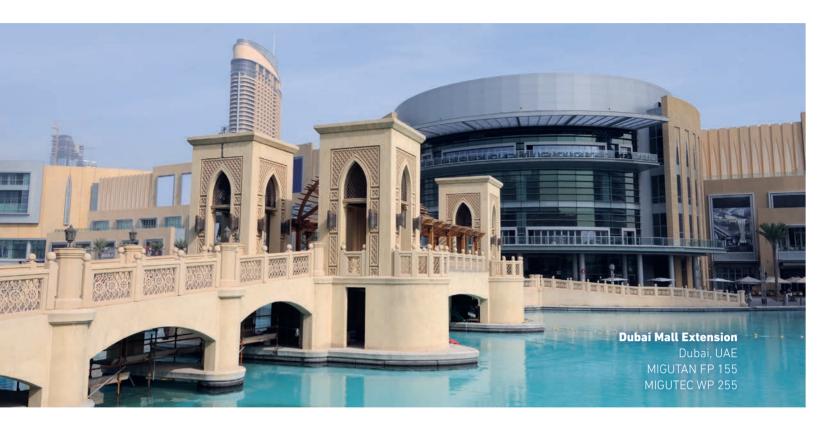


# MIGUA EXPANSION JOINT COVER SYSTEMS ESTABLISHED 1920





## YOUR NEEDS SET OUR BENCHMARK: BEST EXPANSION JOINT COVERS FOR SUSTAINABLE CONSTRUCTION QUALITY.

MIGUA, founded 1920 in Blankenburg/Harz (Germany), is Europe's leading expert in the design, manufacture and installation of expansion joint systems. MIGUA expansion joint systems serve to cover, close and seal expansion joints. Our products satisfy the most rigorous standards in quality and safety and are widely used in large-scale construction projects such as airports, train stations, industrial plants, park buildings, shopping centers and hospitals.

Worldwide, MIGUA is either active in international markets with own sales teams as in Germany, Poland and the MENA/India region, or is represented by independent, specialized companies in more than 60 countries.

Our product range consists of more than 650 different expansion joint systems and offers a maximum of technical know-how as well as on-time delivery to our customers. In addition, our team of engineers designs individual solutions for the manyfold demands of international large scale projects in close co-operation with architects, construction companies and owners to meet their specific demands.

Every day, our experienced teams do their utmost to ensure that our outstanding product quality and innovative approach make your building project successful. We are not satisfied until you are satisfied. Because our guiding principle is:

MIGUA – **you** first.

Visit us online: migua.ae

### MIGUA OFFERS A COMPREHENSIVE PRODUCT PORTFOLIO OF **EXPANSION JOINT COVERS AND SYSTEMS** WITH OUTSTANDING FEATURES.

Our product range covers 5 application orientated product groups as detailed below. In addition to standard expansion joint covers our R&D engineers

provide highly sophisticated solutions for special or non-standard applications. MIGUA provides solutions for extraordinary challenges.

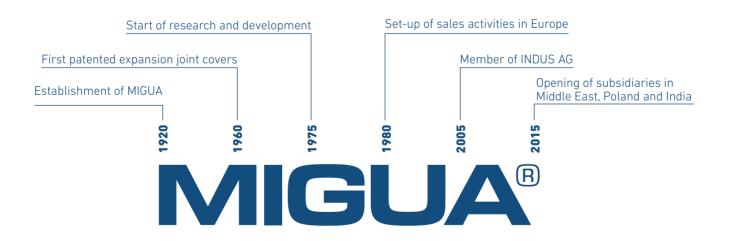
MIGUTEC	<ul> <li>reliable and proven product lines of expansion joint covers for most purposes in internal and external areas</li> <li>for floors</li> <li>for walls and ceilings</li> </ul>
JOINT COVERS FOR EXPANSION JOINTS	<ul> <li>for fixing on concrete, in screed, plaster, but also finished surfaces</li> <li>most of the inserts are interchangeable at any time</li> </ul>
MIGUTRANS	<ul> <li>all-metal expansion joint systems in shopping malls, railway stations, airports, exhibition halls, storage facilities, hospitals, etc.</li> <li>to be used by fork lift trucks and pallet trucks</li> <li>official test certificate available</li> <li>hard wearing, maintenance-free, long lasting</li> </ul>
MIGUTAN WATERTIGHT EXPANSION JOINT SOLUTIONS	<ul> <li>for usage in car parks, multi-storey car parks, underground car parks, swimming pool areas, pedestrian bridges, etc.</li> <li>guaranteed watertightness – official test certificate available</li> <li>available for hygienic requirements in large kitchens, hospitals, sport venues, etc.</li> <li>sealing on top surface, central insert replaceable at any time</li> </ul>
MIGUPREN EXPANSION JOINT STRIPS TO SEAL JOINTS WITH THREE- DIMENSIONAL MOVEMENT	<ul> <li>corrugated jointing system and sealing strips for flat roofs and covered areas such as underground car parks</li> <li>excellent bonding</li> <li>official test certificate on request; hot-bitumen resistant</li> <li>large, multi-directional movement</li> </ul>
MIGUMAX EARTHQUAKE- RESISTANT	<ul> <li>designed for extremely high movements and large joint width</li> <li>easy installation</li> <li>all types of finishes</li> <li>flexible use</li> <li>heavy loads</li> </ul>

## **BASED IN GERMANY –** SUCCESSFUL ALL OVER THE WORLD



MADE IN GERMANY WE SATISFY THE MOST RIGOROUS STANDARDS IN QUALITY AND FUNCTIONALITY.

For us at MIGUA, quality primarily means ensuring optimum functionality and long service life. This is why MIGUA expansion joint covers are developed and manufactured in Germany – and examined in detail during extensive testing. Our many patents and inspection certificates verify this.



OUR SUCCESS STORY DECADES OF EXPERIENCE FOR OUR CUSTOMERS' BENEFIT.

Nowadays, Migua is consequently pursuing the process of internationalization. We are aiming at sustainable growth, for the benefit of our customers and our members of staff. For the future, our target remains to accompany our customers with our compentence and commitment in a partnership of equals.



### **OUR INNOVATIVE CAPACITY** IS PATHBREAKING FOR THE ENTIRE INDUSTRY.

More than 650 proven Migua expansion joint covers have so far been developed to satisfy our customers' every demand. Moreover, as an efficient manufactury, we are able to develop customised solutions for specific requirements – however ambitious they might be.



### reddot award 2017 winner

Die unsichtbare Wandfuge The invisible wall joint



### **INNOVATION** OF PRODUCTS AND SERVICES

As the first manufacturer of expansion joints ever, MIGUA is granted the sought-after Red Dot Award. With the innovative wall joint cover named WSP, Migua created an outstanding design that the expert committee for the Red Dot Award Product Design 2017 has recognised with the internationally approved seal of quality. For us at Migua, this is an incentive to continue our efforts to offer our customers nothing less but the best in quality, functionality and innovative design.



### **AN EXTRACT** OF OUR SATISFIED CUSTOMERS

As one of Europe's leading experts in the design, manufacture and installation of expansion joint systems, Migua is proud to serve many internationally well-known companies and to contribute to their success.

# [INDUS]



1. Construction / infrastructure (19.0%)	330.4
2. Automotive technology (25.8%)	394.1
3. Engineering (21.2%)	375.1
4. Medical engineering / Life science (10.2%)	155.2
5. Metals technology (23.8%)	385.6
INDUS annua	al report 2017

### MIGUA IS PART OF INDUS GROUP

As the leading specialist in the field of sustainable investment and growth in German small and medium-sized companies, INDUS primarily acquires owner-managed companies and helps their business grow over the long term. INDUS thus ensures in the process that these companies are able to retain their particular strength: Their identity as medium-sized companies.



### HEALTH & SAFETY ONE OF THE CORNER-STONES TO OUR SUCCESS

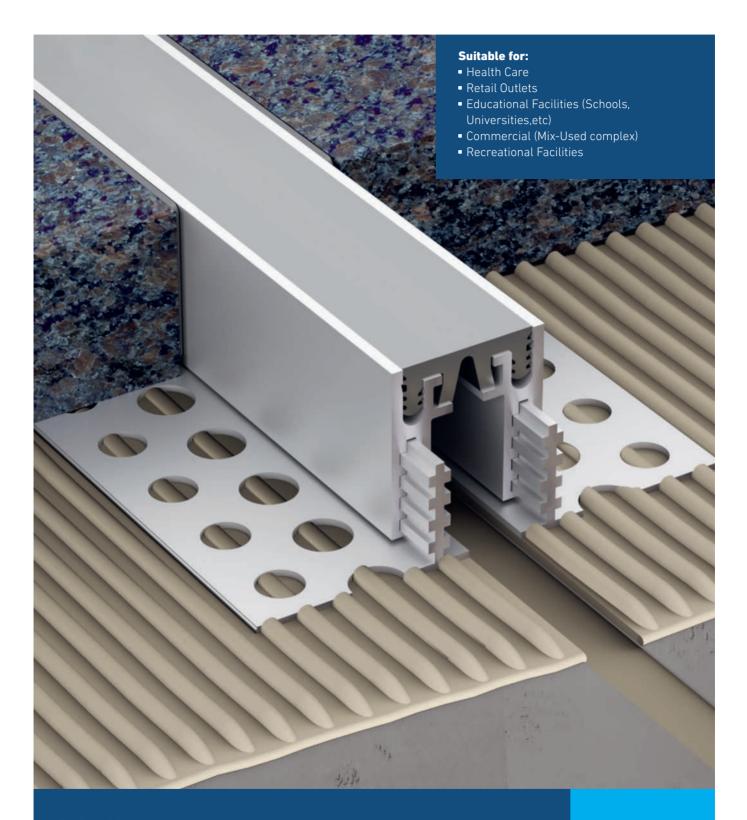
Our employees' safety is the highest benchmark we have for optimising our processes. We therefore subject our production processes in particular to a process of continuous improvement. In doing so, we build on the fruitful interaction between the employers' liability insurance associations, workers' representatives, our employees and our executive board. Our purpose is to ensure the best long-term health and safety solution for the manufacture of MIGUA expansion joint covers.



### WHAT WE'RE COMMITTED TO DOING

We are aware of our responsibility to our customers, business partners and employees. As a part of INDUS group, we are committed to a joint Code of Conduct that is characterised by responsibility and accountability, sincerity, loyalty and respect towards our fellow human beings and the environment. Our actions are governed by integrity. Observance of law and statute is a prime imperative for our company.

## GASKET SERIES | FLOOR COVERS

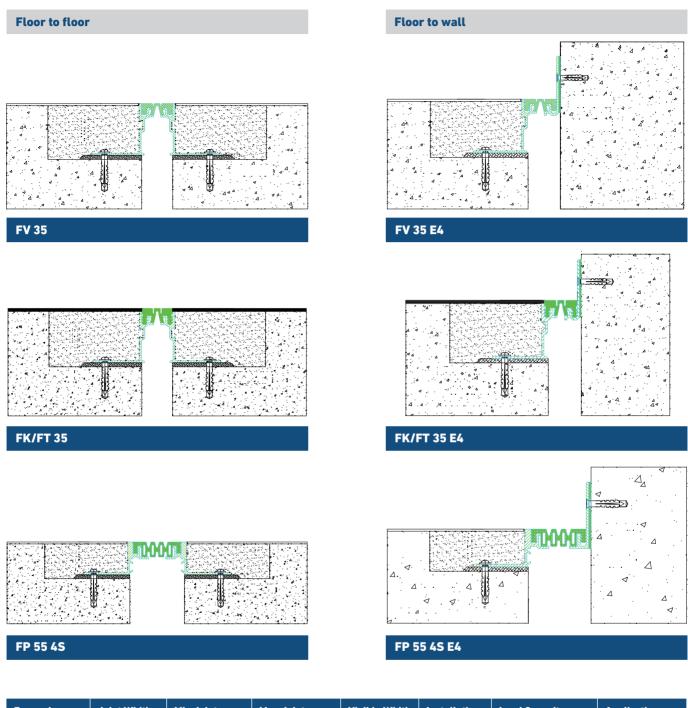


### Designed for:

- Hygiene environment
- Wheeled equipment
- Minimum visual impact
- Internal and external application

### MIGUTEC

JOINT COVERS FOR EXPANSION JOINTS



Expansion			Max Joint	Visible Width	Installation	Load Capacity		Application
Joint Cover		Opening	Opening		Height	<b>~</b>		
FV 35	30 mm	25 mm	35 mm	35 mm	15 – 105 mm	30 kN	30 kN	Floor to Floor
FK/FT 35	30 mm	25 mm	35 mm	30 mm	15 – 105 mm	30 kN	30 kN	Floor to Floor
FP 55 4S	58 mm	47 mm	60 mm	63 mm	20 – 75 mm	30 kN	300 kN	Floor to Floor
FV 35 E4	30 mm	25 mm	35 mm	36 mm	15 – 105 mm	30 kN	30 kN	Floor to Wall
FK/FT 35 E4	30 mm	25 mm	35 mm	30 mm	15 – 105 mm	30 kN	30 kN	Floor to Wall
FP 55 4S E4	58 mm	47 mm	60 mm	61 mm	20 – 75 mm	30 kN	300 kN	Floor to Wall

FK = 3 mm upstand for Vinyl & Linoleum finish

FT = 5 mm upstand for carpet finish

black

grey

beige

brown

## GASKET SERIES | FLOOR COVERS

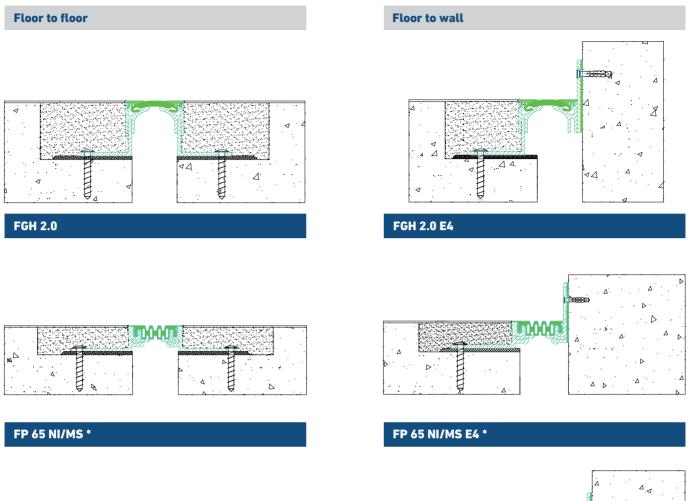


### Designed for:

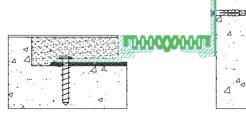
- Hygiene environment
- Wheeled equipment
- Minimum visual impact
- Internal and external application

### MIGUTEC

JOINT COVERS FOR EXPANSION JOINTS



### FP 105



FP 105 E4

Expansion Joint Cover	Joint Width	Min Joint Opening	Max Joint Opening	Visible Width	Installation Height	Load Cap	acity	Application
			opening				<b>6</b> -0	
FGH 2.0	50 mm	40 mm	60 mm	65 mm	40 – 70 mm	30 kN	30 kN	Floor to Floor
FP 65 NI/MS	55 mm	44 mm	66 mm	67 mm	21 – 51 mm	30 kN	300 kN	Floor to Floor
FP 105	100 mm	80 mm	120 mm	109 mm	20 – 50 mm	30 kN	300 kN	Floor to Floor
FGH 2.0 E4	50 mm	40 mm	60 mm	71 mm	30 – 70 mm	30 kN	30 kN	Floor to Wall
FP 65 NI/MS E4	55 mm	44 mm	66 mm	65 mm	21 – 51 mm	30 kN	300 kN	Floor to Wall
FP 105 E4	100 mm	80 mm	120 mm	110 mm	20 – 50 mm	30 kN	300 kN	Floor to Wall

\* NI = Stainless steel capping, MS = Brass capping

grey

\*\* beige only for FP 105

black

beige\*\*

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## SOLID STAINLESS STEEL SERIES | FLOOR COVERS

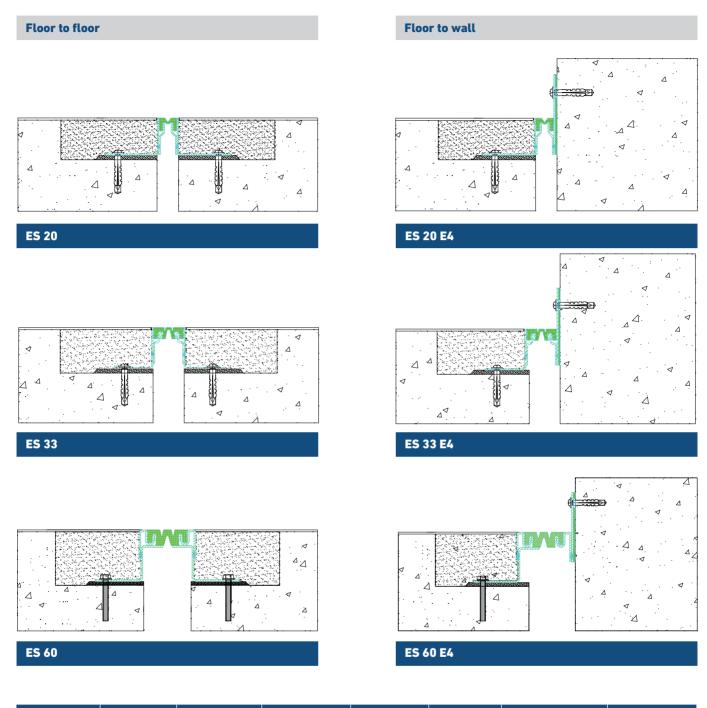


#### **Designed for:**

- Hygiene environment
- Wheeled equipment
- Minimum visual impact
- Internal and external application

### MIGUTEC

JOINT COVERS FOR EXPANSION JOINTS



Expansion					acity	Application		
Joint Cover		Opening	Opening		Height	<b>~</b>	<b>6</b> -•	
ES 20	20 mm	18 mm	23 mm	20 mm	20 – 50 mm	30 kN	30 kN	Floor to Floor
ES 33	30 mm	25 mm	35 mm	33 mm	15 – 50 mm	30 kN	30 kN	Floor to Floor
ES 60	50 mm	44 mm	60 mm	60 mm	19 – 35 mm	90 kN	35 kN	Floor to Floor
ES 20 E4	20 mm	18 mm	23 mm	20 mm	20 – 50 mm	30 kN	30 kN	Floor to Wall
ES 33 E4	30 mm	25 mm	35 mm	33 mm	15 – 50 mm	30 kN	30 kN	Floor to Wall
ES 60 E4	50 mm	44 mm	60 mm	64 mm	19 – 35 mm	90 kN	35 kN	Floor to Wall



grey

beige

brown

Please contact us for available colour per product.

## BLOCKOUT-FREE | FLOOR COVERS

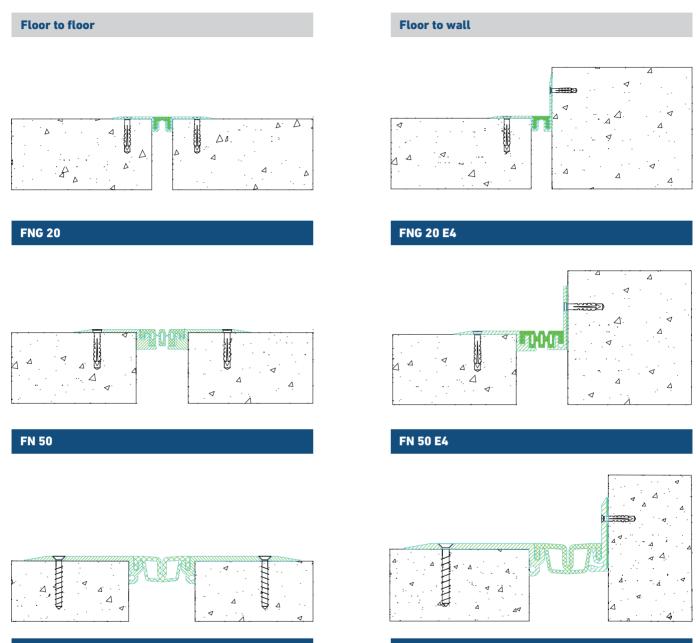


### Designed for:

- Refurbishment and Retrofit applications
- Wheeled equipment and pedestrian traffic
- Internal and external application

### MIGUTEC

JOINT COVERS FOR EXPANSION JOINTS



FN 110

FN 110 E4

Expansion Joint Cover	Joint Width	Min Joint Opening	Max Joint Opening	Visible Width	Installation Height *	Load Capacity	Application
FNG 20	20 mm	19 mm	21 mm	97 mm	2 mm	-	Floor to Floor
FN 50	50 mm	42 mm	58 mm	170 mm	3 mm	-	Floor to Floor
FN 110	75 mm	45 mm	105 mm	311 mm	6 mm	35 kN	Floor to Floor
FNG 20 E4	20 mm	19 mm	21 mm	59 mm	2 mm	-	Floor to Wall
FN 50 E4	50 mm	42 mm	58 mm	110 mm	3 mm	-	Floor to Wall
FN 110 E4	75 mm	45 mm	105 mm	194 mm	6 mm	35 kN	Floor to Wall

\* Wing thickness

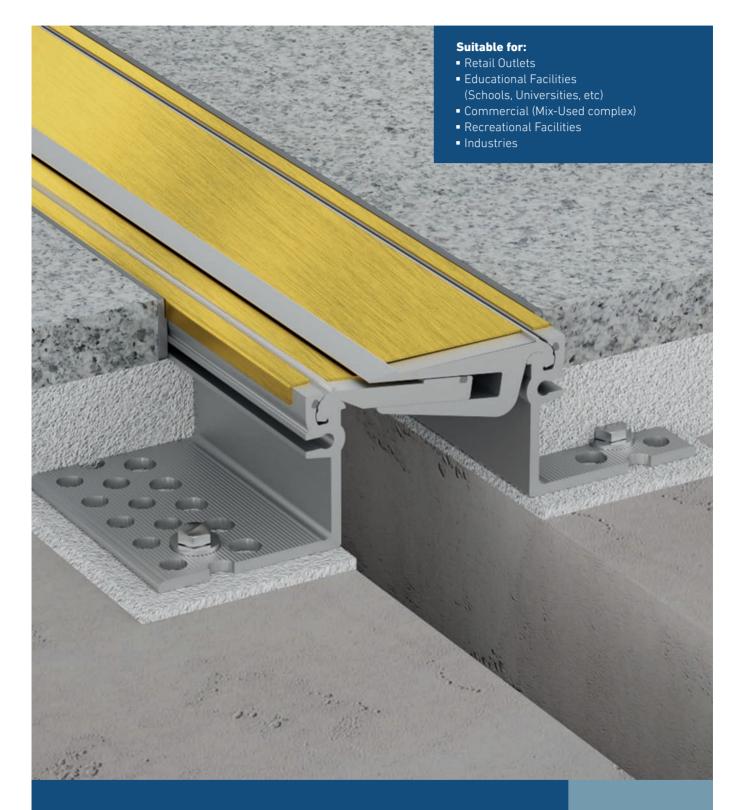
black

grey

beige

Please contact us for available colour per product.

## ALL METALL | FLOOR COVERS

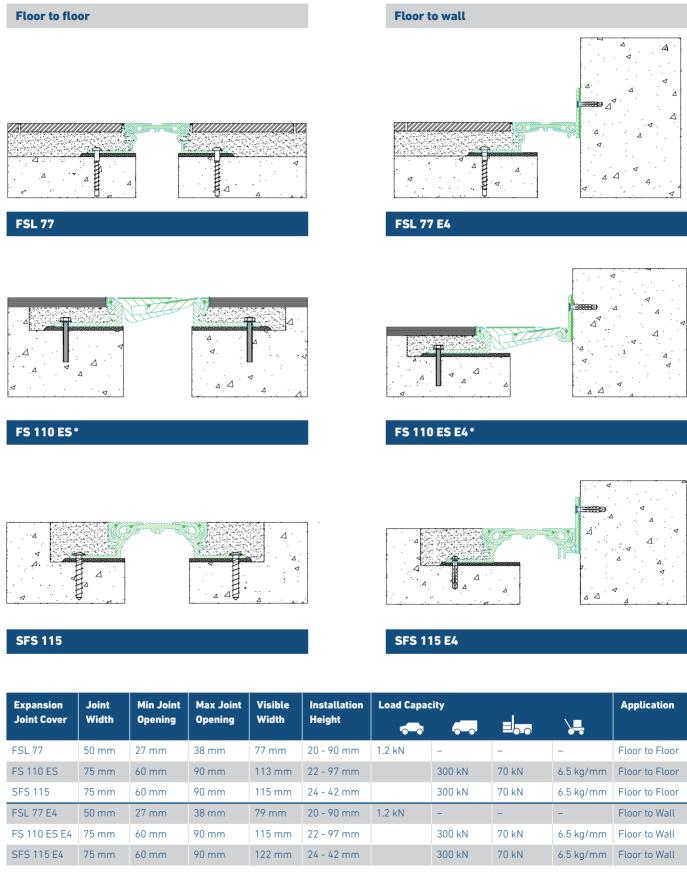


#### **Designed for:**

- Wheeled equipment
- Internal and external application
- Minimum visual impact

### MIGUTRANS

FOR TRAFFICABLE SURFACES



\* Available in brass & stainless steel inlay

## ALL METALL | FLOOR COVERS

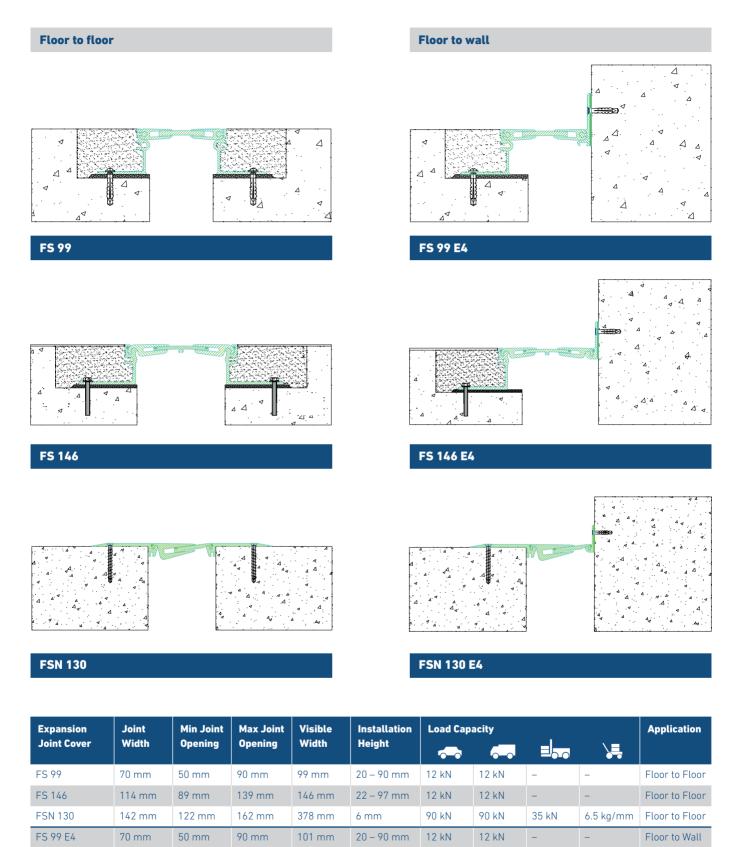


#### **Designed for:**

- Recessed or surface mounted application
- Wheeled equipment
- Internal and external application

**MIGUTRANS** 

FOR TRAFFICABLE SURFACES



89 mm

122 mm

139 mm

162 mm

150 mm

260 mm

22 – 97 mm

6 mm

12 kN

90 kN

12 kN

90 kN

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35 kN

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6.5 kg/mm

114 mm

142 mm

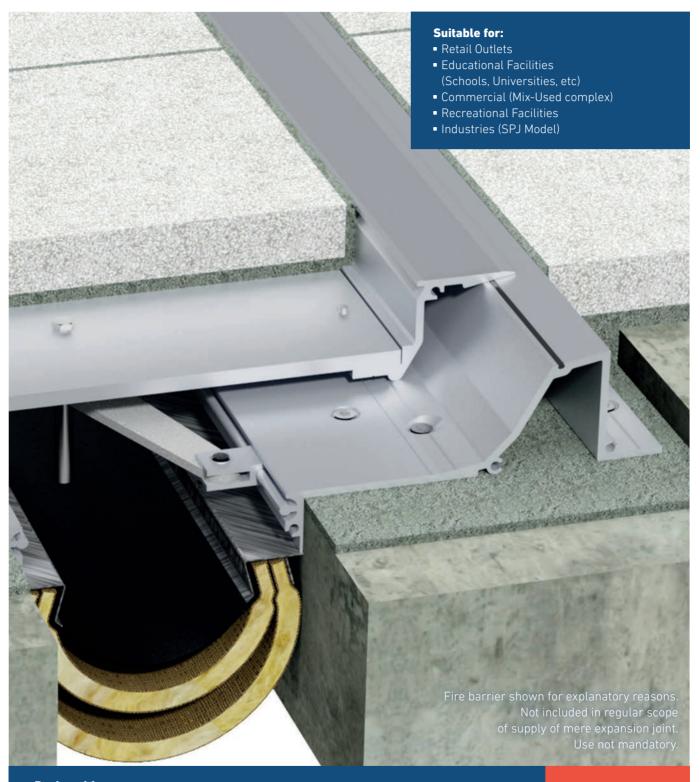
FS 146 E4

FSN 130 E4

Floor to Wall

Floor to Wall

## SEISMIC | FLOOR COVERS

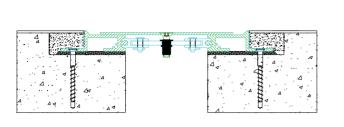


#### **Designed for:**

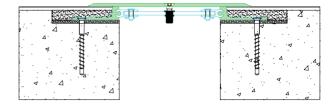
- Recessed mounted application
- Wheeled equipment and pedestrian traffic
- Internal and external application
- Minimum visual impact and maximum concealment (SPJ Model)

### **MIGUMAX**

EARTHQUAKE RESISTANT



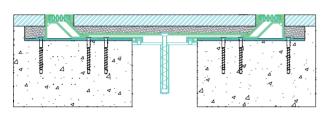
Floor to floor



FSJ

SDPP

Floor to floor

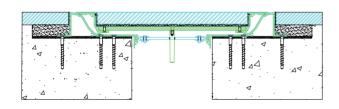


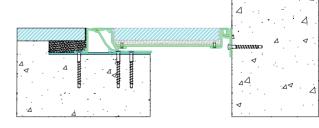
DAVCCOMT	

SDF

BSJ

#### Floor to wall





#### SPJ

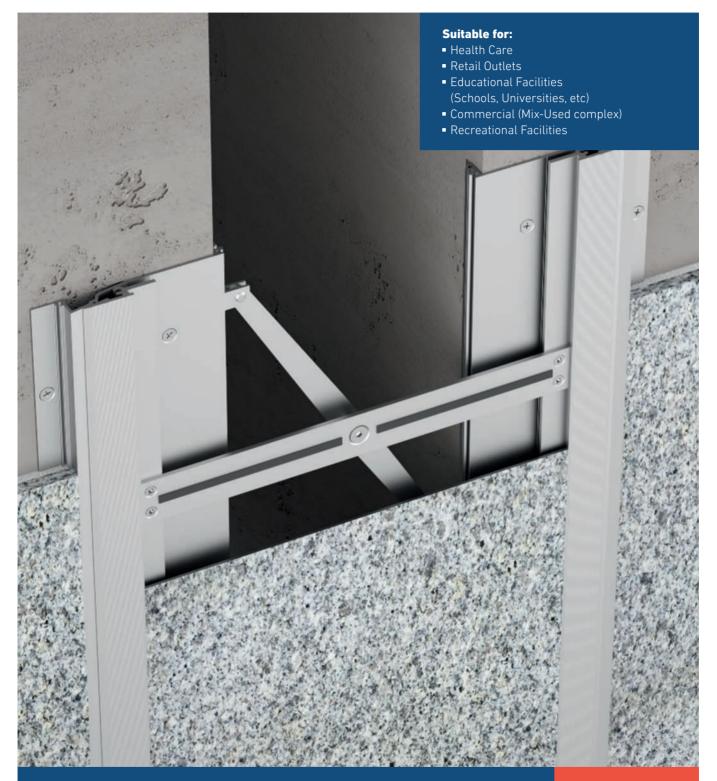
SPJ E3

Expansion Joint Cover	Joint Width*	Installation Height	Load Capacity	Application
FSJ	100–500 mm	25 mm	$\checkmark$	Floor to Floor
BSJ	100–500 mm	23 mm	$\checkmark$	Floor to Floor
SDPP	100–500 mm	55 mm	$\checkmark$	Floor to Floor
SDF	100–500 mm	55 mm	$\checkmark$	Floor to Floor
SPJ	100–500 mm	60 mm	$\checkmark$	Floor to Floor
SPJ E3	100–500 mm	60 mm	$\checkmark$	Floor to Wall

\* Refer to the website for movement details

\*\* Floor to wall models available for all models

## WALL AND CEILING COVERS



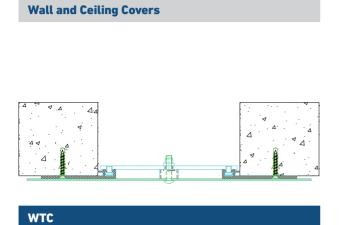
### **Designed for:**

- High aesthetic appeal
- Maximum concealment
- High movement requirement

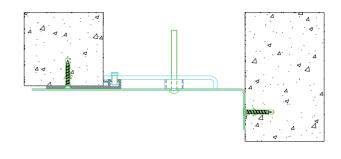
Please contact us in case of larger joint requirements.

### MIGUMAX

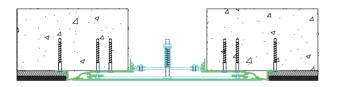
EARTHQUAKE RESISTANT



**Corner Wall and Ceiling Covers** 



WTC E4



WSP



### reddot award 2017 winner

Expansion Joint Cover	Joint Width	Visible Width	Installation Height	Application
WTC	100 – 500 mm	200 – 600 mm	Surface mounted	Wall to Wall
WSP	100 – 500 mm	65 mm	25 mm	Wall to Wall
WTC E4	100 – 500 mm	150 – 450 mm	Surface mounted	Wall Corner
WSP E	100 – 500 mm	65 mm	25 mm	Wall Corner

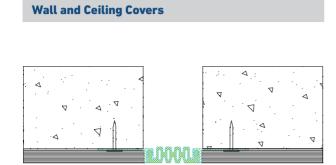
## WALL AND CEILING COVERS



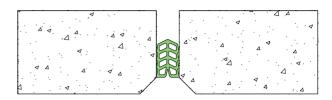
Designed for:Interior wall, ceiling and façade application

### MIGUTEC

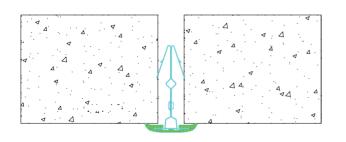
JOINT COVERS FOR EXPANSION JOINTS



Wall and Ceiling Covers

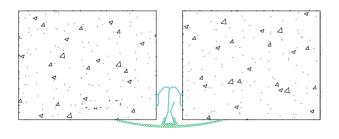


### FB 20

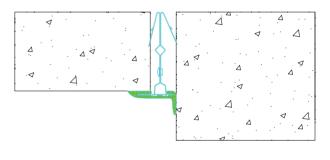


KF 55

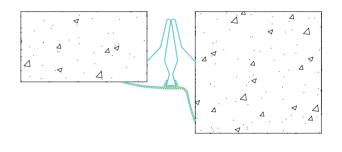
DF



### KF 250



**KFE 55** 



### KFE 250

Expansion Joint Cover	Joint Width	Visible Width	Total Movement	Application
DF* Series	30 – 58 mm	35 – 56 mm		Wall to Wall
FB 20*	10 – 45 mm	10 – 45 mm	6 – 20mm	Wall / Corner
KF 55	25 – 50 mm	50 – 70 mm		Wall to Wall
KF 250	25 – 50 mm	50 – 170 mm		Wall to Wall
KFE 55	25 – 50 mm	47 – 73 mm		Wall Corner
KFE 250	25 – 50 mm	40 – 75 mm		Wall Corner

## WALL AND CEILING COVERS

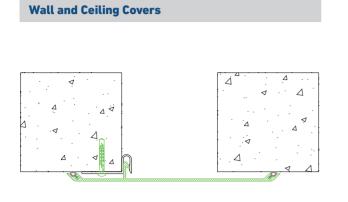


Designed for: Plaster, dry-wall and concrete wall finishes

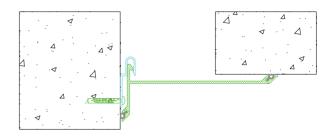
Hygiene environment

### MIGUMAX

EARTHQUAKE-RESISTANT

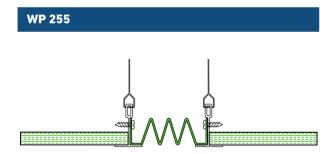


**Corner Wall and Ceiling Covers** 



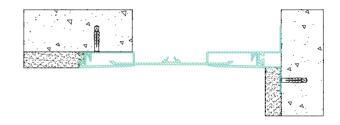
### WJC E4

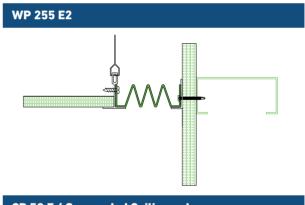
7	4



### CP 50 / Suspended Ceiling only

WJC





CP 50 E / Suspended Ceiling only

Expansion Joint Cover	Joint Width	Visible Width	Installation Height	Application
DLW	50–150 mm	140–222 mm	Surface mount	Wall to Wall
WP 255	110 mm	225 mm	22 mm	Wall to Wall
WJC E4	50–150 mm	83–222 mm	Surface mount	Wall Corner
WP 255 E2	205 mm	255 mm	22 mm	Wall Corner
CP 50	25–50 mm	25–50 mm		Suspended Ceiling
CP 50 E	25 – 50 mm	25 – 50 mm		Corner

## WALL AND CEILING COVERS



#### **Designed for:**

- Plaster, dry-wall and concrete wall finishes
- Hygiene environment

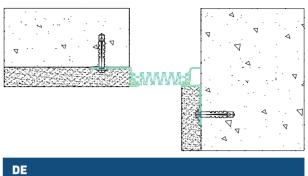
### MIGUMAX

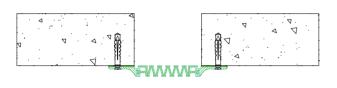
EARTHQUAKE-RESISTANT

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Wall and Ceiling Covers

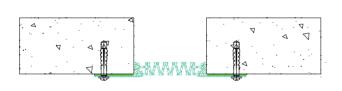
**Corner Wall and Ceiling Covers** 

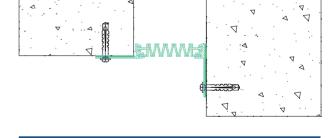




#### FA 12

FA 25





### **FAE 25**

Expansion Joint Cover	Joint Width	Visible Width	Installation Height	Application	
D*Series	30 – 350 mm	32 – 350 mm	12,15,20 mm	Wall to Wall	
FA 12	75 – 350 mm	132 – 407 mm	Surface mount	Wall & Corner	
FA 25	75 – 350 mm	111 – 32 mm	Surface mount	Wall to Wall	
DE** Series	30 – 350 mm	22 – 390 mm	12,15,20 mm	Wall Corner	
FAE 25	75 – 350 mm	69 – 389 mm	Surface mount	Wall Corner	
*D12 (12mm depth) *D15 (15mm depth)	**DE12 (12mm depth) **DE15 (15mm depth)				

\*\*DE20 (20mm depth)

Please contact us for available colour per product.

grey

\*D20 (20mm depth)

## SEISMIC | ROOF COVERS

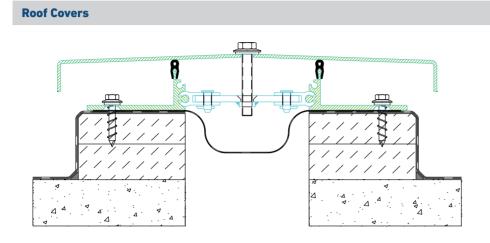


Designed for: • High movement requirement

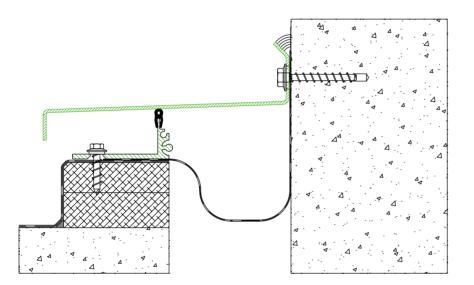
Please contact us in case of larger joint requirements.

### MIGUMAX

EARTHQUAKE-RESISTANT



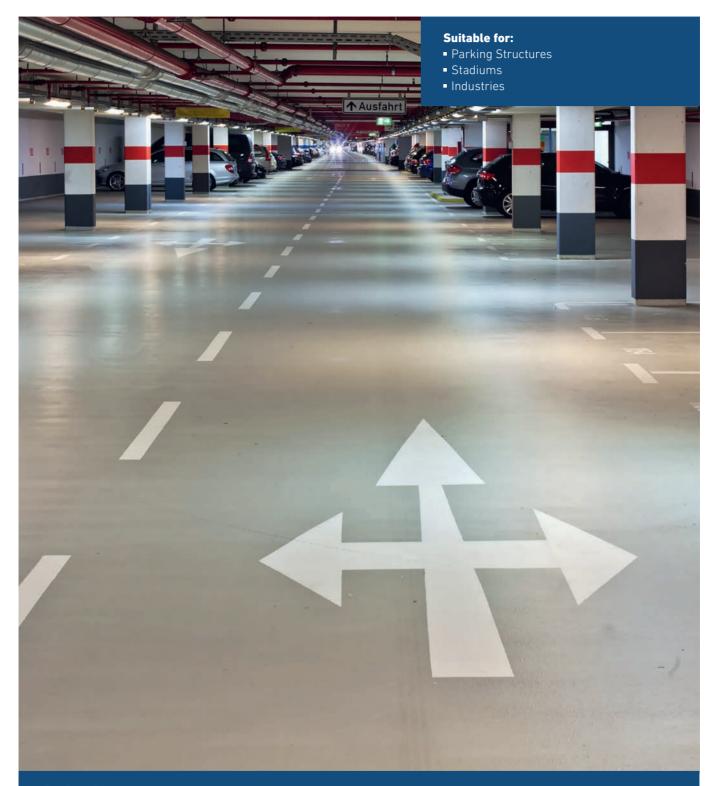
RTC



### RTC E4

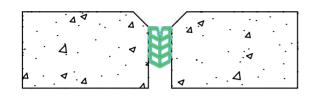
Expansion Joint Cover	Joint Width	Visible Width	Installation Height	Application	
RTC	100 – 500 mm	307 – 707 mm	47 mm	Roof to Roof	
RTC E4	100 – 500 mm	203 – 603 mm	98 mm	Roof Corner	

## PARKING | FLOOR COVERS



### **Designed for:**

- Stadium and parking structures
- Large movement requirement
- Wheeled equipment and high trafficable area



4

FB20

4

 $\triangleleft$ 

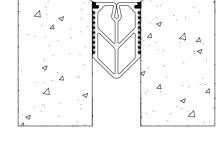
CPZ

2

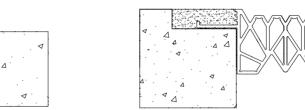
CRSL-S

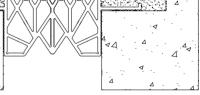
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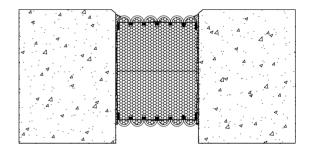


CPS





CPW



### CRSL-H (2 Hr-Fire Rated)

Expansion Joint Cover	Joint Width	Application
FB20	10 – 45 mm	Floor / Wall / Ceiling
CPS	50 – 100 mm	Floor / Wall
CPZ	50 – 100 mm	Floor
CPW	80 – 90 mm	Floor
CRSL-S	12 – 150 mm	Floor / Wall
CRSL-H (2HR)	12 – 100 mm	Floor / Wall

## HEAVY DUTY PARKING | FLOOR COVERS



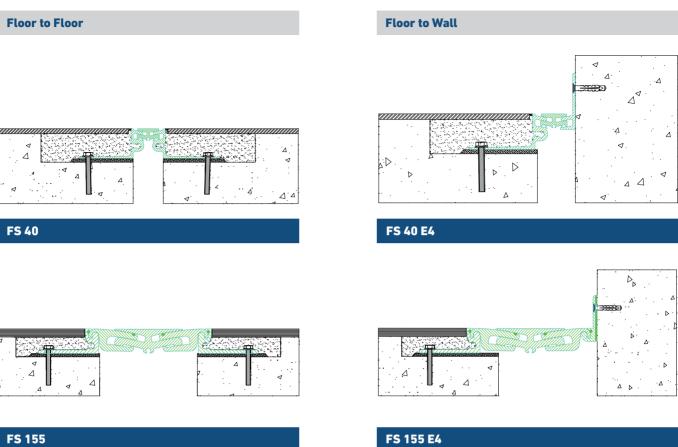
### Designed for:

- Internal and external use
- Large thermal movement
- Heavy wheeled equipment and high trafficable area

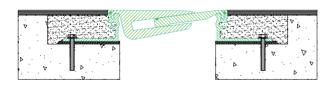
Please contact us in case of larger joint requirements.

### MIGUTRANS

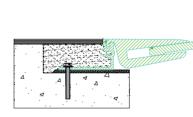
FOR TRAFFICABLE SURFACES

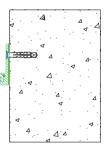


FS 155 E4



### FS 160

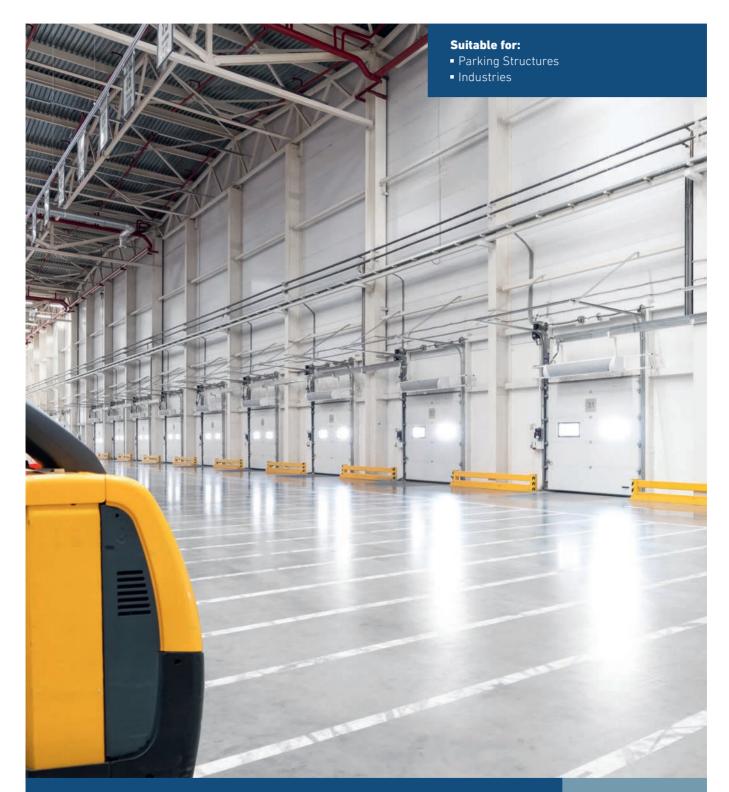




FS 160 E4

Expansion	Joint	Min Joint	Max Joint	Visible					Application
Joint Cover	Width	Opening	Opening	Width	Height	<b>~</b> ~			
FS 40	35 mm	27 mm	43 mm	40 mm	19 – 60 mm	300 kN	70 kN	6.5 kg/mm	Floor to Floor
FS 155	120 mm	100 mm	140 mm	155 mm	22 – 62 mm	600 kN	130 kN	15 kg/mm	Floor to Floor
FS 160	130 mm	100 mm	160 mm	162 mm	22 – 97 mm	300 kN	70 kN	6.5 kg/mm	Floor to Floor
FS 40 E4	35 mm	27 mm	43 mm	42 mm	19 – 60 mm	300 kN	70 kN	6.5 kg/mm	Floor to Wall
FS 155 E4	120 mm	100 mm	140 mm	158 mm	22 – 62 mm	600 kN	130 kN	15 kg/mm	Floor to Wall
FS 160 E4	130 mm	100 mm	160 mm	166 mm	22 – 97 mm	300 kN	70 kN	6.5 kg/mm	Floor to Wall

## HD VIBRATION FREE INDUSTRIAL | FLOOR COVERS



### Designed for:

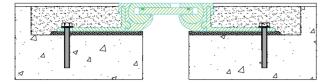
- Internal and external use
- Large thermal movement
- Heavy wheeled equipment and high trafficable area

### MIGUTRANS

FOR TRAFFICABLE SURFACES

#### **Floor Covers**

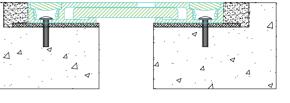
#### **Floor Covers**



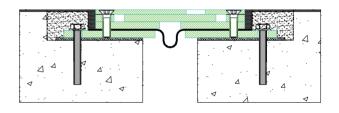
#### FS 100

FSS 215

⊲



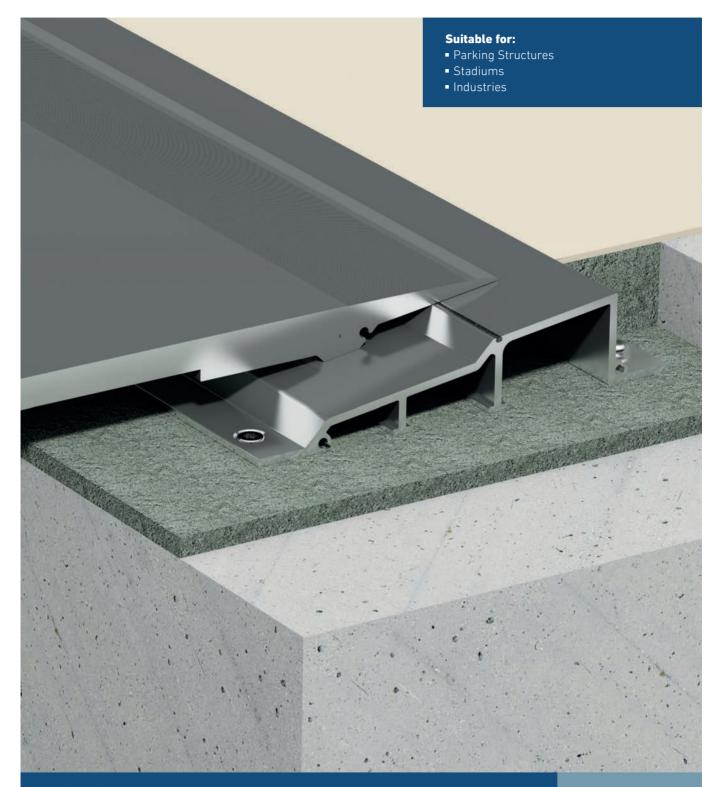
#### STS 160 ES



#### **STW 160 ES**

Expansion	Joint	Min Joint	Max Joint	Visible	Installation Load Capacity		Application		
Joint Cover	Width	Opening	Opening	Width	Height	<b>~</b> -~		1	
FS 100	50 mm	40 mm	60 mm	102 mm	30 – 50 mm	300 kN	75 kN	9 kg/mm	Floor to Floor
FSS 215	60 mm	40 mm	80 mm	215 mm	23 – 23 mm	600 kN	130 kN	30 kg/mm	Floor to Floor
STS 160	60 mm	40 mm	80 mm	163 mm	16 – 60 mm	600 kN	150 kN	75 kg/mm	Floor to Floor
STW 160	60 mm	40 mm	80 mm	163 mm	30 – 60 mm	600 kN	150 kN	75 kg/mm	Floor to Floor

# PARKING AND STADIUM | FLOOR COVERS



### Designed for:

- Large movement requirement
- Heavy wheeled equipment and high trafficable area

## MIGUTRANS

FOR TRAFFICABLE SURFACES

Floor to Flo	or		Fl	oor to Wa	all			
۵ ۵ ۹ ۹ ۹ ۹ ۹ ۹ ۹ ۹ ۹ ۹ ۹				۲ ۲ ۲	▲ ^ √ 2 5V 280 E4			
۵ ۵ ۵ ۹ ۹ ۹ ۹ ۹ ۹ ۹ ۹ ۹ ۹				۲. ۲.	⊲ ⊲ 5V 285 E4		77	
LSP Expansion Joint Cover FSV 280	Joint Width 200 mm	Visible Width 280 mm	Installation Height 45 mm – 130 mm	Load Car	pacity 35 kN	35 kN	6.5 kg/mm	<b>Application</b> Floor to Floor
FSV 280 E4	200 mm	256 mm	45 mm – 130 mm	35 kN	35 kN	35 kN	6.5 kg/mm	Floor to Wall
FSV 285	240 mm	284 mm	27 mm – 80 mm	35 kN	35 kN	-	-	Floor to Floor
FSV 285 E4	240 mm	285 mm	27 mm – 80 mm	35 kN	35 kN	-	_	Floor to Wall

30 kN

LSP E4

100 – 500 mm

382 – 832 mm 45 mm

Floor to Wall

# 100% WATERTIGHT MIGUTAN SYSTEM | FOR BITUMINOUS LAYER

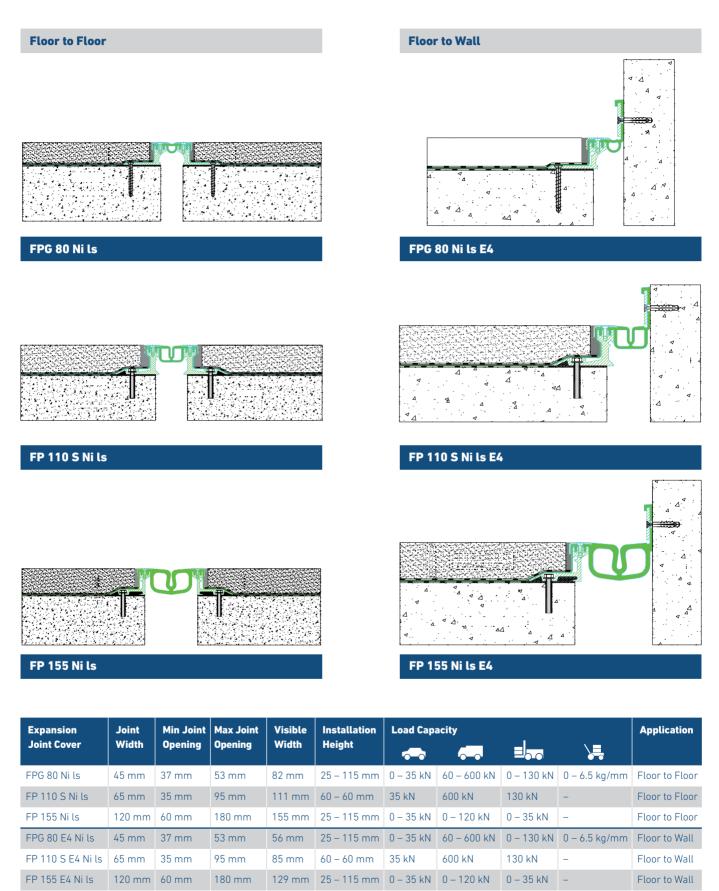


#### **Designed for:**

- Structures with bituminous waterproofing layer
- 100% watertight requirement
- Internal and external use
- Large movement requirement
- Heavy wheeled equipment and high trafficable area

### **MIGUTAN**

WATERTIGHT EXPANSION JOINT SOLUTIONS



# 100% WATERTIGHT MIGUTAN SYSTEM | FOR COATING SYSTEMS

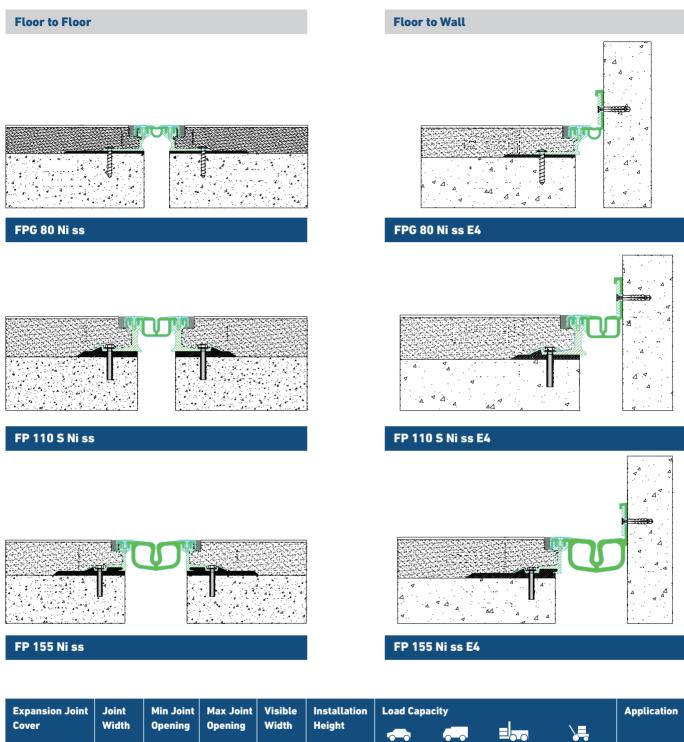


#### **Designed for:**

- Epoxy Coated Floor
- 100% watertight requirement
- Internal and external use
- Large movement requirement
- Heavy wheeled equipment and high trafficable area

### MIGUTAN

WATERTIGHT EXPANSION JOINT SOLUTIONS



						-				
Cover	Width	Opening	Opening	Width	Height	<b>~~</b>	<b>~</b> ~~		<b>\</b> =	
FPG 80 Ni ss	45 mm	37 mm	53 mm	82 mm	25 – 115 mm	0–35 kN	60–600 kN	0–130 kN	0-6.5 kg/mm	Floor to Floor
FP 110 S Ni ss	65 mm	35 mm	95 mm	111 mm	60 – 60 mm	35 kN	600 kN	130 kN	-	Floor to Floor
FP 155 Ni ss	120 mm	60 mm	180 mm	155 mm	25 – 115 mm	0–35 kN	0–120 kN	0–35 kN	-	Floor to Floor
FPG 80 E4 Ni ss	45 mm	37 mm	53 mm	56 mm	25 – 115 mm	0–35 kN	60–600 kN	0–130 kN	0-6.5 kg/mm	Floor to Wall
FP 110 S E4 Ni ss	65 mm	35 mm	95 mm	85 mm	60 – 60 mm	35 kN	600 kN	130 kN	-	Floor to Wall
FP 155 E4 Ni ss	120 mm	60 mm	180 mm	129 mm	25 – 115 mm	0–35 kN	0–120 kN	0–35 kN	-	Floor to Wall

# 100% WATERTIGHT MIGUTAN SYSTEM | COATING SYSTEMS CONCRETE DECK INSTALLATION

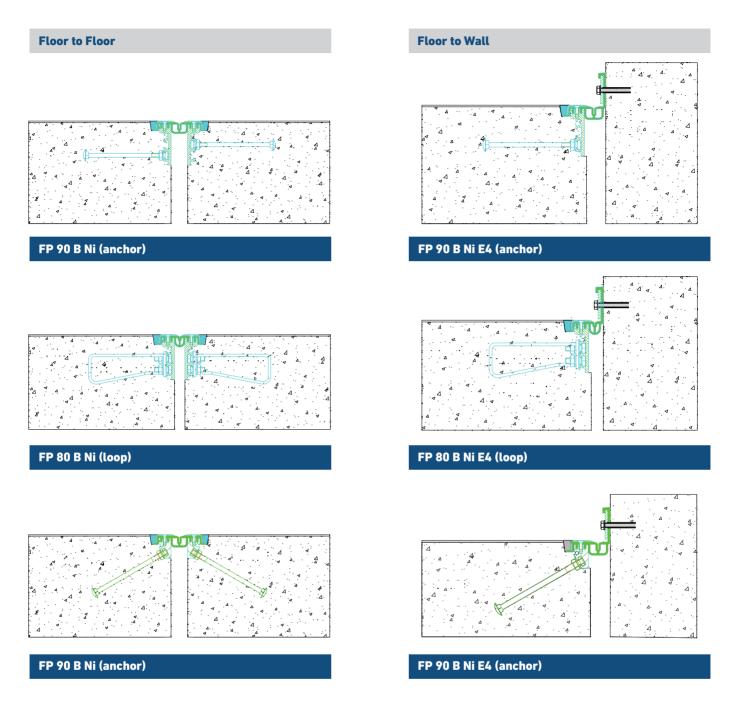


#### **Designed for:**

- Flush installation in concrete decks with coating systems
- 100% watertight requirement
- Large movement requirement
- Heavy wheeled equipment and high trafficable area

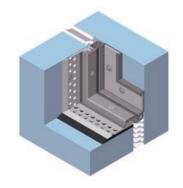
### MIGUTAN

WATERTIGHT EXPANSION JOINT SOLUTIONS



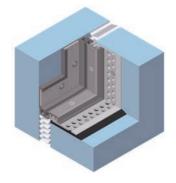
Expansion Joint Cover	Joint	Min Joint	Max Joint			Load Capacity			
	Width	Opening	Opening	Width		<b>~</b> -•		<b>\</b>	
FP 90/90 BNI (anchor)	34 mm	14 mm	54 mm	95 mm	35 kN	300 kN	70 kN	-	Floor to Floor
FP 80/90 BNI (loop)	21 mm	11 mm	31 mm	82 mm	35 kN	600 kN	130 kN	6.5 kg/mm	Floor to Floor
FP 90/48 BNI (anchor)	34 mm	14 mm	54 mm	95 mm	35 kN	300 kN	70 kN	-	Floor to Floor
FP 90/90 BNI E4 (anchor)	34 mm	14 mm	54 mm	95 mm	35 kN	300 kN	70 kN	-	Floor to Wall
FP 80/90 BNI E4 (loop)	21 mm	11 mm	31 mm	82 mm	35 kN	600 kN	130 kN	6.5 kg/mm	Floor to Wall
FP 90/48 BNI E4 (anchor)	34 mm	14 mm	54 mm	95 mm	35 kN	300 kN	70 kN	-	Floor to Wall

# FACTORY TRANSITIONS | MIGUTAN SYSTEM



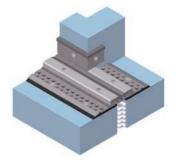
FP 90 V right

FP 90 W left

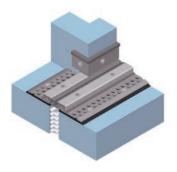


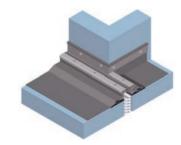
FP 90 V left

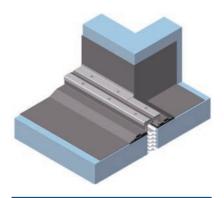
FP 90 W1 right



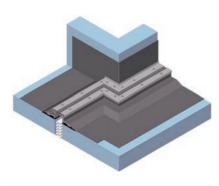
FP 90 W right



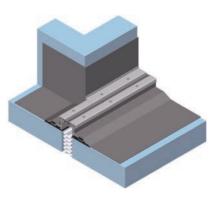




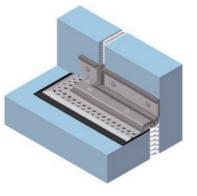
FP 90 W2 right



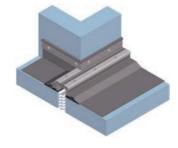
FP 90 W3 left



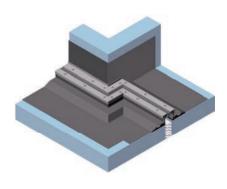
FP 90 W2 left



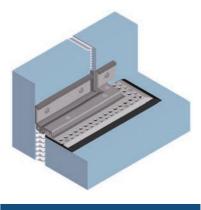
FP 90 X right



FP 90 W1 left



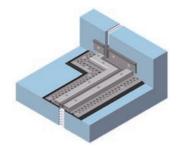
FP 90 W3 right



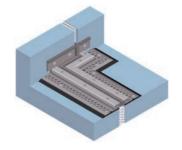
#### FP 90 X left

#### MIGUTAN

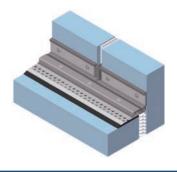
The illustrated terminations/intersections A–Z are a selection of possible solutions only. We will gladly deliver tailor-made terminations/intersections on demand.

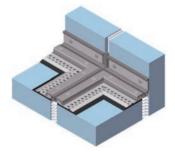


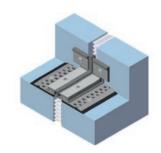


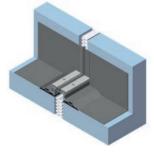


FP 90 X1 left







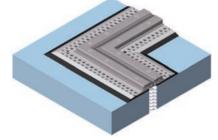


FP 90 Z

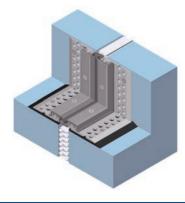




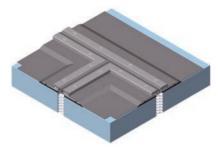
FP 90 Y



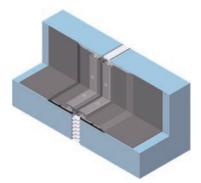
Flat angle, short AAS sheets



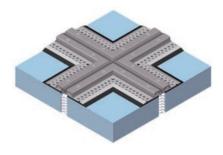
Upstand, short AAS sheets



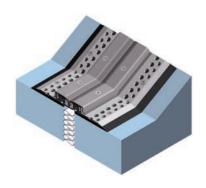
T-Piece, long AAS sheets



Upstand, long AAS sheets



**Cross, short AAS sheets** 



Slope end

# CONTROL JOINTS | FLOOR COVERS

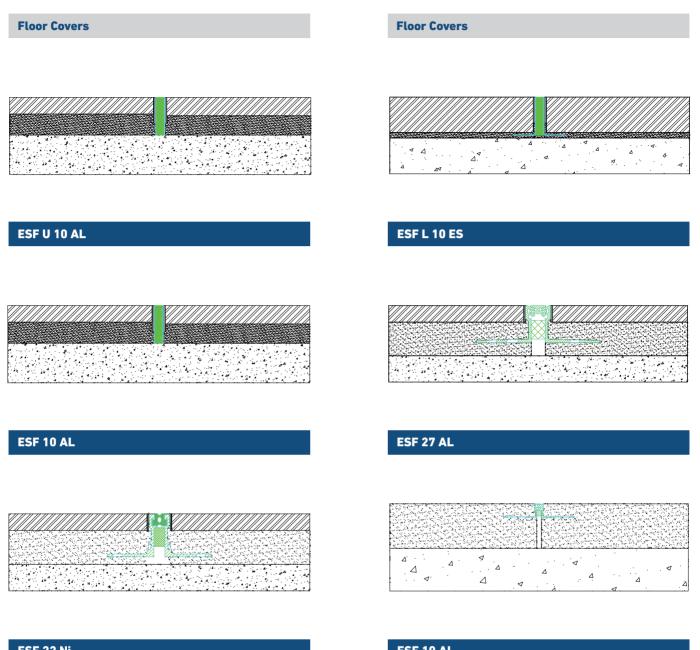


#### Designed for:

- High Mechanical Stress
- Anchored and free-floating installation

### MIGUTEC

JOINT COVERS FOR EXPANSION JOINTS



#### ESF 22 Ni

ESF 10 AL

Expansion Joint Cover	Joint Width	Min Joint Opening	Max Joint Opening	Visible Width	Installation Height	Load Capa	ity	<b>\</b> #	Application
ESF-U 10 AL	5 mm	4 mm	6 mm	10 mm	10 – 100 mm	300 kN	35 kN	-	Floor to Floor
ESF-L 10 ES	8 mm	7 mm	9 mm	10 mm	18 – 51 mm	300 kN	35 kN	-	Floor to Floor
ESF 10 AL	10 mm	8 mm	12 mm	10 mm	12 – 60 mm	600 kN	130 kN	6.5kg/mm	Floor to Floor
ESF 22 NI	12 mm	10 mm	14 mm	22 mm	18 – 60 mm	600 kN	130 kN	11kg/mm	Floor to Floor
ESF 27 AL	15 mm	10 mm	20 mm	27 mm	25 – 55 mm	600 kN	130 kN	8kg/mm	Floor to Floor
ESF 37AL	25 mm	20 mm	30 mm	37 mm	25 – 55 mm	600 kN	130 kN	8kg/mm	Floor to Floor

ES = With stainless steel capping

NI = With stainless steel capping

AL = Aluminium



# MIGUA FIRE BARRIER – FOR ALL KINDS OF EXPANSION JOINTS

Fire barriers are designed and installed together with the expansion joint cover. Each fire barrier is optimally adapted to the individual expansion joint setting. Therefore, knowing the exact joint width and in particular the calculative expected joint movement in expansion and compression (=x)-, lateral shear (=y)- as well as vertical displacement (=z)-direction is crucial. All fire barriers are approved for certain movement sizes only and may only be used within these limits.

Ropes for example are only approved up to a movement of max. 7.4% of the width in Europe, since they no longer expand after compression, which would make the fire protection insufficient. Many products have approvals but are not suitable for use with movement joints.

Therefore, the exact data of each movement joint have to be determined and the material has to live up to these specification. We offer a solutions for every requirement. Take advantage of our experience. MIGUA gladly supports you with competent technical support to assist in choosing the right expansion joint cover and appropriate insulation design.

MIGUFIRE system has been tested at Underwriters Laboratories® for a two-hour rating. The system was fully pre-cycled for 50%, expansion and contraction capacity. It protects against the spread of fire through and expansion and/or seismic joint before and after movement. Complies with UL® 2079 and ASTM E1399.



#### **Designed for:**

- Fire stops within buildings, e.g. schools, hospitals, shopping malls, airports, railway stations, car parks, and commercial buildings
- Expansion joints ranging from 1" to 20"
- For floor and wall applications
- For joints with large movements up to +/- 50% (expansion and compression)
- For requirements concerning duration of protection of 120 minutes
- For requirements concerning certified material according to UL or ETA
- Approved for seismic movement

#### **Product Features:**

- Fire resistance of > = 120 Min.
- Accomodates dynamic movement
- Can be integrated with (nearly) all of our expansion joint systems
- Caulk-free application
- Easy to install
- Applicable for floor and wall joint systems
- Approval/Listing according to UL or ETA
- Transitions available in horizontal and vertical layout
- High thermal insulation properties
- Free from asbestos and other harmful substances

#### MIGUA offers a variety of fire barriers, each tailormade for the specific requirements:



#### **MIGUFIRE 2 HOUR UL Fire Barrier**

Fire protection mat systems of varying thicknesses that are being mounted into the joint in accordance to the joint width. A blanket type fire barrier, tested and proven to provide a 2-hour fire resistant rating.

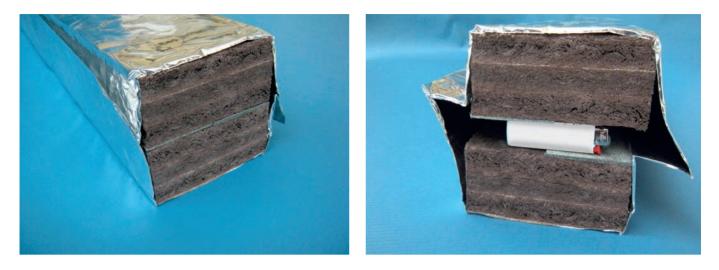
#### **For Floor Covers**

Expansion Joint Cover	Joint Width	Application
MIGUFIRE 1F	25 mm	Floor
MIGUFIRE 2F	50 mm	Floor
MIGUFIRE 3F	75 mm	Floor
MIGUFIRE 4F	100 mm	Floor
MIGUFIRE 5F	125 mm	Floor
MIGUFIRE 6F	150 mm	Floor
MIGUFIRE 7F	175 mm	Floor
MIGUFIRE 8F	200 mm	Floor
MIGUFIRE 9F	225 mm	Floor
MIGUFIRE 10F	250 mm	Floor
MIGUFIRE 11F	275 mm	Floor
MIGUFIRE 12F	300 mm	Floor

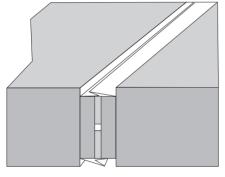
#### For Wall Covers

Expansion Joint Cover	Joint Width	Application
MIGUFIRE 1W	25 mm	Wall
MIGUFIRE 2W	50 mm	Wall
MIGUFIRE 3W	75 mm	Wall
MIGUFIRE 4W	100 mm	Wall
MIGUFIRE 5W	125 mm	Wall
MIGUFIRE 6W	150 mm	Wall
MIGUFIRE 7W	175 mm	Wall
MIGUFIRE 8W	200 mm	Wall
MIGUFIRE 9W	225 mm	Wall
MIGUFIRE 10W	250 mm	Wall
MIGUFIRE 11W	275 mm	Wall
MIGUFIRE 12W	300 mm	Wall

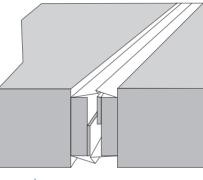
### FIRE BARRIER | FOR ALL KINDS OF EXPANSION JOINTS



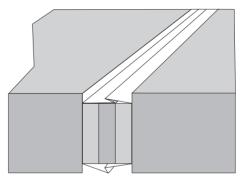
Fire protection systems able to absorb multi directional joint movements that additonal swell in case of fire, thus offering fire protection and smoke tightness. Approved according to European standardization ETA 026; class EI120, class C-s1,d0\* according to EN 13501-1.



normal



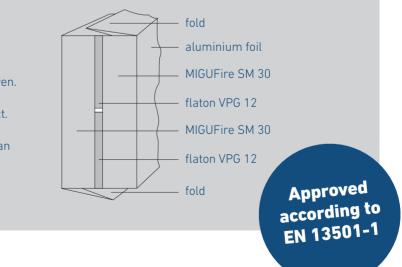
opened



closes in the case of fire

#### How does it work?

The joint element is covered with aluminium foil with expansion fold at its narrow side. Thus, complete closing in the case of expansion of the joint is always given. In the event of fire, the intumescence material flatten expands and supports MIGUFire in its insulation effect. Joint expansions of 20 mm are fireproof secured this way. Approved for joint widths of 20 to 100 mm with an additional expansion of 20 mm.

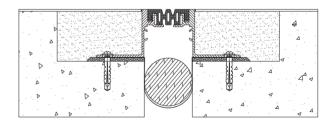


Minimum wall or ceiling thickness (mm)	Starting joint width (mm)	Expanded joint width (mm)	Element length (mm)	Element width (mm)	Element height = Filling depth (mm)
150	20	40	1000	30	125
150	30	50	1000	40	125
150	40	60	1000	50	125
150	50	70	1000	60	125
150	60	80	1000	70	125
150	70	90	1000	80	125
150	80	100	1000	95	125
150	90	110	1000	110	125
150	100	120	1000	120	125

#### Further safety information

- Fire protection ropes in various thicknesses that are being pressed into the expansion joint, offering high fire protection duration of up to 240 minutes
- In general, ropes must not be used for movements
   7,4% of the width of the joint

Opening gap width (mm)	Insu-Rope diameter (mm)
10	12
15	20
20	30
25	40
30	50
40	60
50	70
60	80
70	90
80	100
100	120



FP 55

## **LEGAL NOTES**

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

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

The current version requested from us or downloaded from www.migua.com applies.

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