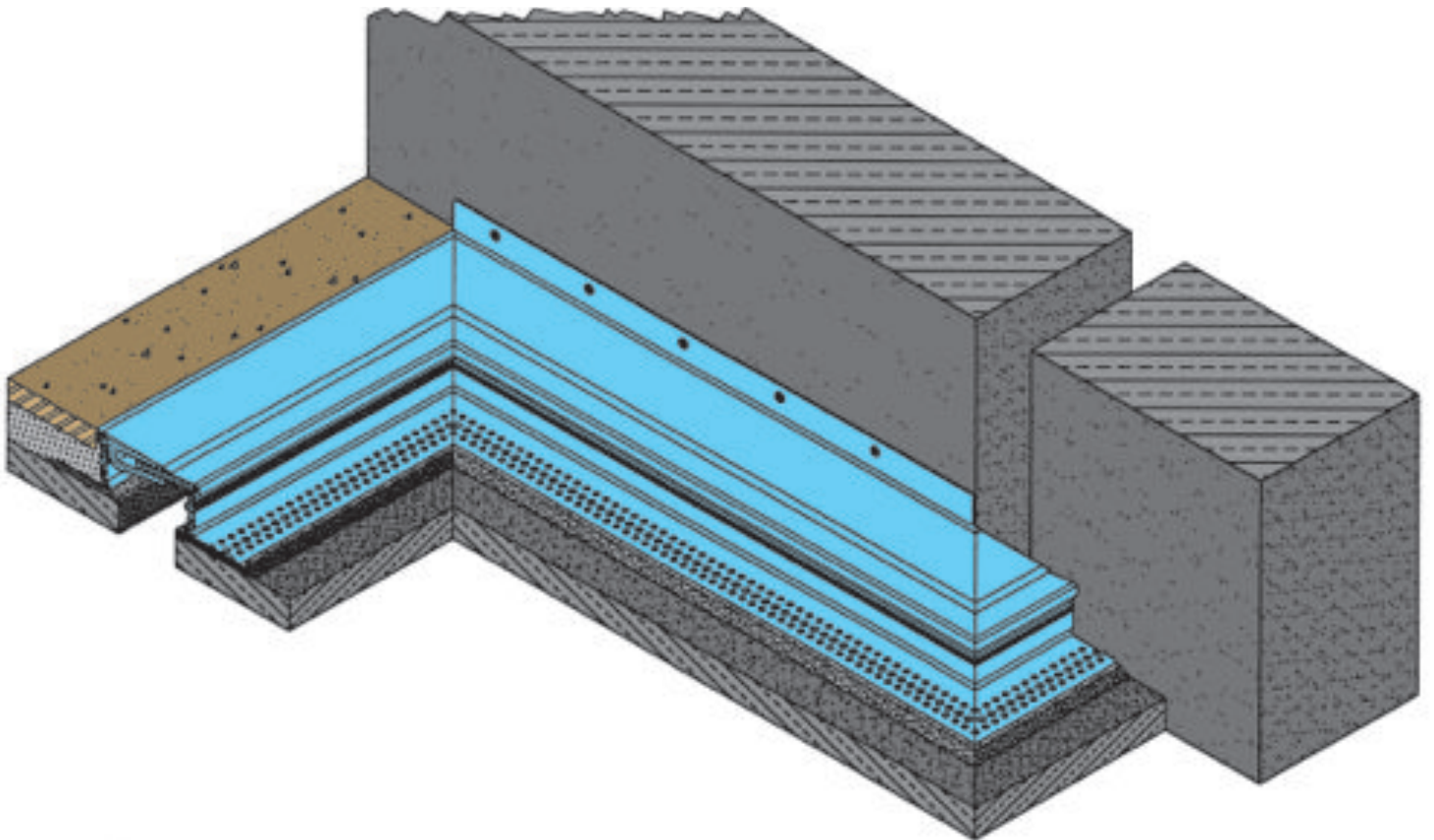
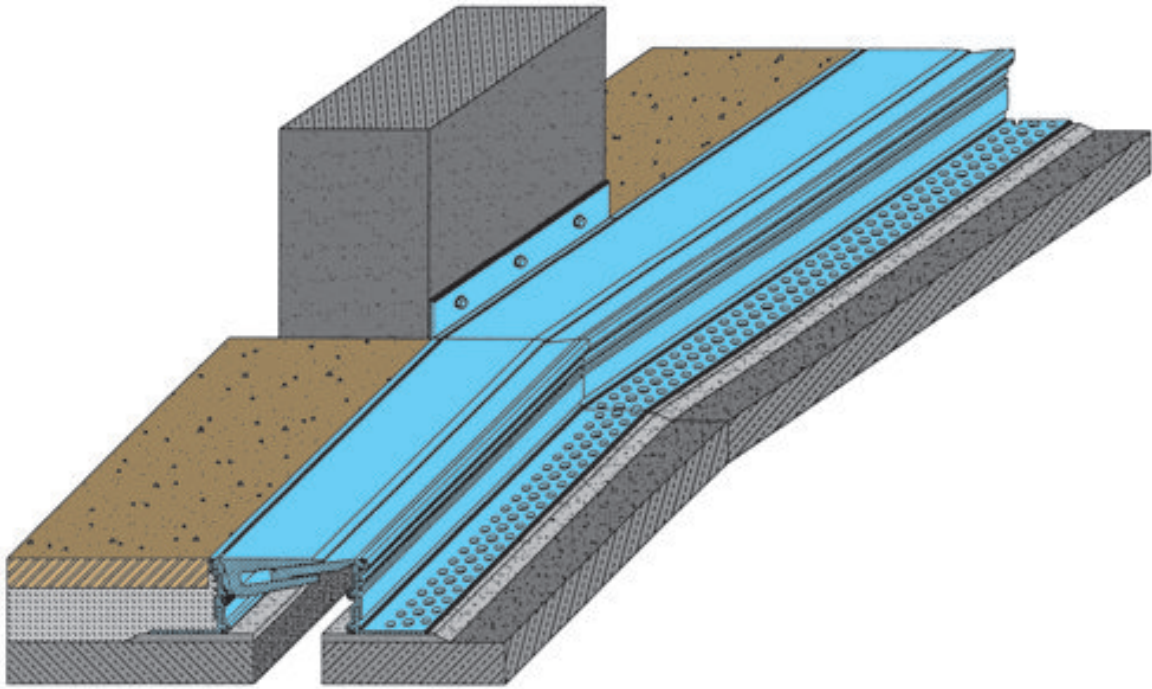
special anchorage unit (FSV 260/...)



EXAMPLES FOR APPLICATION

EXPANSION JOINT SYSTEMS

MIGUTRANS



PROFILE CONNECTIONS

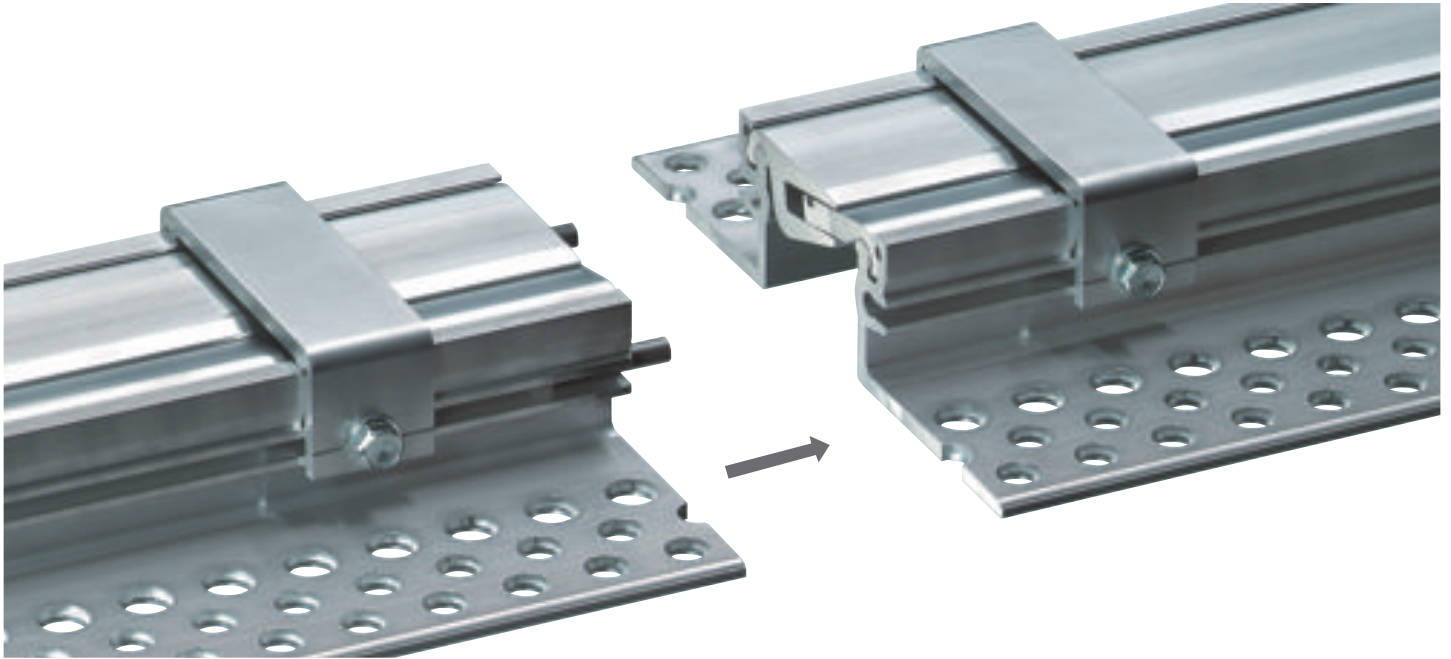
EXPANSION JOINT SYSTEMS

MIGUTRANS

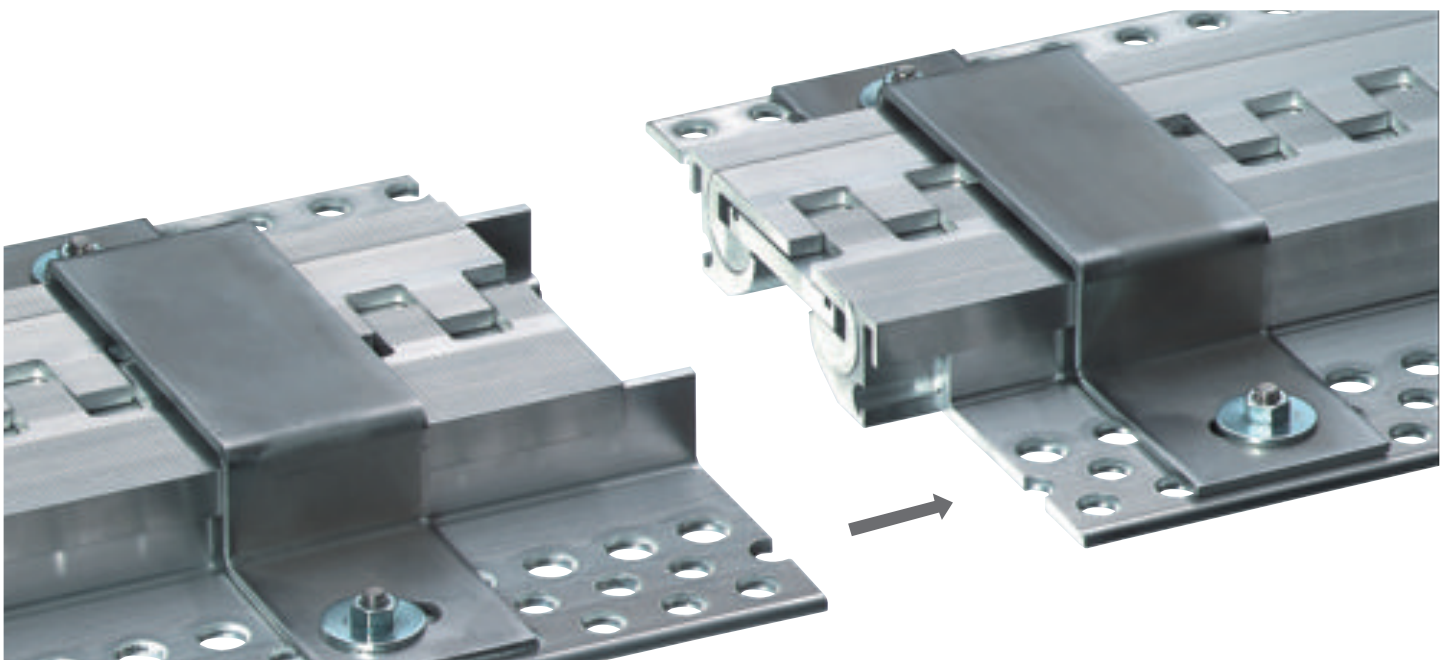
For the **one-piece anchorage units**, positive connection of the individual profile lengths is obtained by use of **slide-in connection pins**.

For a **two-piece anchorage unit**, this connection is obtained by **staggering the joints in the individual aluminium profiles**.

Example FS 75/4200 (one-piece anchorage units)



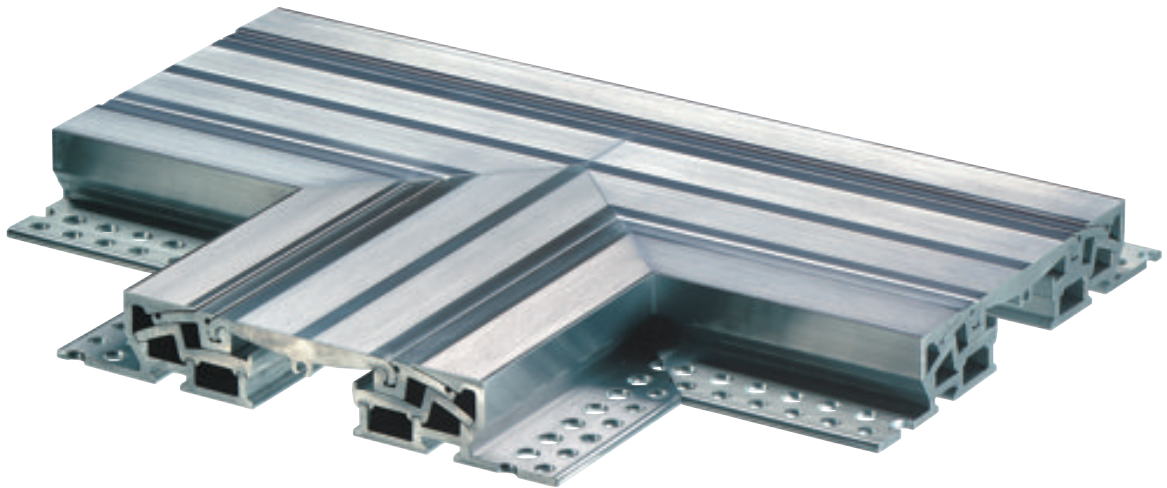
Example FS 100/3000 (two-piece anchorage units)



INTERSECTIONS

EXAMPLES

MIGUTRANS



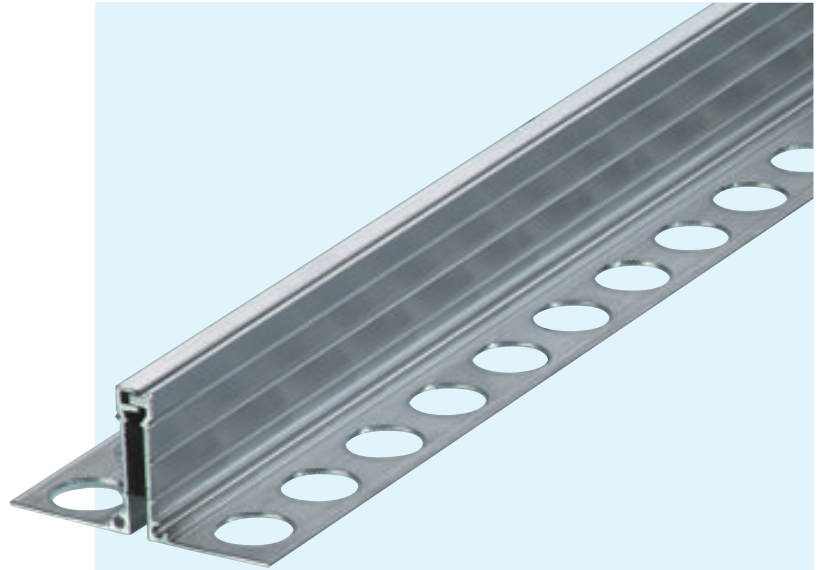
Additional intersections on request

SERIES ESF 10/... AL

FOR CONTRACTION JOINTS IN FLOORS WITH HIGH LOAD CAPACITY

MIGUTRANS

- **SOLID ALL METAL-PROFILE
(HARD WEARING, MAINTENANCE-FREE, LONG LASTING)**
- **INSTALLATION HEIGHT
FROM 15 MM UPWARDS**
- **SMALL VISIBLE SURFACE**



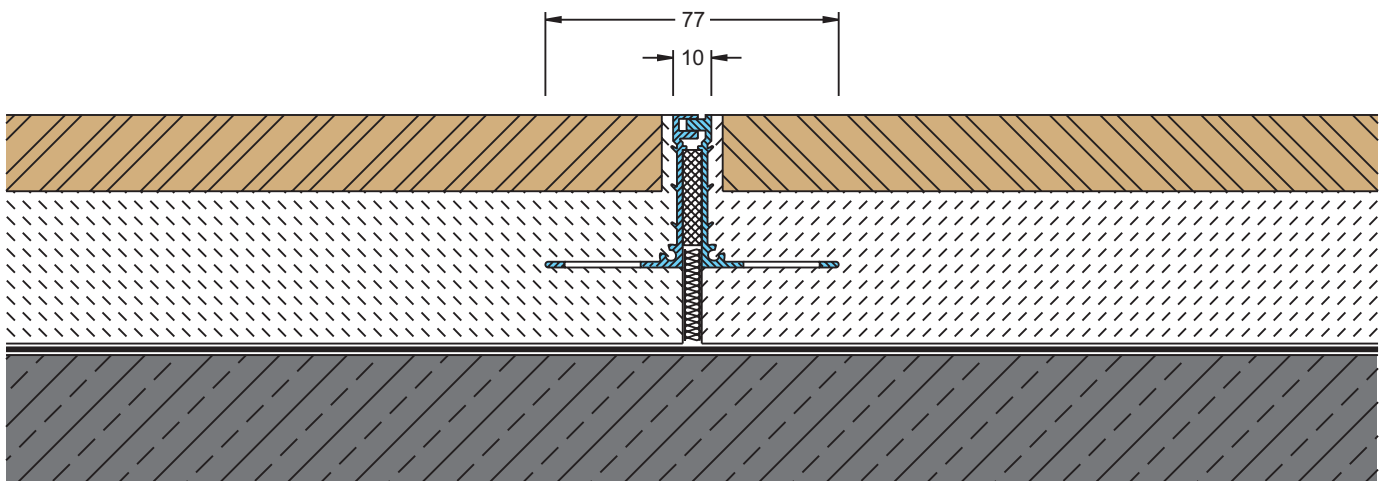
TECHNICAL DATA

Profile	Joint width max. mm	Total Movement mm	Visible Width of Profile mm	Total Width of Profile mm	Installation Height mm	Load capacity Lorries (DIN 1072) kN	Load capacity Fork lift trucks (DIN 1055) kN	Load capacity Solid plastic tyres kg/mm width of wheel
ESF 10/15 AL	10	4 ± 2	10	77	15	600	130	6,5
ESF 10/17 AL	10	4 ± 2	10	77	17	600	130	6,5
ESF 10/25 AL	10	4 ± 2	10	77	25	600	130	6,5
ESF 10/35 AL	10	4 ± 2	10	77	35	600	130	6,5
ESF 10/40 AL	10	4 ± 2	10	77	40	600	130	6,5
ESF 10/50 AL	10	4 ± 2	10	77	50	600	130	6,5
ESF 10/60 AL	10	4 ± 2	10	77	60	600	130	6,5

Material description, important notes and special properties = Page 2

Intersections = Page 35

Installation instruction = Page 36



ESF 10/40 AL

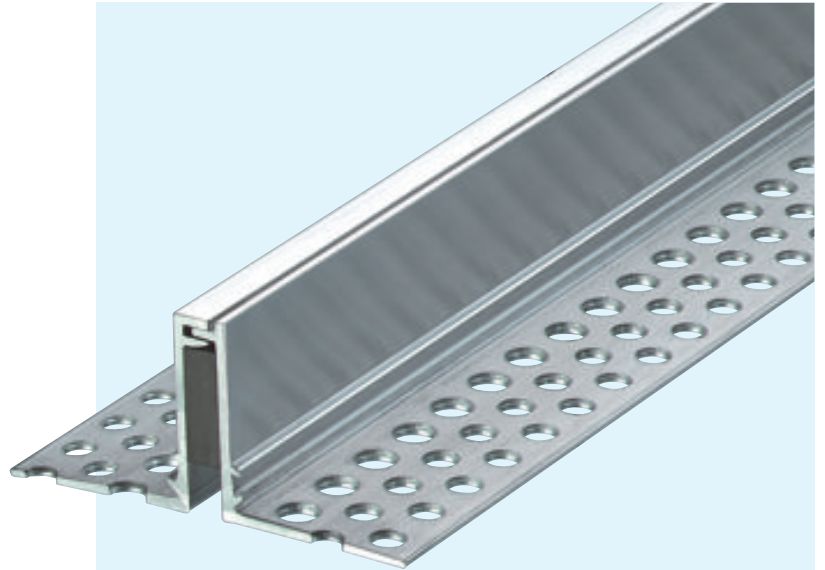
Scale 1 : 2

SERIES ESF 16/... AL

FOR CONTRACTION JOINTS IN FLOORS WITH HIGH LOAD CAPACITY

MIGUTRANS

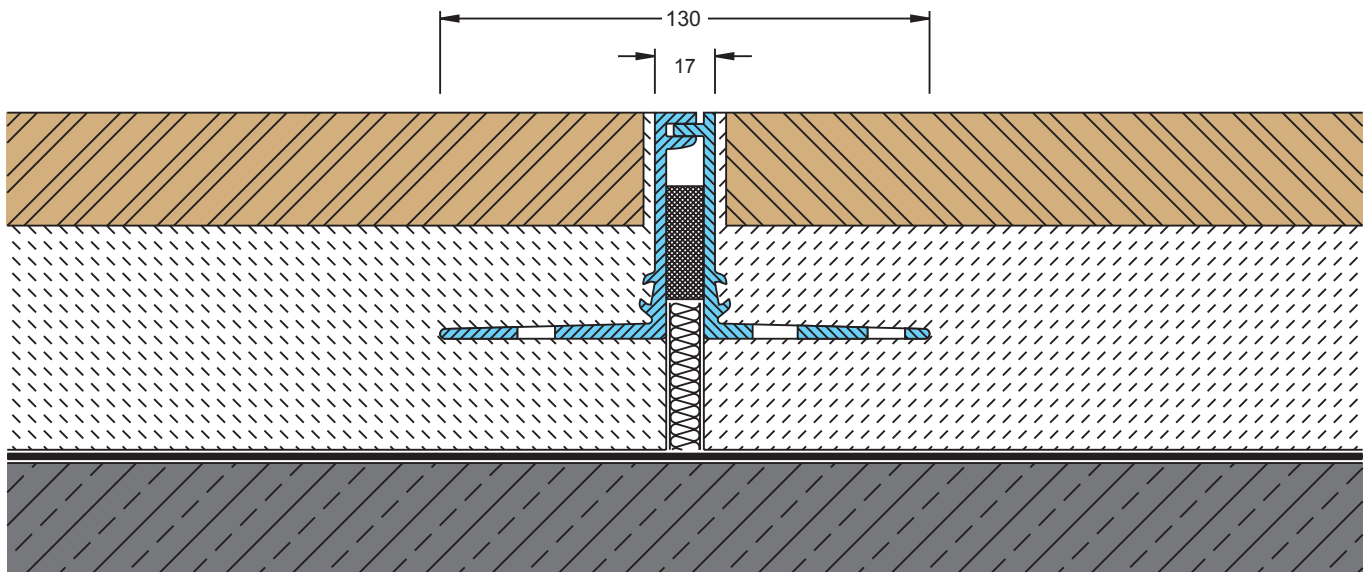
- **SOLID ALL METAL-PROFILE
(HARD WEARING, MAINTENANCE-FREE, LONG LASTING)**
- **HIGH LOAD CAPACITY**
- **MOVEMENT CAPACITY 6 MM**



TECHNICAL DATA

Profile	Joint width max. mm	Total Movement mm	Visible Width of Profile mm	Total Width of Profile mm	Installation Height mm	Load capacity Lorries (DIN 1072) kN	Load capacity Fork lift trucks (DIN 1055) kN	Load capacity Solid plastic tyres kg/mm width of wheel
ESF 16/35 AL	10	6 ± 3	17	130	35	600	130	8
ESF 16/45 AL	10	6 ± 3	17	130	45	600	130	8
ESF 16/60 AL	10	6 ± 3	17	130	60	600	130	8

Material description, important notes and special properties = Page 2
 Intersections = Page 35
 Installation instruction = Page 36



ESF 16/60 AL

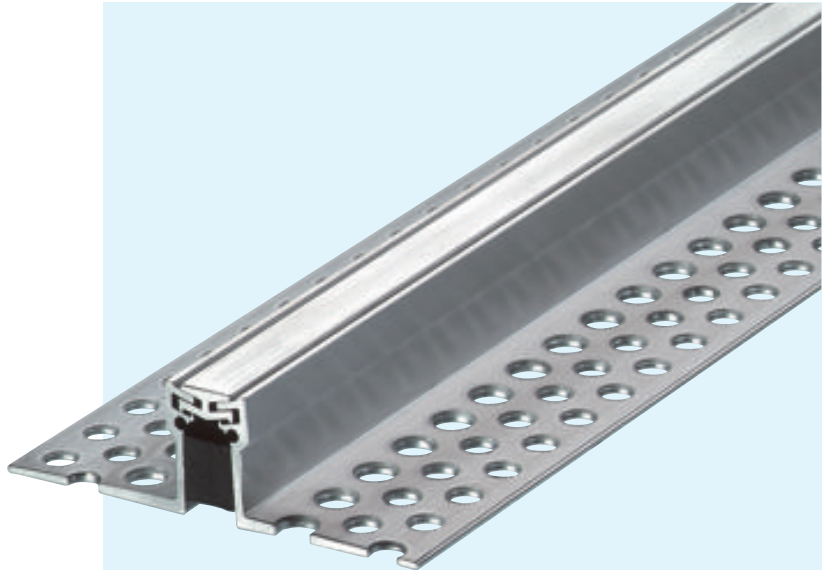
Scale 1 : 2

SERIES ESF 27/... AL

FOR CONTRACTION JOINTS IN FLOORS WITH HIGH LOAD CAPACITY

MIGUTRANS

- **SOLID ALL METAL-PROFILE
(HARD WEARING, MAINTENANCE-FREE, LONG LASTING)**
- **HIGH LOAD CAPACITY**
- **MOVEMENT CAPACITY 10 MM**



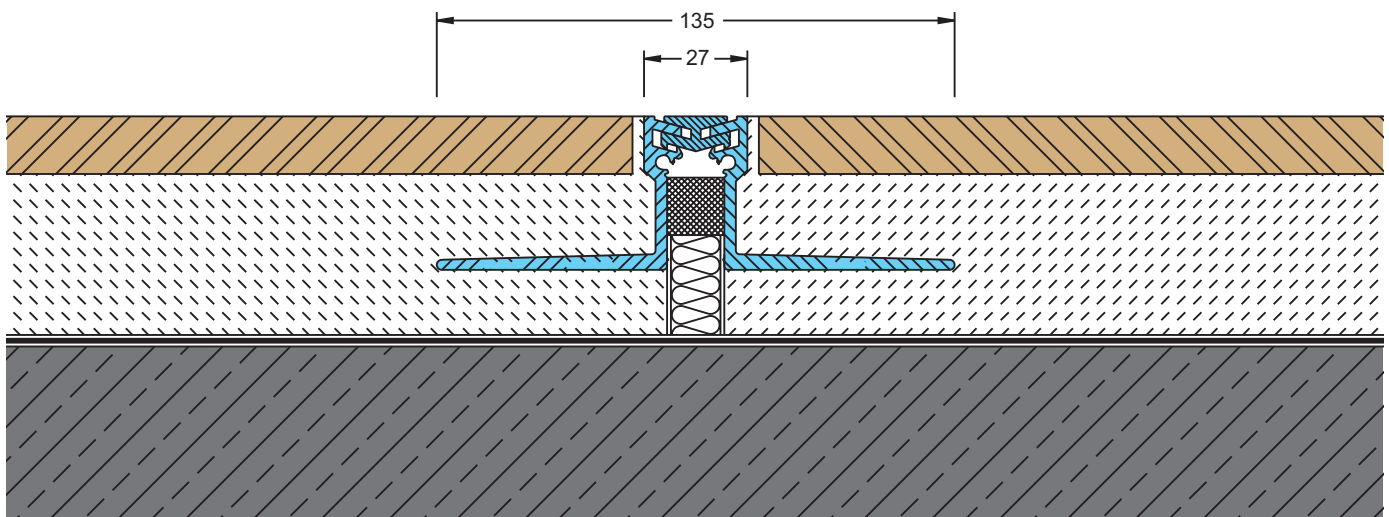
TECHNICAL DATA

Profile	Joint width max. mm	Total Movement mm	Visible Width of Profile mm	Total Width of Profile mm	Installation Height mm	Load capacity Lorries (DIN 1072) kN	Load capacity Fork lift trucks (DIN 1055) kN	Load capacity Solid plastic tyres kg/mm width of wheel
ESF 27/30 AL	15	10 ± 5	27	135	31	600	130	8
ESF 27/40 AL	15	10 ± 5	27	135	40	600	130	8
ESF 27/55 AL	15	10 ± 5	27	135	55	600	130	8

Material description, important notes and special properties = Page 2

Intersections = Page 35

Installation instruction = Page 36



ESF 27/40 AL

Scale 1 : 2

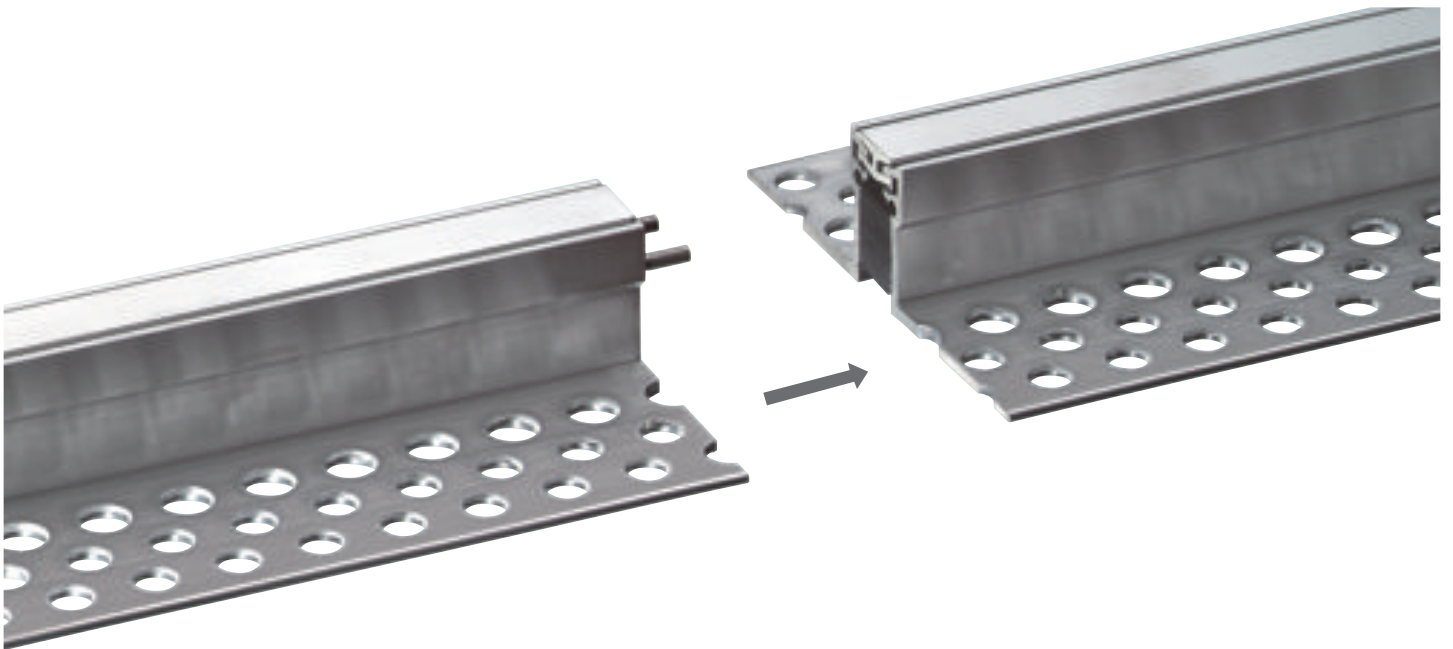
PROFILE CONNECTIONS

CONTRACTION JOINT SYSTEMS

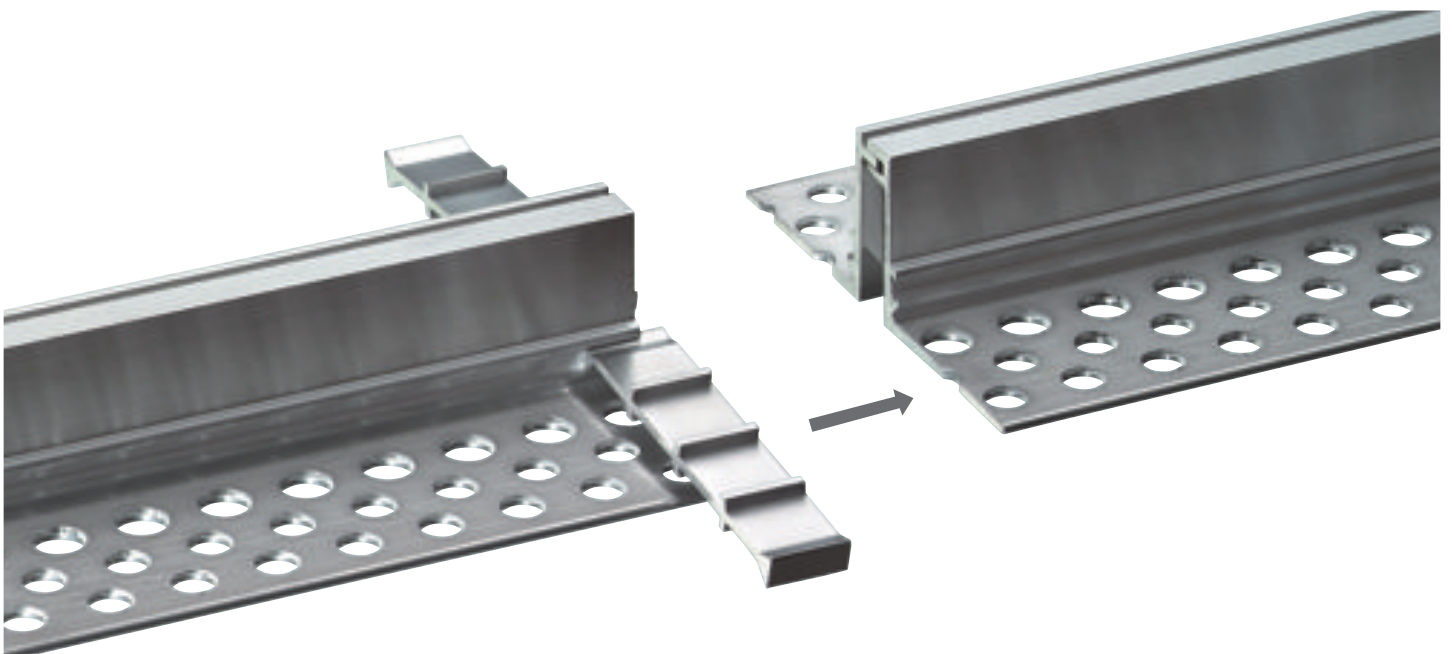
MIGUTRANS

The positive connection of the individual profile lengths is obtained by use of **slide-in connection pins**. (Series ESF 10/... and ESF 27/...) or by **staggering in slide-in anchors** in the individual aluminium profiles (Series ESF 16/...).

Example ESF 27/40 AL



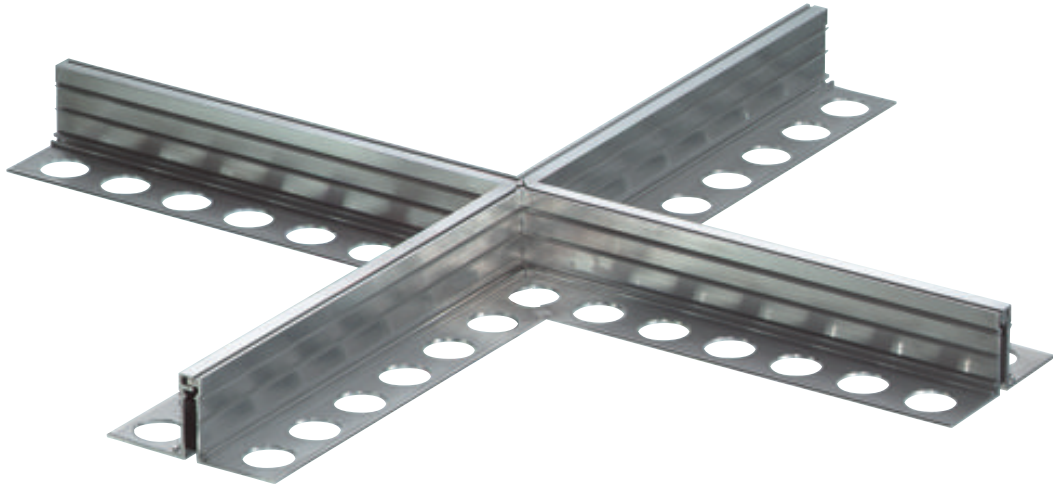
Example ESF 16/45 AL



INTERSECTIONS

EXAMPLES

MIGUTRANS



Additional intersections on request

INSTALLATION INSTRUCTION

EXPANSION JOINT SYSTEMS

MIGUTRANS

The profile will only full fill its function if it has been selected correctly, installed perfectly and if the joint width, joint movement and expected load have been considered.

To compensate for unevenness in the sub-base, an epoxy strip (approx. 100 mm wide) must be laid on the sub-base on both sides of the joint. Place the profile into the epoxy whilst still wet and tap gently into place until the desired level is achieved. Care must be taken that the mounting brackets are fully embedded and that there is no hollow space between them and the sub-base.

To achieve the requested resistance to pressure and a positive bond to the building, its is strictly necessary to use epoxy mortar for the bed beneath the perforated mounting bracket.

After the epoxy has hardened, the mounting brackets of the profile are to be fixed to the sub-base with suitable chemical anchors e.g. UPAT UKA 3M8. Care must be taken that the profile is absolutely straight, so that the screed, tiles or sheet flooring material will be perfectly flush with the edge of the profiles. Fixings are made at distances of approx. 300 mm.

The profiles are adjusted to the mid-point width by means of distance pieces in our works. The visible surface of the profiles is protected by adhesive tapes.

For the *one-piece anchorage units*, **positive connection** of the individual profile lengths is obtained by use of *slide-in connection pins*.

A *two-piece anchorage unit*, this connection is obtained by *staggering the joints in the individual aluminium profiles*. (See page 25)

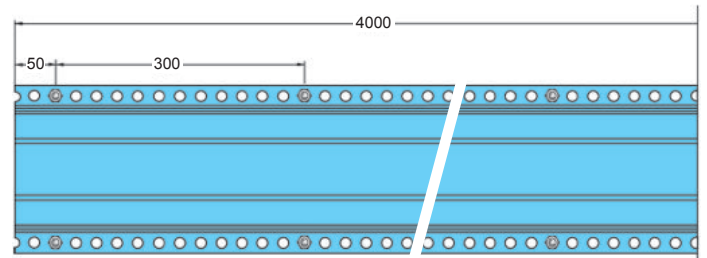
If the profiles are installed in magnesite floors, those parts of the aluminium in contact with the magnesite must be protected by painting with for instance bitumen-epoxy-paint.

The same protection is necessary in areas where moisture is to be expected.

After having fixed the aluminium mounting brackets to the sub-base, the distance pieces must be removed.

Due to the asymmetric design of the visible parts of the profiles of series FS 50/..., FS 75/..., FS 110/..., FS 130/..., FS 160/..., FS 155/..., FS 185/..., FSV 235/... and FSV 280/..., it is essential that these profiles are installed with the same orientation.

(The profiles are marked by appropriate labels in our works for that purpose). Furthermore, it is important that the butt joints of the individual lengths are executed perfectly to obtain a satisfactory appearance.



Distance of fixing

INSTALLATION INSTRUCTION

CONTRACTION JOINT SYSTEMS

A joint filler strip must be placed between the aluminium mounting brackets. This joint filler is not included in our delivery. Series ESF 10/... = 5 mm, Series ESF 16/... = 10 mm, Series ESF 27/... = 15 mm joint filler.

The height of the joint filler depends on the overall height required, but it must be sufficient to ensure that the screed

completely separated at the joint locations.

Before installing the profiles, it has to be insured, that the mounting brackets are absolutely clean and grease/oil free. The perforated legs of the profile are pressed into the first fresh layer of mortar or screed and levelled.

Then more screed has to be applied.



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MIGUTRANS
HEAVY DUTY EXPANSION JOINT SYSTEMS

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WATERTIGHT EXPANSION JOINT SYSTEMS

MIGUPREN
WATERTIGHT CORRUGATED JOINT SYSTEMS FOR FLAT ROOFS

MIGUNOX
SOLID STAINLESS STEEL / STEEL HEAVY DUTY SYSTEMS



WORLDWIDE

More than 10 million metres of our profiles have been performing for decades to the complete satisfaction of Architects, Builders and Owners.

Our selected Representatives and Partners all over the world – backed by our Export and Engineering Departments in Germany – give best advice and solutions for standard, special and unique situations.

MIGUA – over 50 years experience in manufacture and supply of expansion joint systems – regarded as market leaders throughout Europe.

Please contact us to discuss your requirements and to obtain samples for evaluation.

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