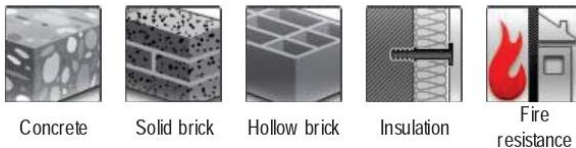


IDMS / IDMR  
 Insulation fastener

**HILTI**

## IDMS / IDMR Insulation fastener

	Anchor version	Benefits
	IDMS Carbon steel  IDMR Stainless steel	- for insulating material up to 15 cm thick - a non-flammable metal fastener - IDMS-T / IDMR-T insulation plate for non self-supporting insulation material



### Approvals / certificates

Description	Authority / Laboratory	No. / date of issue
Fire test report	IBMB, Braunschweig	PB 3136/2315 / 2005-12-02

### 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

		IDMS / IDMR
Concrete $\geq$ C16/20	$N_{rec}$ [kN]	0,1
Solid clay brick Mz 20 – 1,8 – NF	$N_{rec}$ [kN]	0,1
Solid sand-lime brick KS 12 – 1,6 – 2DF	$N_{rec}$ [kN]	0,1
Hollow clay brick Hlz 12 – 0,8 – 6DF	$N_{rec}$ [kN]	0,04 <sup>a)</sup>
Hollow sand-lime brick KSL 12 – 1,4 – 3DF	$N_{rec}$ [kN]	0,04

a) Drilling without hammering

<b>HILTI</b>	<b>IDMS / IDMR</b> Insulation fastener
--------------	---

**Recommended number of IDMS / IDMR not regarding wind suction**

			Number of fasteners per m <sup>2</sup>
Expanded polystyrene (EPS) Polyurethane (PU)	density ≤ 40 kg/m <sup>3</sup>	thickness ≤ 150 mm	4
Mineral wool	density ≤ 150 kg/m <sup>3</sup>	thickness ≤ 100 mm	6
		thickness ≤ 150 mm	8

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

**Materials**

**Material quality**

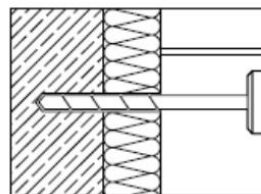
Part	Material
IDMS	Carbon steel, galvanised to 16 µm
IDMR	Stainless steel, grade 1.4301

**Setting**

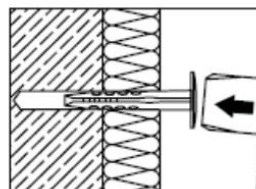
**installation equipment**

	IDMS / IDMR
Rotary hammer	TE2 – TE16
Other tools	Hammer

**Setting instruction**



Drill hole with drill bit.

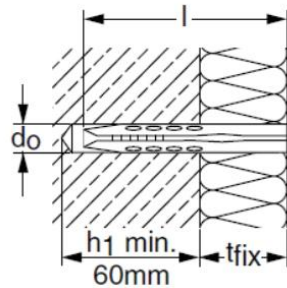


Install the fastener.

IDMS / IDMR  
 Insulation fastener



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



**Setting details IDMS / IDMR**

Anchor version IDMS / IDMR		0/3	3/6	6/9	9/12	12/15
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]	$l - t_{fix} + 10 \text{ mm} \geq 60 \text{ mm}$				
Effective anchorage depth	$h_{nom}$ [mm]	$l - t_{fix} \geq 50$ 30 – 50		full load capacity load reduction with factor 0,5		
Anchor length	$l$ [mm]	80	110	140	170	200
Max fixture thickness	$t_{fix}$ [mm]	30	60	90	120	150

**Setting parameters**

Anchor size		
Minimum base material thickness	$h_{min}$ [mm]	100
Spacing	$s_{min}$ [mm]	100
Edge distance	$c_{min}$ [mm]	100

