

PRODUCT DATA SHEET – ECO-DRIVE S-8

Section 1. PRODUCT DESCRIPTION

**SCREWED-IN FASTENER WITH METAL PIN AND TELESCOPIC DESIGN SUPPORT WASHER
ECO-DRIVE S-8**

The screw connector with steel pin and telescopic pressure plate ECO-DRIVE S-8 is made of polyamide and the pin is made of galvanized steel with a head covered in glass fiber reinforced polyamide, which helps to minimize the thermal transmittance point of the connector. The connector is integrated with the polystyrene disc. Using a telescopic structure significantly reduces assembly times and eliminates the use of cutters for flush mounting. ECO-DRIVE S-8 Connector should be used to transfer wind suction loads and provide additional mechanical support to the entire system, recommended for:

- EPS Polystyrene
- XPS Polystyrene

ECO-DRIVE S-8 connector can be installed according to EAD 330196-01-0604 :

A	B	C	D	E
				
Concrete	Solid ceramic brick, silicate	Ceramic block	Elements made of lightweight aggregate	Aerated concrete

The connectors have the European Technical Assessment: **ETA-13/0107**



screw connector, TORX-40 socket



modern telescopic structure



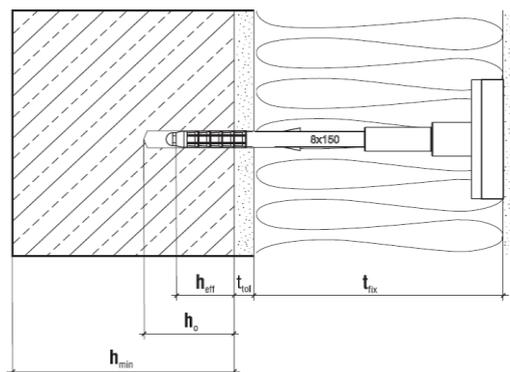
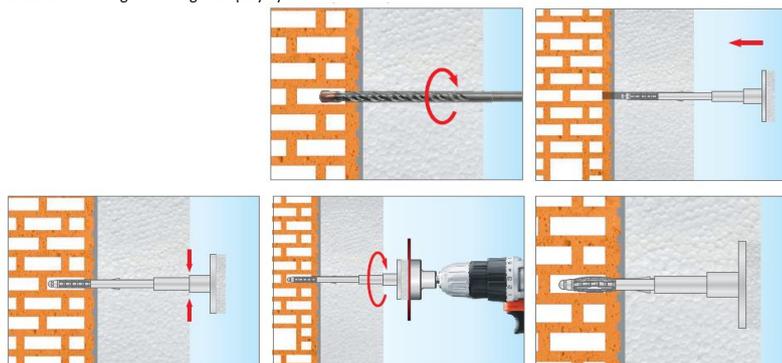
Styrofoam dowel



Section 2. INSTALLATION METHOD

1. Before starting the installation, it is necessary to recognize the support and select the fasteners intended for it.
2. The appropriate length of the connector must be chosen so that the expansion zone is located in the building material of the wall.
3. The minimum length of the connector is: $L_d = t_{fix} + t_{tol} + h_{eff} + 25mm$ (immersion of the moving part of the connector flange in the heat-insulating material), where: t_{fix} - thickness of the attached heat insulation, t_{tol} - thickness of the levelling layers (adhesive mortar + existing plaster), h_{eff} - anchoring depth of the connector in the support (reported in the data sheet and in the technical approval)
4. Before installation, the substrate must be prepared according to the recommendations of the ETICS insulation system manufacturer.
5. The thermal insulation panels must be properly fixed with adhesive mortar
6. The diameter of the holes drilled must correspond to the diameter of the fasteners used
7. Holes in substrates made of solid materials should be at least 10 mm deeper than the anchoring depth of the connector.
8. Holes in solid materials should be cleaned of drilling debris using a back and forth motion of the drill at a slow speed, repeating the operation four times.
9. Holes in substrates with voids and aerated concrete should be drilled without the use of a hammer, as this would cause the internal walls of the substrate to crack, reducing the pull-out strength of the connectors.
10. The connectors must be fixed so that the installation location coincides with the position of the adhesive mortar on the heat-insulating panel.
11. The connector body must be positioned so that the connector rests on the polystyrene with the first ring under the plate
12. Next screw the connector pressure plate using the **EDST device**, which will secure the connector permanently.

Recessed mounting with integrated polystyrene disc



PRODUCT DATA SHEET – ECO-DRIVE S-8

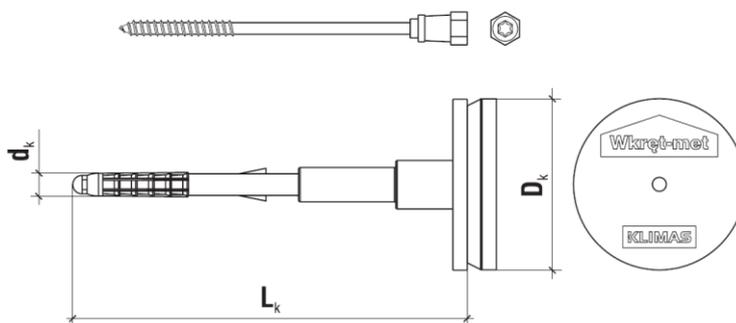
Section 3. SPECIFICATIONS

TECHNICAL PARAMETERS		
Parameter	Unit	Value
Plug diameter	d_k [mm]	8
Plate diameter	D_k [mm]	60
Anchorage depth	h_{eff} [mm]	35/55*
Drilled hole depth	h_0 [mm]	45/65*
Thermal conductivity	χ [W/K]	0.002
Plate stiffness	S [kN/mm]	0.60
Use categories	[-]	ABCDE
Plug material	[-]	PA
Pin material	[-]	Galvanized steel, head covered in PA+GF
European Technical Assessment	[-]	ETA-13/0107

*for category E supports (aerated concrete)

FORCE PARAMETERS			
Substrate Category	Substrate type	Density [kg/dm ³]	Characteristic pull-out resistance [kN]
A	Concrete C12/15	≥ 2.25	1.20
A	Concrete C16/20 – C50/60	≥ 2.30	1.50
B	Solid clay brick	≥ 2.00	1.50
B	Calcium silica solid brick	≥ 2.00	1.50
C	Calcium silicate hollow blocks	≥ 1.60	1.50
C	Perforated brick	≥ 1.20	1.50
C	Lightweight concrete hollow	≥ 0.80	1.50
D	Lightweight concrete blocks	≥ 1.05	0.90
E	Autoclaved aerated concrete AAC2	≥ 0.35	0.60
E	Autoclaved aerated concrete AAC7	≥ 0.65	1.20

Partial safety factor $\gamma_M = 2$ in the absence of regulation



SELECTION TABLE					
Product code	Connector diameter and length ($d_k \times L_k$)	Thickness of thermal insulation material t_{fix} [mm]			Number of pieces in a box
		New buildings (t_{ad} adhesive layer of 10mm)		Old buildings (t_{ad} adhesive layer of 10mm + 20mm of old plaster)	
		Cat. ABCD	Cat. E	Cat. ABCD	
ECODRIVE-S-08150	8x150	80	60	60	100
ECODRIVE-S-08170	8x170	100	80	80	100
ECODRIVE-S-08190	8x190	120	100	100	100
ECODRIVE-S-08210	8x210	140	120	120	100
ECODRIVE-S-08230	8x230	160	140	140	100
ECODRIVE-S-08250	8x250	180	160	160	100
ECODRIVE-S-08270	8x270	200	180	180	100
ECODRIVE-S-08290	8x290	220	200	200	100
ECODRIVE-S-08310	8x310	240	220	220	100
ECODRIVE-S-08330	8x330	260	240	240	100
ECODRIVE-S-08350	8x350	280	260	260	100
ECODRIVE-S-08370	8x370	300	280	280	100
ECODRIVE-S-08390	8x390	320	300	300	100
ECODRIVE-S-08410	8x410	340	320	320	100
ECODRIVE-S-08430	8x430	360	340	340	100

Section 4. NOTES

- All previous versions of this Technical Data Sheet are no longer valid
- The data given in this Product Data Sheet are in accordance with the current state of knowledge and are provided in good faith. If the recommendations on how to use and install the product are not followed, KLIMAS Sp. z o.o. is not responsible for the correctness and quality of the connection.