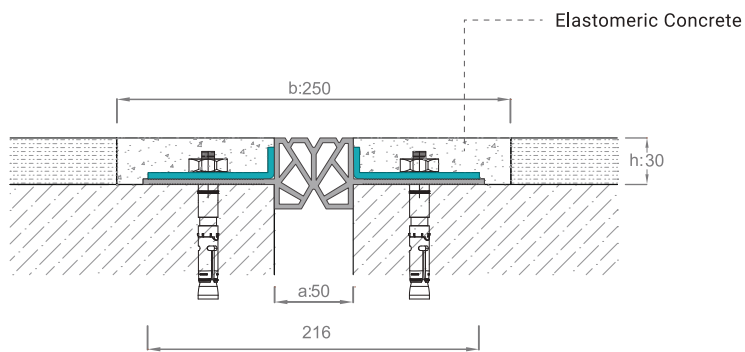


# carpark expansion joint profiles

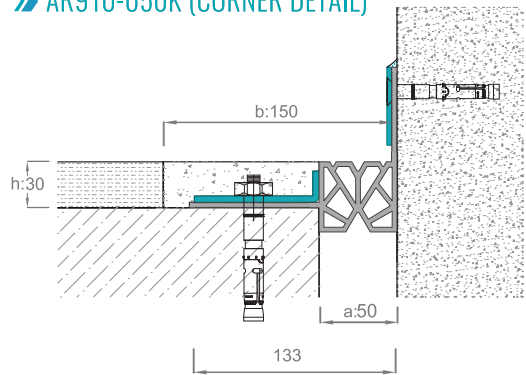
CARPARK  
EXPANSION JOINT  
PROFILES



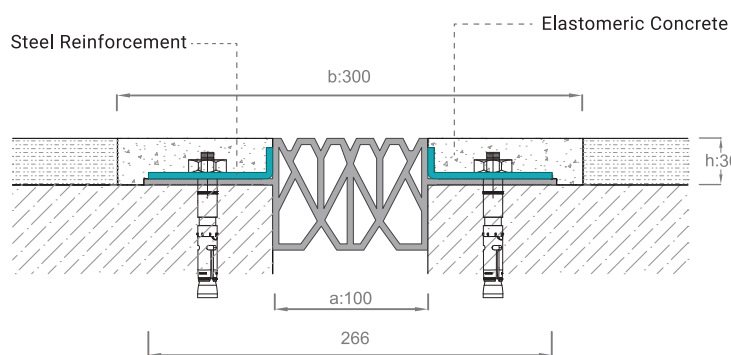
### » AR910-050



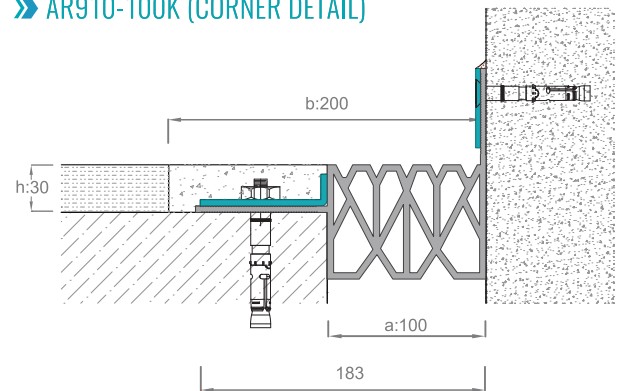
### » AR910-050K (CORNER DETAIL)



### » AR910-100



### » AR910-100K (CORNER DETAIL)



TPE and TPV based Carpark Expansion Joint Profiles are able to settle to the ground only in an hour time. Having such characteristics as high capacity to bend&shrink and resistant to corrosion make AR 910 series suitable to apply on highly polymeric based concrete.

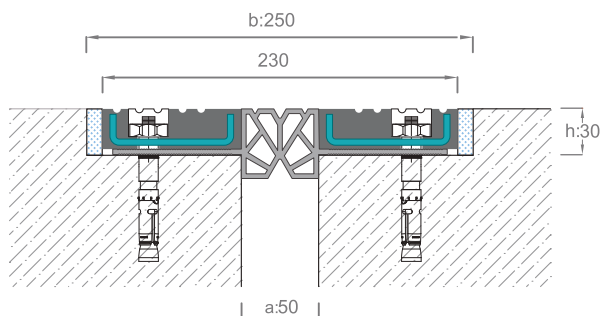
APPLICATIONS



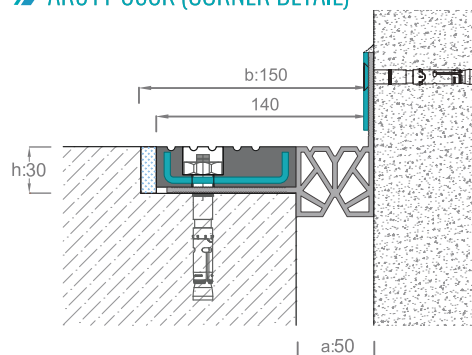
PRODUCT CODE	DESCRIPTION	JOINT WIDTH (a) mm	VISIBLE SURFACE (b) mm	PROFILE HEIGHT (h) mm	TOTAL WIDTH (s) mm	SURFACE	MOVEMENT CAPACITY mm	LOAD CAPACITY
AR 910 - 050	Assembled with steel profiles	50	250	30	216	TPE+Steel	± 25	30 Ton
AR 910 - 100	Assembled with steel profiles	100	300	30	266	TPE+Steel	± 50	30 Ton



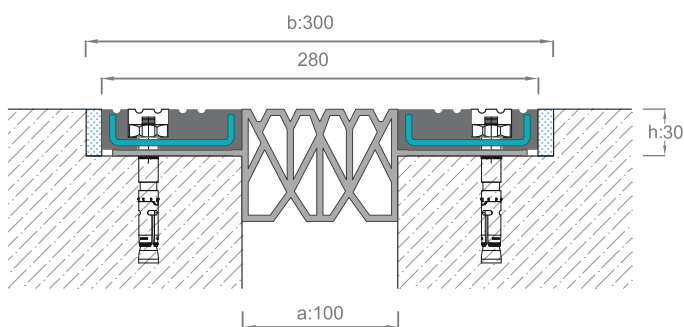
### » AR911-050



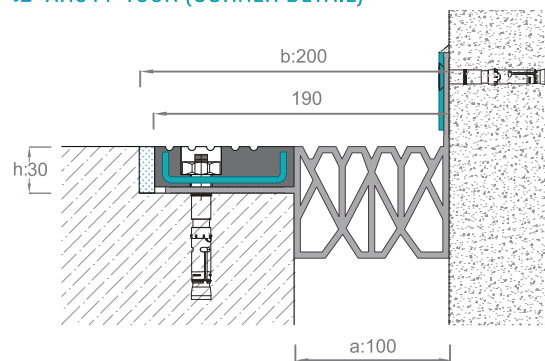
### » AR911-050K (CORNER DETAIL)



### » AR911-100



### » AR911-100K (CORNER DETAIL)






CARPARK  
EXPANSION JOINT  
PROFILES

TPV and TPE middle parts are resistant to heavy loads, comfortable, quite and waterproofing when mounted properly. Furthermore, Volcanized side profiles are reinforced with steel plates.

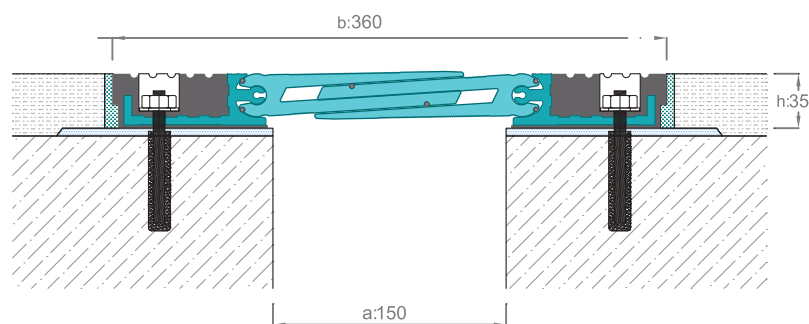
APPLICATIONS



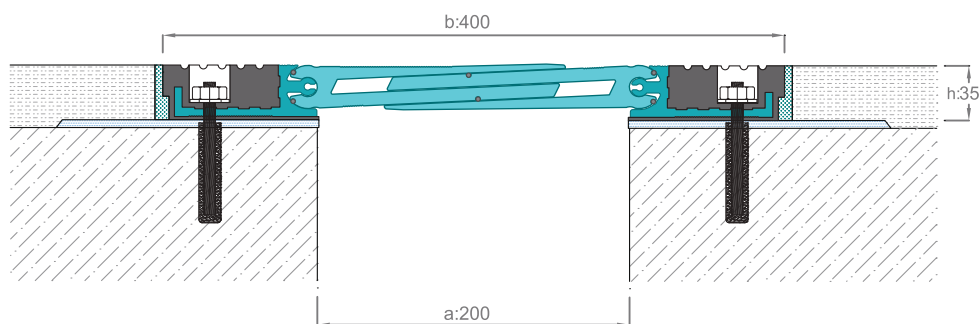
PRODUCT CODE	DESCRIPTION	JOINT WIDTH (a) mm	VISIBLE SURFACE (b) mm	PROFILE HEIGHT (h) mm	TOTAL WIDTH (s) mm	SURFACE	MOVEMENT CAPACITY mm	LOAD CAPACITY
AR 911 - 050	Steel reinforced composite floor profile	50	250	30	250	Rubber + TPE	± 25	30 Ton 
AR 911 - 051	Steel reinforced composite floor profile	50	250	30	250	Rubber + TPE	± 40	30 Ton 
AR 911 - 100	Steel reinforced composite floor profile	100	300	30	300	Rubber + TPE	± 50	30 Ton 



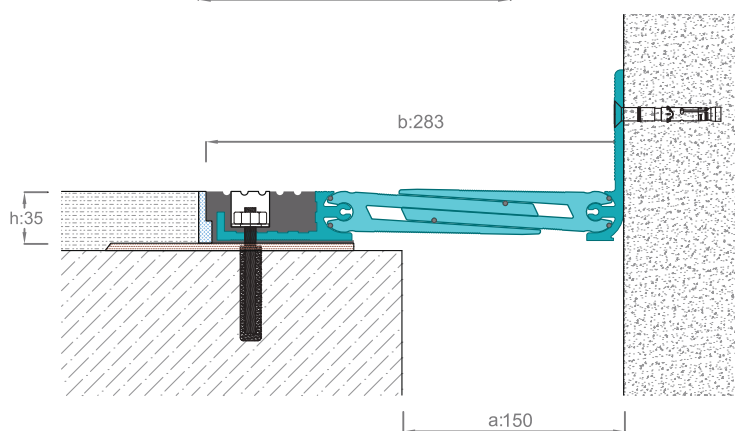
### » AR911-150



### » AR911-200



### » AR911-150K



Created for the first time in the WORLD by ARFEN. These rubber + aluminium dilatation profiles successfully applied to wide expansion joint gaps in car parks and industrial structures. Provide opportunity to be quite and comfortable.

APPLICATIONS

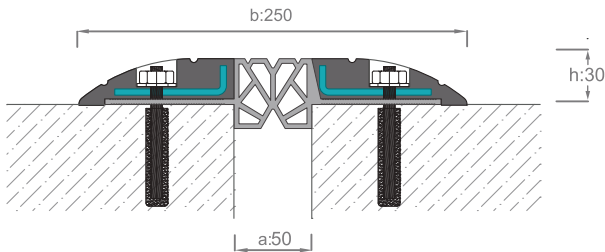


PRODUCT CODE	DESCRIPTION	JOINT WIDTH (a) mm	VISIBLE SURFACE (b) mm	PROFILE HEIGHT (h) mm	TOTAL WIDTH (s) mm	SURFACE	MOVEMENT CAPACITY mm	LOAD CAPACITY
AR 911 - 150	Composite, rubber, aluminium floor profile	150	360	35	360	Mill Finish Alu.+Rubber	+35/-25	30 Ton
AR 911 - 200	Composite, rubber, aluminium floor profile	200	400	35	400	Mill Finish Alu.+Rubber	± 40	16 Ton
AR 911 - 250	Composite, rubber, aluminium floor profile	250	450	35	450	Mill Finish Alu.+Rubber	± 40	9 Ton
AR 911 - 300	Composite, rubber, aluminium floor profile	300	500	35	500	Mill Finish Alu.+Rubber	± 50	6,5 Ton

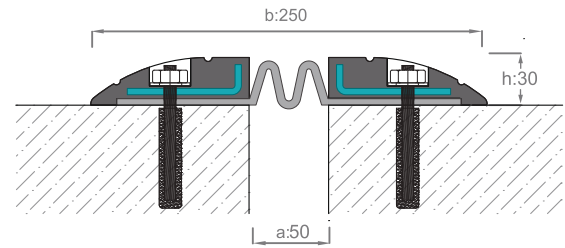




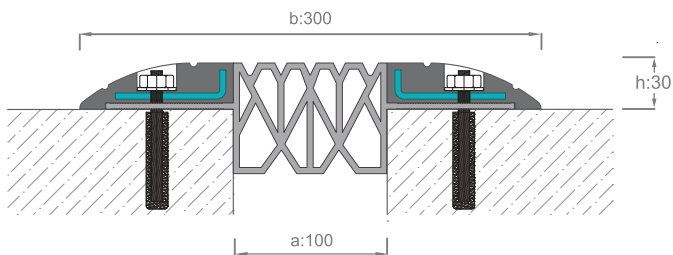
### » AR921-050



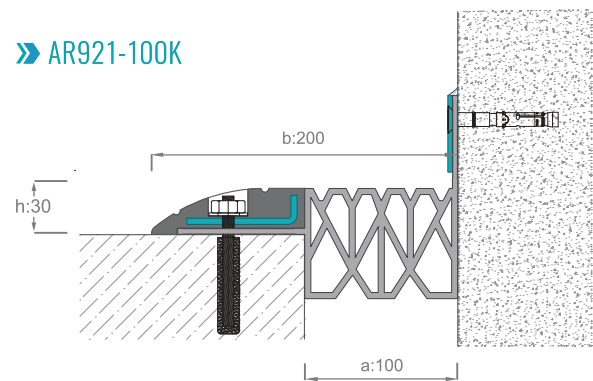
### » AR921-051



### » AR921-100



### » AR921-100K



CARPARK  
EXPANSION JOINT  
PROFILES

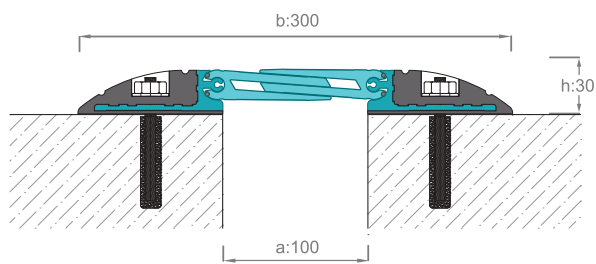
AR 921 series are Rubber + Steel composite Expansion Joint Profiles. Applied to floors as over finish profiles and can be used as a speed bumper. As well assembled to the floor by appropriate steel anchors of having 25 cm gaps in between.



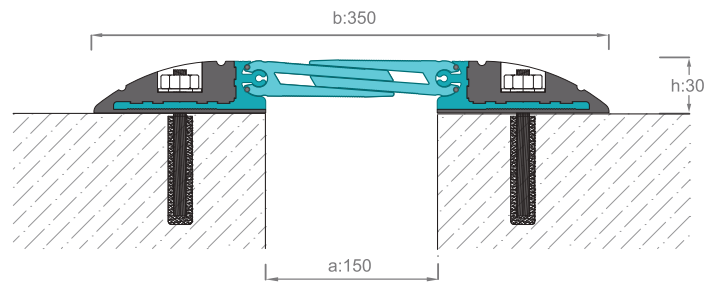
PRODUCT CODE	DESCRIPTION	JOINT WIDTH (a) mm	VISIBLE SURFACE (b) mm	PROFILE HEIGHT (h) mm	TOTAL WIDTH (s) mm	SURFACE	MOVEMENT CAPACITY mm	LOAD CAPACITY
AR921-050	Speed bumper, composite, rubber, steel profile	50	250	30	250	Rubber+TPE	± 25	9 Ton
AR921-051	Speed bumper, composite, rubber, steel profile	50	250	30	250	Rubber+TPE	± 40	9 Ton
AR921-100	Speed bumper, composite, rubber, steel profile	100	300	30	300	Rubber+TPE	± 50	9 Ton
AR921-101	Speed bumper, composite, rubber, aluminium	100	300	30	300	Mill Finish Alu.+Rubber	± 20	12 Ton
AR921-150	Speed bumper, composite, rubber, aluminium	150	350	30	350	Mill Finish Alu.+Rubber	± 20	12 Ton
AR921-200	Speed bumper, composite, rubber, aluminium	200	462	35	462	Mill Finish Alu.+Rubber	± 40	9 Ton
AR921-250	Speed bumper, composite, rubber, aluminium	250	512	35	512	Mill Finish Alu.+Rubber	± 50	9 Ton
AR921-300	Speed bumper, composite, rubber, aluminium	300	562	35	562	Mill Finish Alu.+Rubber	± 50	9 Ton



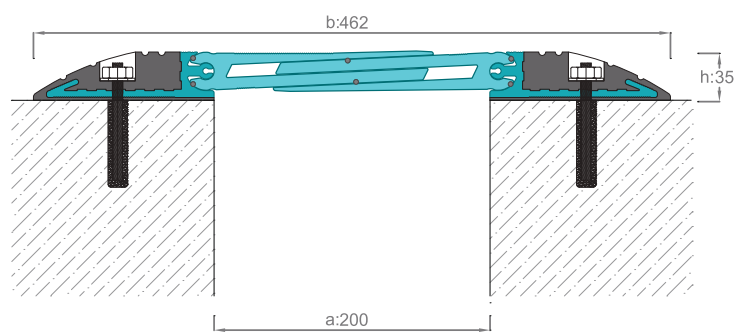
#### » AR921-101



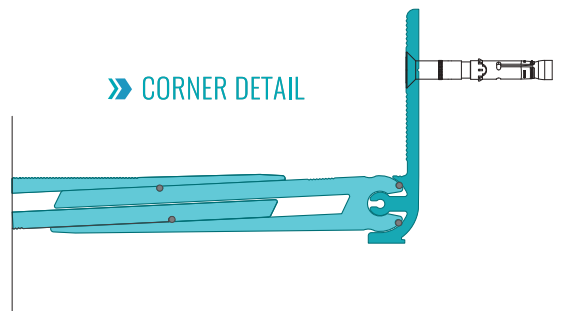
#### » AR921-150



#### » AR921-200



#### » CORNER DETAIL



Developed for the first time In the World by ARFEN. Aluminium + TPE rubber Expansion joint profiles also have the corner detail in each design.

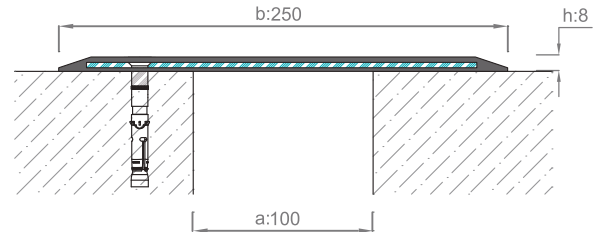
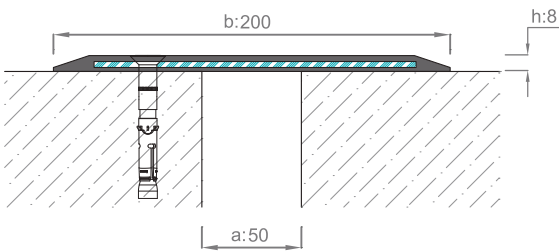
APPLICATIONS





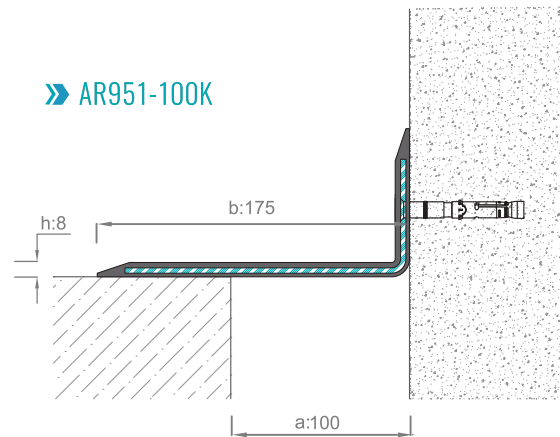
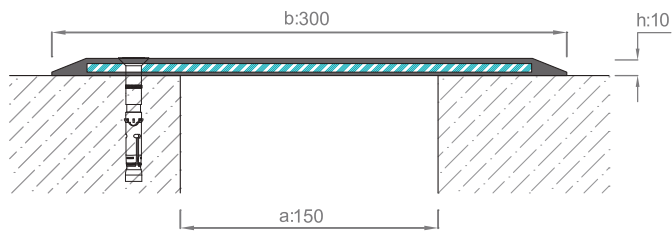
» AR951-050

» AR951-100



» AR951-150

» AR951-100K



CARPARK  
EXPANSION JOINT  
PROFILES

AR 951 series are Rubber + Steel composite Expansion Joint Profiles. Applied to floors and can be used as a speed bumper. Assembled to the floor by appropriate steel anchors of having 25 cm intervals.

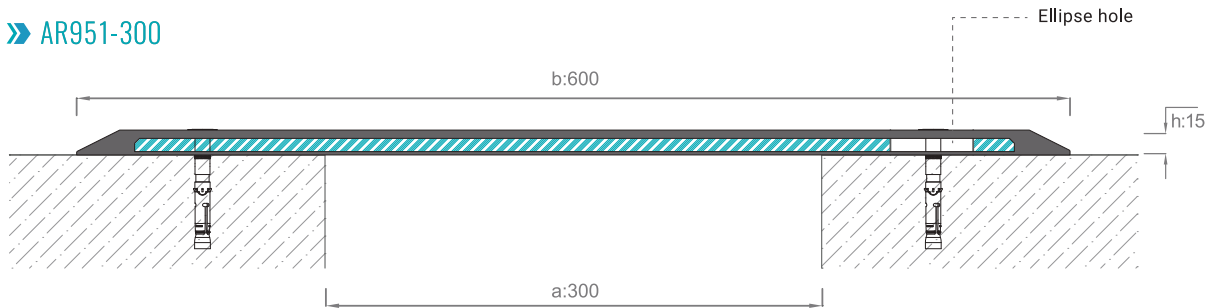
APPLICATIONS



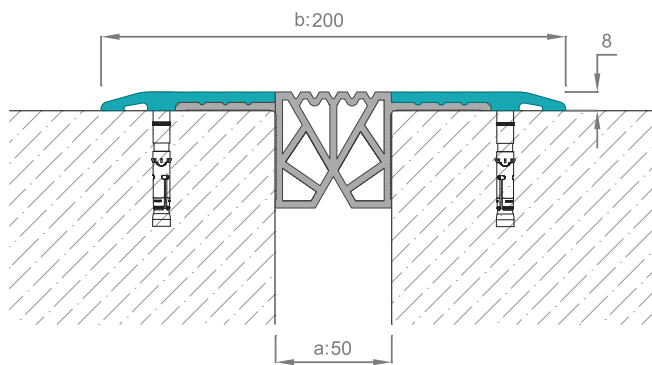
PRODUCT CODE	DESCRIPTION	JOINT WIDTH (a) mm	VISIBLE SURFACE (b) mm	PROFILE HEIGHT (h) mm	ST 37 STEEL THICKNESS mm	TOTAL WIDTH (s) mm	SURFACE	MOVEMENT CAPACITY mm	LOAD CAPACITY
AR951-050	Composite, Rubber, Steel floor profile	50	200	8	3	200	Rubber	± 50	9 Ton
AR951-100	Composite, Rubber, Steel floor profile	80-100	250	8	3	250	Rubber	+50/-100	9 Ton
AR951-150	Composite, Rubber, Steel floor profile	120-150	300	10	4	300	Rubber	+50/-150	6 Ton
AR951-180	Composite, Rubber, Steel floor profile	180-200	350	12	5	350	Rubber	+65/-180	3,5 Ton
AR951-250	Composite, Rubber, Steel floor profile	250	400	12	6	400	Rubber	+65/-250	3,5 Ton
AR951-300	Composite, Rubber, Steel floor profile	300	600	15	8	600	Rubber	± 28 mm	3,5 Ton



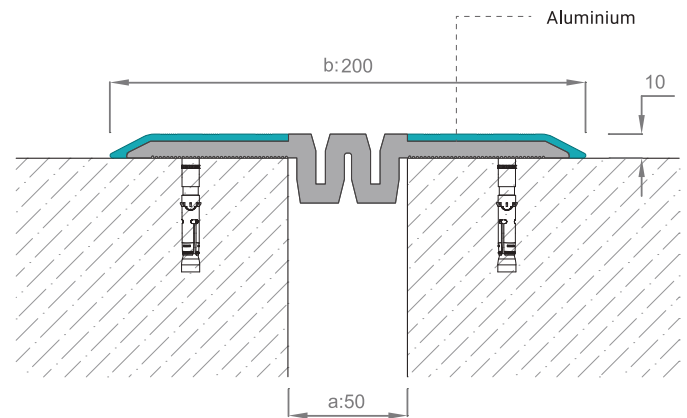
### » AR951-300



### » AR192-050



### » AR194-050



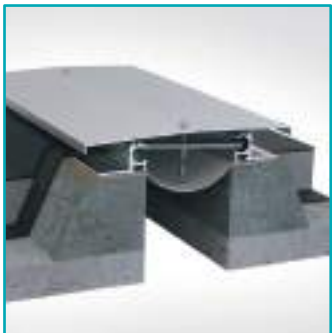
- Stainless Steel top profile can be produced by request.

Aluminium or stainless steel top surfaced expansion joint profiles are suitable for surface mounted floor carpark profiles.

APPLICATIONS



PRODUCT CODE	DESCRIPTION	JOINT WIDTH (a) mm	VISIBLE SURFACE (b) mm	PROFILE HEIGHT (h) mm	TOTAL WIDTH (s) mm	SURFACE	MOVEMENT CAPACITY mm	LOAD CAPACITY
AR 192 - 050	Mill Finish Flush Mounted Floor Profile	50	200	45	200	Mill Finish Alu.+TPE	± 25	9 Ton
AR 193 - 050	Galvanized Flush Mounted Floor Profile	50	170	45	170	Galvanized	± 20	6 Ton
AR 194 - 050	Mill Finish Flush Mounted Floor Profile	50	200	20	200	Mill Finish Alu.+TPE	± 25	9 Ton



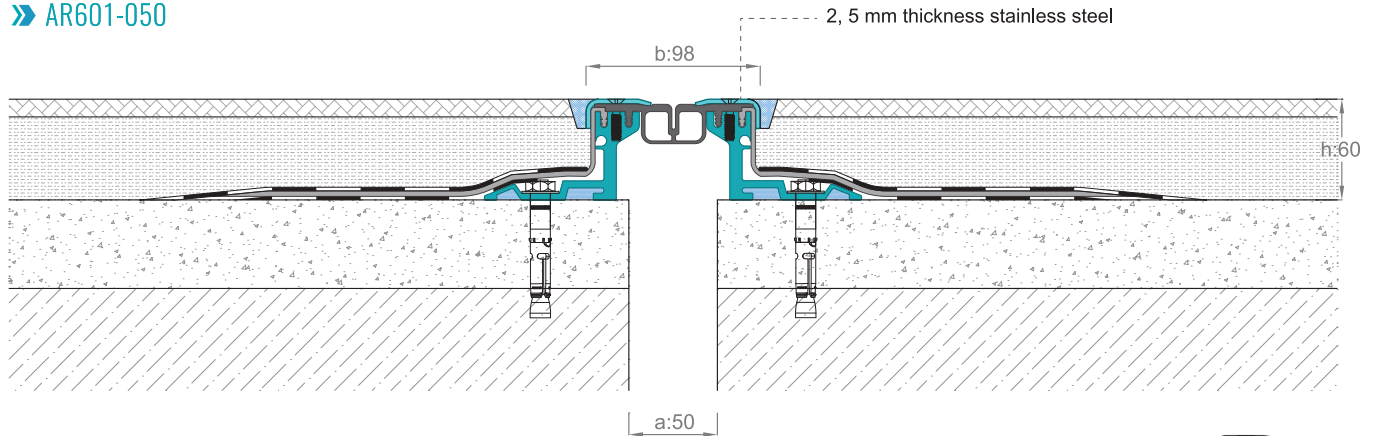
# watertight and terrace expansion joint profiles

WATERTIGHT  
AND TERRACE  
EXPANSION  
JOINT PROFILES

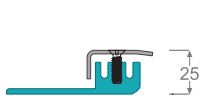




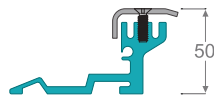
## » AR601-050



Hygienic gasket alternative



» AR600-050A



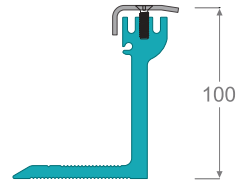
» AR600-050



» AR601-050

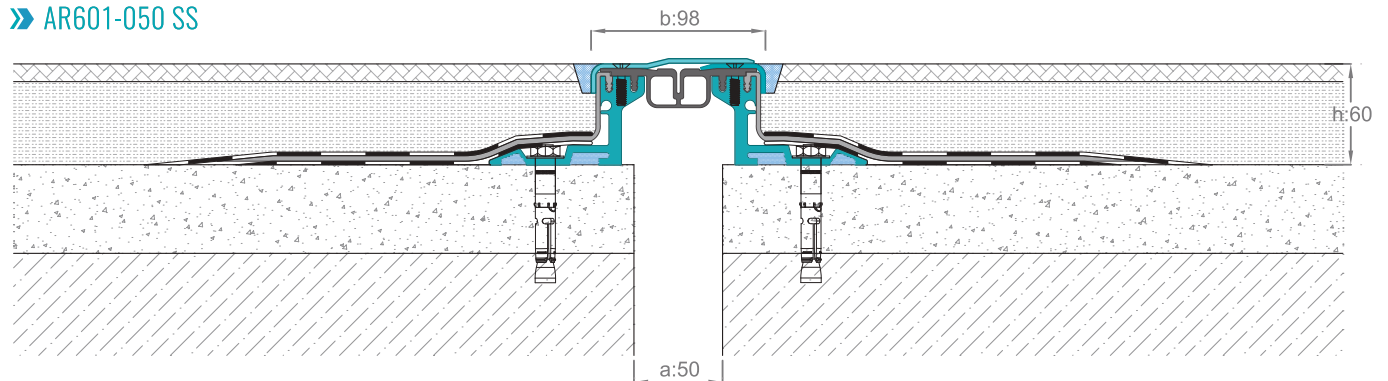


» AR602-050



» AR603-050

## » AR601-050 SS

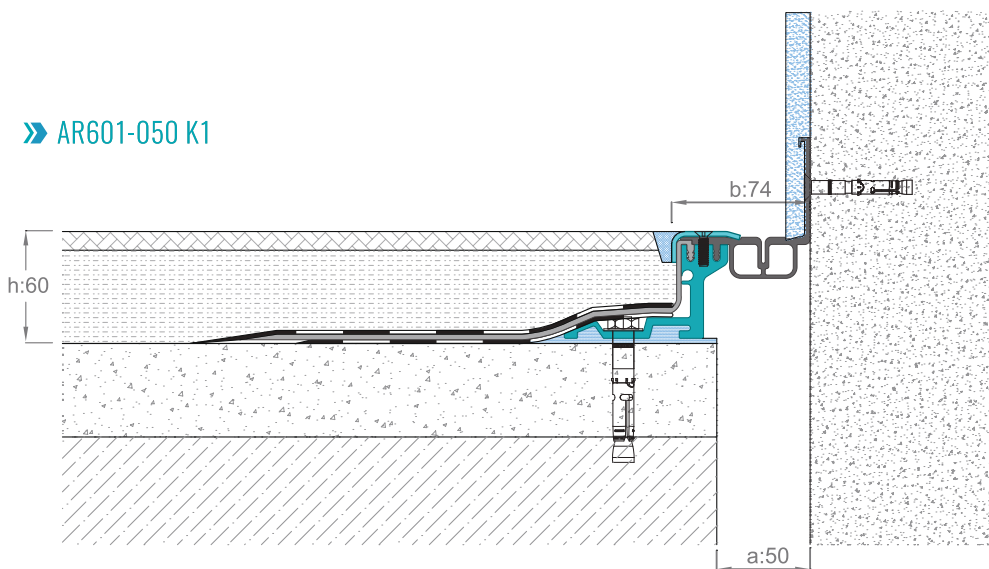


SS 304 quality stainless steel being used. Adoptable with rubber mixture bitumen membrane.

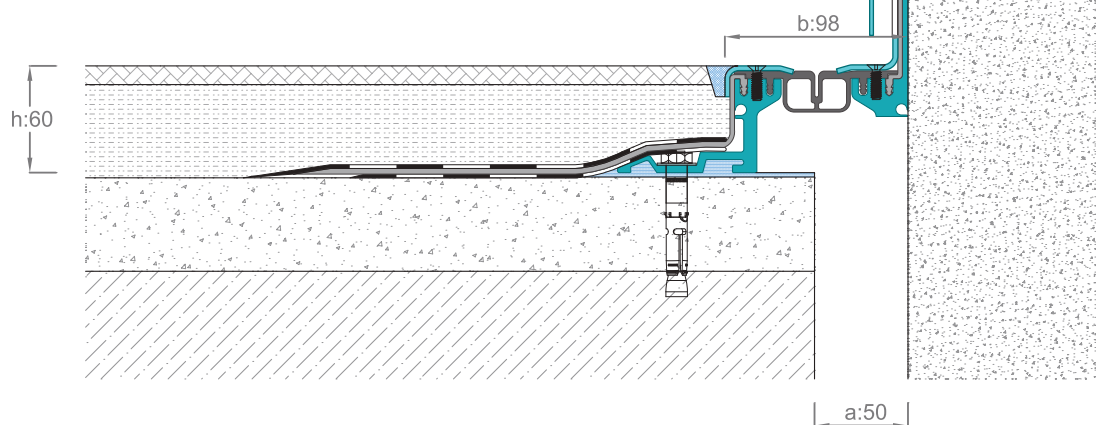
PRODUCT CODE	DESCRIPTION	JOINT WIDTH (a) mm	VISIBLE SURFACE (b) mm	PROFILE HEIGHT (h) mm	TOTAL WIDTH (s) mm	SURFACE	MOVEMENT CAPACITY mm	LOAD CAPACITY
AR600-050A	Ideal for ceramic applications	50	97	25	580	TPV + Stainless Steel	± 20	3.5 Ton
AR600-050	Suitable for granite, marble, concrete and etc.	50	98	50	560	TPV + Stainless Steel	± 20	15 Ton  6 Ton
AR600-050 SS	Suitable for granite, marble with stainless steel top surface	50	98	50	560	Stainless Steel	± 20	15 Ton  6 Ton
AR601-050	Suitable for granite, marble, concrete and etc.	50	98	60	540	TPV + Stainless Steel	± 20	15 Ton  6 Ton
AR602-050	Suitable for granite, marble, concrete and etc.	50	98	70	520	TPV + Stainless Steel	± 20	15 Ton  6 Ton
AR603-050	Suitable for granite, marble, concrete and etc.	50	98	100	460	TPV + Stainless Steel	± 20	15 Ton  6 Ton



» AR601-050 K1



» AR601-050 K2



WATERTIGHT  
AND TERRACE  
EXPANSION  
JOINT PROFILES

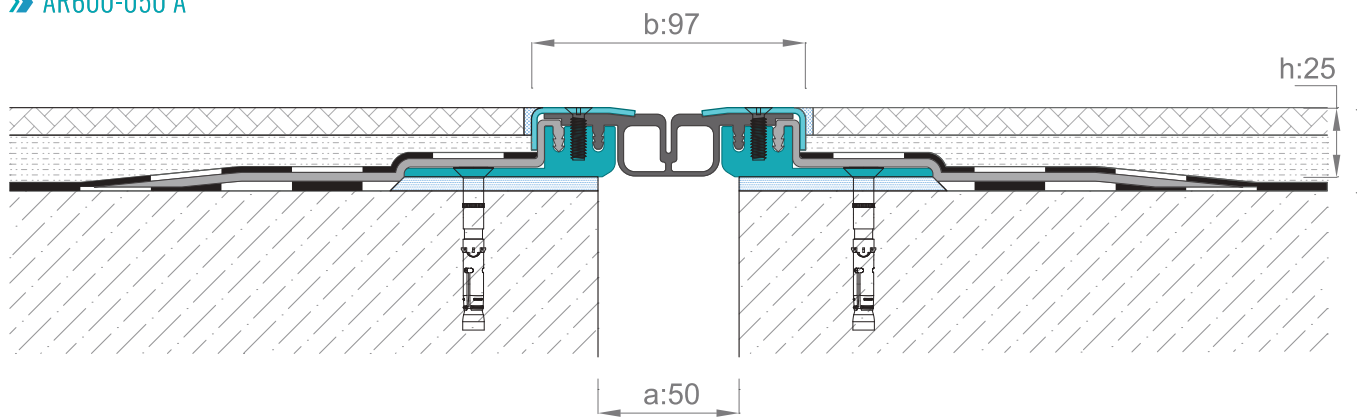
Floor to Floor Thermoplastic side winged Expansion Joint Profiles are composite of aluminium and stainless steel (SS304). Materials hygienic and complete watertight floor expansion joint profiles are connected to isolation materials by side wings and used in wet areas and terraces. Profiles produced in 3 meters lengths and gaskets in 15 meters by rolls.

APPLICATIONS

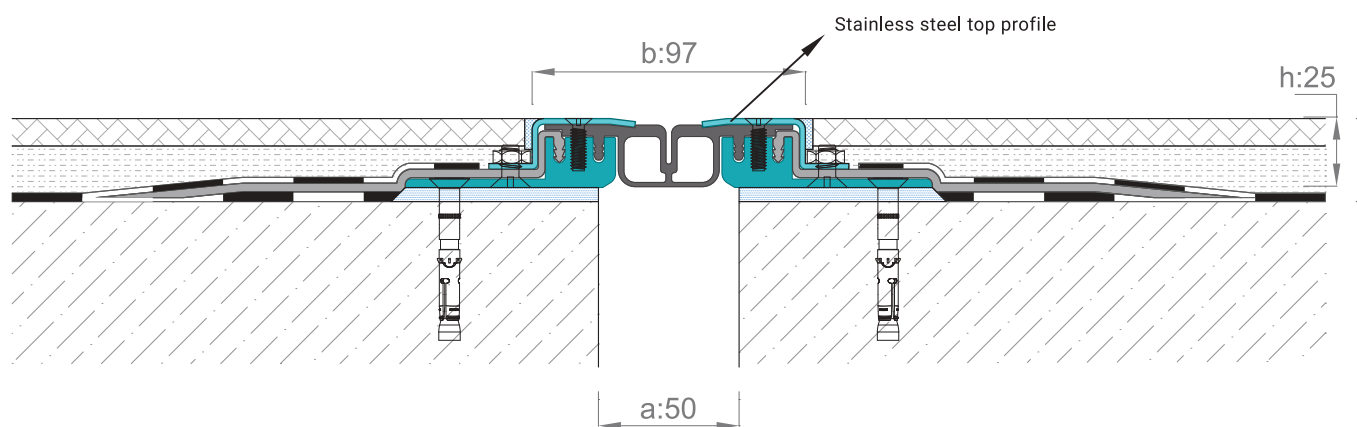




#### » AR600-050 A



#### » AR600-050 A2



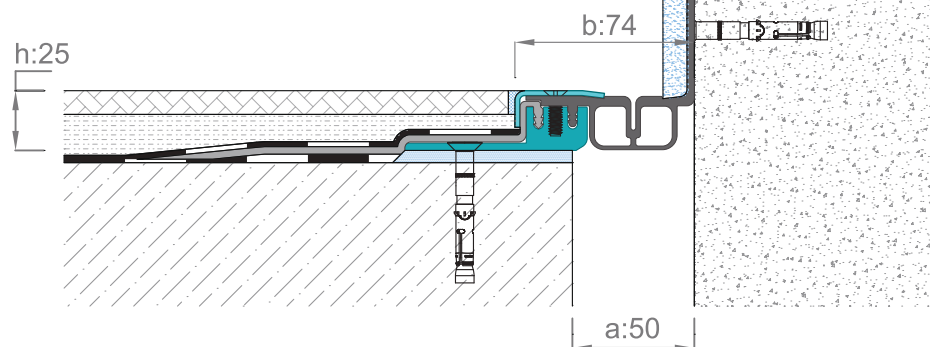
These Flush mounted and TPE inserted Expansion joint Profiles used for wet areas and terraces with low covering height.

APPLICATIONS

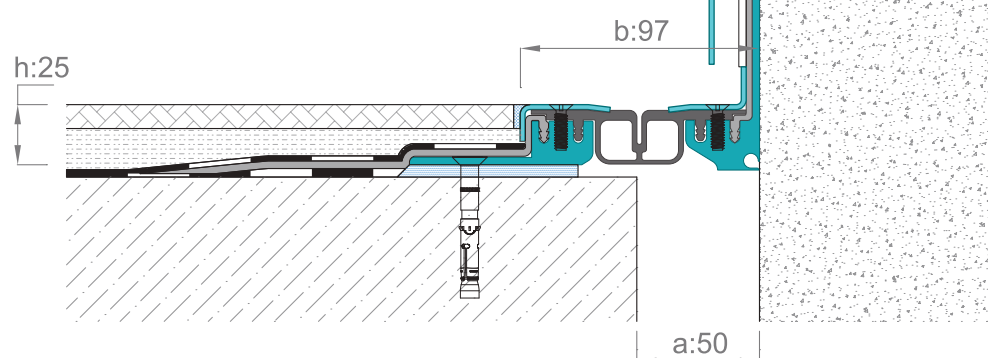




» AR600-050 AK1



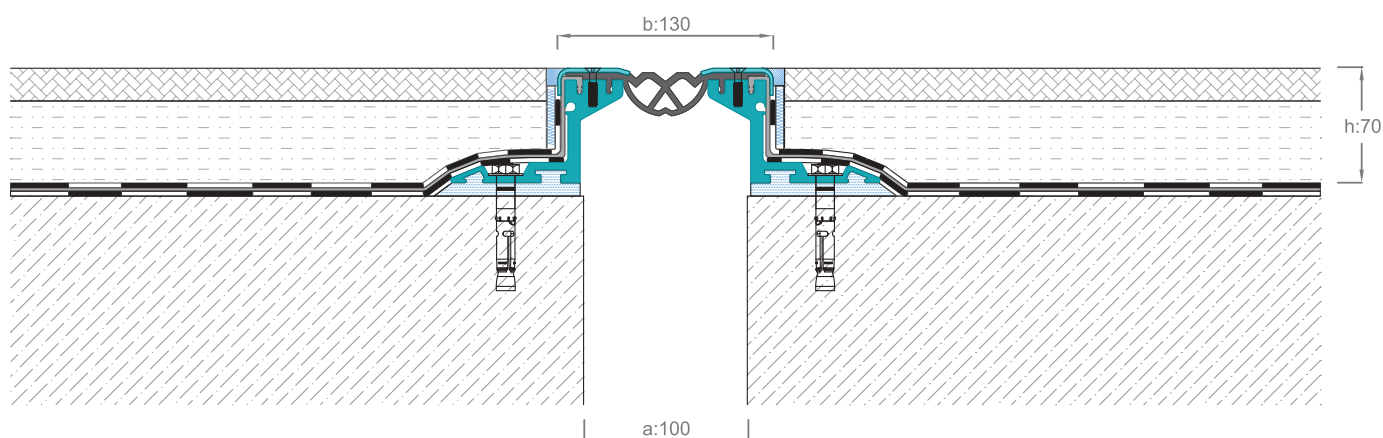
» AR600-050 AK2



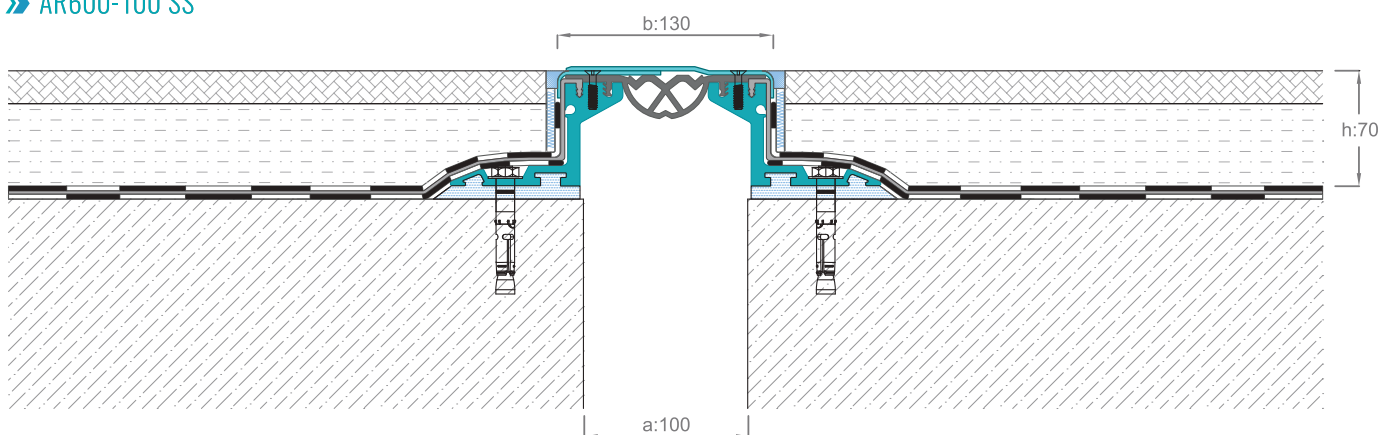
WATERTIGHT  
AND TERRACE  
EXPANSION  
JOINT PROFILES



## » AR600-100



## » AR600-100 SS



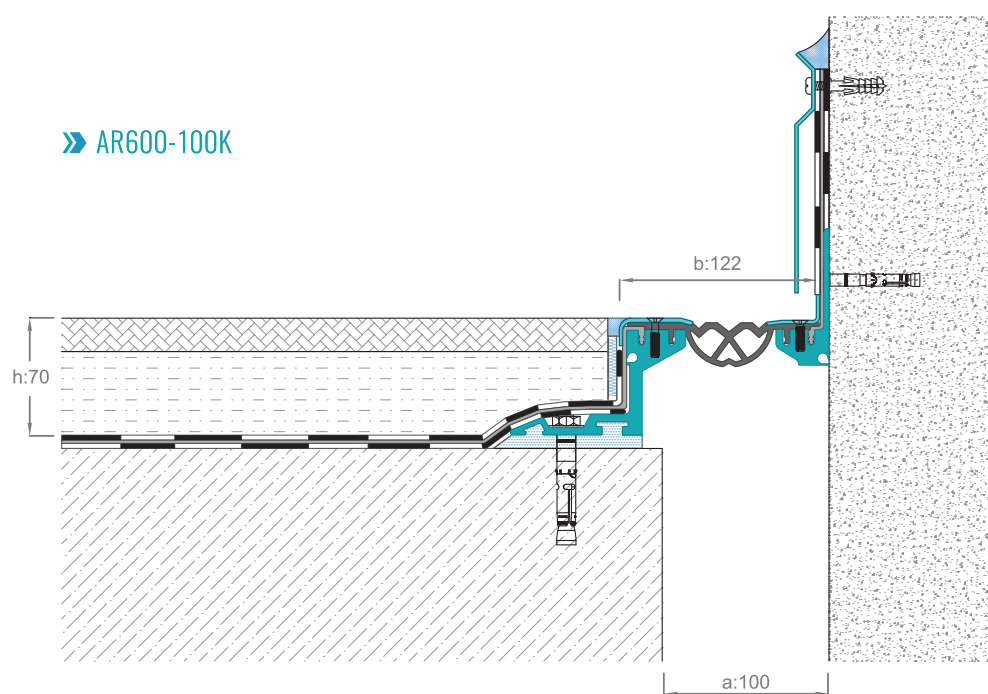
Economic stainless steel top surfaced flush mounted expansion joint profiles are used for 100 mm joint gaps. Additionally, suitable with rubber mixture bitumen membrane.

PRODUCT CODE	DESCRIPTION	JOINT WIDTH (a) mm	VISIBLE SURFACE (b) mm	PROFILE HEIGHT (h) mm	TOTAL WIDTH (s) mm	SURFACE	MOVEMENT CAPACITY mm	LOAD CAPACITY
AR600-100	Suitable for granite, ceramic, concrete and etc.	100	130	70	580	TPV+Stainless Steel	± 20	9 Ton  3.5 Ton
AR600-100 SS	Suitable for granite, marble and etc, with S. Steel top surface	100	130	70	580	Stainless Steel	± 20	9 Ton  3.5 Ton

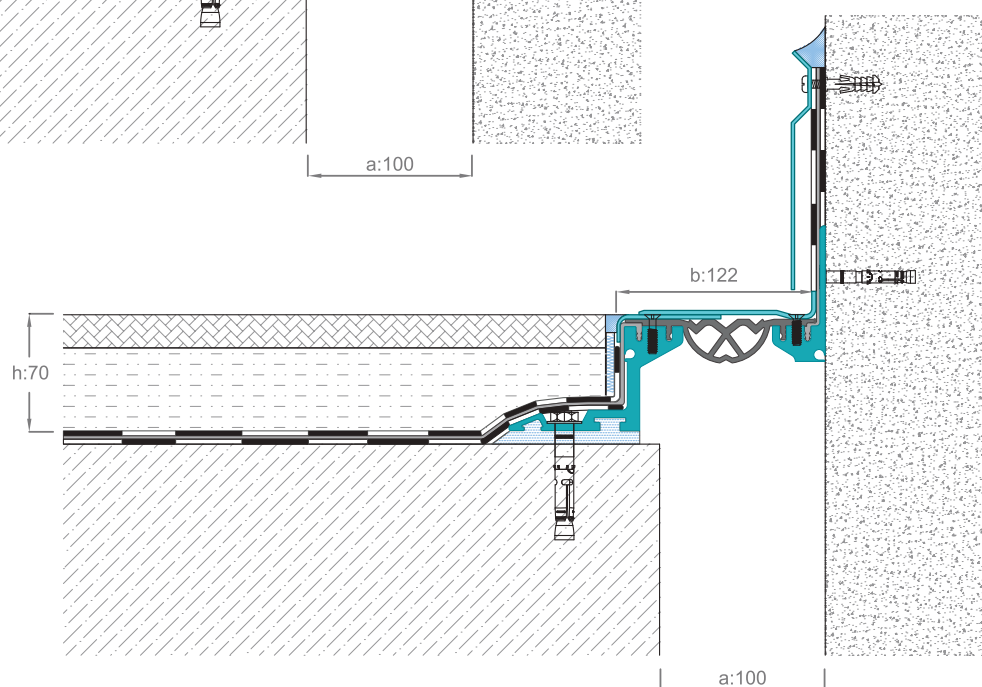




» AR600-100K



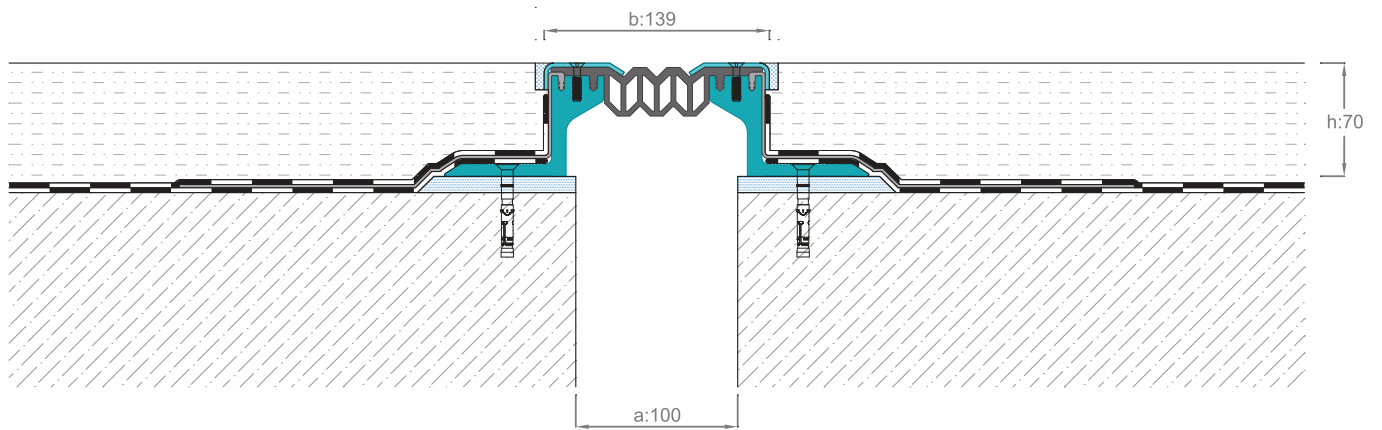
» AR600-100 SSK



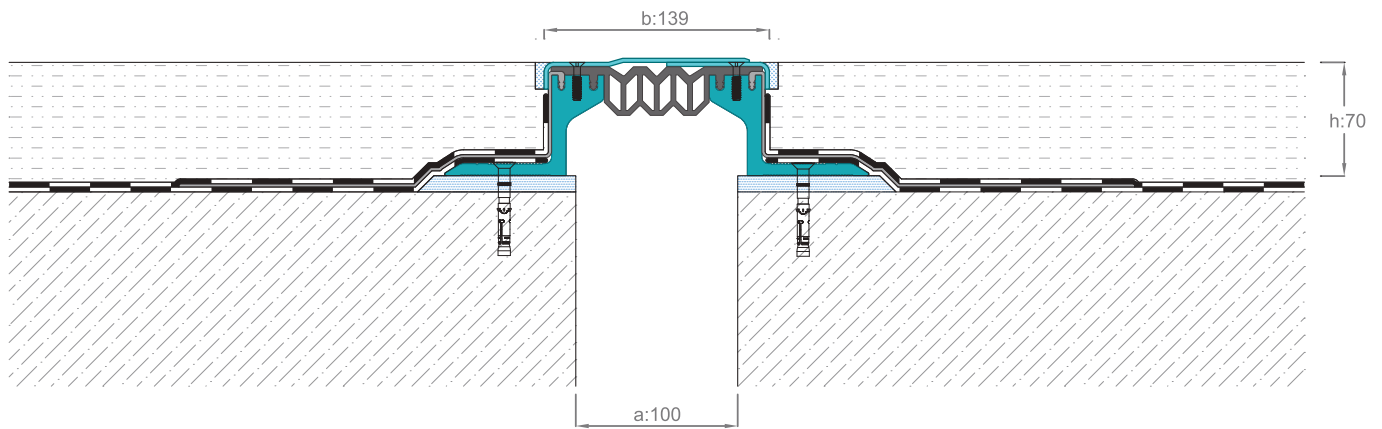
WATERTIGHT  
AND TERRACE  
EXPANSION  
JOINT PROFILES



## » AR600-101



## » AR600-101 SS



TPE inserted and completely watertight Expansion Joint Profiles have the high capacity to move. Mechanical damages (screws and etc.) are prevented by hygienic top surface and TPE insert. The alternative complete stainless steel option is also available.

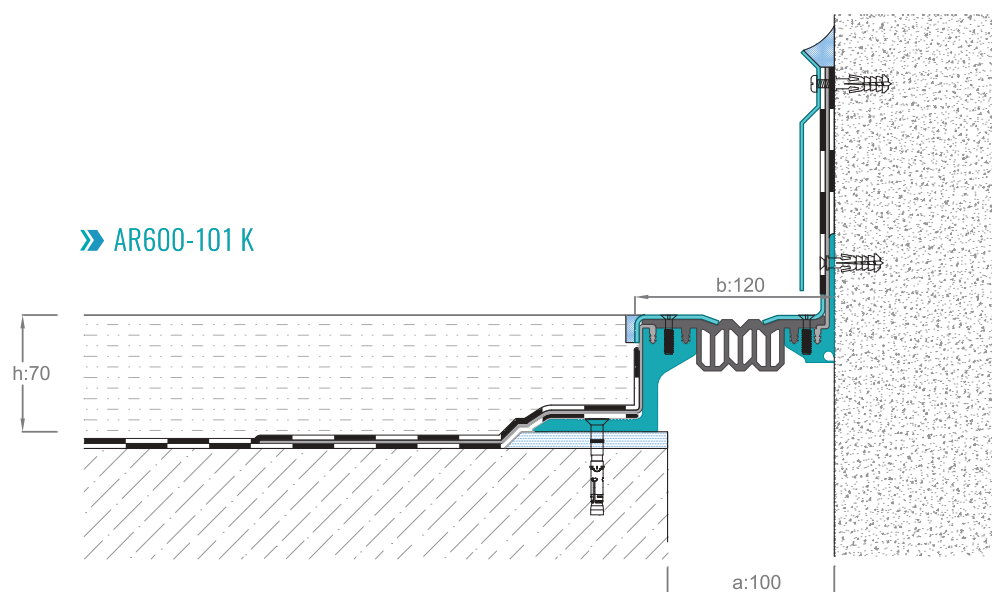
APPLICATIONS



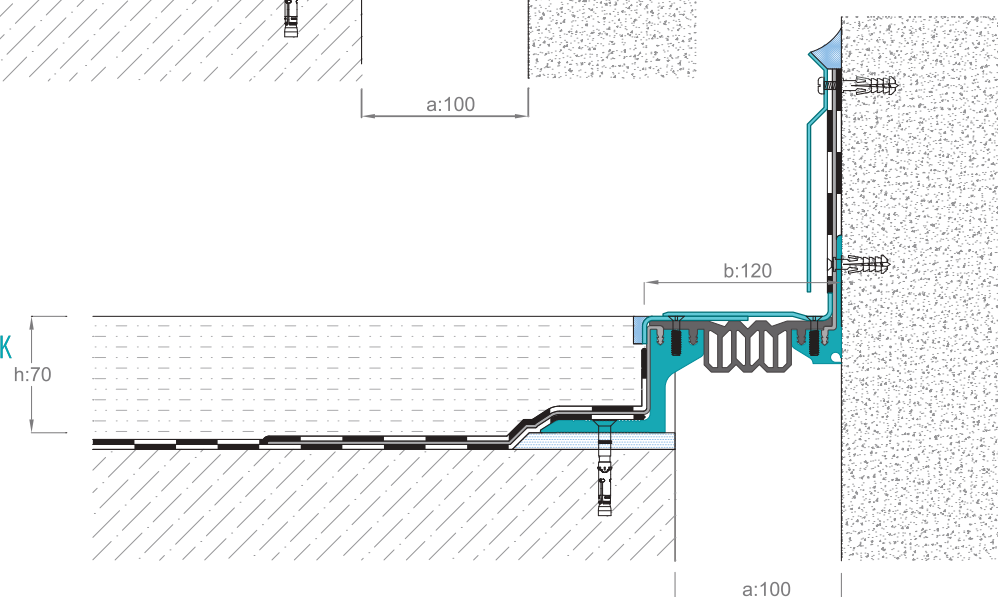
PRODUCT CODE	DESCRIPTION	JOINT WIDTH (a) mm	VISIBLE SURFACE (b) mm	PROFILE HEIGHT (h) mm	TOTAL WIDTH (s) mm	SURFACE	MOVEMENT CAPACITY mm	LOAD CAPACITY
AR600-101	Suitable for granite, marble, ceramic, concrete and etc.	100	139	70	590	TPV+Stainless Steel	± 30	15 Ton  6 Ton
AR600-101 SS	Suitable for granite, marble and etc. with Stainless steel top surface	100	139	70	590	Stainless Steel	± 30	15 Ton  6 Ton
AR600-150	Suitable for granite, marble, ceramic, concrete and etc.	150	184	70	630	TPV+Stainless Steel	± 50	15 Ton  6 Ton
AR600-150SS	Suitable for granite, marble and etc. with Stainless steel top surface	150	184	70	630	Stainless Steel	± 50	15 Ton  6 Ton
AR600-200	Suitable for granite, marble, ceramic, concrete and etc.	200	234	70	680	TPV+Stainless Steel	± 50	9 Ton  3.5 Ton
AR600-200SS	Suitable for granite, marble and etc. with Stainless steel top surface	200	234	70	680	Stainless Steel	± 50	9 Ton  3.5 Ton



» AR600-101 K



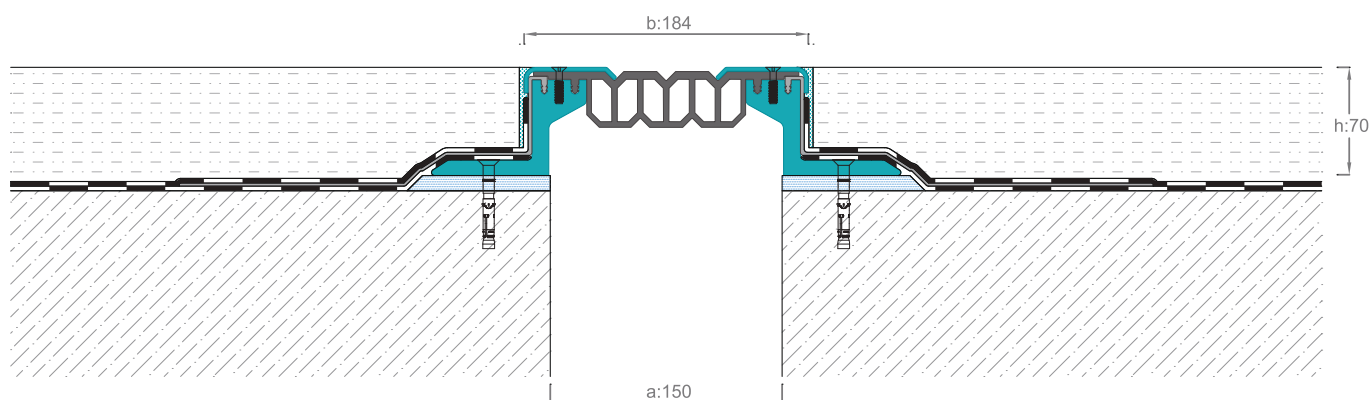
» AR600-101 SSK



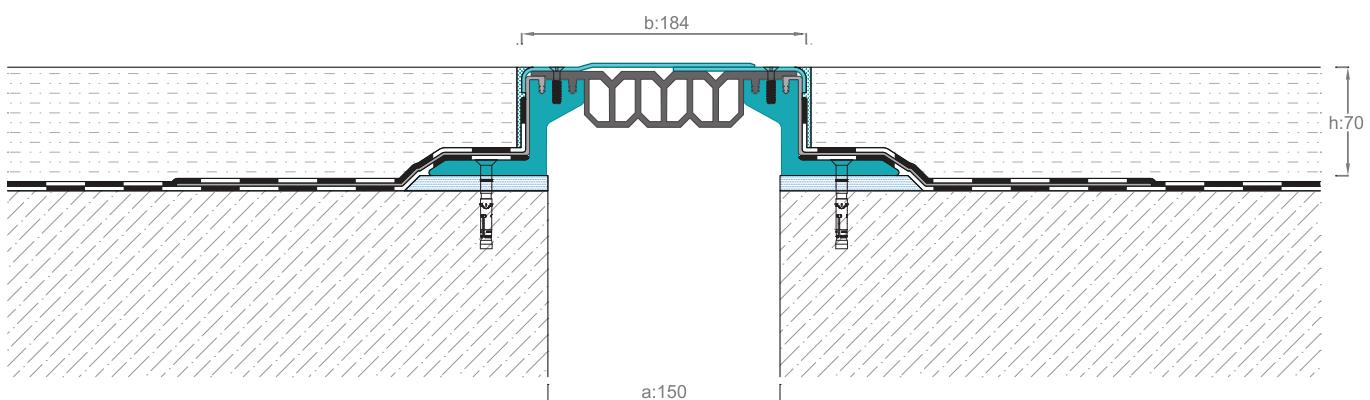
WATERTIGHT  
AND TERRACE  
EXPANSION  
JOINT PROFILES



## » AR600-150



## » AR600-150 SS



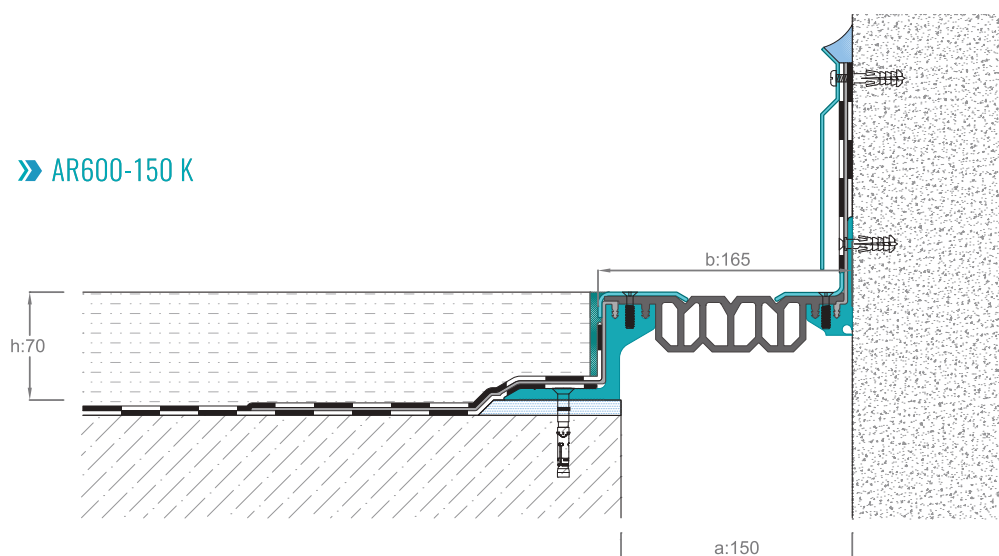
Flush mounted floor and completely watertight Expansion Joint Profiles are suitable for 15 cm gaps and resistant to heavy loads by having special TPE insert in the middle. They can comfortably be used in open and closed areas. Connection of T and L details are also available. Movement capacity and load capacity details can be found in page 85.



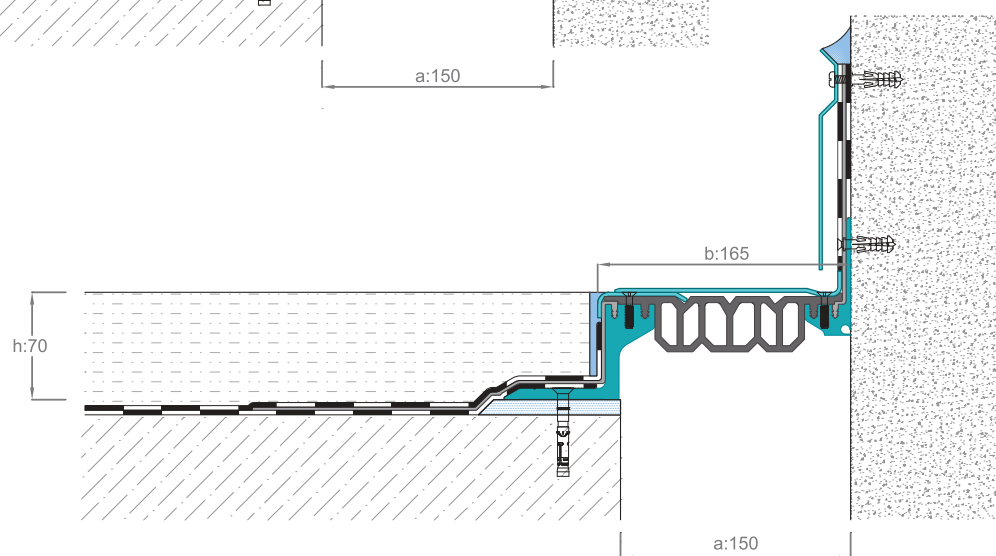
APPLICATIONS



» AR600-150 K



» AR600-150 SSK



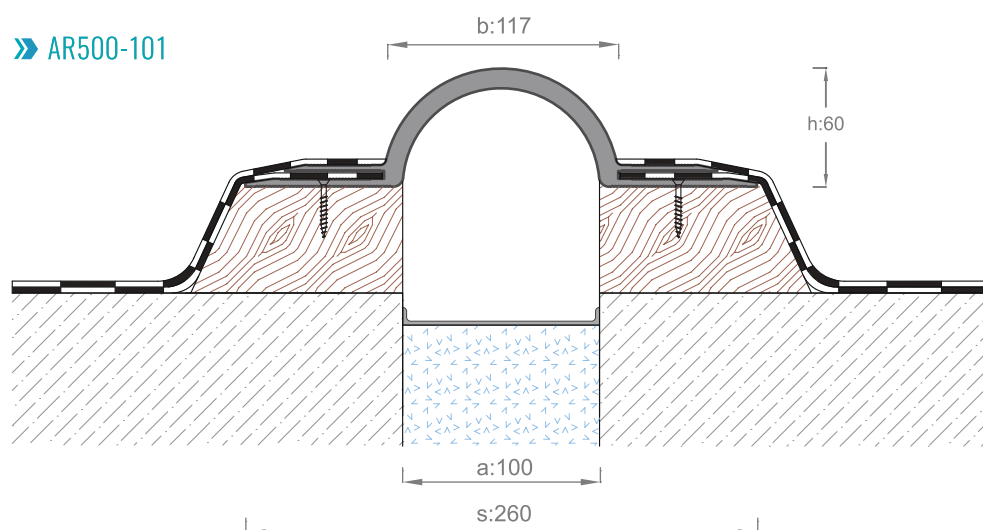
WATERTIGHT  
AND TERRACE  
EXPANSION  
JOINT PROFILES

Additional bits can be melted by only using hot air supply and does not require any other extra source.

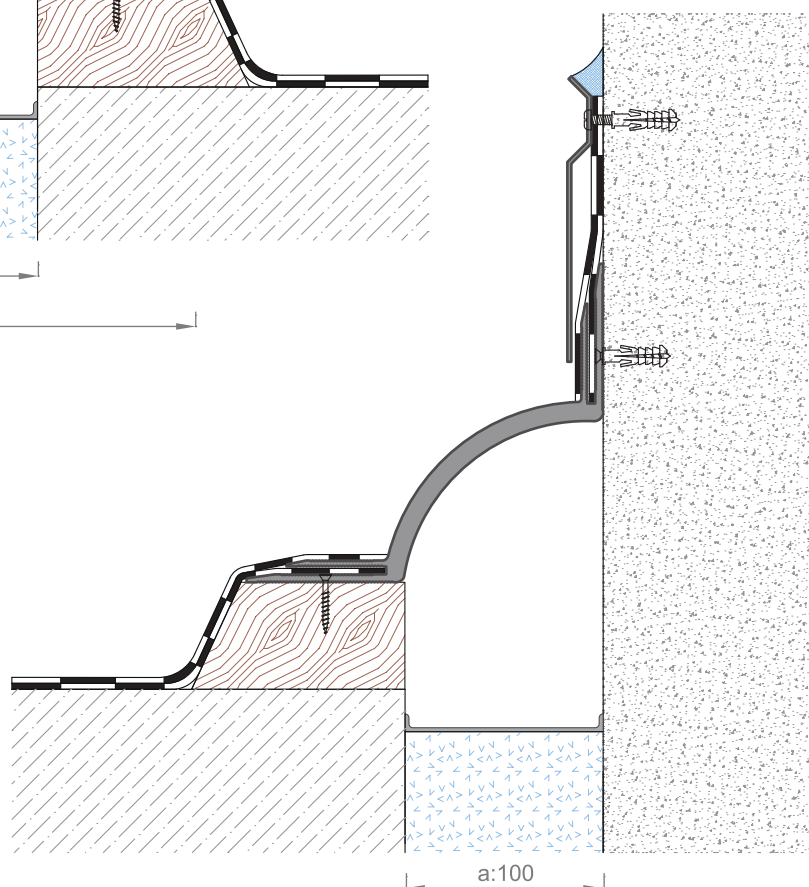




## » AR500-101



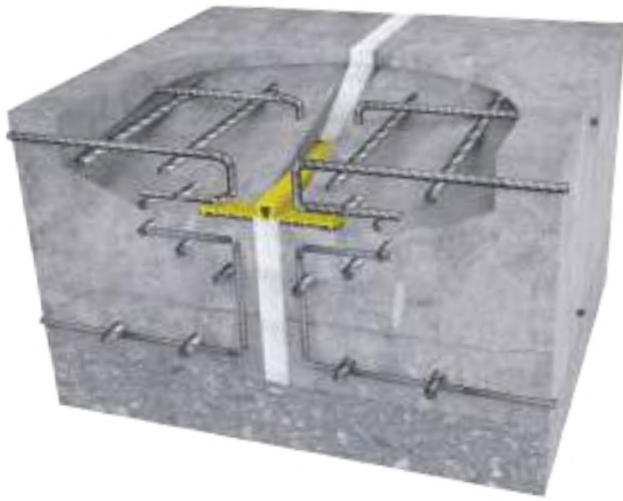
## » AR500-101 CORNER DETAIL



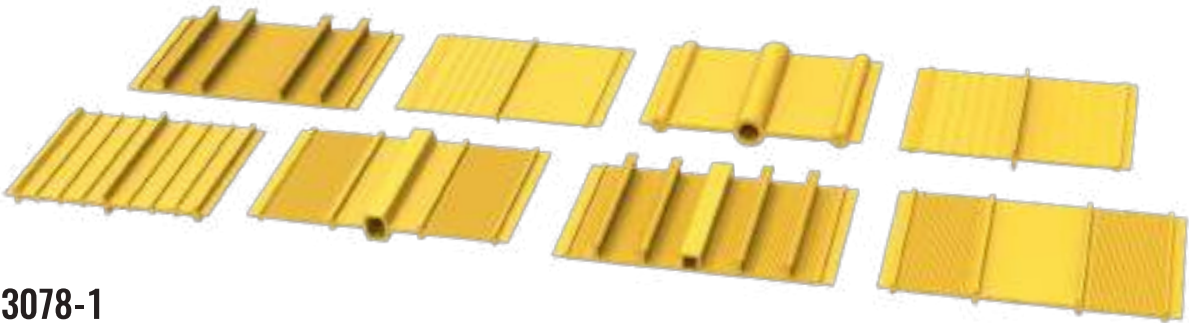
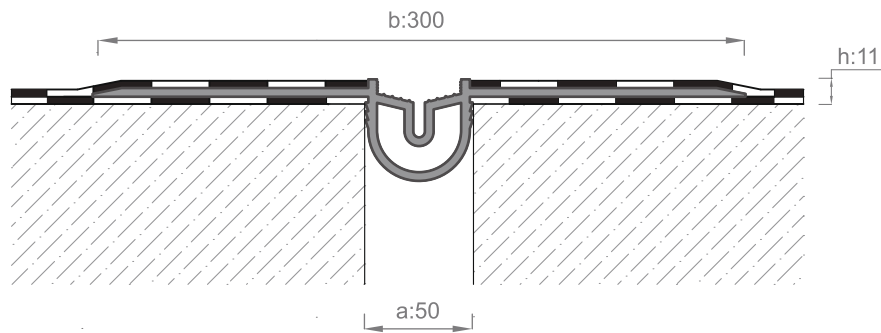
10 mm thick omega terrace thermoplastic bands are resistant to impacts and tearing risks with its strong middle part. Produced in 15 meter lengths.

APPLICATIONS





## » AR500-030



## TS 3078-1

November 2018 -Turkish Standard

WATERTIGHT  
AND TERRACE  
EXPANSION  
JOINT PROFILES

» AK 20/2

» A 20/5

» AK 20/3

» I 20/4

» A 24/4

» DA 24/4

» AA 24/4

» D 24/4

ARFEN's different typed and dimensioned watertight bands are suitable for International standards and Turkish standards. Utilized in foundation to retaining wall, foundation to foundation and retaining wall to retaining wall. Delivered in 25 meters length as a roll.

APPLICATIONS





**Purpose of use:** For several reasons (settlement, earthquake and etc.) many structures face with horizontal or vertical gaps. To maintain watertightness in these gaps ARFEN's PVC watertight bands are applied.

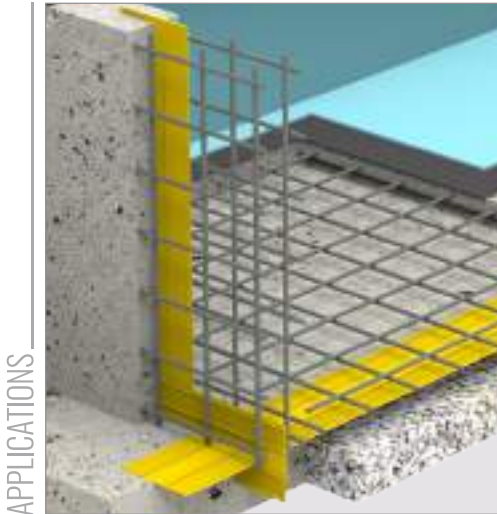
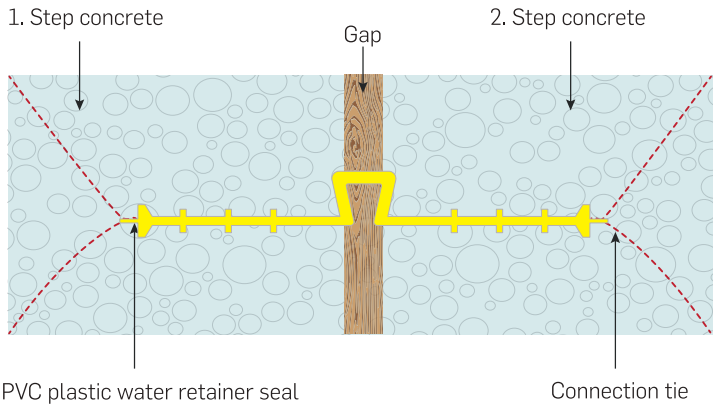
**Material:** Extruded by maintaining appropriate temperature and pressure using mixture of Polyvinyl chloride (PVC) resin, various catalysts, stabilizer, antioxidants, stain, hardener and plasticizer.

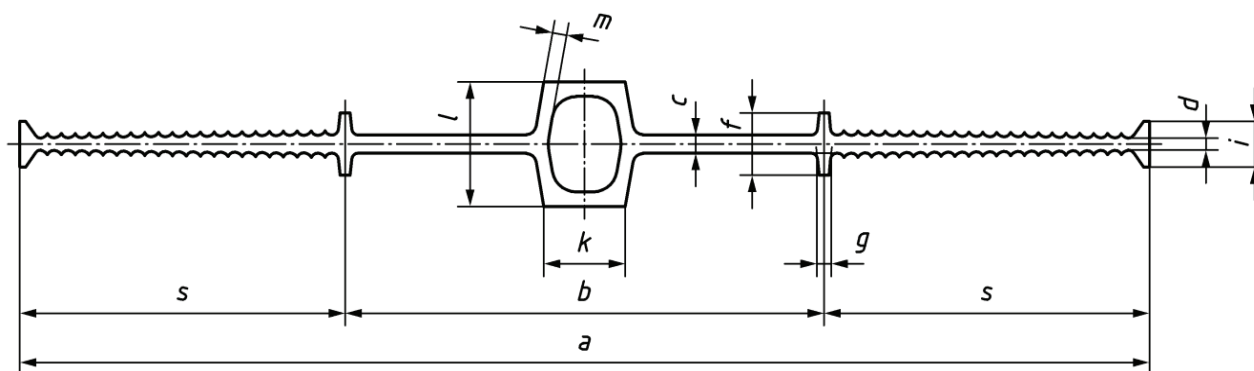
### » APPLICATION AREAS

Hydraulic power plants, Bridges, Underground constructions, Viaducts, Retaining walls, Flooring and bases sitting on the ground, hydraulic power stations, underground water below the groundwater level, Drainage, Water reservoirs, Reservoirs, Water treatment facilities, Swimming pools, Waterfalls, curtain compositions, Industrial constructions.





### » TECHNICAL SPECIFICATION

Tensile strength	Average value	Min. 14	N/mm <sup>2</sup>
	The smallest value	Min. 12	N/mm <sup>2</sup>
Stretching capacity	Average value	Min. 225	%
	The smallest value	Min. 200	%
Type A Shore durometer Hardness grade		75±5	Shore "A"
Unit volume of mass (density)		1,27±0,04	g/cm <sup>3</sup>
Mass to water absorption ratio		Max. 1,5	%
Mass to ash ratio suture		Max. 5,0 (m/m)	%





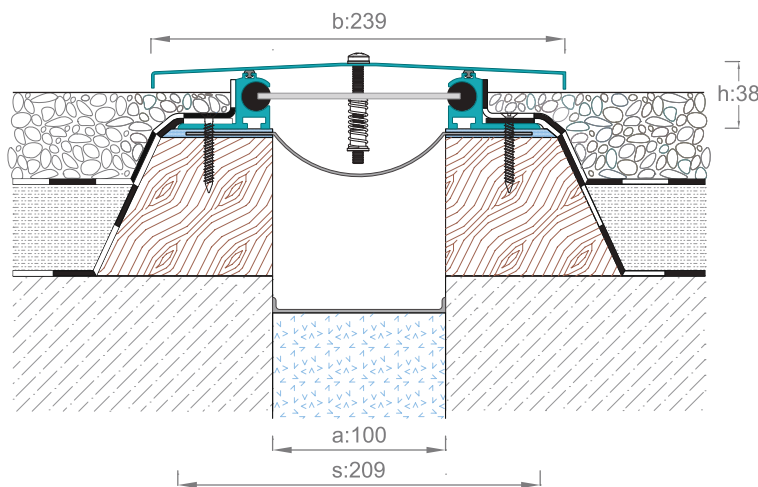
- a** Total width  
**b** Expansion area width  
**c** Thickness of the thinnest part in expansion area  
**d** Thickness of the thinnest part in fastening area  
**f** Height of flat anchoring (fastening) nail  
**g** Width of the anchoring nail  
**i** Thickness of side anchoring bit  
**k** Expansion gap width  
**s** Width of fastening area - Middle axis  
**m** Thickness of the thinnest part in expansion gap area  
**l** Height of expansion gap area

Type	Width			Thickness	Profile				Expansion Gap				
<b>D</b> 	a	b	s	c	d <sup>a</sup>	f	g	i	k	l	m <sup>b</sup>		
	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum		
	240	80	62,5	4	3	15	≥c	11 ≥d+ 6	20	30	3,5		
	320	100	75	5	3,5	≥3 c				35	4		
500	150	100	6	4,5	18 ≥3 c	45				4,5			
<b>A</b> 	Width			Thickness			Profile						
	a	b	s	c	d <sup>a</sup>	f	g	i					
	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum					
	240	80	62,5	3,5	2,5	15 ≥3 c	≥ c	11 ≥ d + 6					
	320	100	75	4,5	3								
500	150	100	6	3,5	18 ≥3 c								
<b>DA</b> 	Width		Thickness	Profile						Expansion Gap			
	a	b	c	N	e	f	f <sub>1</sub> <sup>a</sup>	g	h	i	k	l	m
	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum
	240	90	4	4	45	20	16	4	4	11 ≥h+6	20	20	4
	320	100		6		25	21	≥c					
	500	120		8		25	21	≥ 0,2 f					
<b>AA</b> 	Width	Thickness	Profile										
	a	b	c	N	e	f	f <sub>1</sub> <sup>a</sup>	g	h	i			
	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum			
	240	80	4	4	45	20	16	4	4	11 ≥h+6			
	320	100		6		25	21	≥c					
	500	150		8		25	21	≥0,2 f					

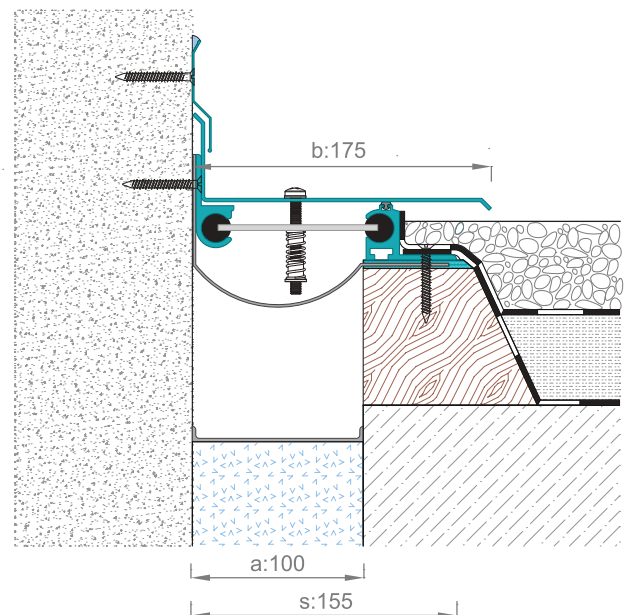




## » AR605-100



## » AR605-100K



Coping type Terrace Expansion Joint Profiles are used as protectors and isolators in opened terraces. Applied with bitumen absorbed wooden wedges or dilatation concrete. H profiles are fitted in additional places to achieve complete watertightness.

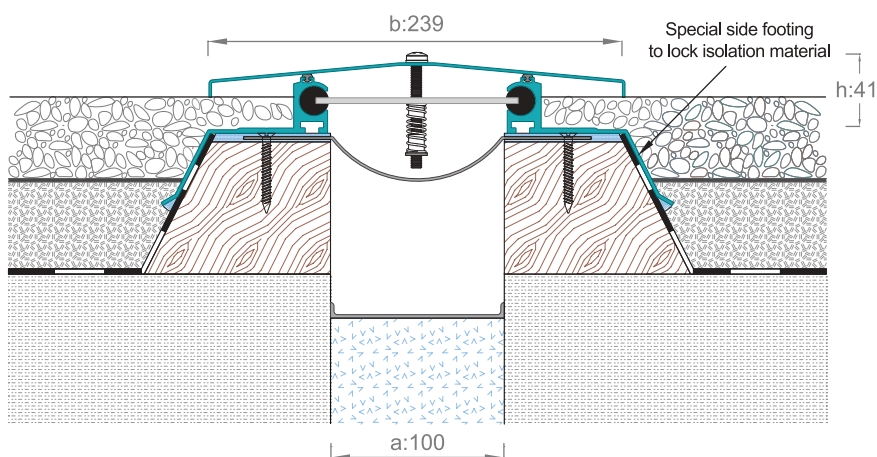


PRODUCT CODE	DESCRIPTION	JOINT WIDTH (a) mm	VISIBLE SURFACE (b) mm	PROFILE HEIGHT (h) mm	TOTAL WIDTH (s) mm	SURFACE	MOVEMENT CAPACITY mm
AR 605 - 050	Coping profiles for terrace applications	50	189	38	189	Anodised Alu./ Powder coated paint	± 25
AR 605 - 100	Coping profiles for terrace applications	100	239	38	239	Anodised Alu./ Powder coated paint	± 50
AR 605 - 150	Coping profiles for terrace applications	150	289	38	289	Anodised Alu./ Powder coated paint	± 75
AR 605 - 200	Coping profiles for terrace applications	200	339	38	339	Anodised Alu./ Powder coated paint	± 100
AR 605 - 250	Coping profiles for terrace applications	250	389	38	389	Anodised Alu./ Powder coated paint	± 100
AR 605 - 300	Coping profiles for terrace applications	300	439	38	439	Anodised Alu./ Powder coated paint	± 100

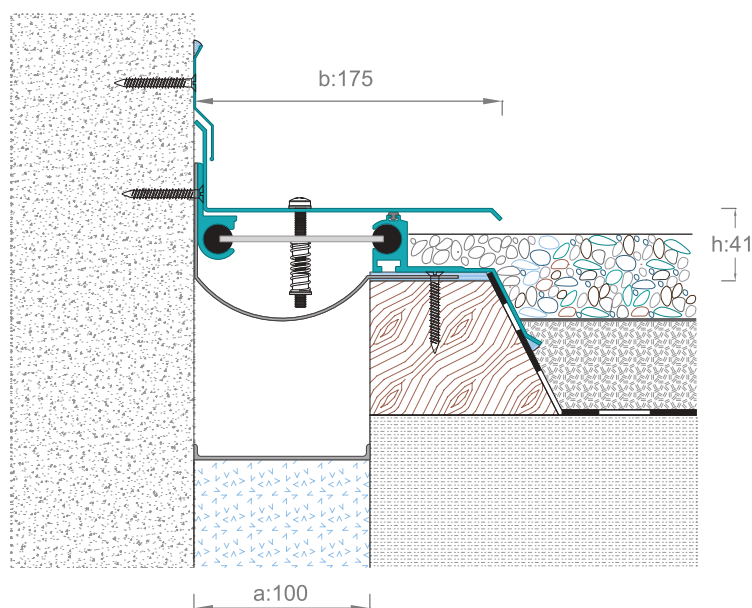




## » AR605-101



## » AR605-101K



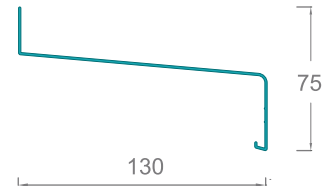
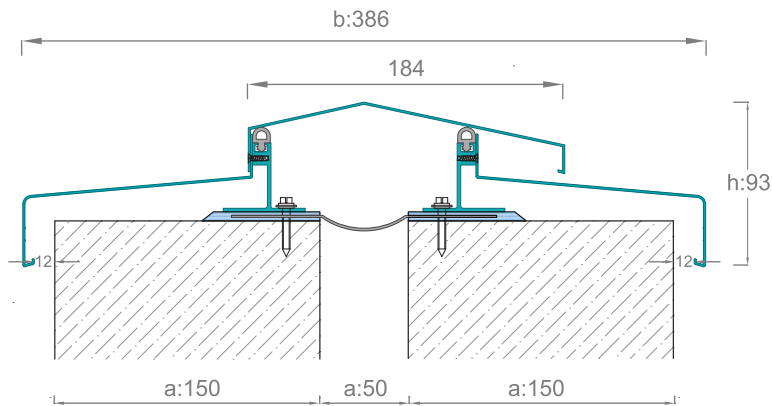
WATERTIGHT  
AND TERRACE  
EXPANSION  
JOINT PROFILES

APPLICATIONS

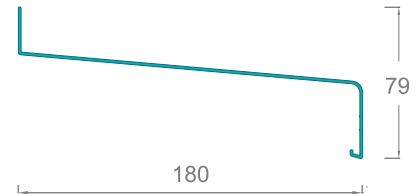




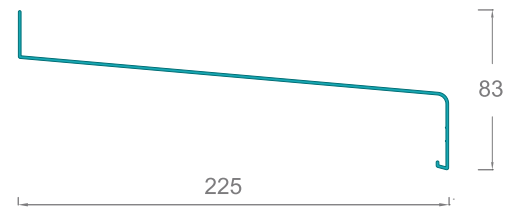
## » AR606-050



AR 606-050 15 CM PARAPET

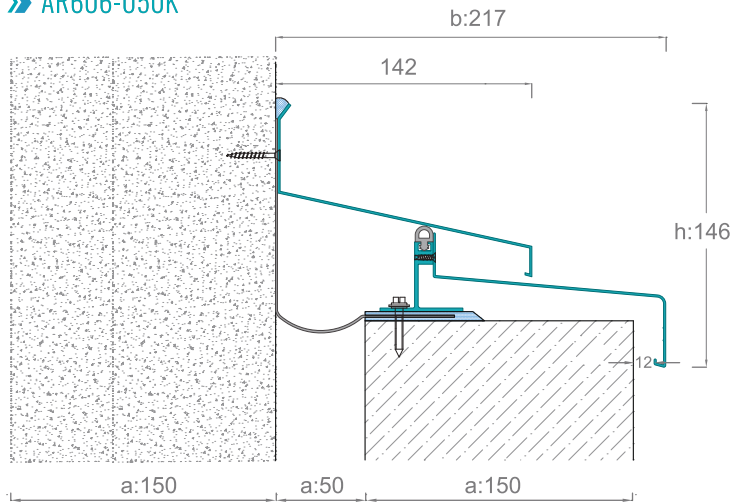


AR 606-051 20 CM PARAPET



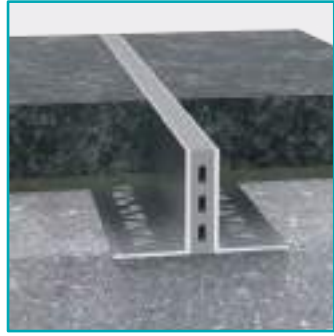
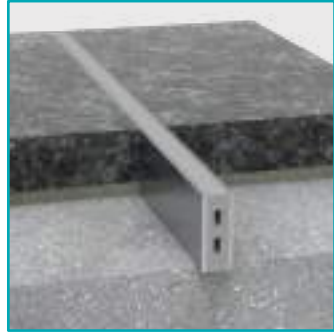
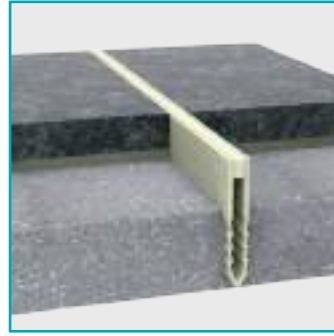
AR 606-052 25 CM PARAPET

## » AR606-050K

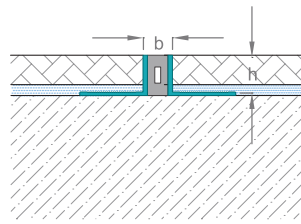


Terrace Coping Profiles bottom footing can be produced according to the gap dimensions. Watertightness can be obtained by TPE H profile.

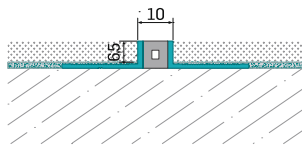
PRODUCT CODE	DESCRIPTION	JOINT WIDTH (a) mm	VISIBLE SURFACE (b) mm	PROFILE HEIGHT (h) mm	TOTAL WIDTH (s) mm	SURFACE	MOVEMENT CAPACITY mm
AR 606 - 050	Coping profiles for terrace applications	50	386	93	386	Anodised Alu./ Powder coated paint	± 25
AR 606 - 100	Coping profiles for terrace applications	100	436	93	436	Anodised Alu./ Powder coated paint	± 50
AR 606 - 150	Coping profiles for terrace applications	150	486	93	486	Anodised Alu./ Powder coated paint	± 50
AR 606 - 200	Coping profiles for terrace applications	200	536	93	536	Anodised Alu./ Powder coated paint	± 50
AR 606 - 250	Coping profiles for terrace applications	250	586	93	586	Anodised Alu./ Powder coated paint	± 50
AR 606 - 300	Coping profiles for terrace applications	300	636	93	636	Anodised Alu./ Powder coated paint	± 50



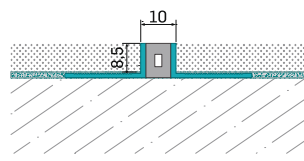
# movement joint profiles



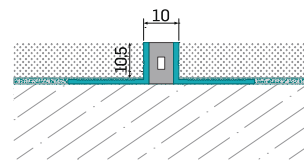
» DP 01-06



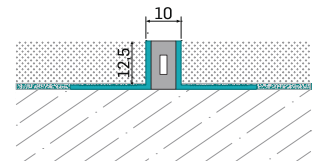
» DP 01-08



» DP 01-10



» DP 01-12



## » WHY MOVEMENT JOINT PROFILES ARE USED?

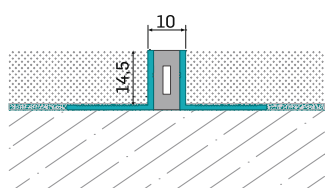
Ceramic, granite, porcelain, stone, glassy ceramics, concrete and marble tiles and terrazzo floor cover applications require thermal expansion joints profiles to absorb natural movements. The temperature difference causes expansion and shrinkage in water or moisture coatings thus, all the tiles shrink with drying and cooling. Another reason, dynamic structural loads cause vibration and large movements in the tile applications. If expansion joint is not used in tile, ceramic, granite or marble applications, internal stresses due to expansion or internal shrinkage can cause many problems such as, obvious cracks and breakage. Therefore, joint design extremely significant for the life of the coatings.

## » APPLICATION STANDARDS

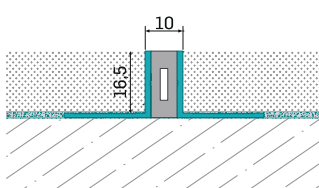
Application Area	Minimum Application Area m2	Maximum Application Area m2	Movement Joint Width (Elastomer bit)
Internal Areas	4,80 mt * 4,80 mt	6,00 mt * 6,00 mt	6 mm
Internal Areas (Moist and Sun lighted areas)	3,60 mt * 3,60 mt	4,80 mt * 4,80 mt	6 mm
External Areas	2,40 mt * 2,40 mt	3,60 mt * 3,60 mt	10 mm
External Areas (Hottest and coldest temperature differences $\geq 40$ C)	2,40 mt * 2,40 mt	3,60 mt * 3,60 mt	13 mm



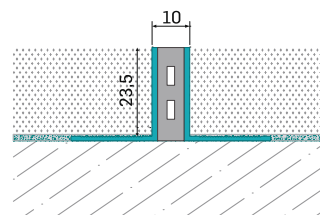
» DP 01-14



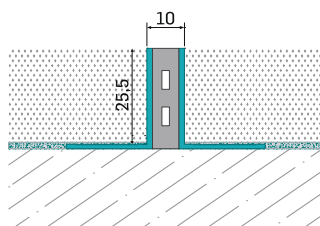
» DP 01-16



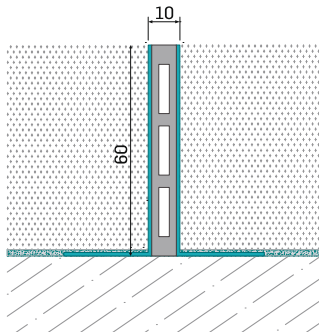
» DP 01-23



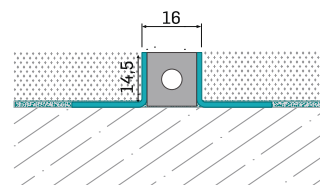
» DP 01-25



» DP 01-60

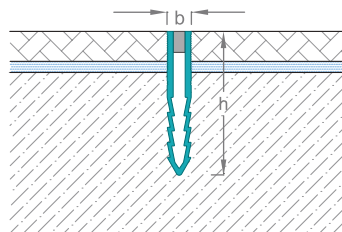
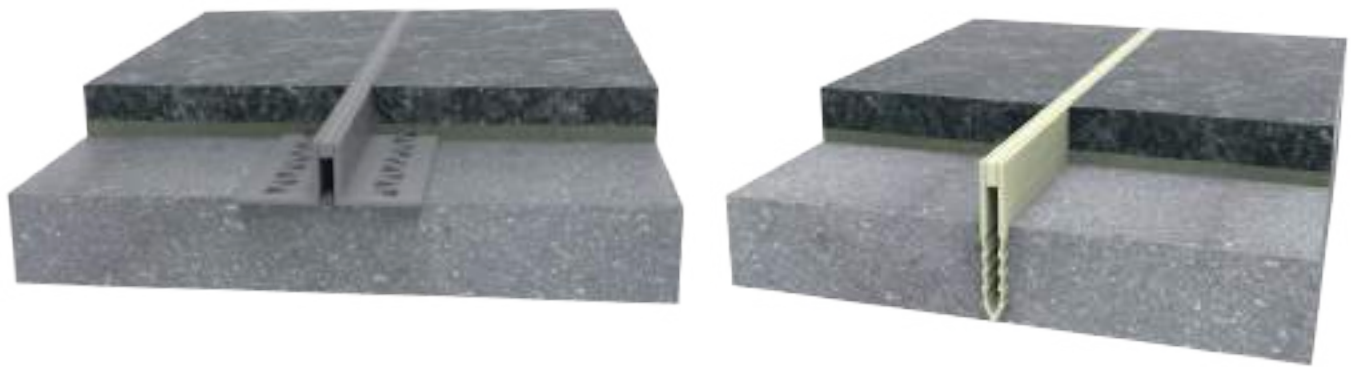


» DP 13-14

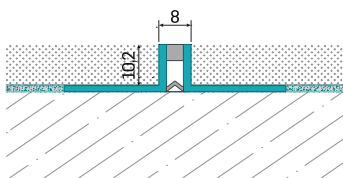


PRODUCT CODE	VISIBLE SURFACE (b) mm	PROFILE HEIGHT (h) mm	LOAD CAPACITY mm
DP 01-06	10	6,5+1,2	+5/-3
DP 01-08	10	8,5+1,2	+5/-3
DP 01-10	10	10,5+1,2	+5/-3
DP 01-12	10	12,5+1,2	+5/-3
DP 01-14	10	14,5+1,2	+5/-3
DP 01-16	10	16,5+1,2	+5/-3
DP 01-23	10	23,5+1,2	+5/-3
DP 01-25	10	25,5+1,2	+5/-3
DP 01-60	10	58,5+1,5	+5/-3
DP 13-14	16	14,5+1,5	±7

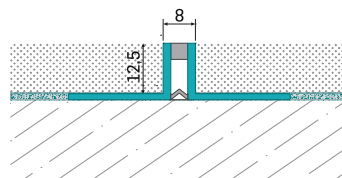




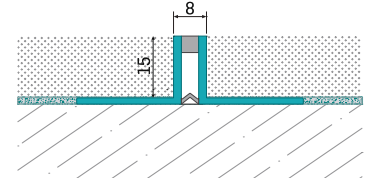
» DP 02-10



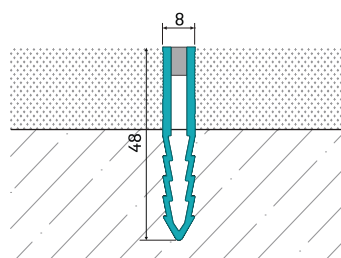
» DP 02-12



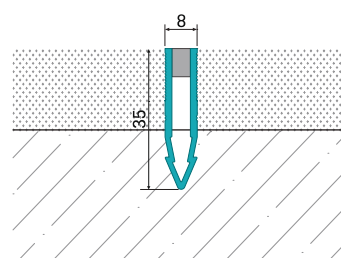
» DP 02-15



» DP 06



» DP 06-1



APPLICATIONS

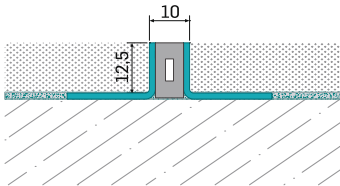


PRODUCT CODE	VISIBLE SURFACE (b) mm	PROFILE HEIGHT (h) mm	LOAD CAPACITY mm
DP 02-10	8	10,5+1,2	±2
DP 02-12	8	12,5+1,2	±2
DP 02-15	8	15+1,2	±2
DP 06	8	48	±2
DP 06-1	8	35	±2

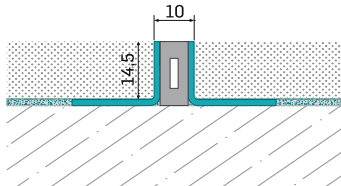
Stainless Steel  
304 Quality



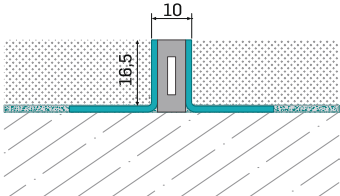
» DP 08-12



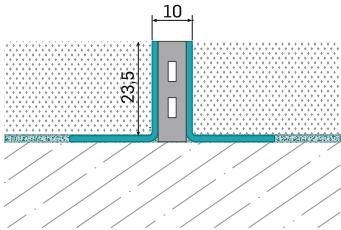
» DP 08-14



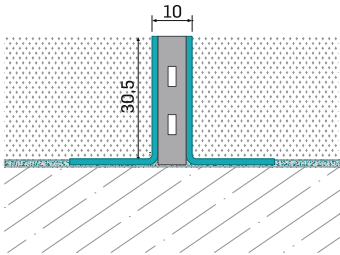
» DP 08-16



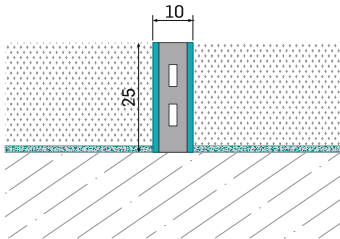
» DP 08-23



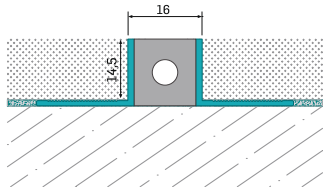
» DP 08-30



» DP 11



» DP 14-14

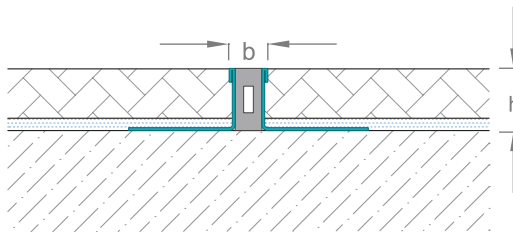
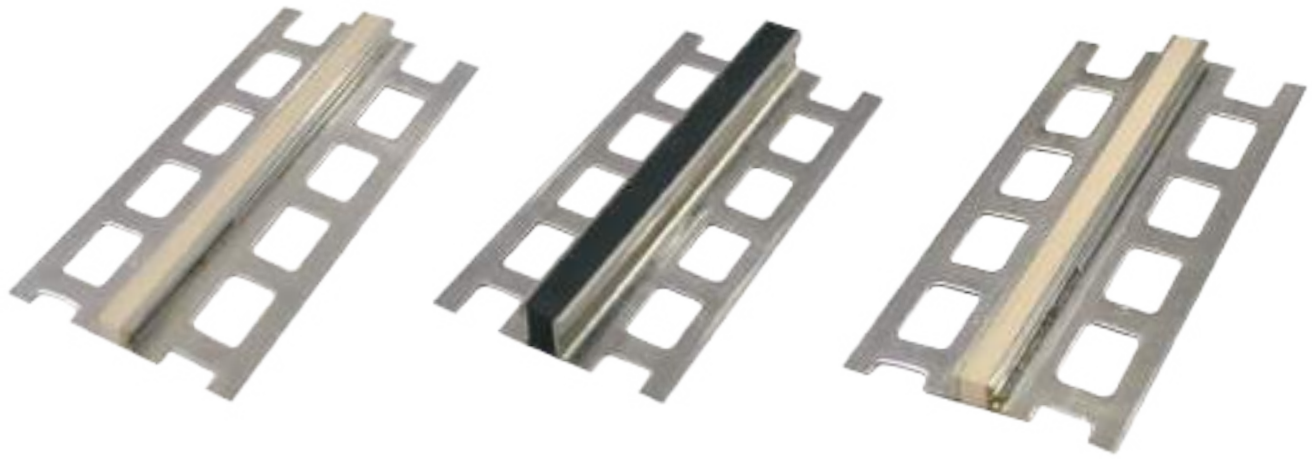


APPLICATIONS

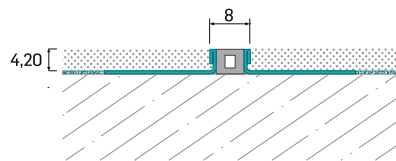


MOVEMENT  
JOINT PROFILES

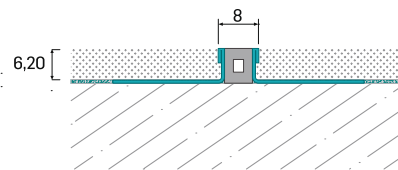
PRODUCT CODE	VISIBLE SURFACE (b) mm	PROFILE HEIGHT (h) mm	LOAD CAPACITY mm
DP 08-12	10	12,5+1,5	+5/-3
DP 08-14	10	14,5+1,5	+5/-3
DP 08-16	10	16,5+1,5	+5/-3
DP 08-23	10	23,5+1,5	+5/-3
DP 08-30	10	30,5+1,5	+5/-3
DP 11	10	25	+5/-3
DP 14-14	16	14,5+1,5	±7



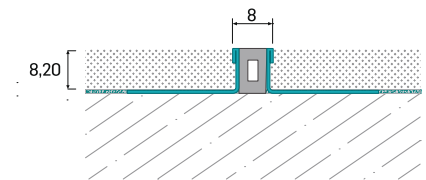
» DP 09-04



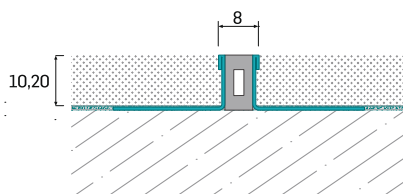
» DP 09-06



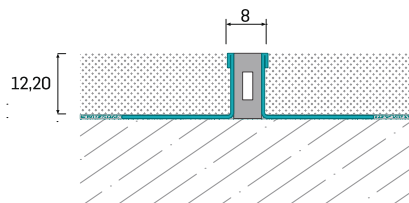
» DP 09-08



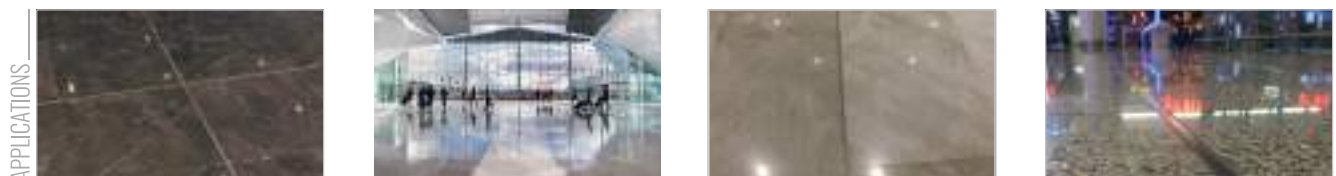
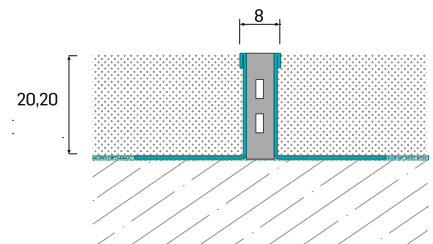
» DP 09-10



» DP 09-12



» DP 09-20



APPLICATIONS

PRODUCT CODE	VISIBLE SURFACE (b) mm	PROFILE HEIGHT (h) mm	LOAD CAPACITY mm
DP 09-04	8	4,20+0,8	+5/-3
DP 09-06	8	6,20+0,8	+5/-3
DP 09-08	8	8,20+0,8	+5/-3
DP 09-10	8	10,20+0,8	+5/-3
DP 09-12	8	12,20+0,8	+5/-3
DP 09-20	8	20,20+0,8	+5/-3

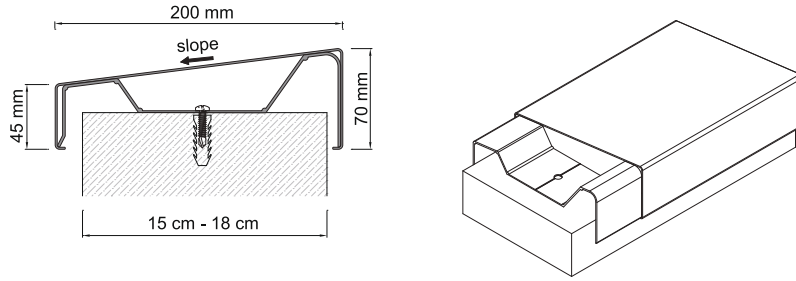


# insulation pressure profiles and copping systems

## COPPING PROFILES

Anodised or powder coated finishing products that compatible with various exterior cladding materials, terrace parapet applications and assembled through 2 mm or 3 mm carrier pieces.

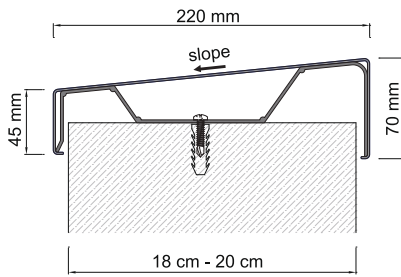
### » ARH-20



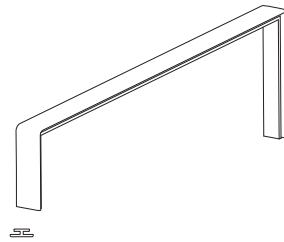
Extruded profiles. One lower carrier piece screwed on the parapet every 50 cm interval. H-section profile or TPE joint seals are installed on the joints



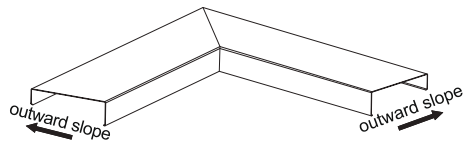
### » ARH-22



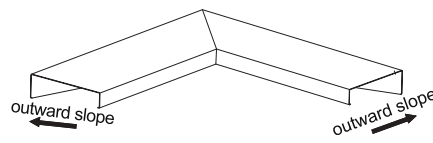
### » H BİRLEŞİM FİTİLİ



Extruded profiles. Product lengths can be produced up to 6 mt in single piece.



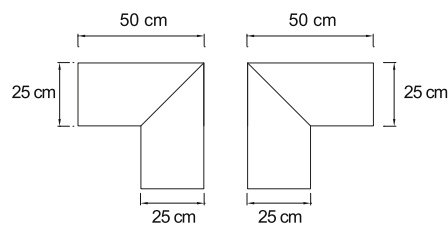
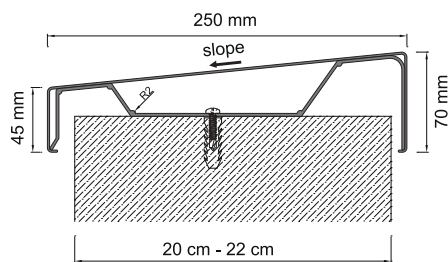
» Internal Corner Detail



» External Corner Detail



### » ARH-25



» External Corner Detail

» Internal Corner Detail

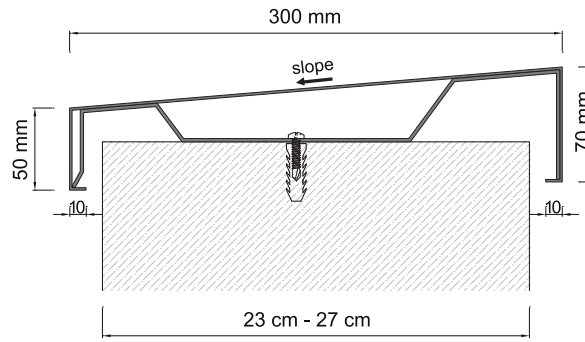
Extruded profiles. Lower carrier piece shipped by 7 cm cutted.





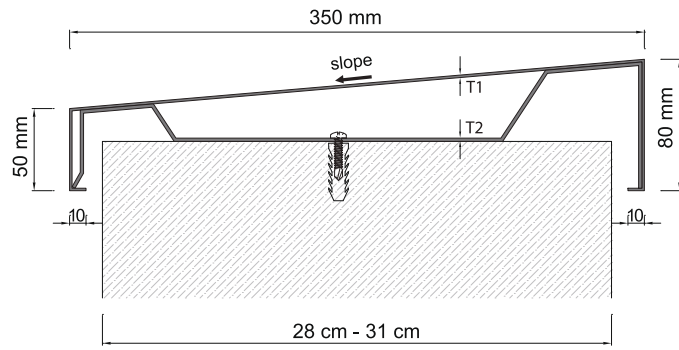


### » ARH-30



Produced of 1,5 mm aluminum sheet. Carrier pieces produced of 2,00 mm thick hard alloy plate. Production length is 3,00 mt.

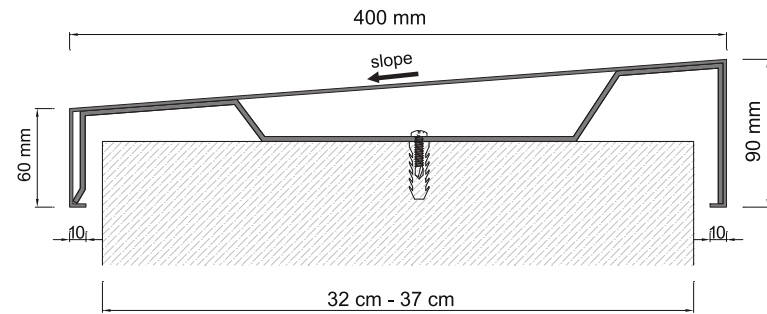
### » ARH-35



Top width  $\leq$  350 mm if T1=1,5 mm T2=2 mm  
Top width  $>$  350 mm if T1=2 mm T2=3 mm



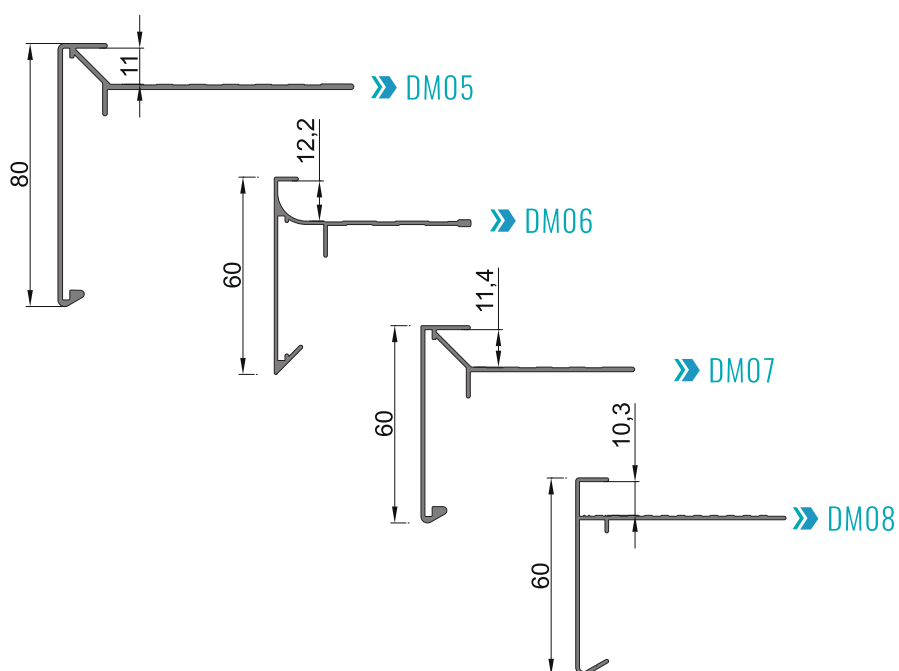
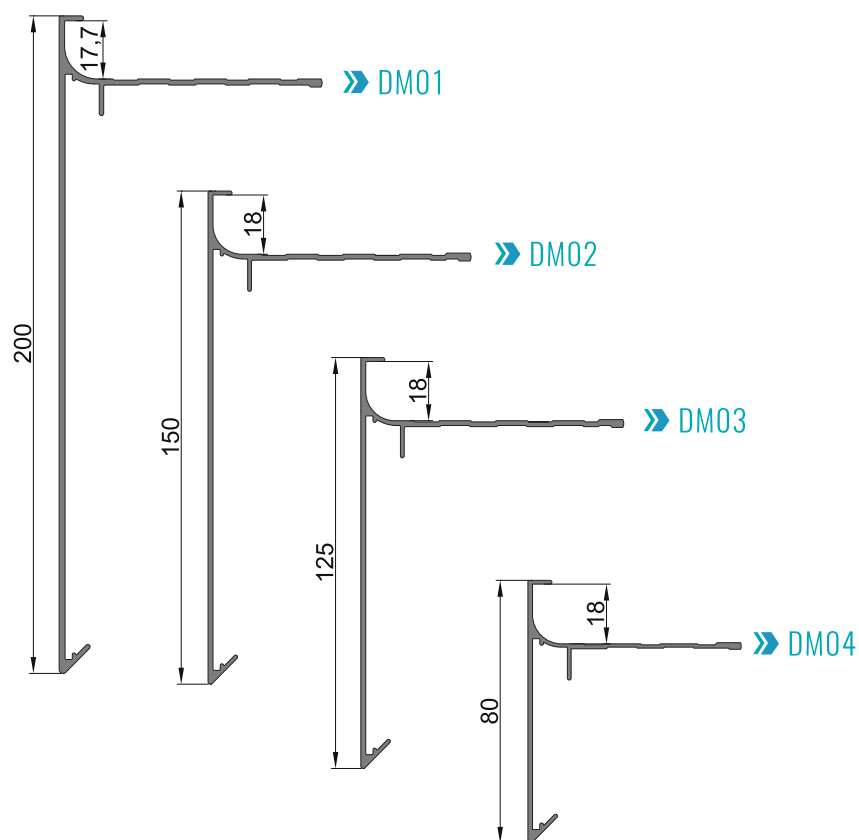
### » ARH-40



Carrier pieces produced of 3,00 mm thick and coping profiles 2,00mm hard alloy plate.

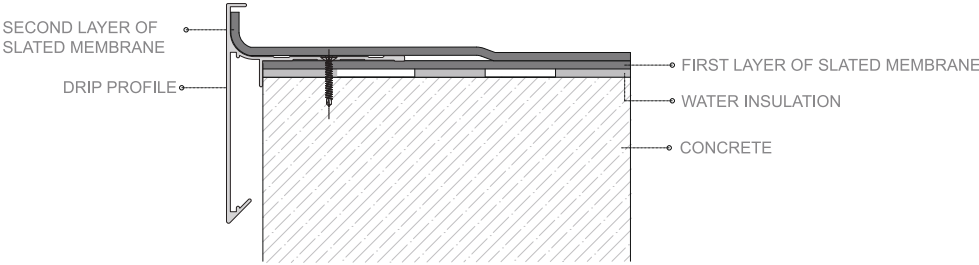
## BALCONY, TERRACE AND PARAPET DRIP PROFILE

Dropper profiles can be applied with all kinds of finishing elements such as ceramic, granite and etc. and applications where open terrace and balconies do not require parapet in applications. In bituminous membrane applications, dropper profiles can be used as a final layer of the top layer slated membrane.

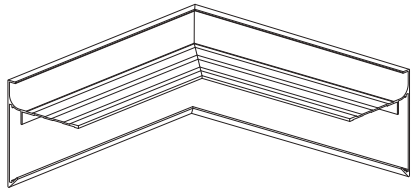
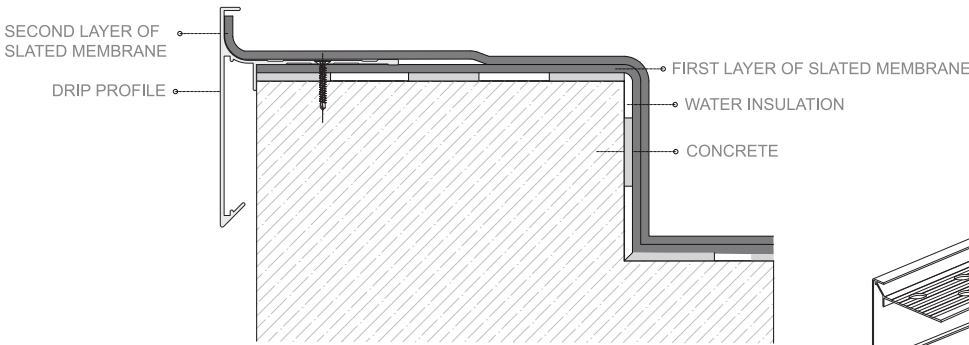




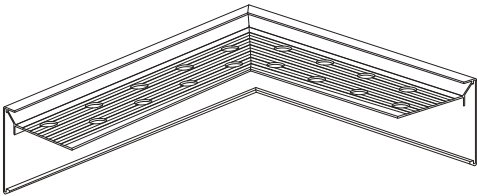
### » SLATED MEMBRANE PARAPET FINISHING DETAIL



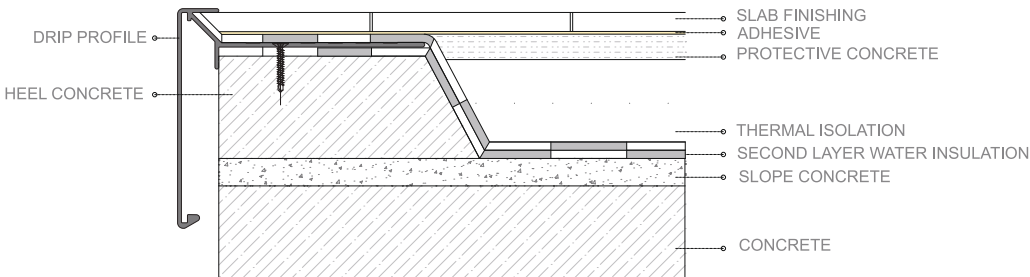
### » COPPING FINISHING DETAIL



### » PARAPET DRIP CORNER DETAIL



### » CERAMIC FINISH BALCONY-TERRACE DETAIL



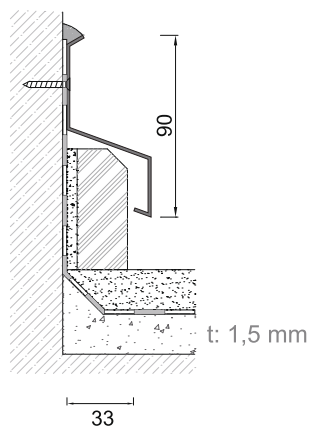
### » CONCRETE&TERRACE DRIP CORNER DETAIL



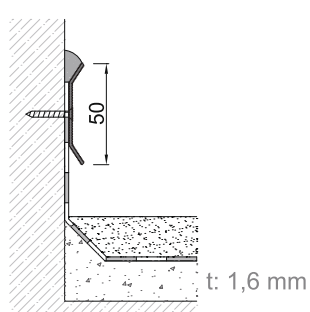
## ALUMINIUM INSULATION PRESSURE PROFILES

Aluminum Insulation Pressure Profiles are compatible with all kinds of bitumen, PVC, TPO, TPE membrane applications at the end of the insulation details. Surface mounted, recessed models as well as wide flashing types are available.

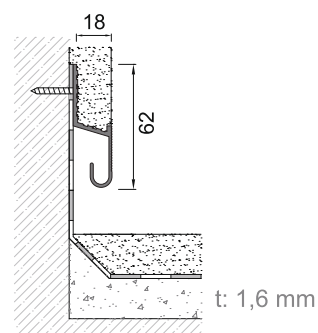
### » AR2001



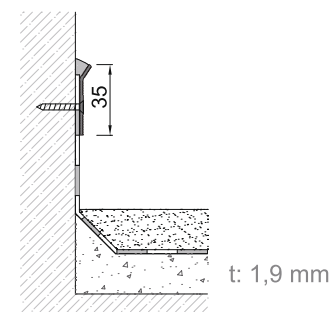
### » AR2002



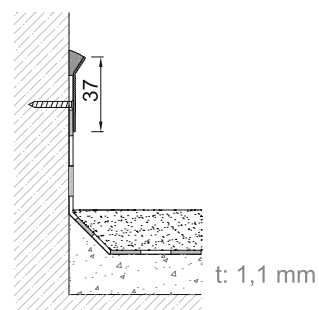
### » AR2003



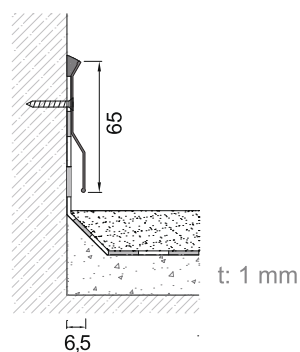
### » AR2004



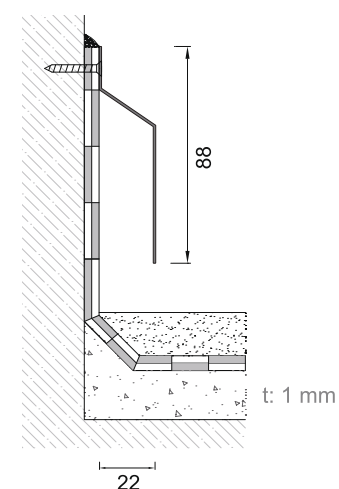
### » AR2006



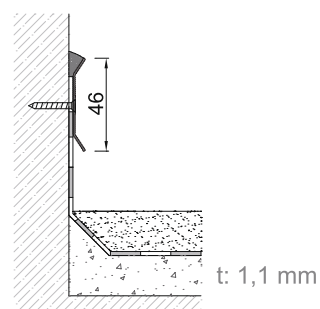
### » AR2005



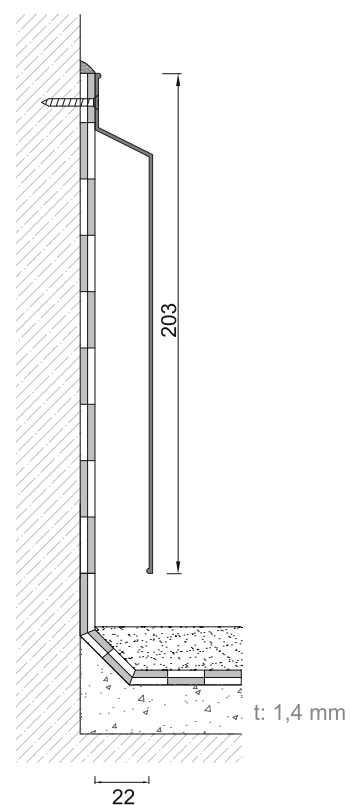
### » AR2008

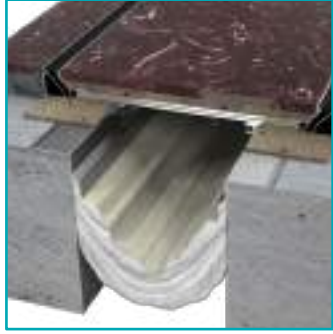


### » AR2007



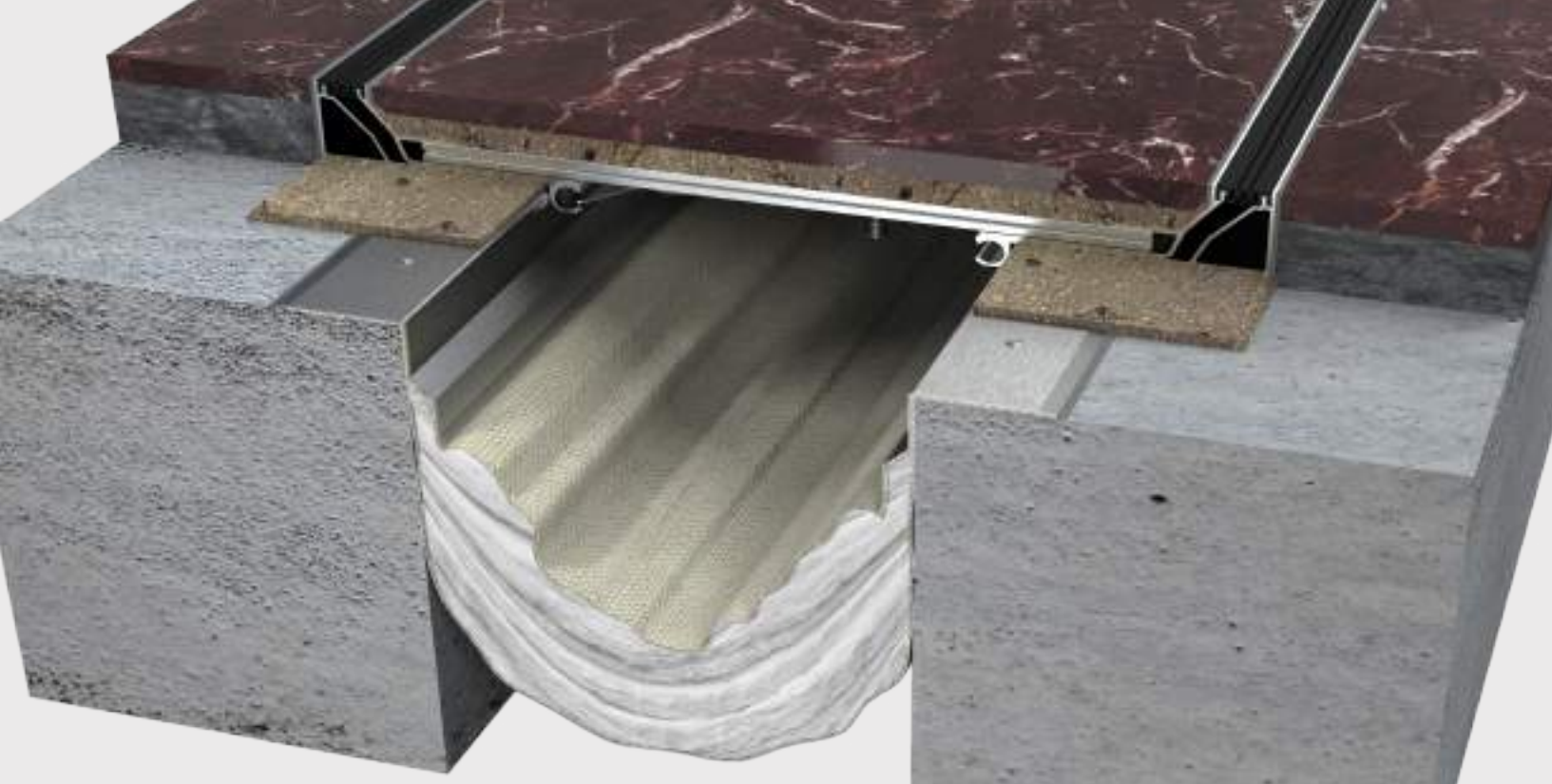
### » AR2009





# fire and water barriers





## ARFEN FIRE BLANKET (HORIZONTAL)

Firestop 120 is a high performance, low weight, 7 layer fiberglass fire blanket that is designed to prevent fire and smoke passage in Expansion Joint gaps and also prevents heat transfer and flame transition to cold side. ARFEN fire barriers can be applied easier and faster than traditional solutions. ARFEN fire barriers have designed and tested to resist fire longest when mounted properly.

Can be used in vertical and horizontal gaps from 100 mm to 300 mm. Suitable for floor applications.

Application areas: Carparks, hospitals, shopping centres, schools, library and etc.

- Horizontal Fire Resistance Time : EI180 (EN 1366-4:2006+A1:2010)
- Fire Resistance Classification: A1
- Product Sizes: 100- 300 MM
- Vertical Use Suitability: NO
- Horizontal Use Suitability: YES

E 180 – EI 60 – H – M50 – B- W100-450 MM

Reference	Initial Gap (mm)	Maximum Gap (mm)	Min. Gap (mm)	Classification
FS100	100	150	40	E180 - EI60 - H - M50 - W100
				E120 - EI20 - V - M50 - W100
FS150	150	225	40	E180 - EI60 - H - M50 - W100
				E120 - EI20 - V - M50 - W100
FS200	200	300	40	E180 - EI60 - H - M50 - W100
				E120 - EI20 - V - M50 - W100
FS250	250	375	40	E180 - EI60 - H - M50 - W100
				E120 - EI20 - V - M50 - W100
FS300	300	450	40	E180 - EI60 - H - M50 - W100
				E120 - EI20 - V - M50 - W100

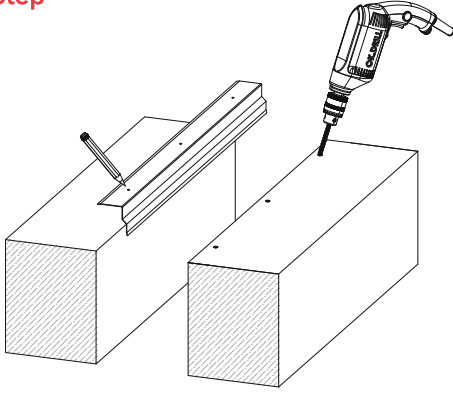


Fire Blanket Layers

**60** MINUTES ISOLATION **180** MINUTES OF INTEGRITY

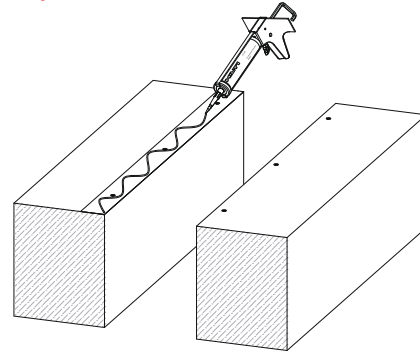
## ARFEN FIRE BLANKET APPLICATION

### 1st Step



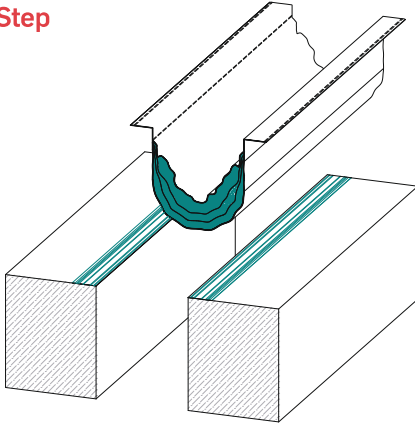
1st Step: The concrete surface and expansion joint gap should be cleaned. The galvanized moutage profiles should be placed on the concrete surface and concrete should be marked through holes on the galvanized profiles, after that fixation holes should be opened with 6,5 mm drill. The holes started from beginning point 150 mm and continue with the interval of 300 mm

### 2nd Step



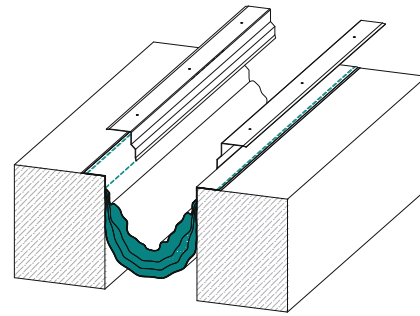
2nd Step: Sealant should be applied on the concrete surface and the layer should be 70 mm

### 3rd Step



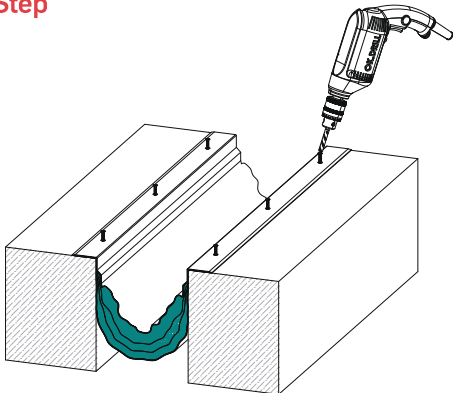
3rd Step: Fire barrier should be placed on the sealant layer. Wait for a while to get efficient bonding with sealant and barrier. After this process, fire barrier could be fixed with nails on the surface optionally

### 4th Step



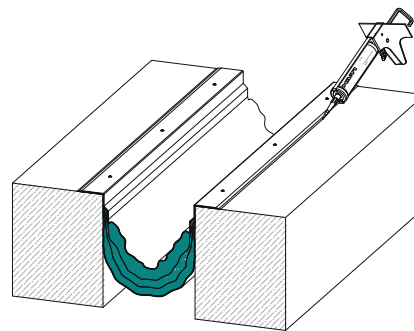
4th Step: Galvanized moutage profiles should be placed on the fire barrier which is already bonded with concrete surface.

### 5th Step



5th Step: Application should be done by E 8,0x80 Buldex Screw through the opened holes on galvanized moutage profiles.

### 6th Step



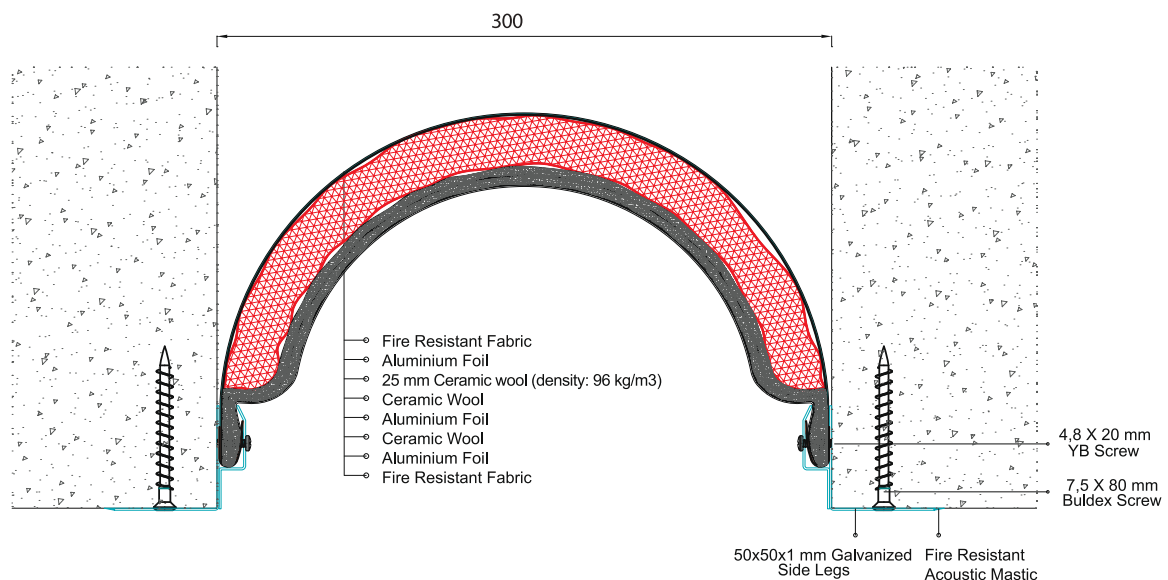
6th Step: The application will be completed with sealant to prevent any leakage between galvanized moutage profiles and concrete surface.

## ARFEN FIRE BLANKET (VERTICAL)

Firestop 120 is a high performance, low weight, 7 layer fiberglass fire blanket that is designed to prevent fire and smoke passage in Expansion Joint gaps and also prevents heat transfer and flame transition to cold side. ARFEN fire barriers can be applied easier and faster than traditional solutions. ARFEN fire barriers have designed and tested to resist fire longest when mounted properly. Can be used in vertical and horizontal gaps from 100 mm to 300 mm. Suitable for floor and wall applications. Application areas: Carparks, hospitals, shopping centres, schools, library and etc.

- Vertical Fire Resistance Time: EI120 (EN 13501-2:2016)
- Fire Resistance Classification: EN1366-4:2006 + A1:2010
- Product Sizes: 100- 300 mm
- Vertical Use Suitability: Yes
- Horizontal Use Suitability: No

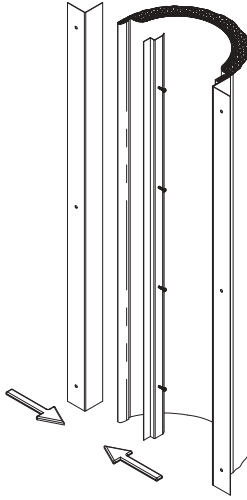
EI20 –EI 20- V- M050 – F – W 100 MM – 300 MM



**20** MINUTES ISOLATION **120** MINUTES OF INTEGRITY

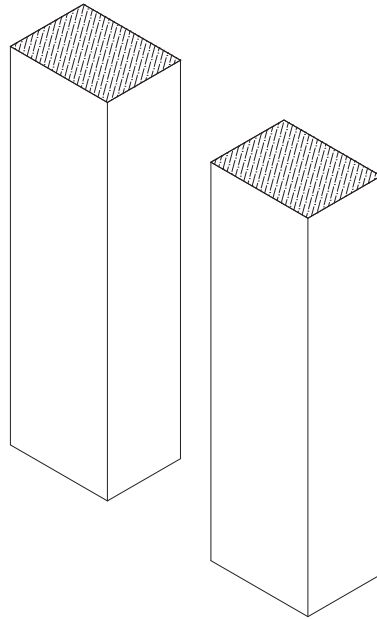
## ARFEN FIRE BLANKET APPLICATION

### 1st Step



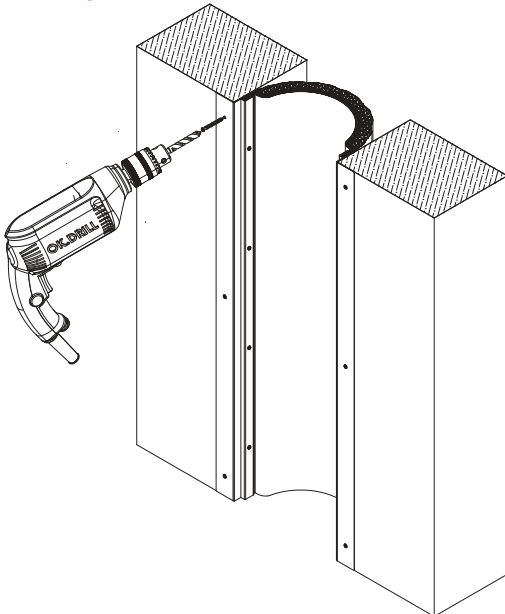
1st Step: The Vertical Fire Barrier detail which is 7 mt long prepared and assemble with galvanized mountage profiles in ARFEN facility and dispatch to the site

### 2nd Step



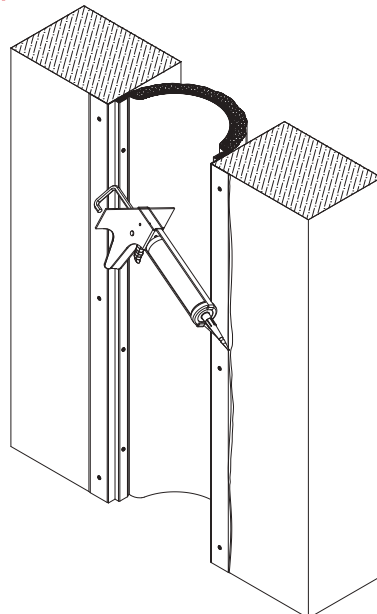
2nd Step: Concrete surface should be cleaned and should be prepared to application

### 3rd Step



3rd Step: The Vertical Fire Barrier should be placed on the wall and immobilized with 7,5 x 80 mm buldex screw.

### 4th Step



4th Step: The application will be completed with Fire resistant sealant to prevent any leakage between galvanized mountage profiles and concrete surface



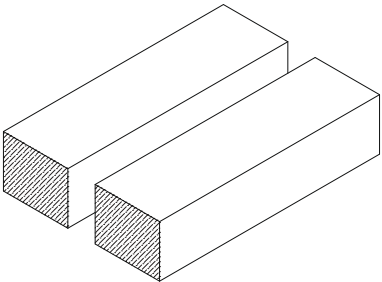
# ARFEN **ROCK WOOL FIRE ROPE**

Arfen fire insulation rope can be easliy applied because of type used as Glass yarn weaving on rock wool. Should beplaced in the expansion joint gap by compression of at least 33%  
Arfen fire insulation rope diameter to be selected according to the application area,

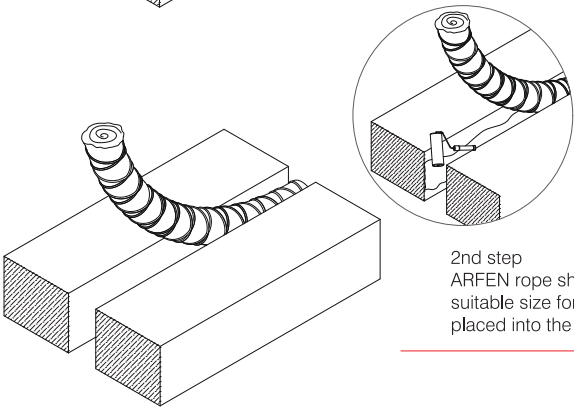
- Horizontal - Vertical Fire Resistance Time: EI240 (SIST EN 13501-2)
- Fire Resistance Classification: A1
- Product Sizes: 20 - 180 mm
- Product Density: 240 +/-20 Kg / m3
- Horizontal And Vertical Use Suitability: Yes
- ETA 17/0061

EI240 – H – X – F – W 10 MM – 150 MM

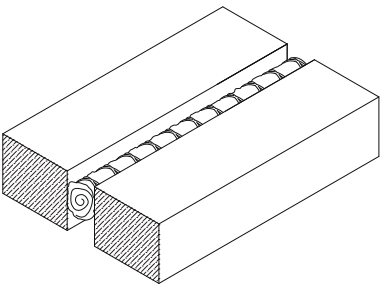
Expansion Joint Gap Dimension (mm)	<10	11-15	16-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	111-120	121-130	131-140	141-150
Material Diameter to be applied (mm)	20	25	30	40	50	60	70	80	90	100	120	130	140	150	160	170



1st step  
Concrete surface area and expansion joint gap should be cleaned and prepared to be suitable for application



2nd step  
ARFEN rope should be selected according to suitable size for the expansion joint gap and placed into the gap with squeeze



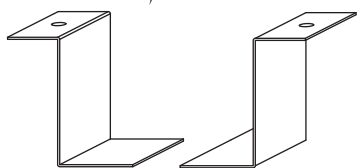
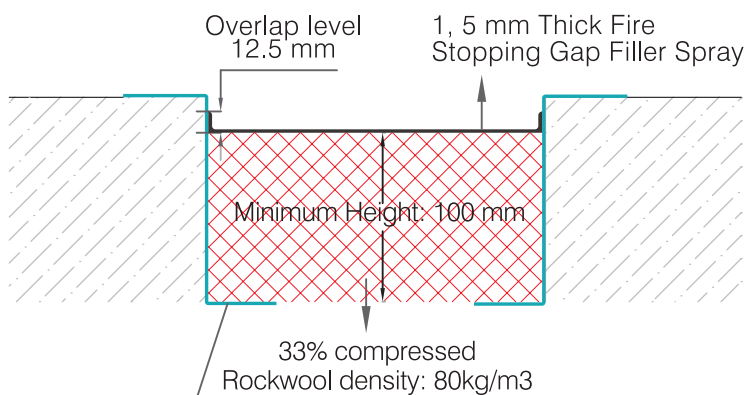
3rd step  
If required, the rope can be fixed with suitable sealant or adhesive on the edge of concrete surface



## ARFEN FIRE MULTICOATED FIRE STOPPING GAP FILLER

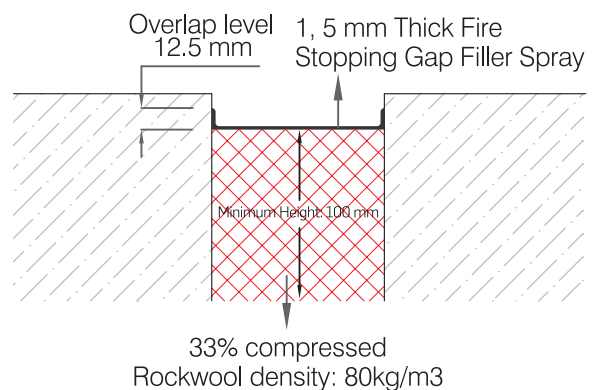
This product is multicoated water based acrylic fire stopping gap filler. Applied on rock wool by a roll or spray internally or externally. ARFEN's fire stopping gap filler has 25% movement capacity of the gap applied in and can resist to fire up to 2 hours.

- Produced in buckets of 5 litre and 15 litre
- Density 1.35 kg/dm<sup>3</sup>
- Ideal storage temperature: 5.30 C, minimum shelf life is 1 year
- Application Temperature: 5.30 C
- Drying Time: 2-4 hours
- Recommended thickness: Wet sheet thickness 2mm, Dry sheet thickness 1 mm.
- Usage: 1.4 Lt/m<sup>2</sup>
- Colour: White
- Waterproof. (Limited to 25% movement capacity)
- Note: Rockwool needs to be compressed 33% before fitting in to Expansion Joint Gap.



Galvanized bracket used in wide Expansion Joint gaps.

**OPTIONAL**





ARFEN  
**CONSUMABLES**  
**FIRE-RESISTANT ACOUSTIC MASTIC**

An acrylic based firestop sealant that provides movement capability in fire rated joints and seals through-penetrations applications

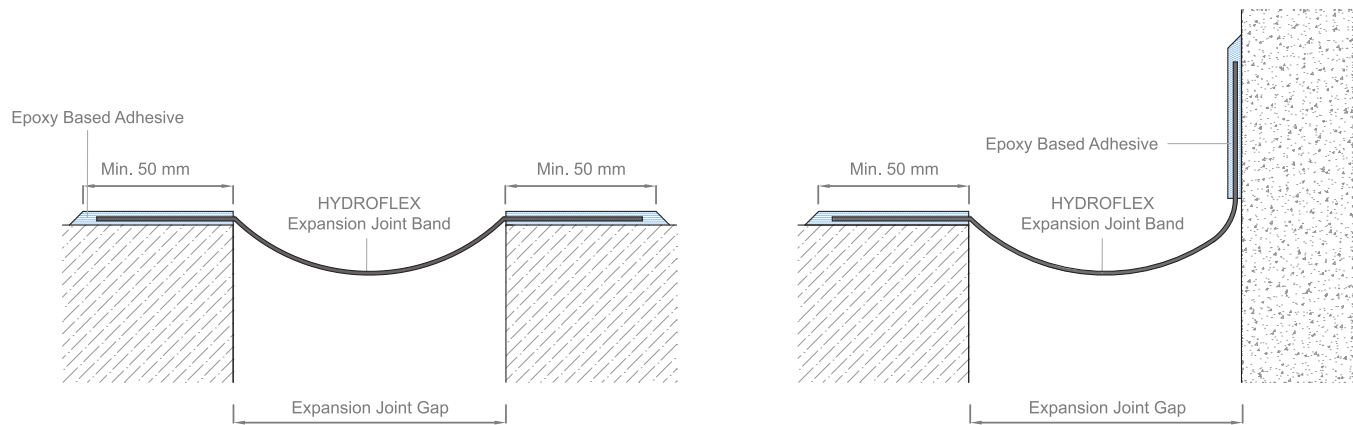
- Silicone free
- Halogen, asbestos and solvent free
- Paintable
- Tested up to %33 movement with 500 cycles in accordance to UL 2079 and ASTM 1966
- Smoke and fume resistant
- Easy clean up with water
- Single component systems available
- Meets LEED requirements for indoor environmental quality credit 4.1 Low Emitting Materials, Sealants and Adhesives and 4.2 Paints and Coatings



Technical Data	Acoustic Mastic
Chemical basis	Acrylic based firestop sealant
Color	Available in red, white and gray
Application temperature	40°F to 104°F (5°C to 40°C)
Skin-forming time	Approx 15 min
Curing time	Approx 3 mm / 3 days
Average volume shrinkage (ASTM C1241)	22.2%
Movement capability	Approx 10%
Temperature resistance	-22 F to 176 F (-30°C to 80°C)
Surface burning characteristics (ASTM E 84-96)	Flame Spread: 10 Smoke Development: 0
Sound transmission classification (ASTM E 90-99)	56 (Relates to specific construction)



Highly elastic HYDROFLEX expansion joint tape is used for every type of buildings in isolating expansion joint gaps, thermal gaps and cracks. Alternative options are available for without holes or with holes at 150 mm, 200 mm, 250 mm, 300 mm, 400 mm width and 1 mm, 1, 5 mm thickness.



» SPECIFICIATIONS AND ADVANTAGES

- Easy application with epoxy adhesive.
- Highly elastic characteristic (600%).
- Strong adhesion to concrete, steel and many other building materials.
- Resistant to plant roots.
- Uv and oil resistant.
- Good performance between wide temperature values.
- Easy to cut, weld (hot air) and joint.

» HYDROFLEX USAGE AREAS

- Horizontal and vertical application on all type of buildings
- Foundations and curtain walls.
- Waste water treatment plants, potable water plants, water tanks pools.
- Tunnels and concrete pipes and boxes.
- Between foundation and curtain wall connection lines.

HYDROFLEX TECHNICAL SPECIFICATIONS	
Chemical composition	TPE (Thermoplastic Elastomer)
Colour	Grey
Hardness level	80
Serving temperature value	-40 °C / +90 °C
Thermal Temperature value	270 °C
Elongation at break	%600
Tear strength	> 600N/cm
Water Pressure resistant value	> 8 Bar
Tensile strength	> 6 Mpa
UV resistance value	> 7500 h
Bitumen resistance	Good
Sulfuric acid resistance	Good
Alcohol resistance	Good
Detergent resistance	Good

PRODUCT CODE	WIDTH	THICKNESS	LENGTH
HYDROFLEX 150	150	1 mm & 1,5 mm	25 mt / rulo
HYDROFLEX 200	200	1 mm & 1,5 mm	25 mt / rulo
HYDROFLEX 250	250	1 mm & 1,5 mm	25 mt / rulo
HYDROFLEX 300	300	1 mm & 1,5 mm	25 mt / rulo
HYDROFLEX 400	400	1 mm & 1,5 mm	25 mt / rulo

## APPLICATION STEPS

### 1ST STEP



### 2ND STEP



### 3RD STEP



### 4TH STEP



## » APPLICATION AREA

Bonding of expansion joint tape anchoring the rods and bars to the concrete, stone or brick.  
Repair and isolating of wide cracks



## » SPECIFICATION AND ADVANTAGES

Perfect adhesion to the concrete and steel. Resistant to chemicals  
Solvent free, It can be applied all types of expansion joint gap,  
Water and gas impermeable, Perfect adhesion to the damp  
surfaces on concrete,  
Easy to apply, It doesn't need any primer before application.

HYDROFLEX 21 is a composition of 2 epoxy based material. Used for  
fixing, anchoring and sticking purposes.

### TECHNICAL SPECIFICATIONS OF EPOXY BASED DILATATION ADHESIVE

Number of components	2 Components A and B
Chemical Specifications	A Component: Epoxy Resin B Component: Epoxy Hardener
Mixed Rate - Weight A/B	3,75 kg / 1,25 kg
Mixed Density	1,7 kg / lt
Fully Cured	Pedestrian usage 24 hours Fully Cured and Open Service : 7 days
Pot Life	40 dk (20 C)
Curing Time	Recoat after : 8-10 hours Fully Cured : 7 days





## ARFEN CHAMFER & CRACK TAPE

HYDROFLEX 120 is used for isolation of critical point on wet area corners and isolating required areas. HYDROFLEX 120 is suitable with many kind of materials.

- ✓ It doesn't need any extra adhesive usage as it is compatible with any kind of isolation materials
- ✓ Easy installation
- ✓ High elasticity capacity
- ✓ %100 water proof
- ✓ Resistant to many kind of chemicals
- ✓ Good resistant to Ozone and UV
- ✓ High performance for wide temperature range (-40 ,+90 °C).

*Note: Our new felt version band is also available under HYDROFLEX 121 product code.*



## SODIUM BENTONITE BASED WATER SWELLING BAND

ARFEN's water swelling band designed to fill gaps or crack in concrete by swelling in contact with water.

- ✓ Easy to apply.
- ✓ Easy application even with huge amount of rebar.
- ✓ Placing in right position and pressing are only the steps for mounting to connection areas.
- ✓ Safely swelling feature does not allow it to get swollen in pouring concrete cases.
- ✓ Can be used in drinking water as it doesn't get mixed with water.
- ✓ Can be used in Swimming pools, tunnels, subways, retaining walls, curtain walls.
- ✓ Can be used in Water tanks, sewage systems, and water purification facilities.
- ✓ Concrete joints, dams, road and intersections of old and new concretes.



## ACRYLIC BASED WATER SWELLING BAND

Acrylic based water stop band gets swollen when in contact with water. Application areas are: swimming pools, water tanks, sewage plants, and construction joints. Also applicable in cold joints where curtains are connected with foundations, and steel profile and pipe's contact areas with concrete. It can be used to provide seals in areas exposed to sea water as well.

- ✓ Easy to apply.
- ✓ Can be used in various surfaces
- ✓ Easy application even with huge amount of rebar.
- ✓ Safely swelling feature does not allow it to get swollen in pouring concrete cases.
- ✓ Fills possible gaps and cracks by swelling and acts as a water barrier in the reinforced concrete structure.
- ✓ Resistant to highly salted water content and various chemicals.



# REFERENCES

## EUROPE & NORTH ASIA

QEBELE CONVENTION CENTER, AZERBAIJAN  
SHAHDAG TOURISM COMPOUND, AZERBAIJAN  
AXIS TOWER – TBILISI / GEORGIA  
ORBI GROUP – BATUM ORBI CITY  
DEKON TAAH. – BATUM LE MERIDIEN OTEL  
ÇALIK HOLDİNG – TURKMENISTAN BURN TREATMENT CENTER  
SUMMA İNŞAAT – NIGER MINISTRY OF FINANCE  
SUMMA İNŞAAT – MOLDOVA ARENA  
SUMMA İNŞAAT – NIGER AIRPORT  
PALVAN İNŞAAT – UZBEKISTAN TASHKENT CITY  
GEMİKAYA HOLDİNG – NAHCHIVAN / AZERBAIJAN PROJECTS  
OLD BAKU CONSTRUCTION – BAKU IBIS OTEL  
NORTH WEST CONSTRUCTION – BAKU WATER FRONT MALL

## NORTH AFRICA

SHARM EL SHEIKH INTERNATIONAL AIRPORT, EGYPT  
HURGADA INTERNATIONAL AIRPORT, EGYPT  
BURJ AL ARAB AIRPORT, EGYPT  
HSBC OFFICE BUILDING, EGYPT  
CIB OFFICE BUILDING-SMART VILLAGE, EGYPT  
SAUDI ARABIA NEW EMBASSY BUILDINGS, DUBAI  
FOUR SEASONS HOTEL IN CAIRO, EGYPT  
FOUR SEASONS HOTEL IN SHARM EL SHEIKH, EGYPT  
SAN STEFANO HOTEL IN ALEXANDRIA, EGYPT  
BANEASA SHOPPING MALL, ROMANIA  
JUMBO SHOPS, ROMANIA  
NERVOLOGICAL HOSPITAL, ROMANIA  
KRASNODAR REGIONAL HOSPITAL, RUSSIA  
BELOYARSK HOSPITAL, RUSSIA  
VOLKSWAGEN FACTORY / SAMARA, RUSSIA  
BAKU FLAME TOWERS, AZERBAIJAN  
BAKU TRUMP TOWER AZERBAIJAN

## MIDDLE EAST

STAR HOTEL, DUBAI  
MERCEDES-BENZ SERVICE CENTER, DUBAI  
G+4+R LABOUR ACCOMMODATION, DUBAI  
ADNOC MUBADALA SCHOOL, ABU DHABI  
DRAGON MALL EXTENSION, DUBAI  
HOTEL ROUNABOUT, DUBAI  
MBR MULBERRY HILLS, DUBAI  
ABRAJ QUARTIER, QATAR  
EXPO 2020 DEVELOPMENT PROJECT, DUBAI

## NORTH AFRICA

SMART VILLAGE OFFICE BUILDINGS, EGYPT  
HOLIDAY INN CAIRO, EGYPT  
INTER CONTINENTAL CAIRO, EGYPT  
UPTOWN PROJECT – EMAAR, EGYPT  
LNG PROJECT - DAMIETTA PORT, EGYPT  
CARREFOUR PROJECT-MAADI CITY CENTRE, EGYPT  
CARREFOUR PROJECT-ALEXANDRIA CITY CENTRE, EGYPT  
CARREFOUR PROJECT-DANDY MALL, EGYPT  
VODAFONE PROJECT-SMART VILLAGE, EGYPT  
LOCAL MOSQUE-SMART VILLAGE, EGYPT  
CALL CENTRE PROJECT-SMART VILLAGE, EGYPT  
MICROSOT BUILDING-SMART VILLAGE, EGYPT  
PYRAMIDS HEIGHTS OFFICE BUILDINGS, EGYPT  
EL REHAB CITY MALL, EGYPT  
GREEN PLAZA COMPOUND-SHARM EL SHEIKH, EGYPT  
CIB - CREDIT AGRICOLE - HSBC BANK BRANCHES, EGYPT  
MADINATI SPORTS &SOCIAL CLUB, EGYPT  
EUROPE & NORTH ASIA  
TALLAGHT UNIVERSITY HOSPITAL, DUBLIN -IRELAND  
LUKA KOPER- SLOVENIA  
ERTELE MALL – HUNGARY  
KOTKA HOSPITAL - FINLAND  
PORTONOVİ RESORT AND VILLAGE - MONTENGRO  
DOM POMOCY, POLAND  
VITAL HOSPITAL, POLAND  
SZPITAL UNIVERSITESI, POLAND  
PLAZA MALL, ROMANIA  
CARREFOUR PROJECTS, ROMANIA  
MUNICIPAL HOSPITAL BUKRES, ROMANIA  
ASGABAT AIRPORT, TURKMENISTAN  
HEALTH COMPLEX SBUILDING, TURKMENISTAN  
CARDIOLOGY HOSPITAL, TURKMENISTAN  
WOMEN-MATERNITY HOSPITAL, TURKMENISTAN  
MILITARY HOSPITAL, TURKMENISTAN  
TRAUMATOLOGY HOSPITAL, TURKMENISTAN  
DOM POMOCY, POLAND  
VITAL HOSPITAL, POLAND  
SZPITAL UNIVERSITESI, POLAND  
PLAZA MALL, ROMANIA  
CARREFOUR PROJECTS, ROMANIA  
MUNICIPAL HOSPITAL BUKRES, ROMANIA

## MIDDLE EAST

TENBEK HOSPITAL, QATAR  
MALL of OMAN, OMAN  
DUBAI METRO STATION & CAR PARK, DUBAI  
PRIVATE & GOVERNMENT HOSPITALS, ABU DHABI  
SHERATON HOTEL, DUBAI  
SEA PORT PASSENGER TERMINAL, DUBAI  
AJMAN TOWER AJMAN PALM JUMERIAH, DUBAI  
MASDAR CAR PARK, ABU DHABI  
ABU DHABI FINANCIAL CENTRE-SOWWAH SQUARE, ABU DHABI  
LLH HOSPITAL, ABU DHABI  
KINGS COLLEGE HOSPITAL, ABU DHABI  
POWER STATION SADIYATH ISLAND, ABU DHABI  
SOBHA HARTLAND SCHOOL, ABU DHABI  
DRAGON MALL, DUBAI  
AJMAN TOWER, DUBAI  
KING ABDULLAH FINANCIAL DISTRICT, SAUDI ARABIA  
SHARJAH CITY CENTRE, DUBAI  
JVC CIRCLE MALL, DUBAI  
TOWN SQUARE- ZAHRA APARTMENT, DUBAI  
TOWN SQUARE- SAFI APARTMENT, DUBAI  
TOWN SQUARE- HAYAT APARTMENT, DUBAI  
TOWN SQUARE- HAYAT BOULEVARD, DUBAI  
DEWA ACCOMODATION BUILDINGS, DUBAI  
THE HILLS, DUBAI  
HAMENI TOWER, DUBAI  
AL MESSILA RESORT and VIP, QATAR  
BAHRAIN INTERNATIONAL AIRPORT, BAHRAIN  
KING SAUD UNIVERSITY, KSA

## OTHERS

BASRA MUNICIPALITY HOSPITAL, IRAQ  
HUMUS UNIVERSITY HOSPITAL, SYRIA  
SANJHONS HOSPITAL, PALESTINE  
MOSQUE AND COMMUNITY FACILITIE, ALGERIA  
RES&COMM TOWER, DOHA QATAR  
NOUAKSHOTT AIRPORT, MAURITANIA  
NAZERBAYAV ÜNİVERSİTESİ, KAZAKHSTAN  
DEBRECEN UNIVERSITY HOSPITAL, HUNGARY  
HUALING OTEL, GEORGIA  
LARA PARK OTEL, CYPRUS



# SAMPLE OF APPLICATIONS





# QUALITY CERTIFICATES



ZAG Fire Rope  
Test Certificate



Factory Production Control  
Certificate of Conformity



Effectis Fire Resistance  
Certificate



TSE Certificate



TSE Certificate



TSE Certificate



ISO 45001 Certificate



ISO 9001:2015 Certificate



ISO 14001:2015 Certificate



QUALICOAT SEASIDE Certificate



Factory Production Control Certificate



Brand Registration Certificate

we  
build  
solutions



**ARFEN CONSTRUCTION MATERIALS COMPANY**

**Head Office:** Atatürk San. Bölgesi Ömerli Mah. Hakkı İleri Cad.  
Gölce Sk. No:22 Hadımköy - Arnavutköy / İSTANBUL  
**Tel:** +90 212 485 16 15 - **Fax:** +90 212 771 25 79 - **www.arfen.com**

**ARFEN ALUMINIUM COMPANY**

Ergene / TEKİRDAĞ - **www.arfenaluminium.com.tr**

**ARFEN BUILDING AND BRIDGE TECHNOLOGY**

Dilovası / Kocaeli - **www.arfen.com.tr**  
TURKEY

For information

