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EMSEAL

PRODUCT DATA Migutan FP 110

Watertight, Plaza Deck, & Split Slab Expansion Joint

A SIKA COMPANY

(Previously **FP 90**, name changed as part of metric standardization program)

Product Description

- **Migutan** (mig-yoo-tan) consists of heavy-duty extruded aluminum retainer rails, synthetic rubber side flashing sheets, a thermo-plastic rubber sealing insert, and stainless-steel retainer caps.
- The rails are bolted to the structural slab, the flashing sheets are integrated in a sandwich with the deck waterproofing system.
- The sealing insert is installed over the upper end of the flashing sheets and is held in compression by the stain- less-steel retainer caps.
- The net result is a system that integrates the structural slab, deck waterproofing and expansion joint system which is essentially independent of the wear-course components (ex: pavers, asphalt topping, concrete topping, etc.) while ensuring that movement is properly accommodated.

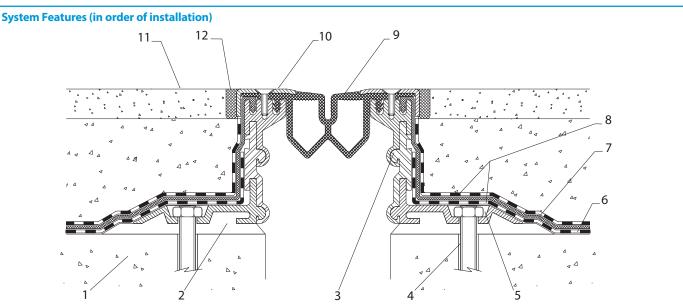
Uses and Applications

- Plaza Decks
- Split-Slab Parking Decks
- Roof Decks
- Below-Grade Deck and Wall Joints

Load Capacity

Plaza and Parking Decks: FP 110/45 - FP 110/115: Suitable for slow moving vehicles with pneumatic tires such as cars and light trucks up to 16,860 lb.wt. (75 kN) gross.

Ramps, Loading Docks or other Decks with Continuous Heavy-Duty (Truck, Bus) Vehicular Traffic: Use steel legs — Consult EMSEAL.



Key to system features

- 1. Structural slab
- 2. Epoxy levelling bed ensures that retainer legs are fully supported while acting as a dielectric separator
- 3. Two or three piece interlocked retainer legs are free to slide relative to each other to provide positive interlocking of successive joint lengths. (Note: solid-leg FP 110/6000s & FP 110/25 interlocked by means of stainless-steel connector pins)
- 4. 5/16" x 4" (8mm x 100mm) epoxy anchors at 12-Inch (300mm) centers ensure secure fastening while placing

no stress on concrete joint-edge (note: FP 110/25 uses counter-sink-head expansion anchor.)

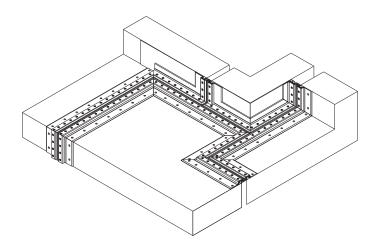
- 5. Level-filled anchor channels protect waterproofing from damage
- 6. Deck waterproofing is installed across deck and up migutan retainer leg
- Heat-weldable, high-nitrile pvc side flashing sheets are fully embedded in, welded to or adhered to upper surface of primary deck waterproofing
- Overlay and deck membranes encapsulate migutan flashing sheet in watertight sandwich

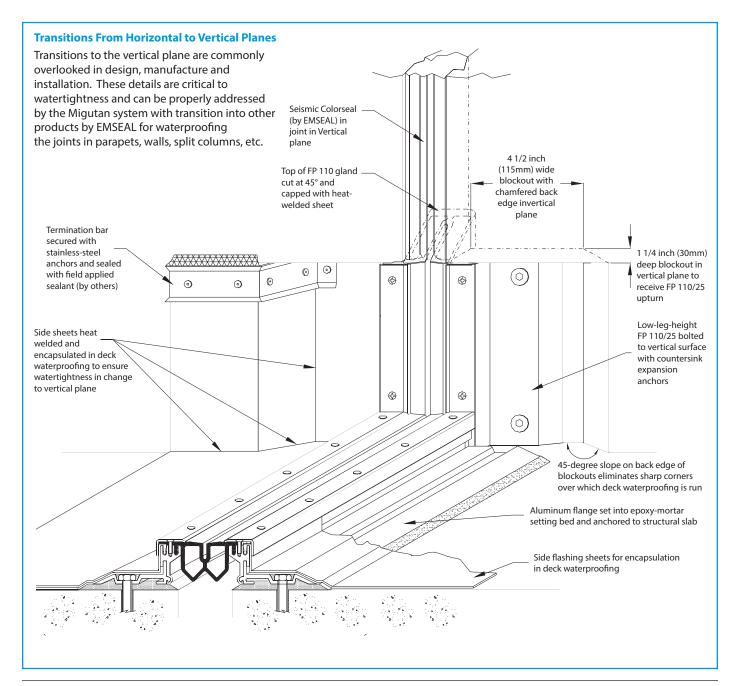
- Heat-weldable, sealing gland allows for watertight heat-welded transitions in direction and plane
- 10. Stainless-steel retaining caps and machine-screws clamp sealing gland and flashing sheet and are removable for seal maintenance
- 11. Pavers, asphalt, fill, or other wearsurface
- 12. Self-levelling, traffic-grade sealant control joint (as needed to suit application — consult EMSEAL)

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Model No.	Α	Α	с	D	E
	For Mean Temp.	Total Movement	Exposed Width (at	Overall Width	– Height
	Joint Size of up to width of A.	Capability (over total expected temp. ° range)	mid-point of movement range)	(At mid-point of movement range)	-
or transitions to th raffic: FP 110/25	e vertical plane, below 2.63" (65mm)	-grade joints, and park 2.00" (50mm)	ting decks with normation 4.33" (110mm)	el car traffic and occasio 9.05″ (230mm)	onal truck/bus 0.98″ (25mm)
			d occasional truck/bu	a troff a	
or split-slab parkir	ng and plaza decks wit	n normal car traffic an	u occasional truck/bu	is traffic:	
or split-slab parkir FP 110/45	ng and plaza decks wit	n normal car traffic an	u occasional truck/bu		1.81″ (46mm)
	ng and plaza decks wit	n normai car traffic an			1.81″ (46mm) 2.44″ (62mm)
FP 110/45	ng and plaza decks wit 3.00" (76mm)	n normal car tramc an 2.36″ (60mm)	4.33" (110mm)	9.33" (237mm)	
FP 110/45 FP 110/60					2.44" (62mm)
FP 110/45 FP 110/60 FP 110/80					2.44″ (62mm) 3.19″ (81mm)
FP 110/45 FP 110/60 FP 110/80 FP 110/95 FP 110/115 or non-vehicular-t	3.00″ (76mm)	2.36" (60mm) a-high leg heights acco	4.33" (110mm) ommodate thick overlay	9.33" (237mm) y systems and topping sl	2.44″ (62mm) 3.19″ (81mm) 3.81″ (97mm) 4.61″ (117mm)
FP 110/45 FP 110/60 FP 110/80 FP 110/95 FP 110/115 Dr non-vehicular-t	3.00" (76mm) raffic plaza decks. Extr	2.36" (60mm) a-high leg heights acco	4.33" (110mm) ommodate thick overlay	9.33" (237mm) y systems and topping sl	2.44″ (62mm) 3.19″ (81mm) 3.81″ (97mm) 4.61″ (117mm)
FP 110/45 FP 110/60 FP 110/80 FP 110/95 FP 110/115 Dr non-vehicular-t re supplied with ext	3.00" (76mm) raffic plaza decks. Extr	2.36" (60mm) a-high leg heights acco	4.33" (110mm) ommodate thick overlay	9.33" (237mm) y systems and topping sl	2.44" (62mm) 3.19" (81mm) 3.81" (97mm) 4.61" (117mm) labs. These models
FP 110/45 FP 110/60 FP 110/80 FP 110/95 FP 110/115 or non-vehicular-t re supplied with ext FP 110/130	3.00" (76mm) raffic plaza decks. Extr	2.36" (60mm) a-high leg heights acco	4.33" (110mm) ommodate thick overlay	9.33" (237mm) y systems and topping sl	2.44" (62mm) 3.19" (81mm) 3.81" (97mm) 4.61" (117mm) labs. These models 5.12" (117mm)
FP 110/45 FP 110/60 FP 110/80 FP 110/95 FP 110/115 or non-vehicular-t re supplied with ext FP 110/130 FP 110/150	3.00" (76mm) raffic plaza decks. Extr	2.36" (60mm) a-high leg heights acco	4.33" (110mm) ommodate thick overlay	9.33" (237mm) y systems and topping sl	2.44" (62mm) 3.19" (81mm) 3.81" (97mm) 4.61" (117mm) labs. These models 5.12" (117mm) 5.90" (150mm)
FP 110/45 FP 110/60 FP 110/80 FP 110/95 FP 110/115 or non-vehicular-t re supplied with ext FP 110/130 FP 110/150 FP 110/165	3.00" (76mm) raffic plaza decks. Extr	2.36" (60mm) a-high leg heights acco	4.33" (110mm) ommodate thick overlay	9.33" (237mm) y systems and topping sl	2.44" (62mm) 3.19" (81mm) 3.81" (97mm) 4.61" (117mm) labs. These models 5.12" (117mm) 5.90" (150mm) 6.57" (167mm)
FP 110/45 FP 110/60 FP 110/80 FP 110/95 FP 110/115 Dr non-vehicular-t re supplied with ext FP 110/130 FP 110/150 FP 110/165 FP 110/185	3.00" (76mm) raffic plaza decks. Extr	2.36" (60mm) a-high leg heights acco	4.33" (110mm) ommodate thick overlay	9.33" (237mm) y systems and topping sl	2.44" (62mm) 3.19" (81mm) 3.81" (97mm) 4.61" (117mm) labs. These models 5.12" (117mm) 5.90" (150mm) 6.57" (167mm) 7.36" (187mm)
FP 110/45 FP 110/60 FP 110/80 FP 110/95 FP 110/115 or non-vehicular-t re supplied with ext FP 110/130 FP 110/130 FP 110/165 FP 110/185 FP 110/200	3.00" (76mm) raffic plaza decks. Extr tra-long (double-width)	2.36" (60mm) a-high leg heights acco side sheets to ensure p	4.33" (110mm) ommodate thick overlay oper integration with d	9.33" (237mm) y systems and topping sl leck waterproofing.	2.44" (62mm) 3.19" (81mm) 3.81" (97mm) 4.61" (117mm) abs. These models 5.12" (117mm) 5.90" (150mm) 6.57" (167mm) 7.36" (187mm) 7.95" (202mm)
FP 110/45 FP 110/60 FP 110/80 FP 110/95 FP 110/115 or non-vehicular-t re supplied with ext FP 110/130 FP 110/150 FP 110/165 FP 110/185 FP 110/200 FP 110/200	3.00" (76mm) raffic plaza decks. Extr tra-long (double-width)	2.36" (60mm) a-high leg heights acco side sheets to ensure p	4.33" (110mm) ommodate thick overlay oper integration with d	9.33" (237mm) y systems and topping sl leck waterproofing.	2.44" (62mm) 3.19" (81mm) 3.81" (97mm) 4.61" (117mm) labs. These models 5.12" (117mm) 5.90" (150mm) 6.57" (167mm) 7.36" (187mm) 7.95" (202mm) 8.74" (222mm)
FP 110/45 FP 110/60 FP 110/80 FP 110/95 FP 110/115 or non-vehicular-t re supplied with ext FP 110/130 FP 110/150 FP 110/165 FP 110/185 FP 110/200 FP 110/200 FP 110/235	3.00" (76mm) raffic plaza decks. Extr tra-long (double-width)	2.36" (60mm) a-high leg heights acco side sheets to ensure p	4.33" (110mm) ommodate thick overlay oper integration with d	9.33" (237mm) y systems and topping sl leck waterproofing.	2.44" (62mm) 3.19" (81mm) 3.81" (97mm) 4.61" (117mm) labs. These models 5.12" (117mm) 5.90" (150mm) 6.57" (167mm) 7.36" (187mm) 7.95" (202mm) 8.74" (222mm) 9.33" (237mm)
FP 110/45 FP 110/60 FP 110/80 FP 110/95 FP 110/115 or non-vehicular-t re supplied with ext FP 110/130 FP 110/150 FP 110/165 FP 110/165 FP 110/200 FP 110/200 FP 110/235 FP 110/235 FP 110/255	3.00" (76mm) raffic plaza decks. Extr tra-long (double-width)	2.36" (60mm) a-high leg heights acco side sheets to ensure p	4.33" (110mm) ommodate thick overlay oper integration with d	9.33" (237mm) y systems and topping sl leck waterproofing.	2.44" (62mm) 3.19" (81mm) 3.81" (97mm) 4.61" (117mm) dabs. These models 5.12" (117mm) 5.90" (150mm) 6.57" (167mm) 7.36" (187mm) 7.36" (202mm) 8.74" (222mm) 9.33" (237mm) 10.12" (257mm)
FP 110/45 FP 110/60 FP 110/80 FP 110/95 FP 110/115 or non-vehicular-t re supplied with ext FP 110/130 FP 110/150 FP 110/165 FP 110/185 FP 110/200 FP 110/200 FP 110/255 FP 110/255 FP 110/270	3.00" (76mm) raffic plaza decks. Extr tra-long (double-width)	2.36" (60mm) a-high leg heights acco side sheets to ensure p	4.33" (110mm) ommodate thick overlay oper integration with d	9.33" (237mm) y systems and topping sl leck waterproofing.	2.44" (62mm) 3.19" (81mm) 3.81" (97mm) 4.61" (117mm) abs. These models 5.12" (117mm) 5.90" (150mm) 6.57" (167mm) 7.36" (187mm) 7.95" (202mm) 8.74" (222mm) 9.33" (237mm) 10.12" (257mm) 10.71" (272mm) 11.49" (292mm)
FP 110/60 FP 110/80 FP 110/95 FP 110/115 or non-vehicular-t re supplied with ext FP 110/130 FP 110/150 FP 110/165 FP 110/185 FP 110/200 FP 110/200 FP 110/235 FP 110/255 FP 110/270 FP 110/2110 FP 110/210	3.00" (76mm) raffic plaza decks. Extr tra-long (double-width)	2.36″ (60mm) a-high leg heights acco side sheets to ensure p 2.36″ (60mm)	4.33" (110mm) ommodate thick overlay oper integration with d 4.33" (110mm)	9.33" (237mm) y systems and topping sl leck waterproofing. 9.33" (237mm)	2.44" (62mm) 3.19" (81mm) 3.81" (97mm) 4.61" (117mm) abs. These models 5.12" (117mm) 5.90" (150mm) 6.57" (167mm) 7.36" (187mm) 7.95" (202mm) 8.74" (222mm) 9.33" (237mm) 10.12" (257mm) 10.71" (272mm)
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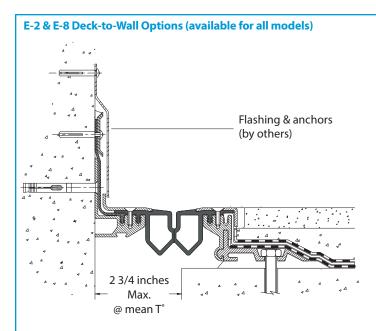
Watertight Transitions & Terminations

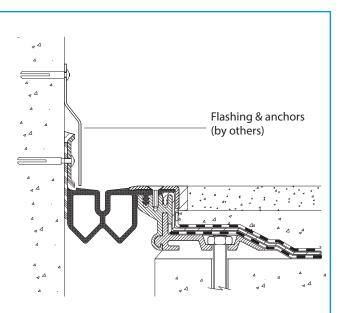
Factory-heat-welded thermoplastic-rubber sealing insert and heat-weldable side sheets as well as factory-welded aluminum components assure watertightness through transitions and terminations. Virtually any kind of transition is both possible and practical.





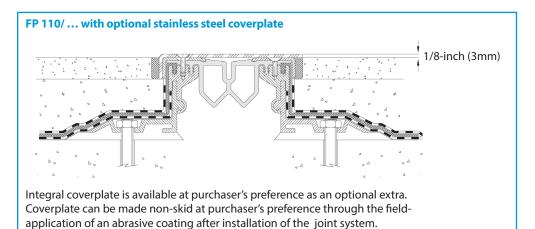
EMSEAL JOINT SYSTEMS, LTD 25 Bridle Lane, Westborough, MA 01581 USA EMSEAL, LLC 111 Royal Group Crescent, Woodbridge, ON L4H 1X9 Canada





NOTE: Use E-2 where continuous runs of deck-to-wall joint are uninterrupted by columns or other elements adjacent to the run of the joint.

NOTE: Use E-8 where joint-gap alternates from deck-to-deck to deck-to-column or wall at intervals along the joint. The E-8, by removing the metal anchor bracket present in the E-2 version, eliminates the need to dog-leg around columns, walls, etc., that interrupt continuous runs.



CAD & Guide Specs

Guide specifications and CAD details are available online at emseal.com or by contacting EMSEAL.

Warranty

Standard or project-specific warranties are available from EMSEAL on request.

Availability & Price

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