Flat roof & façade

BiGHTY drilling screw	324 - 326
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Washered screw	329
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BiGHTY drilling screw

Fastening steel on steel / timber on steel / steel on timber

ETA-12/0085

What can they be used for?

- For steel / steel, timber / steel and steel / timber connections

Properties

- Drills its own core hole and the counter-thread in the component itself
- This allows fastdrilling
- It is no longer necessary to centre-punch the drilling site
- High corrosion resistance

Advantages

- A2 stainless steel, high corrosion resistance
- Tip: Carbon steel, high hardness and strength
- Stainless steel in accordance with DIN 10088
- Seal ring in A2 and EPDM
- Time-saving alternative to conventional self-tapping screws
- Screw can be screwed in with a commercially available spanner or socket spanner
- The specially shaped drill tip prevents the screw from drifting on the surface of the component

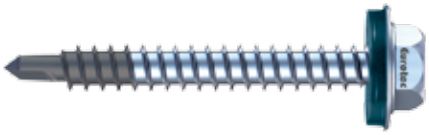
BiGHTY drilling screw
Bimetall

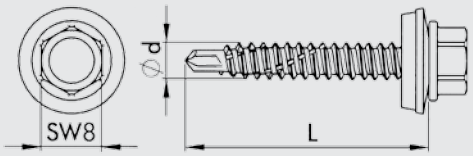
BiGHTY drilling screw
Hardened stainless steel

BiGHTY drilling screw

Bimetal

Stainless Steel





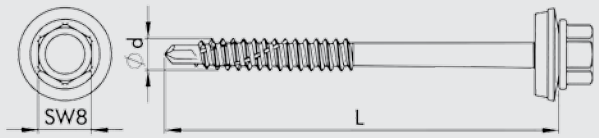
Art. no.	Dimensions [mm]	Spanner gap	Ø Seal ring [mm]	H [mm][a)]	PU
Drilling capacity 3 mm					
945884	4,8 x 16	SW8	14	1	500
945885	4,8 x 19	SW8	14	4	500
945886	4,8 x 25	SW8	14	9	500
945887	4,8 x 32	SW8	14	16	500
945888	4,8 x 38	SW8	14	20	200
945847	4,8 x 50	SW8	14	32	200
Drilling capacity 5 mm					
945890	5,5 x 22	SW8	16	3	500
945891	5,5 x 25	SW8	16	7	500
945892	5,5 x 32	SW8	16	14	500
945893	5,5 x 38	SW8	16	20	500
945894	5,5 x 45	SW8	16	27	200
945875	5,5 x 50	SW8	16	32	200
945895	5,5 x 63	SW8	16	45	200
945896	6,3 x 25	SW10	16	7	500
945897	6,3 x 32	SW10	16	14	200
945898	6,3 x 38	SW10	16	20	200
945899	6,3 x 45	SW10	16	27	200
945841	6,3 x 50	SW10	16	32	200
945900	6,3 x 63	SW10	16	45	200
945901	6,3 x 70	SW10	16	52	200
945902	6,3 x 80	SW10	16	62	200
Drilling capacity 12 mm					
945844	5,5 x 38	SW8	16	10	500

a) H= Clamping thickness + Sheet thickness t; t_{max} = Drilling capacity

BiGHTY drilling screw

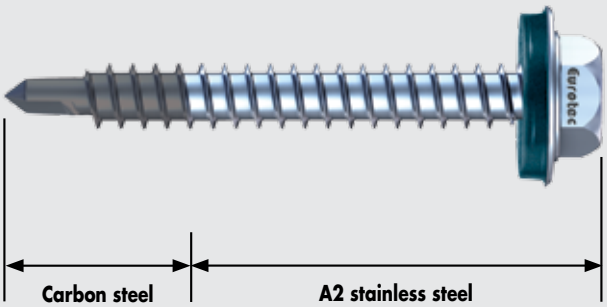
Bimetal

Stainless Steel



Art. no.	Dimensions [mm]	Spanner gap	Ø Seal ring [mm]	PU
Drilling capacity 5 mm				
945839	6,5 x 120	SW8	16	200
945915	6,5 x 140	SW8	16	200
945916	6,5 x 160	SW8	16	200
945917	6,5 x 180	SW8	16	200
945918	6,5 x 200	SW8	16	200
945919	6,5 x 220	SW8	16	200

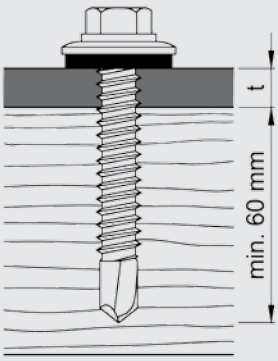
Schematic representation



Carbon steel
High hardness and strength

A2 stainless steel
high corrosion resistance

Connection option

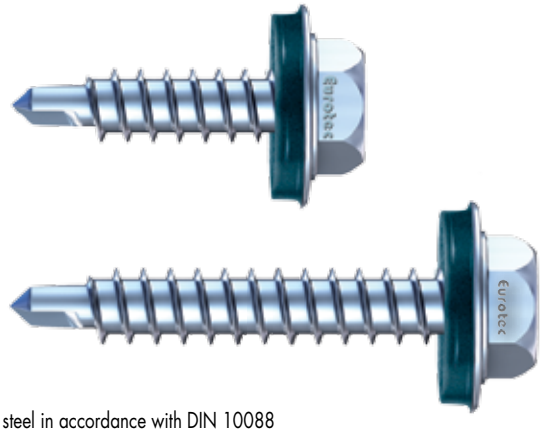


Steel on timber/timber on timber for BiGHTY bimetal 6,5 x L, drilling capacity 5 mm

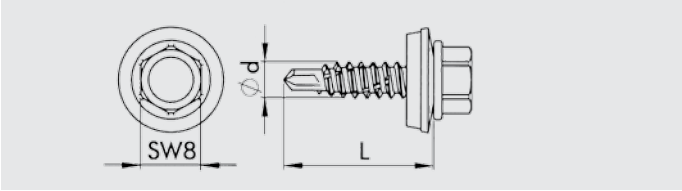
Please always refer to the information in the ETA-12/0085

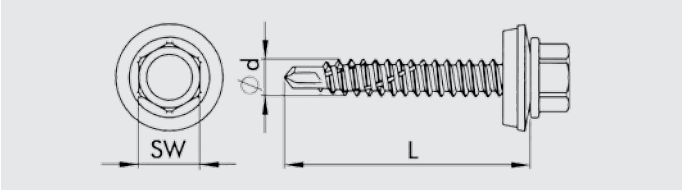
BiGHTY drilling screw

Hardened stainless steel, specially coated



- Stainless steel in accordance with DIN 10088
- Seal ring in A2 and EPDM





Art. no.	Dimensions [mm]	Spanner gap	Ø Seal ring [mm]	H [mm][a)]	PU
Drilling capacity 3 mm					
945660	4,8 x 19	SW8	14	4	500
945661	4,8 x 25	SW8	14	10	500
945662	4,8 x 32	SW8	14	17	500
945663	4,8 x 38	SW8	14	23	200
945664	4,8 x 50	SW8	14	35	200
Drilling capacity 5 mm					
945665	5,5 x 19	SW8	16	2	500
945666	5,5 x 25	SW8	16	8	500
945667	5,5 x 32	SW8	16	15	500
945668	5,5 x 38	SW8	16	21	500
945669	5,5 x 50	SW8	16	33	200
945670	5,5 x 60	SW8	16	43	200
945672	6,3 x 25	SW10	16	8	500
945673	6,3 x 32	SW10	16	15	200
945674	6,3 x 38	SW10	16	21	200
945675	6,3 x 50	SW10	16	33	200
945676	6,3 x 60	SW10	16	43	200
Drilling capacity 12 mm					
945671	5,5 x 38	SW8	16	14	500

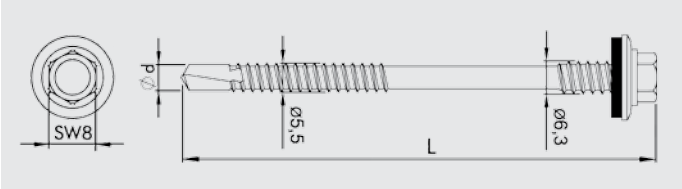
a) H= Clamping thickness + Sheet thickness t; t_{max} = Drilling capacity

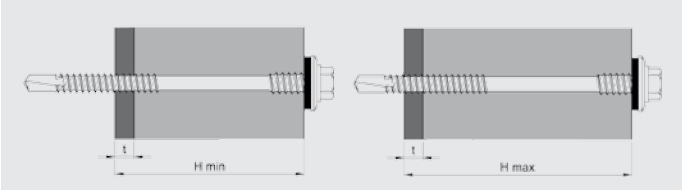
Sandwich-panel screw, Roofing screw, Bugle-head screw, Coloured facade screw

Sandwich-panel screw

Bimetal

- Specially coated
- Seal ring in A2 and EPDM
- Fastening steel on steel

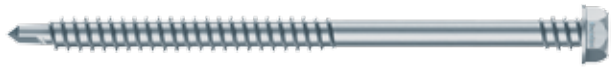




Art. no.	Dimensions [mm]a)	Spanner gap	Ø Seal ring [mm]	H_{min} [mm]b)	H_{max} [mm]b)	PU
Drilling capacity 5 mm						
945903	6,3/5,5 x 155	SW8	16	80	135	200
945904	6,3/5,5 x 175	SW8	16	100	155	200
945846	6,3/5,5 x 200	SW8	16	125	180	200
945905	6,3/5,5 x 235	SW8	16	160	215	200
945906	6,3/5,5 x 250	SW8	16	175	230	200
945907	6,3/5,5 x 275	SW8	16	200	255	200
945908	6,3/5,5 x 300	SW8	16	225	280	200
Drilling capacity 12 mm						
945909	6,3/5,5 x 155	SW8	16	75	130	200
945910	6,3/5,5 x 175	SW8	16	95	150	200
945845	6,3/5,5 x 200	SW8	16	120	175	200
945911	6,3/5,5 x 235	SW8	16	155	210	200
945912	6,3/5,5 x 250	SW8	16	170	225	200
945913	6,3/5,5 x 275	SW8	16	195	250	200
945914	6,3/5,5 x 300	SW8	16	220	275	200

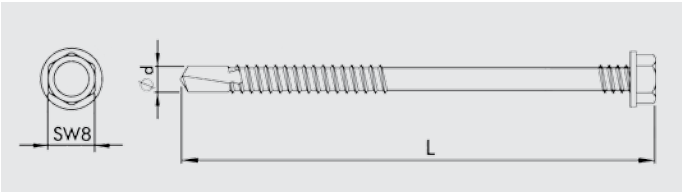
a) Ø Head thread / Ø Drive thread x Screw length
b) H= Clamping thickness + Sheet thickness t; t_{max} = Drilling capacity

Roofing screw



- With hexagon head, secondary thread and drill point

Fields of application
For flat-roof insulation (with anti-slip matting)

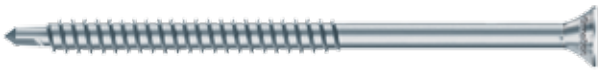


Art. no.	Dimensions [mm]	Spanner gap	PU*
900428	4,8 x 80	SW8	1000
111377	4,8 x 100	SW8	1000
111378	4,8 x 120	SW8	1000
111379	4,8 x 140	SW8	1000
111380	4,8 x 160	SW8	500
111381	4,8 x 180	SW8	500
111382	4,8 x 200	SW8	500
111383	4,8 x 220	SW8	500
111384	4,8 x 240	SW8	250
111385	4,8 x 260	SW8	250

* Plates not included with product

Bugle-head screw

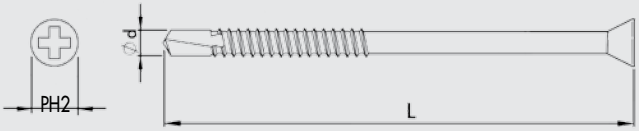
Hardened steel, double-coated



• With bugle-head and drill point

Fields of application

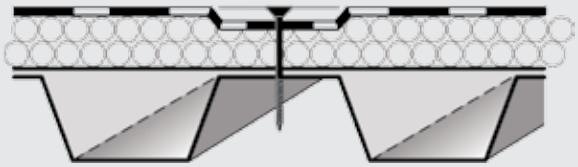
For flat-roof insulation (with anti-slip matting)



Art. no.	Dimensions [mm]	Drive	PU*
111303**	4,8 x 35	TX25 •	1000
111304	4,8 x 50	TX25 •	1000
111305**	4,8 x 60	TX25 •	1000
111306	4,8 x 70	TX25 •	1000
111307	4,8 x 80	TX25 •	500
111308**	4,8 x 90	TX25 •	500
111309	4,8 x 100	TX25 •	500
111310**	4,8 x 110	TX25 •	500
111311	4,8 x 120	TX25 •	500
111312**	4,8 x 130	TX25 •	500
111313**	4,8 x 140	TX25 •	500
111314	4,8 x 150	TX25 •	500
111315	4,8 x 160	TX25 •	500
111316	4,8 x 170	TX25 •	500
111317	4,8 x 180	TX25 •	500
111318**	4,8 x 200	TX25 •	500
111319	4,8 x 220	TX25 •	500
111320**	4,8 x 240	TX25 •	500
111321	4,8 x 260	TX25 •	500
111322**	4,8 x 280	TX25 •	250
111323**	4,8 x 300	TX25 •	250

* Plates not included with product
** On request

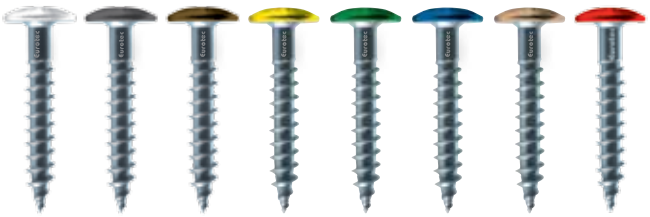
For use on steel profile sheeting



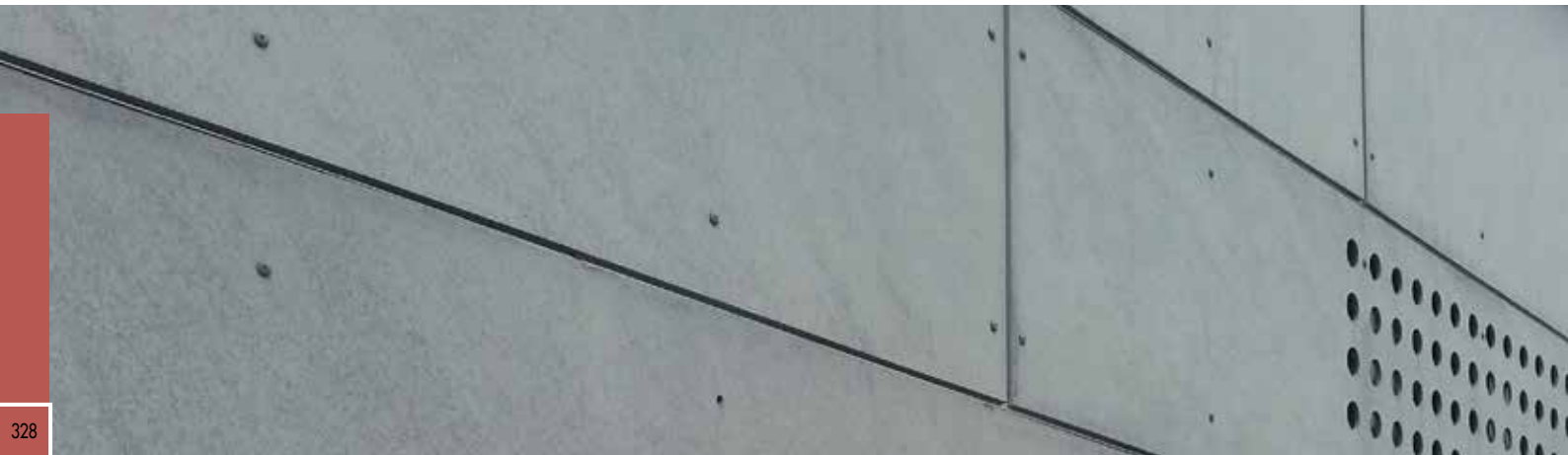
Coloured façade screw

A2 and A4 stainless steel

Stainless Steel



Art. no.	Dimensions [mm]	Colour	Material	Drive	PU
904670	4,8 x 25	Blank	A2	TX20 •	250
904671	4,8 x 32	Blank	A2	TX20 •	250
904672	4,8 x 38	Blank	A2	TX20 •	250
904675	4,8 x 60	Blank	A2	TX20 •	250
W904670	4,8 x 25	White/RAL 9010	A2	TX20 •	250
W904671	4,8 x 32	White/RAL 9010	A2	TX20 •	250
W904672	4,8 x 38	White/RAL 9010	A2	TX20 •	250
W904675	4,8 x 60	White/RAL 9010	A2	TX20 •	250
G904670	4,8 x 25	Grey/RAL 7016	A2	TX20 •	250
G904671	4,8 x 32	Grey/RAL 7016	A2	TX20 •	250
G904672	4,8 x 38	Grey/RAL 7016	A2	TX20 •	250
G904675	4,8 x 60	Grey/RAL 7016	A2	TX20 •	250
900429	5,3 x 35	Brown	A4	TX20 •	100
900430	5,3 x 35	Brown/RAL 8014	A4	TX20 •	100
900431	5,3 x 35	White/RAL 9010	A4	TX20 •	100
900432	5,3 x 35	Grey/RAL 7016	A4	TX20 •	100



Fibre cement screw, Washered screw

Fibre cement screw

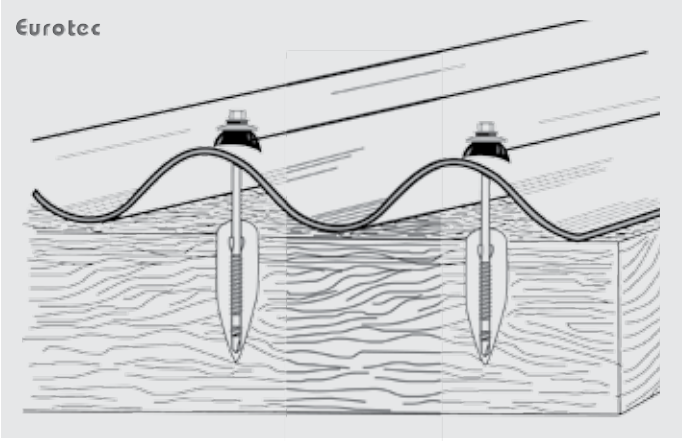
Case-hardened steel and double-coated

Art. no.	Dimensions [mm]	Drive	PU
111353	6,3 x 130	SW8	100

Fields of application

screwing corrugated fibre-cement boards onto timber

- Hexagon head, with drill point and wings
- Mushroom seal, A2 and EPDM



Washered screw

A2 stainless steel, two-part with seal ring

Art. no.	Dimensions [mm]	Ø Seal ring [mm]	Drive	PU
111551	4,5 x 25	15	TX20 ●	500
111552	4,5 x 35	15	TX20 ●	200
111553	4,5 x 45	15	TX20 ●	200
111557	4,5 x 65	15	TX20 ●	200
111558	4,5 x 80	15	TX20 ●	200
111561	4,5 x 150	15	TX20 ●	200

Fields of application

Interior construction; e. g. for (commercial) kitchens, cooling systems, etc.

Klimax insulation-panel holder, Klimax insulation plug, Klimax ECO 1 / ECO 2

Klimax

Insulation-panel holder

Art. no.	Dimensions [mm]	PU
945251	Ø 60	400

- Ideal fastening of wood-fibre insulation elements
- For soft insulating materials

Klimax-slim

Insulation-panel holder

Art. no.	Dimensions [mm]	PU
945987	Ø 60	900

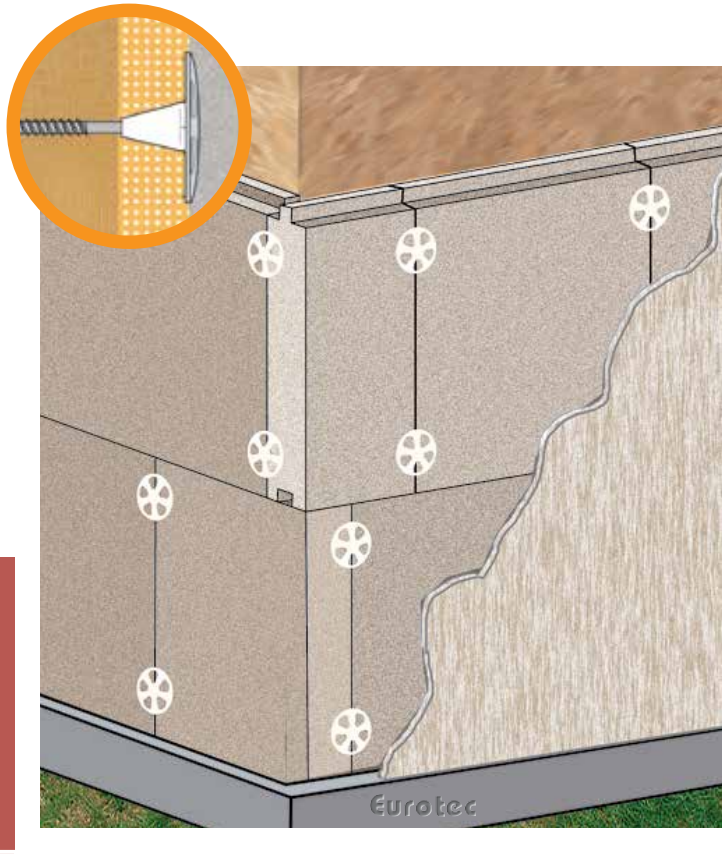
- Ideal fastening of wood-fibre insulation elements
- For harder insulating materials

Paneltwistec AG

Suitable for this

Countersunk head

Art. no.	Dimensions [mm]	Drive	PU
945583	6,0 x 60	TX30 ●	200
945584	6,0 x 70	TX30 ●	200
945632	6,0 x 80	TX30 ●	200
945633	6,0 x 90	TX30 ●	100
945634	6,0 x 100	TX30 ●	100
945636	6,0 x 120	TX30 ●	100
945637	6,0 x 130	TX30 ●	100
945638	6,0 x 140	TX30 ●	100
945640	6,0 x 160	TX30 ●	100
945641	6,0 x 180	TX30 ●	100
945642	6,0 x 200	TX30 ●	100
945643	6,0 x 220	TX30 ●	100
945644	6,0 x 240	TX30 ●	100
945645	6,0 x 260	TX30 ●	100
945646	6,0 x 280	TX30 ●	100
945647	6,0 x 300	TX30 ●	100



Energy-saving measures are becoming increasingly important in the construction of new houses and also enjoy state support!

Decoupling the individual fastening components avoids the creation of thermal bridges. Good insulation results in an extraordinarily comfortable environment. The Klimax insulation-panel holder, in conjunction with the Paneltwistec screws from Eurotec, offers an ideal combination for fastening wood-fibre insulation elements. The prerequisite for this is a load-bearing timber substructure.

Klimax

Insulation plug

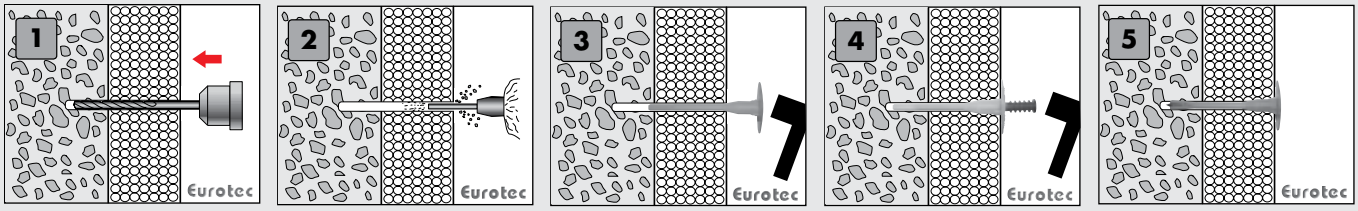
Art. no.	Dimensions [mm]	Plate Ø [mm]	Insulation thickness [mm]	PU
200027	8,0 x 90	60	40 - 60	250
200028	8,0 x 110	60	80	250
200029	8,0 x 130	60	100	200
200030	8,0 x 150	60	120	150
200031	8,0 x 170	60	140	150
200032	8,0 x 190	60	160	100
200033	8,0 x 210	60	180	100
200034	8,0 x 240	60	210	100

- For fastening composite thermal insulation systems

Advantages
- Fast and efficient assembly
- Universally suitable for numerous insulating materials and subsurfaces
- Flat plug head

Installation parameters
- Nominal drill diameter: 8,00 mm
- Depth of drill hole to lowest point: 40,00 mm
- Effective anchorage depth: 30,00 mm

Assembly instructions



Klimax ECO 1

Insulation plug, one-piece

Art. no.	Dimensions [mm]	Plate Ø [mm]	Insulation thickness [mm]	PU
200065	Ø 8,0 x 60	90	30 - 40	250
200066	Ø 8,0 x 80	90	50 - 60	250
200067	Ø 8,0 x 100	90	70 - 80	250
200068	Ø 8,0 x 120	90	90 - 100	250
200069	Ø 8,0 x 140	90	110 - 120	200
200070	Ø 8,0 x 160	90	130 - 140	200

- For secure fastening of soft mineral-fibre insulating materials
- With a hole in the head to accommodate a mesh fabric holder
- For insulating material thickness 30 - 140 mm

Klimax ECO 2

Insulation plug, two-piece

Art. no.	Dimensions [mm]	Plate Ø [mm]	Insulation thickness [mm]	PU
200071	Ø 8,0 x 80	90	30 - 50	250
200072	Ø 8,0 x 100	90	60 - 70	250
200073	Ø 8,0 x 120	90	80 - 90	250
200074	Ø 8,0 x 140	90	100 - 110	250
200075	Ø 8,0 x 160	90	120 - 130	250
200076	Ø 8,0 x 180	90	140 - 150	250
200077	Ø 8,0 x 200	90	160 - 170	250
200078	Ø 8,0 x 220	90	180 - 190	250
200079	Ø 8,0 x 240	90	200 - 210	250

- For secure fastening of soft mineral-fibre insulating materials
- For insulating material thickness of 30 - 210 mm

Advantages
- No thermal bridges
- Time-saving and straightforward impact installation
- Impact-resistant plastic
- Particularly suitable for use with rear-ventilated curtain facades
- Temperature-resistant from -40 °C to +70 °C

Installation parameters
- Nominal drill diameter: ECO 1 = 8,0 mm, ECO 2 = 8,0 mm
- Minimum drill-hole depth: ECO 1 = 25,0 mm, ECO 2 = 35,0 mm
- Minimum installation depth: ECO 1 = 20,0 mm, ECO 2 = 30,0 mm

EiSYS-AP / -H

Façade/adjusting screw

What can they be used for?

- For use with suspended façades
- For rear-ventilated façades if the outer wall is designed with timber formwork, fibre cement boards or other façade elements

Properties

- This screw is fastened to the building wall with a plug
- The freely rotating threaded sleeve at the top of the screw allows the façade's substructure to be aligned parallel to the building wall

Advantages

- Cost savings and reduced assembly times
- High loads can be transmitted through the framework screw connections even in the case of larger distances from the building wall
- Full design freedom is maintained for the façade

EiSYS-AP

EiSYS dowel

EiSYS-AP
Façade profile

EiSYS-AP

Façade/adjusting screw for aluminium

Art. no.	Dimensions [mm]	Insulation thickness [mm]	PU
946214	7,0 x 185	60	50
946215	7,0 x 205	80	50
946216	7,0 x 225	100	50
946217	7,0 x 245	120	50
946218	7,0 x 265	140	50
946219	7,0 x 285	160	50
946220	7,0 x 305	180	50
946221	7,0 x 325	200	50
946222	7,0 x 345	220	50
946223	7,0 x 365	240	50
946224	7,0 x 385	260	50
946225	7,0 x 405	280	50
946226	7,0 x 425	300	50

Note: Table for selecting EiSYS-AP screws with the façade profile 102 x 50 x 2 mm

EiSYS dowels

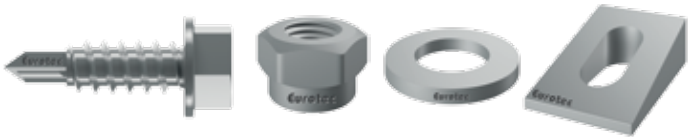
EiSYS-AP and - H

Art. no.	Dimensions [mm]	PU
945405	10,0 x 80	50

EiSYS-AP

Drilling screw, Nut, Washer, Taper washer

On request



EiSYS-AP façade profile

Art. no.	Dimensions [mm]	PU
On request	50 x 102 x 3000	1

EiSYS-AP L-Profil

Art. no.	Dimensions [mm]	PU
On request	35 x 35 x 2 x 6000	1

EiSYS-H insertion tool

Art. no.	Dimensions	Drive	PU
945416	10 x 100	Internal hex - SW5,4 External hex - SW10	1

EiSYS-H

Façade/adjusting screw for timber

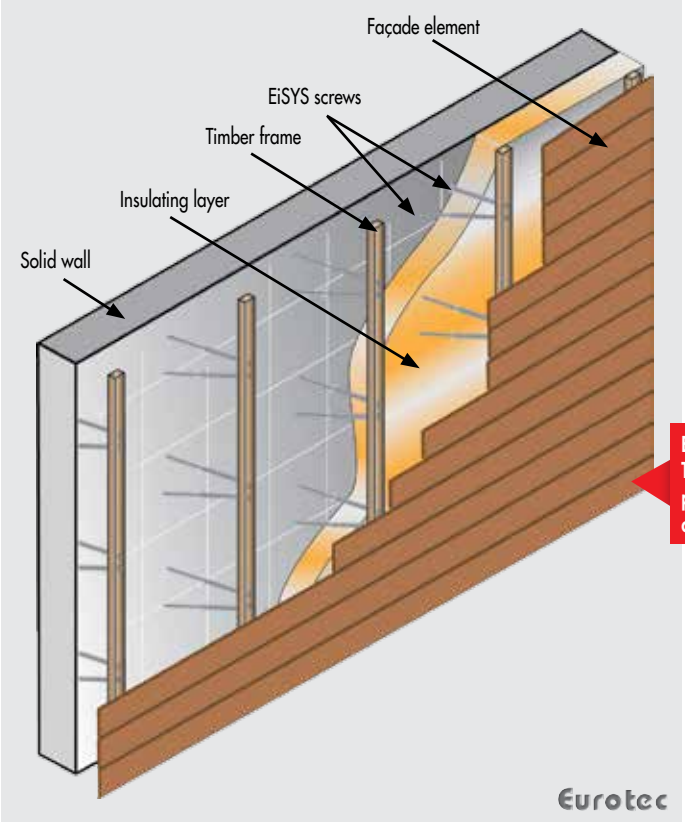
Stainless Steel

- A4 stainless steel

Art. no.	Dimensions [mm]	For insulation thicknesses up to	PU
946080	7,0 x 198	60 mm	50
946081	7,0 x 218	80 mm	50
946082	7,0 x 238	100 mm	50
946083	7,0 x 258	120 mm	50
946084	7,0 x 278	140 mm	50
946085	7,0 x 298	160 mm	50
946086	7,0 x 318	180 mm	50
946087	7,0 x 338	200 mm	50
946088	7,0 x 358	220 mm	50
946089	7,0 x 378	240 mm	50
946090	7,0 x 398	260 mm	50
946091	7,0 x 418	280 mm	50
946092	7,0 x 438	300 mm	50

EiSYS-H insertion tool

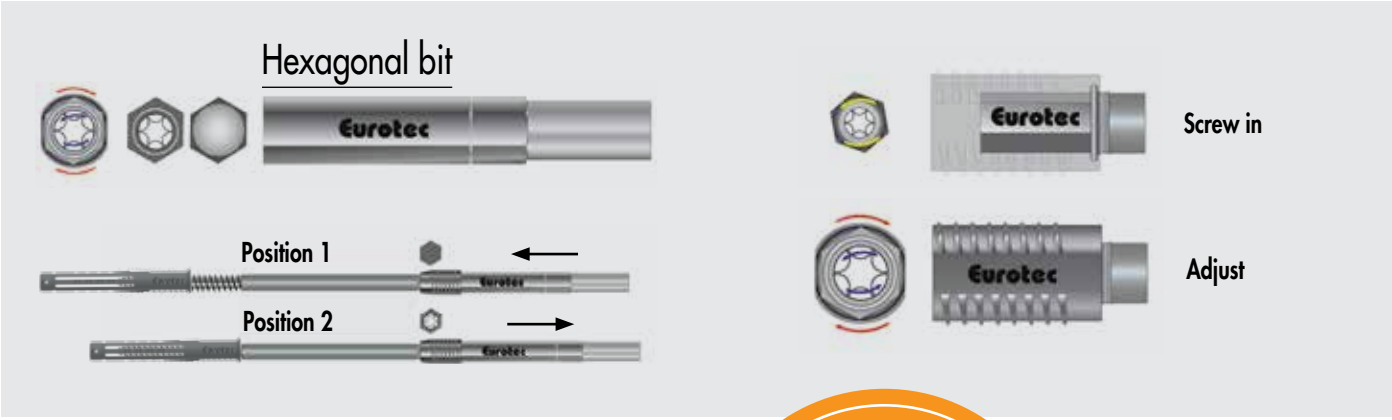
Art. no.	Dimensions [mm]	Drive	PU
946096	70 x 14	SW12 / TX30	1



Example application:
The V-shaped arrangement of the EiSYS-2 screw pair achieves optimum stability and load capacity of the façade construction.

EiSYS-H Façade/adjusting screw for timber

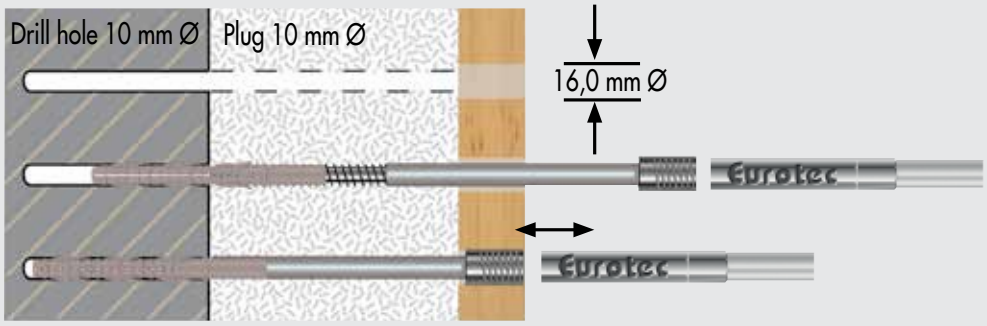
This screw is used to fasten façades in place. Insulation thicknesses of 80 – 280 mm can be handled easily with the EiSYS-H screw from Eurotec.

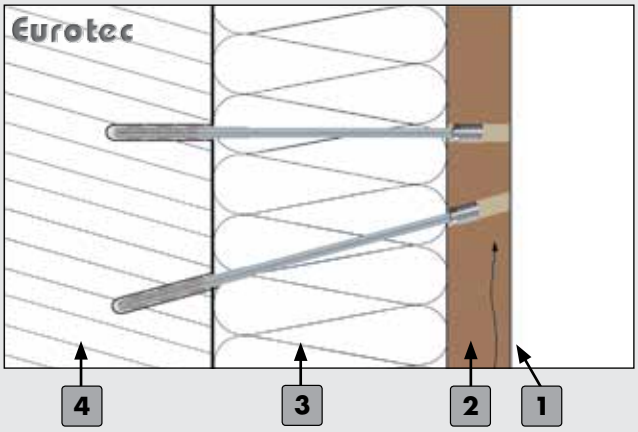


The EiSYS-2 screw is fitted with a freely rotating adjustment sleeve/head that allows the space between the brickwork and the substructure to be tailored to your needs. A hexagonal bit is supplied as an accessory. This is used to screw the screw into the subsurface, as well as to adjust the substructure with the adjustment head.

This is how it's done!

The principle is as ingenious as it is simple. Once the insulation is attached to the exterior wall, the counter batten is pilot-drilled to a diameter of 13 mm in accordance with the system. A hole of 10 mm diameter is then drilled within this hole through the insulation and into the subsurface to create the hole for the plug. The plug is attached to the adjusting screw and the two are then inserted into the prepared drill hole through the counter batten and the insulation. The EiSYS-2 façade/adjusting screw is screwed in completely in position 1 using the hexagonal bit until the adjustment head also lies within the counter batten. Now, the screw is simply pulled out to position 2 using the hexagonal bit and the spacing between the brickwork and the counter batten is adjusted.





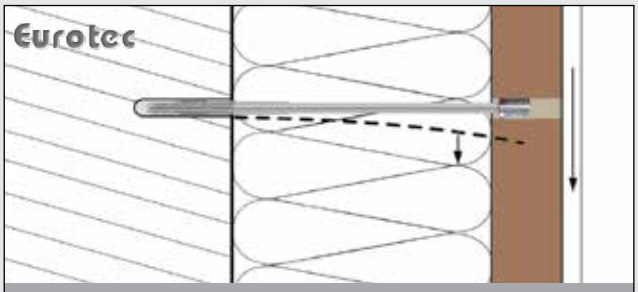
Example of a rear-ventilated façade (EiSYS-H system diagram)

1 Façade element

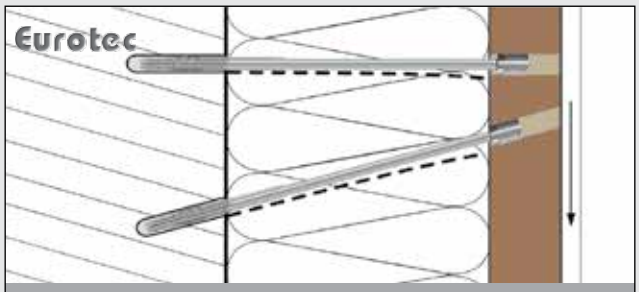
2 Timber frame (mind. 40 x 60 mm²)

3 Insulating layer

4 Brickwork (EiSYS fixing depth = 90 mm)

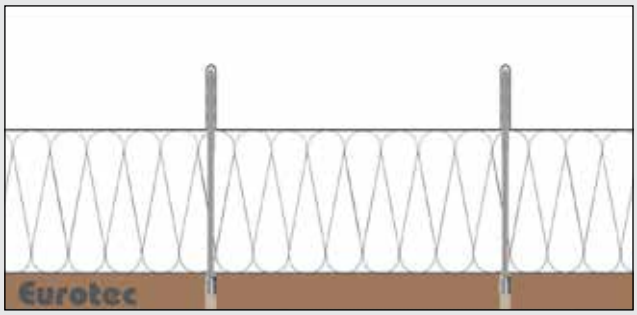


A single screw bends relatively easily under loading (F)



A V-shaped screw pair can absorb higher loads

To increase the rigidity of the EiSYS-H system, the adjusting screws are installed in pairs and in a V shape. This creates a framework screw connection. The framework principle consists of creating a large number of rigid triangles (see diagram) from multiple relatively pliable screws installed perpendicular to the wall.
For the same load, these triangles exhibit a much lower deflection than screws that are simply screwed in perpendicular to the wall.



Example of a suspended ceiling

The Eisys-H's adjustment function can, of course, also be used in other applications, e. g. for a suspended ceiling.

Blue-Power façade mounting system

For fastening timber substructures to concrete or brickwork

What can they be used for?

- For façade fastenings where wooden sub-structures are to be fixed on concrete or masonry at a distance
- Outdoors: rear-ventilated curtain façade with façade insulation
- Indoors: e. g. suspended ceilings, wall panelling etc.

Properties

- Absorbs the possible load consisting of tensile and shear forces

Advantages

- Quick and easy solution
- Plug-free installation
- Short assembly times
- Can be used with standard battery-driven electric tools

Blue-Power system screw

Countersunk-head, special coated

Advantages

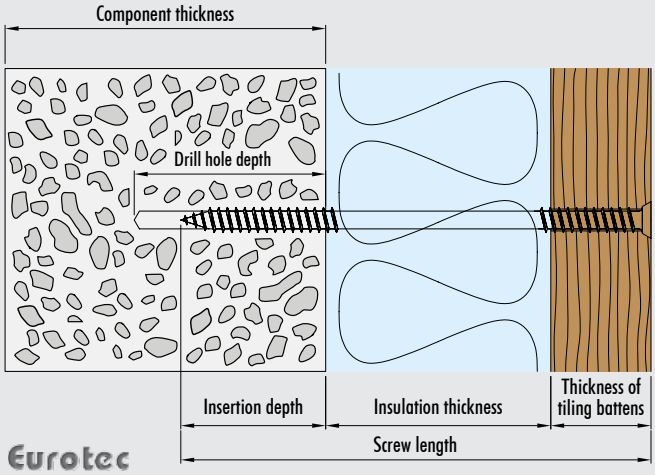
- Plug-free installation
- Short assembly times
- Can be used with standard battery-driven electric tools

Areas of use

Outdoors: rear-ventilated curtain façade with façade insulation
Indoors: e. g. suspended ceilings, wall panelling, etc.

Assembly

1. Pre-drill the battens to 6,5 mm
2. Pre-drill the substrate
3. Insert the Blue-Power system screw through the battens and into the substrate



Art. no.	Dimensions [mm]	Drive	For insulation thicknesses up to a)			PU
			Concrete, clay brick and solid lime sand brick [mm]a)	Porous concrete and perforated lime sand brick [mm]a)	Vertically perforated brick [mm]a)	
110390	7,4 x 180	TX40 ●	100	80	30	100
110391	7,4 x 200	TX40 ●	120	100	50	100
110392	7,4 x 220	TX40 ●	140	120	70	100
110393	7,4 x 240	TX40 ●	160	140	90	100
110394	7,4 x 260	TX40 ●	180	160	110	100
110395	7,4 x 280	TX40 ●	200	180	130	100
110396	7,4 x 300	TX40 ●	220	200	150	100
110397	7,4 x 320	TX40 ●	240	220	170	100
110398	7,4 x 340	TX40 ●	260	240	190	100
110399	7,4 x 360	TX40 ●	280	260	210	100
110400	7,4 x 380	TX40 ●	300	280	230	100
110401	7,4 x 400	TX40 ●	320	300	250	100

a) For a tiling batten thickness of 30 mm
Screw length ≥ min. Insertion depth + Insulation thickness + Tiling batten thickness

Static values

Subsurface	Substrate drilling Ø [mm]	Drill Ø in subsurface [mm]	min. Screw embedment depth [mm]	Drilling method[a)]	min. Component thickness [mm]	min. Edge distance [mm]	min. Axial distance [mm]	Char. tensile capacity N_{Rk}[b)] [kN]	Char. shear load-bearing capacity V_{RK} [kN]
Concrete C20/25	6,5	70	50	H	100	50	100	2,5	0,75
Clay brick (CB)	6,0	70	50	H	115	50	100	3,5	0,6
Solid sand-lime brick	6,0	70	50	H	115	50	100	3,5	0,5
Porous concrete	5,0	85	70	D	115	50	100	0,9	0,3
Perforated lime sand brick	5,0	85	70	D	115	50	100	2,0	0,6
Vertically perforated brick (VPB)	6,5	140	120	D	175	50	100	0,5	0,4

a) H = Hammer drilling, D = Rotary drilling
b) The characteristic head pull-through capacity $F_{ax,head,Rd}$ in the battens must be taken into account. $F_{ax,head,Rd}$ (ρ_k 350)= 1,45 kN. The battens must be pre-drilled to 6.5 mm.