BIRCOcanal[®]

BECAUSE WATER IS PRECIOUS.



The supply channel for heavy duty areas



BIRCOcanal[®] stands for outstanding robustness and adaptability and enables the design of future-oriented urban projects with near-surface supply lines. In times of energy transition, where electric and hydrogen refuelling stations are playing an increasingly important role and bringing about changes in traffic volumes, BIRCOcanal[®] offers the ideal solution with its easily accessible and modular design. This flexibility ensures that the system can be adapted and expanded to meet new requirements at any time.

HIGHEST QUALITY STANDARDS:

Realised 1:1 in our own production facility

BIRCO is dedicated to developing first-class drainage solutions made from high-quality, robust concrete. This material gives our channels and systems exceptional durability and durability - even under the toughest conditions. The concrete impresses with minimal water absorption, excellent abrasion resistance and resistance to frost and de-icing salt, which makes our products unrivalled in terms of lateral stability.

The high quality of our materials, coupled with the sophisticated design of BIRCO channel systems, guarantees optimum operating conditions on any construction site and promises efficient, cost-effective installation. Our solutions not only stand for the highest safety standards and long-term investment protection, but also fulfil the strict requirements of EN 1433. With our in-depth understanding of customer needs and project requirements, BIRCO products not only deliver outstanding quality and performance, but also future-oriented, sustainable drainage concepts.



BIRCO 1, 1537/23 max-1 HW 320 BL 3.0m BH 500 Tur-M (F900 W +R CE IB LEDGERH H33 E-PLA-HSUNL BSB K407-1

BIRCO high-quality materials



HIGH-QUALITY CONCRETE DRAINAGE CHANNELS – COST-SAVING RELIABILITY

BIRCO concrete channels offer maximum performance even without a full concrete surrounding, whether in terms of geometry, water admission capacity, load classes resistance or during installation. The vibro-compression technique ensures immediate demoulding for most of our ranges. Our concretes are of quality C40/50 or C60/75, particularly resistant to pressure.



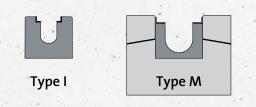
SOLID ANGLES AND PROFILES

BIRCO uses solid 4 mm hot-dip galvanised (70 micron) steel profiles. Stainless steel angles are also available on request. Some of our ranges have solid cast iron angles 5 mm thick with cathodic protection. The angles are fitted with shift protection of the DI gratings and self-cleaning fastening pockets.



OPTIMAL BOLTING

Our concrete drainage channels are fitted with solid steel or DI angles with combined locking. Numerous gratings can be either screwed to the channel element up to 8 times per metre or quickly locked with the BIRCO Easylock alternative.



TYPE I AND TYPE M INSTALLATION

Type I: this type of drainage channel does not require a load-bearing foundation or encasement to support vertical and horizontal forces. The design and materials used are specially designed to withstand the loads exerted on the channel. Installation is therefore quick, simple and possible even in narrow trenches, which considerably reduces costs. Many BIRCO drainage systems have been specially designed for Type I installation.

Type M requires the use of a load-bearing foundation and/or encasement. Vertical and horizontal loads that occur after installation are transmitted to the foundation or encasement. The strength and load-bearing capacity, i.e. the load class, depend directly on the nature and construction of the foundation or surrounding.

ANCHORING SYSTEM

Firmly anchored in the ground, most BIRCO drainage channels feature a continuous anchoring system that binds the drainage element to the bedding over its entire length.



INTERLOCKING AND JOINTING

Easy interlocking of the elements thanks to the tongue-and-groove system. Installation from above, with a visible joint at all times for quick and easy inspection. A half-moon gap ensures a watertight joint possibility between the channel elements and for the entire drainage line. EN1433 compliance guaranteed!

3

FACTS

- + Supply channels: NW 100 1000
- + Nominal widths 320, 420 and 520 with DI Hexagon[®] cover
- + Lengths: 1.00 and 2.00 meters
- + High-quality C 40/50 concrete
- With solid steel angles for fastening the covers or with steel lateral protection for use with reinforced concrete covers
- + Cast-in mounting rails (from NW 200 on request)
- + Also suitable for drainage

1

2

3

5

- Load classes: A 15 E 600 or SLW 60, Reinforced concrete cover acc. to EN 1991-2 (traffic loads on bridges) load model 1
- + Type I installation possible up to load class D 400

AREAS OF APPLICATION

- + Industrial construction (internal and external areas)
- + Production halls
- + Trade fair centres
- + Public buildings



Load model 1 cc. to Eurocode 2 and SLW 60

EDGE/CORROSION PROTECTION

+ 4 mm cast-in solid steel angle coated with 70 µm zinc

INSTALLED MOUNTING RAILS

 Uncomplicated and quick installation thanks to integrated mounting rails, even for additions or repairs

HIGH-QUALITY MATERIALS

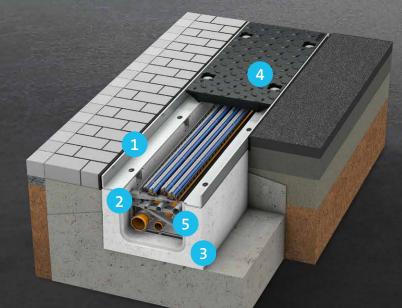
- + High-quality C 40/50 concrete
- + Pressure resistance, frost and de-icing salt resistance guarantee longevity and investment protection

TRAFFIC SAFETY

- + DI covers with 8 bolts per meter
- + Alternative : Reinforced concrete covers

VISIBLE SEALING GAP

 Safety sealing gap at the channel joint (can be grouted with BIRCO SF-Connect sealant)





VARIANT WITHOUT MOUNTING RAILS

BIRCOcanal[®] | NW 100



The supply channel for heavy duty areas

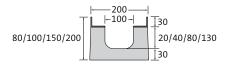
SUPPLY CHANNELS WITH ANGLES

WITHOUT CAST-IN MOUNTING RAILS

TEC*

TEC*

- + Hot-dipped galvanised solid steel angles for combi-fastening system
- + Reservation for sealing joint





DESCRIPTION	LENGTH	HEIGHT	WEIGHT	LOAD CLASS ACC. TO EN 1433	PALLET	ARTICLE NO.
Supply channel	1000 mm	80 mm	23.0 kg	A 15 - E 600	24 units	052010
Supply channel	1000 mm	100 mm	30.0 kg	A 15 - E 600	24 units	052011
Supply channel	1000 mm	150 mm	47.0 kg	A 15 - E 600	24 units	052013
Supply channel	1000 mm	200 mm	57.0 kg	A 15 – E 600	20 units	052014

SOLID DI COVERS | FOR SUPPLY CHANNELS WITH ANGLES

- + Solid
- + Black dip-painted
- + 8 M12/A2 bolts per meter
- + 8 Easylock fastenings per meter (alternatively)



LENGTH	WIDTH	HEIGHT	WEIGHT	LOAD CLASS ACC. TO EN 1433	PALLET	ARTICLE NO. BOLT FASTENING	ARTICLE NO. EASYLOCK
500 mm	187 mm	30 mm	7.5 kg	A 15 - E 600	100 units	052076	052076e

BIRCOcanal[®] | NW 150



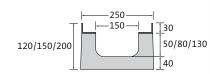
The supply channel for heavy duty areas

SUPPLY CHANNELS WITH ANGLES

WITHOUT CAST-IN MOUNTING RAILS

TEC*

- + Hot-dipped galvanised solid steel angles for combi-fastening system
- + Reservation for sealing joint





DESCRIPTION	LENGTH	HEIGHT	WEIGHT	LOAD CLASS ACC. TO EN 1433	PALLET	ARTICLE NO.
Supply channel	1000 mm	120 mm	48.0 kg	A 15 – E 600	15 units	052110
Supply channel	1000 mm	150 mm	51.0 kg	A 15 - E 600	15 units	052111
Supply channel	1000 mm	200 mm	63.0 kg	A 15 – E 600	12 units	052112

SOLID DI COVERS | FOR SUPPLY CHANNELS WITH ANGLES

TEC*

+ Solid

- + Black dip-painted
- + 8 M12/A2 bolts per meter
- + 8 Easylock fastenings per meter (alternatively)



LENGTH	WIDTH	HEIGHT	WEIGHT	LOAD CLASS ACC. TO EN 1433	PALLET	ARTICLE NO. BOLT FASTENING	ARTICLE NO. EASYLOCK
500 mm	237 mm	30 mm	10.5 kg	A 15 – E 600	98 units	052176	052176e

BIRCOcanal[®]

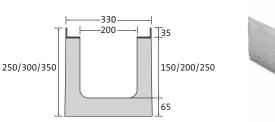


The supply channel for heavy duty areas

SUPPLY CHANNELS WITH ANGLES WITH CAST-IN MOUNTING RAILS

NW 200

- + Hot-dipped galvanised solid steel angles for combi-fastening system
- + Reservation for sealing joint
- + Cast-in mounting rails type 28/15, hot-dipped galvanised





DESCRIPTION	LENGTH	HEIGHT	WEIGHT	LOAD CLASS ACC. TO EN 1433	PALLET	ARTICLE NO.
Supply channel	1000 mm	250 mm	107.0 kg	A 15 – E 600	6 units	052210
Supply channel	1000 mm	300 mm	118.0 kg	A 15 – E 600	6 units	052211
Supply channel	1000 mm	350 mm	134.0 kg	A15-E600	6 units	052212

SUPPLY CHANNELS WITH ANGLES | WITHOUT CAST-IN MOUNTING RAILS

TEC*

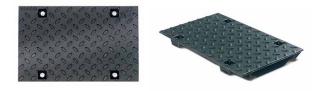
- + Hot-dipped galvanised solid steel angles for combi-fastening system
- + Reservation for sealing joint

DESCRIPTION	LENGTH	HEIGHT	WEIGHT	LOAD CLASS ACC. TO EN 1433	PALLET	ARTICLE NO.
Supply channel	1000 mm	250 mm	103.0 kg	A 15 - E 600	6 units	052230
Supply channel	1000 mm	300 mm	127.0 kg	A 15 - E 600	6 units	052231
Supply channel	1000 mm	350 mm	147.0 kg	A 15 - E 600	6 units	052232

SOLID DI COVERS | FOR SUPPLY CHANNELS WITH ANGLES

TEC*

- + Solid
- + Black dip-painted
- + 8 M12/A2 bolts per meter
- + 8 Easylock fastenings per meter (alternatively)



LENGTH	WIDTH	HEIGHT	WEIGHT	LOAD CLASS ACC. TO EN 1433	PALLET	ARTICLE NO. BOLT FASTENING	ARTICLE NO. EASYLOCK
500 mm	317 mm	35 mm	14.8 kg	A15-E600	60 units	052276	052276e



The supply channel for heavy duty areas

SUPPLY CHANNELS WITH ANGLES WITH CAST-IN MOUNTING RAILS



+ Cast-in hot-dipped galvanised solid steel angles 450-+ Visible sealing gap 50 + With continuous anchoring system + With shift protection of the grating 410 550 + Cast-in mounting rails type 28/15, hot-dipped galvanised 90 490 DESCRIPTION LOAD CLASS ACC. TO EN 1433 LENGTH HEIGHT PALLET ARTICLE NO. WEIGHT A15-F900 Supply channel 1000 mm 550 mm 250.0 kg 4 units 30052320

NW 320

Also available with stainless steel angles (V2A) on request.

SUPPLY CHANNELS WITH ANGLES WITHOUT CAST-IN MOUNTING RAILS

TEC*

- + Cast-in hot-dipped galvanised solid steel angles
- + Visible sealing gap
- + With continuous anchoring system
- + With shift protection of the grating



DESCRIPTION	LENGTH	HEIGHT	WEIGHT	LOAD CLASS ACC. TO EN 1433	PALLET	ARTICLE NO.
Supply channel	1000 mm	550 mm	250.0 kg	A 15 – F 900	4 units	30052340

Also available with stainless steel angles (V2A) on request.

SOLID HEXAGON[®] COVER DI FOR SUPPLY CHANNELS WITH ANGLES TEC*

- + Solid
- + Black dip-painted
- + 8 M12/A2 bolts per meter
- + Anti-slip classification R10/V10





LENGTH	WIDTH	HEIGHT	WEIGHT	LOAD CLASS ACC. TO EN 1433	PALLET	ARTICLE NO. BOLT FASTENING
498 mm	437 mm	45 mm	30.4 kg	A 15 – E 600	40 units	30052376

The supply channel for heavy duty areas

SUPPLY CHANNELS WITH ANGLES WITH CAST-IN MOUNTING RAILS TEC* + Cast-in hot-dipped galvanised solid steel angles 550 420 + Visible sealing gap **1**50 + With continuous anchoring system + With shift protection of the grating 410 550 + Cast-in mounting rails type 28/15, hot-dipped galvanised 90 590 LOAD CLASS ACC. TO EN 1433 DESCRIPTION LENGTH HEIGHT WEIGHT PALLET ARTICLE NO.

NW 420

 Supply channel
 1000 mm
 550 mm
 271.0 kg
 A 15 - F 900
 4 units

Also available with stainless steel angles (V2A) on request.

SUPPLY CHANNELS WITH ANGLES

WITHOUT CAST-IN MOUNTING RAILS

TEC*

TEC*

30052420

- + Cast-in hot-dipped galvanised solid steel angles
- + Visible sealing gap
- + With continuous anchoring system
- + With shift protection of the grating



DESCRIPTION	LENGTH	HEIGHT	WEIGHT	LOAD CLASS ACC. TO EN 1433	PALLET	ARTICLE NO.
Supply channel	1000 mm	550 mm	271.0 kg	A 15 - F 900	4 units	30052440

Also available with stainless steel angles (V2A) on request.

SOLID HEXAGON[®] COVER | DI | FOR SUPPLY CHANNELS WITH ANGLES

+ Solid

LENGTH

498 mm

- + Black dip-painted
- + 8 M12/A2 bolts per meter
- + Anti-slip classification R10/V10







TEC*

The supply channel for heavy duty areas

SUPPLY CHANNELS WITH ANGLES | WITH CAST-IN MOUNTING RAILS



- + Cast-in hot-dipped galvanised solid steel angles
- + Visible sealing gap
- + With continuous anchoring system
- + With shift protection of the grating
- + Cast-in mounting rails type 28/15,
- hot-dipped galvanised

550		150 410 90	
	050		

DESCRIPTION	LENGTH	HEIGHT	WEIGHT	LOAD CLASS ACC. TO EN 1433	PALLET	ARTICLE NO.
Supply channel	1000 mm	550 mm	292.0 kg	A 15 – F 900	4 units	30052520

NW 520

Also available with stainless steel angles (V2A) on request.

SUPPLY CHANNELS WITH ANGLES WITHOUT CAST-IN MOUNTING RAILS

TEC*

- + Cast-in hot-dipped galvanised solid steel angles
- + Visible sealing gap
- + With continuous anchoring system
- + With shift protection of the grating



DESCRIPTION	LENGTH	HEIGHT	WEIGHT	LOAD CLASS ACC. TO EN 1433	PALLET	ARTICLE NO.
Supply channel	1000 mm	550 mm	292.0 kg	A 15 – F 900	4 units	30052540

Also available with stainless steel angles (V2A) on request.

SOLID HEXAGON® COVER	DI	FOR SUPPLY CHANNELS WITH ANGLES	TEC*
 Solid Black dip-painted 8 M12/A2 bolts per meter Anti-slip classification R10/V10 			

LENGTH	WIDTH	HEIGHT	WEIGHT	LOAD CLASS ACC. TO EN 1433	PALLET	ARTICLE NO. BOLT FASTENING
498 mm	637 mm	45 mm	50.5 kg	A 15 – E 600	24 units	30052576

TEC*

TEC*

SUPPLY CHANNELS WITHOUT ANGLES WITH CAST-IN MOUNTING RAILS TEC* + Visible sealing gap -650 -520 With continuous anchoring system + + Cast-in mounting rails type 28/15, hot-dipped galvanised 405 495 90 -690 DESCRIPTION LENGTH HEIGHT WEIGHT LOAD CLASS PALLET ARTICLE NO. 284.0 kg Supply channel 1000 mm 495 mm A15-F900 4 units 30050520

SUPPLY CHANNELS WITHOUT ANGLES | WITHOUT CAST-IN MOUNTING RAILS

- + Visible sealing gap
- + With continuous anchoring system

DESCRIPTION	LENGTH	HEIGHT	WEIGHT	LOAD CLASS	PALLET	ARTICLE NO.
Supply channel	1000 mm	495 mm	284.0 kg	A 15 - F 900	4 units	30050540

REINFORCED CONCRETE COVER ¹⁾ | FOR SUPPLY CHANNELS WITHOUT ANGLES

- + Smoothed surface
- + 2 cast-in anchor sleeves for mechanical installation
- + Plus lateral steel protection (see accessories)



LENGTH	WIDTH	HEIGHT	WEIGHT	LOAD CLASS	PALLET	ARTICLE NO. BOLT FASTENING
1000 mm	645 mm	200 mm	296.0 kg	SLW 60 ¹⁾	1 units	30050597

¹⁾ Reinforced concrete cover acc. to EN 1991-2 (traffic loads on bridges) load model 1

[] Please note that foam tape must generally be applied between the BIRCOcanal and the concrete cover.



TEC*

The supply channel for heavy duty areas

SUPPLY CHANNELS WITHOUT ANGLES WITH CAST-IN MOUNTING RAILS TEC* + Reinforced grade C 40/50 concrete 900 700 + Reservation for sealing joint + Cast-in anchor sleeves RD 14 for mechanical installation 400 500 + Cast-in mounting rails type 28/15, hot-dipped galvanised 100 DESCRIPTION LENGTH HEIGHT WEIGHT LOAD CLASS PALLET ARTICLE NO. 850.0 kg Supply channel 2000 mm 500 mm A15-E600 1 unit 050720

NW 700

SUPPLY CHANNELS WITHOUT ANGLES

WITHOUT CAST-IN MOUNTING RAILS

- + Reinforced grade C 40/50 concrete
- + Reservation for sealing joint
- + Cast-in anchor sleeves RD 14 for mechanical installation

DESCRIPTION	LENGTH	HEIGHT	WEIGHT	LOAD CLASS	PALLET	ARTICLE NO.
Supply channel	2000 mm	500 mm	850.0 kg	A 15 – E 600	1 units	050740

REINFORCED CONCRETE COVER ¹⁾ | FOR SUPPLY CHANNELS WITHOUT ANGLES TEC*

- + Smoothed surface
- + 4 cast-in anchor sleeves RD 14 for mechanical installation
- + Plus lateral steel protection (see accessories)





LENGTH	WIDTH	HEIGHT	WEIGHT	LOAD CLASS	PALLET	ARTICLE NO. BOLT FASTENING
2000 mm	900 mm	220 mm	942.0 kg	SLW 60 ¹⁾	1 unit	0507981

¹⁾ Reinforced concrete cover acc. to EN 1991-2 (traffic loads on bridges) load model 1

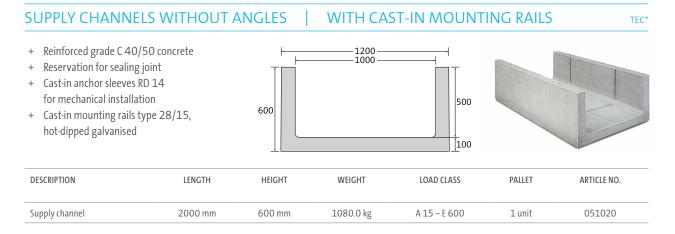
Please note that foam tape must generally be applied between the BIRCOcanal and the concrete cover.

NW 1000



TEC*

The supply channel for heavy duty areas



SUPPLY CHANNELS WITHOUT ANGLES | WITHOUT CAST-IN MOUNTING RAILS

- + Reinforced grade C 40/50 concrete
- + Reservation for sealing joint
- + Cast-in anchor sleeves RD 14 for mechanical installation

DESCRIPTION	LENGTH	HEIGHT	WEIGHT	LOAD CLASS	PALLET	ARTICLE NO.
Supply channel	2000 mm	600 mm	1090.0 kg	A 15 – E 600	1 unit	051040

REINFORCED CONCRETE COVER ¹⁾ | FOR SUPPLY CHANNELS WITHOUT ANGLES TEC*

- + Smoothed surface
- + 4 cast-in anchor sleeves RD 14 for mechanical installation
- + Plus lateral steel protection (see accessories)



LENGTH	WIDTH	HEIGHT	WEIGHT	LOAD CLASS	PALLET	ART. NO. BOLT FASTENING
2000 mm	1200 mm	250 mm	1370.0 kg	SLW 60 ¹⁾	1 unit	0510981

¹⁾ Reinforced concrete cover acc. to EN 1991-2 (traffic loads on bridges) load model 1

I Please note that foam tape must generally be applied between the BIRCOcanal and the concrete cover.

BIRCOcanal®Accessories

The supply channel for heavy duty areas

END CAPS FOR NW 100 | GALVANISED STEEL TEC*

DESCRIPTION	WIDTH	FOR HEIGHT	WEIGHT	ARTICLE NO.
End cap	200 mm	80–100 mm	0.3 kg	052040
End cap	200 mm	150 mm	0.4 kg	052041
End cap	200 mm	200 mm	0.6 kg	052042

END CAPS FOR NW 150 | GALVANISED STEEL

DESCRIPTION	WIDTH	FOR HEIGHT	WEIGHT	ARTICLE NO.
End cap	250 mm	120 - 150 mm	0.5 kg	052140
End cap	250 mm	200 mm	0.7 kg	052141

TEC*

TEC*

TEC*

TEC*

TEC*

END CAPS FOR NW 200 | GALVANISED STEEL

DESCRIPTION	WIDTH	FOR HEIGHT	WEIGHT	ARTICLE NO.
End cap	330 mm	250 mm	1.1 kg	052240
End cap	330 mm	300 mm	1.3 kg	052241
End cap	330 mm	350 mm	1.5 kg	052242

END CAPS FOR NW 320 | GALVANISED STEEL

DESCRIPTION	WIDTH	FOR HEIGHT	WEIGHT	ARTICLE NO.
End cap	450 mm	550 mm	4.2 kg	30052342

END CAPS FOR NW 420 | GALVANISED STEEL

DESCRIPTION	WIDTH	FOR HEIGHT	WEIGHT	ARTICLE NO.
End cap	550 mm	550 mm	5.3 kg	30052442

END CAPS FOR NW 520 | GALVANISED STEEL

DESCRIPTION	WIDTH	FOR HEIGHT	WEIGHT	ARTICLE NO.
End cap for BIRCOcanal with angles	650 mm	550 mm	6.4 kg	30052542
End cap for BIRCOcanal without angles	650 mm	505 mm	5.6 kg	30050542

* BIRCO Product group | Exception up to D 400: Not for use across the carriageway of highways or motorways. Dimensions and weights may vary slightly.

TEC*

TEC*

TEC*

TEC*

TEC*

END CAPS FOR NW 700 GALVANISED STEEL

DESCRIPTION	WIDTH	FOR HEIGHT	WEIGHT	ARTICLE NO.
End can	900 mm	500 mm	11.0 kg	052741
End cap	900 1111	500 mm	11.9 kg	052741

END CAPS FOR NW 700 | GALVANISED STEEL

DESCRIPTION	WIDTH	FOR HEIGHT	WEIGHT	ARTICLE NO.
End cap	120 mm	600 mm	21.5 kg	052940

BIRCOcanal[®] LIFTING ACCESSORIES FOR INSTALLATION

+ for mechanical installation

DESCRIPTION	LOAD CAPACITY (PER PIECE)	WEIGHT	ARTICLE NO.
Rotatable lifting point (set of 4 pcs) for the mechanical installation of supply channels with angles NW 100 – 520 $$	1.00 t	2.0 kg (set)	606108
Lifting loops RD 14 for reinforced concrete covers / supply channels without angles NW 520 – 1000	0.50 t	0.2 kg/unit	606016

LATERAL STEEL PROTECTION | GALVANISED STEEL

+ As back support for reinforced concrete covers

- of BIRCOcanal[®] without angles
- + 1 or 2-sided mounting

DESCRIPTION	LENGTH	HEIGHT	THICKNESS OF MATERIAL	WEIGHT	ARTICLE NO.
1-sided, NW 520	1000 mm	330 mm	5 mm	13.0 kg	609663
2-sided, NW 520	1000 mm	330 mm	5 mm	26.0 kg	609664
1-sided, NW 700 – 1000	2000 mm	330 mm	5 mm	26.0 kg	609665
2-sided, NW 700 – 1000	2000 mm	330 mm	5 mm	52.0 kg	609666

[] The side panels serve only as a lateral boundary and do not have the function of absorbing dynamic horizontal forces.

FOAM TAPE | COMPRESSION BAND

+ Between supply channel and reinforced concrete cover for BIRCOcanal[®] without angles, 50/5 mm or 100/5 mm (by the metre)

+ Self-adhesive

DESCRIPTION	LENGTH	WIDTH	THICKNESS OF MATERIAL	ARTICLE NO.
Foam tape for NW 520	by the meter	50 mm	5 mm	609402
Foam tape for NW 700 – 1000	by the meter	100 mm	5 mm	609414

I Absolutely necessary to compensate for manufacturing and installation tolerances in order to ensure full-surface support of the reinforced concrete covers.