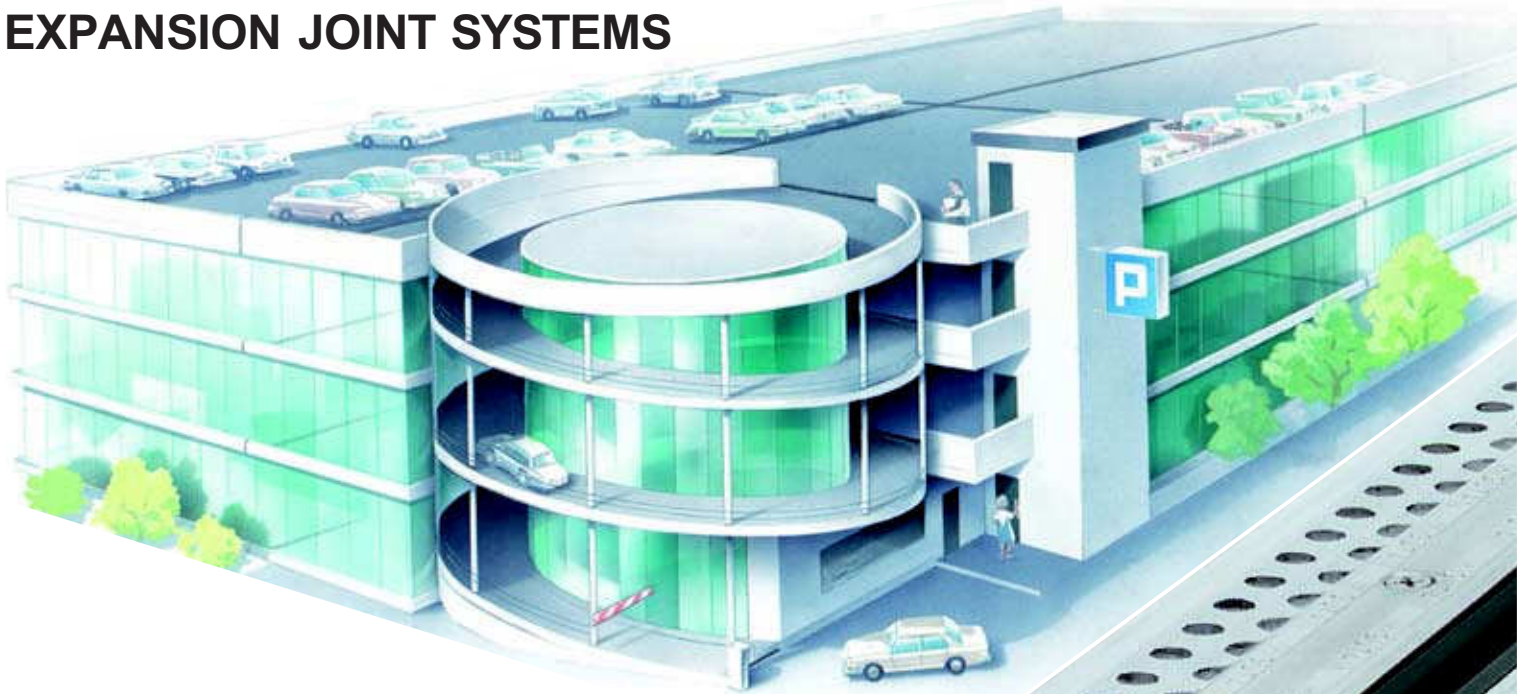




MIGUTAN WATERTIGHT EXPANSION JOINT SYSTEMS



MULTI-DIRECTIONAL MOVEMENT
VEHICULAR TRAFFIC
HIGH LOADING



MIGUA®

MIGUA 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.

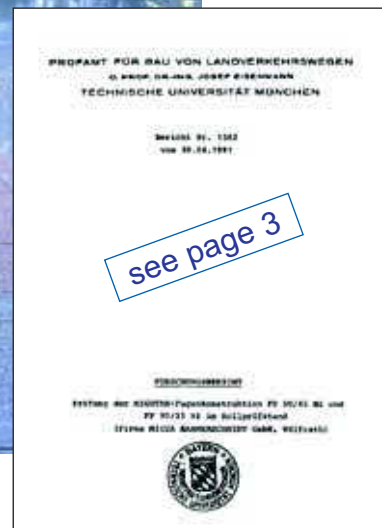
Over 10 million metres of profiles have performed to the requirements of Architects, Builders and Owners throughout decades of use and complete satisfaction.

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 you do need a profile from our standard program or a special construction.

Several certificates about e.g. waterproofing, 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.



see page 3

Our advice as to installation examples 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.

INDEX

CATALOGUE No. 3

MIGUTAN

SUBJECT	DESCRIPTION	PAGE
PRODUCT DESCRIPTION		2
TEST		3
THE SYSTEM		4-5
MIGUTAN-EXPANSION JOINT SYSTEMS WITH LONG AAS-SHEETS FOR BITUMINOUS SEALING		
SERIES FP 80/...NI	SMALL VISIBLE SURFACE	6
SERIES FPG 90/...NI	SMOOTH INSERT, FOR INCREASED HYGIENIC REQUIREMENTS	7
SERIES FP 90/...NI, FP 110/...NI	STANDARD-PROFILES	8-9
SERIES FP 115/...NI, FP 155/...NI	LARGE MOVEMENTS	10-11
SERIES FP.../6000 S NI	HEAVY LOADS, HEAVY DUTY VEHICLES	12
MIGUTAN-EXPANSION JOINT SYSTEMS FOR FLEXIBLE WATERPROOFING SLURRY		
SERIES MIGUTRIX FP .../... NI XA	FOR CONNECTION TO LIQUID MEMBRANES	13
MIGUTAN-EXPANSION JOINT SYSTEMS WITH SHORT AAS-SHEETS FOR FLOORS WITH COATINGS		
SERIES FP 80/...NI	SMALL VISIBLE SURFACE	14
SERIES FPG 90/...NI	SMOOTH INSERT, FOR INCREASED HYGIENIC REQUIREMENTS	15
SERIES FP 90/...NI, FP 110/...NI	STANDARD-PROFILES	16-17
SERIES FP 115/...NI, FP 155/...NI	LARGE MOVEMENTS	18-19
SERIES FP.../6000 S NI	HEAVY LOADS, HEAVY DUTY VEHICLES	20
INSTALLATION WITH AAP 50/20	EXAMPLE: PROFILE FP 90/25 NI	21
MIGUTAN-EXPANSION JOINT SYSTEMS FOR FLUSH INSTALLATION IN CONCRETE DECKS		
SERIES FP .../90 B NI	PROFILE VARIANT	22-23
INSTALLATION METHODS / USAGE AAP 50/20	EXAMPLE: PROFILE FP 90/90 B NI WITH ANCHOR RODS	24
PROFILE CONNECTIONS		25
COLUMN- / WALL-CONNECTIONS		26-28
INSTALLATION EXAMPLES	COVER PLATES	29
	COMBINED PROFILES	30
	SMALL HEIGHTS	31-32
	EXTREMELY WIDE JOINTS	32
	VEHICLES WITH SOLID WHEELS	33
	LARGE HEIGHTS	34-35
	INSITU-CONCRETE	36
	FLEXIBLE WATERPROOFING SLURRY	
	ALTERNATIVE SEALING / LIQUID MEMBRANE	37
	EXTREMELY WIDE JOINTS, LARGE MOVEMENTS	38-39
TERMINATIONS / INTERSECTIONS		40-45
TRANSITIONS		46-47
EXAMPLES		48-49

Our Catalogue No. 2 – **MIGUTRANS** – Expansion Joint Systems - informs you on **all-metal** systems to be used by fork lift trucks and pallet trucks.
Please order on request.

WATERTIGHT EXPANSION JOINT SYSTEMS

IN ACCORDANCE WITH DIN 18195 (for sealing against non-pressing water) WITH INTERCHANGEABLE SEALING INSERT

MIGUTAN

TEST CERTIFICATE

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

QUALITY

The profiles have been used for more than 25 years (Car parks, multi-storey car parks, garages, kitchen, swimming pool areas, etc.).

A large number of reference projects can be provided.

IMPORTANT NOTES

We ensure a perfect fit by taking measurement on site (complete systems including all intersections, transitions and connections will be done in our works).

Due to its low installation height, the height 25 mm should not be used in connection with asphalt.

Due to the shape of the central insert the following minimum joint widths have to be considered:

FP 110/25 Ni = 50 mm
FP 115/25 Ni and FP 115/35 Ni = 55 mm
FP 115/...Ni with height less than 80 mm = 95 mm

For the fixing of the profile height 35 mm in connection with long AAS-sheets, countersunk head screws MMS-F 7,5 x 80 have to be used (page 32). Distance between screws approx. 300 mm.

Fixing with a distance of approx. 300 mm has to be used for the following profiles:

FP 80/25 Ni with short AAS-sheets (see page 14)
Series FP .../6000 S Ni (see page 12 + 20)

For all other profiles the distance for the fixing is 350 mm.

Vertical movements cannot be absorbed, if stainless steel cover plates are used.

If the MIGUTAN profiles are used in swimming pool areas special stainless steel alloys are necessary, due to the chloric resistance (surcharge compared to standard version). Such usage has to be mentioned in all specification and inquiries.

Colour of MIGUFLEX-sealing inserts and AAS-sheets: black.

TYPICAL USES

Car parks, multi-storey car parks, garages, swimming pool areas, kitchen, pedestrian bridges, ramps.

MATERIAL

Aluminium side plates with striated aluminium mounting brackets, flexible sealing insert and long or short side sealing sheets (AAS-sheets) or fibre fabric bonded sheets on both sides. AAS-sheets are made of quality MIGUFLEX, which is non-abrasive, weather resistant, resistant against salt as well as good resistant against waste water (hydrogen sulphide, microbes, bacteria). The AAS-sheets can be used with hot bitumen.

2,5 mm thick stainless steel cappings, fixed by screws, provide protection for the parts of the system remaining visible and exposed after installation. These capping sections will simultaneously apply the required pressure upon the sealing insert and AAS-sheets.

SPECIAL PROPERTIES

Flexible sealing insert is watertight-weldable, resistant to weather, benzene, fuel, oil and salt. The insert has a double-web to provide multilayered protection against water leakage.

The central sealing insert is interchangeable (even after installation) without disrupting the surface.

The central sealing insert on the top surface ensures an impermeable barrier against moisture and salt.

Watertightness is provided by continuous sealing elements for the whole joint system.

The profiles are provided with 300 mm wide AAS-sheets on both sides, which are striated to provide best possible connection with the sealing layer to give a watertight connection in different sealing systems acc. to DIN 18195 (e.g.: bituminous sealing, etc.).

Stainless steel cappings are striated to provide skid resistance.

The stainless steel cappings are secured to the top of the profile with screws tightened to 7 Nm torque to provide continuous constant pressure.

It is possible to fabricate intersections and transitions for the most complicated joint systems.

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

Optimum aesthetic design of the individual components - large joint width, small visible width and large movement/load capacity.

TEST

EXPANSION JOINT SYSTEMS

MIGUTAN

RESEARCH REPORT

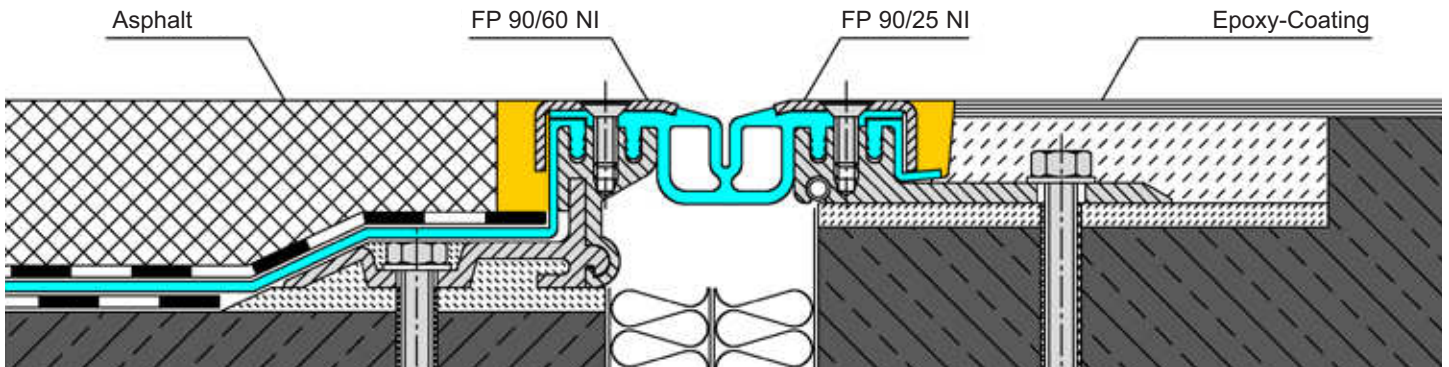
We commissioned the testing department of the construction of national traffic routes of the TU Munich to carry out a suitability test with our MIGUTAN Expansion Joint Systems FP 90/45 NI and FP 90/25 NI.

The test was relevant to watertightness under repeated loads and different joint widths and was carried out on a testing stand.

TEST SPECIMEN

The specimen for the test consisted of two concrete slabs, onto which a combination profile, comprising FP 90/45 NI in connection with asphalt on one side and FP 90/25 NI in connection with epoxy coating on the other side, was mounted.

The aluminium side plates were then screwed to the concrete slabs, and after the sealing insert had been pressed into the side plates, the 2,5 mm thick stainless steel capping sections were screwed to the basic aluminium sections.



TEST PROCEDURE

The test specimen was mounted into the testing stand and subsequently pushed forward and backward under two single wheels, at a rolling speed of approx. 1 km/h, over a total rolling path of 500 mm in length. These conditions create an increased stress to both the profile system and the surrounding surface. To simulate the relevant track distribution in normal circumstances, continuous shifts ± 2 cm in transverse direction were made during the approx. 30 no. longitudinal passages.

To simulate light trucks, the twin tyres were changed to single tyres, the axle load was set to 50 kN and the tyre inflation pressure to 8,0 bar. Two test were determined.

Test phase no. 1:

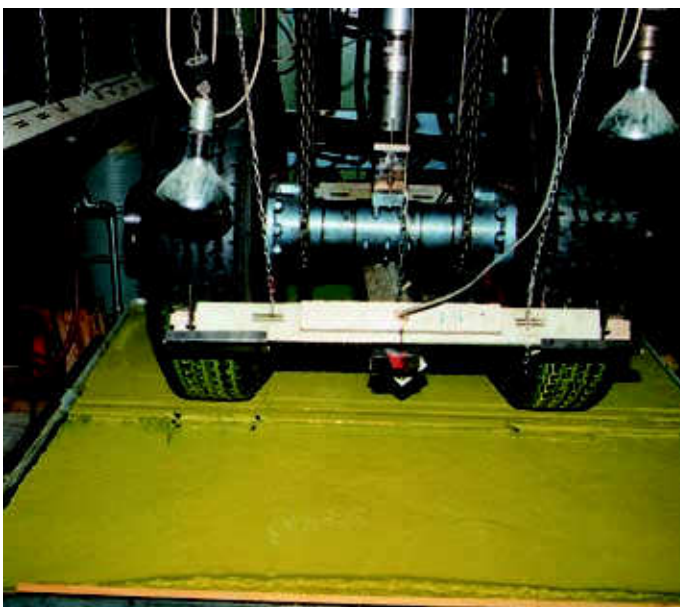
Joint width = 0 mm (normal position) 60.000 passages at room temperature, under an axle load of 50 kN and a tyre inflation pressure of 8,0 bar.

Test phase no. 2:

Joint width = + 20 mm (position in winter) 60.000 passages, under an axle load of 50 kN and a tyre inflation pressure of 8,0 bar.

At the end of each test phase, the surface of the test specimen was submerged in water in order to test watertightness.

TEST RESULTS



Test phase no. 1:

Even after a total of 65.000 passages, no evidence of water colouration and thus leakage, could be found at the underside of the joint (which was visible from the side).

Test phase no. 2:

A further 77.000 passages were made and after approx. 142.000 load changes with a joint width of 0 mm and + 20 mm, no evidence of water leakage could be found.

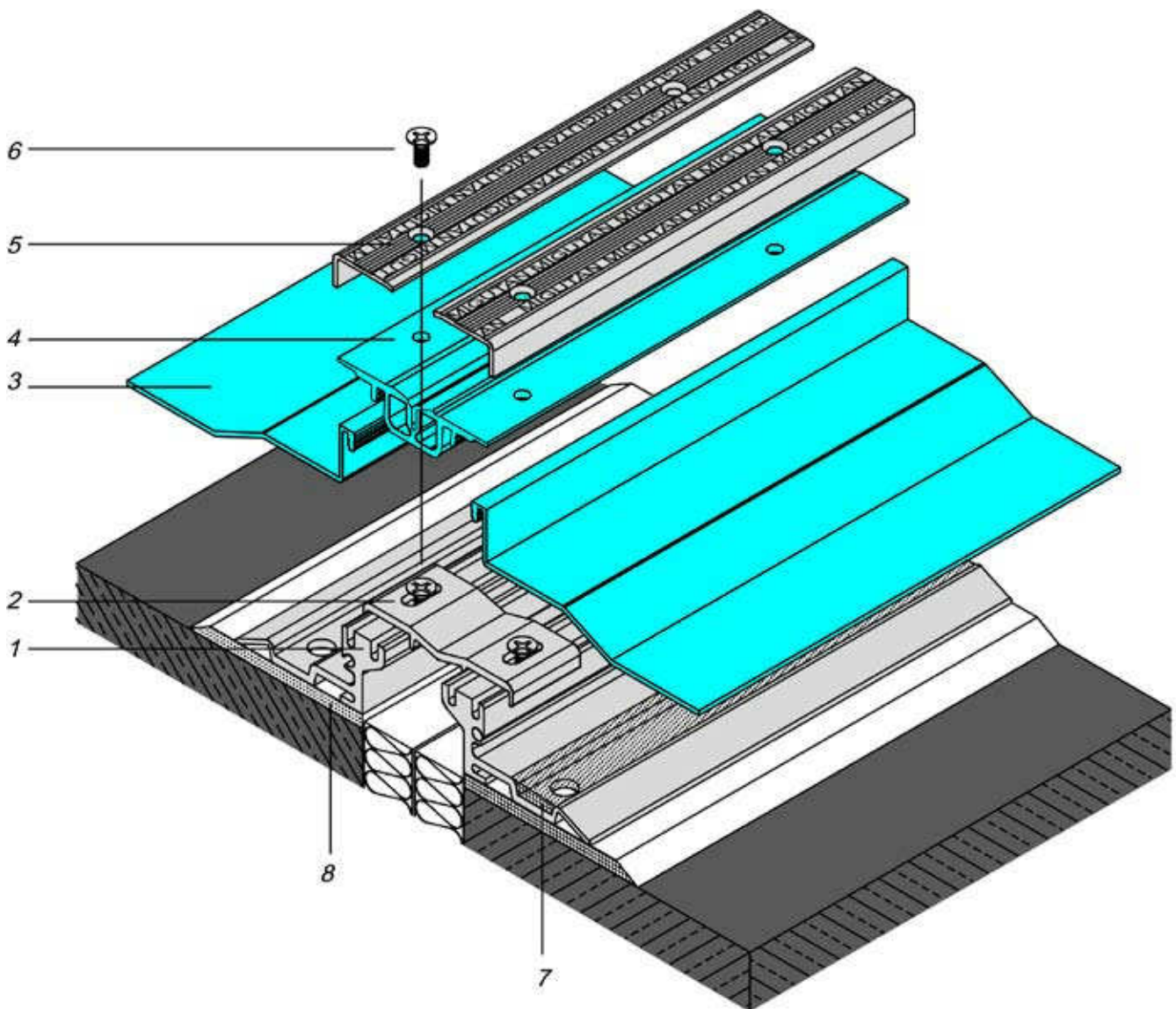
Summary: The load tests showed that the two aluminium side plates, FP 90/45 NI and FP 90/25 NI, are both watertight and of sufficient dimension for frequent passage by axle loads of 50 kN and tyre inflation pressure of 8,0 bar.

Watertight test
after termination of test phase no. 2
(142.000 load changes)

THE SYSTEM

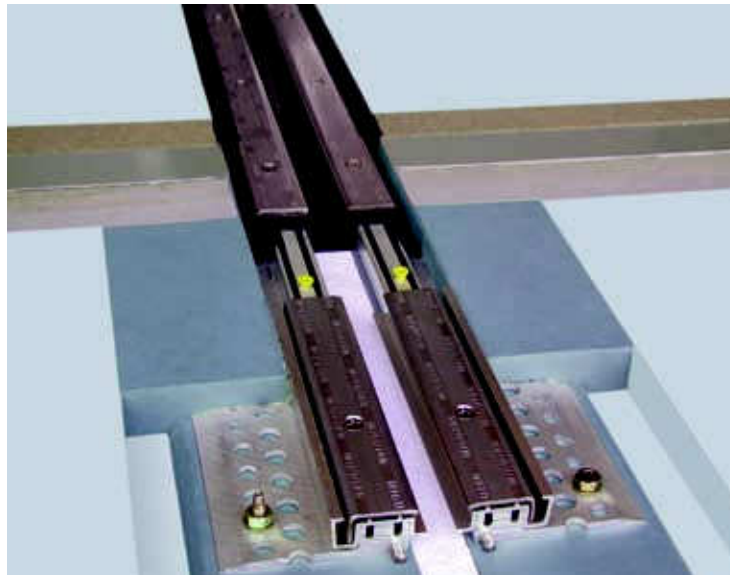
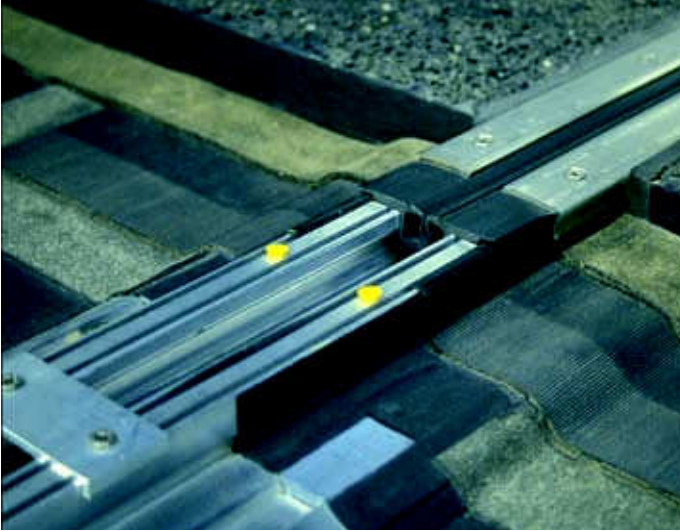
MIGUTAN

- 1 = Aluminium mounting bracket
- 2 = Spacer
- 3 = MIGUFLEX AAS-sheets
- 4 = MIGUFLEX sealing insert
- 5 = Stainless steel capping
- 6 = Stainless steel cross recessed countersunk head screws
- 7 = Epoxy mortar
- 8 = Epoxy mortar



THE SYSTEM

MIGUTAN

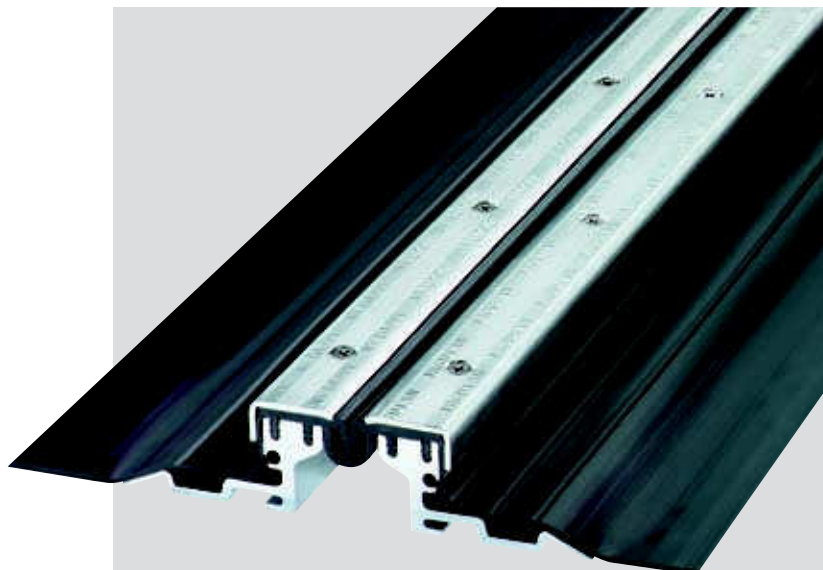


SERIES FP 80/... NI

WITH LONG AAS-SEALING SHEETS FOR BITUMINOUS SEALING

MIGUTAN

- **WATERTIGHT
(OFFICIAL TEST CERTIFICATE)**
- **SEALING ON TOP OF SURFACE**
- **CENTRAL INSERT IS INTER-
CHANGEABLE AT ANY TIME**
- **SMALL VISIBLE SURFACE**



TECHNICAL DATA

Profile	Joint width max. mm	Total movement mm	Visible width of profile	Total width of profile	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
FP 80/25 NI	45	20 ± 10	82	209	25	–	–	–
FP 80/35 NI	45	20 ± 10	82	209	35	600	130	6,5
FP 80/45 NI	45	20 ± 10	82	198	46	300	70	not allowed
FP 80/60 NI	45	20 ± 10	82	209	60	300	30	not allowed
FP 80/80 NI	45	20 ± 10	82	209	81	120	30	not allowed
FP 80/95 NI	45	20 ± 10	82	209	97	60	not allowed	not allowed
FP 80/115 NI	45	20 ± 10	82	209	117	60	not allowed	not allowed

Profiles with an installation height from 60 mm upwards can be adjusted to higher load capacity. Please ask for our advice.

Material description, important notes and special properties = Page 2

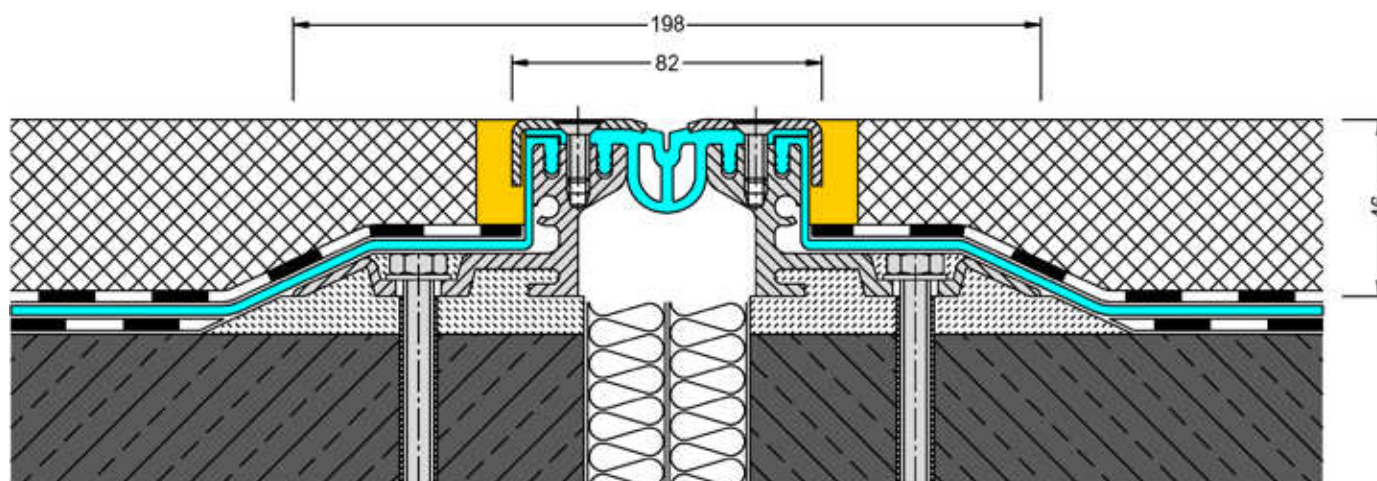
Larger heights = Page 34–35

Column-/Wall-connections = Page 26–28

Terminations/Intersections = Page 40–45

Stainless Steel Cover Plates = Page 29

Further usage = Page 30–39



FP 80/45 NI

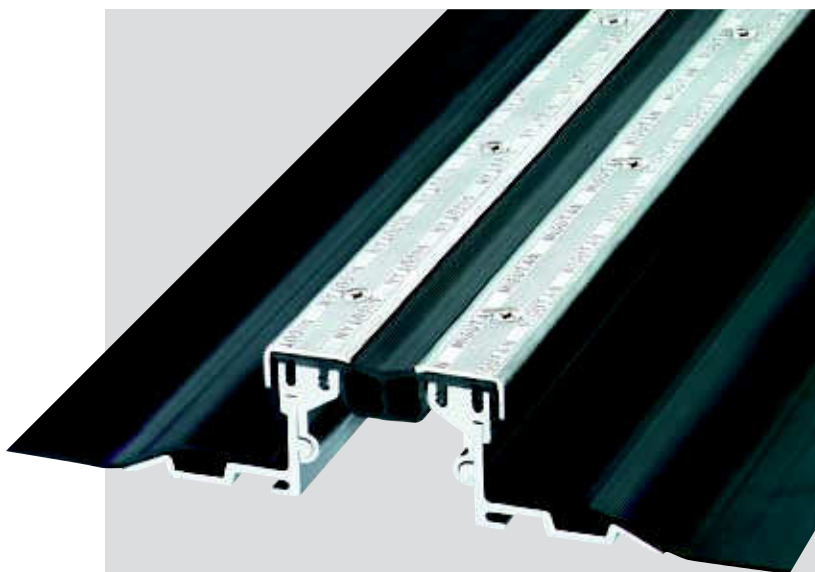
Scale 1 : 2

SERIES FPG 90/... NI

WITH LONG AAS-SEALING SHEETS FOR BITUMINOUS SEALING

MIGUTAN

- **WATERTIGHT
(OFFICIAL TEST CERTIFICATE)**
- **SEALING ON TOP OF SURFACE**
- **CENTRAL INSERT IS INTER-
CHANGEABLE AT ANY TIME**
- **WITH SMOOTH INSERT
FOR INCREASED HYGIENIC
REQUIREMENTS**



TECHNICAL DATA

Profile	Joint width max. mm	Total movement mm	Visible width of profile	Total width of profile	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
FPG 90/ 25 NI	60	20 ± 10	95	222	25	–	–	–
FPG 90/ 35 NI	60	20 ± 10	95	222	35	600	130	not allowed
FPG 90/ 45 NI	60	20 ± 10	95	211	46	300	70	not allowed
FPG 90/ 60 NI	60	20 ± 10	95	222	60	300	30	not allowed
FPG 90/ 80 NI	60	20 ± 10	95	222	81	120	30	not allowed
FPG 90/ 95 NI	60	20 ± 10	95	222	97	60	not allowed	not allowed
FPG 90/115 NI	60	20 ± 10	95	222	117	60	not allowed	not allowed

Profiles with an installation height from 60 mm upwards can be adjusted to higher load capacity. Please ask for our advice.

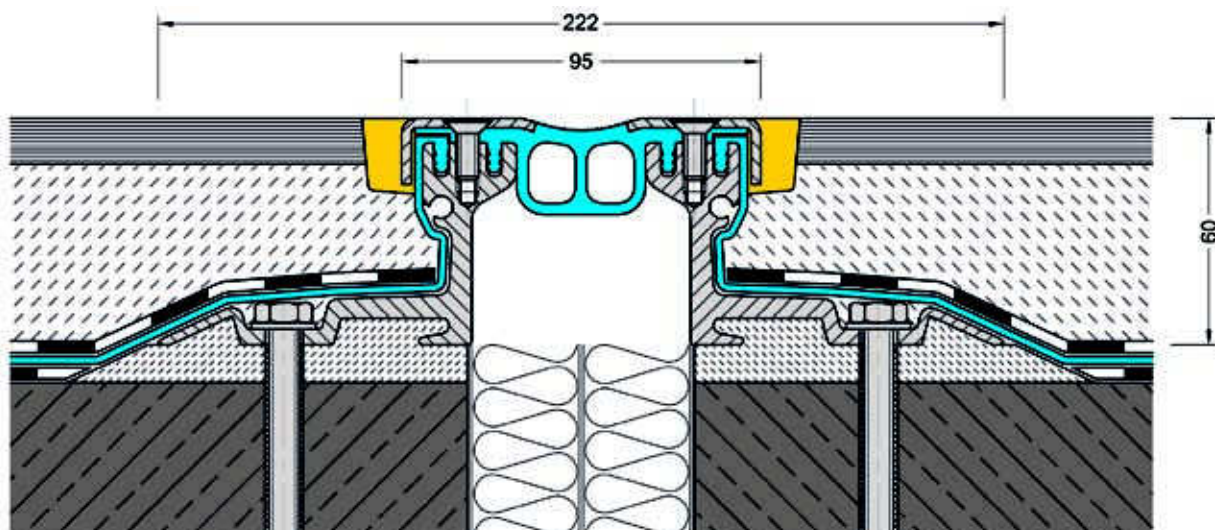
Material description, important notes and special properties = Page 2

Larger heights = Page 34–35

Column-/Wall-connections = Page 26–28

Terminations/Intersections = Page 40–45

Further usage = Page 30–39



FPG 90/60 NI

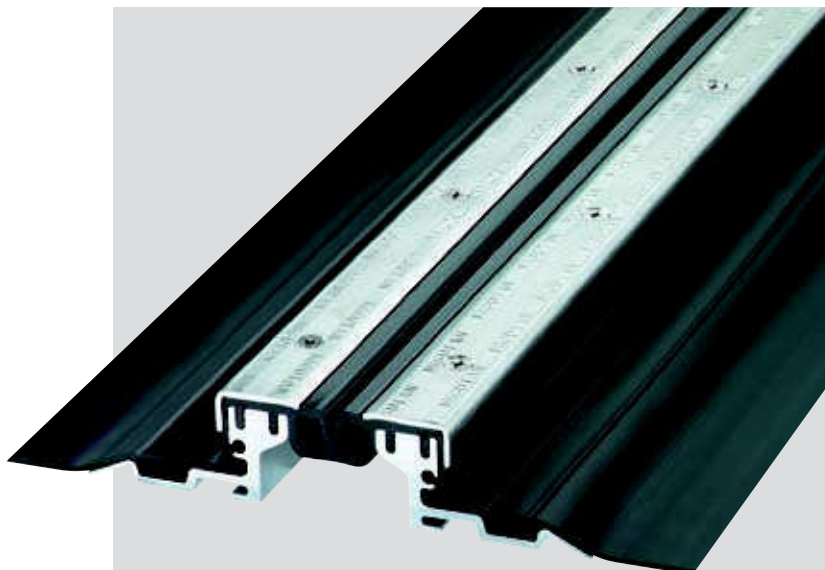
Scale 1 : 2

SERIES FP 90/... NI

WITH LONG AAS-SEALING SHEETS FOR BITUMINOUS SEALING

MIGUTAN

- **WATERTIGHT
(OFFICIAL TEST CERTIFICATE)**
- **SEALING ON TOP OF SURFACE**
- **CENTRAL INSERT IS INTER-
CHANGEABLE AT ANY TIME**
- **MOVEMENT CAPACITY 40 MM**
- **FOR JOINT WIDTHS UP TO 60 MM**



TECHNICAL DATA

Profile	Joint width max. mm	Total movement mm	Visible width of profile	Total width of profile	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
FP 90/ 25 NI	60	40 ± 20	95	222	25	–	–	–
FP 90/ 35 NI	60	40 ± 20	95	222	35	600	130	4,3
FP 90/ 45 NI	60	40 ± 20	95	211	46	300	70	not allowed
FP 90/ 60 NI	60	40 ± 20	95	222	60	300	30	not allowed
FP 90/ 80 NI	60	40 ± 20	95	222	81	120	30	not allowed
FP 90/ 95 NI	60	40 ± 20	95	222	97	60	not allowed	not allowed
FP 90/115 NI	60	40 ± 20	95	222	117	60	not allowed	not allowed

Profiles with an installation height from 60 mm upwards can be adjusted to higher load capacity. Please ask for our advice.

Material description, important notes and special properties = Page 2

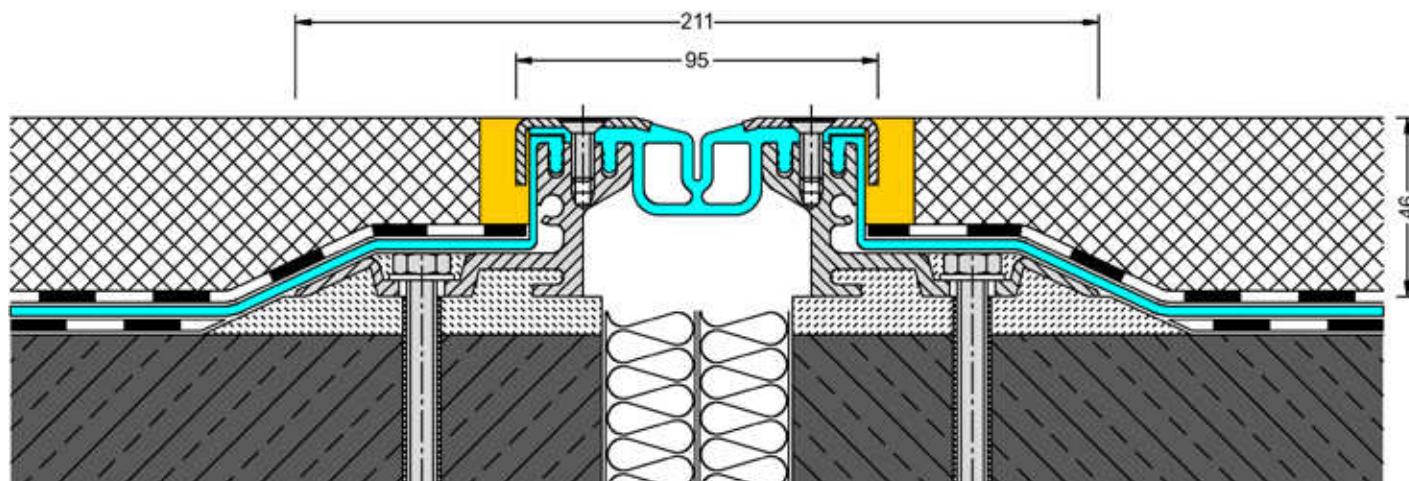
Larger heights = Page 34–35

Column-/Wall-connections = Page 26–28

Terminations/Intersections = Page 40–45

Stainless Steel Cover Plates = Page 29

Further usage = Page 30–39



FP 90/45 NI

Scale 1 : 2

SERIES FP 110/... NI

WITH LONG AAS-SEALING SHEETS FOR BITUMINOUS SEALING

MIGUTAN

- **WATERTIGHT
(OFFICIAL TEST CERTIFICATE)**
- **SEALING ON TOP OF SURFACE**
- **CENTRAL INSERT IS INTER-
CHANGEABLE AT ANY TIME**
- **MOVEMENT CAPACITY 60 MM**
- **FOR JOINT WIDTHS UP TO 75 MM**



TECHNICAL DATA

Profile	Joint width max. mm	Total movement mm	Visible width of profile	Total width of profile	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
FP 110/ 25 NI	75	60 ± 30	111	238	25	–	–	–
FP 110/ 35 NI	75	60 ± 30	111	238	35	600	130	not allowed
FP 110/ 45 NI	75	60 ± 30	111	227	46	300	70	not allowed
FP 110/ 60 NI	75	60 ± 30	111	238	60	300	30	not allowed
FP 110/ 80 NI	75	60 ± 30	111	238	81	120	30	not allowed
FP 110/ 95 NI	75	60 ± 30	111	238	97	60	not allowed	not allowed
FP 110/115 NI	75	60 ± 30	111	238	117	60	not allowed	not allowed

Profiles with an installation height from 60 mm upwards can be adjusted to higher load capacity. Please ask for our advice.

Material description, important notes and special properties = Page 2

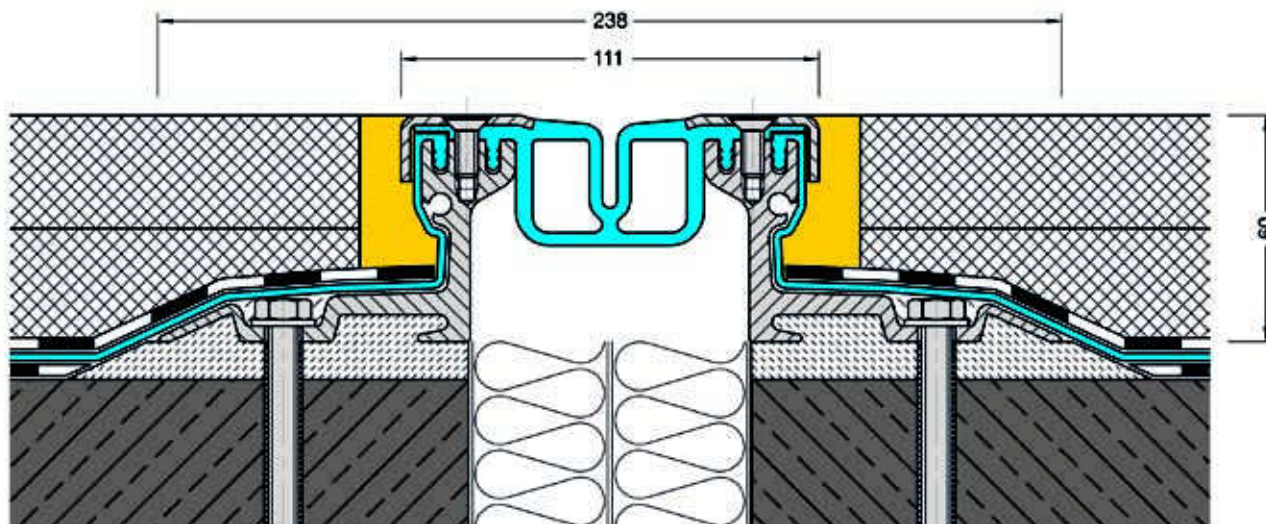
Larger heights = Page 34–35

Column-/Wall-connections = Page 26–28

Terminations/Intersections = Page 40–45

Stainless Steel Cover Plates = Page 29

Further usage = Page 30–39



FP 110/60 NI

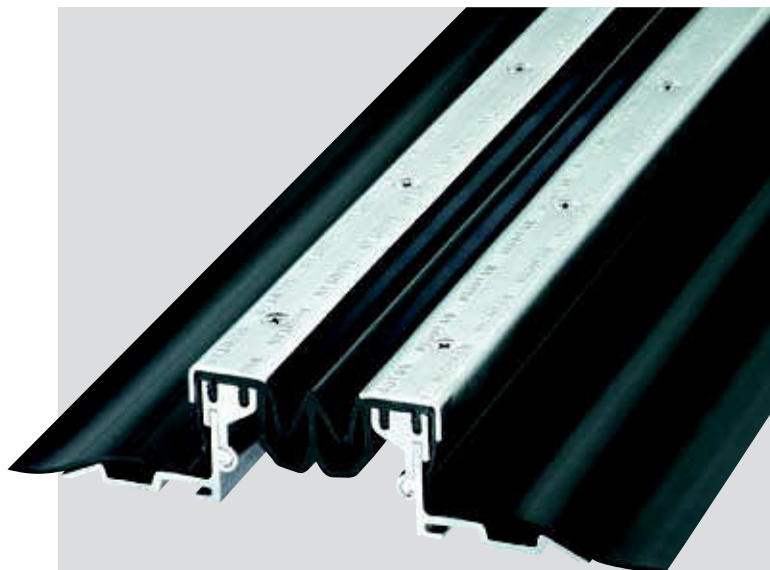
Scale 1 : 2

SERIES FP 115/... NI

WITH LONG AAS-SEALING SHEETS FOR BITUMINOUS SEALING

MIGUTAN

- **WATERTIGHT
(OFFICIAL TEST CERTIFICATE)**
- **SEALING ON TOP OF SURFACE**
- **CENTRAL INSERT IS INTER-
CHANGEABLE AT ANY TIME**
- **MOVEMENT CAPACITY 80 MM**
- **FOR JOINT WIDTHS UP TO 80 MM**



TECHNICAL DATA

Profile	Joint width max. mm	Total movement mm	Visible width of profile	Total width of profile	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
FP 115/ 25 NI	80	80 + 50/-30	115	242	25	—	—	—
FP 115/ 35 NI	80	80 + 50/-30	115	242	35	600	130	not allowed
FP 115/ 45 NI	80	80 + 50/-30	115	231	46	300	70	not allowed
FP 115/ 60 NI	80	80 + 50/-30	115	242	60	300	30	not allowed
FP 115/ 80 NI	80	80 + 50/-30	115	242	81	120	30	not allowed
FP 115/ 95 NI	80	80 + 50/-30	115	242	97	60	not allowed	not allowed
FP 115/115 NI	80	80 + 50/-30	115	242	117	60	not allowed	not allowed

Profiles with an installation height from 60 mm upwards can be adjusted to higher load capacity. Please ask for our advice.

Material description, important notes and special properties = Page 2

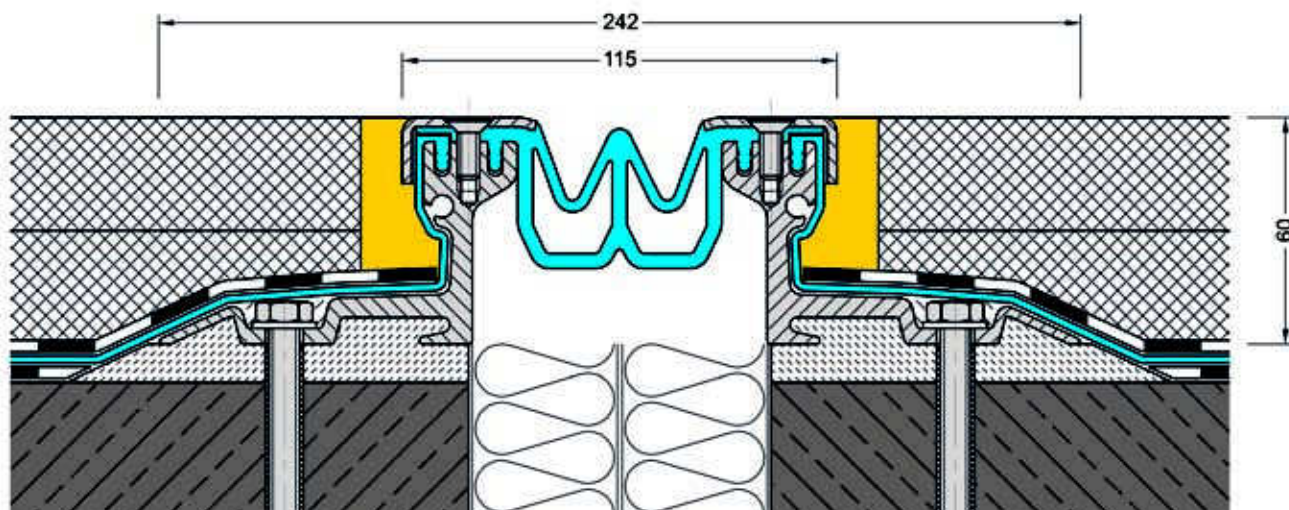
Larger heights = Page 34–35

Column-/Wall-connections = Page 26–28

Terminations/Intersections = Page 40–45

Stainless Steel Cover Plates = Page 29

Further usage = Page 30–39



FP 115/60 NI

Scale 1 : 2

SERIES FP 155/... NI

WITH LONG AAS-SEALING SHEETS FOR BITUMINOUS SEALING

MIGUTAN

- **WATERTIGHT
(OFFICIAL TEST CERTIFICATE)**
- **SEALING ON TOP OF SURFACE**
- **CENTRAL INSERT IS INTER-
CHANGEABLE AT ANY TIME**
- **MOVEMENT CAPACITY 120 MM**
- **FOR JOINT WIDTHS UP TO 120 MM**



TECHNICAL DATA

Profile	Joint width max. mm	Total movement mm	Visible width of profile	Total width of profile	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
FP 155/ 25 NI	120	120 ± 60	155	282	25	–	–	–
FP 155/ 35 NI	120	120 ± 60	155	282	35	120	35	not allowed
FP 155/ 45 NI	120	120 ± 60	155	271	46	60	35	not allowed
FP 155/ 60 NI	120	120 ± 60	155	282	60	35	35	not allowed
FP 155/ 80 NI	120	120 ± 60	155	282	81	35	35	not allowed
FP 155/ 95 NI	120	120 ± 60	155	282	97	private cars	not allowed	not allowed
FP 155/115 NI	120	120 ± 60	155	282	117	private cars	not allowed	not allowed

Profiles with an installation height from 60 mm upwards can be adjusted to higher load capacity. Please ask for our advice.

Material description, important notes and special properties = Page 2

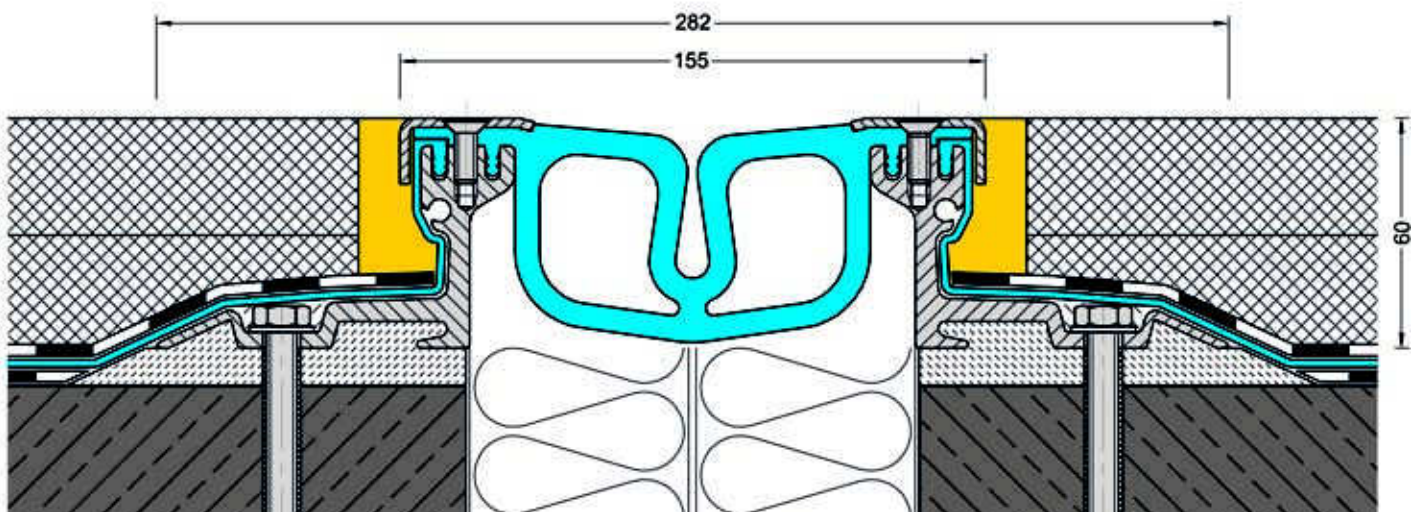
Larger heights = Page 34–35

Column-/Wall-connections = Page 26–28

Terminations/Intersections = Page 40–45

Stainless Steel Cover Plates = Page 29

Further usage = Page 30–39



FP 155/60 NI

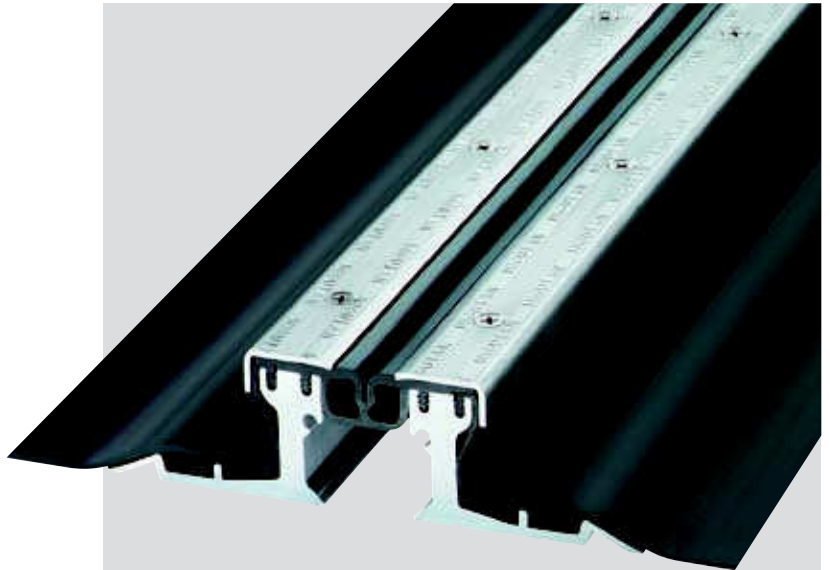
Scale 1 : 2

SERIES FP .../6000 S NI

WITH LONG AAS-SEALING SHEETS FOR BITUMINOUS SEALING

MIGUTAN

- **WATERTIGHT
(OFFICIAL TEST CERTIFICATE)**
- **SEALING ON TOP OF SURFACE**
- **CENTRAL INSERT IS INTER-
CHANGEABLE AT ANY TIME**
- **MOVEMENT CAPACITY UP TO
120 MM**
- **HEAVY LOADS –
HEAVY DUTY VEHICLES**



TECHNICAL DATA

Profile	Joint width max. mm	Total movement mm	Visible width of profile	Total width of profile	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
FP 80/6000 S NI	35	20 ± 10	82	201	60	600	130	6,5
FPG90/6000 S NI	50	20 ± 10	95	214	60	600	130	4,3
FP 90/6000 S NI	50	40 ± 20	95	214	60	600	130	not allowed
FP 110/6000 S NI	65	60 ± 30	111	230	60	600	130	not allowed
FP 115/6000 S NI	70	80 + 50/-30	115	234	60	600	130	not allowed
FP 155/6000 S NI	110	120 ± 60	155	274	60	300	70	not allowed

Material description, important notes and special properties = Page 2

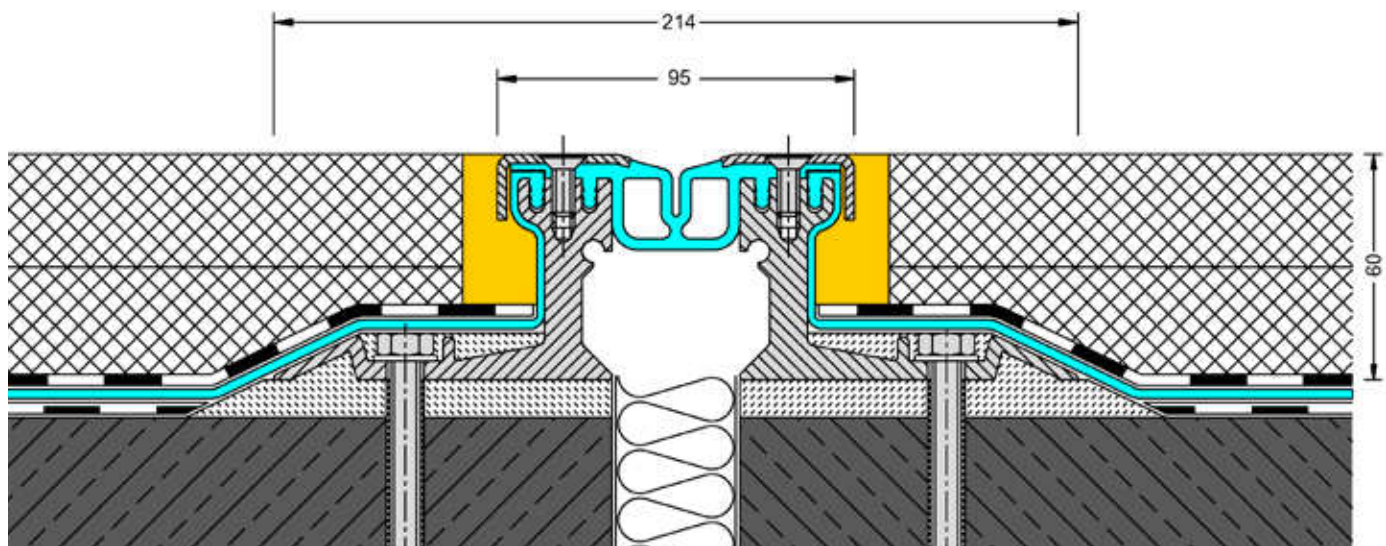
Larger heights = Page 34–35

Column-/Wall-connections = Page 26–28

Terminations/Intersections = Page 40–45

Stainless Steel Cover Plates = Page 29

Further usage = Page 30–39



FP 90/6000 S NI

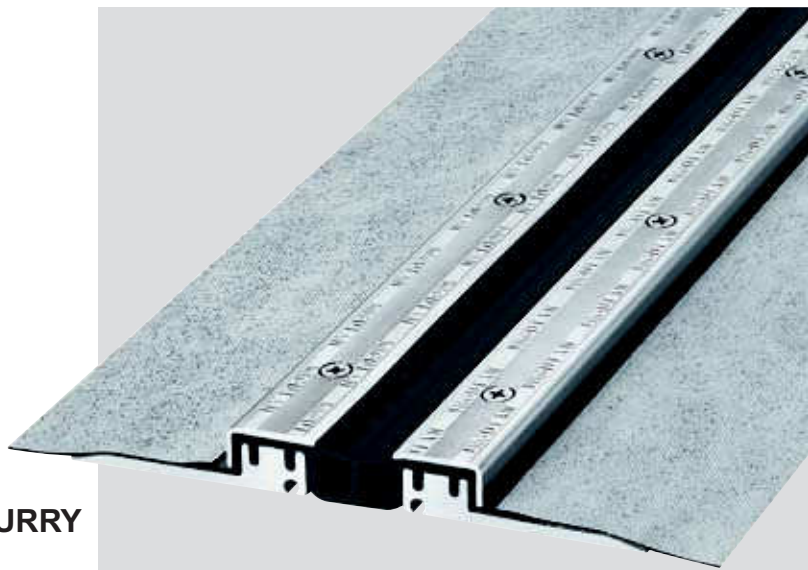
Scale 1 : 2

SERIES MIGUTRIX FP.../...NI XA

WITH FIBRE FABRIC BONDED SHEETS FOR FLEXIBLE WATERPROOFING SLURRY BELOW CERAMIC FLOORS

MIGUTAN

- **WATERTIGHT
(OFFICIAL TEST CERTIFICATE)**
- **SEALING ON TOP OF SURFACE**
- **CENTRAL INSERT IS INTER-
CHANGEABLE AT ANY TIME**
- **MOVEMENT CAPACITY UP TO
120 MM**
- **FOR JOINT WIDTHS UP TO 120 MM**
- **FOR FLEXIBLE WATERPROOFING SLURRY**



TECHNICAL DATA

Profile	Joint width max. mm	Total movement mm	Visible width of profile	Total width of profile	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
FP 80/... NI XA	45	20 ± 10	82					
FPG90/... NI XA	60	20 ± 10	95	see	from	For load capacity of the profile please refer to the corresponding profile with short sealing sheets on following pages 14–20.		
FP 90/... NI XA	60	40 ± 20	95	pages	25			
FP 110/... NI XA	75	60 ± 30	111	14–20	upwards			
FP 115/... NI XA	80	80 + 50/–30	115					
FP 155/... NI XA	120	120 ± 60	155					

Material description, important notes and special properties = Page 2

Column-/Wall-connections = Page 26–28

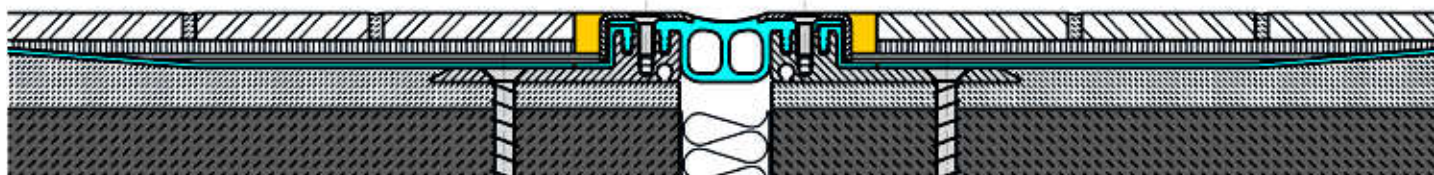
Terminations/Intersections = Page 40–45

Stainless Steel Cover Plates = Page 29

Further usage = Page 30–39

The connection of our fibre fabric bonded MIGUTRIX-sheets to the flexible waterproofing slurry / liquid membrane has to be tested for each application.

Installation example of series MIGUTRIX in combination with liquid membrane.
Profile FPG 90/25 NI XA with fiber fabric bonded sheets (Installation on screed).



FPG 90/25 NI XA

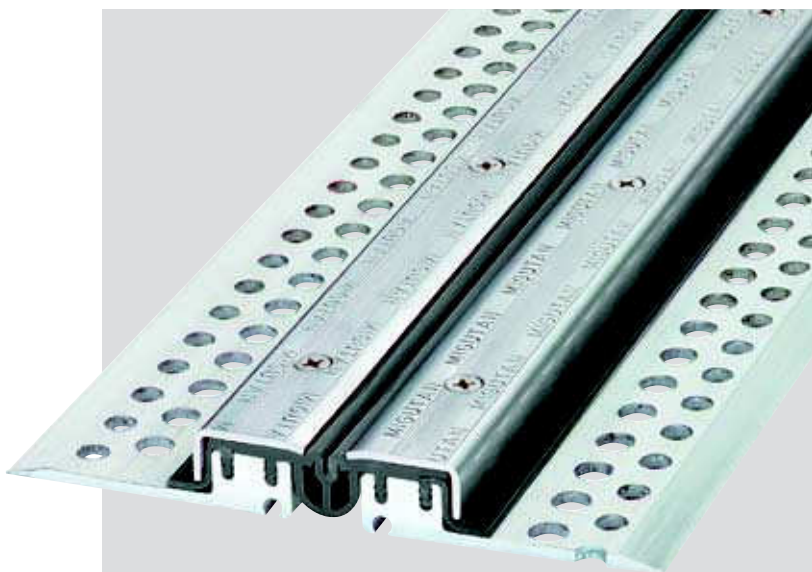
Scale 1 : 2

SERIES FP 80/... NI

WITH SHORT AAS-SEALING SHEETS FOR FLOORS WITH COATINGS

MIGUTAN

- **WATERTIGHT
(OFFICIAL TEST CERTIFICATE)**
- **SEALING ON TOP OF SURFACE**
- **CENTRAL INSERT IS INTER-
CHANGEABLE AT ANY TIME**
- **SMALL VISIBLE SURFACE**
- **PROPER AND ECONOMICAL
FORMATION OF THE CONNECTION
JOINT BY USING AAP 50/20**



TECHNICAL DATA

Profile	Joint width max. mm	Total movement mm	Visible width of profile	Total width of profile	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
FP 80/ 25 NI	45	20 ± 10	82	209	25	600	130	6,5
FP 80/ 35 NI	45	20 ± 10	82	209	35	600	130	6,5
FP 80/ 45 NI	45	20 ± 10	82	198	46	300	70	not allowed
FP 80/ 60 NI	45	20 ± 10	82	209	60	300	30	not allowed
FP 80/ 80 NI	45	20 ± 10	82	209	81	120	30	not allowed
FP 80/ 95 NI	45	20 ± 10	82	209	97	60	not allowed	not allowed
FP 80/115 NI	45	20 ± 10	82	209	117	60	not allowed	not allowed

Profiles with an installation height from 60 mm upwards can be adjusted to higher load capacity. Please ask for our advice.

Material description, important notes and special properties = Page 2

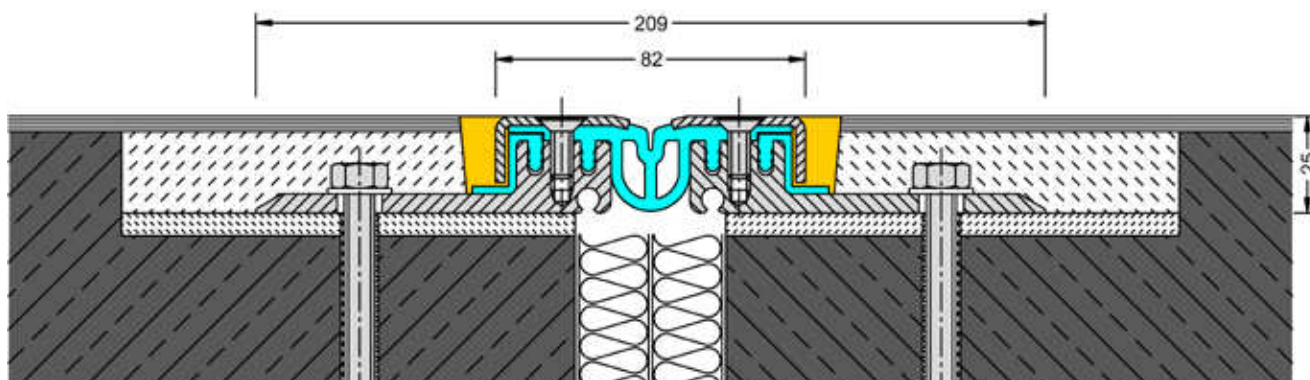
Column-/Wall-connections = Page 26–28

Terminations/Intersections = Page 40–45

Stainless Steel Cover Plates = Page 29

Further usage = Page 30–39

Installation instructions = Page 21



FP 80/25 NI

Scale 1 : 2

SERIES FPG 90/... NI

WITH SHORT AAS-SEALING SHEETS FOR FLOORS WITH COATINGS

MIGUTAN

- **WATERTIGHT
(OFFICIAL TEST CERTIFICATE)**
- **SEALING ON TOP OF SURFACE**
- **CENTRAL INSERT IS INTER-
CHANGEABLE AT ANY TIME**
- **WITH SMOOTH INSERT FOR
INCREASED HYGIENIC
REQUIREMENTS**
- **PROPER AND ECONOMICAL
FORMATION OF THE CONNECTION
JOINT BY USING AAP 50/20**



TECHNICAL DATA

Profile	Joint width max. mm	Total movement mm	Visible width of profile	Total width of profile	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
FPG 90/ 25 NI	60	20 ± 10	95	222	25	600	130	4,3
FPG 90/ 35 NI	60	20 ± 10	95	222	35	600	130	4,3
FPG 90/ 45 NI	60	20 ± 10	95	211	46	300	70	not allowed
FPG 90/ 60 NI	60	20 ± 10	95	222	60	300	30	not allowed
FPG 90/ 80 NI	60	20 ± 10	95	222	81	120	30	not allowed
FPG 90/ 95 NI	60	20 ± 10	95	222	97	60	not allowed	not allowed
FPG 90/115 NI	60	20 ± 10	95	222	117	60	not allowed	not allowed

Profiles with an installation height from 60 mm upwards can be adjusted to higher load capacity. Please ask for our advice.

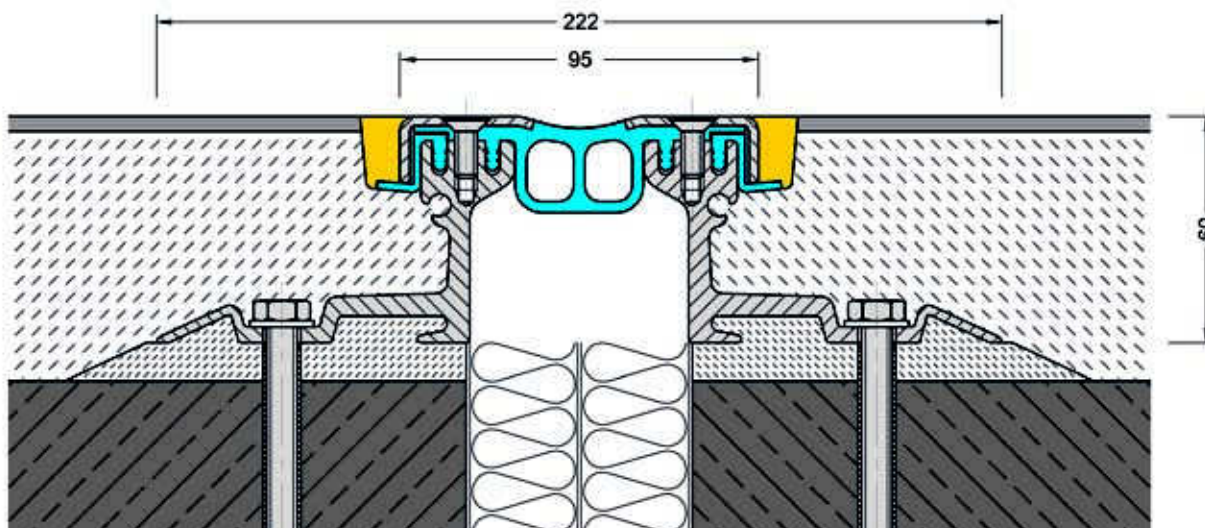
Material description, important notes and special properties = Page 2

Column-/Wall-connections = Page 26–28

Terminations/Intersections = Page 40–45

Further usage = Page 30–39

Installation instructions = Page 21



FPG 90/60 NI

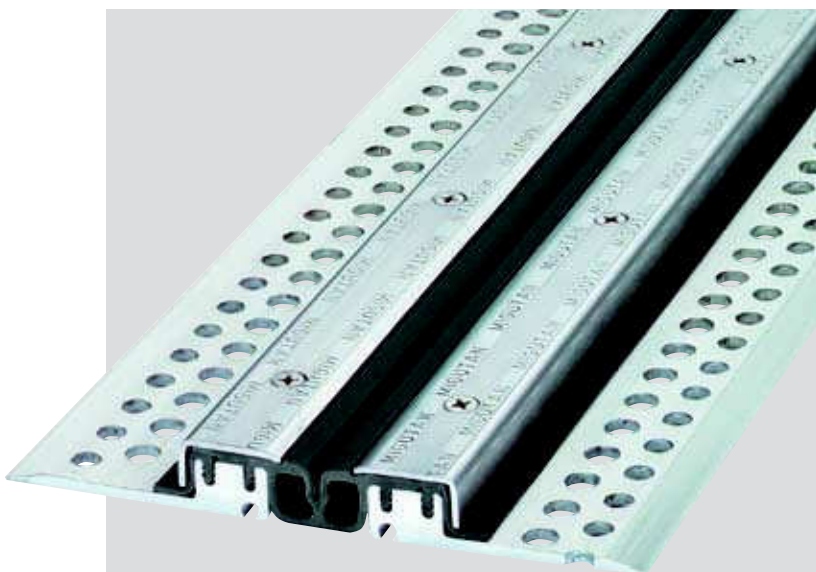
Scale 1 : 2

SERIES FP 90/... NI

WITH SHORT AAS-SEALING SHEETS FOR FLOORS WITH COATINGS

MIGUTAN

- **WATERTIGHT
(OFFICIAL TEST CERTIFICATE)**
- **SEALING ON TOP OF SURFACE**
- **CENTRAL INSERT IS INTER-
CHANGEABLE AT ANY TIME**
- **MOVEMENT CAPACITY 40 MM**
- **FOR JOINT WIDTHS UP TO 60 MM**
- **PROPER AND ECONOMICAL
FORMATION OF THE CONNECTION
JOINT BY USING AAP 50/20**

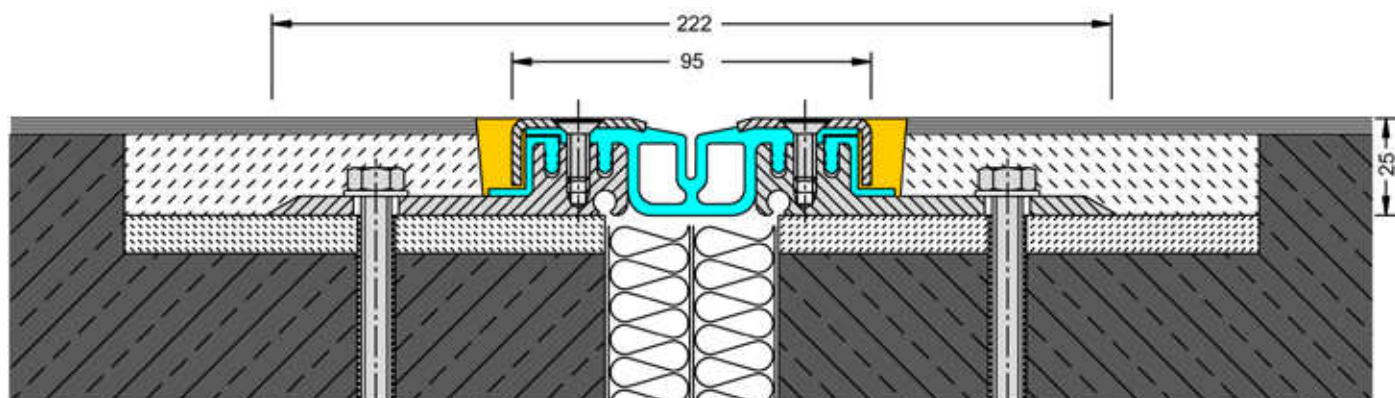


TECHNICAL DATA

Profile	Joint width max. mm	Total movement mm	Visible width of profile	Total width of profile	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
FP 90/ 25 NI	60	40 ± 20	95	222	25	600	130	not allowed
FP 90/ 35 NI	60	40 ± 20	95	222	35	600	130	not allowed
FP 90/ 45 NI	60	40 ± 20	95	211	46	300	70	not allowed
FP 90/ 60 NI	60	40 ± 20	95	222	60	300	30	not allowed
FP 90/ 80 NI	60	40 ± 20	95	222	81	120	30	not allowed
FP 90/ 95 NI	60	40 ± 20	95	222	97	60	not allowed	not allowed
FP 90/115 NI	60	40 ± 20	95	222	117	60	not allowed	not allowed

Profiles with an installation height from 60 mm upwards can be adjusted to higher load capacity. Please ask for our advice.

Material description, important notes and special properties = Page 2
Column-/Wall-connections = Page 26–28
Terminations/Intersections = Page 40–45
Stainless Steel Cover Plates = Page 29
Further usage = Page 30–39
Installation instructions = Page 21



FP 90/25 NI

Scale 1 : 2

SERIES FP 110/... NI

WITH SHORT AAS-SEALING SHEETS FOR FLOORS WITH COATINGS

MIGUTAN

- **WATERTIGHT
(OFFICIAL TEST CERTIFICATE)**
- **SEALING ON TOP OF SURFACE**
- **CENTRAL INSERT IS INTER-
CHANGEABLE AT ANY TIME**
- **MOVEMENT CAPACITY 60 MM**
- **FOR JOINT WIDTHS UP TO 75 MM**
- **PROPER AND ECONOMICAL
FORMATION OF THE CONNECTION
JOINT BY USING AAP 50/20**



TECHNICAL DATA

Profile	Joint width max. mm	Total movement mm	Visible width of profile	Total width of profile	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
FP 110/ 25 NI	75	60 ± 30	111	238	25	600	130	not allowed
FP 110/ 35 NI	75	60 ± 30	111	238	35	600	130	not allowed
FP 110/ 45 NI	75	60 ± 30	111	227	46	300	70	not allowed
FP 110/ 60 NI	75	60 ± 30	111	238	60	300	30	not allowed
FP 110/ 80 NI	75	60 ± 30	111	238	81	120	30	not allowed
FP 110/ 95 NI	75	60 ± 30	111	238	97	60	not allowed	not allowed
FP 110/115 NI	75	60 ± 30	111	238	117	60	not allowed	not allowed

Profiles with an installation height from 60 mm upwards can be adjusted to higher load capacity. Please ask for our advice.

Material description, important notes and special properties = Page 2

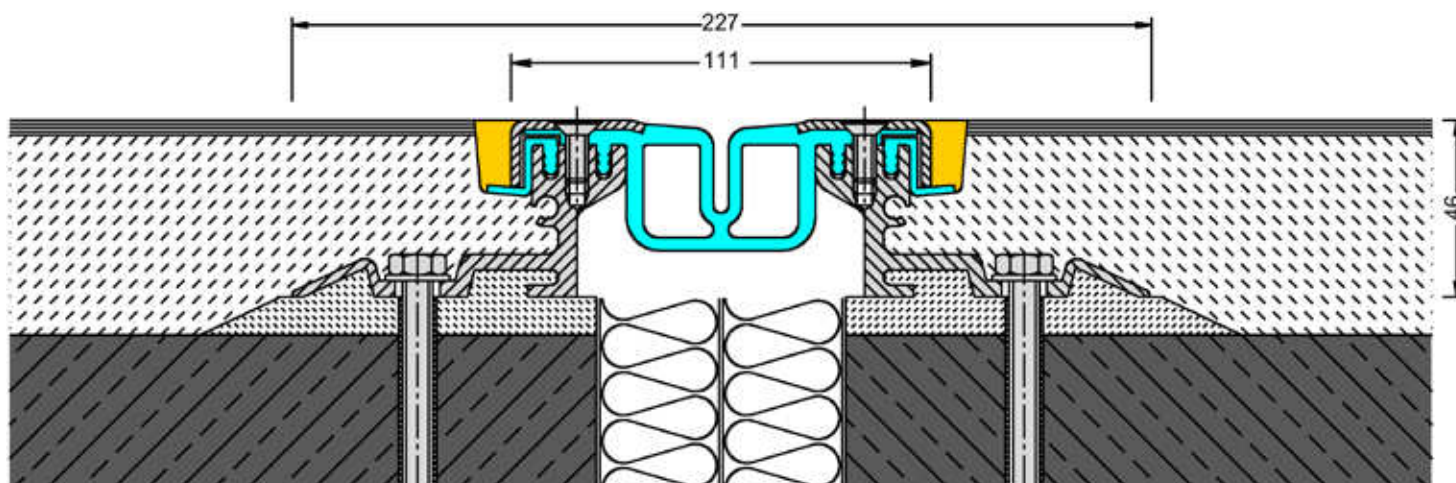
Column-/Wall-connections = Page 26–28

Terminations/Intersections = Page 40–45

Stainless Steel Cover Plates = Page 29

Further usage = Page 30–39

Installation instructions = Page 21



FP 110/45 NI

Scale 1 : 2

SERIES FP 115/... NI

WITH SHORT AAS-SEALING SHEETS FOR FLOORS WITH COATINGS

MIGUTAN

- **WATERTIGHT
(OFFICIAL TEST CERTIFICATE)**
- **SEALING ON TOP OF SURFACE**
- **CENTRAL INSERT IS INTER-
CHANGEABLE AT ANY TIME**
- **MOVEMENT CAPACITY 80 MM**
- **FOR JOINT WIDTHS UP TO 80 MM**
- **PROPER AND ECONOMICAL
FORMATION OF THE CONNECTION
JOINT BY USING AAP 50/20**



TECHNICAL DATA

Profile	Joint width max. mm	Total movement mm	Visible width of profile	Total width of profile	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
FP 115/ 25 NI	80	80 + 50/-30	115	242	25	600	130	not allowed
FP 115/ 35 NI	80	80 + 50/-30	115	242	35	600	130	not allowed
FP 115/ 45 NI	80	80 + 50/-30	115	231	46	300	70	not allowed
FP 115/ 60 NI	80	80 + 50/-30	115	242	60	300	30	not allowed
FP 115/ 80 NI	80	80 + 50/-30	115	242	81	120	30	not allowed
FP 115/ 95 NI	80	80 + 50/-30	115	242	97	60	not allowed	not allowed
FP 115/115 NI	80	80 + 50/-30	115	242	117	60	not allowed	not allowed

Profiles with an installation height from 60 mm upwards can be adjusted to higher load capacity. Please ask for our advice.

Material description, important notes and special properties = Page 2

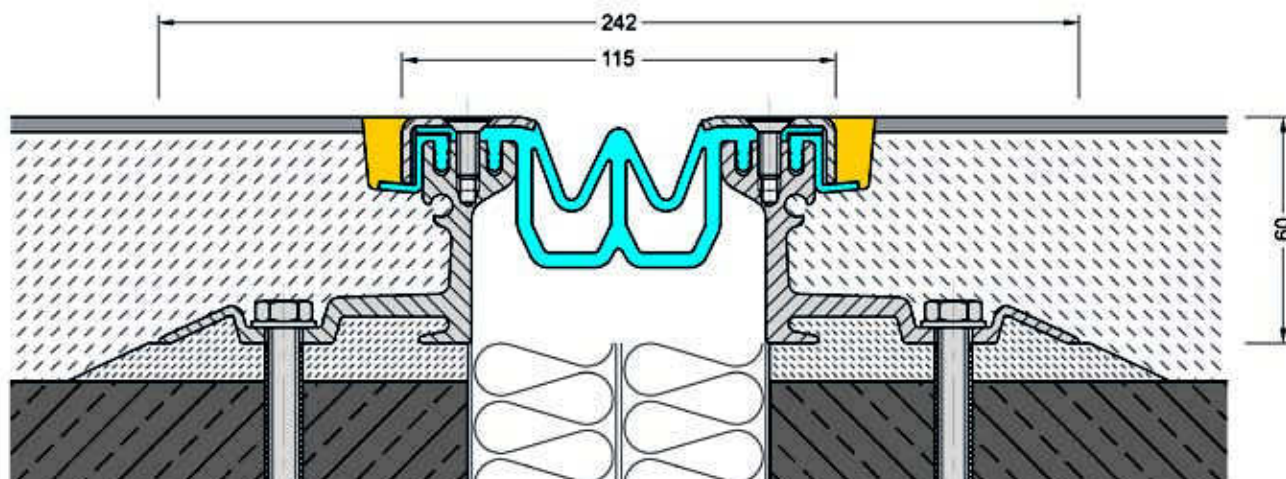
Column-/Wall-connections = Page 26-28

Terminations/Intersections = Page 40-45

Stainless Steel Cover Plates = Page 29

Further usage = Page 30-39

Installation instructions = Page 21



FP 115/60 NI

Scale 1 : 2

SERIES FP 155/... NI

WITH SHORT AAS-SEALING SHEETS FOR FLOORS WITH COATINGS

MIGUTAN

- **WATERTIGHT
(OFFICIAL TEST CERTIFICATE)**
- **SEALING ON TOP OF SURFACE**
- **CENTRAL INSERT IS INTER-
CHANGEABLE AT ANY TIME**
- **MOVEMENT CAPACITY 120 MM**
- **FOR JOINT WIDTHS UP TO 120 MM**
- **PROPER AND ECONOMICAL
FORMATION OF THE CONNECTION
JOINT BY USING AAP 50/20**



TECHNICAL DATA

Profile	Joint width max. mm	Total movement mm	Visible width of profile	Total width of profile	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
FP 155/ 25 NI	120	120 + 60	155	282	25	120	35	–
FP 155/ 35 NI	120	120 + 60	155	282	35	120	35	not allowed
FP 155/ 45 NI	120	120 + 60	155	271	46	60	35	not allowed
FP 155/ 60 NI	120	120 + 60	155	282	60	35	35	not allowed
FP 155/ 80 NI	120	120 + 60	155	282	81	35	35	not allowed
FP 155/ 95 NI	120	120 + 60	155	282	97	private cars	not allowed	not allowed
FP 155/115 NI	120	120 + 60	155	282	117	private cars	not allowed	not allowed

Profiles with an installation height from 60 mm upwards can be adjusted to higher load capacity. Please ask for our advice.

Material description, important notes and special properties = Page 2

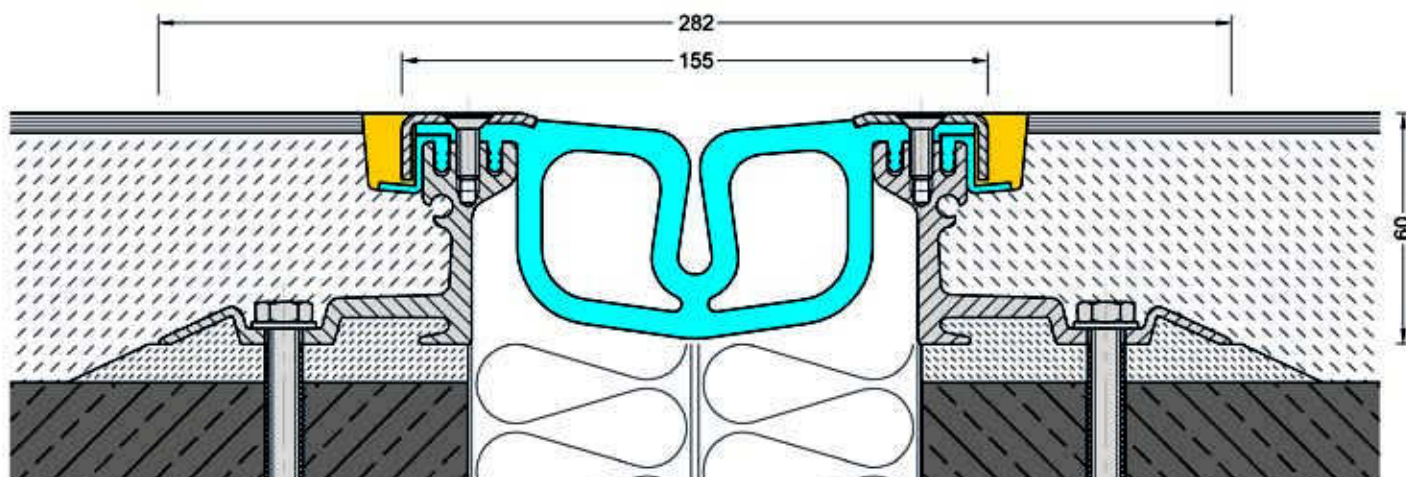
Column-/Wall-connections = Page 26–28

Terminations/Intersections = Page 40–45

Stainless Steel Cover Plates = Page 29

Further usage = Page 30–39

Installation instructions = Page 21



FP 155/60 NI

Scale 1 : 2

SERIES FP .../6000 S NI

WITH SHORT AAS-SEALING SHEETS FOR FLOORS WITH COATINGS

MIGUTAN

- **WATERTIGHT
(OFFICIAL TEST CERTIFICATE)**
- **SEALING ON TOP OF SURFACE**
- **CENTRAL INSERT IS INTER-
CHANGEABLE AT ANY TIME**
- **MOVEMENT CAPACITY UP TO 120 MM**
- **HEAVY LOADS –
HEAVY DUTY VEHICLES**
- **PROPER AND ECONOMICAL
FORMATION OF THE CONNECTION
JOINT BY USING AAP 50/20**



TECHNICAL DATA

Profile	Joint width max. mm	Total movement mm	Visible width of profile	Total width of profile	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
FP 80/6000 S NI	35	20 ± 10	82	201	60	600	130	6,5
FPG90/6000 S NI	50	20 ± 10	95	214	60	600	130	4,3
FP 90/6000 S NI	50	40 ± 20	95	214	60	600	130	not allowed
FP 110/6000 S NI	65	60 ± 30	111	230	60	600	130	not allowed
FP 115/6000 S NI	70	80 + 50/-30	115	234	60	600	130	not allowed
FP 155/6000 S NI	110	120 ± 60	155	274	60	300	70	not allowed

Material description, important notes and special properties = Page 2

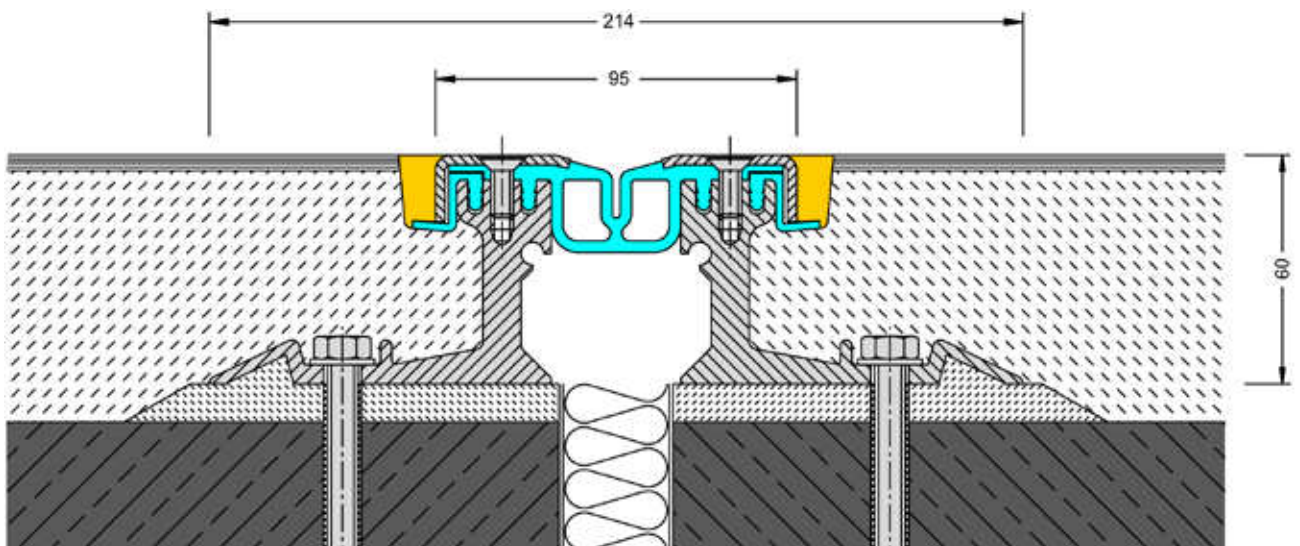
Column-/Wall-connections = Page 26–28

Terminations/Intersections = Page 40–45

Stainless Steel Cover Plates = Page 29

Further usage = Page 30–39

Installation instructions = Page 21



FP 90/6000 S NI

Scale 1 : 2

INSTALLATION

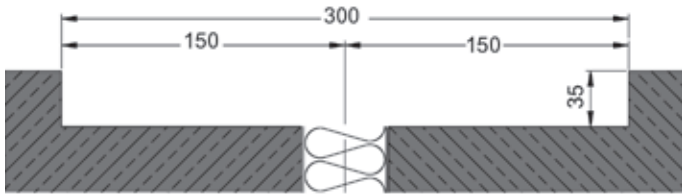
WITH CONNECTION JOINT FILLER PROFILE AAP 50/20

MIGUTAN

Example FP 90/25 NI

1.

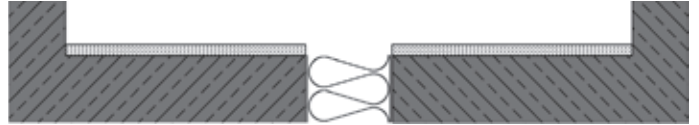
Blockout/Recess to be cleaned and primed



Maßstab 1 : 4

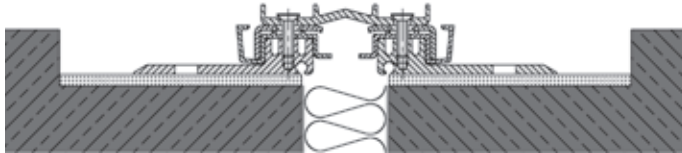
2.

Watertight epoxy strip to be laid
(to compensate the unevenness of the concrete surface)



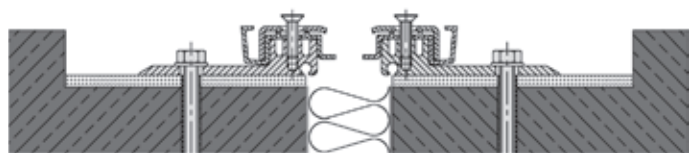
3.

Aluminium profile to be cleaned, degreased and possibly primed.
The FP 90/25 NI together with AAP 50/20 to be put into the epoxy whilst still wet and tap gently into place until the desired level is achieved



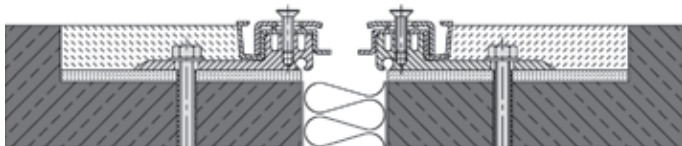
4.

After the epoxy has hardened, the mounting brackets of the profile are to be fixed to the sub-base with chemical anchors, e.g. UPAT UKA 3 M8.
Fixing distances approx. 350 mm



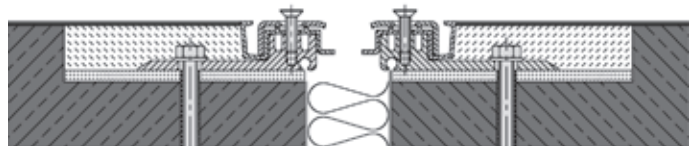
5.

The Blockout/Recess to be filled with an approved watertight grout (high compression strength and contraction free).
The grout must be flattened on top so that it is flush with the flooring material



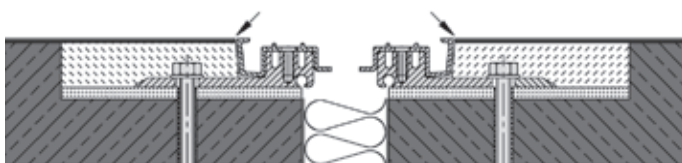
6.

Applying and finishing of the coating
If the insert and AAS sheets will not be installed directly after application of the profile, it is absolutely necessary to remove or cut the spacer



7.

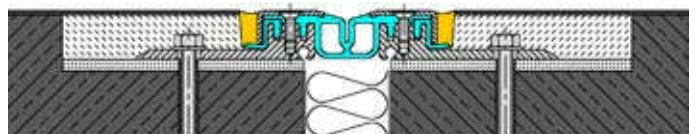
Cutting free and removing of the AAP 50/20



8.

The AAS side sheets and the central insert to be pushed in and pressed together by the stainless steel cappings.

The cappings are secured with the stainless steel screws supplied. The connection joint has to be filled with a suitable sealant, e.g. Polyurethane, to ensure a watertight connection



9.

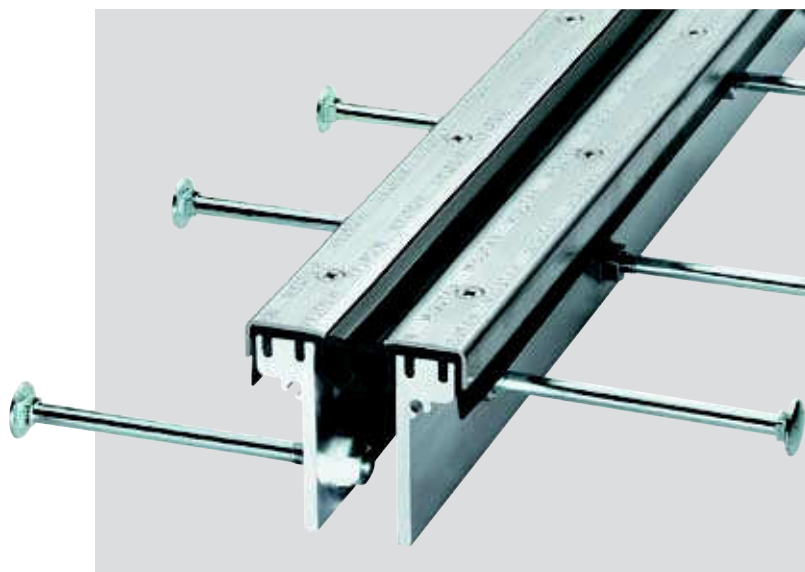
The stainless steel screws are to be retightened after approx. 10–14 days by means of a torque wrench (7 Nm)

SERIES FP .../90 B NI

FOR FLUSH INSTALLATION IN CONCRETE DECKS WITH COATINGS

MIGUTAN

- **WATERTIGHT
(OFFICIAL TEST CERTIFICATE)**
- **SEALING ON TOP OF SURFACE**
- **CENTRAL INSERT IS INTER-
CHANGEABLE AT ANY TIME**
- **MOVEMENT CAPACITY UP TO 120 MM**
- **HEAVY LOADS UP TO 600 kN**
- **PROPER AND ECONOMICAL
FORMATION OF THE CONNECTION
JOINT BY USING AAP 50/20**



TECHNICAL DATA

Profile	Joint width max. mm	Total movement mm	Visible width of profile	Total width of profile	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
FP 80/90 B NI	with anchor rods	21	20 ± 10	82	91	300	70	not allowed
FPG90/90 B NI	with anchor rods	34	20 ± 10	95	91	300	70	not allowed
FP 90/90 B NI	with anchor rods	34	40 ± 20	95	91	300	70	not allowed
FP 110/90 B NI	with anchor rods	50	60 ± 30	111	91	300	70	not allowed
FP 115/90 B NI	with anchor rods	54	80 + 50/-30	115	91	300	70	not allowed
FP 155/90 B NI	with anchor rods	94	120 ± 60	155	91	120	35	not allowed
FP 80/90 B NI	with loop anchors	21	20 ± 10	82	91	600	130	6,5
FPG90/90 B NI	with loop anchors	34	20 ± 10	95	91	600	130	4,3
FP 90/90 B NI	with loop anchors	34	40 ± 20	95	91	600	130	not allowed
FP 110/90 B NI	with loop anchors	50	60 ± 30	111	91	600	130	not allowed
FP 115/90 B NI	with loop anchors	54	80 + 50/-30	115	91	600	130	not allowed
FP 155/90 B NI	with loop anchors	94	120 ± 60	155	91	300	70	not allowed

Material description, important notes and special properties = Page 2

Column-/Wall-connections = Page 26–28

Terminations/Intersections = Page 40–45

Stainless Steel Cover Plates = Page 29

Further usage = Page 30–39

Installation instructions = Page 24

INSTALLATION

The profiles will be fixed by means of anchor rods or loop anchors.

For fixing of the profiles on concrete slabs, additional adjusting devices can be screwed to the aluminium side plates of the profiles in our works and supplied on request.

Positive connection between each single length is achieved on site by means of connecting pins, which ensures a level and precise transition.

For secure fixing of the profile system, the anchor rods or the loop anchors should be welded to the reinforcement.

A connection joint of approx. 10 x 20 mm must be provided adjacent to each side of the stainless steel capping.

This connection joint is filled with sealant, e.g. Polyurethane.

The stainless steel cappings have a roughened vertical surface which will improve adhesion with a sealant.

Proper and economical formation of the connection joint by using connection joint filler profile AAP 50/20.

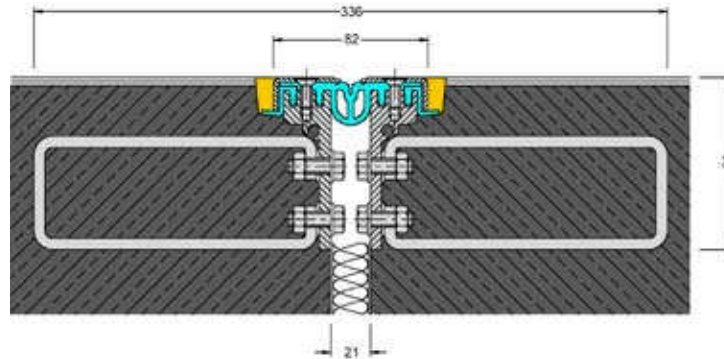
Usage please see page 24.

SERIES FP .../90 B NI

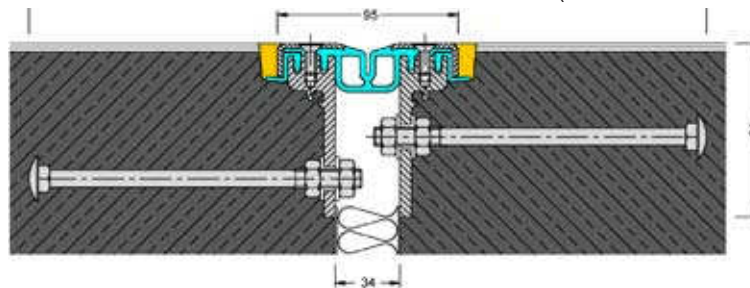
PROFILE VARIANTS

MIGUTAN

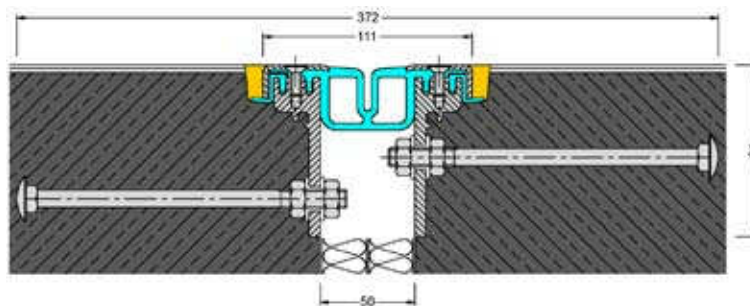
Profile **FP 80/90 B NI with loop anchors** for movement 20 ± 10 mm (also available with anchor rods)



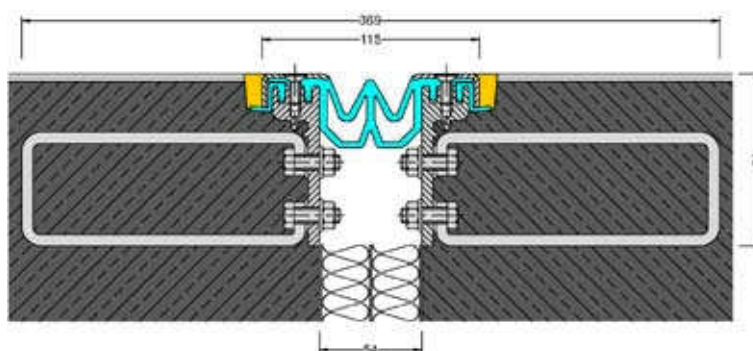
Profile **FP 90/90 B NI with anchor rods** for movement 40 ± 20 mm (also available with loop anchors)



Profile **FP 110/90 B NI with anchor rods** for movement 60 ± 30 mm (also available with loop anchors)



Profile **FP 115/90 B NI with loop anchors** for movement $80 +50/-30$ mm (also available with anchor rods)



Scale 1 : 4