IDP Insulation fastener

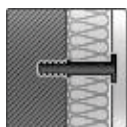|	Anchor version	Benefits
	IDP	- for insulating up to 15 cm - simple setting

Concrete   Solid brick   Hollow brick   Insulation

Basic loading data (for a single anchor)

All data in this section applies to
- Correct setting (See setting instruction)
- No edge distance and spacing influence
- Base material as specified in the table
- Minimum base material thickness
- Loads shall be reduced and number of fasteners shall be increased if the temperature sustains above 40°C

Recommended loads [a]

			IDP
Concrete ≥ C16/20	N_{rec}	[kN]	0,14
Solid clay brick Mz 20 – 1,8 – NF	N_{rec}	[kN]	0,14
Solid sand-lime brick KS 12 – 1,6 – 2DF	N_{rec}	[kN]	0,14
Hollow clay brick Hlz 12 – 0,8 – 6DF	N_{rec}	[kN]	0,04 [b]
Hollow sand-lime brick KSL 12 – 1,4 – 3DF	N_{rec}	[kN]	0,04

a) With overall global safety factor $\gamma = 5$ to the characteristic loads and a partial safety factor of $\gamma = 1,4$ to the design values.
b) Drilling without hammering

Recommended number of IDP not regarding wind suction

			Number of fasteners per m^2
Expanded polystyrene (EPS) Polyurethane (PU)	density ≤ 40 kg/m^3	thickness ≤ 150 mm	4
Mineral wool	density ≤ 150 kg/m^3	thickness ≤ 100 mm	4
		thickness ≤ 150 mm	6

The data is only valid if no further material is applied on the insulation, e.g. plaster. Otherwise number of fasteners have to be increased.
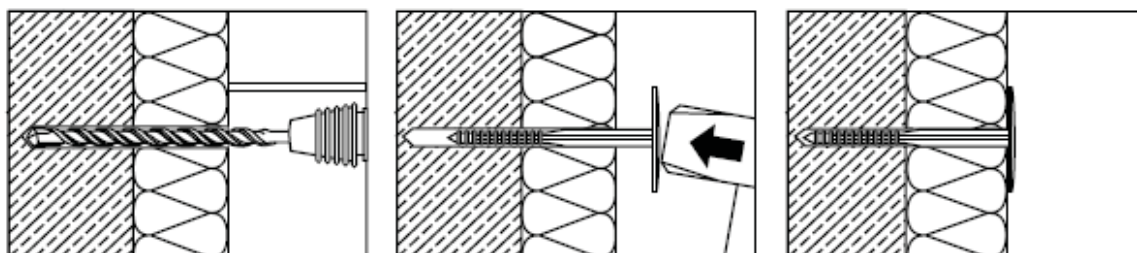
Materials

Material quality

Part	Material
Plastic sleeve	Polypropylene

Setting

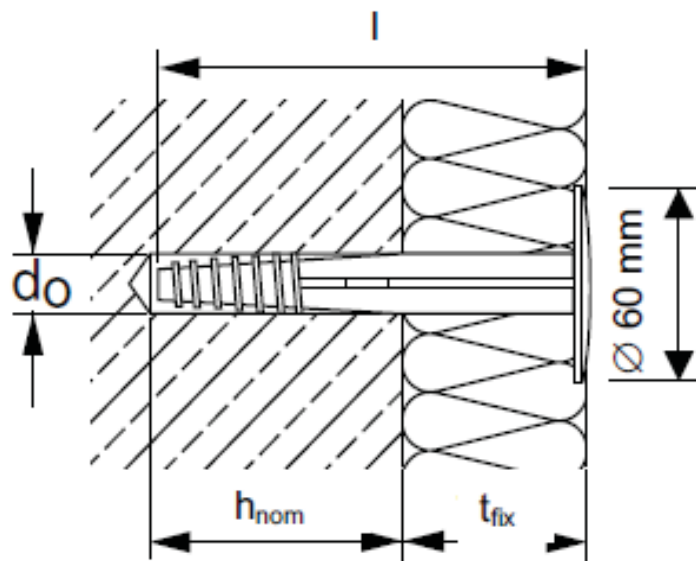### installation equipment

Anchor size	IDP
Rotary hammer	TE2 … TE16
Other tools	Hammer

Setting instruction

Drill hole with drill bit.

Tap in fastener with a hammer.

Setting details: depth of drill hole h_1 and effective anchorage depth h_{nom}

Setting details IDP

Anchor version IDP			0/2	2/4	4/6	6/8	8/10	10/12	13/15
Nominal diameter of drill bit	d_o	[mm]	8						
Cutting diameter of drill bit	$d_{cut} \le$	[mm]	8,45						
Depth of drill hole	$h_1 \ge$	[mm]	$l - t_{fix} + 10\,mm \ge 40mm$						
Effective anchorage depth	h_{nom}	[mm]	25						
Anchor length	l	[mm]	50	70	90	110	130	150	180
Max fixture thickness	t_{fix}	[mm]	20	40	60	80	100	120	150
Installation temperature		[°C]	0 to +40						