

FLAT ROOF DRAINAGE SYSTEMS



CATALOGUE

Company data

TOPWET s.r.o. náměstí Viléma Mrštíka 62 664 81 Ostrovačice Czech Republic

ld.-Nr. Tax-Nr. 273 77 377 CZ27377377 GPS

49° 12' 36.81" N 16° 24' 34.19" E

TOPWET°

TOPWET Customer infoline

Orders, stock, invoicing

M +420 722 991 789

E export@topwet.cz

TOPWET Technical support line

M +420 720 960 137 E support@topwet.cz www.topwet.eu

TOPSAFE®

TOPSAFE Customer infoline

Orders, stock, invoicing

M +420 774 410 111

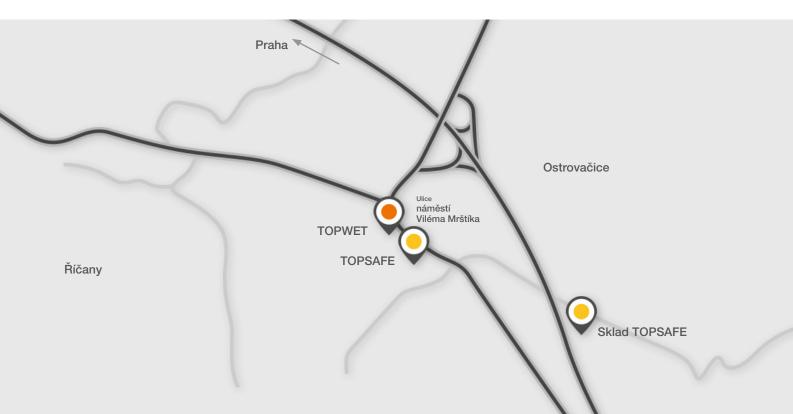
E topsafe@topwet.cz

TOPSAFE Technical support line

M +420 774 410 112 E projekty@topwet.cz

Desing of projects

www.topsafe.cz



Content

TOPWET SYSTEMS FOR DRAINAGE OF FLAT ROOFS

About	4
Technical information	6
Self-regulating heating	7
Roof Waterproofing Sleeve	8
Custom made sleeves	9
Combination options of products and accessories	10
Roof outlets	12
Extensions for outlets and other accessories	14
Extensions for refurbishment outlets and other accessories	16
Two-stage sanitation seal	17
Universal single - wall roof outlet	18
Terrace outlets	20
Accessories for roof outlets, terrace outlets and extensions	22
Refurbishment outlets and vents	24
Extended single-wall roof outlets	26
Balcony outlets	28

Accessories for TOPWET balcony outlets	30
Retention element	31
Inspection chamber for green roofs	32
Through wall outlets	34
Safety overflows	36
Vents and penetrations	38
Sealing sleeves – shaped pieces for waterproofing penetrations through PVC membranes	42
Sealing sleeves – shaped pieces for waterproofing penetrations through TPO membrane	44
Adjustment of penetrations and details	46
Edge dividers	47
Other roof elements	48
Ventilation turbines	50
Solutions for multi storey car parks – traverse outlets	51
Continuous balcony outlets and steel pipes	52
Penetrations for the substructure	53
Anti-slide pavements	54

TOPSAFE® FALL PROTECTION SAFETY SYSTEMS

What services are provided in TOPSAFE	56
The key to correctly determining the anchor points	57
Anchoring points for trapezoid and sandwich constructions	58
Anchoring points for concrete construction	59
Anchoring points for inclined roofs	60

Collective protection	61
Industrial systems and Roof access constructions	62
Anchoring points for steel constructions	64
Nets	65

About



Company history

A purely Czech company TOPWET s.r.o. is part of the PF Group, which has been manufacturing and supplying products to the construction industry since 1999. In 2005, an independent company TOPWET s.r.o. was established, containing the TOPWET division providing drainage for flat roofs and the TOPSAFE division providing protection systems against falls from a height.



Product certification

All our products are certified by independent European organizations and thus meet the demanding conditions for certification in the LGA testing laboratory and comply with applicable European standards.



Technical support

Due to the nature of our products, we most often provide technical advice to customers in the design and implementation phase as part of providing quality client service. We provide service to implementation companies and designers.



Customer service

Client care is our alpha omega. We build our relationship with the customer on intensive contact and try to adapt to his requirements as much as possible.



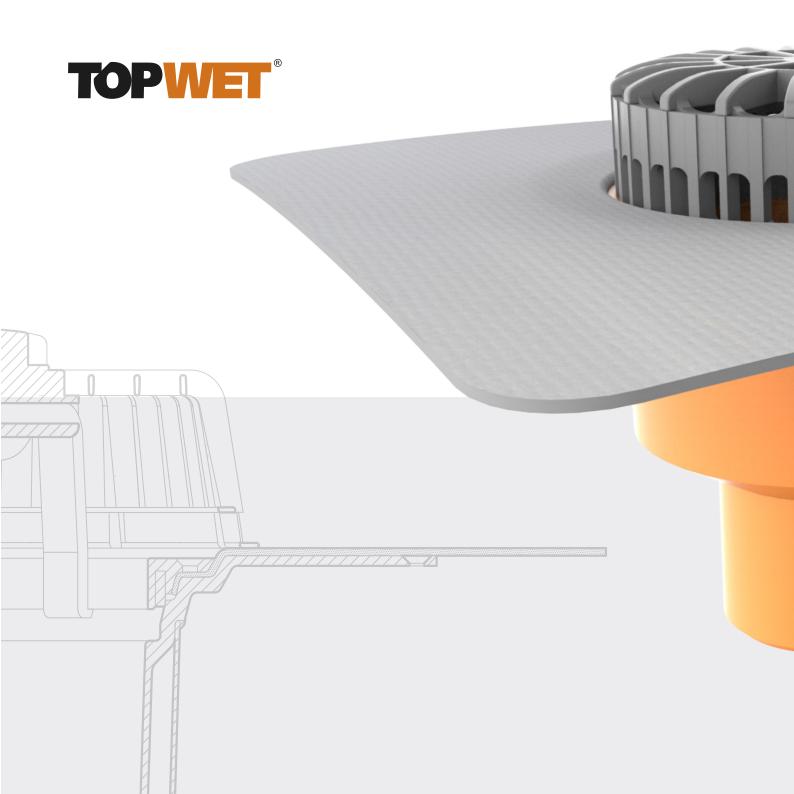
Quality and development

We use the latest technologies in the development of our products. First, we produce protoTypees to assess shape, function, ergonomics or to verify technological limitations to ensure high quality and long-term sustainability of products.



Goods delivery

Fast and reliable delivery of goods to our customers is one of our priorities. We guarantee the ordering of our products directly to the address of your building with delivery within two days of ordering.



Technical information

Technical drawings and examples of drainage

Technical drawings are prepared in scale including the corresponding dimensions. The examples of drainage include the currently most frequently used ways of drainage and they are updated continuously.



Possibility of simple printing and viewing



Possibility to place items into their own details or to use sample details



Possibility to download plugin for roof and terrace elements



Self-regulating heating

Drainage of flat roofs

Self-regulating electric heating of outlets and gutter overflows ensures reliable drainage during the winter season. The system works by resistance change bto semiconductors due to ambient temperature changes. During the winter periods outlets are at risk of blocking due to ice or snow build up. The heating element is designed to protect not only the orrifice of the outlet but its immediate surroundings as well.



Advantages of self-regulation heating

- Reliable drainage also in winter season
- Voltage 230 V / 50 Hz without necessity of a transformer or a control unit
- Option of connection to heating of gutters, downpipes, entries etc.
- Simple connection via a switch or a thermostat
- Electric energy saving

Connection description

- Connection is performed in an electric box under roof structure
- Length of the outlet supply cable is 1.5 m. Cable CYKY 3 x 1.5 mm
- Wire connection: yellow-green/protective, black/phase, blue/neutral
- AC voltage: 230 V, 50 Hz
- Input power: 10W at 20°C, 14W at 0°C, 18W at -20°C (for each product different)
- Max. current surge: 400mA (for each product different)
- Protection class: IP 67

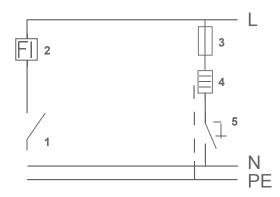
Basic options of connecting of heated outlets

- Without possibility of switching off (energy consumption also in summer season – not recommended)
- Mechanical switch (manipulation required), or time socket
- Outer thermostat with integrated thermal sensor
- Thermostat to a switchboard including thermal sensor for measuring of outer temperature
- Thermostat to a switchboard including thermal and humidity sensor for measuring the outside temperature

Wiring diagram

- 1 main switch
- 2 residual current device
- 3 circuit breaker
- 4 roof outlet

- 5 thermostat or switch
- L phase (black)
- N neutral (blue)
- PE protective (yellow-green))





Roof Waterproofing Sleeve

TOPWET company supplies standardly all own products with integrated bitumen and PVC sleeve waterproof to ensure 100% reliable waterproof connection.

- √ 100% waterproof
- ✓ Without screw flanges
- ✓ Fully compatible with roof waterproofing system

 A list of foils in stock can be found here:





BIT

Supplied with a UV stable SBS bitumen sleeve for direct welding to the main waterproofing layer.



PVC

Supplied with a 1.5mm mPVC sleeve All outlets can be manufactured with a specific manufacturers membrane (subject to additional cost).

Brands we cooperate with:

Axter Bauder BMI Group Carlisle Fatra FDT Elevate Mapei Protan Schedetal Sika Soprema VAE



Custom made sleeves:

Material bases:



TPO (FPO)

Thermoplastic (flexible) polyelefin.

A minimum thickness of 1.5mm, ideally in a homogenous version, is required. We currently produce with brands from previous page.



PE

Polyethylene is a vapour resistant membrane that is used mostly on roofs with a light structure.



STE

A sleeve for connection to liquid waterproofing applications.
Customer may supply their own sleeve or we will provide a special flexible sleeve with double sided integrated layer for connection to the liquid waterproofing.



EPDM

A membrane of synthetic rubber. We currently produce with brands from previous page



ECB

Foil with a low content of asphalt.

A mixture of polymers with oil asphalts. Tolerant to polystyrene foam. Compatible with bitumen insulation.



EVA

Combination of EVA and PVC sleeve, it does not contain any potentially liquid plasticizers. Tolerant to polystyrene foam. Compatible with bitumen insulation.



Combination options of products and accessories

		TWN Roof outlet attachments	TWTN Outlet attachments	TWN OVER Safety overflow attachment	TW RETN Retention attachments	TWN TI Heat insulating element
Roof outlets p.12		~		~	~	
Roof outlet extension p.14	1			~	~	~
Terrace outlets p.20	The state of the s		only vertical outlet			
Terrace outlet extension p.14						
Refurbishment outlets p.24				~	~	
Refurbishment outlets BZ p.24						
Extended outlets p.26				~	~	
Extended outlets BZ p.26						
Balcony outlets TWB p.28	(A)		TWB balcony outlets have their for more information see the cat	own complete line of acces alogue page 30	sories,	



TWN SAN TES Refurbishment seal	TWZU KL Odour trap	TWZU Water odour trap	TWOK Leaf guard for gravel	TW TER Terrace attachment	TW PLK Walkable protective leaf guard	TW ODK Drainage ring	TWZ Inspection chamber for green roofs
	Trap		And the state of t		iear guard		Muniting 1
		Accessories canno	ot be combined with dra	ains in variant XL			
~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~
	~	~	~	~	~	~	~
	~	~	~	~	~	~	~
~			~	~	~	~	~
							~
~			~	~	~	~	~
							~

Roof outlets

Drainage of flat roofs



Basic type - thermally insulated vertical roof outlet

- Double-wall structure of polyamide PA6
- Integrated sleeve of waterproof membrane or vapour barrier
- Protective leaf guard included each package
- Direct connection to vertical roof downpipes of DN 70, DN 100, DN 125 and DN 150 diameters

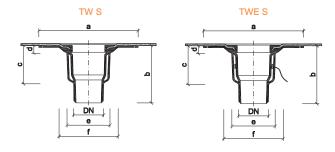
Complementary type – horizontal roof outlet

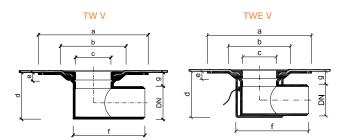
- Direct connection to horizontal pipes
 of DN 70, DN 100 and DN 125 diameters
- Reduced construction height for warm roofs

Dimensions of vert		Dimensions [mm]						
Туре	DN	а	b	С	d	е	f	
TW(E) 75 S	70	330	210	145	25	160	200	
TW(E) 110 S	100	330	210	135	25	160	200	
TW(E) 125 S	125	330	210	135	25	160	200	
TW(E) 160 S	150	342	210	135	25	190	265	

Dimensions of horizontal roof outlets Dimensions [mm]								
Туре	DN	а	b	С	d	е	f	g
TW(E) 75 V	70	330	200	130	121	36	224 (238*)	46
TW(E) 110 V	100	330	200	130	157	25	238 (250*)	47
TW(E) 125 V	125	330	200	130	165	25	239 (251*)	40

^{*} dimensions of heated version







TOPWET roof outlets with integrated bitumen sleeve

BIT

Version	Туре	Dimensions
TOPWET roof outlet with an integrated sleeve of modified bitumen strip, vertical version, heat-insulated – double-wall with a leaf guard.	TW 75 S BIT TW 110 S BIT TW 125 S BIT TW 160 S XL BIT	DN 70 DN 100 DN 125 DN 150
TOPWET roof outlet with an integrated sleeve of modified bitumen strip, vertical version, heat-insulated – double-wall with a leaf guard, heated with 230 V, with a connecting cable.	TWE 75 S BIT TWE 110 S BIT TWE 125 S BIT TWE 160 S XL BIT	DN 70 DN 100 DN 125 DN 150
TOPWET roof outlet with an integrated sleeve of modified bitumen strip, horizontal version, with a leaf guard.	TW 75 V BIT TW 110 V BIT TW 125 V BIT	DN 70 DN 100 DN 125
TOPWET roof outlet with an integrated sleeve of modified bitumen strip, horizontal version, with a leaf guard, heated with 230 V, with a connecting cable.	TWE 75 V BIT TWE 110 V BIT TWE 125 V BIT	DN 70 DN 100 DN 125

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE - suitable for liquid waterproofing). For more information please see page 9.

TOPWET roof outlets with integrated PVC sleeve

PVC

Version	Туре	Dimensions
TOPWET roof outlet with an integrated sleeve of waterproofing membrane based on PVC, vertical version, heat-insulated – double-wall with a leaf guard.	TW 75 S PVC TW 110 S PVC TW 125 S PVC TW 160 S XL PVC	DN 70 DN 100 DN 125 DN 150
TOPWET roof outlet with an integrated sleeve of waterproofing membrane based on PVC, vertical version, heat-insulated – double-wall with a leaf guard, heated with 230 V, with a connecting cable.	TWE 75 S PVC TWE 110 S PVC TWE 125 S PVC TWE 160 S XL PVC	DN 70 DN 100 DN 125 DN 150
TOPWET roof outlet with an integrated sleeve of waterproofing membrane based on PVC, horizontal version, with a leaf guard.	TW 75 V PVC TW 110 V PVC TW 125 V PVC	DN 70 DN 100 DN 125
TOPWET roof outlet with an integrated sleeve of waterproofing membrane based on PVC, horizontal version, with a leaf guard, heated with 230 V, with a connecting cable.	TWE 75 V PVC TWE 110 V PVC TWE 125 V PVC	DN 70 DN 100 DN 125

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE - suitable for liquid waterproofing). For more information please see page 9.



Extensions for outlets and other accessories

Drainage of warm roofs



Basic type - universal performance

- Applicable for roof outlets of DN 70, DN 100 and DN 125 diameters, outlets vertical and horizontal including heated ones
- Height depending on insulation thickness ranging from 40 mm up to 500 mm
- Suitable for passive houses with an insulation thickness up to 500 mm
- Sealing ring protecting against raised water included
- Heated version on request

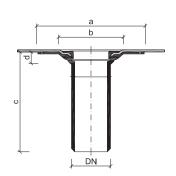
Complementary type XL

Dimensions [mm]

 Only for vertical roof outlets of DN 150 diameter including heated ones

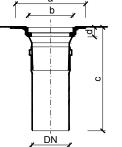
Dimensions of extensions for roof outlets

			Difficusions [min]					
Туре	for roof outlets TW / TWE	а	b	С	d	Insulation thickness		
TWN v220	75, 110, 125	330	200	290	40	40–220		
TWN v300	75, 110, 125	330	200	370	40	40–300		
TWN v500	75, 110, 125	330	200	540	40	40–500		
TWNE v500	75, 110, 125	330	200	540	100	100-500		
TWN v300 XL	160	342	265	330	120	120-300		
TWN v500 XL	160	342	265	540	120	120-500		
TWNE v500 XL	160	342	265	540	120	120–500		



Dimensions of extensions for terrace outlets

	for word or whate		Dimensions [mm]				
Туре	for roof outlets TW / TWE	а	b	С	d	Insulation thickness	
TWTN v300	75, 110, 125	204	130	370	20	20–300	





Extensions for thermal insulation for TOPWET roof outlets

Version	Туре	Insulation thickness
TOPWET attachment with an integrated sleeve of modified bitumen for vertical and horizontal TOPWET roof outlets of DN 70, 100 and 125, with a sealing ring, without a leaf guard (XL version only for outlets of DN 150). TWNE = heated performance, suitable for an insulation thickness over 300 mm.	TWN v220 BIT TWN v300 BIT TWN v500 BIT TWNE v500 BIT TWNE v500 XL BIT TWN v300 XL BIT TWN v500 XL BIT	40–220 mm 40–300 mm 40–500 mm 100-500 mm 120-500 mm 120–300 mm 120–500 mm
TOPWET extension with an integrated sleeve of PVC waterproofing membrane for vertical and horizontal TOPWET roof outlets of DN 70, 100 and 125, with a sealing ring, without a leaf guard (XL version only for outlets of DN 150). TWNE = heated performance, suitable for an insulation thickness over 300 mm.	TWN v220 PVC TWN v300 PVC TWN v500 PVC TWNE v500 PVC TWNE v500 XL PVC TWN v300 XL PVC TWN v500 XL PVC	40–220 mm 40–300 mm 40–500 mm 100-500 mm 120-500 mm 120–300 mm 120–500 mm

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE - suitable for liquid waterproofing). For more information please see page 9.

Extensions for thermal insulation for TOPWET terrace outlets

Version	Туре	Insulation thickness
TOPWET extension with an integrated sleeve of modified bitumen for vertical TOPWET terrace outlets of DN 70, 100 and 125, with a sealing ring. Attachment is without leafguard, with extension pipe.	TWTN v300 BIT	20–300 mm
TOPWET extension with an integrated sleeve of PVC waterproofing membrane for vertical TOPWET terrace outlets of DN 70, 100 and 125, with a sealing ring. Attachment is without leafguard, with extension pipe.	TWTN v300 PVC	20–300 mm

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE - suitable for liquid waterproofing). For more information please see page 9.



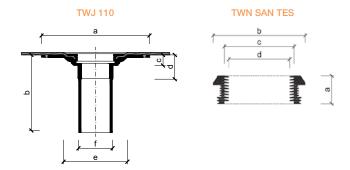
Extensions for refurbishment outlets and other accessories

Two-stage refurbishment seal



- Special rubber gasket
- The seal makes it possible to use two stages drainage solutions for roof refurbishment
- Applicability for refurbishment and single-wall outlets diameter DN 50 - 125
- As the second stage, we recommend using TWJ 110 for the thermal insulation thickness from 55 mm
- Reliable connection and sealing of the upper and lower part
- TWN SAN TES seal and TWJ 110 extension are two separate items, that must be ordered separately

Dimension of extension and seal								
Туре	а	b	С	d	е	f		
TWJ 110	330	400	40 (80*)	90	200	110		
TWN SAN TES	47	155	118	103				



It is about compatibility with TWN SAN TES rubber seal. This connection must be tight to prevent leakage into thermal insulation. The appropriate dimension of the outlet (lower part) is decided only when connecting to the existing downpipe.



^{*} Why must the upper part (extension) always be 110 mm in size?

Extensions for refurbishment outlets and other accessories

Accessories Version Type Outer / inner diameter



Two-stage refurbishment seal TOPWET for connecting the second stage to refurbishment outlets and single-walled extended outlets. Can be combined with diameters DN 50-DN 125.

TWN SAN TES

130 mm / 110 mm



Scheme of assembly of a two-stage refurbishment outlet

- Roof outlet TWJ 110 with leaf guard
- 2 Roof outlet TW, TWJ or TW SAN, DN 50-125
- Universal refurbishment sealing
 TWN SAN TES

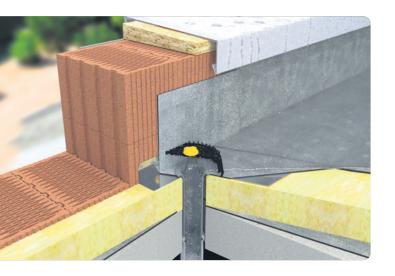
Electronic thermostats to control the heated roof outlets TOPWET and heating kit

Accessories	Version	Туре	Outer / inner diameter
THE REAL PROPERTY.	Universal external thermostat for controlling TOPWET heated roof outlets with an integrated thermal sensor for external temperature measurement. It is possible to connect up to 16 outlets to one thermostat.	TWT 524	70x70 mm
	Universal internal thermostat for controlling TOPWET heated roof outlets connected to switchboard boxes. Complete with a 4m cable and a thermal sensor for external temperature measurement. It is possible to connect up to 16 outlets to one thermostat.	TWT 3528	90×50 mm
	Kit includes a self regulating AC 230V, 50Hz heat cable (cable heat section 0,4 m or 0,6 m long, inlet cable length 1.5m). Complete with two plastic mounting straps to fix the cable to the pipe	TW SE TW SE XL	0,4 / 1,5 m 0,6 / 1,5 m



Universal single-wall outlet

Complicated drainage places

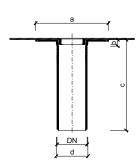


- Base plate can be bent directly on site
- Wide range of useage, especially near attics and narrow roof gutters
- Suitable for renovations
- Standard length 400 mm, up to 1000 mm on request
- Easy and fast installation
- Direct connection to pipes DN 50, 70, 90, 100 and 125
- Flexible stainless steel base plate, plastic pipe
- Necessary to cut leaf guard, suitable to combine with attica shafts

Universal single-wall outlet with flexible base plate

			Dimensions [mm]						
Туре	DN	а	b	С	d				
TWJ UNI 50	50	245	20	400	58				
TWJ UNI 75	70	245	20	400	81				
TWJ UNI 90	90	245	20	400	96				
TWJ UNI 110	100	245	20	400	116				
TWJ UNI 125	125	245	20	400	131				

TWJ UNI



* Differences between TWJ UNI and TWJ BZ?

Outlets TWJ UNI and TWJ BZ have same shape and dimension, differences at material of base plate.

The TWJ BZ outlets have a plastic base, the TWJ UNI outlets have a stainless steel flexible base that allows the drains to be placed even in difficult available places.

Bending can be done directly on the construction site, which significantly saves time and costs of customizing other outlets.



Universal single - wall roof outlet

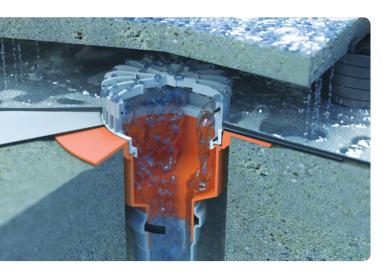
Accessories	Version	Туре	Outer / inner diameter
RAIL STATE OF THE	Universal single - wall outlet TOPWET with an integrated sleeve of modified bitumen strip, flexible base plate and leaf guard	TWJ UNI 50 BIT TWJ UNI 75 BIT TWJ UNI 90 BIT TWJ UNI 110 BIT TWJ UNI 125 BIT	DN 50 DN 70 DN 90 DN 100 DN 125
	Universal single - wall outlet TOPWET with an integrated sleeve of waterproof membrane based on PVC, flexible base plate and leaf guard	TWJ UNI 50 PVC TWJ UNI 75 PVC TWJ UNI 90 PVC TWJ UNI 110 PVC TWJ UNI 125 PVC	DN 50 DN 70 DN 90 DN 100 DN 125





Terrace outlets

Drainage of flat roofs, terraces and balconies



- Vertical or horizontal version DN 50-125
- Construction from polyamide PA6
- Integrated sleeve made of a waterproof strip or foil
- Low construction height
- A special low leaf guard is part of every outlet, with possibility of adjustment to a flat leaf guard
- A heated version will ensure reliable drainage even in the winter season

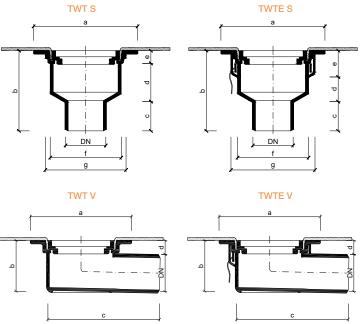
Terrace outlets - vertical version

		Dimensions [mm]							
Туре	DN	а	b	С	d e	f	g		
TWT(E) 75 S	70	204	182	80	75 (*52) 27 (*50)	133	156		
TWT(E) 110 S	100	204	182	80	75 (*52) 27 (*50)	133	156		
TWT(E) 125 S	125	204	182	80	75 (*52) 27 (*50)	133	156		

^{**} dimension at heated version

Terrace outlets - horizontal version

		Dimensions [mm]						
Туре	DN	а	b	С	d			
TWT(E) 50 V	50	204	92	225	44			
TWT(E) 75 V	70	204	102	225	28			
TWT(E) 110 V	100	204	143	238	33			
TWT(E) 125 V	125	204	143	238	26			





TOPWET terrace outlet with an integrated bitumen sleeve

BIT

	Version	Туре	Dimensions
annu.	TOPWET terrace outlet with an integrated sleeve of modified bitumen strip, vertical version, with a leaf guard.	TWT 75 S BIT TWT 110 S BIT TWT 125 S BIT	DN 70 DN 100 DN 125
annual	TOPWET terrace outlet with an integrated sleeve of modified bitumen strip, vertical version, heated 230 V with a connecting cable, with a leaf guard.	TWTE 75 S BIT TWTE 110 S BIT TWTE 125 S BIT	DN 70 DN 100 DN 125
annual	TOPWET terrace outlet with an integrated sleeve of modified bitumen strip, horizontal version, with a leaf guard.	TWT 50 V BIT TWT 75 V BIT TWT 110 V BIT TWT 125 V BIT	DN 50 DN 70 DN 100 DN 125
	TOPWET terrace outlet with an integrated sleeve of modified bitumen strip, horizontal version, heated 230 V with a connecting cable, with a leaf guard.	TWTE 50 V BIT TWTE 75 V BIT TWTE 110 V BIT TWTE 125 V BIT	DN 50 DN 70 DN 100 DN 125

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE - suitable for liquid waterproofing). For more information please see page 9.

TOPWET terrace outlets with an integrated PVC sleeve

PVC

	Version	Туре	Dimensions
	TOPWET terrace outlets with an integrated PVC sleeve of waterproof membrane based on PVC, vertical version, with a leaf guard.	TWT 75 S PVC TWT 110 S PVC TWT 125 S PVC	DN 70 DN 100 DN 125
Santa	TOPWET terrace outlets with an integrated PVC sleeve of waterproof membrane based on PVC, vertical version, heated 230 V with a connecting cable, with a leaf guard.	TWTE 75 S PVC TWTE 110 S PVC TWTE 125 S PVC	DN 70 DN 100 DN 125
annua de la companya	TOPWET terrace outlets with an integrated PVC sleeve of waterproof membrane based on PVC, horizontal version, with a leaf guard.	TWT 50 V PVC TWT 75 V PVC TWT 110 V PVC TWT 125 V PVC	DN 50 DN 70 DN 100 DN 125
Sunnes	TOPWET terrace outlets with an integrated PVC sleeve of waterproof membrane based on PVC, horizontal version, heated 230 V with a connecting cable, with a leaf guard.	TWTE 50 V PVC TWTE 75 V PVC TWTE 110 V PVC TWTE 125 V PVC	DN 50 DN 70 DN 100 DN 125

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE – suitable for liquid waterproofing). For more information please see page 9.



Accessories for roof outlets, terrace outlets and extensions

Dimensions [mm]

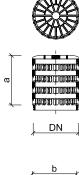
Drainage of ballast roofs, terraces and balconies and anti-stink measures

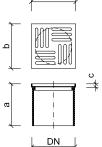


- On roofs with a ballast layer of gravel it is necessary to use a perforated leaf guard
- Wide range of accessories for walkable roofs
- Terrace attachments for drainage from the paving surface level
- Possibility of using a odour trap inserted in the outlet

Leaf guard for roofs with gravel

		Difference [filling				
Туре	DN	а			Purpose	
TWOK v100	125*	100			(
TWOK v133	125*	133	A universal leaf guard for roof outlets DN 70, 100 and 125, terrace outlets DN 50, 70, 100			
TWOK v166	125*	166		,	ttachments for outlets, sanitation extended outlets	
TWOK v200	125*	200	Outie	et and	exterided outlets	
TWOK NR v20-1000 XL	150	20–1000	For roof outlets DN 150 and attachments for XL outlets			
Terrace attachments						
				Di	mensions [mm]	
Туре	DN	а	b	С	Purpose	
TW TER	125*	100	135	11	A universal terrace attachment for roof outlets DN 70, 100 and 125, terrace outlets DN 50, 70, 100 and 125,	
TW TER P	125*	220	135	11	extensions for outlets, refurbishment outlet and extended outlets	
TWNR TER v10–1000 XL	150	10–1000	150	11	For roof outlets DN 150 and extensions for XL outlets	





* How can attachments be universal for various diameters of roof and terrace outlets DN 50, 70, 100 and 125?

The outlets have a neck or an integrated sleeve of the same construction and diameter. The outlet construction only differs below the neck. Ensuring that all the accessories are universal.

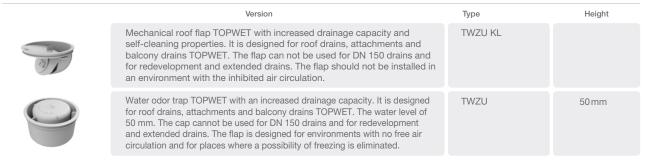
What attachment shall I use if I have screed waterproof which is at the level of the outlet neck?

For this type of finish, there is TW TER attachment which can be shortened according to the height of the screed and paving.



Mechanical roof flaps into TOPWET roof outlets, terrace outlets and their extensions

Accessories



Accessories for roof outlets, terrace outlets and their extensions

Accessories

	Version	Туре	Height above insulation level
	Terraced attachment TOPWET for terraces with glued or otherwise mounted pavement. The package includes one drainage ring for the more continuous water runoff from the main waterproof system. The terraced attachment can be extended with another drainage ring TW ODK by about 33 mm or the attachment TWN TER. The attachment height is adjustable; the thick-walled polyamide PA6 UV Stabil design.	TW TER	10–100 mm (45–150 mm)**
107 1	Perforated terraced attachment TOPWET for terraces with the pavement. The package includes three drainage rings for smoother water runoff from the main waterproof system. The terraced attachment can be extended with another drainage ring TW ODK by about 33 mm or the attachment TWN TER. The attachment height is adjustable; the thick-walled polyamide PA6 UV Stabil design.	TW TER P	45–220 mm
	The extended attachment for the extension of the terraced attachment by 120 mm as a maximum. The exact height of the attachment can always be adapted directly on site. The thick-walled polyamide PA6 UV Stabil design.	TWN TER	15–120 mm
Thursday.	Drainage ring for extension of leaf guard TWOK or terrace attachment TW TER (P) The thick-walled polyamide PA6 UV Stabil design. The height above the level of the waterproof system is 33 mm. The hole size of 15x7 mm.	TW ODK	+33 mm
	Flat walkable leaf guard TOPWET. The thick-walled polyamide PA6 UV Stabil design. The height above the level of the waterproof system is 10 mm.	TW PLK	+10 mm
happen griff	Perforated leaf guard TOPWET for roofs with gravel or other load-increasing strata. The basket can be extended with the drainage ring TW ODK always by 33 mm. The thick-walled polyamide PA6 UV Stabil design.	TWOK v33 TWOK v66 TWOK v100 TWOK v133 TWOK v166 TWOK v200	33 mm 66 mm 100 mm 133 mm 166 mm 200 mm

^{*} The heights apply when the TW ODK



Refurbishment outlets and vents

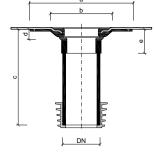
Flat roof refurbishment



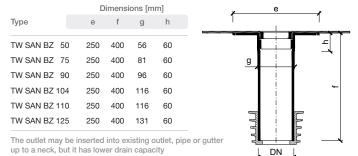
- Basic lenght 400mm
- Direct connection to existing roof outlets or vertical downpipes
- Wide assortment of fine graduated diameters
- Easy application with refurbishment with use of a new heat-insulated layer from a thickness of 50 mm
- Custom manufacturing of higher refurbishment outlets with a tube of a length up to 1500 mm
- Lip seal against raised water included in each outlet
- Slippery means included in each package
- Heated version on request

Refurbishment outlets for warm roofs

	Dimensions [mm]							
Туре	а	b	C**	d	е			
TW SAN 50	330	220	400	40 (80*)	90			
TW SAN 63	330	220	400	40 (80*)	90			
TW SAN 75	330	220	400	40 (80*)	90			
TW SAN 90	330	220	400	40 (75*)	90			
TW SAN 104	330	220	400	40 (80*)	90			
TW SAN 110	330	220	400	40 (80*)	90			
TW SAN 125	330	220	400	40 (80*)	90			
TW SAN 140	330	220	400	40 (80*)	90			
TW SAN 160	342	265	400	40 (90*)	120			



Refurbishment outlets for cold roofs



Selection table for refurbishment outlets

OCICOLIO	ii table loi i	Ciuii	313111	IICIII	outio	,13				Ту	pe of e	xisting	downp	ipe [Dl	١]									
Туре	For connection to piping			Cast i	ron							PE					P\	/C				PP		
турс	of diameter	70	80	100	110	125	150	200	63	75	90	110	125	150	200	70	100	125	150	200	100	125	150	200
TW SAN 50	54–72 mm	V							/	V						V								
TW SAN 63	69-81 mm	/	~							\	\					V								
TW SAN 75	79-102 mm		~								/										V			
TW SAN 90	99–106 mm			~								V					V				V			
TW SAN 104	109–116 mm				V																			
TW SAN 110	116-129mm					/								/				/				\		
TW SAN 125	144–154 mm						V								~				V				V	
TW SAN 140	154-186 mm						V							/	/				V	/			V	V
TW SAN 160	186–200 mm							/								/				V				/

^{*} dimension at heated version

^{**} optionally extension up to 2000 mm to order

TOPWET refurbishment outlets with integrated bitumen sleeve

BIT

	Version	Type For co	nnection to piping of diameter
	TOPWET refurbishment outlet with an integrated sleeve of modified bitumen strip with a leaf guard. Length 400 mm, option of extension up to 1500 mm on request.	TW SAN 50 BIT TW SAN 63 BIT TW SAN 75 BIT TW SAN 90 BIT TW SAN 104 BIT TW SAN 110 BIT TW SAN 125 BIT TW SAN 140 BIT TW SAN 140 BIT TW SAN 160 XL BIT	54–72 mm 69-81 mm 79–102 mm 99–106 mm 109–116 mm 116–129 mm 144–154 mm 154-186 mm 186–200 mm
	TOPWET refurbishment outlet with an integrated sleeve of modified bitumen strip with a leaf guard, heated with 230 V with a supply cable. Length 400 mm, option of extension up to 1500 mm on request.	TWE SAN 50 BIT TWE SAN 63 BIT TWE SAN 75 BIT TWE SAN 90 BIT TWE SAN 104 BIT TWE SAN 104 BIT TWE SAN 110 BIT TWE SAN 125 BIT TWE SAN 140 BIT TWE SAN 140 BIT TWE SAN 160 XL BIT	54–72 mm 69-81 mm 79–102 mm 99–106 mm 109–116 mm 116–129 mm 144–154 mm 154-186 mm 186–200 mm
	TOPWET refurbishment outlet for cold roofs with an integrated sleeve of modified bitumen strip with a leaf guard. The outlet may be inserted into redeveloped pipes up to a neck, but it has lower drain capacity. Length 400 mm, option of extension up to 1000 mm on request.	TW SAN BZ 50 BIT TW SAN BZ 75 BIT TW SAN BZ 90 BIT TW SAN BZ 104 BIT TW SAN BZ 110 BIT TW SAN BZ 125 BIT	54–72 mm 79–102 mm 99–106 mm 109–116 mm 116–129 mm 144–154 mm
+	TOPWET refurbishment vent determined for connection to sewerage ventilation piping with an integrated sleeve of modified bitumen strip including a rain cap. A height above insulation of 300 mm, a height below insulation of 200 mm, option of extension up to 1500 mm on request.	TWOP SAN 50 BIT TWOP SAN 75 BIT TWOP SAN 90 BIT TWOP SAN 110 BIT TWOP SAN 125 BIT	54–72 mm 79–102 mm 99–106 mm 116–129 mm 144–154 mm

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE - suitable for liquid waterproofing). For more information please see page 9.

TOPWET refurbishment outlets with integrated PVC sleeve

PVC

Version	Type For o	connection to piping of diamete
TOPWET refurbishment outlet with an integrated sleeve of hydro-insulation foil based on PVC with a leaf guard. Length 400 mm, option of extension up to 1500 mm on request.	TW SAN 50 PVC TW SAN 63 PVC TW SAN 75 PVC TW SAN 90 PVC TW SAN 104 PVC TW SAN 110 PVC TW SAN 125 PVC TW SAN 140 PVC TW SAN 160 XL PVC	54–72 mm 69-81 mm 79–102 mm 99–106 mm 109–116 mm 116–129 mm 144–154 mm 154-186 mm 186–200 mm
TOPWET refurbishment outlet with an integrated sleeve of hydro-insulation foil based on PVC with a leaf guard, heated with 230 V with a supply cable. Length 400 mm, option of extension up to 1500 mm on request.	TWE SAN 50 PVC TWE SAN 63 PVC TWE SAN 75 PVC TWE SAN 79 PVC TWE SAN 104 PVC TWE SAN 110 PVC TWE SAN 125 PVC TWE SAN 125 PVC TWE SAN 140 PVC TWE SAN 140 PVC TWE SAN 160 XL PVC	54–72 mm 69-81 mm 79–102 mm 99–106 mm 109–116 mm 116–129 mm 144–154 mm 154–186 mm
TOPWET refurbishment outlet for cold roofs with an integrated sleeve of PVC membrane with a leaf guard. The outlet may be inserted into redeveloped pipes up to a neck, but it has lower drain capacity. Length 400 mm, option of extension up to 1000 mm on request.	TW SAN BZ 50 PVC TW SAN BZ 75 PVC TW SAN BZ 90 PVC TW SAN BZ 104 PVC TW SAN BZ 110 PVC TW SAN BZ 125 PVC	54–72 mm 79–102 mm 99–106 mm 109–116 mm 116–129 mm 144–154 mm
TOPWET refurbishment vent determined for connection to sewerage ventilation piping with an integrated sleeve of waterproof membrane based on PVC including a rain cap. A height above insulation of 300 mm, a height below insulation of 200 mm, option of extension up to 1500 mm on request.	TWOP SAN 50 PVC TWOP SAN 75 PVC TWOP SAN 90 PVC TWOP SAN 110 PVC TWOP SAN 125 PVC	54–72 mm 79–102 mm 99–106 mm 116–129 mm 144–154 mm

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE - suitable for liquid waterproofing). For more information please see page 9.



Extended single-wall roof outlets

Drainage of flat roofs



Extended single-wall roof outlets

		Dimensions [mm]						
Туре	DN	а	b**	С	d	е	f	
TWJ 50	50	330	400	40 (80*)	90	200	160	
TWJ 75	70	330	400	40 (80*)	90	200	160	
TWJ 90	90	330	400	40 (80*)	90	200	160	
TWJ 110	100	330	400	40 (80*)	90	200	160	
TWJ 125	125	330	400	40 (80*)	90	200	160	
TWJ 160	150	342	400	40 (90*)	120	265	205	

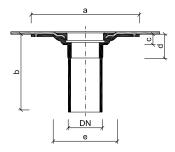
^{*}dimension at heated version

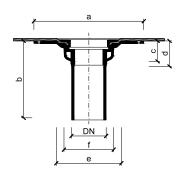
Extended single-wall roof outlets Roofs without thermal insulation

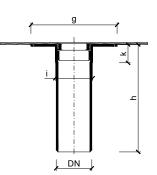
Hoois withou	t tileillia	i ilisulation	Dimensions [mm]				
Туре	DN	g	h	i	k		
TWJ BZ 50	50	250	400	56	60		
TWJ BZ 75	70	250	400	81	60		
TWJ BZ 90	90	250	400	96	60		
TWJ BZ 110	100	250	400	116	60		
TWJ BZ 125	125	250	400	131	60		

The outlet may be inserted into existing outlet, pipe or gutter up to a neck, but it has lower drain capacity

- Standard length 400 mm
- Length up to 1500 mm on request
- Option of length modification directly on construction site
- Simple assembly
- Option for heated version to order
- No possibility of combination with outlet extensions and mechanical roof flaps
- It is possible to combine with TWOK and TW TER accessories







What is the difference between the standard outlet and the BZ outlet?

Outlets with BZ marking (without thermal insulation) are useful for uninsulated structures, gutters or redevelopments when it is necessary to insert the outlet into the pipe or the hole up to the neck. In contrast to the standard version the BZ outlets have lower drain capacity.



^{**} optionally extension up to 1500 mm to order

Extended single-wall roof outlets with integrated bitumen sleeve

BIT

Version	Туре	DN / Outlet lenght
TOPWET roof outlet with an integrated sleeve of modified bitumen strip with a leaf guard. Single-wall, length option on request.	TWJ 50 BIT TWJ 75 BIT TWJ 90 BIT TWJ 110 BIT TWJ 125 BIT TWJ 160 XL BIT	DN 50 / 400 mm DN 70 / 400 mm DN 90 / 400 mm DN 100 / 400 mm DN 125 / 400 mm DN 150 / 400 mm
TOPWET roof outlet with an integrated sleeve of modified bitumen strip with a leaf guard, heated with 230 V with a supply cable 1.5 m. Single-wall, length option on request.	TWJE 50 BIT TWJE 75 BIT TWJE 90 BIT TWJE 110 BIT TWJE 125 BIT TWJE 160 XL BIT	DN 50 / 400 mm DN 70 / 400 mm DN 90 / 400 mm DN 100 / 400 mm DN 125 / 400 mm DN 150 / 400 mm
TOPWET roof outlet cold roofs with an integrated sleeve of modified bitumen strip with a leaf guard. The outlet may be inserted into redeveloped pipes up to a neck, but it has lower drain capacity. Length 400 mm, option of extension up to 1000 mm on request.	TWJ BZ 50 BIT TWJ BZ 75 BIT TWJ BZ 90 BIT TWJ BZ 110 BIT TWJ BZ 125 BIT	DN 50 / 400 mm DN 70 / 400 mm DN 90 / 400 mm DN 100 / 400 mm DN 125 / 400 mm

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE - suitable for liquid waterproofing). For more information please see page 9.

Extended single-wall roof outlets with integrated PVC sleeve

PVC

Version	Туре	DN / Outlet lenght
TOPWET roof outlet with an integrated sleeve of waterproof membrane based on PVC with a leaf guard. Single-wall, length option on request.	TWJ 50 PVC TWJ 75 PVC TWJ 90 PVC TWJ 110 PVC TWJ 125 PVC TWJ 160 XL PVC	DN 50 / 400 mm DN 70 / 400 mm DN 90 / 400 mm DN 100 / 400 mm DN 125 / 400 mm DN 150 / 400 mm
TOPWET roof outlet with an integrated sleeve of waterproof membrane based on PVC with a leaf guard, heated with 230 V with a supply cable 1.5 m. Single-wall, length option on request.	TWJE 50 PVC TWJE 75 PVC TWJE 90 PVC TWJE 110 PVC TWJE 125 PVC TWJE 160 XL PVC	DN 50 / 400 mm DN 70 / 400 mm DN 90 / 400 mm DN 100 / 400 mm DN 125 / 400 mm DN 150 / 400 mm
TOPWET roof outlet for cold roofs with an integrated sleeve of waterproof membrane based on PVC with a leaf guard. The outlet may be inserted into redeveloped pipes up to a neck, but it has lower drain capacity. Length 400 mm, option of extension up to 1000 mm on request.	TWJ BZ 50 PVC TWJ BZ 75 PVC TWJ BZ 90 PVC TWJ BZ 110 PVC TWJ BZ 125 PVC	DN 50 / 400 mm DN 70 / 400 mm DN 90 / 400 mm DN 100 / 400 mm DN 125 / 400 mm

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE – suitable for liquid waterproofing). For more information please see page 9.



Balcony outlets

Drainage of balconies

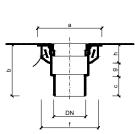


- DN 50 and 70 vertical and horizontal version
- PA6 polyamide construction
- Integrated sleeve of waterproof strip or foil
- Low construction height
- Suitable to drain smaller areas
- Protective and removable grid included in each outlet
- Heated version ensures reliable drainage even in winter season

Balcony outlets - vertical version

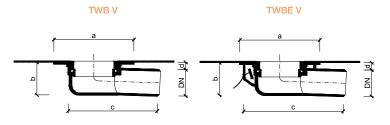
		Dimensions [mm]								
Туре	DN	а	b	С	d	е	f	g	h	
TWB 50 S	50	150	120	45	51	24	99	-	-	
TWB 75 S	70	150	120	45	51	24	99			
TWBE 50 S	50	150	120	45	-	-	134	32	43	
TWBE 75 S	70	150	120	45	-	-	134	32	43	

TWB S TWBE S



Balcony outlets - horizontal version

		Dimensions [mm]							
Туре	DN	а	b	С	d				
TWB 50 V	50	150	61	167	14				
TWB 75 V	70	150	96	163	21				
TWBE 50 V	50	150	61	187	14				
TWBE 75 V	70	150	96	183	21				





TOPWET balcony outlets with integrated bitumen sleeve

BIT

	Version	Туре	Dimensions
(A)	TOPWET balcony outlet with an integrated sleeve of modified bitumen strip, vertical version, with a flat leaf guard.	TWB 50 S BIT TWB 75 S BIT	DN 50 DN 70
	TOPWET balcony outlet with an integrated sleeve of modified bitumen strip, vertical version, heated with 230 V with a supply cable, with a flat leaf guard.	TWBE 50 S BIT TWBE 75 S BIT	DN 50 DN 70
	TOPWET balcony outlet with an integrated sleeve of modified bitumen strip, horizontal version, with a flat leaf guard.	TWB 50 V BIT TWB 75 V BIT	DN 50 DN 70
	TOPWET balcony outlet with an integrated sleeve of modified bitumen strip, horizontal version, heated with 230 V with a supply cable, with a flat leaf guard.	TWBE 50 V BIT TWBE 75 V BIT	DN 50 DN 70

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE - suitable for liquid waterproofing). For more information please see page 9.

TOPWET balcony outlets with integrated PVC sleeve

PVC

	Version	Туре	Dimensions
410	TOPWET balcony outlet with an integrated sleeve of waterproof membrane based on PVC, vertical version, with a flat leaf guard.	TWB 50 S PVC TWB 75 S PVC	DN 50 DN 70
	TOPWET balcony outlet with an integrated sleeve of waterproof membrane based on PVC, vertical version, heated with 230 V with a supply cable, with a flat leaf guard.	TWBE 50 S PVC TWBE 75 S PVC	DN 50 DN 70
and the second	TOPWET balcony outlet with an integrated sleeve of waterproof membrane based on PVC, horizontal version, with a flat leaf guard.	TWB 50 V PVC TWB 75 V PVC	DN 50 DN 70
	TOPWET balcony outlet with an integrated sleeve of waterproof membrane based on PVC, horizontal version, heated with 230 V with a supply cable, with a flat leaf guard.	TWBE 50 V PVC TWBE 75 V PVC	DN 50 DN 70

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE - suitable for liquid waterproofing). For more information please see page 9.



Accessories for TOPWET balcony outlets

	Version	Туре	Height above insulation level
	TOPWET balcony attachment of a new generation with a stainless steel grid 100x100 mm. For balconies with glued or differently laid tiles. The balcony attachment can be extended using another TWB ODK drainage ring of 25 mm. The package includes drainage ring for the more continuous water runoff from main waterproof system. The exact height of the attachment can always be adapted directly on site. The thick-walled polyamide PA6 UV Stabil design.	TWB TER	14-95 mm (39-120 mm)*
	TOPWET balcony attachment of a new generation with a stainless steel grid 100x100 mm. For balconies with glued laid tiles. The exact height of the attachment can always be adapted directly on site. The thick-walled polyamide PA6 UV Stabil design.	TWB TER TH	18-95 mm
	TOPWET balcony attachment of a new generation with a stainless steel grid 100x100 mm. For balconies with glued laid tiles and integrated membrane increase adhesion. The exact height of the attachment can always be adapted directly on site.	TWB TER STE	10-95 mm
	Balcony drainage ring for extension of the TWB TER balcony attachment, always by 25 mm. The thick-walled polyamide PA6 UV Stabil design. The hole size of 10x6.5 mm.	TWB ODK	25 mm
65	Flat TOPWET walkable protective leaf guard balcony outlets The thick-walled polyamide PA6 UV Stabil design. The height above the level of the waterproof system is 10 mm.	TWB PLK	10 mm
	Perforated protective leaf guard TOPWET for balcony outlets. The leaf guard can be extended with the drainage ring TWB ODK always by 25 mm. The thick-walled polyamide PA6 UV Stabil design.	TWOK BAL v35 TWOK BAL v60 TWOK BAL v85 TWOK BAL v110	35 mm 60 mm 85 mm 110 mm
	Mechanical stink trap for vertical and horizontal version of TOPWET TWB balcony outlets.	TWZU BAL	

^{*} The heights apply when the TW ODK BAL item is used

Possible combinations of accessories for TOPWET balcony outlets for various types of balcony compositions

Balcony composition with a drainage layer



Combination of a TOPWET balcony outlet with an integrated sleeve and a balcony attachment with a stainless steel grid and a drainage ring used for water drainage from the main hydro-insulation layer. Balcony composition with a glued layer



Combination of a TOPWET balcony outlet with an integrated sleeve for screed insulation and a balcony attachment with a stainless steel grid adjusted on site as required.

Balcony composition with a walkable roof foil



Combination of a TOPWET balcony outlet with an integrated sleeve and a flat walkable protective basket supplied as standard with balcony outlets. Balcony composition with a gravel layer



Combination of a TOPWET balcony outlet with an integrated sleeve and a flat walkable protective basket supplied as standard with balcony outlets, complemented with balcony drainage rings as required.



Retention element

Reduction of drainage capacity of rainwater into the sewer network

Retention roof

- Reduction of drainage capacity into the sewer network
- Fast installation and easy maintenance
- Reduction of acquisition costs compared to other retention systems

Support & Retention Roof Designs

- Technical report of retention roof incl. calculation on the basis of information from the authorities concerned
- Drawing of the division of the retention roof surfaces
- Delivery and installation of retention elements
- Inspection and cleaning of installed retention elements
- For design suggestion, ask at technical department TOPWET



Retention attachments



The TOPWET retention element is designed to reduce the outflow of rainwater towards the sewer network with the possibility of setting the outflow value in a certain range. The draft retention measure is made by calculation following a statement from the authorities concerned.

Version

Type

For overflow height

TW RETN

80 mm - 176 mm

Basic phases of rainwater runoff

Beginning phase

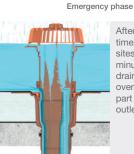


At normal rainfall intensity, the water flows freely through the lower openings into the sewer as with conventional roof



Proposed phase

In the event of heavy rain, the water level begins to rise up and the lower openings of the retention outlet provide an outflow corresponding to the permissible outflow, based on the opinion of the authorities concerned.



After exceeding the time of the storm sites longer than 15 minutes, the water is drained by a safety overflow in the upper part of the retention outlet



Inspection chamber for green roofs

Accessories for roofs with vegetation layers

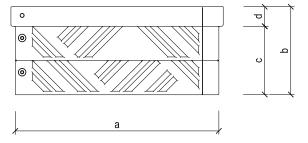


- Dimensions 300x300, 400x400 and 550x550 mm
- Variable height adjustment basic set of 100 mm, additional set of 50 mm
- New design, stronger construction, finer perforations, fluent drainage of water from the vegetation
- Removable lid in neutral gray
- Solid, UV stable material
- Easy to check and roof outlet maintenance

Inspection chamber for green roofs

		Dime	ensions [mm]	
Туре	а	b	С	d
	280	130	100	30
TWZ (F)	380	130	100	30
	530	130	100	30
	280	130	100	30
TWZN v100	380	130	100	30
	530	130	100	30
	280	80	50	30
TWZN v50	380	80	50	30
	530	80	50	30

TWZ



Self - assembly

Chambers for green roof is structurally adapted, so that the chambers can be assembled in required height self-help directly on construction.

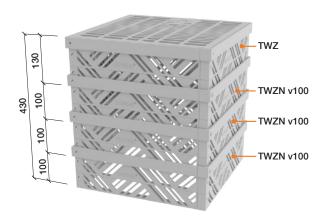
Using height slats (50 mm or 100 mm) and fasteners to the cover grid TWZ or TWZF can be easy to assemble the whole protective chamber to the required height according to vegetation formation.



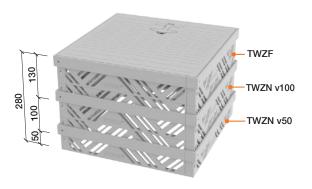
Inspection chamber for green roofs

	Version	Туре	Dimensions
	Inspection chamber for green roofs, height 130 mm, including perforated plastic cover grid. Fasteners included in the package	TWZ 300x300x130 TWZ 400x400x130 TWZ 550x550x130	300x300 mm 400x400 mm 550x550 mm
Manager All	Inspection chamber for green roofs, height 130 mm, including non-perforated plastic cover grid. Fasteners included in the package	TWZF 300x300x130 TWZF 400x400x130 TWZF 550x550x130	300x300 mm 400x400 mm 550x550 mm
Hall Hall	Basic set of four slats for an increase of 100 mm, fasteners are included. Fasteners included in the package	TWZN v100 300x300 TWZN v100 400x400 TWZN v100 550x550	300x300 mm 400x400 mm 550x550 mm
THE WALL	Additional set of four slats for an increase of 50 mm, fasteners are included. Fasteners included in the package	TWZN v50 300x300 TWZN v50 400x400 TWZN v50 550x550	300x300 mm 400x400 mm 550x550 mm

Chamber components with perforated grid, height 430 mm



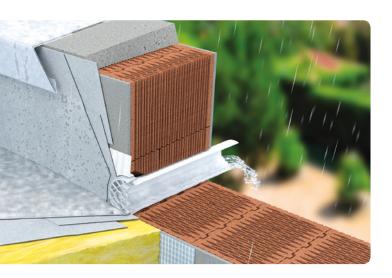
Chamber components with non-perforated grid, height 280 mm





Through wall outlets

Drainage of flat roofs, terraces and balconies



Through wall outlets - round

		Dimensions [mm]							
Туре	DN	а	b	С	d	е	f	g	h
TWC(E) 50	50	600	24	104	88	13	62	22	62
TWC(E) 75	70	600	24	104	88	13	62	22	62
TWC(E) 110	100	600	24	174	157	13	60	22	60
TWC(E) 125	125	600	24	174	157	13	60	22	60
TWC(E) 160	150	600	24	174	157	13	60	22	60

Through wall outlets - squared

	Dimensions [mm]							
Туре	a x b	С	d	е	f	g	h	
TWC 50x100	50x100	500	4	92	38	8	50	
TWC 50x150	50x150	500	4	92	38	8	50	
TWC 100x100	100x100	500	4	142	88	8	50	
TWC 100x150	100x150	500	4	142	88	8	50	
TWC 100x300	100x300	500	4	142	88	8	50	

Basic type – round through wall outlet of 600 mm length

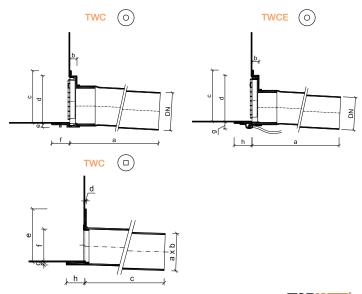
- Construction with a lowered drain edge
- Integrated sleeve of waterproofing membrane
- Protective and removable grid included in each through wall outlet
- Possibility to extend up to 1500 mm
- Through wall outlet made of UV stable PVC
- Heated version ensures reliable drainage even in winter season
- Possibility of connection to a rain hopper or to downpipes DN 50, DN 70, DN 100, DN 125 and DN 150

Basic type - throught wall outlet squared of 500 mm lenght

- Five basic dimensions
- Same dimensions as round version
- Custom made dimensions to order (always 50 mm)

Complementary type – mini through wall outlet of 200 mm length

- For drainage of small terraces and balconies
- Low construction height 60 mm
- Special sleeve for connection to trowelled insulationi





TOPWET through wall outlets with integrated bitumen sleeve

BIT

	Version	Туре	Dimensions
-	TOPWET round through wall outlet with an integrated sleeve of modified bitumen strip and with a leaf guard. Length 600 mm, option of extension up to 1500 mm on request.	TWC 50 BIT TWC 75 BIT TWC 110 BIT TWC 125 BIT TWC 160 BIT	DN 50 DN 70 DN 100 DN 125 DN 150
	TOPWET round through wall outlet with an integrated sleeve of modified bitumen strip and with a leaf guard, heated with 230 V with a supply cable. Length 600 mm, option of extension up to 1500 mm on request.	TWCE 50 BIT TWCE 75 BIT TWCE 110 BIT TWCE 125 BIT TWCE 160 BIT	DN 50 DN 70 DN 100 DN 125 DN 150
	TOPWET squared through wall outlet with an integrated sleeve of modified bitumen strip. Outlet spout material is PVC, white colour. Length 500 mm, option of extension up to 1000 mm on request.	TWC 50x100 BIT TWC 50x150 BIT TWC 100x100 BIT TWC 150x150 BIT TWC 100x300 BIT	50/100 50/150 100/100 150/150 100/300

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE - suitable for liquid waterproofing). For more information please see page 9.

TOPWET through wall outlets with integrated PVC sleeve

PVC

	Version	Туре	Dimensions
-	TOPWET round gutter spout with an integrated sleeve of PVC membrane and with a leaf guard. Length 600 mm, option of extension up to 1500 mm on request.	TWC 50 PVC TWC 75 PVC TWC 110 PVC TWC 125 PVC TWC 160 PVC	DN 50 DN 70 DN 100 DN 125 DN 150
	TOPWET round through wall outlet with an integrated sleeve of PVC membrane and with a leaf guard, heated with 230 V with a supply cable. Length 600 mm, option of extension up to 1500 mm on request.	TWCE 50 PVC TWCE 75 PVC TWCE 110 PVC TWCE 125 PVC TWCE 160 PVC	DN 50 DN 70 DN 100 DN 125 DN 150
-	TOPWET squared through wall outlet with an integrated sleeve of waterproof membrane based on PVC. Outlet spout material is PVC, white colour. Length 500 mm, option of extension up to 1000 mm on request.	TWC 50x100 PVC TWC 50x150 PVC TWC 100x100 PVC TWC 150x150 PVC TWC 150x300 PVC	50/100 50/150 100/100 150/150 100/300

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE - suitable for liquid waterproofing). For more information please see page 9.

TOPWET MINI through wall outlet



TOPWET MINI through wall outlet. Length 200 mm, option of ea	xtension up
to 1500 mm on request.	

Version

TWC 40 BIT MINI DN 40 TWC 40 PVC MINI DN 40 TWC 40 STE MINI DN 40 STE - for cold liquid applied waterproofing

Туре



Dimensions

Safety overflows

Safety oveflows of flat roofs, terraces and balconies



Safety overflows - round

	Dimensions [mm]							
Туре	DN	a*	b	С	d	е		
TWPP 50	50	600	20	56	30	97		
TWPP 75	70	600	20	81	30	84		
TWPP 110	100	600	20	116	30	67		
TWPP 125	125	600	20	131	30	59		

*optionally extension up to 1500mm to order

Safety overflows - squared

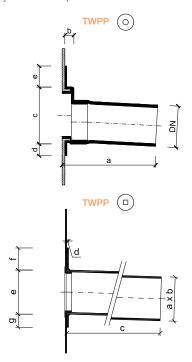
	Dimensions [mm]							
Туре	axb	C*	d	е	f	g		
TWPP 50x100	50x100	500	4	50	50	30		
TWPP 50x150	50x150	500	4	50	50	30		
TWPP 100x100	100x100	500	4	100	50	30		
TWPP 100x150	100x150	500	4	100	50	30		
TWPP 100x300	100x300	500	4	100	50	30		

Round safety overflow of 600 mm length

- Made of UV stabile PVC
- Integrated sleeve of waterproofing membrane
- Produced at DN 50, 70, 100 and 125
- Possibility to extend up to 1500 mm
- Recommended overlap over the facade is at least 100 mm

Squared safety overflow of 500 mm length

- Five basic variants in stock
- Made of UV stable, hardened PVC
- Integrated sleeve of waterproofing membrane
- Recommended overlap over the facade is at least 100mm
- Possibility of custom-made production in multiples of 50 mm up to 200 x 800 mm
- Optionally extension up to 1000 mm







TOPWET safety overflows with integrated bitumen sleeve

BIT

_	Version	Туре	Dimensions
•	TOPWET round safety overflow with an integrated sleeve of modified bitumen strip and with a leaf guard. Length 600 mm, option of extension up to 1500 mm on request.	TWPP 50 BIT TWPP 75 BIT TWPP 110 BIT TWPP 125 BIT	DN 50 DN 70 DN 100 DN 125
	TOPWET squared safety overflow with an integrated sleeve of modified bitumen strip. Outlet spout material is PVC, white colour. Length 500 mm, option of extension up to 1000 mm on request.	TWPP 50x100 BIT TWPP 50x150 BIT TWPP 100x100 BIT TWPP 150x150 BIT TWPP 100x300 BIT	50/100 50/150 100/100 150/150 100/300

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE - suitable for liquid waterproofing). For more information please see page 9.

TOPWET safety overflows with integrated PVC sleeve

PVC

Version	Type	Dimensions
TOPWET round safety overflow with an integrated sleeve of PVC membrane and with a leaf guard. Length 600 mm, option of extension up to 1500 mm on request.	TWPP 50 PVC TWPP 75 PVC TWPP 110 PVC TWPP 125 PVC	DN 50 DN 70 DN 100 DN 125
TOPWET squared safety overflow outlet with an integrated sleeve of a waterproof membrane based on PVC. Outlet spout material is PVC, white colour. Length 500 mm, option of extension up to 1000 mm on request.	TWPP 50x100 PVC TWPP 50x150 PVC TWPP 100x100 PVC TWPP 150x150 PVC TWPP 100x300 PVC	50/100 50/150 100/100 150/150 100/300

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE - suitable for liquid waterproofing). For more information please see page 9.

Aluminium shaft

Accessories Version Type Dimensions (Height / Width) Aluminium shaft for TOPWET through wall outlets and safety overflows for roofs with ballast. TWS C 250x150x100 TWS C 250x150x200 TWS C 250x150x200

Emergency drainage

Accessories Version Type Overflow height Safety overflow for drainage in the area. Flooding height 40 - 120mm. Compatible with terrace, roof outlets and their attachments. It includes 3 ring seals and a protective perforated leaf guard.



Vents and penetrations

Ventilation of roofs, sewerage and cable penetrations



Ventilation of flat roofs and piping ventilation

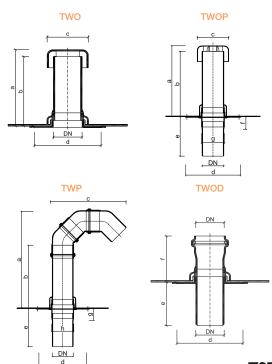
		Section			Dime	nsions	[mm]		
Туре	DN	[cm ²]	a*	b*	С	d	e*	f	g
TWO a TWOP 50	50	15	360	332	110	250	200	60	56
TWO a TWOP 75	70	37	360	332	110	250	200	60	81
TWO a TWOP 110	100	85	360	332	160	250	200	60	116
TWO a TWOP 125	125	111	360	332	160	250	200	60	131

Penetration for cables and base plate

		Section			Di	mens	ions [r	nm]		
Туре	DN	[cm ²]		b*	С	d	e*	f*	g	h
TWP a TWOD 50	50	15	450	332	260	250	200	90	60	56
TWP a TWOD 75	70	37	480	332	310	250	200	90	60	81
TWP a TWOD 110	100	85	520	332	400	250	200	100	60	116
TWP a TWOD 125	125	111	545	332	440	250	200	100	60	131

^{*} optionally extension up to 1500 mm to order

- Simple construction for effective ventilation of double-skin roofs
- Fixing points for firm attachment to the substrate of the upper coating
- Integrated waterproof sleeve for reliable connection to the roofing
- Completely new products for professional termination of sewerage ventilation piping
- Applicable for all commonly used DN 50, DN 70, DN 100 and DN 125 ventilation piping
- Base plate enables air-tight penetration through a vapour resistant barrier
- Reliable solution for leading cables, hoses and other media carriers out on the roof
- Professional penetration through waterproof that does not require either ordinary inspections or maintenance



Vents, sewerage ventilation, penetrations for cables with integrated bitumen sleeve

BIT

	Version	Туре	Dimensions
I	TOPWET roof vent with an integrated sleeve of modified bitumen strip, including a rain cap. Height 300 mm, option of extension up to 500 mm on request.	TWO 50 BIT TWO 75 BIT TWO 110 BIT TWO 125 BIT DN 150 page 40	DN 50 DN 70 DN 100 DN 125
+	TOPWET sewerage ventilation for connection to vent piping with an integrated sleeve of modified bitumen strip, including a rain cap. Height above insulation 300 mm (custom made 500 mm), depth under insulation 200 mm, option of extension up to 1500 mm on request. In combination with TWOD usable from 160 mm thermal insulation height.	TWOP 50 BIT TWOP 75 BIT TWOP 110 BIT TWOP 125 BIT DN 150 page 40	DN 50 DN 70 DN 100 DN 125
7	TOPWET penetration for cables with an integrated sleeve of modified bitumen strip. Depth under insulation 200 mm, above insulation up to 500 mm, option of extension up to 1500 mm on request. In combination with TWOD usable from 160 mm thermal insulation height.	TWP 50 BIT TWP 75 BIT TWP 110 BIT TWP 125 BIT DN 150 page 40	DN 50 DN 70 DN 100 DN 125
-	Penetration through the vapor barrier TOPWET to connect TWOP and TWP to the vapor barrier with an integrated sleeve of modified bitumen strip. Depth under insulation 200 mm, option of extension up to 1500 mm on request. This product can not be used as a penetration element for the lower structure.	TWOD 50 BIT TWOD 75 BIT TWOD 110 BIT TWOD 125 BIT DN 150 page 40	DN 50 DN 70 DN 100 DN 125

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE – suitable for liquid waterproofing). For more information please see page 9. Extended version subject to price increase. Please contact us for further details.

Vents, sewerage ventilation, penetrations for cables with integrated PVC and PE sleeve

PVC

	Version	Туре	Dimensions
	TOPWET roof vent with an integrated sleeve of hydro-insulation foil based on PVC, including a rain cap. Height 300 mm, option of extension up to 500 mm on request.	TWO 50 PVC TWO 75 PVC TWO 110 PVC TWO 125 PVC DN 150 page 40	DN 50 DN 70 DN 100 DN 125
-	TOPWET sewerage ventilation for connection to vent piping with an integrated sleeve of hydro-insulation foil based on PVC, including a rain cap. Height above insulation 300 mm (custom made 500 mm), depth under insulation 200 mm, option of extension up to 1500 mm on request. In combination with TWOD usable from 160 mm thermal insulation height.	TWOP 50 PVC TWOP 75 PVC TWOP 110 PVC TWOP 125 PVC DN 150 page 40	DN 50 DN 70 DN 100 DN 125
	TOPWET penetration for cables with an integrated sleeve of hydro-insulation foil based on PVC. Depth under insulation 200 mm, above insulation up to 500 mm, option of extension up to 1500 mm on request. In combination with TWOD usable from 160 mm thermal insulation height.	TWP 50 PVC TWP 75 PVC TWP 110 PVC TWP 125 PVC DN 150 page 40	DN 50 DN 70 DN 100 DN 125
1	Penetration through the vapor barrier TOPWET to connect TWOP and TWP to the vapor barrier with an integrated sleeve of hydro-insulation foil based on PE. Depth under insulation 200 mm, option of extension up to 1500 mm on request. This product can not be used as a penetration element for the lower structure.	TWOD 50 PE TWOD 75 PE TWOD 110 PE TWOD 125 PE DN 150 page 40	DN 50 DN 70 DN 100 DN 125

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE – suitable for liquid waterproofing). For more information please see page 9. Extended version subject to price increase. Please contact us for further details.



Vents and penetrations

Ventilation of roofs, sewerage and cable penetrations



Ventilation of flat roofs and sewerages

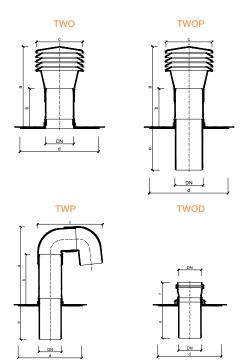
		Cross		Dim	ensions	[mm]	
Туре	DN	section [cm²]	a*	b*	С	d	e*
TWO a TWOP 160	150	186	510	270	260	345	300

Cable penetrations and the baseplate

		Cross		Dimensions [mm]					
Туре	DN	section	a*	b*	С	d	e*	f*	
		[cm ²]							
TWP a TWOD 160	150	186	610	420	450	345	300 (200**)	125	

^{*} extension up to 1500 mm on request

- A simple construction for effective ventilation of two-membrane roofs
- Anchoring points for fixed anchoring in the load-bearing structure of the roof membrane
- Integrated waterproof sleeve for reliable connection to the roofing
- Professional products from a UV stable material
- Usable for all the common ventilation pipes DN 150
- A reliable solution for leading the cables and other media carriers to the roof
- Professional penetration through waterproof not requiring any checks or maintenance





^{**} lenght by the TWOD product

Vents, sewerage ventilation, penetrations for cables with an integrated bitumen sleeve

BIT

Version	Туре	Dimensions
TOPWET roof vent with an integrated sleeve of a modified including a rain cap. Height 300 mm, option of extension request.		DN 150
TOPWET sewerage ventilation for connection to the ventilation integrated sleeve modified bitumen strip, including a rain co above the insulation is 300 mm (custom made 500 mm), the insulation is 300 mm, on request it is possible to extend up to the content of t	ver. The height depth below the	DN 150
TOPWET penetration for cables with an integrated sleeve strip, including a rain cover. Depth below the insulation is insulation up to 500 mm, on request it is possible to extern	300 mm, above the	DN 150
Penetration through the vapor barrier TOPWET to connect to the vapor barrier with an integrated sleeve of modified bunder insulation 200 mm, option of extension up to 1500 r product can not be used as a penetration element for the	itumen strip. Depth nm on request. This	DN 150

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE – suitable for liquid waterproofing). For more information please see page 9. Extended version subject to price increase. Please contact us for further details.

Vents, sewerage ventilation, penetrations for cables with an integrated PVC and PE sleeve

PVC

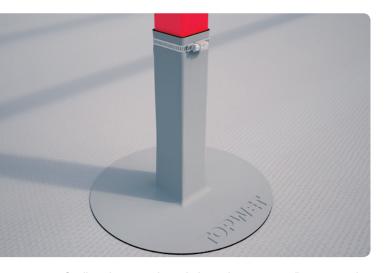
	Version	Туре	Dimensions
I	TOPWET roof vent with an integrated sleeve of hydro-insulation foil based on PVC, including a rain cap. Height 300 mm, option of extension up to 500 mm on request.	TWO 160 PVC	DN 150
1	TOPWET sewerage ventilation for connection to the ventilation pipe with an integrated sleeve waterproof membrane on PVC basis, including a rain cover. The height above the insulation is 300 mm (custom made 500 mm), the depth below the insulation is 300 mm, on request it is possible to extend up to 1500 mm.	TWOP 160 PVC	DN 150
1	TOPWET penetration for cables with an integrated sleeve waterproof membrane on PVC basis, including a rain cover. Depth below the insulation is 300 mm, above the insulation up to 500 mm, on request it is possible to extend up to 1500 mm.	TWP 160 PVC	DN 150
1	Penetration through the vapor barrier TOPWET to connect TWOP and TWP to the vapor barrier with an integrated sleeve of hydro-insulation foil based on PE. Depth under insulation 200 mm, option of extension up to 1500 mm on request. This product can not be used as a penetration element for the lower structure.	TWOD 160 PE	DN 150

Option to supply with custom made sleeve (EPDM, TPO, FPO, PE, ECB, EVA, STE – suitable for liquid waterproofing). For more information please see page 9. Extended version subject to price increase. Please contact us for further details.



Sealing sleeves – shaped pieces for waterproofing penetrations through PVC membranes

System solution for penetration of hydro-insulation layer



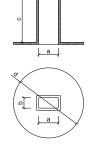
Shaped pieces

- Wide range of dimensions
- Open design for penetrations without a put on possibility
- Height of all shaped pieces 150 mm
- System treatment of penetrations
- For round and sqaured penetrations

Sealing sleeves – shaped pieces for waterproofing penetrations of PVC membranes

	Dime	nsions [mm]
Type = Dimensions "a" [mm]	C**	d***
TWUT a TWOT 11*, 12*, 14*, 15, 16, 17, 18, 20, 21, 22, 24, 25, 30	150	150
TWUT a TWOT 32, 35, 40, 42, 43, 45, 50	150	150
TWUT a TWOT 51, 56, 60, 63, 65, 70, 72, 75, 76, 77, 80	150	180
TWUT a TWOT 83, 90, 100, 102, 105, 110, 114	150	250
TWUT a TWOT 120, 125, 130, 138, 140, 150, 160, 170	150	275
TWUT a TWOT 180, 200	150	350
	Dime	nsions [mm]
Type = Dimensions "a" x "b" [mm]	C**	d***
TWUT a TWOT 8x35, 8x40, 10x30, 10x35, 10x40, 15x15, 16x16, 20x20, 15x35	150	150
TWUT a TWOT 15x40, 20x35, 20x40, 25x25, 25x30, 25x35, 30x30, 27x40, 30x40, 35x35	150	150
TWUT a TWOT 10x60, 8x50, 15x50, 15x60, 10x50, 20x50, 20x60, 25x45, 25x50, 30x50	150	180
$TWUT\ a\ TWOT\ 30x60,\ 35x50,\ 40x40,\ 40x45,\ 40x50,\ 40x55,\ 40x60,\ 45x45,\ 50x50,\ 20x70,\ 35x70$	150	180
TWUT a TWOT 40x70, 50x70, 8x80, 25x80, 40x80, 50x80, 8x90, 10x90, 10x100, 60x60, 15x100	150	250
TWUT a TWOT 55x85, 70x70, 80x80, 40x90, 50x100, 60x100, 10x120, 60x120, 10x140	150	250
$TWUT\ a\ TWOT\ 50x150,\ 100x100,\ 50x120,\ 60x120,\ 70x120,\ 120x120,\ 75x145,\ 15x150,\ 10x160$	150	275
TWUT a TWOT 100x150, 120x140, 80x160	150	300
TWUT a TWOT 140x140, 150x150, 160x160	150	350

^{*} only closed sealing sleeves ** on request can be delivered at a height of 300 mm *** on request can be delivered in diameters up to 350 mm





Sealing sleeves – shaped pieces for waterproofing penetrations through PVC membranes

Accessories

Version

Type (inner diameter / dimensions in mm)



Closed round shaped piece of PVC film designed for processing the penetration elements. The type indicates the internal diameter of the shaped piece in mm. The height of all cuffs is 150 mm. Material: homogenous foil based on mPVC, thickness of 1.5 mm. Color execution: light gray finish, the approximate number according to RAL 7035.

TWUT 70, 72, 75, 76, 77, 80, 83, 90, 100, 102, 105, 110, 114, 120, 125, 130, 138, 140, 150, 160, 170, 180, 200



Closed square shaped piece of PVC film designed for processing the penetration elements. The type indicates the internal dimensions of the shaped piece in mm. The height of all cuffs is 150 mm. Material: homogenous foil based on mPVC, thickness of 1.5 mm. Color execution: light gray finish, the approximate number according to RAL 7035.

TWUT 8x35, 8x40, 8x50, 8x80, 10x30, 10x35, 10x40, 10x50, 10x60, 10x90, 10x100, 12x100, 10x120, 50x120, 70x120, 10x140, 140x140, 10x160, 15x15, 15x35, 15x40, 15x50, 15x60, 15x80, 15x100, 15x150, 16x16, 17x82, 18x83, 20x20, 20x35, 20x40, 20x50, 20x60, 20x70, 25x25, 25x30, 25x35, 25x45, 40x45, 25x50, 27x40

TWUT 30x30, 30x40, 30x50, 30x60, 35x35, 35x50, 35x55, 35x70
TWUT 40x40, 40x50, 40x55, 40x60, 40x70, 40x80, 45x45,
TWUT 50x50, 50x70, 50x80, 50x100, 50x150, 55x85,
TWUT 60x60, 60x100, 60x120, 70x70, 75x145, 80x80, 80x160,
TWUT 100x100, 100x150, 120x120, 120x140, 150x150, 160x160



Open round shaped piece of PVC film designed for processing the penetration elements. The type indicates the internal diameter of the shaped piece in mm. The height of all cuffs is 150 mm. Material: homogenous foil based on mPVC, thickness of 1.5 mm. Color execution: light gray finish, the approximate number according to RAL 7035.

TWOT 15, 16, 17, 18, 20, 21, 22, 24, 25, 30, 32, 35, 40, 42, 43, 45, 50, 51, 56, 60, 63, 65, 70, 72, 75, 76, 77, 80, 83,

TWOT 90, 100, 102, 105, 110, 114, 120, 125, 130, 138, 140, 150, 160, 170, 180, 200



Open square shaped piece of PVC film designed for processing the penetration elements. The type indicates the internal dimensions of the shaped piece in mm. The height of all cuffs is 150 mm. Material: homogenous foil based on mPVC, thickness of 1.5 mm. Color execution: light gray finish, the approximate number according to RAL 7035.

TWOT 8x35, 25x35, 8x40, 25x45, 8x50, 8x80, 8x90, 10x30,10x35, 10x40, 10x50, 10x60, 25x80, 10x90, 10x100, 10x120, 10x140, 10x160, 15x15, 15x35, 15x40, 27x40, 40x45, 15x50, 15x60, 40x90, 15x100, 15x150, 70x120, 16x16,

TWOT 20x20, 20x35, 20x40, 20x50, 20x60, 20x70, 25x25, 25x30, 25x50, TWOT 30x30, 30x40, 30x50, 30x60, 35x35, 35x50, 35x70, TWOT 40x40, 40x50, 40x55, 40x60, 40x70, 40x80, 45x45, TWOT 50x50, 50x70, 50x80, 50x100, 50x120, 50x150, 55x85, TWOT 60x60, 60x100, 60x120, 70x70, 75x145, 80x80, 80x160, TWOT 100x100, 100x150, 120x120, 120x140, 140x140, 150x150, 160x160



Closed round shaped piece of PVC foil designed for treatment of cable penetrations with diameter up to 11 mm. The shaped piece height is 300 mm. Base diameter 150 mm.

TWUT 11/300





Sealing sleeves – shaped pieces for waterproofing penetrations through TPO membrane

Adjustment of penetrations



Shaped pieces

- Unique production technology
- Round versions only
- Wide range of small dimensions
- System treatment of penetrations

Dimensions [mm]

Adjustment of penetrations and solution of details made of TPO foil

Accessories



Closed round sleeve made of TPO-based foil designed for adjustment penetrations. The type indicates the inner diameter of the fitting in mm. Height of all cuffs 300 mm. Material: foil based on TPO th. 1.5 mm, types of foils are listed below. More information at www.topwet.eu

Version

Type

TWUT 11, 12, 14, 15, 16, 17, 18, 20, 21, 22, 24 TPO (FPO) TWUT 25, 30, 32, 35, 40, 42, 43, 50, 60, 65, 70 TPO (FPO) TWUT 75, 80, 90, 100, 110 TPO (FPO) TWUT 120, 125, 130, 140, 150, 160, 170, 180, 200 TPO (FPO)

Dimensions of sealing sleeves - fittings for penetrations of waterproofing from TPO foils

Type = Dimensions "a" [mm]	С	d
TWUT 11, 12, 14, 15, 16, 17, 18, 20, 21, 22, 24 TPO (FPO)	300	200
TWUT 25, 30, 32, 35, 40, 42, 43, 50, 60, 65, 70 TPO (FPO)	300	250
TWUT 75, 80, 90, 100, 110 TPO (FPO)	300	300
TWUT 120, 125, 130, 140, 150, 160, 170, 180, 200 TPO (FPO)	300	350

y a l

Fittings must always be stabilized against the effects of wind suction. For more information, see the assembly instructions at www.topwet.cz



Standard foil for the production of cuffs based on TPO

Accessories

Producer	Order code	Material	Approximate RAL
Bauder	TWUT FPO THERMOPLAN GREY	FPO	7001
Bauder	TWUT_FPO THERMOPLAN PEARL WHITE	FPO	1013
Mapei	TWUT_TPO MAPEPLAN WHITE	TPO	9010
Mapei	TWUT_TPO MAPEPLAN DARK GREY	TPO	7012
Sika	TWUT_FPO SARNAFIL GREY	FPO	7040
Elevate	TWUT_TPO ULTRAPLY WHITE	TPO	9010

Note: These are roofing foils with a reinforcing insert.



Adjustment of penetrations and details

Other roof elements



Details

Adjustment of inner and outer corners

Endless jubilee bands

- Designed for highly corrosive places
- The endless band enables the production of clips in any diameter

Heat shrink tubes

- New dimensions 265/75
- UV stabil
- Penetration waterproofing on the roof
- System solution

Adjustment of penetrations and solution of details from PVC foil

Accessories



Cone (KUZ) and a bellows (VLN) fittings of homogenous foil based on mPVC.

Color: SV - light grey, TM - dark grey

Туре

TW KUZ TW VLN



Endless jubilee band completely made of stainless steel with independent lock pieces enable production of jubilee bands of any diameter. Locks packed by 25 pcs. Band length 3 m or 25 m. Material: stainless chromium-nickel steel. The lock pieces have a zinc coated stainless steel screw. Zinc serves as a lubricant, without this the clamp is hard to tighten.

TWSP NEK 3 – band width 8 mm
TWSP NEK 25 – band width 8 mm
TWSP ZAM – band width 8 mm
TWSP NEK 25 s14 – band width 14 mm
TWSP ZAM s14 – band width 14 mm



Heat shrink tube with glue for general use in the temperature range from -55 ° C to 105 ° C. Made from modified polyolefin. The tubes are highly resistant to solvents and chemicals. Suitable for universal industrial usage or as an electrical protection of all types of plastic cables. The minimum shrink temperature of 120 °C using hot air or soft yellow flame. The dimension marked with * is the dimension for the maximum shrink.

Version

TWH 22/6* TWH 115/34* TWH 33/8* TWH 140/42* TWH 55/16* TWH 160/50* TWH 75/22* TWH 235/65* TWH 265/75*



Edge dividers

Other roof elements

- For roofs with load increasing layer of gravel and pavement profile completion
- Aluminum moulding for all types of waterproof systems
- A wide selection of dimensions
- Custom production
- Easy installation
- Connecting piece as a part of each moulding
- The length of 2 m
- Custom made TPO versions



Edge dividers

Accessories





	Version	Type	height / base / length
pavement profile. In moulding of 2000 rethe blank of all kind by 10 mm bending connection to another ordered quantity	cofs with a load increasing layer of gravel and the completion of the Material: Aluminum with the thickness of 1,5 mm, the length of the mm. The moulding has holes – every 250 mm - for the passage of ds of waterproof systems. The stiffness of the moulding is secured at the ends of both arms. Supplied with connecting piece for easy ther moulding; the delivery time of the custom moulding depends on ty. Mounting the moulding to the base is done using a waterproof ight of product to order is 200 mm.	TW KL AL 30 TW KL AL 40 TW KL AL 50 TW KL AL 60 TW KL AL 70 TW KL AL 80 TW KL AL 90 TW KL AL 100 TW KL AL 100	30 mm / 65mm / 2000 mm 40 mm / 65mm / 2000 mm 50 mm / 65mm / 2000 mm 60 mm / 65mm / 2000 mm 70 mm / 65mm / 2000 mm 80 mm / 80mm / 2000 mm 100 mm / 80mm / 2000 mm mm / 80mm / 2000 mm
pavement profile for plastic-coated meta 2000 mm. The stiff arms. Supplied with time of the custom there are high freque mounting. A difference of the custom the coatenate of the custom the coatenate of the custom the cu	ofs with a load increasing layer of gravel and the completion of the r roofs and terraces with the main PVC waterproof layer. Material: al sheet with the total thickness of 1.6 mm, length of the moulding of less of the moulding is secured by bending of 10 mm at ends of both a connecting piece for easy connection of another moulding. The delivery made moulding is depending on the ordered quantity. At the moulding lency welded 3-5 pieces of blanket of foil mPVC 80×130 mm for easy nt color execution is available for a surcharge of +20 %. In other colour acces of blanket of the mPVC foil are not part of the edge dividers.	TW KL 40 TW KL 50 TW KL 65 TW KL 90	40 mm / 65mm / 2000 mm 50 mm / 65mm / 2000 mm 65 mm / 65mm / 2000 mm 90 mm / 65mm / 2000 mm
strut, which prever	uminum skirting boards from a height of 130 mm includes an inclined ats deformation of the bar due to forces acting on it. The package of struts, including 8 pieces of anchoring rivets, which are used for	TW KL AL VZPER	The size of the strut is variable according to the height of the bar

anchoring. The struts are distributed evenly along the length of the bar.



Dimensions of moulding:

Other roof elements

Catchers, supports, penetrations and other accessories

Snow catcher for roofs with the main PVC waterproof sleeve

Accessories

	Version	Type D	elivery time /minimum purchase
T	Metal sheet snow catcher. A shaped piece for catching of snow layer and protecting its sliding from the roof structure, for roofs with the main waterproof sleeve of PVC. Light grey colour.	TW SZ TW SZ 250x250	3 days / 5 pcs 4 weeks / 50 pcs
	Metal sheet snow catcher with an integrated waterproof sleeve. A shaped piece for catching of snow layer and protecting its sliding from the roof structure, for roofs with the main waterproof sleeve of PVC. Light grey colour.	TW SZM TW SZM 250x250	3 days / 5 pcs 4 weeks / 50 pcs
1	Metal sheet snow catcher. A shaped piece for catching of snow layer and protecting its sliding from the roof structure, for roofs with the main waterproof sleeve of PVC. RAL colours.	TW SZ RAL	4 weeks / 50 pcs

^{*} Version z vybraných druhů TPO/FPO materiálů na dotaz

Snow catcher for roofs with the main PVC waterproof layer - other



Holder for tubular snow trap with an integrated sleeve of foil based on mPVC made of the stainless steel, designed for mounting and fixing of one or two pipes with the diameter of up to 28 mm. The system design should always be made by a responsible designer, depending on particular conditions. Piping is not included in the supply.

Type	Delivery time /minimum purchas
TW SZ 2TR	3 weeks / 3 ks

Lightning conductor holder



A plastic holder for lightning conductors for fitting the conductors on flat roofs. Colour: grey, black, green or red. It can be supplied with a cut-out part of the mPVC foil sleeve.

Version

Type	Height
TW HR 10	120 mm
TW HR 12	120 mm
TW HR 10 + MANŽETA	120 mm
TW HR 12 + MANŽETA	120 mm

Foil cleaner on mPVC basis



Version	Type	Volume
Highly effective foil cleaner on PVC basis.	TW CLEANER 5 TW CLEANER 1 TW CLEANER 0,25	51 11 0,251



Other roof accessories



Formwork element for roof outlets



The formwork polyurethane part is designed to create a suitable bed in the load-bearing roof construction for installing vertical roof drains. No core drilling, thermal bridges and the consumption of heat insulator around the outlet are eliminated.

Version

Type
TW BED

Dimensions 500x500x220mm

Heat insulating element for roof extensions

250x250 mm, height 100 mm and 200 mm.



The heat insulating element made of EPS 150 polystyrene foam is intended for extension pieces for the roof outlet. The size of the part is $600 \times 600 \times 100$ mm.

Version

Type TWN TI Dimensions

600x600x100mm

Aluminium shafts



Aluminum shafts with grid for roof and sanitation outlets, for roofs with a gravel

Version

Aluminum shafts for roof and sanitation outlets, for roofs with a gravel. Dimensions

TWS 250x250x100 TWS 250x250x200 Dimensions 250x250x100 mm 250x250x200 mm

Aluminum shafts with grid for roof and sanitation outlets, for roofs with a gravel. Dimensions 250x250 mm, height 100 mm and 200 mm.

TWS 250x250x100+TWSK TWS 250x250x200+TWSK

250x250x100 mm 250x250x200 mm

Aluminum shafts for roof and sanitation outlets, for roofs with a gravel. Dimensions 300x300 mm, height 100 mm and 200 mm.

TWZ AL 300x300x100 TWZ AL 300x300x200 300x300x100 mm 300x300x200 mm



Ventilation turbines

Ventilation turbines

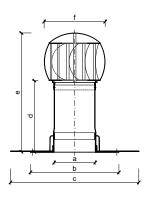


NEWS

- For air ventilation (even with very high humidity), cellars, garages, radon subsoil, bathroom, toilets, roof parts, sewerage, etc.
- Polyamide PA6 and PVC base with integrated insulation sleeve as required
- Turbine made of UV-stable ASA polymer in black
- Greater suction power than conventional vents

Ventilační turbína TOPWET

			Dimensi	ons [mm]			Suction	power
Туре	а	b	С	d*	е	f	v [km/h]**	V [m3/h]***
TWO TUR 160 BIT	160	345x345	500x500	241	463	236	3	51
							6	142
							8	182
							10	248
TWO TUR 160 PVC	160	345x345	500x500	241	463	236	3	51
							6	142
							8	182
							10	248



^{**} air speed, *** air amonut



Version	Type	Dimensions
TOPWET ventilation turbine with an integrated sleeve made of modified bitumen strip. Height above insulation 250 mm.	TWO TUR 160 BIT	DN 150
TOPWET ventilation turbine with integrated sleeve made of mPVC-based waterproofing foil. Height above insulation 250 mm.	TWO TUR 160 PVC	DN 150



^{*} custom made extension up to 500 or 1000 mm

Solutions for multi storey car parks – traverse outlets

Drainage of car parks and traverse areas

Travers outlets and attachments

- Made of stainless steel
- Extreme mechanical resistance against damage
- Can be supplied in a heated version, see page 11

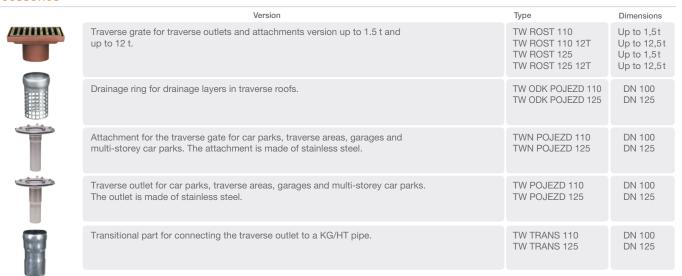
Traverse grates

- Divided according to the permitted load: up to 1.5 t and up to 12 t
- Removable grate for easy cleaning and inspection



Solutions for multi storey car parks - traverse outlets

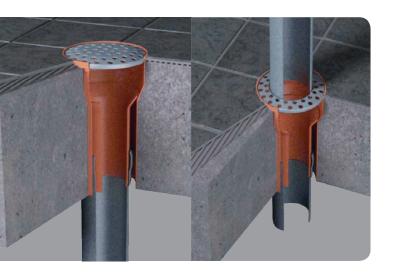
Accessories





Continuous balcony outlets and steel pipes

Drainage of balconies and terraces



- A continuous drainage system enables draining water from the individual balconies without using a side connection for every floor
- The outlets and pipes are made from hot-dip galvanized steel, which ensures higher mechanical resistance against external influences
- Simple assembly and maintenance
- Connection to KG and HT systems using a simple transitional piece
- Preparation of a technical solution for a specific construction free of charge

LORO waste piping





It can be supplied including all the accessories, elbows, branching, sleeves, reductions, transmission pieces etc.

Technical advice about the system and assistance at the stage of project documentation is provided within the scope of technical support free of charge.



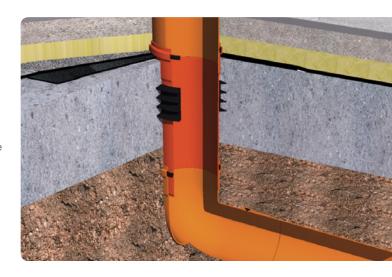




Penetrations for the substructure

Solution with an integrated waterproof sleeve

- Systematic and reliable solution
- Full technical support
- For any penetration, custom-made solution
- Made from solid materials
- Resistant to abrasion
- High strength and rigidity, shock-proof and resistant to pressure
- Trouble-free installation at low temperature



Penetrations for the substructure



Version

Penetrations through the substructure. Fittings for both a white tub and a black tub. Possible solution of any penetration, such as penetrations for KG/HT sewer pipes, water pipes, gas pipes, power cables etc.

We offer free of charge technical consultancy for the whole system, assistance at the stage of project documentation and calculation of individual price quotes.

Accessories





Anti-slide pavements

Safe movement on a flat roof



- For easy creating of anti-slide routes
- Highly durable and maintenance-free PVC product
- Intended for flat roofs with the main hydro-insulation layer from an mPVC based foil
- The size of each element is 600 x 600 mm
- Elements are UV resistant
- Board thickness 7 mm
- Connected with the roof surface by means of hot air
- Color versions: gray brindle

Anti-slide pavements



Version

Walkable part designed for the creation of corridors on the roof surface with the main waterproofing layer made of mPVC-based foil. Standardized dimensions 600 x 600 mm, thickness 7 mm. Colour: gray brindle

Type marking

TW-WALK

What are the benefits of this product?

- Excellent resistance to weathering, including UV radiation i
- Deep surface texture for high slip resistance
- Easy drainage of rainwater
- Weldability with FATRAFOL PVC-P films with hot air

TW WALK

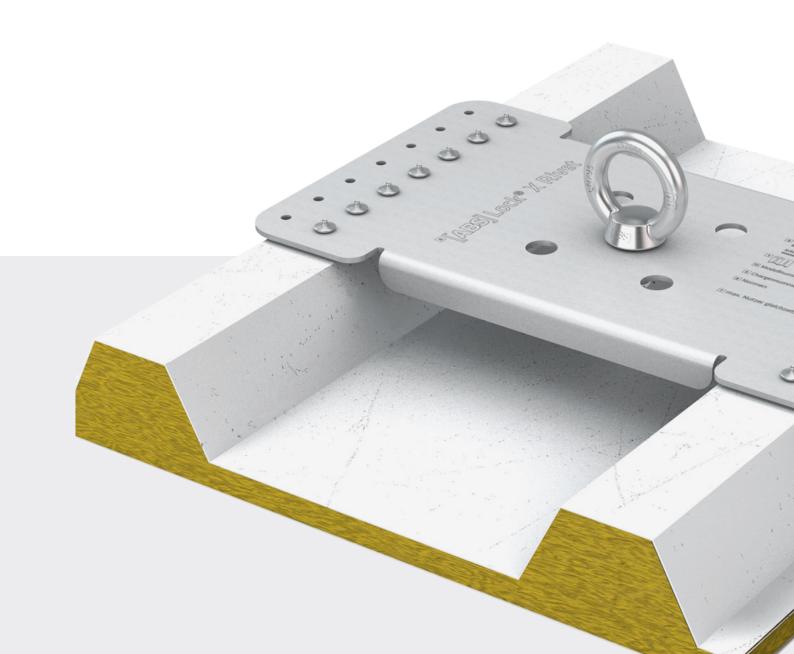
Easy and quick installation

What are the reasons why the use of anti-slide pavements can be beneficial?

- Prevention of damage to the roof surface
- Extending the service life of the waterproofing layer
- Workers safety and reduction of risk injuries
- Accessibility for maintenance and service
- Compliance with regulation and standards



TOPSAFE®



What services are provided in TOPSAFE

Proposals, implementation & support



- We provide own delivery and assembly of anchoring points
- Available net of trained certified assembly companies
- We perform inspections and revisions of installed systems
- Elaboration of design proposals free of charge
- Proposal of satefy solutions determined to your roof
- Details of anchoring points in DWG for free of charge download
- We offer only stainless steel products certified in accordance with valid standards

Why must safety be ensured on roofs?

Fulfillment of standard and legislative requirements:

- Government Regulation No. 362/2005 Coll., regarding safety and health protection at work
- ČSN 73 1901-1 Roof designing
- Act No. 88/2016 Coll., which regulates other requirements for safety and health protection at work

When fall protection is necessary?

For height differences of more than 1.5 m, if there is a risk of:

- falling from the roof edge
- sliding off the roof at a slope of more than 25 degrees
- falling through the roof (e.g. roof skylight)

What are the requirements for anchor points?

- certification according to the ČSN EN 795 standard carried out in an accredited testing laboratory
- must resist corrosion the most suitable is the stainless steel type, incl. anchoring materials

We are able to propose a specific solution for your roof free of charge



The key to correctly determining the anchor points

Roof structure

- specifications of the supporting structure and covering
- thermal insulation thickness

Element location

- endpoint, corner point
- intermediate

For safe and correct functionality of the safety system it is not enough just to choose a suitable anchor point. The entire proposal is needed adapt to all the requirements and conditions of a specific building.

We are able to propose a specific solution for your roof free of charge



Marking of TOPSAFE products for easy selection



Can be complemented with a reinforcing pipe - then it can be used as end and turn points in the systems with permanent anchoring lines from a stainless steel rope



Suitable for use as end and turn points in the systems with permanent anchoring lines from a stainless steel rope



Suitable for use only as an intermediate point in the straight sections in the systems with permanent anchoring lines from a stainless steel rope



Made of stainless steel





Suitable for use as corner and turn points in the systems with permanent anchoring lines from a stainless steel rope



Maximum number of users attached to the anchoring device



Can be loaded in both vertical and horizontal direction





Can be loaded in horizontal / vertical direction

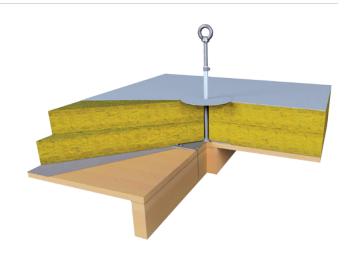
Anchoring points for trapezoid and sandwich constructions



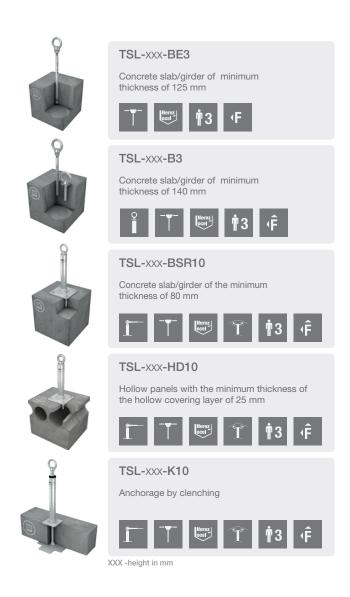
Anchoring points for wooden constructions







Anchoring points for concrete construction







Anchorage by clenching











TSL-xxx-BSL3

Concrete slab with the minimum thickness of 110 mm















TSL-RB3

Concrete slab with the minimum thickness of 130 mm









TSL-B4

Concrete slab with the minimum thickness of 130 mm









TSL-B5

Concrete slab with the minimum thickness of 80 mm







Anchoring points for inclined roofs



TSL-DH04P

Wooden girder (rafter) with the minimum dimensions of 60 x 120 mm









TSL-F5

Stainless steel and galvanized sheets with minimum thickness of 0,5 mm











TSL-DH04Z

Wooden girder (rafter) with the minimum dimensions of 60 x 120 mm









TSL-F4

Stainless steel and galvanized sheets with minimum thickness of 0,5 mm

















TSL-LOOP

Wooden girder (rafter) with the minimum dimensions of 60 x 120 mm









TSL-F4ZW

Stainless steel and galvanized sheets with minimum thickness of 0,5 mm













Anchoring points for rope suspension work



TSL-xxx-BSR10AS

Concrete slab with the minimum thickness of 120 mm











TSL-xxx-STSR10

Minimum slab wide 150 mm













TSL-0-ST3

Minimum steel thickness 5 mm



TSL-0-B3

Concrete slab with the minimum thickness of 140 mm



Collective protection



Railing anchored to the base by fusing



Free-standing railing with weights



Bars for illumination strips



Bars for roof skylights

Rail systems, Systems for ladders

Rail systems

- It can also be used as a system for work when suspended on rope
- Smooth movement along the whole length of rail lines
- Possible turning thanks to a curved rail and a special motorized element

Systems for ladders

- Security with every step when moving on a ladder
- Simple solution with high efficiency
- Easy and intuitive use







Industrial systems and Roof access constructions



Industrial systems

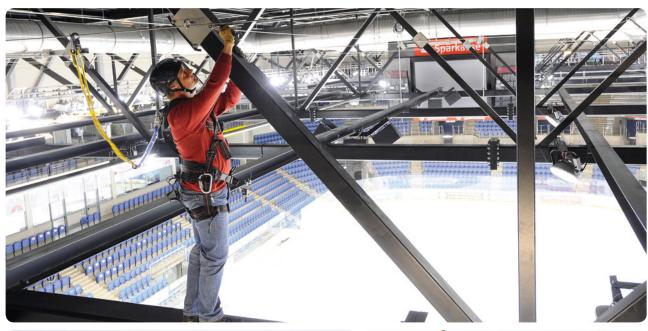
- Security of workers in industrial buildings, such as halls, production plants, warehouses etc.
- Possibility of securing footbridges, crane tracks, servicing places and rack systems
- For industrial systems, it is possible to use basic anchoring points specified in the previous chapters according to the types of the base construction

Roof access constructions

- Made of high quality aluminium
- Very light construction compared to stainless steel
- Low static load of building structures











Anchoring points for steel constructions





TSL-XXX-STSL3

Max. flange width 55 mm (calculated from the vertical part) Min. steel thickness 5 mm











TSL-xxx-STK10

Steel girder with the maximum flange width of 150 mm











Industrial systems



TSL-STR3

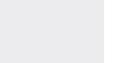
TSL-F-333

Min. steel thickness 8 mm









Trapezoid sheets of minimum thickness 0,5 mm









TSL-TRIPOLE

A mobile tripod used for securing of workers in shafts with the entrance hole.



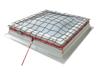


TSL-AA

A system for securing a person, e.g. on a means of transport (a cistern truck etc.).



Special products



TSN-DOME

Protective net against falling through the spotlight and anchor point in one.



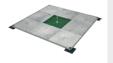
TSL-OT

A stainless steel anchoring point intended for flat roofs (up to the maximum inclination of 10°).









TSL-MB

A mobile anchoring point intended for 2 person.











TS-ML

Intended for arresting systems with a temporary flexible anchoring line.

Safety nets for construction industry

We offer sale and rental of safety nets

Use

- As a collective protection means against fall during construction of halls, shopping centres and bridges
- Protection of unguarded edges and openings in constructions
- A means of retention on scaffolding
- Protection against fall of material
- As walkable nets with the grid of 45 mm

Advantages

- The connecting means do not make the movement of workers more difficult
- Thanks to a high net deformation, the falling person is caught less hard than in a full-body harness
- Higher safety for workers working under the installed net



Certificated nets types

Product description	Type marking
Systém S - A safety net with a peripheral rope It is a basic and most frequent net type intended for fall retention. Safety nets of the system S are attached in the horizontal position by means of suspension ropes or other means on the anchoring points capable of load transfer. The minimum net area is 35 m2.	TSN-S
Systém U - A safety net connected to the load-bearing construction for vertical use These nets are supposed to prevent fall of persons or material from height over unguarded edges nearby the edge of the floors, roofs, staircases etc. The standard dimensions are 1.5 - 2 m x the required length. Possibility of easy installation by means of straps. Generally, the installation of these nets is governed by EN 13374.	TSN-U



System elements for drainage and adjustment of all penetrations waterproofing layer on a flat roof.



Maintenance-free stair system made of laminate and vinyl for lining new stairs as well as for quick renovation without remove the old staircase.







Fall protection systems for all types of roofs, from design to implementation.

TOPSET®

WINDOW SILLS

Aesthetic window sills of the highest quality, resistant to moisture and swelling, creating decorative element in the interior.

CEMVIN

CEMENT-FIBROUS BOARDS

Quality cement fiber boards with the possibility of extensive use in construction.



TOPWET s.r.o.

Náměstí Viléma Mrštíka 62 | 664 81 Ostrovačice

www.topwet.eu











