



INSTYTUT TECHNIKI BUDOWLANEJ  
PL 00-611 WARSAW, Filtrowa 1 St., www.itb.pl

MEMBER of EOTA and  
UEAtc



Official English language translation issued on 20 September 2019.  
The original version is in Polish language.

## NATIONAL TECHNICAL ASSESSMENT ITB-KOT-2019/0715 edition 1

This National Technical Assessment has been issued in accordance with the regulation of the Minister of Infrastructure and Construction of 17<sup>th</sup> November 2016 on national technical assessments (Dz. U. z 2016 r., poz. 1968) by the Instytut Techniki Budowlanej in Warsaw, on the request of:

**CONECTO Sp. z o.o.**  
**Florentyna 25, 62-817 Żelazków**

National Technical Assessment ITB-KOT-2019/0715 edition 1 is a positive assessment of performance of the following construction products for the intended use:

### CONECTO PARK SL and GA waterproof expansion joint profiles

Validity date of the National Technical Assessment:

**27 March 2024**



DIRECTOR  
of Instytut Techniki Budowlanej

Robert Geryło, Ph.D.

Warsaw, 27 March 2019

Instytut Techniki Budowlanej

Filtrowa 1 St., 00-611 Warszawa

tel.: 22 825 04 71; NIP: 525 000 93 58; KRS: 0000158785

## 1. TECHNICAL DESCRIPTION OF THE PRODUCT

The subject of this National Technical Assessment are CONECTO PARK SL and GA waterproof expansion joint profiles, manufactured by CONECTO Sp. z o.o., Florentyna 25, 62-817 Żelazków, in manufacturing plant in Beznatka.

Waterproof expansion joint profiles consist of aluminium or stainless steel profiles (Fig. A1 ÷ A4) and EPDM flexible sealing insert.

The National Technical Assessment covers following types of waterproof expansion joint profiles:

- CONECTO PARK SL 190.30.N (Fig. A5),
- CONECTO PARK SL 190.30.W (Fig. A6),
- CONECTO PARK SL 190.30.CV (Fig. A7),
- CONECTO PARK SL 210.50.N (Fig. A8),
- CONECTO PARK SL 210.50.W (Fig. A9),
- CONECTO PARK SL 210.50.CV (Fig. A10),
- CONECTO PARK SL 230.70.N (Fig. A11),
- CONECTO PARK SL 230.70.W (Fig. A12),
- CONECTO PARK SL 230.70.CV (Fig. A13),
- CONECTO PARK GA 43.10.15÷100 S (Fig. A14),
- CONECTO PARK GA 43.10.100÷200 S (Fig. A15),
- CONECTO PARK GA 43.10.CV S (Fig. A16),
- CONECTO PARK GA 43.10.90& S (Fig. A17),
- CONECTO PARK GA 50.20.15÷100 S (Fig. A18),
- CONECTO PARK GA 50.20.100÷200 S (Fig. A19),
- CONECTO PARK GA 50.20.CV S (Fig. A20),
- CONECTO PARK GA 50.20.90& S (Fig. A21),
- CONECTO PARK GA 63.30.15÷100 S (Fig. A22),
- CONECTO PARK GA 63.30.100÷200 S (Fig. A23),
- CONECTO PARK GA 63.30.CV S (Fig. A24),
- CONECTO PARK GA 63.30.90& S (Fig. A25),
- CONECTO PARK GA 88.45.15÷100 S (Fig. A26),
- CONECTO PARK GA 88.45.100÷200 S (Fig. A27),
- CONECTO PARK GA 88.45.CV S (Fig. A28),
- CONECTO PARK GA 88.45.90& S (Fig. A29).

CONECTO PARK SL waterproof expansion joint profiles, with EPDM flexible sealing insert, clamped with aluminium or stainless steel profiles, are intended for surface or recessed installation.

CONECTO PARK GA waterproof expansion joint profiles, with EPDM flexible sealing insert, embedded in aluminum support profiles, clamped with aluminum or stainless steel angle, are intended for recessed installation. CONECTO PARK GA expansion joint profiles may be used with an extended



elastometric cover element (L type) or additional stainless steel cover (T type) (according to Fig. A14 b and c).

The shape and dimensions of CONECTO PARK SL and GA waterproof expansion joint profiles are given in Annex A.

Materials used for CONECTO PARK SL and GA waterproof expansion joint profiles are given in Annex B.

## 2. INTENDED USE OF THE PRODUCT

CONECTO PARK SL and GA waterproof expansion joint profiles are intended for waterproofing cover of expansion joints in floors and coverings indoors and outdoors, in the temperature range from -30°C to +80°C.

CONECTO PARK SL and GA waterproof expansion joint profiles may be used to protect expansion joints against the rainwater penetration, water in the wet rooms and water occurring on floors and coverings, during cleaning and maintenance activities on the floor surface.

CONECTO PARK SL and GA waterproof expansion joint profiles can be used for the protection expansion joints between horizontal floor surfaces or corner joints between a floor and a wall.

CONECTO PARK SL and GA waterproof expansion joint profiles are designed for joints with width of 50 ÷ 150 mm and compensate changes in the width (movement of floors and coverings) within the range given in Annex A, Fig A5 ÷ A29, where H designates horizontal displacement and V designates vertical displacement.

CONECTO PARK SL and GA waterproof expansion joint profiles may be used for protecting floors with properly located expansion joints, against cracking outside the expansion joints.

The expansion joints profiles are capable of load transferring from pedestrian and circular traffic, specific for G category of traffic area, in accordance with PN-EN 1991-1-1:2004. The way of using the traffic and parking areas, classified in category G, is given in Table 1.

**Table 1**

Category of traffic area	Specific use	Examples
G	Traffic and parking areas for medium vehicles ( $\geq 30$ kN and $\leq 160$ kN total vehicle weight on two axles)	Access routes: delivery zones, zones available for fire brigades (total vehicle weight 160 kN)
Note: G category shall be marked with appropriate warning signs		

The influence of temperature and concrete shrinkage on structural deformations and associated expansion joints size has to be determined in accordance with PN-EN 1992-1-1:2008.

In case of expansion joints profiles that installation requires a suitable recesses (expansion grooves), it has to be ensured that the recess has the correct dimensions, squareness and flatness of their mounting surfaces.

CONECTO PARK SL and GA watertight expansion joint profiles should be fixed by expansion anchors or other mechanical fasteners placed on the market in accordance with applicable regulations and intended for a base material. The fastener spacing should be given by the manufacturer in the assembly instructions.

Waterproof expansion joint profiles, covered by this National Technical Assessment shall be used in accordance with:

- technical design, developed for a specific application, taking into account Polish standards and building regulations, in particular the regulation of the Minister of Infrastructure of 12th April 2002, on technical conditions to be met by buildings and their location (Dz. U. z 2015 r., poz. 1422, as amended),
- provisions of this National Technical Assessment,
- the guidelines specified in manufacturer's instructions and delivered to the recipients.

### **3. PERFORMANCE OF THE PRODUCT AND METHODS USED FOR ITS ASSESSMENT**

#### **3.1. Performance of the product**

**3.1.1. Durability.** CONECTO PARK SL and GA watertight expansion joints withstand a test of 100000 transverse rolling cycles of a tire wheel with a 20 kN vertical load, acting on a 200 mm square surface.

**3.1.2. Durability for multiple changes of width of expansion joint.** CONECTO PARK SL and GA waterproof expansion joint profiles withstand 1000 cycles of sliding to the maximum width and sliding to the minimum width, in accordance with the compensation ranges of the expansion joint movement, specified in Annex A, Fig. A5 ÷ A29.

**3.1.3. Durability in extreme temperature.** CONECTO PARK SL and GA waterproof expansion joint profiles withstand a temperature of -30°C and +80°C for 20000 transverse rolling cycles of a tire wheel with 20 kN vertical load, adhering to the tested sample with a defined impact surface.

**3.1.4. Durability for multiple changes of width of expansion joint in extreme temperature.** CONECTO PARK SL and GA waterproof expansion joint profiles withstand temperature of -30°C and +80°C with 1000 cycles of opening to the maximum width and sliding to the minimum width, in accordance with the compensation ranges of the expansion joint movement specified in Annex A, Fig. A5 ÷ A29.

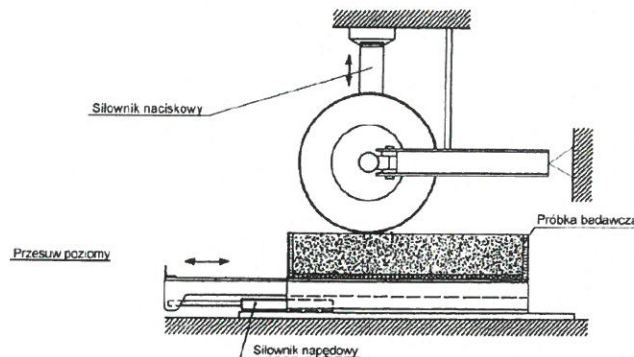
**3.1.5. Watertightness.** CONECTO PARK SL and GA waterproof expansion joint profiles, before and after each durability test according to clause 3.1.1, 3.1.2, 3.1.3 and 3.1.4 maintain tightness against rainwater (not under pressure) during sprinkling tests, for not less than 10 minutes, with an intensity of 10 liters per minute.

#### **3.2. Methods used to assess the performance**

**3.2.1. Checking the durability.** Checking the durability of watertight expansion joint profiles is carried out on the test stand, the diagram of which is shown in Figure 1. The tire wheel should be loaded with the required pressure. Appropriate force is applied to the specimen through a 200 mm wide wheel with the pressure adjusted to obtain the required contact length with the ground. Then, with the pneumatic cylinder, the sample is set in a reciprocating motion with a displacement of 400 mm so that the loaded wheel rolls through the expansion gap, while the sample movement in the direction of rolling



and the primary movement are one test cycle. After making the required number of wheel rollings, the watertight expansion profile should not show any damage. The test has to be carried out at the maximum expansion joints width and at the maximum compensation level difference.



**Figure 1.** Diagram of the test stand for durability test

### 3.2.2. Checking the durability for multiple changes in the width of expansion joint.

Checking the durability for multiple changes in the width of the expansion joint is carried out on a test sample mounted on the testing machine and then subjected to cyclic action of forces causing the expansion joint to open / close in accordance with the declared value of expansion joint movement.

**3.2.3. Checking the durability in extreme temperature.** Checking the durability of watertight expansion joint profiles is carried out on the test stand, the diagram of which is shown in Figure 1. The whole is placed in a climatic chamber at  $-30^{\circ}\text{C}$ . The wheel tire should be loaded with the required pressure. The sample of appropriate force is applied to the specimen through a 200 mm wide wheel with the pressure adjusted to obtain the required contact length with the ground. Then, with the help of a pneumatic cylinder, the sample is set in a reciprocating motion with a displacement of 400 mm so that the loaded wheel rolls through the expansion joint, while the sample movement in the direction of rolling and the primary movement are one test cycle. After making the required number of wheel rollings, the watertight expansion profile should not show any damage. The test has to be carried out at the maximum expansion joint width and at the maximum compensated level difference. The test as per the above description is also carried out at  $+80^{\circ}\text{C}$ .

**3.2.4. Checking the durability for multiple changes in the width of expansion joint in extreme temperature.** Checking the durability for multiple changes in the width of the expansion joint in extreme temperature is carried out on a test sample placed in climatic chamber at  $-30^{\circ}\text{C}$  and subjected to cyclic action of forces causing the expansion joint opened / closed in accordance with the declared value of expansion joint movement.

The test according to the above description is also carried out at  $+80^{\circ}\text{C}$ .

**3.2.5. Checking the watertightness.** Checking the watertightness is carried out on a test sample on which a durability test was carried out previously in accordance with clause 3.2.1, 3.2.2, 3.2.3 and 3.2.4. Watertightness test is carried out by spraying water on the surface of the test sample, in which the expansion joint is protected by a watertight expansion joint profile. Water spraying should be carried out at an intensity of 10 liters per minute. The test should be conducted for 10 minutes. After end

of the test, it is necessary to inspect and determine whether any amount of water has leaked into the expansion joint (the expansion joint has to be dry).

#### **4. PACKAGING, TRANSPORT AND STORAGE, AND THE METHOD OF PRODUCT MARKING**

The products covered by this National Technical Assessment shall be delivered in the original packaging of the manufacturer, stored and transported, in a way that ensures that their technical properties remain unchanged.

The way of marking the product with the construction mark shall be made in accordance with the regulation of the Minister of Infrastructure and Construction of 17<sup>th</sup> November 2016 on the manner of declaring the performance of construction products and marking them with the construction mark (Dz. U. z 2016 r., poz. 1966, as amended).

The marking of a product with the construction mark shall be accompanied by the following information:

- the last two digits of the year in which the construction mark was placed for the first time on a construction product,
- the name and address of the manufacturer's registered office or identification mark allowing to clearly identify the name and address of the registered office of the manufacturer,
- the name and product-type of the construction product,
- the number and year of issuing the national technical assessment, according to which the performance has been declared (ITB-KOT-2019/0715 edition 1),
- the number of the national declaration of performance,
- the level or class of declared performance,
- the manufacturer's website address, if the national declaration of performance is made available on it.

Along with national declaration of performance, a safety data sheet and/or information on hazardous substances contained in the construction product shall be provided or made available where appropriate, referred to in Article 31 or 33 of Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and establishing the European Chemicals Agency.

In addition, the marking of a construction product that is a hazardous mixture under REACH shall comply with the requirements of Regulation (EC) No. 1272/2008 of the European Parliament and of the Council on classification, labelling, and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC and amending Regulation (EC) No 1907/2006.

#### **5. ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE**

##### **5.1. National system of assessment and verification of constancy of performance**

In accordance with the regulation of the Minister of Infrastructure and Construction of 17<sup>th</sup> November 2016 on the manner of declaring the performance of construction products and marking them with the construction mark (Dz. U. z 2016 r., poz. 1966, as amended), the system 3 of assessment and verification of constancy of performance applies.



## 5.2. Type test

The performance, assessed in clause 3, constitute a type test of the product until changes of raw materials, ingredients, production line or manufacturing plant occur.

## 5.3. Factory production control

The manufacturer shall have implemented a system of factory production control in the manufacturing plant. All elements of this system, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of principles and procedures, including records from the conducted tests. The factory production control shall be adapted to the production technology and ensure in the serial production declared performance of the product is maintained.

The factory production control includes the specification and checking of raw materials and components, inspection and testing in the production process and control tests (according to p. 5.4), conducted by the manufacturer in accordance with the established test plan and according to the rules and procedures set out in the factory production control documentation.

The results of production control shall be systematically recorded. The records shall confirm that the products meet the criteria for assessment and verification of constancy of performance. Individual products or batch of products and related production details must be fully identifiable and reproducible.

## 5.4. Control test

**5.4.1. Test program.** The test program includes:

- a) ongoing tests,
- b) periodic tests.

**5.4.2. Ongoing tests.** The ongoing tests include the verification of:

- a) appearance,
- b) shape and dimensions.

**5.4.3. Periodic tests.** The periodic tests include the verification of:

- a) durability,
- b) durability in extreme temperature,
- c) durability for multiple changes of width of expansion joint,
- d) durability for multiple changes of width of expansion joint in extreme temperature,
- e) watertightness.

## 5.5. Frequency of testing

Ongoing tests shall be conducted in accordance with the established test plan, but not less frequently than for each batch of products. The size of products batch shall be specified in the documentation of the factory production control.

Periodic tests shall be carried out at least once every 3 years.



## 6. PROVISIONS

6.1. National Technical Assessment ITB-KOT-2019/0715 edition 1 is a positive assessment of the performance of these essential characteristics of CONECTO PARK SL and GA waterproof expansion joint profiles which according to the intended use resulting from the provisions of the Assessment, affect the fulfillment of basic requirements by construction works, in which the product will be used.

6.2. National Technical Assessment ITB-KOT-2019/0715 edition 1 does not authorize a manufacturer to mark a construction product with the construction mark.

In accordance with the Act on construction products of 16<sup>th</sup> April 2004, as amended (Dz. U. z 2016 r., poz. 1570, with subsequent amendments), products covered by this National Technical Assessment may be placed on the market or made available on the national market, if the manufacturer has performed the assessment and verification of constancy of performance, drawn up a national declaration of performance in accordance with the National Technical Assessment ITB-KOT-2019/0715 edition 1 and marked the products in accordance with applicable regulations.

6.3. National Technical Assessment ITB-KOT-2019/0715 edition 1 does not violate the applicant's rights resulting from the industrial property protection regulations, and particularly from the Act of 30<sup>th</sup> June 2000 – The industrial property right (consolidated text: Dz. U. z 2017, poz. 776). The assurance of these rights is the responsibility of users of this National Technical Assessment.

6.4. By issuing of the National Technical Assessment, ITB takes no responsibility for possible infringements of any exclusive or acquired rights.

6.5. National Technical Assessment does not relieve the manufacturer of the products from the responsibility for the relevant quality, and the contractors of construction works from the responsibility for their proper application.

6.6. Validity of the National Technical Assessment may be extended for subsequent periods, not longer than 5 years.

## 7. LIST OF DOCUMENTS USED IN THE PROCEDURE

### 7.1. Test reports, assessments, classifications

1. LZE01-03505/18/Z00NZE. Raport z badań. Zakład Inżynierii Elementów Budowlanych ITB, Poznań, January 2019.
2. LZE01-01716/18/Z00NZE. Raport z badań. Zakład Inżynierii Elementów Budowlanych ITB, Poznań, October 2018 r.
3. LOW01-6022/11/R01OWN. Raport z badań. Laboratorium Okuć i Ślusarki Budowlanej – LOW ITB, Poznań.
4. LOW02-6022/11/R01OWN. Raport z badań. Laboratorium Okuć i Ślusarki Budowlanej – LOW ITB, Poznań.

5. OWN-OT-027/2012. Opinia specjalistyczna. Laboratorium Okuć i Ślusarki Budowlanej – LOW ITB, Poznań.
6. LOW01-6022/13/R05OWN. Raport z badań. Laboratorium Okuć i Ślusarki Budowlanej – LOW ITB, Poznań.

## 7.2. Standards and reference documents

PN-EN 573-3:2014	<i>Aluminium i stopy aluminium. Skład chemiczny i rodzaje wyrobów przerobionych plastycznie. Część 3. Skład chemiczny i rodzaje wyrobów</i>
PN-EN 755-2:2016	<i>Aluminium i stopy aluminium. Pręty, rury i kształtowniki wyciskane. Część 2: Własności mechaniczne</i>
PN-EN 755-9:2016	<i>Aluminium i stopy aluminium. Pręty, rury i kształtowniki wyciskane. Część 9: Dopuszczalne odchyłki wymiarów i kształtu kształtowników</i>
PN-EN 515:2017	<i>Aluminium i stopy aluminium. Wyroby przerobione plastycznie. Oznaczanie stanów</i>
PN-EN 1991-1-1:2004	<i>Eurokod 1: Oddziaływania na konstrukcje. Część 1-1: Oddziaływania ogólne. Ciężar objętościowy, ciężar własny, obciążenia użytkowe w budynkach</i>
PN-EN 1992-1-1:2008	<i>Eurokod 2. Projektowanie konstrukcji z betonu. Część 1-1: Reguły ogólne i reguły dla budynków</i>
PN-EN 10088-1:2014	<i>Stale odporne na korozję. Część 1: Gatunki stali odpornych na korozję</i>
PN-EN 10088-2:2014	<i>Stale odporne na korozję. Część 2: Warunki techniczne dostawy blach i taśm ze stali nierdzewnych ogólnego przeznaczenia</i>
PN-EN 22768-1:1999	<i>Tolerancje ogólne. Tolerancje wymiarów liniowych i kątowych bez indywidualnych oznaczeń tolerancji</i>
PN-EN ISO 868:2005	<i>Tworzywa sztuczne i ebonit. Oznaczanie twardości metodą wciskania z zastosowaniem twardościomierza (twardość metodą Shore'a)</i>
PN-EN ISO 2360:2017	<i>Powłoki nieprzewodzące na podłożu niemagnetycznym przewodzącym elektryczność. Pomiar grubości powłok. Metoda amplitudowa prądów wirowych</i>
PN-ISO 34-1:2007	<i>Guma i kauczuk termoplastyczny. Oznaczanie wytrzymałości na rozdzieranie. Część 1: Próbkki do badań prostokątne, kątowe i łukowe</i>
PN-ISO 37:2007+AC1:2008	<i>Guma i kauczuk termoplastyczny. Oznaczanie właściwości wytrzymałościowych przy rozciąganiu</i>
PN-ISO 815:1998	<i>Guma i kauczuk termoplastyczny. Oznaczanie odkształcenia trwałego po ścisnieniu w temperaturze otoczenia, podwyższonej lub niskiej</i>



PN-ISO 1817:2001  
AT-15-8735/2013

*Guma. Oznaczanie odporności na działanie cieczy*  
*Wodoszczelne listwy dylatacyjne podłogowe CONECTO PARK*

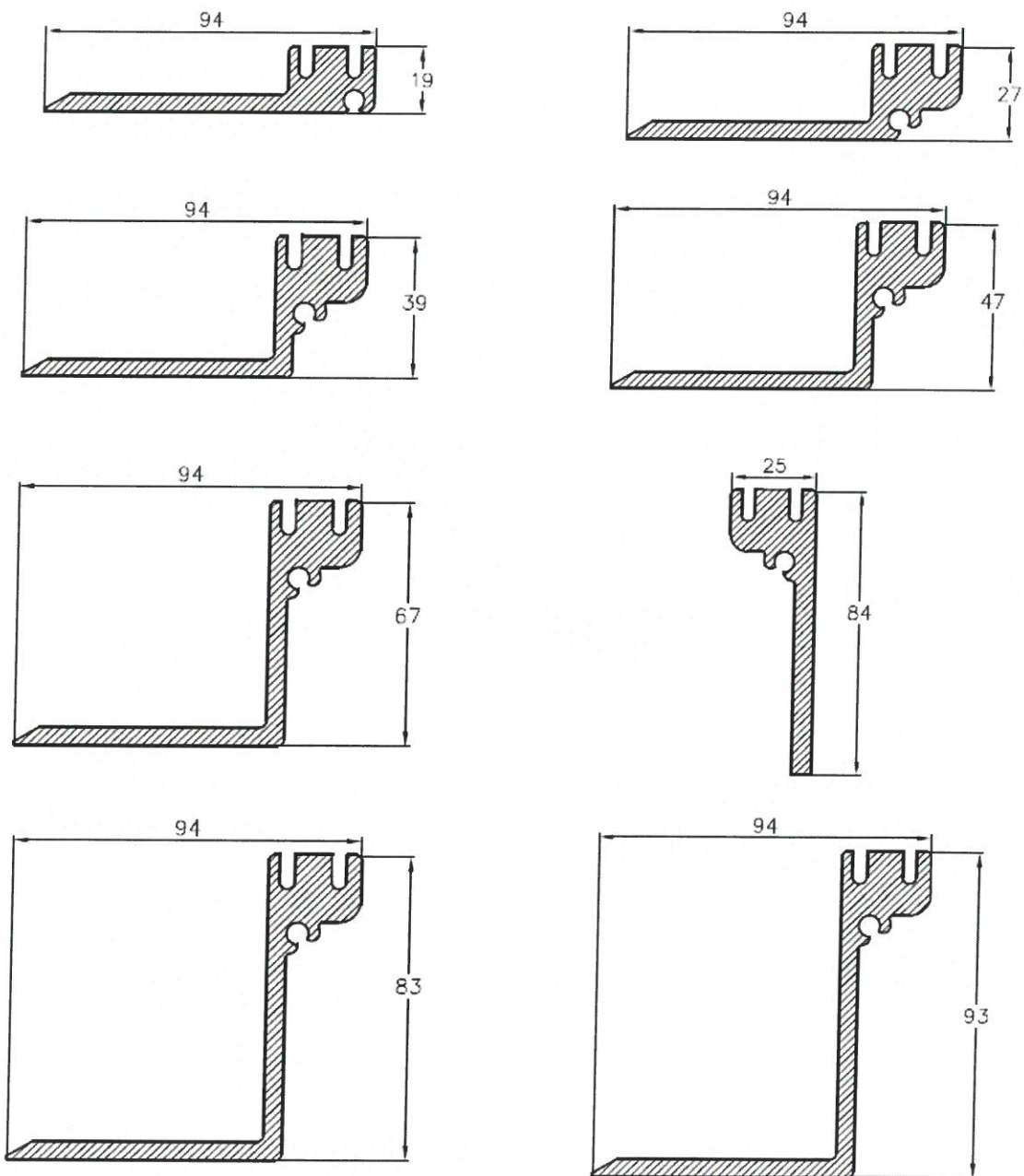
## ANNEXES

<b>Annex A.</b> Shape and dimensions .....	12
<b>Annex B.</b> Materials and appearance.....	25

**Annex A.**



**Fig. A1.** CONECTO PARK SL waterproof expansion joints profiles – aluminium

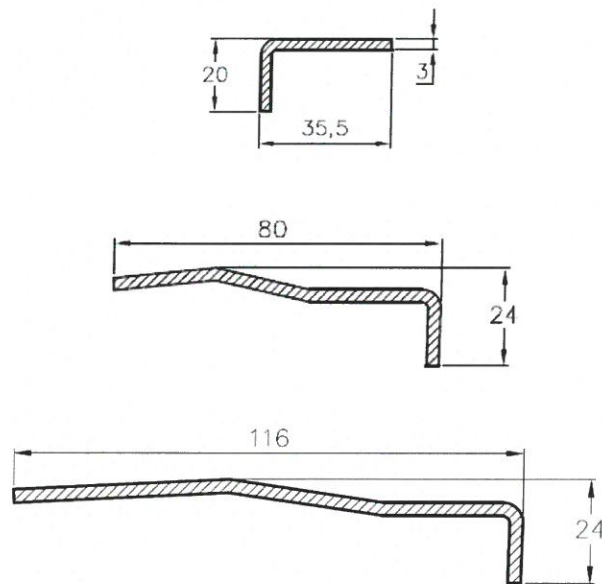


**Fig. A2.** CONECTO PARK GA waterproof expansion joints profiles – aluminium





**Fig. A3.** CONECTO PARK SL waterproof expansion joints profiles – stainless steel



**Fig. A4.** CONECTO PARK GA waterproof expansion joint profiles – stainless steel

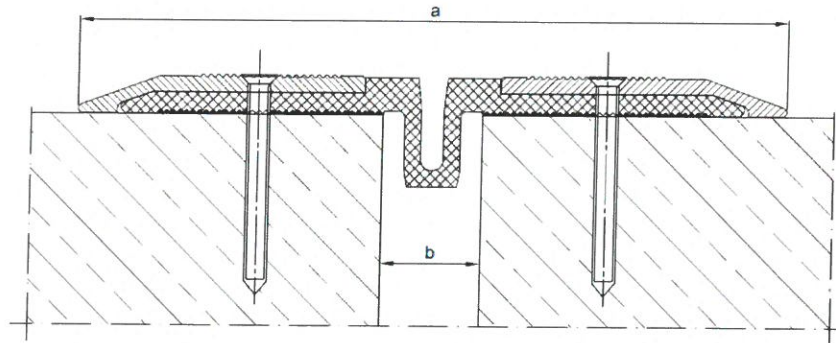


Fig. A5. CONECTO PARK SL 190.30.N waterproof expansion joint profile – surface installation

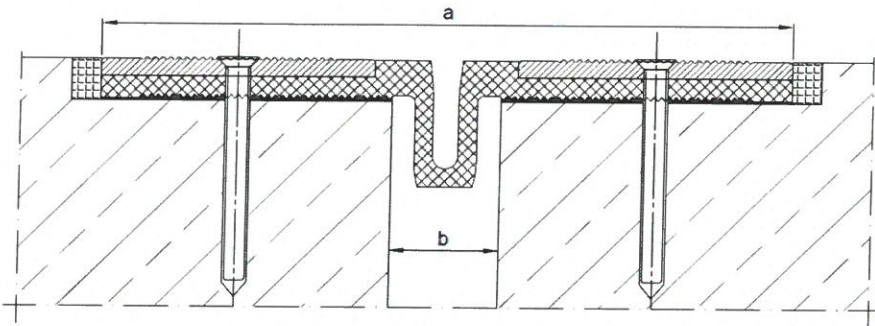


Fig. A6. CONECTO PARK SL 190.30.W waterproof expansion joint profile – recessed installation

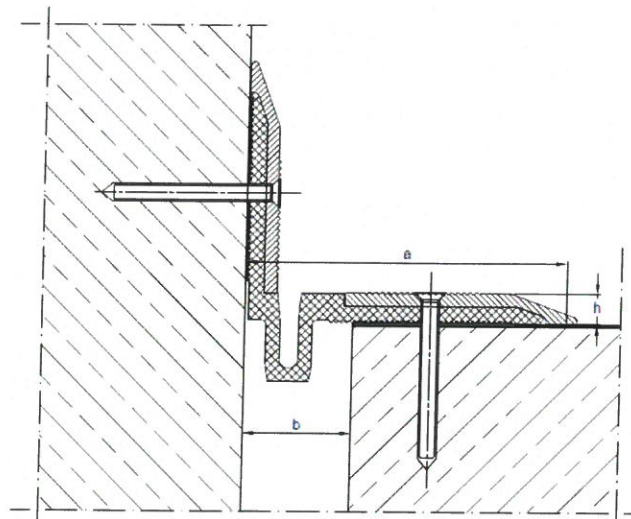


Fig. A7. CONECTO PARK SL 190.30.CV waterproof expansion joint profile – wall mounted surface installation

Table A1. Characteristics of CONECTO PARK SL190.30 expansion joint profiles

Item	Type of expansion joint profile	Compensation [mm]	Dimensions [mm]		
			a	b	h
1	CONECTO PARK SL 190.30.N	$H \pm 20$ $V \pm 15$	215	max. 40	11
2	CONECTO PARK SL 190.30.W	$H \pm 20$ $V \pm 15$	190	max. 40	11
3	CONECTO PARK SL 190.30.CV	$H \pm 20$ $V \pm 15$	124	max. 40	11

H – compensation in the horizontal direction, V – compensation in the vertical direction



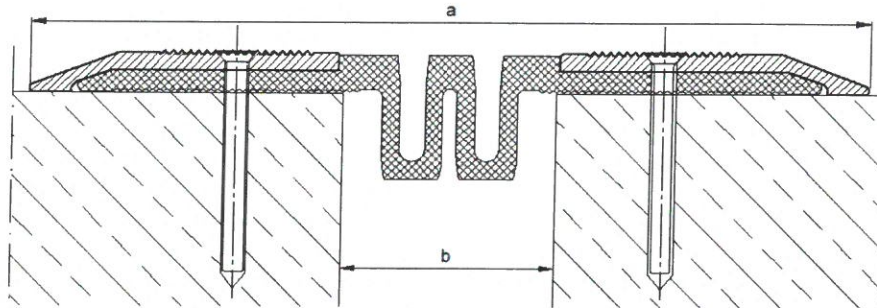


Fig. A8. CONECTO PARK SL 210.50.N waterproof expansion joint profile – surface installation

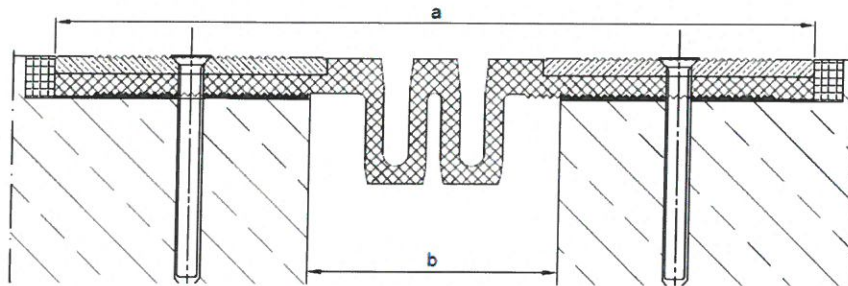


Fig. A9. CONECTO PARK SL 210.50.W waterproof expansion joint profile – recessed installation

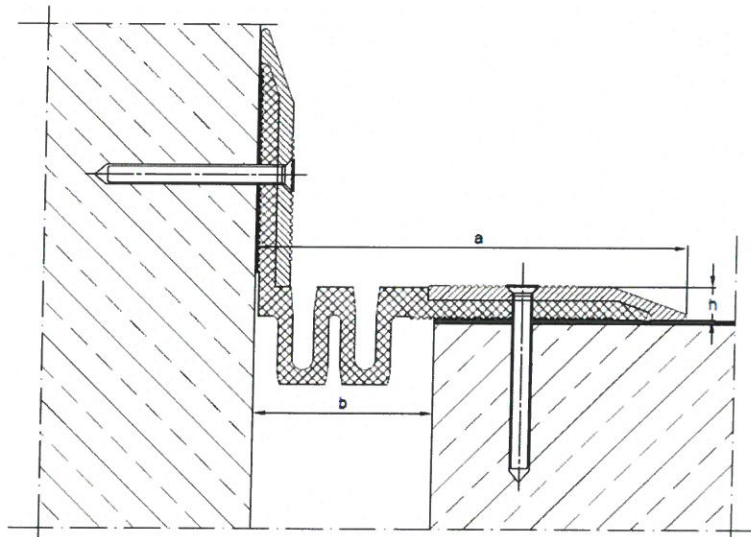


Fig. A10. CONECTO PARK SL 210.50.CV waterproof expansion joint profile – wall mounted surface installation

Table A2. Characteristics of CONECTO PARK SL 210.50 expansion joint profiles

Item	Type of expansion joint profile	Compensation [mm]	Dimensions [mm]		
			a	b	h
1	CONECTO PARK SL 210.50.N	H ±30 V ±20	235	max. 70	11
2	CONECTO PARK SL 210.50.W	H ±30 V ±20	210	max. 70	11
3	CONECTO PARK SL 210.50.CV	H ±30 V ±20	145	max. 70	11

H – compensation in the horizontal direction, V – compensation in the vertical direction

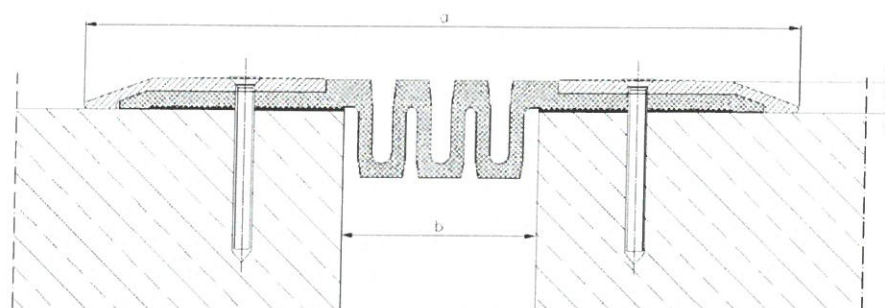


Fig. A11. CONECTO PARK SL 230.70.N waterproof expansion joint profile – surface installation

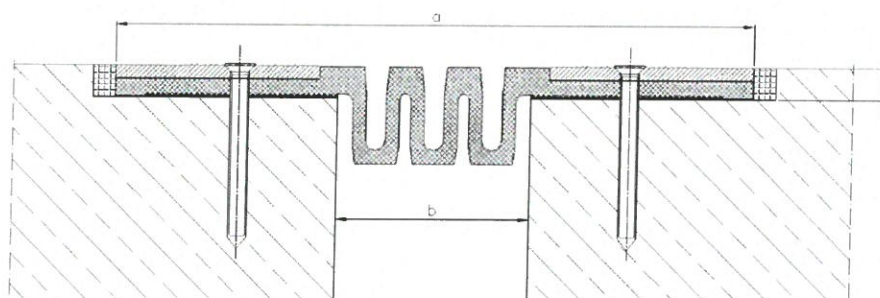


Fig. A12. CONECTO PARK SL 230.70.W waterproof expansion joint profile – recessed installation

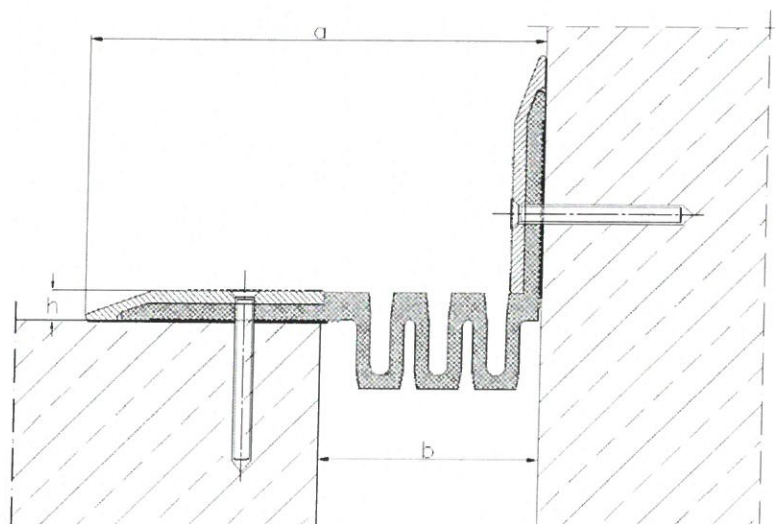
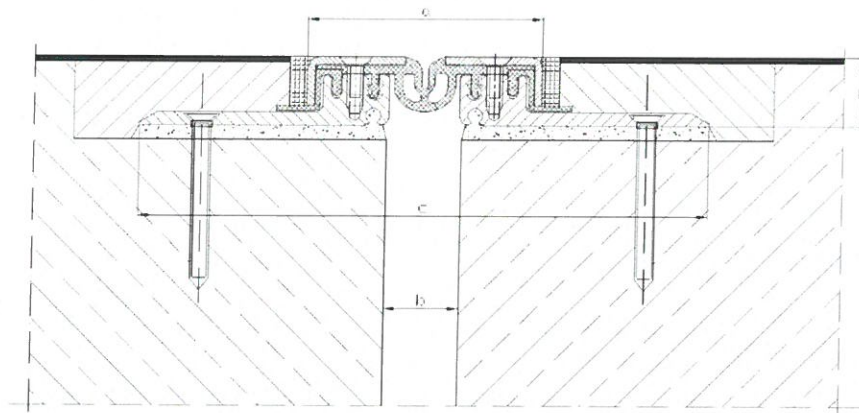


Fig. A13. CONECTO PARK SL 230.70.CV waterproof expansion joint profile – wall mounted surface installation

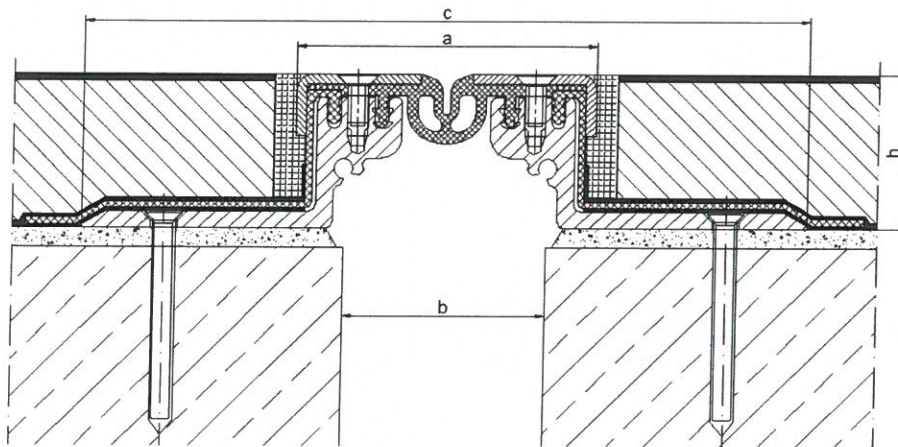
Table A3. Characteristics of CONECTO PARK SL 230.70 expansion joint profiles

Item	Type of expansion joint profile	Compensation [mm]	Dimensions [mm]		
			a	b	h
1	CONECTO PARK SL 230.70.N	$H \pm 45$ $V \pm 30$	257	max. 85	11
2	CONECTO PARK SL 230.70.W	$H \pm 45$ $V \pm 30$	231	max. 85	11
3	CONECTO PARK SL 230.70.CV	$H \pm 45$ $V \pm 30$	155	max. 85	11

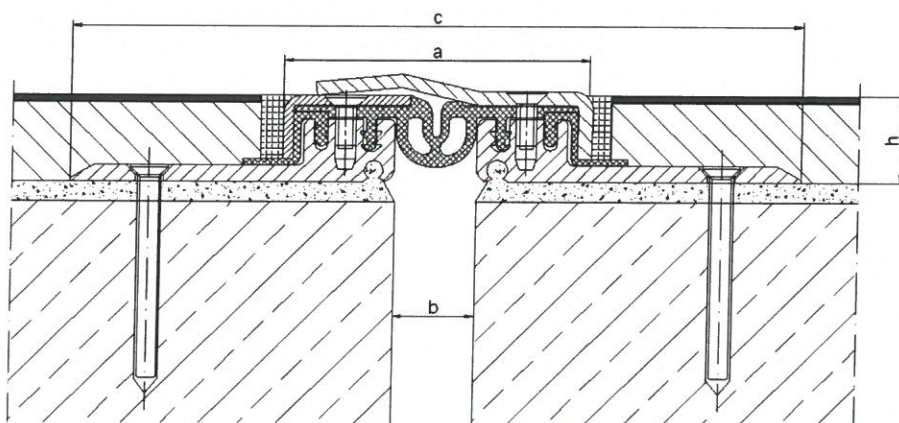
H – compensation in the horizontal direction, V – compensation in the vertical direction



a) basic version



b) version L



c) version T

**Fig. A14.** CONECTO PARK GA 43.10.15-100 S waterproof expansion joint profile



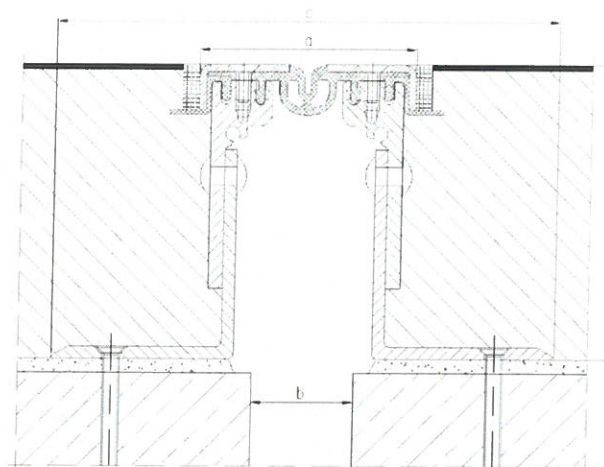


Fig. A15. CONECTO PARK GA 43.10.100+200 S waterproof expansion joint profile

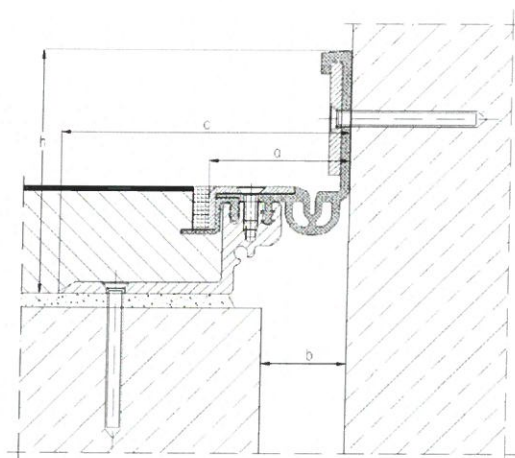
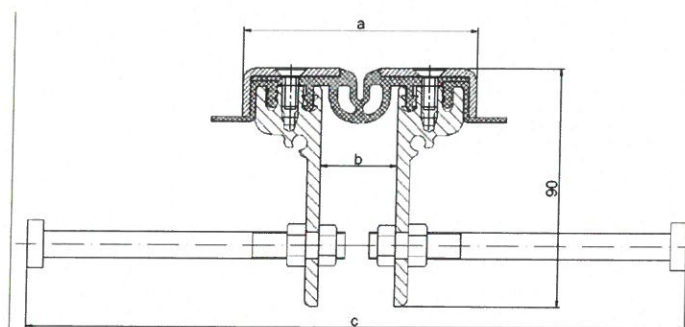


Fig. A16. CONECTO PARK GA 43.10.CV S waterproof expansion joint profile

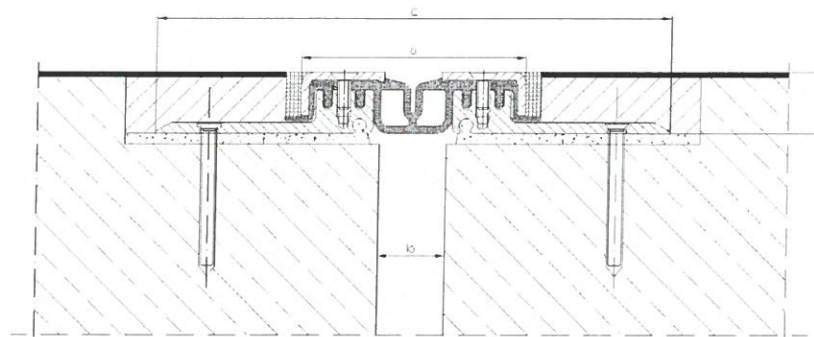


Rys. A17. CONECTO PARK GA 43.10.90& S waterproof expansion joint profile

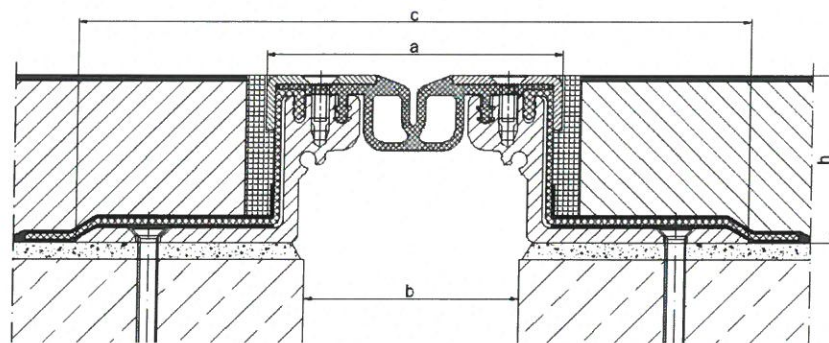
Table A4. Characteristics of CONECTO PARK GA 43.10 expansion joint profiles

Item	Type of expansion joint profile*	Compensation [mm]	Dimensions [mm]			
			a	b	c	h
1	CONECTO PARK GA 43.10.15+100 S	H ± 10 V ± 10	89	max. 60	212	15 + 100
2	CONECTO PARK GA 43.10.100+200 S	H ± 10 V ± 10	89	max. 60	212	100 ÷ 200
3	CONECTO PARK GA 43.10.CV S	H ± 10 V ± 10	60	max. 50	123	-
4	CONECTO PARK GA 43.10.90& S	H ± 10 V ± 10	60	max. 30	249	90

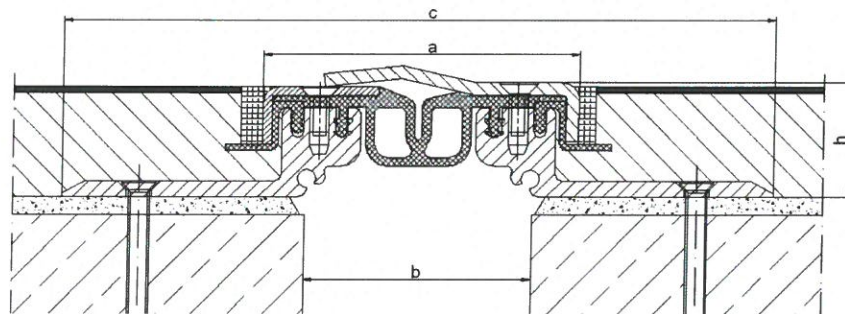
H – compensation in the horizontal direction, V – compensation in the vertical direction  
\*all types of expansion joint profiles are available in the basic version, L version and T version



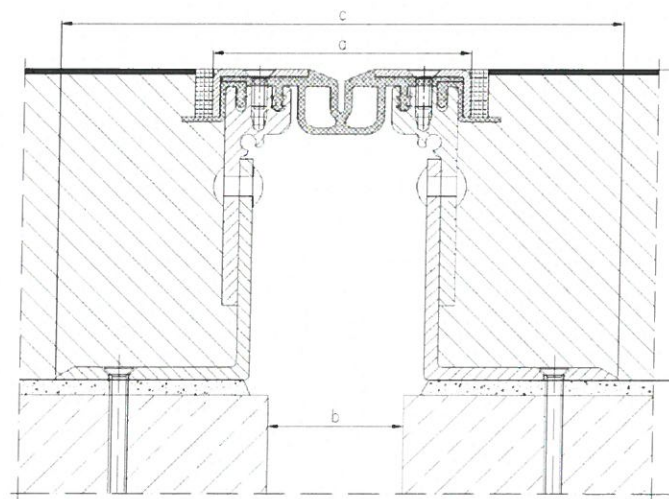
a) basic version



b) version L



c) version T

**Fig. A18. CONECTO PARK GA 50.20.15÷100 S waterproof expansion joint profile**

**Fig. A19. CONECTO PARK GA 50.20.100÷200 S waterproof expansion joint profile**

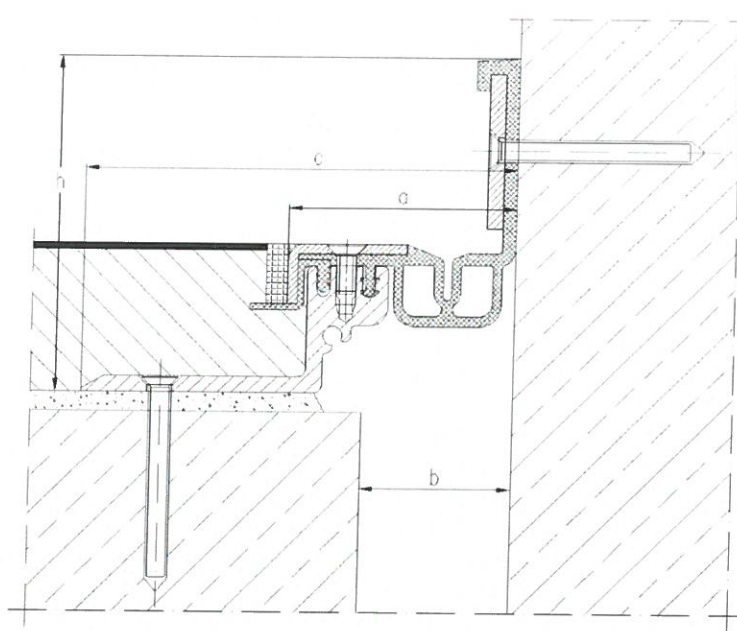


Fig. A20. CONECTO PARK GA 50.20.CV S waterproof expansion joint profile

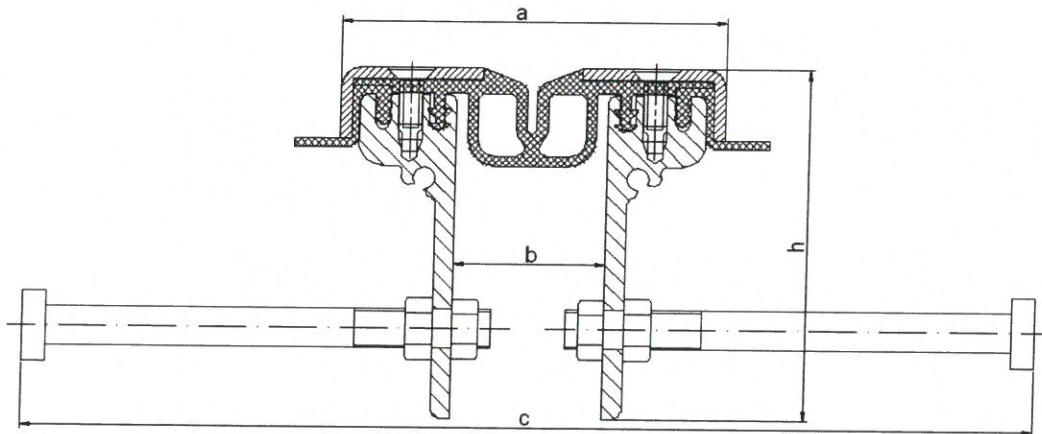


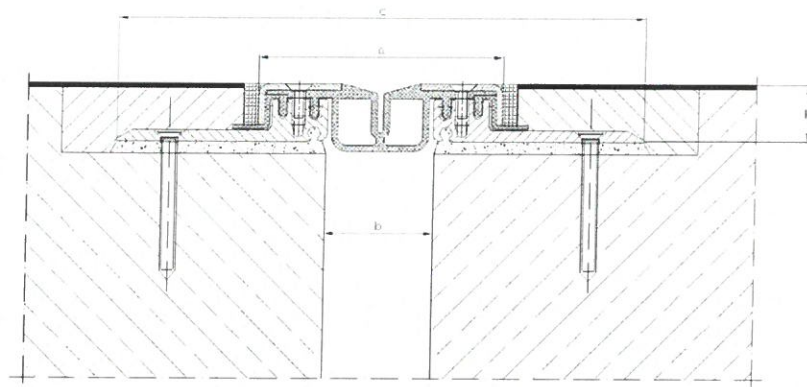
Fig. A21. CONECTO PARK GA 50.20.90& S waterproof expansion joint profile

Table A5. Characteristics of CONECTO PARK GA 50.20 expansion joint profiles

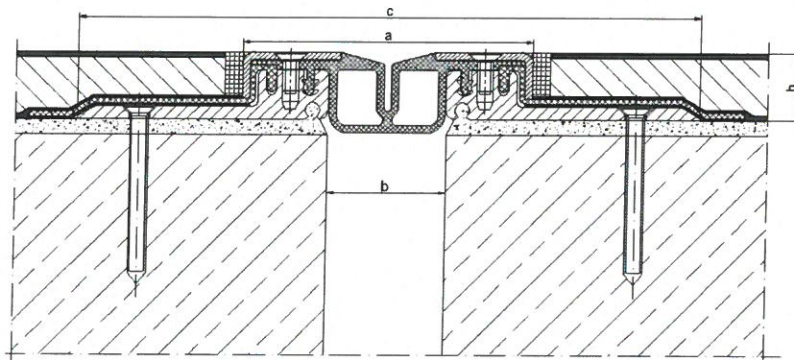
Item	Type of expansion joint profile*	Compensation [mm]	Dimension [mm]			
			a	b	c	h
1	CONECTO PARK GA 50.20.15+100 S	H ± 20 V ± 15	99	max. 80	222	15 + 100
2	CONECTO PARK GA 50.20.100+200 S	H ± 20 V ± 15	99	max. 80	222	100 + 200
3	CONECTO PARK GA 50.20.CV S	H ± 20 V ± 15	99	max. 60	133	-
4	CONECTO PARK GA 50.20.90& S	H ± 20 V ± 15	99	max. 40	222	90

H – compensation in the horizontal direction, V – compensation in the vertical direction  
 \* all types of expansion joint profiles are available in the basic version, L version and T version

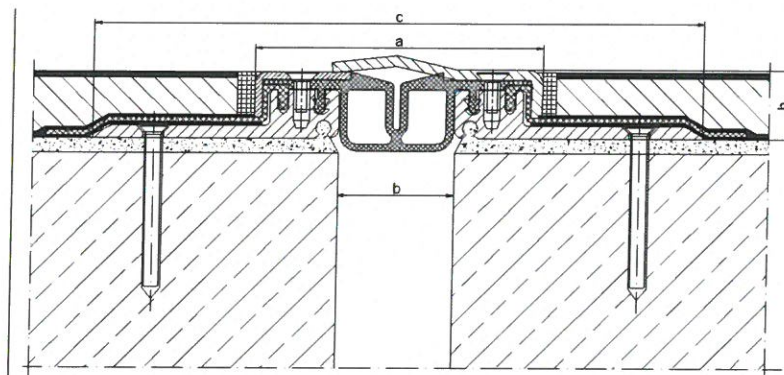




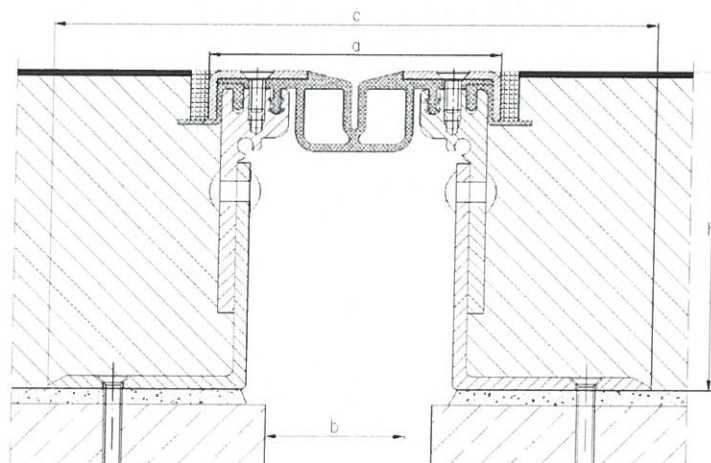
a) basic version



b) version L



c) version T

**Fig. A22. CONECTO PARK GA 63.30.15+100 S waterproof expansion joint profile**

**Fig. A23. CONECTO PARK GA 63.30.100+200 S waterproof expansion joint profile**

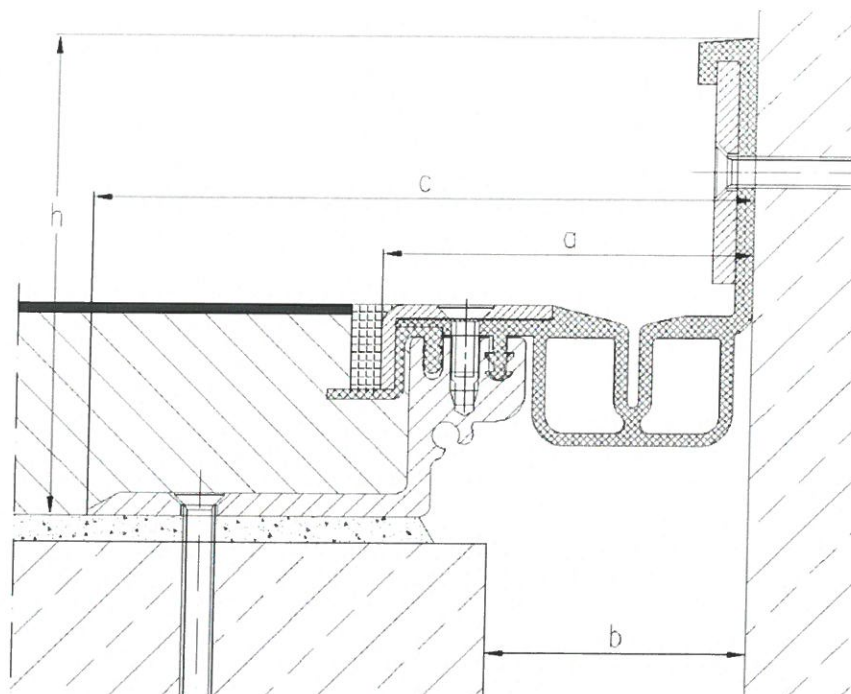


Fig. A24. CONECTO PARK GA 63.30.CV S waterproof expansion joint profile

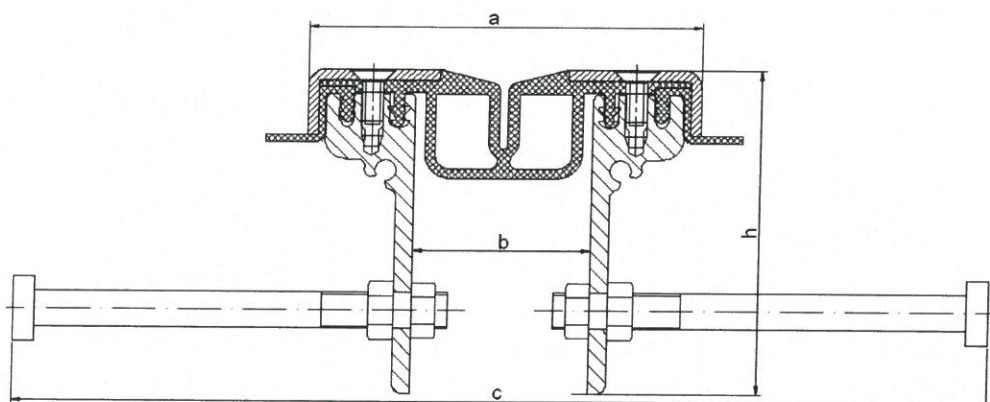


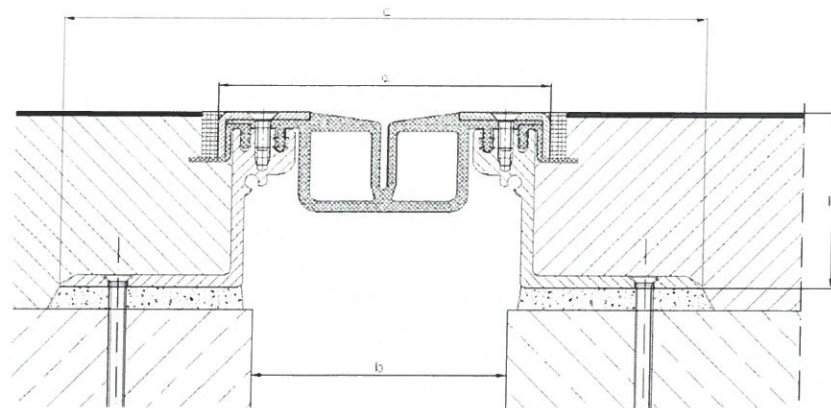
Fig. A25. CONECTO PARK GA 63.30.90& S waterproof expansion joint profile

Table A6. Characteristics of Conecto GA 63.30 expansion joint profiles

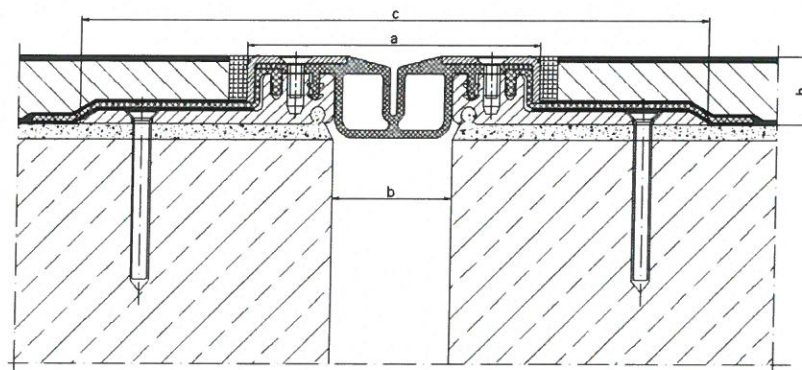
Item	Type of expansion joint profile*	Compensation [mm]	Dimensions [mm]			
			a	b	c	h
1	CONECTO PARK GA 63.30.15+100 S	H ± 30 V ± 20	109	max. 90	232	15 + 100
2	CONECTO PARK GA 63.30.100+200 S	H ± 30 V ± 20	109	max. 90	232	100 + 200
3	CONECTO PARK GA 63.30.CV S	H ± 30 V ± 20	80	max. 70	143	-
4	CONECTO PARK GA 63.30.90& S	H ± 30 V ± 20	109	max. 50	269	90

H – compensation in the horizontal direction, V – compensation in the vertical direction  
 \* all types of expansion joint profiles are available in the basic version, L version and T version

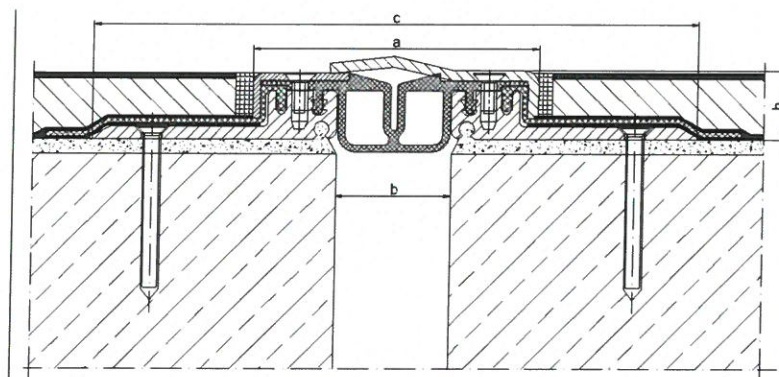




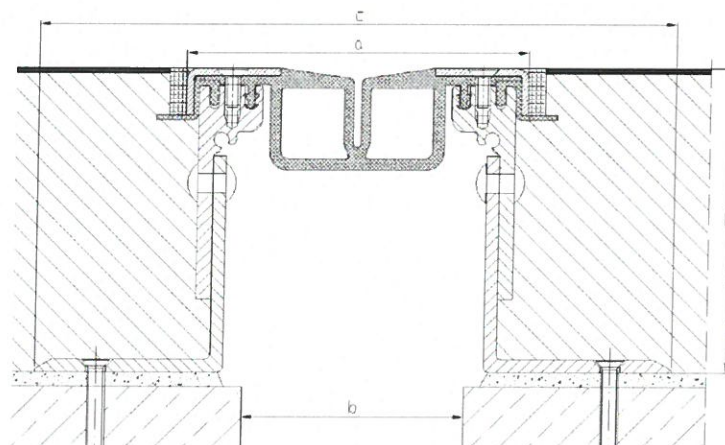
a) basic version



b) version L



c) version T

**Fig. A26. CONECTO PARK GA 88.45.15+100 S waterproof expansion joint profile**

**Fig. A27. CONECTO PARK GA 88.45.100+200 S waterproof expansion joint profile**



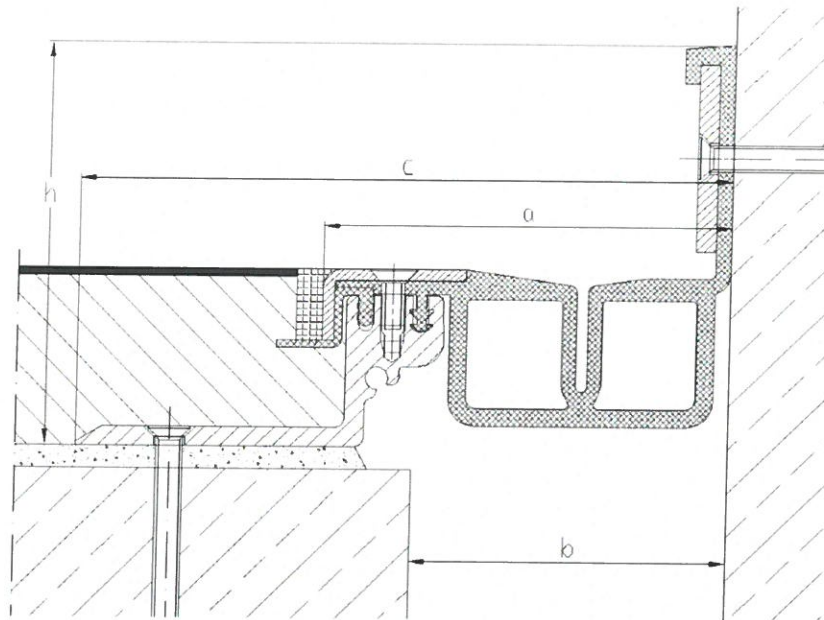


Fig. A28. CONECTO PARK GA 88.45.CV S waterproof expansion joint profile

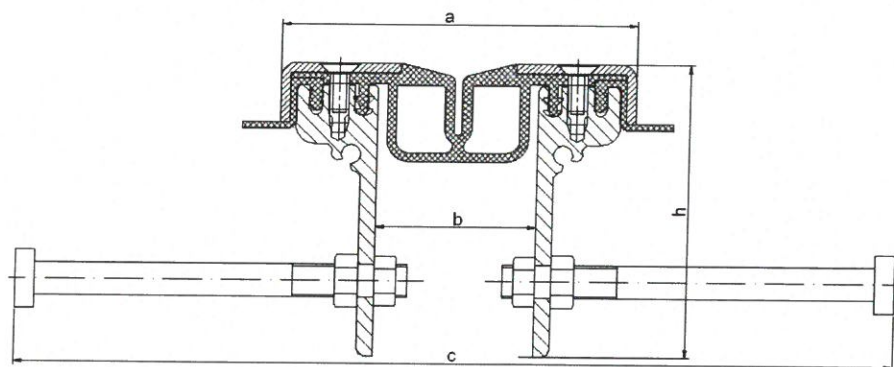


Fig. A29. CONECTO PARK GA 88.45.90& S waterproof expansion joint profile

Table A7. Characteristics of CONECTO PARK GA 88.45 expansion joint profiles

Item	Type of expansion joint profile*	Compensation [mm]	Dimensions [mm]			
			a	b	c	h
1	CONECTO PARK GA 88.45.15+100 S	H ±45 V ±30	124	max. 110	257	15 ÷ 100
2	CONECTO PARK GA 88.45.100+200 S	H ±45 V ±30	124	max. 110	257	100 ÷ 200
3	CONECTO PARK GA 88.45.CV S	H ±45 V ±30	105	max. 95	163	-
4	CONECTO PARK GA 88.45.90& S	H ±45 V ±30	124	max. 70	290	90

H – compensation in the horizontal direction, V – compensation in the vertical direction  
 \* all types of expansion joint profiles are available in the basic version, L version and T version

## Annex B.

### B.1. Materials

#### B.1.1. Flexible sealing inserts

Sealing inserts should be made of EPDM with the characteristics given in Table B1.

**Table B1**

Item	Characteristics	Requirements	Test methods
1	2	3	4
1	Shore hardness, °Sh	70 ± 5	PN-EN ISO 868:2005
2	Tensile strength, MPa	≥ 10	PN-ISO 37:2007 + AC1:2008
3	Relative elongation, %	≥ 400	PN-ISO 37:2007 + AC1:2008
4	Permanent deformation after 24 h at temperature +70 °C, %	≤ 60	PN-ISO 815:1998
5	Tear strength, N/mm	≥ 40	PN-ISO 34-1:2007
6	Resistance to liquids: <ul style="list-style-type: none"> <li>– water</li> <li>– saline water (saturated aqueous NaCl solution)</li> <li>– methanol (solvent)</li> <li>– engine oil (Stell Helix Ultra 5 W-40)</li> </ul>	weight change: ≤ 12 % thickness change: ≤ 5 %	PN-ISO 1817:2001

#### B.1.2. Aluminium profiles

Aluminium profiles (fig. A1 ÷ A2) should be made of aluminium alloy EN AW 6063 according to PN-EN 573-3:2010, temper T6 according to PN-EN 515:2017 or another aluminium alloy with no lower mechanical properties and should meet the requirements of PN-EN 755-2:2016 and PN-EN 755-9:2016. The cross-section tolerances of aluminium profiles should be in accordance with PN-EN 755-9:2016. Tolerances of other dimensions should suit coarse class deviations c according to PN-EN 22768-1:1999.

#### B.1.3. Stainless steel profiles

Clamping profiles (fig. A3 ÷ A4) should be made of sheet metal not less than 2 mm thick, corrosion resistant steel, grade 1.4301 according to PN-EN 10088-1:2014 or other corrosion resistant steel with not lower properties according to PN-EN 10088-1:2014.

### B.2. Appearance

Untreated surfaces of profiles should not have visible damage (cracks, dents, delaminations, blisters) and appearance defects. It is allowed to have dents, scratches and other defects invisible in daylight from a distance of 1 m with the unaided eye. Places of joining the profiles should be smooth, without gaps and steps. Flexible sealing inserts should adhere without gaps or creases to the respective surface of the profile and to the sealing surface. Disconnectable connections should be well fitted and easy to install and should not change during use.

