



## IZ 8 Insulation fastener

Anchor version	Benefits
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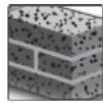
IZ

- Insulation fastener especially for plastered surfaces
- 30mm setting depth
- Perfect flush setting

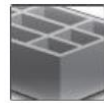
Base material
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Concrete  
(non-cracked)

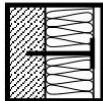


Solid brick



Hollow brick

Other information
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Fastening of  
insulation

Basic loading data for short term acting loads e.g. wind (for a single anchor)
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**All data in this section applies to:**

- Correct setting (see setting instruction)
- No edge distance and spacing influence
- Redundant fastenings in the base materials as specified in the tables
- Minimum base material thickness or greater
- Transmission of wind suction loads only
- Anchor and its plate is not exposed to UV-radiation for more than 6 weeks

**Recommended loads**

Base material			IZ 8
Concrete $\geq$ C16/20	$N_{Rec}$	[kN]	0,2
Solid clay brick Mz 12/2,0	$N_{Rec}$	[kN]	0,2
Solid sand-lime brick KS 12/1,8	$N_{Rec}$	[kN]	0,2
Vertically perforated clay brick Hlz 12/1,0	$N_{Rec}$	[kN]	0,13 <sup>a)</sup>
Vertically perforated sand-lime brick KSL 12/1,4	$N_{Rec}$	[kN]	0,17

a) Rotary drilling only - no hammer action



**Recommended pull-through loads and minimum number of fasteners<sup>a)</sup>**

Base material	Thickness [mm]	Plate-Ø [mm]	Pull-through load [kN]	Minimum number of fasteners [pcs/m <sup>2</sup> ]
Expanded polystyrene EPS	≥40	≥ 60	0,15	5
Mineral wool, type HD		≥ 60	0,15	5
Mineral wool, type WV		≥ 90	0,15 <sup>b)</sup>	4
Mineral wool, type lamella		≥ 140	0,167 <sup>c)</sup>	4

- a) Recommended values in case that the insulation material to be fixed is not covered by a European Technical Assessment (ETA) or any national approval document. If the ETICS to be fixed is covered by an ETA or any national approval document, the given pull-through resistance in the ETA or national approval document is applicable for the indicated anchors only. Contact HILTI to find out which HILTI insulation fasteners can be used!
- b) HILTI slip-on plate HDT 90 must be used
- c) HILTI slip-on plate HDT 140 must be used

**Basic provisions for fixing insulation on the bottom side of ceilings**

**All data in this section applies to**

- Correct setting (see setting instruction)
- No edge distance and spacing influence
- Redundant fastening in non-cracked concrete
- Minimum base material thickness or greater
- Transmission of quasi-static permanent loads only
- Anchor and its plate is not exposed to UV-radiation for more than 6 weeks

Note: Each panel shall be supported by 4 anchors at least e.g. by T-joint fixing.

**Recommended number of anchors for fixing panels to ceilings w/o consideration of wind load<sup>a)</sup>:**

Specific panels weight	Number of anchors per m <sup>2</sup>
EPS (≤30 kg/m <sup>3</sup> , TR≥100 kPa, 60mm≤thickness≤260)	4
Mineral wool (≤120 kg/m <sup>3</sup> , TR≥3.5 kPa, 60mm≤thickness≤120mm)	
Mineral wool (≤150 kg/m <sup>3</sup> , TR≥3.5 kPa, 60mm≤thickness≤100mm)	
Mineral wool (≤200 kg/m <sup>3</sup> , TR≥3.5 kPa, 60mm≤thickness≤70mm)	5

a) A safety factor for dead load  $\gamma_F=1,35$ , a safety factor  $\gamma_{M, EPS}=1,50$ , a safety factor  $\gamma_{M, Mineralwool}=2,00$  for material is considered.

**Service temperature range**

	Base material temperature	Maximum long term base material temperature	Maximum short term base material temperature
Temperature range	0 °C to +40 °C	+24 °C	+40 °C

**Maximum short term base material temperature**

Short-term elevated base material temperatures are those that occur over brief intervals, e.g. because of diurnal cycling.

**Maximum long term base material temperature**

Long-term elevated base material temperatures are roughly constant over significant periods of time.

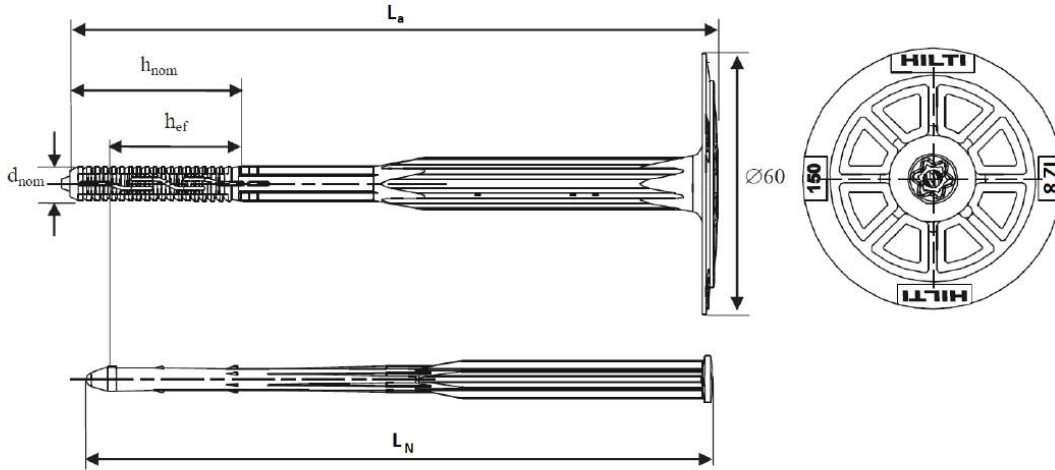
**Materials**

**Material quality**

Part	Material
Anchor sleeve and plate	Polyethylene
Expansion pin	Polyamide, fiber reinforced 50%



**IZ 8**



**Anchor dimensions**

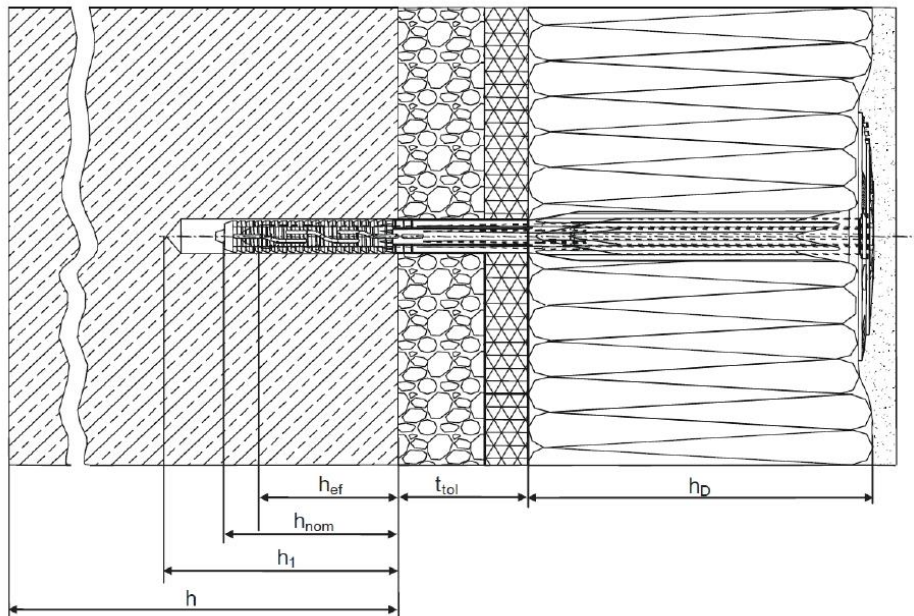
			<b>IZ 8</b>
Diameter of sleeve	$d_{nom}$	[mm]	8
Minimum length of anchor body	$L_{a,min}$	[mm]	70
Maximum length of anchor body	$L_{a,max}$	[mm]	210
Minimum length of pin	$L_{N,min}$	[mm]	65
Maximum length of pin	$L_{N,max}$	[mm]	205



**Anchor designations**

		<b>IZ 8</b>
Top of plate	Producer:	HILTI
	Anchor type:	IZ 8
	Anchor length [mm]:	e.g. 150 mm

**Setting information**



**Setting details:**

		<b>IZ 8</b>
Nominal diameter of drill bit	$d_o$ [mm]	8
Cutting diameter of drill bit	$d_{cut} \leq$ [mm]	8,45
Depth of drill hole	$h_1 \geq$ [mm]	50
Effective anchorage depth	$h_{ef}$ [mm]	30
Overall embedment depth	$h_{nom}$ [mm]	40
Thickness of insulation	$h_D$ [mm]	20 to 170
Maximum thickness of tolerance layer	$t_{tol,max}$ [mm]	$L_a - h_{nom} - h_D^{a)}$
Installation temperature	[°C]	0 to +40
UV exposure		$\leq 6$ weeks

a)  $L_a$  ... Anchor length,  $h_{nom}$  ... Overall embedment depth,  $h_D$  ... Thickness of insulation

Example:

IZ 8 x 150-P:  $L_a = 150\text{mm}$ ;  $h_{nom} = 40\text{mm}$ ;  $h_D = 100\text{mm}$

$t_{tol,max} = 150\text{mm} - 40\text{mm} - 100\text{mm} = 10\text{mm}$

Note: If  $t_{tol}$  is greater than 30mm a stepped drill bit must be used. Please contact HILTI for detailed information!

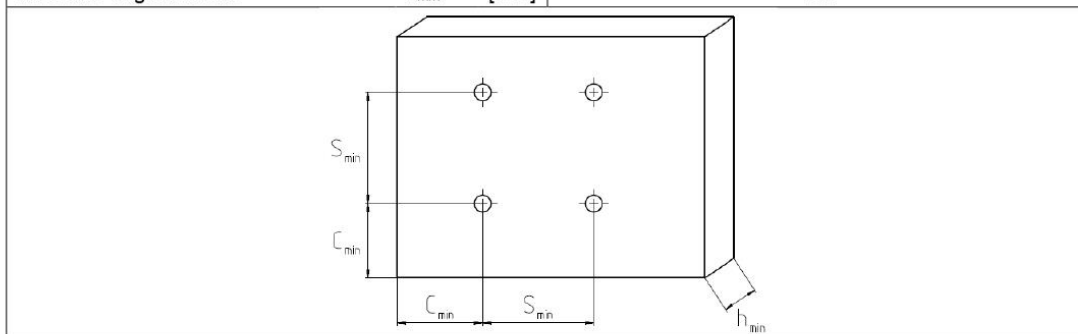


**Installation equipment**

Anchor size	IZ 8
Rotary hammer	Corded: HILTI TE 2 – TE 7 Battery: HILTI TE2-A22, TE4-A22, TE6-A36
Installation	Hammer 500g to 1500g

**Minimum edge distance, minimum spacing and minimum base material thickness**

		IZ 8
Minimum base material thickness	$h_{min}$ [mm]	100
Minimum spacing	$s_{min}$ [mm]	100
Minimum edge distance	$c_{min}$ [mm]	100





**Setting instruction\***

\*For detailed information on installation see instruction for use given with the package of the product.

<b>Setting instructions</b>	
<b>1</b> <b>Drill hole with drill bit</b> 	
<b>2</b> <b>Insert the fastener by hand</b> 	<b>2</b> <b>Do not hammer on expansion pin</b> 
<b>3</b> <b>Tap fastener with a hammer</b> 	
<b>4</b> <b>Check correct setting</b> 	