



Product catalog.



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Hello, we're ziel-plast.



Polish, family business

The company ZIEL-PLAST was founded in 1999 and since then it has been continuously producing fasteners for thermal insulation and other plastic elements for the construction industry.



Quality confirmed by certificates

ZIEL-PLAST offers high quality products, which is confirmed by the obtained National Technical Assessments (ITB) and European Technical Assessments issued by the Deutsches Institut für Bautechnik (DIBt). The Factory Production Control System together with the research and development laboratory ensures the compliance and repeatability of the manufactured elements. The confirmation of the high standard is the presence of products throughout Poland, as well as in European, Asian and Oceanian countries.



Development

The constantly modernized machinery park allows us to respond to the needs of the changing market. This applies to both the automated production department and the company's tool room equipped with professional CNC machines. This is a guarantee of high repeatability and quick response to unusual orders. Our own high-bay warehouse allows us to execute orders on time and our car fleet allows us to finalize the order with delivery to the customer's site.



Goal

Our company's goal is to:

- further product improvement,
- increase in production capacity,
- identification of market needs and customer requirements and expectations along with their implementation to the satisfaction of both interested parties.



Simply better

As specialists in plastic construction products, at ZIEL-PLAST, we take great care to ensure that our products are crafted from the most suitable materials to their intended purposes. Whether it's temperature stability, load-bearing capacity, or impact resistance, we prioritize these properties to deliver top-notch, durable solutions. What truly distinguishes ZIEL-PLAST is our commitment to distinctive, sleek designs, user-friendliness, and the use of meticulously selected high-quality materials in our products.



Affordability for all

We want to make our products as affordable as possible for everyone, and we try to ensure that this approach is reflected in our prices. What's more, today we are in 19 countries around the world and this number is constantly growing.



Time

Lead time plays a key role at our company, as we realize how important it is to our customers. Therefore, we prioritize the speed of delivery of our products and customer service.



Sustainability at a higher level

We use high-quality materials sourced in Europe, and we pay special attention to ensure that our product packaging takes up as little space as possible - just to reduce our carbon footprint.

Production



We have over **30 modern machines**



We produce over **1 000 000 pieces per day**





Frame fixings.
Frame fixings.
Frame fixings.



Hexagonal washer head with **TX socket** increases the clamping surface and works with various user tools.

The frame plug with a **large diameter flange** perfectly insulates from the fastened material, thus preventing contact corrosion. It works especially well in the assembly of elements made of hard materials, such as steel structures.

Improved shear and bending strength thanks to the use of a **non-standard, larger screw diameter** - under the head and in the threaded part.

Countersunk head with TX seat for perfect veneering with the fixture and cooperation with the user's various tools. It works especially well in the assembly of elements made of soft materials, such as wooden structures.

The use of **impact-resistant polyamide** ensures resistance to hammer blows.

The special design of the anchoring zone ensures unmatched load-bearing capacity in **all categories of substrates** according to ETAG 020 (A, B, C, D).

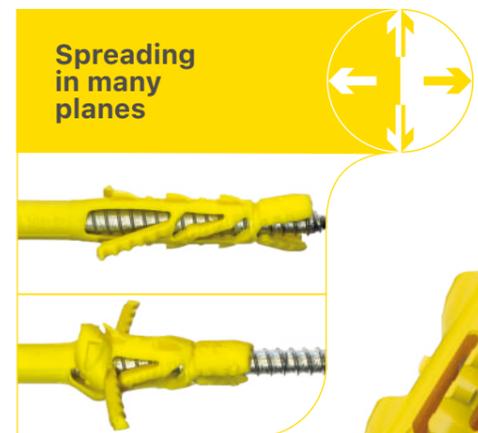
The widely spaced projections on the surface of the dowel effectively **prevent rotation** in the ground.

The geometry of the dowel is designed to **spread in various directions**.

Product quality confirmed by the European **CE** certificate.



Product description



Approval

▶ European Technical Assessment ETA-21/0610

Substrate categories

- ▶ **A** - Normal grade concrete C12 / 15, concrete \geq C16 / 20
- ▶ **B** - Ceramic solid brick MZ; solid silicate brick KS
- ▶ **C** - Perforated silicate brick KSL; Porothersm P+W 25 ceramic block
- ▶ **D** - AAC2-AAC6 autoclaved aerated concrete

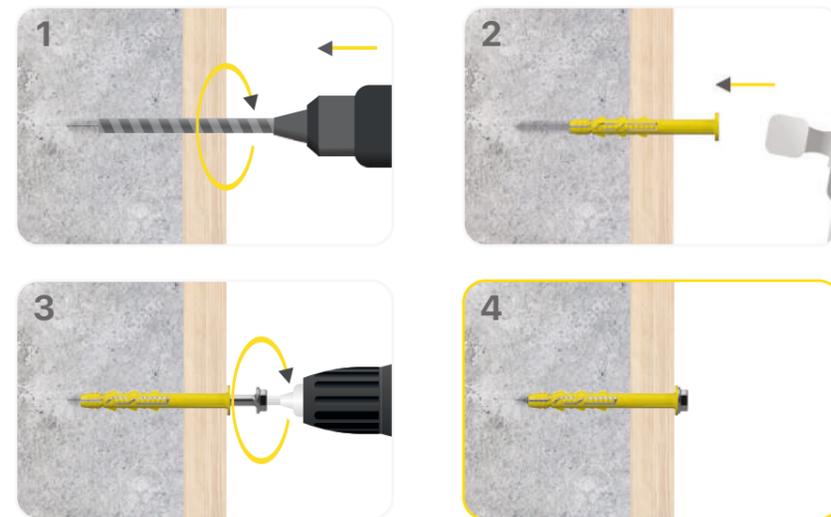
Application

- ▶ assembly of light internal steel or wooden structures
- ▶ assembly of consoles in systems of light ventilated facades
- ▶ installation of window and door joinery, garage doors, handrails and balustrades
- ▶ assembly of building equipment elements (e.g. air conditioners, heat exchangers)
- ▶ assembly of display windows, furniture, shelves, walls and others

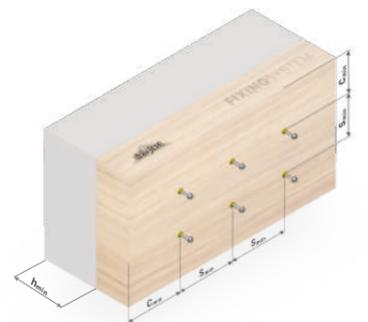
Material

- ▶ Sleeve - nylon / polyamide
- ▶ Screw - galvanized steel

Installation instructions



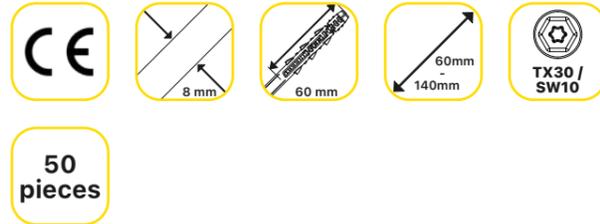
The minimum thickness of the substrate	$h_{min} \geq [mm]$	100
Minimum spacing of fasteners	$S_{min} \geq [mm]$	100
The minimum distance of the fastener from the edge	$C_{min} \geq [mm]$	100



Frame fixing ZP-RK Ø8



Universal frame plug with a flange and a galvanized hexagonal head screw SW10 with a TX30 socket for through-mounting.



Product description

Frame plugs with the highest parameters and a wide range of applications, certified for installation in all base materials.

Material

- ▶ Sleeve - nylon / polyamide
- ▶ Screw - galvanized steel

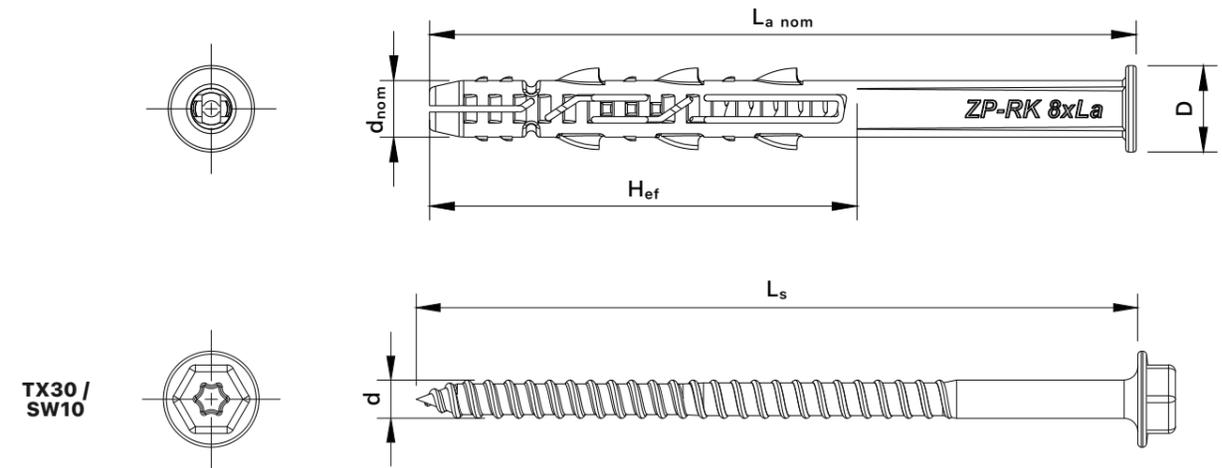
Approval

- ▶ European Technical Assessment
ETA-21/0610

Characteristic resistance

Base materials	Concrete C12 / 15	Concrete ≥C16/20	Solid clay brick MZ	Solid silicate brick KS	Perforated silicate brick KSL	Vertical perforated clay bricks, Porotherm P+W 25	Autoclaved aerated concrete AAC2	Autoclaved aerated concrete AAC6
Base materials categories								
	A	A	B	B	C	C	D	D
Drilling method								
	hammer	hammer	hammer	hammer	rotary	rotary	rotary	rotary
Characteristic resistance [kN]								
H _{ef} - 60mm	1,2	2,0	2,5	2,5	2,5	0,9	0,75	0,9

Product information



Type	Plug			Screw		Effective anchoring depth H _{ef} [mm]	Mounting hole depth [mm]	Maximum thickness of the fixed element [mm]
	Diameter d _{nom} [mm]	Length L _{a nom} [mm]	Diameter D [mm]	Diameter d [mm]	Length L _s [mm]			
Coming soon ZP-RK 8x60	8	62	14	5,5	67	60	70	2
ZP-RK 8x80	8	80	14	5,5	87	60	70	20
ZP-RK 8x100	8	100	14	5,5	107	60	70	40
ZP-RK 8x120	8	120	14	5,5	127	60	70	60
ZP-RK 8x140	8	140	14	5,5	147	60	70	80

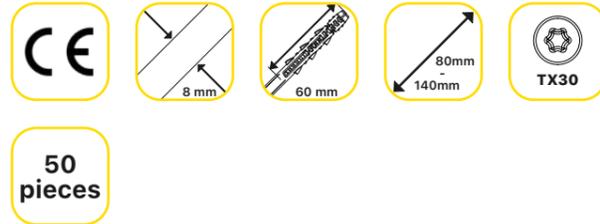
Logistics information

Type	Index	Quantity [pcs]		Weight [kg]		EAN code
		Unit package (carton)	Pallet	Unit package (carton)	Pallet	
ZP-RK 8x60	RK8X60	50	27500	0,85	490	5908275918950
ZP-RK 8x80	RK8X80	50	27500	1,05	600	5908275918608
ZP-RK 8x100	RK8X100	50	27500	1,25	710	5908275918615
ZP-RK 8x120	RK8X120	50	27500	1,45	820	5908275918622
ZP-RK 8x140	RK8X140	50	19000	1,65	650	5908275918639

Frame fixing ZP-RS Ø8



Universal frame plug with galvanized countersunk head screw with a TX30 socket for through-mounting.



50 pieces

Product description

Frame plugs with the highest parameters and a wide range of applications, certified for installation in all base materials.

Material

- ▶ Sleeve - nylon / polyamide
- ▶ Screw - galvanized steel

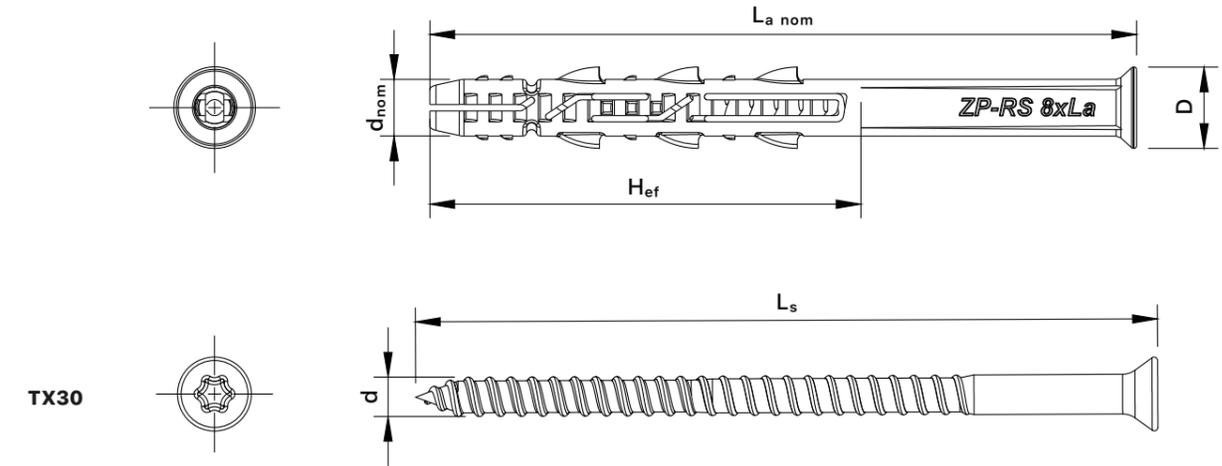
Approval

- ▶ European Technical Assessment
ETA-21/0610

Characteristic resistance

Base materials	Concrete C12 / 15	Concrete ≥C16/20	Solid clay brick MZ	Solid silicate brick KS	Perforated silicate brick KSL	Vertical perforated clay bricks, Porotherm P+W 25	Autoclaved aerated concrete AAC2	Autoclaved aerated concrete AAC6
Base materials categories								
	A	A	B	B	C	C	D	D
Drilling method								
	hammer	hammer	hammer	hammer	rotary	rotary	rotary	rotary
Characteristic resistance [kN]								
H _{ef} - 60mm	1,2	2,0	2,5	2,5	2,5	0,9	0,75	0,9

Product information



TX30

Type	Plug			Screw		Effective anchoring depth H _{ef} [mm]	Mounting hole depth [mm]	Maximum thickness of the fixed element [mm]
	Diameter d _{nom} [mm]	Length L _{a nom} [mm]	Diameter D [mm]	Diameter d [mm]	Length L _s [mm]			
Coming soon ZP-RS 8x60	8	62	14	5,5	67	60	70	2
ZP-RS 8x80	8	80	11	5,5	80	60	70	20
ZP-RS 8x100	8	100	11	5,5	100	60	70	40
ZP-RS 8x120	8	120	11	5,5	120	60	70	60
ZP-RS 8x140	8	140	11	5,5	140	60	70	80

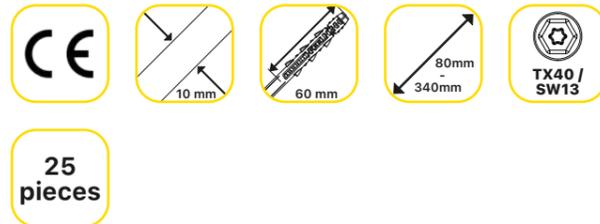
Logistics information

Type	Index	Quantity [pcs]		Weight [kg]		EAN code
		Unit package (carton)	Pallet	Unit package (carton)	Pallet	
ZP-RS 8x60	RS8X60	50	27500	0,75	440	5908275918943
ZP-RS 8x80	RS8X80	50	27500	0,95	550	5908275918462
ZP-RS 8x100	RS8X100	50	27500	1,15	660	5908275918479
ZP-RS 8x120	RS8X120	50	27500	1,35	770	5908275918486
ZP-RS 8x140	RS8X140	50	19000	1,55	610	5908275918493

Frame fixing ZP-RK Ø10



Universal frame plug with a flange and a galvanized hexagonal head screw SW13 with a TX40 socket for through-mounting.



25 pieces

Product description

Frame plugs with the highest parameters and a wide range of applications, certified for installation in all base materials.

Material

- ▶ Sleeve - nylon / polyamide
- ▶ Screw - galvanized steel

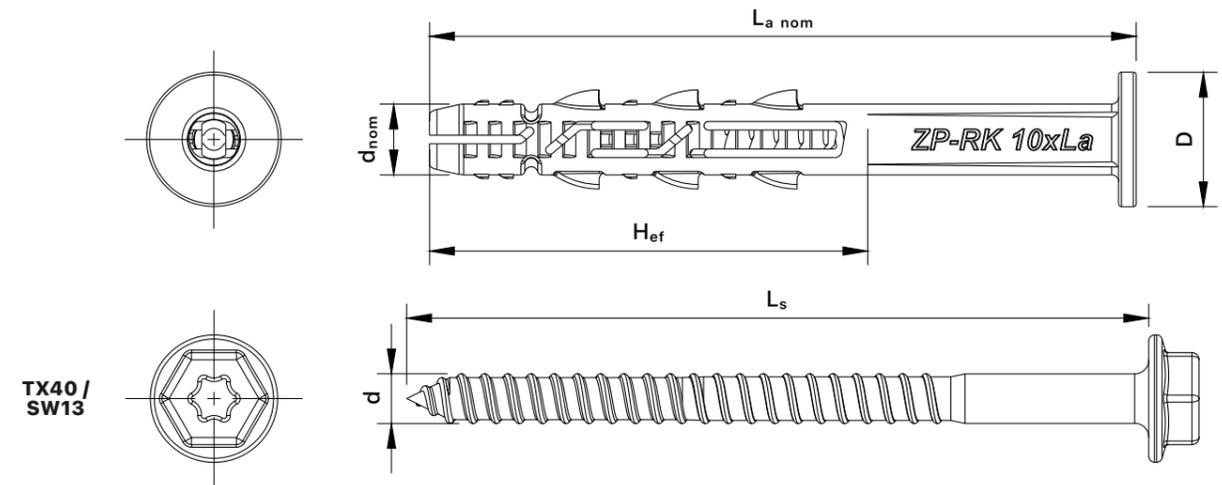
Approval

- ▶ European Technical Assessment
ETA-21/0610

Characteristic resistance

Base materials	Concrete C12 / 15	Concrete ≥C16/20	Solid clay brick MZ	Solid silicate brick KS	Perforated silicate brick KSL	Vertical perforated clay bricks, Porotherm P+W 25	Autoclaved aerated concrete AAC2	Autoclaved aerated concrete AAC6
Base materials categories								
	A	A	B	B	C	C	D	D
Drilling method								
	hammer	hammer	hammer	hammer	rotary	rotary	rotary	rotary
Characteristic resistance [kN]								
H _{ef} - 60mm	5,0	6,0	3,0	3,0	3,0	1,2	0,9	1,6

Product information



Type	Plug			Screw		Effective anchoring depth H _{ef} [mm]	Mounting hole depth [mm]	Maximum thickness of the fixed element [mm]
	Diameter d _{nom} [mm]	Length L _{a nom} [mm]	Diameter D [mm]	Diameter d [mm]	Length L _s [mm]			
ZP-RK 10x80	10	80	19	7,0	87	60	70	20
ZP-RK 10x100	10	100	19	7,0	107	60	70	40
ZP-RK 10x120	10	120	19	7,0	127	60	70	60
ZP-RK 10x140	10	140	19	7,0	147	60	70	80
ZP-RK 10x160	10	160	19	7,0	167	60	70	100
ZP-RK 10x180	10	180	19	7,0	187	60	70	120
ZP-RK 10x220	10	220	19	7,0	227	60	70	160
ZP-RK 10x260	10	260	19	7,0	267	60	70	200
ZP-RK 10x300	10	300	19	7,0	307	60	70	240
ZP-RK 10x340	10	340	19	7,0	347	60	70	280

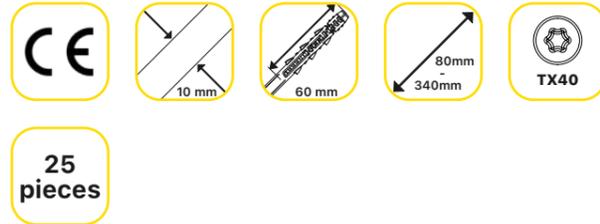
Logistics information

Type	Index	Quantity [pcs]		Weight [kg]		EAN code
		Unit package (carton)	Pallet	Unit package (carton)	Pallet	
ZP-RK 10x80	RK10X80	25	13750	0,80	460	5908275918646
ZP-RK 10x100	RK10X100	25	13750	1,00	570	5908275918653
ZP-RK 10x120	RK10X120	25	13750	1,20	680	5908275918660
ZP-RK 10x140	RK10X140	25	9500	1,40	560	5908275918677
ZP-RK 10x160	RK10X160	25	9500	1,60	630	5908275918684
ZP-RK 10x180	RK10X180	Coming soon				
ZP-RK 10x220	RK10X220	Coming soon				
ZP-RK 10x260	RK10X260	Coming soon				
ZP-RK 10x300	RK10X300	Coming soon				
ZP-RK 10x340	RK10X340	Coming soon				

Frame fixing ZP-RS Ø10



Universal frame plug with galvanized countersunk head screw with a TX30 socket for through-mounting.



25 pieces

Product description

Frame plugs with the highest parameters and a wide range of applications, certified for installation in all base materials.

Material

- ▶ Sleeve - nylon / polyamide
- ▶ Screw - galvanized steel

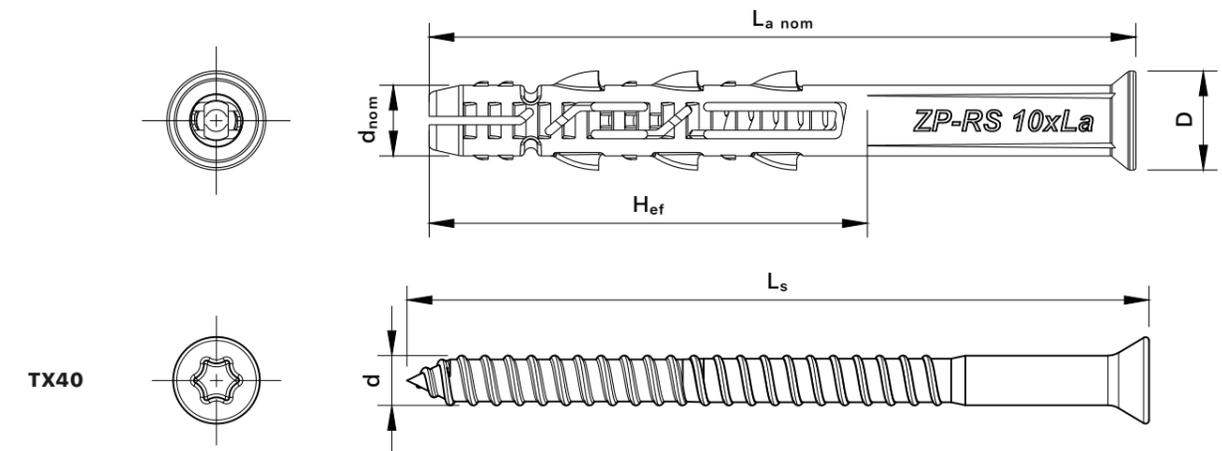
Approval

- ▶ European Technical Assessment ETA-21/0610

Characteristic resistance

Base materials	Concrete C12 / 15	Concrete ≥C16/20	Solid clay brick MZ	Solid silicate brick KS	Perforated silicate brick KSL	Vertical perforated clay bricks, Porotherm P+W 25	Autoclaved aerated concrete AAC2	Autoclaved aerated concrete AAC6
Base materials categories								
	A	A	B	B	C	C	D	D
Drilling method								
	hammer	hammer	hammer	hammer	rotary	rotary	rotary	rotary
Characteristic resistance [kN]								
H _{ef} - 60mm	5,0	6,0	3,0	3,0	3,0	1,2	0,9	1,6

Product information



Type	Plug			Screw		Effective anchoring depth H _{ef} [mm]	Mounting hole depth [mm]	Maximum thickness of the fixed element [mm]
	Diameter d _{nom} [mm]	Length L _{a nom} [mm]	Diameter D [mm]	Diameter d [mm]	Length L _s [mm]			
ZP-RS 10x80	10	80	19	7,0	87	60	70	20
ZP-RS 10x100	10	100	19	7,0	107	60	70	40
ZP-RS 10x120	10	120	19	7,0	127	60	70	60
ZP-RS 10x140	10	140	19	7,0	147	60	70	80
ZP-RS 10x160	10	160	19	7,0	167	60	70	100
ZP-RS 10x180	10	180	19	7,0	187	60	70	120
ZP-RS 10x220	10	220	19	7,0	227	60	70	160
ZP-RS 10x260	10	260	19	7,0	267	60	70	200
ZP-RS 10x300	10	300	19	7,0	307	60	70	240
ZP-RS 10x340	10	340	19	7,0	347	60	70	280

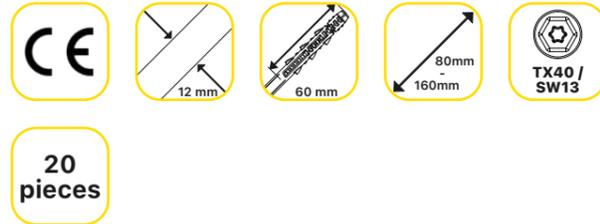
Logistics information

Type	Index	Quantity [pcs]		Weight [kg]		EAN code
		Unit package (carton)	Pallet	Unit package (carton)	Pallet	
ZP-RS 10x80	RS10X80	25	13750	0,80	460	5908275918646
ZP-RS 10x100	RS10X100	25	13750	1,00	570	5908275918653
ZP-RS 10x120	RS10X120	25	13750	1,20	680	5908275918660
ZP-RS 10x140	RS10X140	25	9500	1,40	560	5908275918677
ZP-RS 10x160	RS10X160	25	9500	1,60	630	5908275918684
ZP-RS 10x180	RS10X180			Coming soon		
ZP-RS 10x220	RS10X220			Coming soon		
ZP-RS 10x260	RS10X260			Coming soon		
ZP-RS 10x300	RS10X300			Coming soon		
ZP-RS 10x340	RS10X340			Coming soon		

Frame fixing ZP-RK Ø12



Universal frame plug with a flange and a galvanized hexagonal head screw SW13 with a TX40 socket for through-mounting.



Product description

Frame plugs with the highest parameters and a wide range of applications, certified for installation in all base materials.

Material

- ▶ Sleeve - nylon / polyamide
- ▶ Screw - galvanized steel

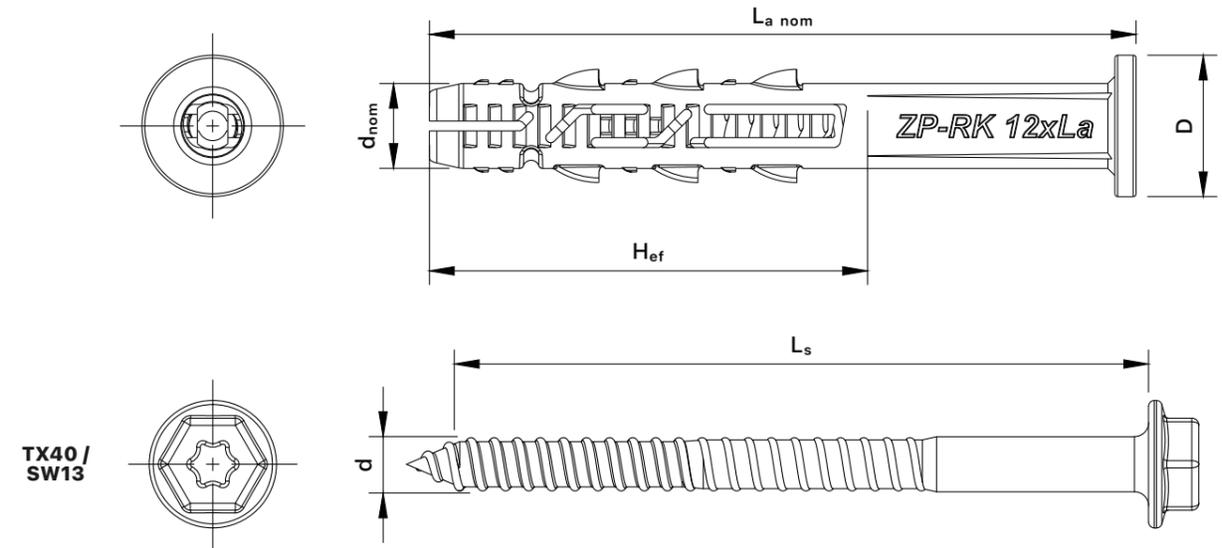
Approval

- ▶ European Technical Assessment
ETA-21/0610

Characteristic resistance

Base materials	Concrete C12 / 15	Concrete ≥C16/20	Solid clay brick MZ	Solid silicate brick KS	Perforated silicate brick KSL	Vertical perforated clay bricks, Porotherm P+W 25	Autoclaved aerated concrete AAC2	Autoclaved aerated concrete AAC6
Base materials categories								
	A	A	B	B	C	C	D	D
Drilling method								
	hammer	hammer	hammer	hammer	rotary	rotary	rotary	rotary
Characteristic resistance [kN]								
H _{ef} - 60mm	5,0	6,0	3,0	3,0	3,0	1,2	0,9	1,6

Product information



Type	Plug			Screw		Effective anchoring depth H _{ef} [mm]	Mounting hole depth [mm]	Maximum thickness of the fixed element [mm]
	Diameter d _{nom} [mm]	Length L _{a nom} [mm]	Diameter D [mm]	Diameter d [mm]	Length L _s [mm]			
ZP-RK 12x80	12	80	20	8,0	87	60	70	20
ZP-RK 12x100	12	100	20	8,0	107	60	70	40
ZP-RK 12x120	12	120	20	8,0	127	60	70	60
ZP-RK 12x140	12	140	20	8,0	147	60	70	80
ZP-RK 12x160	12	160	20	8,0	167	60	70	100

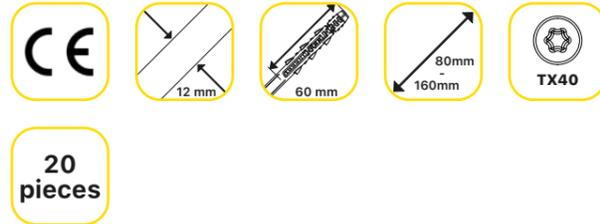
Logistics information

Type	Index	Quantity [pcs]		Weight [kg]		EAN code
		Unit package (carton)	Pallet	Unit package (carton)	Pallet	
ZP-RK 12x80	RK12X80	20	11000	0,80	460	5908275918691
ZP-RK 12x100	RK12X100	20	11000	1,00	570	5908275918707
ZP-RK 12x120	RK12X120	20	11000	1,20	680	5908275918714
ZP-RK 12x140	RK12X140	20	7600	1,35	540	5908275918721
ZP-RK 12x160	RK12X160	20	7600	1,55	610	5908275918738

Frame fixing ZP-RS Ø12



Universal frame plug with galvanized countersunk head screw with a TX30 socket for through-mounting.



Product description

Frame plugs with the highest parameters and a wide range of applications, certified for installation in all base materials.

Material

- ▶ Sleeve - nylon / polyamide
- ▶ Screw - galvanized steel

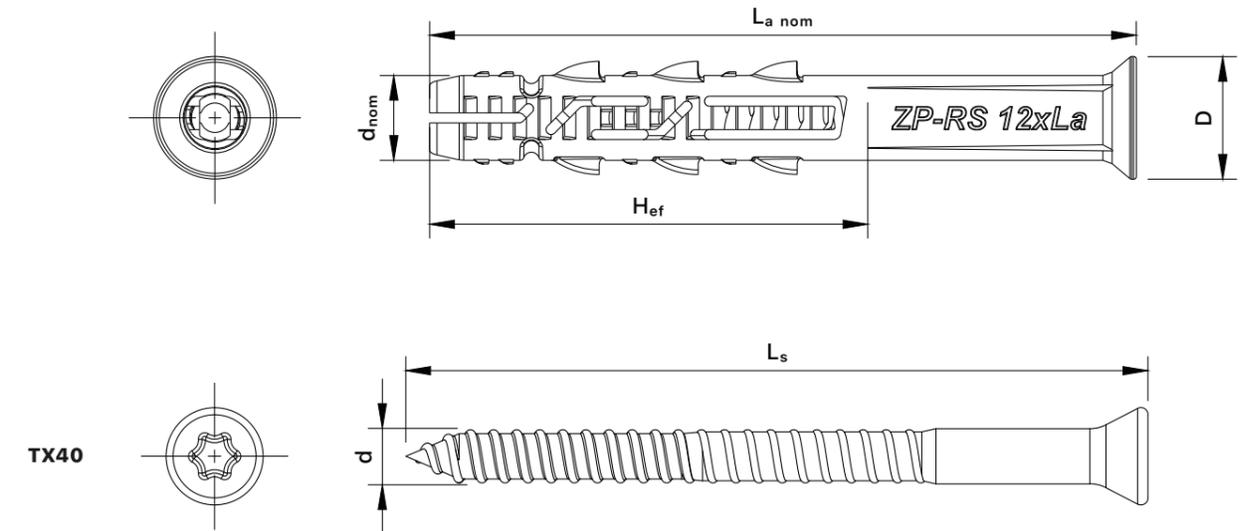
Approval

- ▶ European Technical Assessment
ETA-21/0610

Characteristic resistance

Base materials	Concrete C12 / 15	Concrete ≥C16/20	Solid clay brick MZ	Solid silicate brick KS	Perforated silicate brick KSL	Vertical perforated clay bricks, Porotherm P+W 25	Autoclaved aerated concrete AAC2	Autoclaved aerated concrete AAC6
Base materials categories								
	A	A	B	B	C	C	D	D
Drilling method								
	hammer	hammer	hammer	hammer	rotary	rotary	rotary	rotary
Characteristic resistance [kN]								
H _{ef} - 60mm	5,0	6,0	3,0	3,0	3,0	1,2	0,9	1,6

Product information



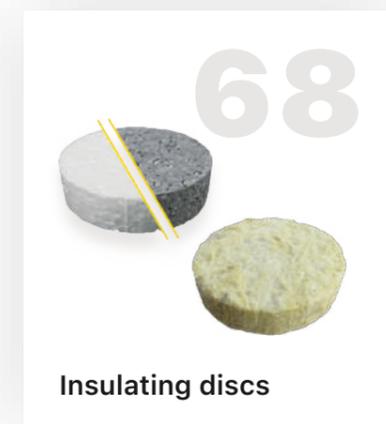
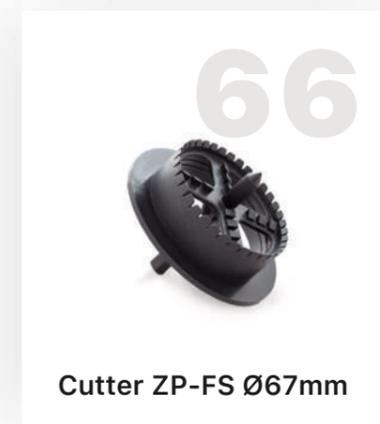
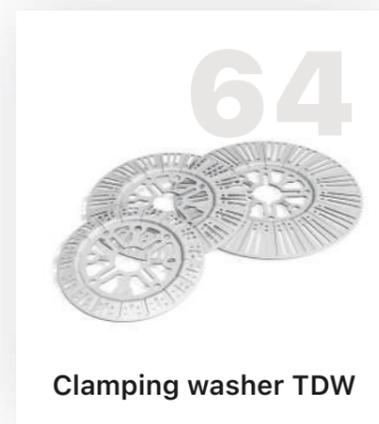
Type	Plug			Screw		Effective anchoring depth H _{ef} [mm]	Mounting hole depth [mm]	Maximum thickness of the fixed element [mm]
	Diameter d _{nom} [mm]	Length L _{a nom} [mm]	Diameter D [mm]	Diameter d [mm]	Length L _s [mm]			
ZP-RS 12x80	12	80	17	8,0	87	60	70	20
ZP-RS 12x100	12	100	17	8,0	107	60	70	40
ZP-RS 12x120	12	120	17	8,0	127	60	70	60
ZP-RS 12x140	12	140	17	8,0	147	60	70	80
ZP-RS 12x160	12	160	17	8,0	167	60	70	100

Logistics information

Type	Index	Quantity [pcs]		Weight [kg]		EAN code
		Unit package (carton)	Pallet	Unit package (carton)	Pallet	
ZP-RS 12x80	RS12X80	20	11000	0,75	440	5908275918554
ZP-RS 12x100	RS12X100	20	11000	0,95	550	5908275918561
ZP-RS 12x120	RS12X120	20	11000	1,10	630	5908275918578
ZP-RS 12x140	RS12X140	20	7600	1,25	500	5908275918585
ZP-RS 12x160	RS12X160	20	7600	1,45	580	5908275918592



Wall insulation fastening system.
Wall insulation fastening system.
 Wall insulation fastening system.



Fastener type selection

Surface mount

› Fastener length ≥ insulation thickness + adhesive (10mm) + anchoring zone



Type	ETX-MT		ETX-M		FIX-M		FIX-S		FIX-PA		LIT-W	LIT
Anchoring zone [mm]	25	45	25	45	35	70	35	70	35	70	50	50
Cat.	ABCD	E	ABCD	E	ABCDE		ABCDE		ABCDE	BCE	ABE	ABE
10					10x100	10x100	10x100	10x100	10x100	10x100		10x70
20			8x75	8x75	10x100	10x100	10x100	10x100	10x100	10x100		10x90
30	8x95	8x95	8x75	8x95	10x100	10x120	10x100	10x120	10x100	10x120		10x90
40	8x95	8x95	8x75	8x95	10x100	10x120	10x100	10x120	10x100	10x120	10x100	10x100
50	8x95	8x115	8x95	8x115	10x100	10x140	10x100	10x140	10x100	10x140	10x120	10x120
60	8x95	8x115	8x95	8x115	10x120	10x140	10x120	10x140	10x120	10x140	10x120	10x120
70	8x115	8x135	8x115	8x135	10x120	10x160	10x120	10x160	10x120	10x160	10x140	10x140
80	8x115	8x135	8x115	8x135	10x140	10x160	10x140	10x160	10x140	10x160	10x140	10x140
90	8x135	8x155	8x135	8x155	10x140	10x180	10x140	10x180	10x140	10x180	10x160	10x160
100	8x135	8x155	8x135	8x155	10x160	10x180	10x160	10x180	10x160	10x180	10x160	10x160
110	8x155	8x175	8x155	8x175	10x160	10x200	10x160	10x200	10x160	10x200	10x180	10x180
120	8x155	8x175	8x155	8x175	10x180	10x200	10x180	10x200	10x180	10x200	10x180	10x180
130	8x175	8x195	8x175	8x195	10x180	10x220	10x180	10x220	10x180	10x220	10x200	10x200
140	8x175	8x195	8x175	8x195	10x200	10x220	10x200	10x220	10x200	10x220	10x200	10x200
150	8x195	8x215	8x195	8x215	10x200	10x240	10x200	10x240	10x200	10x240	10x220	10x220
160	8x195	8x215	8x195	8x215	10x220	10x240	10x220	10x240	10x220	10x240	10x220	10x220
170	8x215	8x235	8x215	8x235	10x220	10x260	10x220	10x260	10x220	10x260	10x240	10x240
180	8x215	8x235	8x215	8x235	10x240	10x260	10x240	10x260	10x240	10x260	10x240	10x240
190	8x235	8x255	8x235	8x255	10x240	10x280	10x240	10x280	10x240	10x280	10x260	10x260
200	8x235	8x255	8x235	8x255	10x260	10x280	10x260	10x280	10x260	10x280	10x260	10x260
210	8x255	8x275	8x255	8x275	10x260	10x300	10x260	10x300	10x260	10x300		
220	8x255	8x275	8x255	8x275	10x280	10x300	10x280	10x300	10x280	10x300		
230	8x275	8x295	8x275	8x295	10x280	10x340	10x280		10x280			
240	8x275	8x295	8x275	8x295	10x300	10x340	10x300		10x300			
250	8x295		8x295		10x300	10x340	10x300		10x300			
260	8x295		8x295		10x340	10x340						
270					10x340	10x380						
280					10x340	10x380						
290					10x340	10x380						
300					10x380	10x380						
310					10x380	10x420						
320					10x380	10x420						
330					10x380	10x420						
340					10x420	10x420						
350					10x420							
360					10x420							
370					10x420							

Fastener type selection

Immersed mount

› Fastener length ≥ insulation thickness + adhesive (10mm) + anchoring zone - insulating disc (20mm)



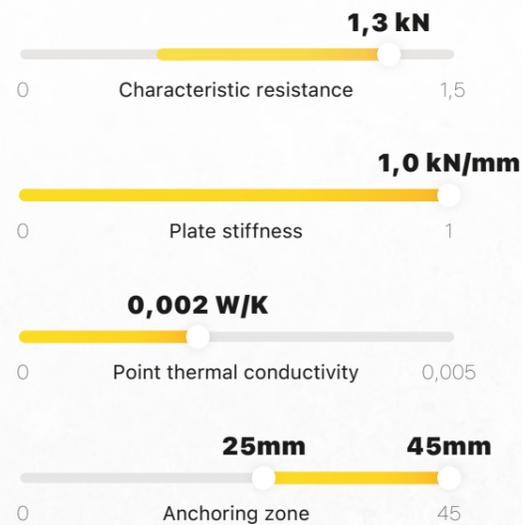
Type	ETX-MT		ETX-M		FIX-M		FIX-S		FIX-PA		LIT-W	LIT
Anchoring zone [mm]	25	45	25	45	35	70	35	70	35	70	50	50
Cat.	ABCD	E	ABCD	E	ABCDE		ABCDE		ABCDE	BCE	ABE	ABE
30					10x100	10x100	10x100	10x100	10x100	10x100		10x70
40			8x75	8x75	10x100	10x100	10x100	10x100	10x100	10x100		10x90
50	8x95	8x95	8x75	8x95	10x100	10x120	10x100	10x120	10x100	10x120		10x90
60	8x95	8x95	8x75	8x95	10x100	10x120	10x100	10x120	10x100	10x120	10x100	10x100
70	8x95	8x115	8x95	8x115	10x100	10x140	10x100	10x140	10x100	10x140	10x120	10x120
80	8x95	8x115	8x95	8x115	10x120	10x140	10x120	10x140	10x120	10x140	10x120	10x120
90	8x115	8x135	8x115	8x135	10x120	10x160	10x120	10x160	10x120	10x160	10x140	10x140
100	8x115	8x135	8x115	8x135	10x140	10x160	10x140	10x160	10x140	10x160	10x140	10x140
110	8x135	8x155	8x135	8x155	10x140	10x180	10x140	10x180	10x140	10x180	10x160	10x160
120	8x135	8x155	8x135	8x155	10x160	10x180	10x160	10x180	10x160	10x180	10x160	10x160
130	8x155	8x175	8x155	8x175	10x160	10x200	10x160	10x200	10x160	10x200	10x180	10x180
140	8x155	8x175	8x155	8x175	10x180	10x200	10x180	10x200	10x180	10x200	10x180	10x180
150	8x175	8x195	8x175	8x195	10x180	10x220	10x180	10x220	10x180	10x220	10x200	10x200
160	8x175	8x195	8x175	8x195	10x200	10x220	10x200	10x220	10x200	10x220	10x200	10x200
170	8x195	8x215	8x195	8x215	10x200	10x240	10x200	10x240	10x200	10x240	10x220	10x220
180	8x195	8x215	8x195	8x215	10x220	10x240	10x220	10x240	10x220	10x240	10x220	10x220
190	8x215	8x235	8x215	8x235	10x220	10x260	10x220	10x260	10x220	10x260	10x240	10x240
200	8x215	8x235	8x215	8x235	10x240	10x260	10x240	10x260	10x240	10x260	10x240	10x240
210	8x235	8x255	8x235	8x255	10x240	10x280	10x240	10x280	10x240	10x280	10x260	10x260
220	8x235	8x255	8x235	8x255	10x260	10x280	10x260	10x280	10x260	10x280	10x260	10x260
230	8x255	8x275	8x255	8x275	10x260	10x300	10x260	10x300	10x260	10x300		
240	8x255	8x275	8x255	8x275	10x280	10x300	10x280	10x300	10x280	10x300		
250	8x275	8x295	8x275	8x295	10x280	10x340	10x280		10x280			
260	8x275	8x295	8x275	8x295	10x300	10x340	10x300		10x300			
270	8x295		8x295		10x300	10x340	10x300		10x300			
280	8x295		8x295		10x340	10x340						
290					10x340	10x380						
300					10x340	10x380						
310					10x340	10x380						
320					10x380	10x380						
330					10x380	10x420						
340					10x380	10x420						
350					10x380	10x420						
360					10x420	10x420						
370					10x420							
380					10x420							
390					10x420							

New

ETX Fasteners



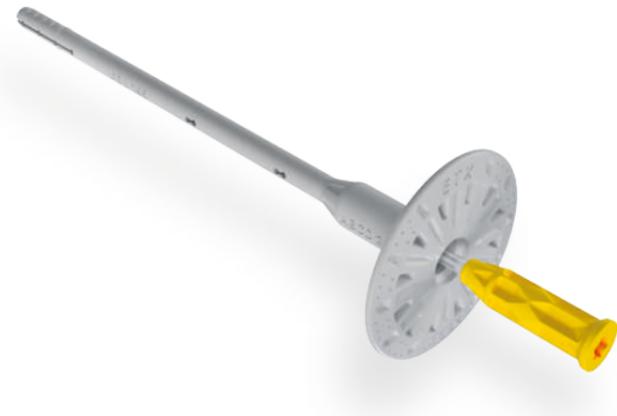
ETX-MT		ETX-M
✓	Screw-in	✗
✓*	Hammer-in	✓
✓	Pre-assembled	✗
✓	Torx socket	✗
95-295mm	Length range	75-295mm
ABCD: 25mm E: 45mm	Anchoring zone	ABCD: 25mm E: 45mm
✓	CE certificate	✓



*Optional mounting method - not recommended for cat. A.



Fastener ETX-MT



Screwed in or nailed in plastic anchors for fixing of external thermal insulation composite systems with rendering - with a metal-plastic specific threaded nail



Product description

*Optional mounting method - not recommended for cat. A.

ETX fastener is a product with a wide range of applications. It can be fixed in any category of substrate. With a diameter of 8mm and a short anchoring zone (ABCD: 25mm, E: 45mm), much better strength parameters are achieved, as well as installation time is significantly reduced.

Features and Benefits

- ▶ Quality confirmed by the European CE certificate.
- ▶ Advanced plugs for polystyrene equipped with a metal pin with a plastic cover.
- ▶ Quicker installation, by using the shortest possible anchoring zone.
- ▶ The new design of the anchoring zone with a diameter of 8mm influenced to increase the strength parameters (up to 1,3 kN).
- ▶ Very high plate stiffness: 1,0kN/mm.
- ▶ Can be installed with optional TDW pressure plates.

Applications

- ▶ Facade insulation system (ETICS)
- ▶ Styrofoam plates
- ▶ Mineral wool plates
- ▶ Polyurethane plates
- ▶ Cork
- ▶ Wood wool plates

Material

- ▶ Sleeve – polypropylene
- ▶ Pin – galvanized steel with a plastic insulator

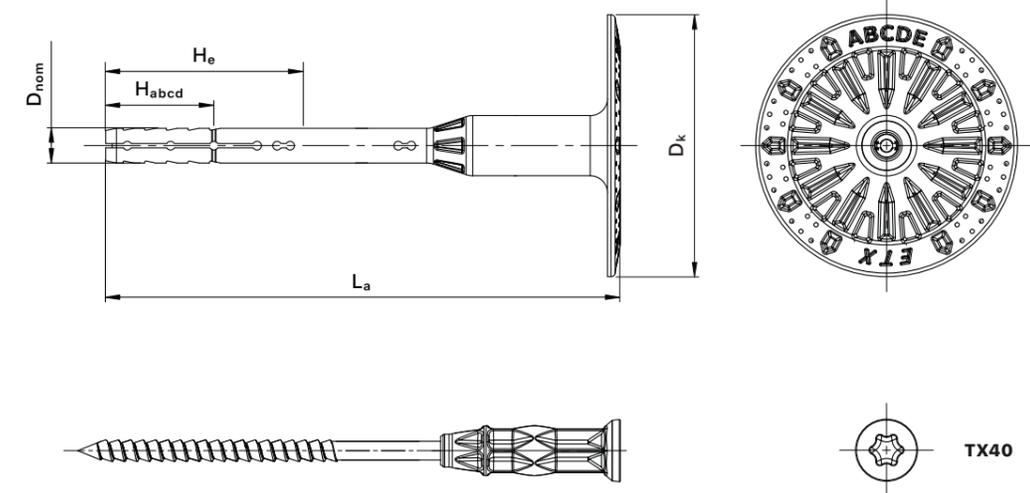
Approval

- ▶ European Technical Assessment ETA-23/0351

Substrate categories

- ▶ **A** - Concrete C12/15, Normal concrete of class C20/25 – C50/60
- ▶ **B** - Solid clay brick MZ, Solid silicate brick KS
- ▶ **C** - Perforated silicate brick KSL, Hollow brick Hlz, Porotherm 25
- ▶ **D** - Lightweight aggregate concrete LAC
- ▶ **E** - AAC2-AAC7 aerated concrete

Product information



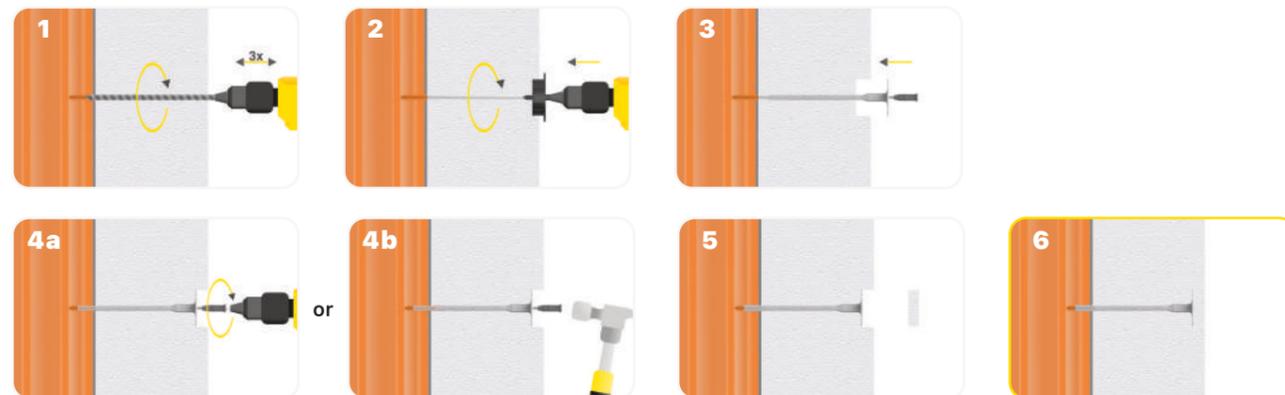
Type	Diameter D _{nom} [mm]	Length L _a [mm]	Plate diameter D _k [mm]	Effective anchoring depth H _{abcd} / H _e [mm]	Mounting hole depth ABCD / E [mm]	Recommended thickness of ETICS for cat. ABCD (countersunk assembly) [mm]	Recommended thickness of ETICS for cat. E (countersunk assembly) [mm]
ETX-MT 8x95	8	95	60	25 / 45	35 / 55	60 (80)	40 (60)
ETX-MT 8x115	8	115	60	25 / 45	35 / 55	80 (100)	60 (80)
ETX-MT 8x135	8	135	60	25 / 45	35 / 55	100 (120)	80 (100)
ETX-MT 8x155	8	155	60	25 / 45	35 / 55	120 (140)	100 (120)
ETX-MT 8x175	8	175	60	25 / 45	35 / 55	140 (160)	120 (140)
ETX-MT 8x195	8	195	60	25 / 45	35 / 55	160 (180)	140 (160)
ETX-MT 8x215	8	215	60	25 / 45	35 / 55	180 (200)	160 (180)
ETX-MT 8x235	8	235	60	25 / 45	35 / 55	200 (220)	180 (200)
ETX-MT 8x255	8	255	60	25 / 45	35 / 55	220 (240)	200 (220)
ETX-MT 8x275	8	275	60	25 / 45	35 / 55	240 (260)	220 (240)
ETX-MT 8x295	8	295	60	25 / 45	35 / 55	260 (280)	240 (260)

Characteristic resistance

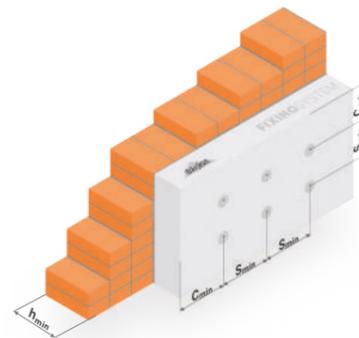
Substrate	Concrete C12/15	Concrete C16/20 + C50/60	Thin concrete members C16/20 + C50/60	Clay brick MZ	Calcium silicate brick KS	Calcium silicate hollow block KSL, a=40mm	Vertically perforated clay bricks Porotherm 25, a=12mm	Vertically perforated clay bricks Porotherm 25, a=17mm	Lightweight concrete hollow block HBL, a=33mm	Lightweight concrete hollow block Tekno Amerblok PK17,8 a=30mm	Lightweight concrete hollow block Tekno Amerblok PK19 a=30mm	Lightweight concrete block LAC	Autoclaved aerated concrete block AAC2	Autoclaved aerated concrete block AAC7
	Substrate categories													
	A	A	A	B	B	C	C	C	C	C	C	D	E	E
Drilling method														
	hammer	hammer	hammer	hammer	hammer	hammer	rotary	rotary	rotary	rotary	rotary	rotary	rotary	rotary
Characteristic resistance [kN]														
H _{abcd} - 25mm	0,90	1,30	1,30	1,30	1,30	1,30	0,50	0,70	0,60	1,30	1,30	0,60		
H _e - 45mm													0,50	0,90

Fastener type	ETX-MT	
The strength of the plate	[kN]	1,95
The stiffness of the plate	[kN/mm]	1,0
Point thermal conductivity	[W/K]	0,002

Installation instructions



The minimum thickness of the substrate	$h_{min} \geq$ [mm]	100
Minimum spacing of fasteners	$S_{min} \geq$ [mm]	100
Minimum spacing of fasteners	$C_{min} \geq$ [mm]	100
Recommended number of pieces	pieces / m ²	6-8 / m ²
Recommended number of pieces at the corners of the building	pieces / m ²	8-10 / m ²



Logistics information

Type	Index	Quantity [pcs]		Weight [kg]		EAN code
		Unit package (carton)	Pallet (120x80x180 [cm])	Unit package (carton)	Pallet (120x80x180 [cm])	
ETX-MT 8x95	EMT095	100	8400	2,15	201	5907812671761
ETX-MT 8x115	EMT115	100	8400	2,40	222	5907812671778
ETX-MT 8x135	EMT135	100	8400	2,75	251	5907812671785
ETX-MT 8x155	EMT155	100	5600	3,00	188	5907812671792
ETX-MT 8x175	EMT175	100	5600	3,25	202	5907812671808
ETX-MT 8x195	EMT195	100	5600	3,50	216	5907812671815
ETX-MT 8x215	EMT215	100	4000	3,80	172	5907812671822
ETX-MT 8x235	EMT235	100	4000	4,15	186	5907812671839
ETX-MT 8x255	EMT255	100	4000	4,45	198	5907812671846
ETX-MT 8x275	EMT275	100	4000	4,70	208	5907812671853
ETX-MT 8x295	EMT295	100	4000	5,00	220	5907812671860

Mounting accessories

Clamping washer TDW

► For mechanical installation of thermal insulation materials, especially heavy mineral wool, which requires a solid and reliable protection against displacement.

► Compatible with all available connectors: ETX-MT, ETX-M, FIX-M, FIX-S, FIX-PA, LIT-W, LIT and TAD-60.

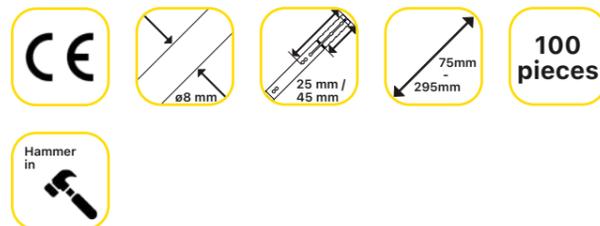


Type	Diameter [mm]
TDW-90	90
TDW-110	110
TDW-130	130

Fastener ETX-M



Nailed in plastic anchors with a metal-plastic specific nail for fixing of external thermal insulation composite systems with rendering



Product description

ETX fastener is a product with a wide range of applications. It can be fixed in any category of substrate. With a diameter of 8mm and a short anchoring zone (ABCD: 25mm, E: 45mm), much better strength parameters are achieved, as well as installation time is significantly reduced.

Features and Benefits

- ▶ Quality confirmed by the European CE certificate.
- ▶ Advanced plugs for polystyrene equipped with a metal pin with a plastic cover.
- ▶ Quicker installation, by using the shortest possible anchoring zone.
- ▶ The new design of the anchoring zone with a diameter of 8mm influenced to increase the strength parameters (up to 1,3 kN).
- ▶ Very high plate stiffness: 1,0kN/mm.
- ▶ Can be installed with optional TDW pressure plates.

Applications

- ▶ Facade insulation system (ETICS)
- ▶ Styrofoam plates
- ▶ Mineral wool plates
- ▶ Polyurethane plates
- ▶ Cork
- ▶ Wood wool plates

Material

- ▶ Sleeve – polypropylene
- ▶ Pin – galvanized steel with a plastic insulator

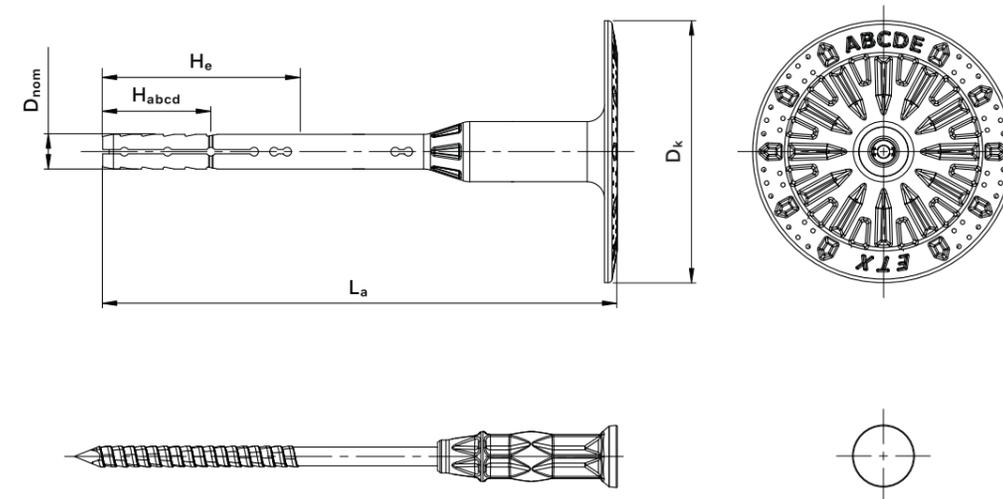
Approval

- ▶ European Technical Assessment ETA-23/0351

Substrate categories

- ▶ **A** - Concrete C12/15, Normal concrete of class C20/25 – C50/60
- ▶ **B** - Solid clay brick MZ, Solid silicate brick KS
- ▶ **C** - Perforated silicate brick KSL, Hollow brick Hlz, Porotherm 25
- ▶ **D** - Lightweight aggregate concrete LAC
- ▶ **E** - AAC2-AAC7 aerated concrete

Product information



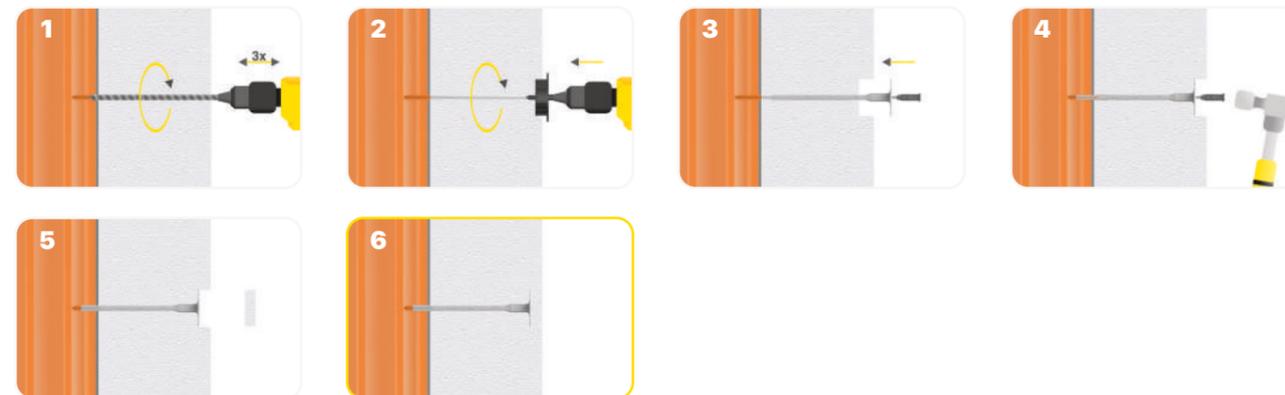
Type	Diameter D_{nom} [mm]	Length L_a [mm]	Plate diameter D_k [mm]	Effective anchoring depth H_{abcd} / H_e [mm]	Mounting hole depth ABCD / E [mm]	Recommended thickness of ETICS for cat. ABCD (countersunk assembly) [mm]	Recommended thickness of ETICS for cat. E (countersunk assembly) [mm]
ETX-M 8x75	8	75	60	25 / 45	35 / 55	40 (60)	20 (40)
ETX-M 8x95	8	95	60	25 / 45	35 / 55	60 (80)	40 (60)
ETX-M 8x115	8	115	60	25 / 45	35 / 55	80 (100)	60 (80)
ETX-M 8x135	8	135	60	25 / 45	35 / 55	100 (120)	80 (100)
ETX-M 8x155	8	155	60	25 / 45	35 / 55	120 (140)	100 (120)
ETX-M 8x175	8	175	60	25 / 45	35 / 55	140 (160)	120 (140)
ETX-M 8x195	8	195	60	25 / 45	35 / 55	160 (180)	140 (160)
ETX-M 8x215	8	215	60	25 / 45	35 / 55	180 (200)	160 (180)
ETX-M 8x235	8	235	60	25 / 45	35 / 55	200 (220)	180 (200)
ETX-M 8x255	8	255	60	25 / 45	35 / 55	220 (240)	200 (220)
ETX-M 8x275	8	275	60	25 / 45	35 / 55	240 (260)	220 (240)
ETX-M 8x295	8	295	60	25 / 45	35 / 55	260 (280)	240 (260)

Characteristic resistance

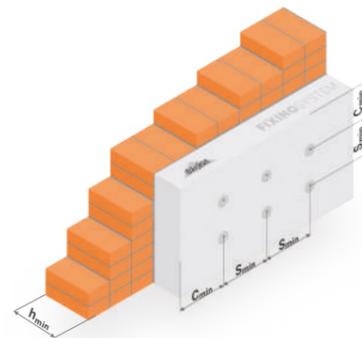
Substrate	Concrete C12/15	Concrete C16/20 + C50/60	Thin concrete members C16/20 + C50/60	Clay brick MZ	Calcium silicate brick KS	Calcium silicate hollow block KSL, a=40mm	Vertically perforated clay bricks Porotherm 25, a=12mm	Vertically perforated clay bricks Porotherm 25, a=17mm	Lightweight concrete hollow block HBL, a=33mm	Lightweight concrete hollow block Tekno Amerblok PK17,8 a=30mm	Lightweight concrete hollow block Tekno Amerblok PK19 a=30mm	Lightweight concrete block LAC	Autoclaved aerated concrete block AAC2	Autoclaved aerated concrete block AAC7
	A	A	A	B	B	C	C	C	C	C	C	D	E	E
Substrate categories														
Drilling method														
	hammer	hammer	hammer	hammer	hammer	hammer	rotary	rotary	rotary	rotary	rotary	rotary	rotary	rotary
Characteristic resistance [kN]														
H _{abcd} - 25mm	0,90	1,30	1,30	1,30	1,30	1,30	0,50	0,70	0,60	1,30	1,30	0,60		
H _e - 45mm													0,50	0,90

Fastener type	ETX-M	
The strength of the plate [kN]	[kN]	1,95
The stiffness of the plate [kN/mm]	[kN/mm]	1,0
Point thermal conductivity [W/K]	[W/K]	0,002

Installation instructions



The minimum thickness of the substrate	$h_{min} \geq$ [mm]	100
Minimum spacing of fasteners	$S_{min} \geq$ [mm]	100
Minimum spacing of fasteners	$C_{min} \geq$ [mm]	100
Recommended number of pieces	pieces / m ²	6-8 / m ²
Recommended number of pieces at the corners of the building	pieces / m ²	8-10 / m ²



Logistics information

Type	Index	Quantity [pcs]		Weight [kg]		EAN code
		Unit package (carton)	Pallet (120x80x180 [cm])	Unit package (carton)	Pallet (120x80x180 [cm])	
ETX-M 8x75	EM075	100	10000	1,80	210	5907812671884
ETX-M 8x95	EM095	100	10000	2,15	235	5907812671150
ETX-M 8x115	EM115	100	10000	2,40	260	5907812671167
ETX-M 8x135	EM135	100	10000	2,75	295	5907812671174
ETX-M 8x155	EM155	100	10000	3,00	320	5907812671181
ETX-M 8x175	EM175	100	8400	3,25	293	5907812671198
ETX-M 8x195	EM195	100	8400	3,50	314	5907812671204
ETX-M 8x215	EM215	100	8400	3,80	339	5907812671211
ETX-M 8x235	EM235	100	5600	4,15	252	5907812671228
ETX-M 8x255	EM255	100	5600	4,45	269	5907812671235
ETX-M 8x275	EM275	100	5600	4,70	283	5907812671242
ETX-M 8x295	EM295	100	5600	5,00	300	5907812671754

Mounting accessories

Clamping washer TDW

- For mechanical installation of thermal insulation materials, especially heavy mineral wool, which requires a solid and reliable protection against displacement.
- Compatible with all available connectors: ETX-MT, ETX-M, FIX-M, FIX-S, FIX-PA, LIT-W, LIT and TAD-60.



Type	Diameter [mm]
TDW-90	90
TDW-110	110
TDW-130	130

Fasteners FIX



Metal pin with plastic cover

Metal pin

Polyamide / nylon pin
*for anchoring 35mm



A **new design** thanks to which the disc with a diameter of 60mm is more rigid. The product is made of **virgin polypropylene**.

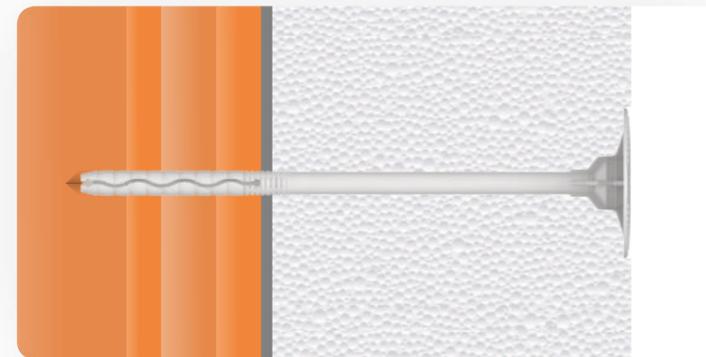
The new design of the **anchoring zone** allows for **35mm** and **70mm** anchoring. In the FIX-M and FIX-S models we used a **threaded** and **galvanized** nail, while in the FIX-PA a **polyamide** pin.



The **FIX** series products have obtained the European Technical Assessment **ETA-19/0573**, which ensures **the highest quality**, satisfying the needs of the most demanding customers.

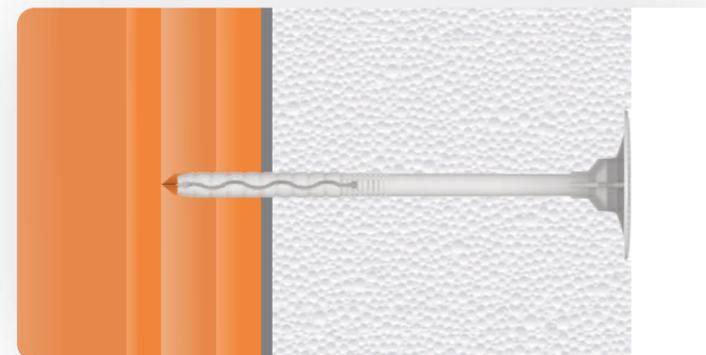
Double anchoring zone

One fastener, **two** anchoring zones



70mm

Long anchoring zone (70 mm) guarantees not only high results in the category of resistance to pulling out from the wall, but also full installation reliability. This is a solution that provides **the highest values** in terms of durability and safety in every project, enabling stable and reliable fixing of elements. Recommended for low quality substrates and difficult working conditions.



35mm

Short anchoring zone (35 mm) is a solution that **speeds up** the assembly process and allows the **use of a shorter dowel**. This makes the installation of insulating elements on the walls more effective, shortening the time needed for work and saving money, because you can use shorter fastener length. Recommended for good quality base materials.

Example

For 150mm thick insulating material

Long anchoring zone

150mm + 10mm (adhesive) + 70mm = 230mm -> 10x240

Short anchoring zone

150mm + 10mm (adhesive) + 35mm = 195mm -> 10x200



Fastener FIX-M



Advanced hammer-in facade plug with a metal, plastic covered pin for fixing external thermal insulation ETICS in concrete and masonry.



Product description

Fastener FIX are versatile products. **They have a double anchoring zone: 35 mm and 70 mm.** As a result, one dowel can be used for different thicknesses of the insulation layer. At the same time, the demarcation into insulating pins with a long and short anchoring zone was abandoned.

Features and Benefits

- ▶ Quality confirmed by the European CE certificate.
- ▶ Connectors rated by Deutsches Institut für Bautechnik DiBT.
- ▶ Dowels with double anchoring zone: 35 mm and 70 mm.
- ▶ Advanced plugs for polystyrene equipped with a metal, plastic covered pin.
- ▶ Can be installed with optional TDW pressure plates.
- ▶ The possibility of surface or recessed mounting with the use of the ZP-FS 67mm cutter and polystyrene plugs.

Applications

- ▶ Facade insulation system (ETICS)
- ▶ Styrofoam plates
- ▶ Mineral wool plates
- ▶ Polyurethane plates
- ▶ Cork
- ▶ Wood wool plates

Material

- ▶ Sleeve – polypropylene
- ▶ Pin – galvanized steel with a plastic insulator

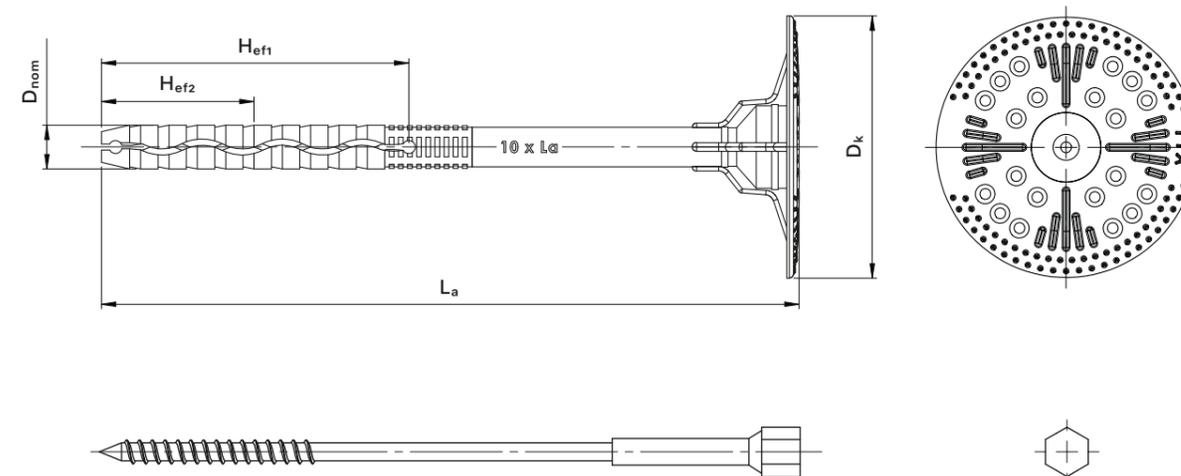
Approval

- ▶ European Technical Assessment ETA-19/0573

Substrate categories

- ▶ **A** - Concrete C12/15, Normal concrete of class C20/25 – C50/60
- ▶ **B** - Solid clay brick MZ, Solid silicate brick KS
- ▶ **C** - Perforated silicate brick KSL, Hollow brick Hlz, Porotherm 25
- ▶ **D** - Lightweight aggregate concrete LAC
- ▶ **E** - AAC2-AAC7 aerated concrete

Product information



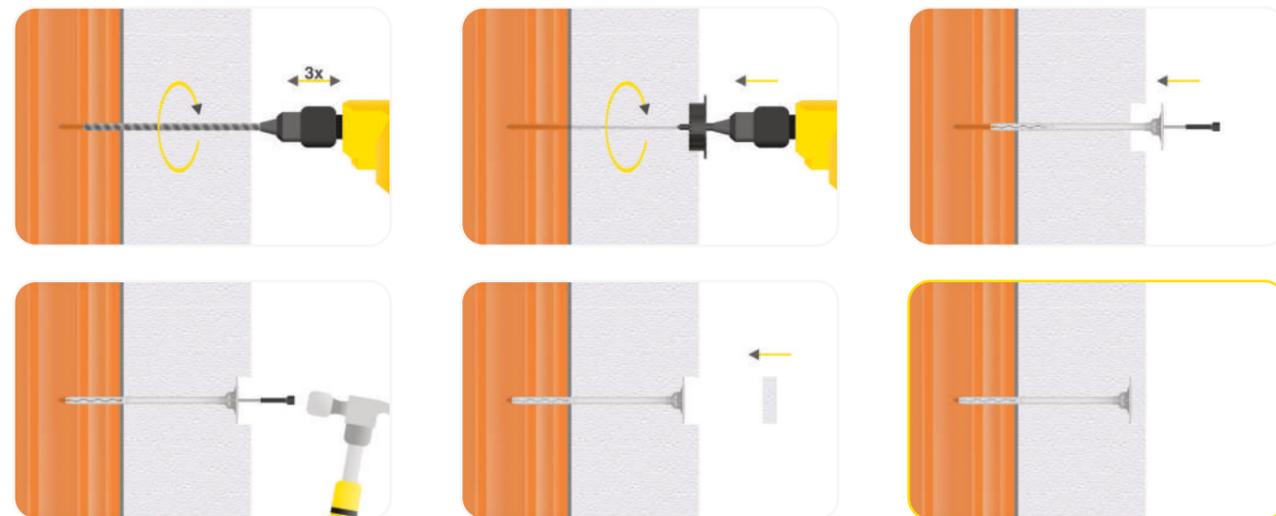
Type	Fastener			Effective anchoring depth H _{ef1} [mm]	Effective anchoring depth H _{ef2} [mm]	Mounting hole depth [mm]	Recommended thickness of ETICS (recessed mounting) [mm]
	Diameter D _{nom} [mm]	Length L _a [mm]	Plate diameter D _k [mm]				
FIX-M 10x100	10	100	60	70	35	45 ÷ 80	20÷55 (40÷75)
FIX-M 10x120	10	120	60	70	35	45 ÷ 80	40÷75 (60÷95)
FIX-M 10x140	10	140	60	70	35	45 ÷ 80	60÷95 (80÷115)
FIX-M 10x160	10	160	60	70	35	45 ÷ 80	80÷115 (100÷135)
FIX-M 10x180	10	180	60	70	35	45 ÷ 80	100÷135 (120÷155)
FIX-M 10x200	10	200	60	70	35	45 ÷ 80	120÷155 (140÷175)
FIX-M 10x220	10	220	60	70	35	45 ÷ 80	140÷175 (160÷195)
FIX-M 10x240	10	240	60	70	35	45 ÷ 80	160÷195 (180÷215)
FIX-M 10x260	10	260	60	70	35	45 ÷ 80	180÷215 (200÷235)
FIX-M 10x280	10	280	60	70	35	45 ÷ 80	200÷235 (220÷255)
FIX-M 10x300	10	300	60	70	35	45 ÷ 80	220÷255 (240÷275)
FIX-M 10x340	10	340	60	70	35	45 ÷ 80	260÷295 (280÷315)
FIX-M 10x380	10	380	60	70	35	45 ÷ 80	300÷335 (320÷345)
FIX-M 10x420	10	420	60	70	35	45 ÷ 80	340÷375 (360÷385)

Characteristic resistance

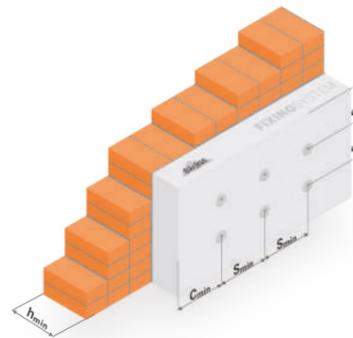
Base materials	Concrete C12 / 15	Concrete C16 / 20- C50 / 60	Solid clay brick MZ	Solid silicate brick KS	Perforated silicate brick KSL	Hollow brick Hlz	Porotherm 25	Lightweight aggregate concrete LAC	AAC2-AAC7 aerated concrete
Base materials categories									
	A	A	B	B	C	C	C	D	E
Drilling method									
	hammer	hammer	hammer	hammer	hammer	rotary	rotary	rotary	rotary
Characteristic resistance [kN]									
H _{ef1} - 70mm (FIX-M)	0,50	0,70	0,45	0,45	0,45	0,25	0,10	0,70	0,35
H _{ef2} - 35mm (FIX-M-K)	0,40	0,55	0,45	0,45	0,45	0,25	0,10	0,55	0,20

Fastener type	FIX-M	
The strength of the plate	[kN]	1,50
The stiffness of the plate	[kN/mm]	0,6
Point thermal conductivity	[W/K]	0,003

Installation instructions



The minimum thickness of the substrate	$h_{min} \geq$ [mm]	100
Minimum spacing of fasteners	$S_{min} \geq$ [mm]	100
Minimum spacing of fasteners	$C_{min} \geq$ [mm]	100
Recommended number of pieces	pieces / m ²	6-8
Recommended number of pieces at the corners of the building	pieces / m ²	8-10



Logistics information

Type	Index	Quantity [pcs]		Weight [kg]		EAN code
		Unit packaging (carton)	Pallet (120x80x180 [cm])	Unit packaging (carton)	Pallet (120x80x180 [cm])	
FIX-M 10x100	M100	100	10000	2,3	250	5908275918004
FIX-M 10x120	M120	100	10000	2,8	300	5908275918011
FIX-M 10x140	M140	100	10000	3,2	340	5908275918028
FIX-M 10x160	M160	100	10000	3,6	380	5908275918035
FIX-M 10x180	M180	100	8400	3,9	350	5908275918042
FIX-M 10x200	M200	100	8400	4,3	380	5908275918059
FIX-M 10x220	M220	100	8400	4,6	405	5908275918066
FIX-M 10x240	M240	100	5600	5,0	295	5908275918073
FIX-M 10x260	M260	100	5600	5,4	325	5908275918080
FIX-M 10x280	M280	100	5600	5,7	340	5908275918097
FIX-M 10x300	M300	100	5600	6,0	355	5908275918103
FIX-M 10x340	M340	100	3600	6,5	254	5908275918110
FIX-M 10x380	M380	100	3600	7,1	273	5908275918127
FIX-M 10x420	M420	100	3600	7,7	296	5908275918134

Mounting accessories

Clamping washer TDW

► For mechanical installation of thermal insulation materials, especially heavy mineral wool, which requires a solid and reliable protection against displacement.

► Compatible with all available connectors: ETX-MT, ETX-M, FIX-M, FIX-S, FIX-PA, LIT-W, LIT and TAD-60.



Type	Diameter [mm]
TDW-90	90
TDW-110	110
TDW-130	130

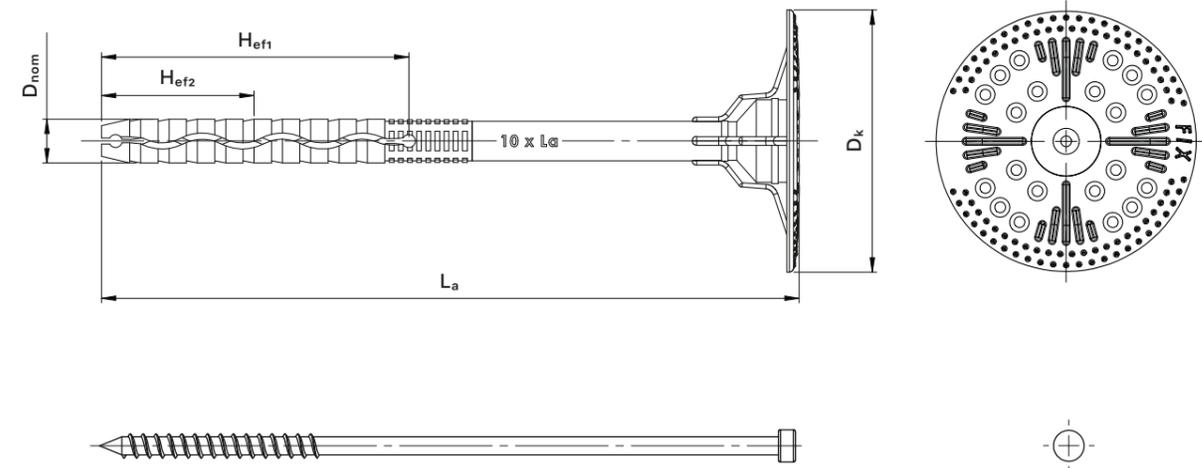
Fastener FIX-S



Advanced hammer-in facade plug with a metal pin for fixing external thermal insulation ETICS in concrete and masonry.



Product information



Product description

Fastener FIX are versatile products. They have a double anchoring zone: 35 mm and 70 mm. As a result, one dowel can be used for different thicknesses of the insulation layer. At the same time, the demarcation into insulating pins with a long and short anchoring zone was abandoned.

Features and Benefits

- ▶ Quality confirmed by the European CE certificate.
- ▶ Connectors rated by Deutsches Institut für Bautechnik DiBT.
- ▶ Dowels with double anchoring zone: 35 mm and 70 mm.
- ▶ Advanced plugs for polystyrene equipped with a metal pin.
- ▶ Can be installed with optional TDW pressure plates.
- ▶ The possibility of surface or recessed mounting with the use of the ZP-FS 67mm cutter and polystyrene plugs.

Applications

- ▶ Facade insulation system (ETICS)
- ▶ Styrofoam plates
- ▶ Mineral wool plates
- ▶ Polyurethane plates
- ▶ Cork
- ▶ Wood wool plates

Material

- ▶ Sleeve – polypropylene
- ▶ Pin - galvanized steel

Approval

- ▶ European Technical Assessment ETA-19/0573

Substrate categories

- ▶ **A** - Concrete C12/15, Normal concrete of class C20/25 – C50/60
- ▶ **B** - Solid clay brick MZ, Solid silicate brick KS
- ▶ **C** - Perforated silicate brick KSL, Hollow brick Hlz, Porotherm 25
- ▶ **D** - Lightweight aggregate concrete LAC
- ▶ **E** - AAC2-AAC7 aerated concrete

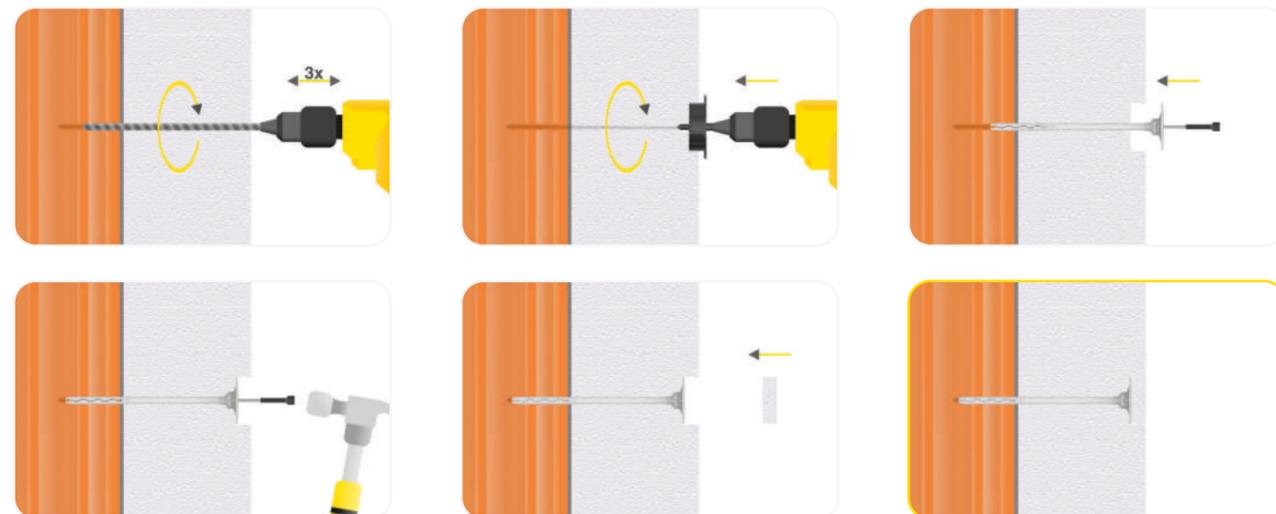
Type	Fastener			Effective anchoring depth H _{ef1} [mm]	Effective anchoring depth H _{ef2} [mm]	Mounting hole depth [mm]	Recommended thickness of ETICS (recessed mounting) [mm]
	Diameter D _{nom} [mm]	Length L _a [mm]	Plate diameter D _k [mm]				
FIX-S 10x100	10	100	60	70	35	45 ÷ 80	20÷55 (40÷75)
FIX-S 10x120	10	120	60	70	35	45 ÷ 80	40÷75 (60÷95)
FIX-S 10x140	10	140	60	70	35	45 ÷ 80	60÷95 (80÷115)
FIX-S 10x160	10	160	60	70	35	45 ÷ 80	80÷115 (100÷135)
FIX-S 10x180	10	180	60	70	35	45 ÷ 80	100÷135 (120÷155)
FIX-S 10x200	10	200	60	70	35	45 ÷ 80	120÷155 (140÷175)
FIX-S 10x220	10	220	60	70	35	45 ÷ 80	140÷175 (160÷195)
FIX-S 10x240	10	240	60	70	35	45 ÷ 80	160÷195 (180÷215)
FIX-S 10x260	10	260	60	70	35	45 ÷ 80	180÷215 (200÷235)
FIX-S 10x280	10	280	60	70	35	45 ÷ 80	200÷235 (220÷255)
FIX-S 10x300	10	300	60	70	35	45 ÷ 80	220÷255 (240÷275)

Characteristic resistance

Base materials	Concrete C12 / 15	Concrete C16 / 20- C50 / 60	Solid clay brick MZ	Solid silicate brick KS	Perforated silicate brick KSL	Hollow brick Hlz	Porotherm 25	Lightweight aggregate concrete LAC	AAC2-AAC7 aerated concrete
Base materials categories									
	A	A	B	B	C	C	C	D	E
Drilling method									
	hammer	hammer	hammer	hammer	hammer	rotary	rotary	rotary	rotary
Characteristic resistance [kN]									
H_{ef1} - 70mm (FIX-S)	0,50	0,70	0,45	0,45	0,45	0,25	0,10	0,70	0,35
H_{ef2} - 35mm (FIX-S-K)	0,40	0,55	0,45	0,45	0,45	0,25	0,10	0,55	0,20

Fastener type	FIX-S
The strength of the plate [kN]	1,50
The stiffness of the plate [kN/mm]	0,6
Point thermal conductivity [W/K]	0,002

Installation instructions



The minimum thickness of the substrate	$h_{min} \geq$ [mm]	100
Minimum spacing of fasteners	$S_{min} \geq$ [mm]	100
Minimum spacing of fasteners	$C_{min} \geq$ [mm]	100
Recommended number of pieces	pieces / m ²	6-8
Recommended number of pieces at the corners of the building	pieces / m ²	8-10

Logistics information

Type	Index	Quantity [pcs]		Weight [kg]		EAN code
		Unit packaging (carton)	Pallet (120x80x180 [cm])	Unit packaging (carton)	Pallet (120x80x180 [cm])	
FIX-S 10x100	S100	100	10000	2,3	250	5908275918141
FIX-S 10x120	S120	100	10000	2,8	300	5908275918158
FIX-S 10x140	S140	100	10000	3,2	340	5908275918165
FIX-S 10x160	S160	100	10000	3,6	380	5908275918172
FIX-S 10x180	S180	100	8400	3,9	350	5908275918189
FIX-S 10x200	S200	100	8400	4,3	380	5908275918196
FIX-S 10x220	S220	100	8400	4,6	405	5908275918202
FIX-S 10x240	S240	100	5600	5,0	295	5908275918219
FIX-S 10x260	S260	100	5600	5,4	325	5908275918226
FIX-S 10x280	S280	100	5600	5,7	340	5908275918233
FIX-S 10x300	S300	100	5600	6,0	355	5908275918240

Mounting accessories

Clamping washer TDW

- For mechanical installation of thermal insulation materials, especially heavy mineral wool, which requires a solid and reliable protection against displacement.
- Compatible with all available connectors: ETX-MT, ETX-M, FIX-M, FIX-S, FIX-PA, LIT-W, LIT and TAD-60.



Type	Diameter [mm]
TDW-90	90
TDW-110	110
TDW-130	130

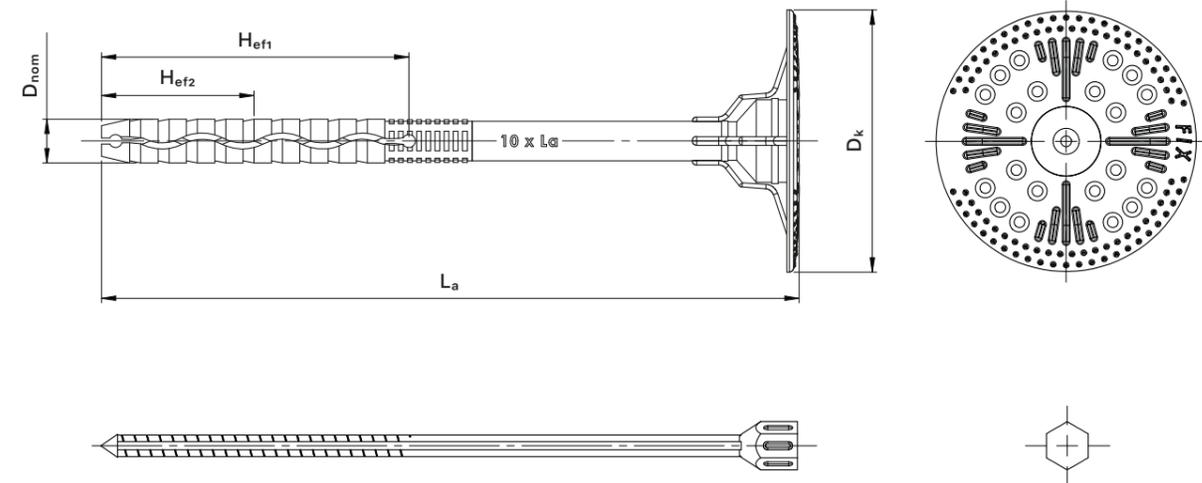
Fastener FIX-PA



Advanced hammer-in facade plug with a polyamide pin for fixing external thermal insulation ETICS in concrete and masonry.



Product information



Product description

Fastener FIX are versatile products. They have a double anchoring zone: 35 mm and 70 mm. As a result, one dowel can be used for different thicknesses of the insulation layer. At the same time, the demarcation into insulating pins with a long and short anchoring zone was abandoned.

Features and Benefits

- ▶ Quality confirmed by the European CE certificate.
- ▶ Connectors rated by Deutsches Institut für Bautechnik DiBT.
- ▶ Dowels with double anchoring zone: 35 mm and 70 mm.
- ▶ Advanced plugs for polystyrene equipped with a rigid polyamide pin.
- ▶ Can be installed with optional TDW pressure plates.
- ▶ The possibility of surface or recessed mounting with the use of the ZP-FS 67mm cutter and polystyrene plugs.

Applications

- ▶ Facade insulation system (ETICS)
- ▶ Styrofoam plates
- ▶ Mineral wool plates
- ▶ Polyurethane plates
- ▶ Cork
- ▶ Wood wool plates

Material

- ▶ Sleeve – polypropylene
- ▶ Pin – polyamide

Approval

- ▶ European Technical Assessment ETA-19/0573

Substrate categories

- ▶ **A** - Concrete C12/15, Normal concrete of class C20/25 – C50/60
- ▶ **B** - Solid clay brick MZ, Solid silicate brick KS
- ▶ **C** - Perforated silicate brick KSL, Hollow brick Hlz, Porotherm 25
- ▶ **D** - Lightweight aggregate concrete LAC
- ▶ **E** - AAC2-AAC7 aerated concrete

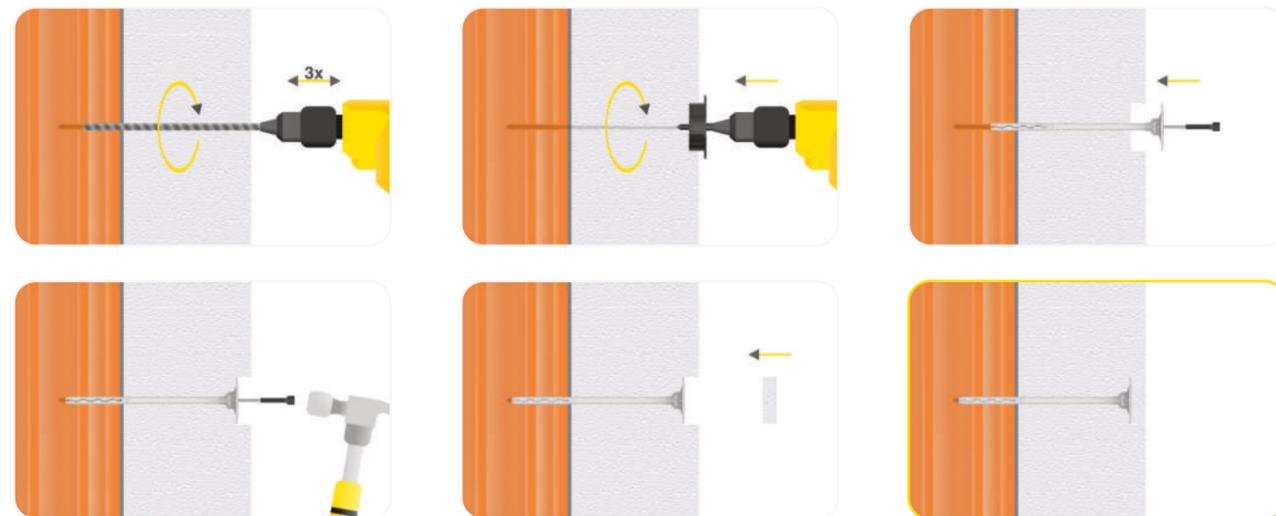
Type	Fastener			Effective anchoring depth H _{ef1} [mm]	Effective anchoring depth H _{ef2} [mm]	Mounting hole depth [mm]	Recommended thickness of ETICS (recessed mounting) [mm]
	Diameter D _{nom} [mm]	Length L _a [mm]	Plate diameter D _k [mm]				
FIX-PA 10x100	10	100	60	70	35	45 ÷ 80	20÷55 (40÷75)
FIX-PA 10x120	10	120	60	70	35	45 ÷ 80	40÷75 (60÷95)
FIX-PA 10x140	10	140	60	70	35	45 ÷ 80	60÷95 (80÷115)
FIX-PA 10x160	10	160	60	70	35	45 ÷ 80	80÷115 (100÷135)
FIX-PA 10x180	10	180	60	70	35	45 ÷ 80	100÷135 (120÷155)
FIX-PA 10x200	10	200	60	70	35	45 ÷ 80	120÷155 (140÷175)
FIX-PA 10x220	10	220	60	70	35	45 ÷ 80	140÷175 (160÷195)
FIX-PA 10x240	10	240	60	70	35	45 ÷ 80	160÷195 (180÷215)
FIX-PA 10x260	10	260	60	70	35	45 ÷ 80	180÷215 (200÷235)
FIX-PA 10x280	10	280	60	70	35	45 ÷ 80	200÷235 (220÷255)
FIX-PA 10x300	10	300	60	70	35	45 ÷ 80	220÷255 (240÷275)

Characteristic resistance

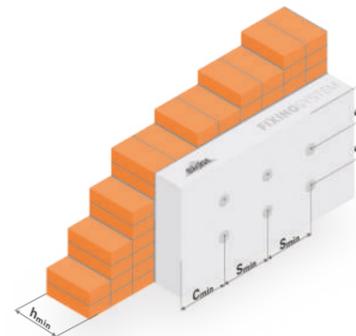
Base materials	Concrete C12 / 15	Concrete C16 / 20- C50 / 60	Solid clay brick MZ	Solid silicate brick KS	Perforated silicate brick KSL	Hollow brick Hlz	Porotherm 25	Lightweight aggregate concrete LAC	AAC2-AAC7 aerated concrete
Base materials categories									
	A	A	B	B	C	C	C	D	E
Drilling method									
	hammer	hammer	hammer	hammer	hammer	rotary	rotary	rotary	rotary
Characteristic resistance [kN]									
H _{ef1} - 70mm (FIX-PA)	-	-	0,60	0,60	0,60	0,25	0,20	-	0,50
H _{ef2} - 35mm (FIX-PA-K)	0,70	1,00	0,50	0,50	0,50	0,50	0,20	1,00	0,45

Fastener type	FIX-PA
The strength of the plate [kN]	1,50
The stiffness of the plate [kN/mm]	0,6
Point thermal conductivity [W/K]	0,001

Installation instructions



The minimum thickness of the substrate	$h_{min} \geq$ [mm]	100
Minimum spacing of fasteners	$S_{min} \geq$ [mm]	100
Minimum spacing of fasteners	$C_{min} \geq$ [mm]	100
Recommended number of pieces	pieces / m ²	6-8
Recommended number of pieces at the corners of the building	pieces / m ²	8-10



Logistics information

Type	Index	Quantity [pcs]		Weight [kg]		EAN code
		Unit packaging (carton)	Pallet (120x80x180 [cm])	Unit packaging (carton)	Pallet (120x80x180 [cm])	
FIX-PA 10x100	PA100	100	10000	1,2	139	5908275918288
FIX-PA 10x120	PA120	100	10000	1,3	147	5908275918295
FIX-PA 10x140	PA140	100	10000	1,4	162	5908275918301
FIX-PA 10x160	PA160	100	10000	1,6	180	5908275918318
FIX-PA 10x180	PA180	100	8400	1,8	172	5908275918325
FIX-PA 10x200	PA200	100	8400	2,0	186	5908275918332
FIX-PA 10x220	PA220	100	8400	2,1	198	5908275918349
FIX-PA 10x240	PA240	100	5600	2,2	143	5908275918356
FIX-PA 10x260	PA260	100	5600	2,3	152	5908275918363
FIX-PA 10x280	PA280	100	5600	2,5	161	5908275918370
FIX-PA 10x300	PA300	100	5600	2,6	168	5908275918387

Mounting accessories

Clamping washer TDW

- For mechanical installation of thermal insulation materials, especially heavy mineral wool, which requires a solid and reliable protection against displacement.
- Compatible with all available connectors: ETX-MT, ETX-M, FIX-M, FIX-S, FIX-PA, LIT-W, LIT and TAD-60.

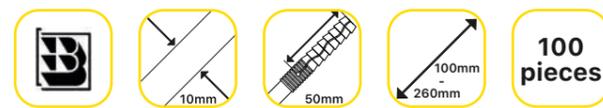


Type	Diameter [mm]
TDW-90	90
TDW-110	110
TDW-130	130

Plastic fastener LIT-W



Reinforced hammer-in facade pins with a plastic pin for fixing external thermal insulation ETICS.



Product description

For mechanical installation of thermal insulation materials (e.g. fixing polystyrene, mineral wool) in concrete or masonry substrate.

Features and Benefits

- ▶ The fastener LIT-W are reinforced in relation to the LIT connector to facilitate driving the mandrel.
- ▶ Dowels available from 100 mm total length.
- ▶ The proven design of the insulating pins facilitates quick and trouble-free installation.
- ▶ Can be installed with optional TDW pressure plates.
- ▶ The possibility of surface or recessed mounting with the use of the ZP-FS 67mm cutter and polystyrene plugs.

Applications

- ▶ Facade insulation system (ETICS)
- ▶ Styrofoam plates
- ▶ Mineral wool plates
- ▶ Polyurethane plates
- ▶ Cork
- ▶ Wood wool plates

Material

- ▶ Sleeve – polypropylene
- ▶ Pin – polypropylene

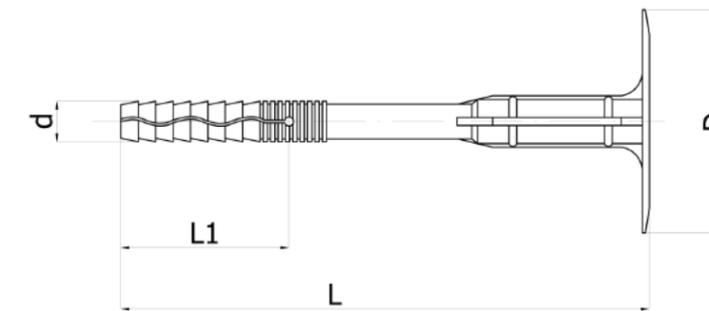
Approval

- ▶ National Technical Assessment ITB-KOT-2017/0106

Substrate categories

- ▶ A - Normal grade concrete C20 / 25 - C50 / 60
- ▶ B - Class 15 ceramic solid brick
- ▶ E - Aerated concrete

Product information

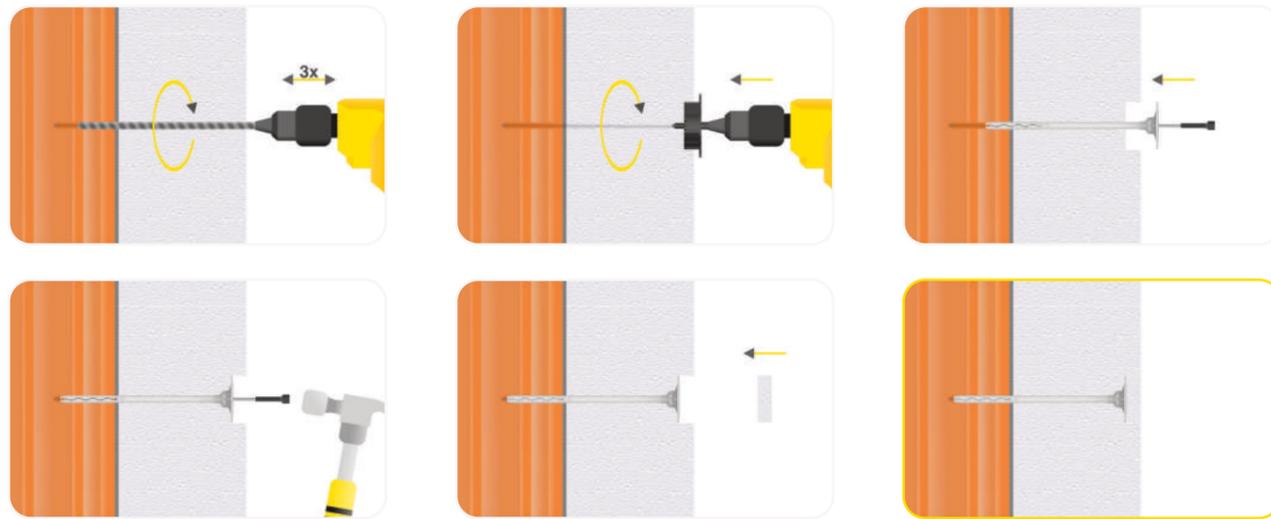


Type	Fastener			Effective anchoring depth L1 [mm]	Mounting hole depth [mm]	Recommended thickness of ETICS (immersed mounting) [mm]
	Diameter d [mm]	Length L [mm]	Plate diameter D [mm]			
LIT-W 10x100	10	100	60	50	60	40 (60)
LIT-W 10x120	10	120	60	50	60	60 (80)
LIT-W 10x140	10	140	60	50	60	80 (100)
LIT-W 10x160	10	160	60	50	60	100 (120)
LIT-W 10x180	10	180	60	50	60	120 (140)
LIT-W 10x200	10	200	60	50	60	140 (160)
LIT-W 10x220	10	220	60	50	60	160 (180)
LIT-W 10x240	10	240	60	50	60	180 (200)
LIT-W 10x260	10	260	60	50	60	200 (220)

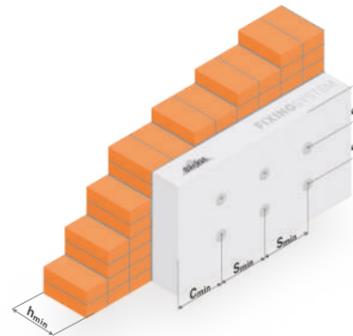
Characteristic resistance

Base materials categories	Base materials	Characteristic resistance [kN]
A	Normal grade concrete C20 / 25 - C50 / 60	0,10
B	Class 15 ceramic solid brick	0,10
E	Aerated concrete	0,10

Installation instructions



The minimum thickness of the base materials	$h_{min} \geq$ [mm]	100
Minimum spacing of fasteners	$S_{min} \geq$ [mm]	100
Minimum spacing of fasteners	$C_{min} \geq$ [mm]	100
Recommended number of pieces	pieces / m ²	6-8
Recommended number of pieces at the corners of the building	pieces / m ²	8-10



Logistics information

Type	Index	Quantity [pcs]		Weight [kg]		EAN code
		Unit packaging (foil)	Collective packaging (foil)	Unit packaging (foil)	Collective packaging (foil)	
LIT-W 10x100	W100	100	1000	1,1	10,5	5907812671273
LIT-W 10x120	W120	100	1000	1,2	11,5	5907812671280
LIT-W 10x140	W140	100	1000	1,3	13,0	5907812671297
LIT-W 10x160	W160	100	1000	1,5	14,5	5907812671303
LIT-W 10x180	W180	100	1000	1,6	15,5	5907812671310
LIT-W 10x200	W200	100	1000	1,7	16,5	5907812671327
LIT-W 10x220	W220	100	1000	1,8	17,5	5907812671334
LIT-W 10x240	W240	100	500	1,8	9	5907812671341
LIT-W 10x260	W260	100	500	1,9	9,5	5907812671358

Mounting accessories

Insulating discs

- ▶ For filling assembly cavities after the ZP-FS cutter and preventing heat transfer at the site of application of the plastic fasteners.
- ▶ For use with the ZP-FS 67mm cutter.



Type	Diameter x Thickness [mm]
Styrofoam discs - white	67x16,5
Styrofoam discs - graphite	67x16,5
Mineral wool discs	67x20

Cutter for styrofoam and wool ZP-FS Ø67mm

- ▶ For cutting holes for the immersed mounting of insulation connectors.
- ▶ For use with styrofoam plugs or mineral wool plugs.



Type	Diameter [mm]
Cutter ZP-FS 67mm	67

Clamping washer TDW

- ▶ For mechanical installation of thermal insulation materials, especially heavy mineral wool, which requires a solid and reliable protection against displacement.
- ▶ Compatible with all available connectors: ETX-MT, ETX-M, FIX-M, FIX-S, FIX-PA, LIT-W, LIT and TAD-60.



Type	Diameter [mm]
TDW-90	90
TDW-110	110
TDW-130	130

Plastic fastener LIT



Economical hammer-in facade plug with a plastic pin for fixing external thermal insulation ETICS.



Product description

For mechanical installation of thermal insulation materials (e.g. fixing polystyrene, mineral wool) in concrete or masonry substrate.

Features and Benefits

- ▶ Economical plugs for polystyrene, reducing the cost of the thermal insulation system.
- ▶ Dowels available from 70 mm in total length.
- ▶ The proven design of the insulating pins facilitates quick and trouble-free installation.
- ▶ Can be installed with optional TDW pressure plates.
- ▶ The possibility of surface or recessed mounting with the use of the ZP-FS 67mm cutter and polystyrene plugs.

Applications

- ▶ Facade insulation system (ETICS)
- ▶ Styrofoam plates
- ▶ Mineral wool plates
- ▶ Polyurethane plates
- ▶ Cork
- ▶ Wood wool plates

Material

- ▶ Sleeve – polypropylene
- ▶ Pin – polypropylene

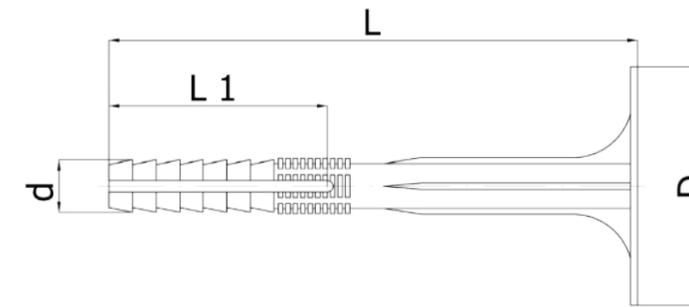
Approval

▶ National Technical Assessment ITB-KOT-2020/1347 edition 1

Substrate categories

- ▶ A - Normal grade concrete C20 / 25 - C50 / 60
- ▶ B - Class 15 ceramic solid brick
- ▶ E - Aerated concrete

Product information

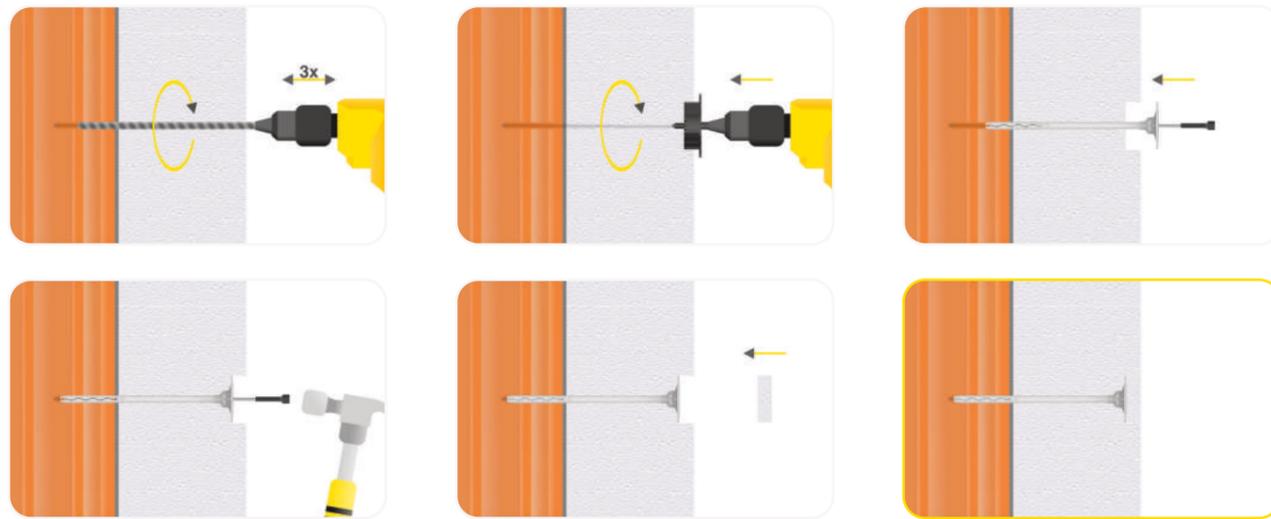


Type	Diameter d [mm]	Length L [mm]	Plate diameter D [mm]	Effective anchoring depth L1 [mm]	Mounting hole depth [mm]	Recommended thickness of ETICS (immersed mounting) [mm]
LIT 10x70	10	70	60	50	60	10 (30)
LIT 10x90	10	90	60	50	60	30 (50)
LIT 10x100	10	100	60	50	60	40 (60)
LIT 10x120	10	120	60	50	60	60 (80)
LIT 10x140	10	140	60	50	60	80 (100)
LIT 10x160	10	160	60	50	60	100 (120)
LIT 10x180	10	180	60	50	60	120 (140)
LIT 10x200	10	200	60	50	60	140 (160)
LIT 10x220	10	220	60	50	60	160 (180)
LIT 10x240	10	240	60	50	60	180 (200)
LIT 10x260	10	260	60	50	60	200 (220)

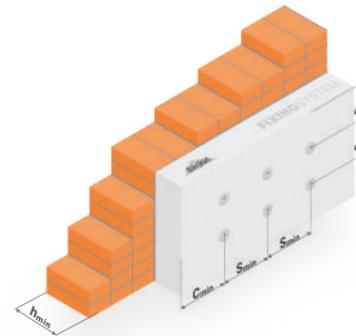
Characteristic resistance

Base materials categories	Base materials	Characteristic resistance [kN]
A	Normal grade concrete C20 / 25 - C50 / 60	0,51
B	Class 15 ceramic solid brick	0,50
E	Aerated concrete	0,27

Installation instructions



The minimum thickness of the base materials	$h_{min} \geq$ [mm]	100
Minimum spacing of fasteners	$S_{min} \geq$ [mm]	100
Minimum spacing of fasteners	$C_{min} \geq$ [mm]	100
Recommended number of pieces	pieces / m ²	6-8
Recommended number of pieces at the corners of the building	pieces / m ²	8-10



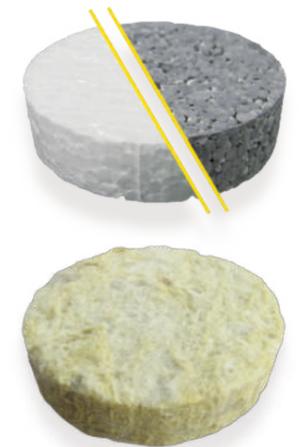
Logistics information

Type	Index	Quantity [pcs]		Weight [kg]		EAN code
		Unit packaging (foil)	Collective packaging (foil)	Unit packaging (foil)	Collective packaging (foil)	
LIT 10x70	70	100	1000	0,7	7,0	5907812671013
LIT 10x90	90	100	1000	0,8	8,0	5907812671020
LIT 10x100	100	100	1000	0,9	8,5	5907812671037
LIT 10x120	120	100	1000	0,9	9,0	5907812671051
LIT 10x140	140	100	1000	1,1	10,5	5907812671068
LIT 10x160	160	100	1000	1,2	12,0	5907812671075
LIT 10x180	180	100	1000	1,3	13,0	5907812671082
LIT 10x200	200	100	1000	1,5	14,5	5907812671099
LIT 10x220	220	100	1000	1,6	15,5	5907812671105
LIT 10x240	240	100	500	1,7	8,5	5907812671112
LIT 10x260	260	100	500	1,8	9,0	5907812671129

Mounting accessories

Insulating discs

- ▶ For filling assembly cavities after the ZP-FS cutter and preventing heat transfer at the site of application of the plastic fasteners.
- ▶ For use with the ZP-FS 67mm cutter.



Type	Diameter x Thickness [mm]
Styrofoam discs - white	67x16,5
Styrofoam discs - graphite	67x16,5
Mineral wool discs	67x20

Cutter for styrofoam and wool ZP-FS Ø67mm

- ▶ For cutting holes for the immersed mounting of insulation connectors.
- ▶ For use with styrofoam plugs or mineral wool plugs.



Type	Diameter [mm]
ZP-FS	67

Clamping washer TDW

- ▶ For mechanical installation of thermal insulation materials, especially heavy mineral wool, which requires a solid and reliable protection against displacement.
- ▶ Compatible with all available connectors: ETX-MT, ETX-M, FIX-M, FIX-S, FIX-PA, LIT-W, LIT and TAD-60.



Type	Diameter [mm]
TDW-90	90
TDW-110	110
TDW-130	130

Clamping washer TAD-60



Pressure flange for fixing the outer layer of thermal insulation in a wooden or metal substrate with a properly selected screw



Product description

For mechanical installation of thermal insulation materials (e.g. fixing of polystyrene, mineral wool) in wooden substrates, OSB boards or made of steel sheet. Often used in the thermal insulation of walls of Canadian homes.

Features and Benefits

- ▶ An additional masking plug eliminates thermal bridges and ensures aesthetic assembly.
- ▶ As a few, we've placed the plug outside the plate, thanks to which the collar's high rigidity has been maintained.
- ▶ Suitable for any thickness of insulation layer. The right screw must be selected.
- ▶ Installation possible with optional TDW clamping washer.
- ▶ Surface or recessed mounting possible with the use of a ZP-FS 67mm cutter and styrofoam discs.

Applications

- ▶ Facade insulation system (ETICS)
- ▶ Styrofoam plates
- ▶ Mineral wool plates
- ▶ Polyurethane plates
- ▶ Cork
- ▶ Wood wool plates

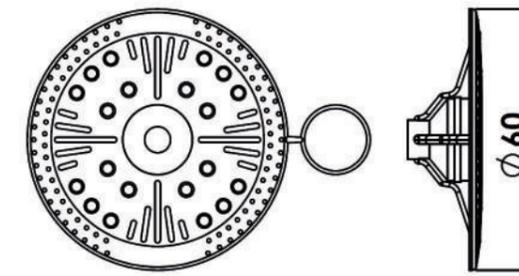
Material

- ▶ Impact resistant polypropylene

Substrate categories

- ▶ Wood
- ▶ OSB boards
- ▶ Steel plate

Product information



Type	Plate diameter [mm]
TAD-60	60

Logistics information

Type	Index	Quantity [pcs]		Weight [kg]		EAN code
		Unit packaging	Collective packaging	Unit packaging	Collective packaging	
TAD-60	TAD60	100 (foil)	500 (foil)	0,5 (foil)	2,5 (foil)	5907812671501
TAD-60 (250)	TAD60/250	250 (carton)	37500 (pallet)	1,3 (carton)	205 (pallet)	5907812671501

Mounting accessories

Clamping washer TDW

- ▶ For mechanical installation of thermal insulation materials, especially heavy mineral wool, which requires a solid and reliable protection against displacement.
- ▶ Compatible with all available connectors: ETX-MT, ETX-M, FIX-M, FIX-S, FIX-PA, LIT-W, LIT and TAD-60.

Type	Diameter [mm]
TDW-90	90
TDW-110	110
TDW-130	130



Clamping washer TDW



Pressure collar increasing the contact surface for fixing insulation wool



100 pieces

Product description

For mechanical installation of thermal insulation materials, especially heavy mineral wool, which requires solid and reliable protection against displacement.

Features and Benefits

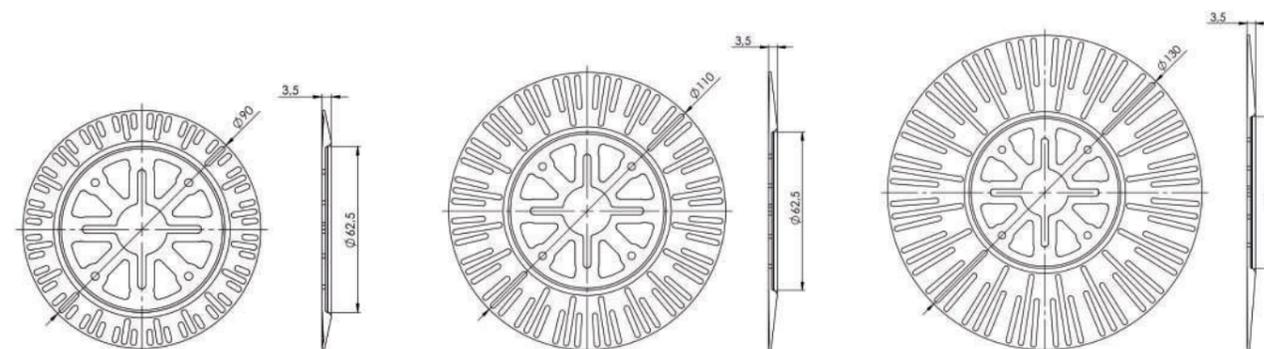
- ▶ TDW pressure plates are an improved construction in which we used advanced technical material reinforced with glass fiber. The new model means improved stiffness, increased impact resistance and perfect adhesion to the surface of the insulating layer.
- ▶ In the new design, we took into account the convenience of installation, which is why TDW are equipped with a snap system compatible with FIX insulation pins.

- ▶ To meet all requirements, we offer plates in three sizes: 90, 110 and 130 mm of plate diameter.
- ▶ Compatible with all available connectors: ETX-MT, ETX-M, FIX-M, FIX-S, FIX-PA, LIT-W, LIT and TAD-60.
- ▶ Especially recommended for fixing insulation wool.

Material

- ▶ Impact-resistant technical plastic reinforced with glass fiber.

Product information



Type	Plate diameter [mm]
TDW-90	90
TDW-110	110
TDW-130	130

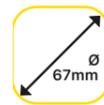
Logistics information

Type	Index	Quantity [pcs]		Weight [kg]		EAN code
		Unit packaging (carton)	Pallet	Unit packaging (carton)	Pallet	
TDW-90	TDW90	100	28800	1,0	310	5908275918424
TDW-110	TDW110	100	28800	1,1	350	5908275918431
TDW-130	TDW130	100	28800	1,3	400	5908275918448

Cutter for styrofoam and wool ZP-FS Ø67mm



Cutter for cutting in foamed styrofoam and mineral wool



Product description

For cutting holes for recessed mounting of insulation connectors.

Features and Benefits

- ▶ Enables the assembly of connectors in a recessed system.
- ▶ They allow the use of fasteners shorter by 20 mm with the same thickness of the insulation layer.
- ▶ Mandrel for mounting in a drill or screwdriver.
- ▶ The stop collar gives you control of the drilling depth.
- ▶ For use with styrofoam plugs or mineral wool plugs.

Material

- ▶ Abrasion - resistant polyamide, glass-fiber reinforced.

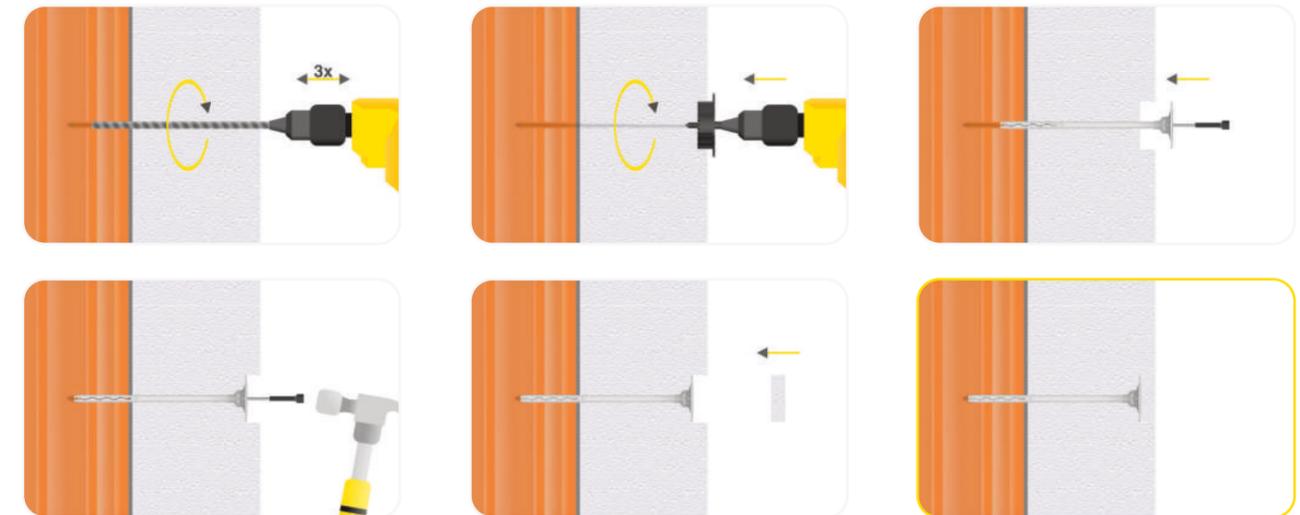
Product information

Type	Diameter [mm]	The depth of the drilled socket [mm]
ZP-FS	67	20

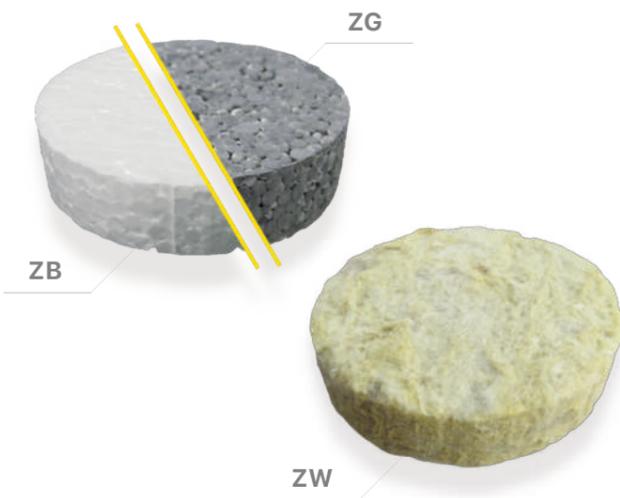
Logistics information

Type	Quantity [pcs]		Weight [kg]		EAN code
	Unit packaging (foil with a hanger)	Pallet	Unit packaging (foil with a hanger)	Pallet	
ZP-FS	1	ND	0,2	ND	5907812671259

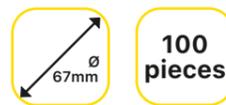
Installation instructions



Insulating discs



Styrofoam and mineral wool discs reducing the thermal permeability of the insulating layer of the building



Product description

For filling assembly cavities after the ZP-FS cutter and preventing heat transfer at the place of use of plastic connectors.

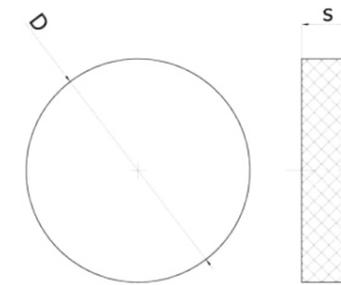
Features and Benefits

- ▶ They reduce thermal bridges formed in the place of application of insulation fasteners.
- ▶ They allow the use of fasteners shorter by 20 mm with the same thickness of the insulation layer.
- ▶ They provide a smooth and easy-to-process polystyrene surface on the facade.
- ▶ Styrofoam plugs cut out and placed in a cardboard box speed up and facilitate installation.
- ▶ For use with the ZP-FS 67mm cutter.

Material

- ▶ As one of the few, for the production of plugs, we only use primary styrofoam, previously unprocessed.
- ▶ Heat transfer coefficients:
 - white styrofoam – 0,040 W/sqm
 - graphite styrofoam – 0,031 W/sqm
 - mineral wool – 0,038 W/sqm

Product information

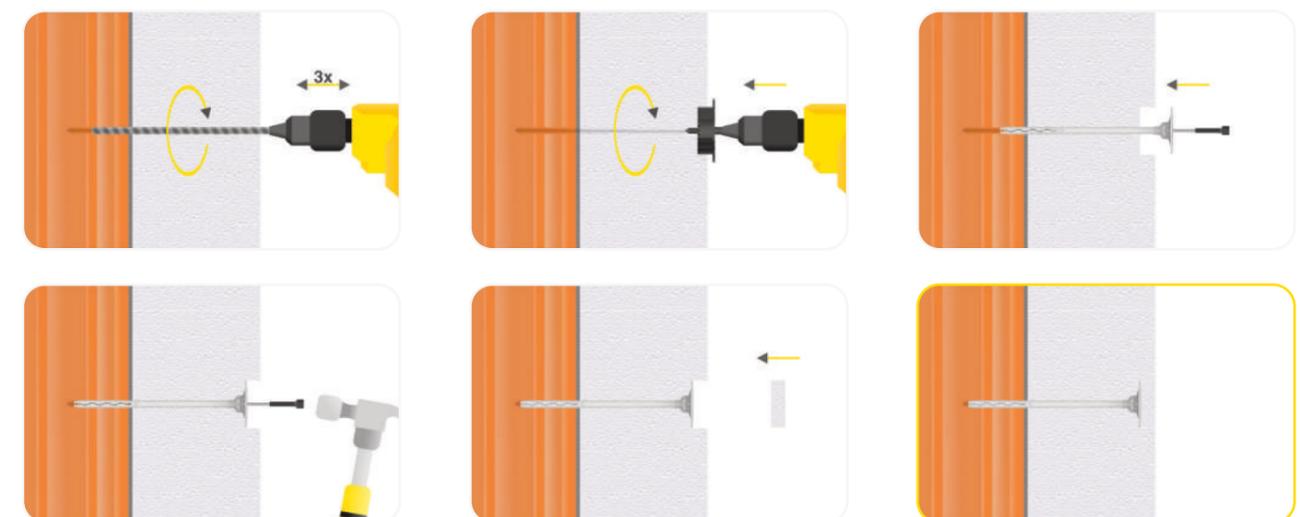


Type	Diameter D [mm]	Thickness S [mm]	Heat transfer coefficient [W/sqm]
Styrofoam disc - white (ZB)	67	16,5	0,040
Styrofoam disc - graphite (ZG)	67	16,5	0,031
Mineral wool disc (ZW)	67	20	0,038

Logistics information

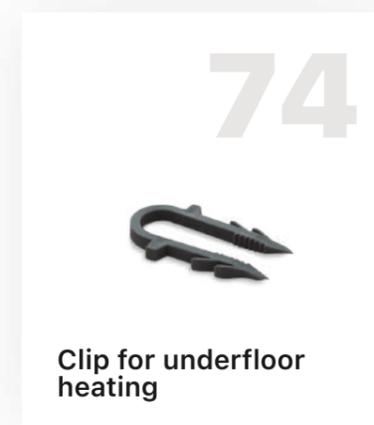
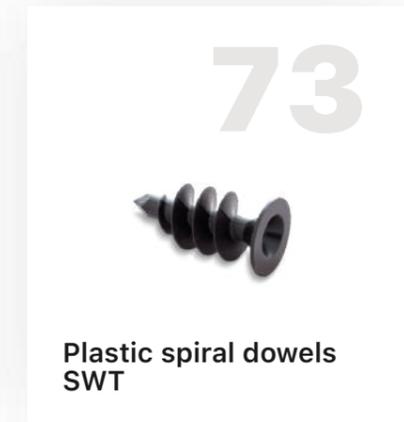
Type	Quantity [pcs]		Weight [kg]		EAN code
	Unit packaging (carton)	Pallet	Unit packaging (carton)	Pallet	
ZB100	100	15000	0,25	45	5907812671914
ZB500	500	18000	0,95	45	5907812671266
ZG100	100	15000	0,25	45	5907812671921
ZG500	500	18000	0,95	45	5907812671990
ZW	100	10000	1,3	140	5907812671723

Installation instructions





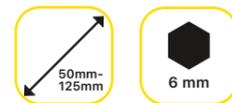
Installation in the
insulation layer.
**Installation in the
insulation layer.**
Installation in the
insulation layer.



Plastic spiral dowels SWT



For fastening light elements in styrofoam and mineral wool.



Product description

► For fastening light elements in a layer of polystyrene or wool. Most often used for the installation of cameras, lamps and building numbering.

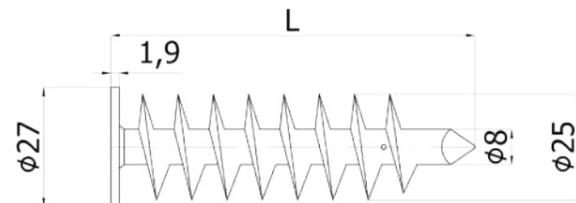
► For proper installation, we recommend using a metal wood screw $\varnothing 5 \times 40$ [mm].

Features and Benefits

- It enables the installation of light elements in polystyrene or mineral wool.
- The 6 mm Allen key socket facilitates installation.

Material

- Primary polypropylene.



Type	Thread diameter [mm]	Collar diameter [mm]	Length L [mm]	Socket for key [mm]
SWT50	25	27	50	HEX 6,0
SWT85	25	27	85	HEX 6,0
SWT125	25	27	125	HEX 6,0

Logistics information

Type	Quantity [pcs]		Weight [kg]		EAN code
	Unit packaging (foil with a hanger)	Pallet	Unit packaging (foil with a hanger)	Pallet	
SWT50	20	ND	0,2	ND	5907812671518
SWT85	15	ND	0,2	ND	5907812671525
SWT125	10	ND	0,2	ND	5907812671532
SWT50/100	100	28800	1,0	310	5908275918998
SWT85/100	100	28800	1,4	370	5908275918981
SWT125/100	100	28800	2,0	600	5908275918974

Plastic spiral dowel SWT-F



For fastening light elements in polystyrene and mineral wool. Conical version.

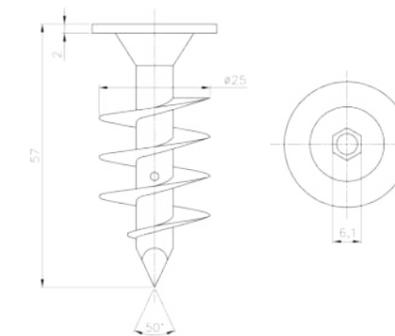


Product description

► For fastening light elements in a layer of styrofoam or wool. Most often used for the installation of insulating foils (dimpled foil).

Features and Benefits

- It enables the installation of light elements in polystyrene or mineral wool.
- The 6 mm Allen key socket facilitates installation.



Type	Thread diameter [mm]	Collar diameter [mm]	Length L [mm]	Socket for key [mm]
SWT-F	25	27	57	HEX 6,0

Logistics information

Type	Quantity [pcs]		Weight [kg]		EAN code
	Unit packaging (foil)	Collective packaging (carton)	Unit packaging (foil)	Collective packaging (carton)	
SWT-F	100	500	0,45	2,5	5907812671983

Clip for underfloor heating



Plastic clips for quick fixing of floor heating pipes in an insulating layer, e.g. in foamed polystyrene.



Product description

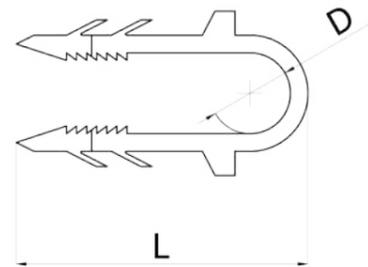
- ▶ For fixing the underfloor heating pipe system before concrete screed.
- ▶ For the installation of pipes with a diameter of 16 mm.

Features and Benefits

- ▶ The simple design allows assembly without special tools.
- ▶ Numerous teeth ensure secure attachment in foam.

Material

- ▶ Impact resistant polypropylene.



Type	Diameter D [mm]	Length L [mm]
SP	16,5	60

Logistics information

Type	Quantity [pcs]		Weight [kg]		EAN code
	Unit packaging (foil)	Collective packaging (foil)	Unit packaging (foil)	Collective packaging (foil)	
SP	100	2500	0,4	10	5907812671549





System for foundations.
System for foundations.
System for foundations.

78



Reinforcement
spacers – small

79



Reinforcement
spacers – large

80



Limiter for
construction forms

81



Plug for limiter

82



Plastic spiral dowels
SWT

Reinforcement spacers – small



Distance to maintain an even thickness (15, 20, 25 or 30 [mm]) of concrete cover in the horizontal reinforcement.



Product description

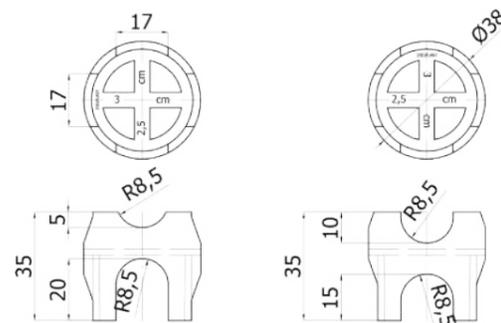
- ▶ To keep the distance of the horizontal reinforcement from the ground equal.
- ▶ For use in all types of concrete formwork.

Features and Benefits

- ▶ Design allowing the use of different heights: 15, 20, 25 or 30 mm. The inscription inside makes it easier to identify the setting of the reinforcement distance.

Material

- ▶ High-impact resistant plastic.



Type	Reinforcement distance from the ground [mm]	Total diameter [mm]	Total height [mm]
DST15/30	15, 20, 25 or 30	38	35

Logistics information

Type	Quantity [pcs]		Weight [kg]		EAN code
	Unit packaging	Collective packaging	Unit packaging (foil)	Collective packaging (foil)	
DST15/30	100 (foil)	500 (foil)	0,9 (foil)	4,3 (foil)	5907812671464
DST15/30/500	500 (carton)	32000 (pallet)	4,4 (carton)	300 (pallet)	5907812671464

Reinforcement spacers – large



Distance to maintain an even thickness (35, 40, 45 or 50 [mm]) of concrete cover in the horizontal reinforcement.



Product description

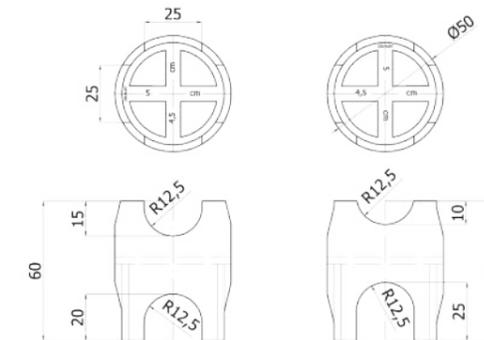
- ▶ To keep the distance of the horizontal reinforcement from the ground equal.
- ▶ For use in all types of concrete formwork.

Features and Benefits

- ▶ The design allows the use of different heights: 35, 40, 45 or 50 mm. The inscription inside makes it easier to identify the setting of the reinforcement distance.

Material

- ▶ High-impact resistant plastic.



Type	Reinforcement distance from the ground [mm]	Total diameter [mm]	Total height [mm]
DST35/50	35, 40, 45 or 50	50	60

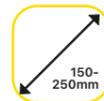
Logistics information

Type	Quantity [pcs]		Weight [kg]		EAN code
	Unit packaging (carton)	Pallet	Unit packaging (carton)	Pallet	
DST35/50	100	8400	2,2	200	5907812671136

Limiter for construction forms



A formwork spacer to keep all types of building forms the same width.



100 pieces

Product description

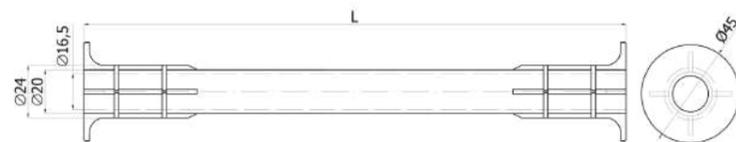
- ▶ To keep the width of concrete building forms.
- ▶ Two limiters can be used for larger widths, e.g. for 300 mm spacing = 2 x 150 mm limiters.

Features and Benefits

- ▶ The spacer ensures an even width of formwork and construction forms..
- ▶ The structure ensures a stable fixation in concrete.

Material

- ▶ High-impact plastic – PP polypropylene.



Type	Inner Diameter d [mm]	Collar diameter D [mm]	Total length L [mm]
O150	18,5	44	150
O200	18,5	44	200
O240	18,5	44	240
O250	18,5	44	250

Logistics information

Type	Quantity [pcs]		Weight [kg]		EAN code
	Unit packaging (foil)	Collective packaging (foil)	Unit packaging (foil)	Collective packaging (foil)	
O150	100	500	1,7	8,5	5907812671938
O200	100	500	2,1	10,5	5907812671945
O240	100	500	2,4	12	5908275918455
O250	100	500	2,5	12,5	5907812671952

Plug for limiter



Special foundation plugs for plugging the limiter holes after removing the ties of building forms

200 pieces

Product description

- ▶ For plugging mounting holes in construction form limiters.

Features and Benefits

- ▶ It works perfectly with our limiter for construction forms.
- ▶ It allows to obtain a smooth and aesthetic concrete surface.
- ▶ Tightly prevents the penetration of moisture.
- ▶ For use with construction form limiters.

Material

- ▶ Polypropylene PP

Type	Outer diameter D [mm]
Z0	18,6

Logistics information

Type	Quantity [pcs]	Weight [kg]	EAN code
	Unit packaging (foil)	Unit packaging (foil)	
Z0	200	0,45	5907812671006

Plastic spiral dowel SWT-F



For fastening light elements in polystyrene and mineral wool. Conical version.

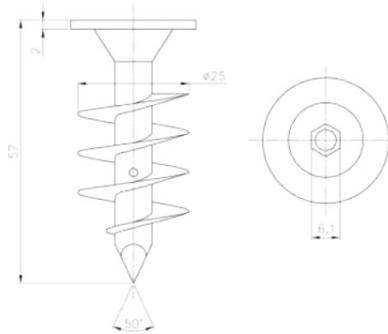


Product description

► For fastening light elements in a layer of polystyrene or wool. Most often used for the installation of insulating foils (dimpled foil).

Features and Benefits

- It enables the installation of light elements in polystyrene or mineral wool.
- The 6 mm Allen key socket facilitates installation.



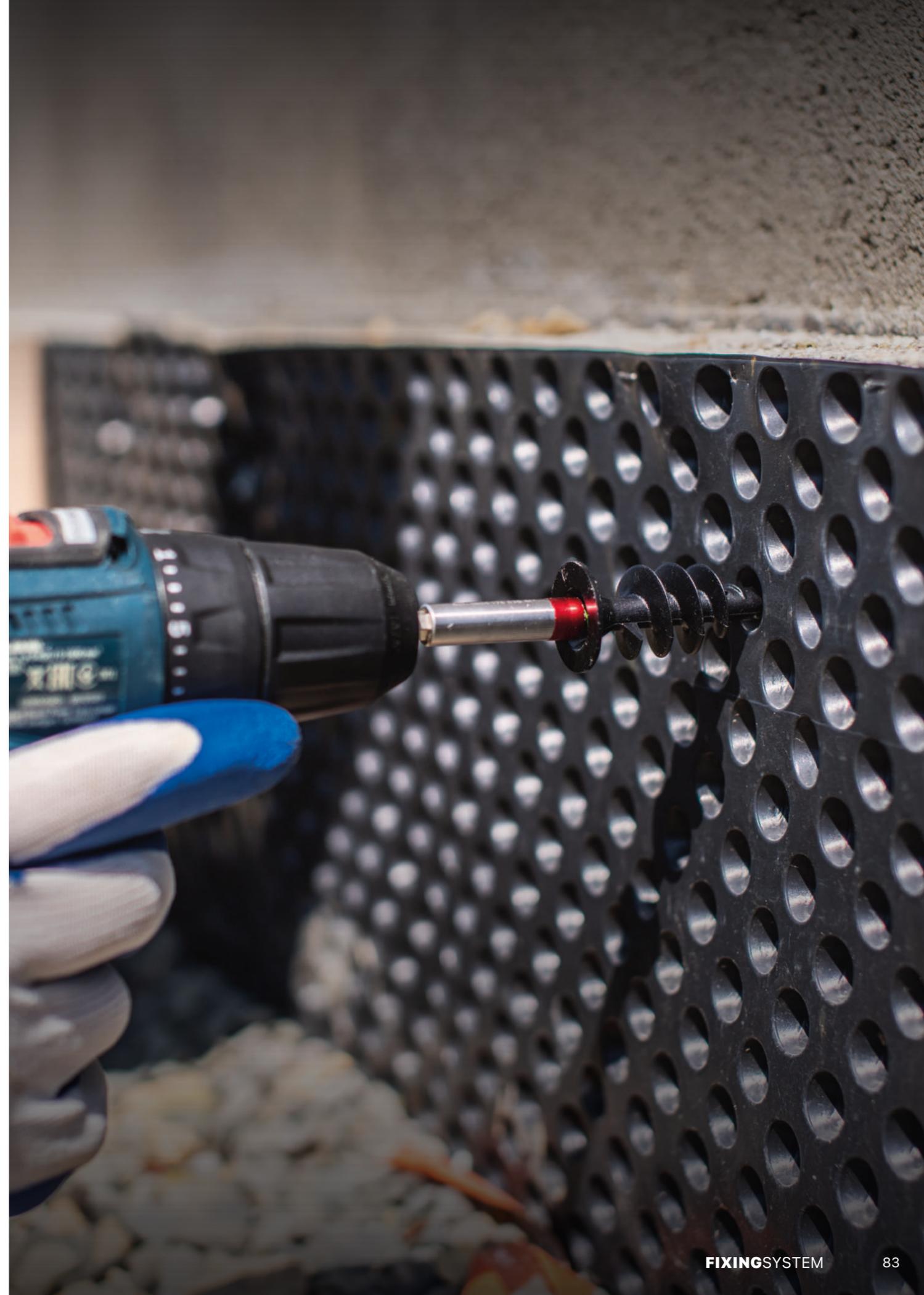
Material

► Glass-fiber reinforced plastic.

Type	Thread diameter [mm]	Collar diameter [mm]	Length L [mm]	Socket for key [mm]
SWT-F	25	27	57	HEX 6,0

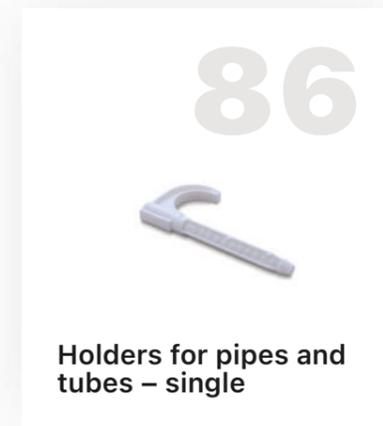
Logistics information

Type	Quantity [pcs]		Weight [kg]		EAN code
	Unit packaging (foil)	Collective packaging (carton)	Unit packaging (foil)	Collective packaging (carton)	
SWT-F	100	500	0,45	2,5	5907812671983

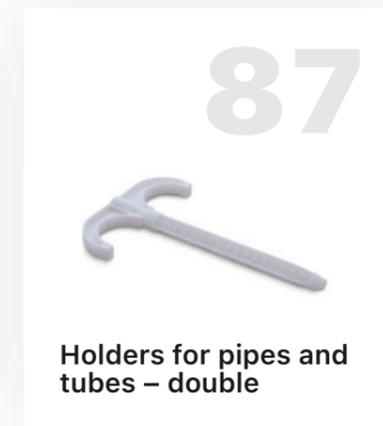




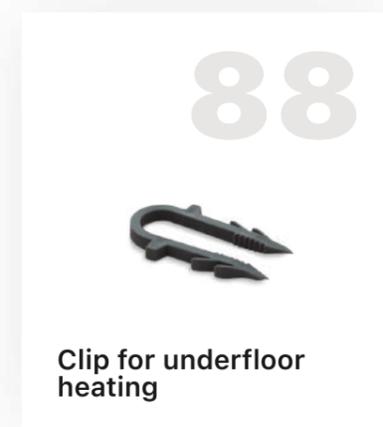
Installation of pipes and wires.
Installation of pipes and wires.
Installation of pipes and wires.



86
Holders for pipes and tubes – single



87
Holders for pipes and tubes – double

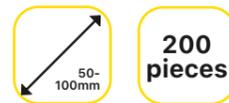


88
Clip for underfloor heating

Holders for pipes and tubes – single



Fixing pipes, electric cables and conduits in any building base – single arm version.



Product description

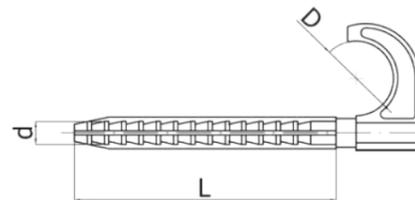
► For fixing pipes, wires, cables and conduits in any construction base: concrete, masonry or insulation.

Features and Benefits

► The special design of the pin ensures a secure fixing in any construction substrate.

Material

► High-impact resistant plastic – PP polypropylene



Type	Maximum pipe diameter D [mm]	Anchoring length L [mm]	Anchor diameter d [mm]
UJ/25/50	25	50	10
UJ/25/75	25	75	10
UJ/25/100	25	100	10
UJ/35/75	35	75	10
UJ/35/100	35	100	10

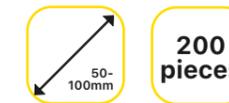
Logistics information

Type	Quantity [pcs]		Weight [kg]		EAN code
	Unit packaging (carton)	Pallet	Unit packaging (carton)	Pallet	
UJ/25/50	200	30000	1,2	200	5908275918967
UJ/25/75	200	30000	1,5	255	5907812671631
UJ/25/100	200	30000	1,8	300	5907812671648
UJ/35/75	200	30000	1,7	280	5907812671655
UJ/35/100	200	30000	1,9	300	5907812671662

Holders for pipes and tubes – double



Fastening pipes, electric cables and conduits in any building base – version with double arms.



Product description

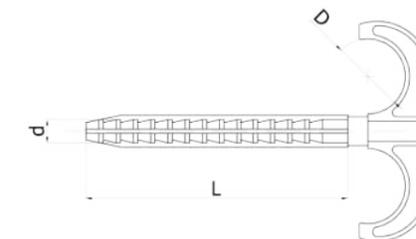
► For fixing pipes, wires, cables and conduits in any construction base: concrete, masonry or insulation.

Features and Benefits

► The special design of the pin ensures a secure fixing in any construction substrate.

Material

► High-impact resistant plastic – PP polypropylene



Type	Maximum pipe diameter D [mm]	Anchoring length L [mm]	Anchor diameter d [mm]
UD/25/50	25	50	10
UD/25/75	25	75	10
UD/25/100	25	100	10
UD/35/75	35	75	10
UD/35/100	35	100	10

Logistics information

Type	Quantity [pcs]		Weight [kg]		EAN code
	Unit packaging (carton)	Pallet	Unit packaging (carton)	Pallet	
UD/25/50	200	30000	1,2	200	5907812671877
UD/25/75	200	20000	1,8	195	5907812671679
UD/25/100	200	20000	2,1	225	5907812671716
UD/35/75	200	20000	2,1	225	5907812671686
UD/35/100	200	16800	2,3	200	5907812671693

Clip for underfloor heating



Plastic clips for quick fixing of floor heating pipes in an insulating layer, e.g. in foamed polystyrene.



Product description

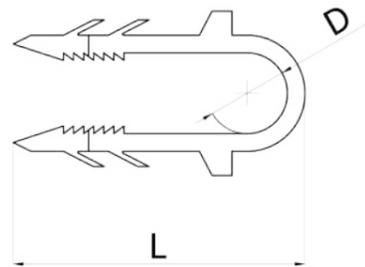
- ▶ For fixing the underfloor heating pipe system before concrete screed.
- ▶ For the installation of pipes with a diameter of 16 mm.

Features and Benefits

- ▶ The simple design allows assembly without special tools.
- ▶ Numerous teeth ensure secure attachment in foam.

Material

- ▶ Impact resistant polypropylene.



Type	Diameter D [mm]	Length L [mm]
SP	16,5	60

Logistics information

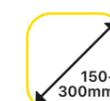
Type	Quantity [pcs]		Weight [kg]		EAN code
	Unit packaging (foil)	Collective packaging (foil)	Unit packaging (foil)	Collective packaging (foil)	
SP	100	2500	0,4	10	5907812671549



Garden holders



Reliable fixation, floor coverings and foil in your garden and large plantation



100 pieces

Product description

► For fixing all types of foil, nonwovens in the ground.

Features and Benefits

► Made of a raw material neutral to soil and groundwater.

Material

► Glass-fiber reinforced plastic.



Type	Total length L [mm]
U150	150
U200	200
U250	250
U300	300

Logistics information

Type	Quantity [pcs]		Weight [kg]		EAN code
	Unit packaging (foil)	Collective packaging (foil)	Unit packaging (foil)	Collective packaging (foil)	
U150	100	500	1,4	5,2	5907812671044
U200	100	500	1,5	6,5	5907812671730
U250	100	500	1,6	7,7	5907812671969
U300	100	500	1,9	9,3	5907812671662

For garden.
For garden.
 For garden.

Europejska Ocena Techniczna ETA-19/0573 z dnia 17 stycznia 2020

Ilustracje na jej podstawie: Ziel-Plast Sp. z o.o. - wykonał wytytuł i rysunek

Część ogólna

Jednostka Oceny Technicznej: Instytut Techniki Budowlanej

Nazwa handlowa wyrobu budowlanego: FIX-M / FIX-PA / FIX-S / FIX-M-K / FIX-PA-K / FIX-S-K

Opis wyrobu, do którego należy wyrob budowlany: Łączniki tworzywowe do mocowania słupów UWB/UEB/UEB-E/UEB-E-E/UEB-E-E-E/UEB-E-E-E-E w podłożu betonowym i murowym

Producent: Ziel-Plast Bożena Zielińska i Karolina Zielińska Spółka Jawna ul. Zamkowa 28 32-652 Białowice, Polska

Zakład produkcyjny: Ziel-Plast Bożena Zielińska Spółka Jawna

Nazwa Europejska Ocena Techniczna: 23 stron, w tym 3 załączniki, które stanowią integralną część niniejszej Oceny

Nazwa Europejska Ocena Techniczna z Rozporządzeniem (UE) N 305/2011, na podstawie: EAD 330196-01-0204

Instytut Techniki Budowlanej | ul. Flakowa 1 | 04-041 | Warszawa | POLSKA | tel. +48 22 63 54 71 | www.itb.pl

Europejska Ocena Techniczna ETA-21/0610 z 29/04/2022

Część ogólna

Jednostka Oceny Technicznej: Instytut Techniki Budowlanej

Nazwa handlowa wyrobu budowlanego: ZP-UE-12P-UE-8

Opis wyrobu, do którego należy wyrob budowlany: Łączniki tworzywowe do montażu słupów ZP/UEB/UEB-E/UEB-E-E/UEB-E-E-E/UEB-E-E-E-E w podłożu betonowym i murowym

Producent: Ziel-Plast Bożena Zielińska i Karolina Zielińska Spółka Jawna ul. Zamkowa 28 32-652 Białowice, Polska

Zakład produkcyjny: Ziel-Plast Bożena Zielińska i Karolina Zielińska Spółka Jawna ul. Zamkowa 28 32-652 Białowice, Polska

Nazwa Europejska Ocena Techniczna: 21 stron, w tym 3 załączniki, które stanowią integralną część niniejszej Oceny

Nazwa Europejska Ocena Techniczna z Rozporządzeniem (UE) N 305/2011, na podstawie: EAD 330196-01-0204

Instytut Techniki Budowlanej | ul. Flakowa 1 | 04-041 | Warszawa | POLSKA | tel. +48 22 63 54 71 | www.itb.pl

Europejska Ocena Techniczna ETA-23/0351 z 19/06/2023

Część ogólna

Jednostka Oceny Technicznej: Instytut Techniki Budowlanej

Nazwa handlowa wyrobu budowlanego: ETX-AL-ETX-MT, ETX-S i ETX-E

Opis wyrobu, do którego należy wyrob budowlany: Łączniki tworzywowe do mocowania słupów UWB/UEB/UEB-E/UEB-E-E/UEB-E-E-E/UEB-E-E-E-E w podłożu betonowym i murowym

Producent: Ziel-Plast Bożena Zielińska i Karolina Zielińska Spółka Jawna ul. Zamkowa 28 32-652 Białowice, Polska

Zakład produkcyjny: Ziel-Plast Bożena Zielińska i Karolina Zielińska Spółka Jawna ul. Zamkowa 28 32-652 Białowice, Polska

Nazwa Europejska Ocena Techniczna: 23 strony, w tym 3 załączniki, które stanowią integralną część niniejszej Oceny

Nazwa Europejska Ocena Techniczna z Rozporządzeniem (UE) N 305/2011, na podstawie: EAD 330196-01-0204

Instytut Techniki Budowlanej | ul. Flakowa 1 | 04-041 | Warszawa | POLSKA | tel. +48 22 63 54 71 | www.itb.pl

KRAJOWA OCENA TECHNICZNA ITB-KOT-2020/1347 wydanie 1

Instytut Techniki Budowlanej | ul. Flakowa 1, 04-041 Warszawa

„ZIEL-PLAST” Bożena Zielińska i Karolina Zielińska Spółka Jawna ul. Zamkowa 28, 32-652 Białowice

Krajowa Ocena Techniczna ITB-KOT-2020/1347 wydana 1 stroną połączoną oceną właściwości użytkowych paradyżny wyrobu budowlanego do zamierzonego zastosowania:

Łączniki tworzywowe LIT do mocowania termoizolacji

Data ważności Krajowej Oceny Technicznej: 22 maja 2025 r.

Wzrostek Instytut Techniki Budowlanej | ul. Flakowa 1, 04-041 Warszawa, 22 maja 2023 r.

KRAJOWA OCENA TECHNICZNA ITB-KOT-2017/0106 wydanie 1

Instytut Techniki Budowlanej | ul. Flakowa 1, 04-041 Warszawa

„ZIEL-PLAST” Bożena Zielińska i Karolina Zielińska Spółka Jawna ul. Zamkowa 28, 32-652 Białowice

Krajowa Ocena Techniczna ITB-KOT-2017/0106 wydana 1 stroną połączoną oceną właściwości użytkowych paradyżny wyrobu budowlanego do zamierzonego zastosowania:

Łączniki tworzywowe LIT-W do mocowania termoizolacji

Data ważności Krajowej Oceny Technicznej: 29 czerwca 2022 r.

Wzrostek Instytut Techniki Budowlanej | ul. Flakowa 1, 04-041 Warszawa, 29 czerwca 2017 r.

JEDNOSTKA NOTYFIKOWANA N 1486 INSTYTUT TECHNIKI BUDOWLANEJ ZAKŁAD CERTYFIKACJI

CERTYFIKAT ZGODNOŚCI ZAKŁADOWEJ KONTROLI PRODUKCJI 1486-CPR-0609/Z

Zgodnie z Rozporządzeniem Parlamentu Europejskiego i Rady (UE) N 305/2011 z dnia 9 marca 2011 r. (Rozporządzenie UE) niniejszy certyfikat służy do wyrobów budowlanych:

Łączniki tworzywowe typu FIX-M / FIX-PA / FIX-S / FIX-M-K / FIX-PA-K / FIX-S-K do mocowania termoizolacji w podłożu betonowym i murowym

Opis wyrobu - jak podano w pkt 1.1 CTA 1486/23, zgodnie z EAD 330202

Zamierzony zastosowanie - jak podano w pkt 1.2 CTA 1486/23, zgodnie z EAD 330202

Wspierane przez do obrotu pod nazwą lub znakami fabrycznymi producenta:

„ZIEL-PLAST” Bożena Zielińska i Karolina Zielińska Spółka Jawna ul. Zamkowa 28 32-652 Białowice

i produkowanego w zakładzie produkcyjnym: **„Ziel-Plast” Bożena Zielińska i Karolina Zielińska Spółka Jawna** ul. Zamkowa 28 32-652 Białowice

Należy wykonać plany, aby zapewnić zgodność wyrobu z niniejszym certyfikatem i zapewnić zgodność z wymaganiami technicznymi.

ETA-19/0573, wydana 17/01/2020 | EAD 330196-01-0204

Wzrostek Instytut Techniki Budowlanej | ul. Flakowa 1, 04-041 Warszawa, 22 maja 2023 r.

JEDNOSTKA NOTYFIKOWANA N 1486 INSTYTUT TECHNIKI BUDOWLANEJ ZAKŁAD CERTYFIKACJI

KRAJOWY CERTYFIKAT ZGODNOŚCI ZAKŁADOWEJ KONTROLI PRODUKCJI Nr 020-UWB-0206/Z

Zgodnie z Rozporządzeniem Parlamentu Europejskiego i Rady (UE) N 305/2011 z dnia 9 marca 2011 r. (Rozporządzenie UE) niniejszy certyfikat służy do wyrobów budowlanych:

Łączniki tworzywowe LIT do mocowania termoizolacji

Opis wyrobu - jak podano w pkt 1.1 CTA 1486/23, zgodnie z EAD 330202

Zamierzony zastosowanie - jak podano w pkt 1.2 CTA 1486/23, zgodnie z EAD 330202

Wspierane przez do obrotu pod nazwą lub znakami fabrycznymi producenta:

„ZIEL-PLAST” Bożena Zielińska i Karolina Zielińska Spółka Jawna ul. Zamkowa 28 32-652 Białowice

i produkowanego w zakładzie produkcyjnym: **„Ziel-Plast” Bożena Zielińska i Karolina Zielińska Spółka Jawna** ul. Zamkowa 28 32-652 Białowice

Należy wykonać plany, aby zapewnić zgodność wyrobu z niniejszym certyfikatem i zapewnić zgodność z wymaganiami technicznymi.

ETA-19/0573, wydana 17/01/2020 | EAD 330196-01-0204

Wzrostek Instytut Techniki Budowlanej | ul. Flakowa 1, 04-041 Warszawa, 22 maja 2023 r.

JEDNOSTKA NOTYFIKOWANA N 1486 INSTYTUT TECHNIKI BUDOWLANEJ ZAKŁAD CERTYFIKACJI

KRAJOWY CERTYFIKAT ZGODNOŚCI ZAKŁADOWEJ KONTROLI PRODUKCJI Nr 020-UWB-0796/Z

Zgodnie z Rozporządzeniem Parlamentu Europejskiego i Rady (UE) N 305/2011 z dnia 9 marca 2011 r. (Rozporządzenie UE) niniejszy certyfikat służy do wyrobów budowlanych:

Łączniki tworzywowe LIT-W do mocowania termoizolacji

Opis wyrobu - jak podano w pkt 1.1 CTA 1486/23, zgodnie z EAD 330202

Zamierzony zastosowanie - jak podano w pkt 1.2 CTA 1486/23, zgodnie z EAD 330202

Wspierane przez do obrotu pod nazwą lub znakami fabrycznymi producenta:

„Ziel-Plast” Bożena Zielińska i Karolina Zielińska Spółka Jawna ul. Zamkowa 28 32-652 Białowice

i produkowanego w zakładzie produkcyjnym: **„Ziel-Plast” Bożena Zielińska i Karolina Zielińska Spółka Jawna** ul. Zamkowa 28 32-652 Białowice

Należy wykonać plany, aby zapewnić zgodność wyrobu z niniejszym certyfikatem i zapewnić zgodność z wymaganiami technicznymi.

ETA-19/0573, wydana 17/01/2020 | EAD 330196-01-0204

Wzrostek Instytut Techniki Budowlanej | ul. Flakowa 1, 04-041 Warszawa, 22 maja 2023 r.



2024

FIXINGSYSTEM



ZIEL-PLAST
Zielińscy Spółka Komandytowa

ul. Zamkowa 28
32-652 Bulowice, POLAND

Tel: +48 33 845 52 69
e-mail: biuro@ziel-plast.pl

www.ziel-plast.pl

