



# HLD Plastic anchors

Economical plastic anchor for drywall

## Anchor version



HLD  
(M10)

## Benefits

- Plastic undercut anchor
- Simple setting
- Drywall application

## Base material



Drywall

## Basic loading data

### 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
- Load data given in the tables is independent of load direction

## Characteristic resistance

Anchor size			HLD 2	HLD 3	HLD 4
Anchoring principle <sup>a)</sup>					
Gypsum board Thickness 12,5mm	B	$F_{Rk}$ [kN]	0,4	0,4	0,4
Fibre reinforced gypsum board	A	$F_{Rk}$ [kN]	0,3	-	-
Fibre reinforced gypsum board Thickness 2x12,5mm	A	$F_{Rk}$ [kN]	-	0,6	-
Hollow clay brick	A / B	$F_{Rk}$ [kN]	0,75	0,75	
Concrete $\geq$ C16/20	C	$F_{Rk}$ [kN]	1,25	2	2,5

a) See setting details

## Design resistance

Anchor size			HLD 2	HLD 3	HLD 4
Anchoring principle <sup>a)</sup>					
Gypsum board Thickness 12,5mm	B	$F_{Rd}$ [kN]	0,11	0,11	0,11
Fibre reinforced gypsum board	A	$F_{Rd}$ [kN]	0,08	-	-
Fibre reinforced gypsum board Thickness 2x12,5mm	A	$F_{Rd}$ [kN]	-	0,17	-
Hollow clay brick	A / B	$F_{Rd}$ [kN]	0,21	0,21	-
Concrete $\geq$ C16/20	C	$F_{Rd}$ [kN]	0,35	0,56	0,70

a) See setting detail

### Recommended loads <sup>b)</sup>

Anchor size				HLD 2	HLD 3	HLD 4
Anchoring principle <sup>a)</sup>						
Gypsum board Thickness 12,5mm	B	$F_{Rec}$	[kN]	0,08	0,08	0,08
Fibre reinforced gypsum board	A	$F_{Rec}$	[kN]	0,06	-	-
Fibre reinforced gypsum board Thickness 2x12,5mm	A	$F_{Rec}$	[kN]	-	0,12	-
Hollow clay brick	A / B	$F_{Rec}$	[kN]	0,15	0,15	
Concrete $\geq$ C16/20	C	$F_{Rec}$	[kN]	0,25	0,4	0,5

a) See setting details

b) With overall global safety factor  $\gamma = 5$  to the characteristic loads and a partial safety factor of  $\gamma = 1,4$  to the design value.

### Materials

#### Material quality

Part	Material
Sleeve	Polyamide PA 6

### Setting information

#### Installation temperature

-10°C to + 40°C

#### Service temperature range

Hilti HLD universal anchor may be applied in the temperature range given below.

Temperature range	Base material temperature	Max. long term base material temperature	Max. short term base material temperature
Temperature range	-40 °C to +80 °C	+50 °C	+80 °C

#### Max short term base material temperature

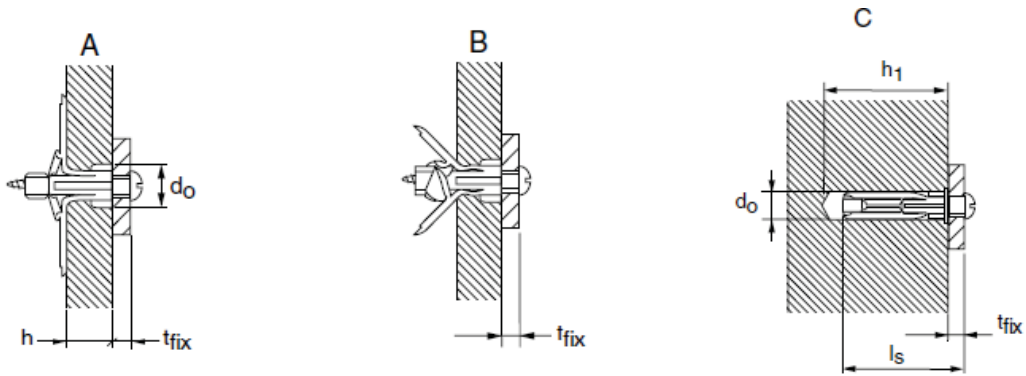
Short-term elevated base material temperatures are those that occur over brief intervals, e.g. as a result of diurnal cycling.

#### Max long term base material temperature

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

### Setting details

Anchor size				HLD 2	HLD 3	HLD 4
Nominal diameter of drill bit	$d_o$	[mm]		10		
Depth of drill hole	(only anchoring principle C)	$h_1 \geq$	[mm]	50	56	66
Screw length	(anchoring principle A/B)	$l_s$	[mm]	$33 + t_{fix}$	$40 + t_{fix}$	$49 + t_{fix}$
	(anchoring principle C)	$l_s$	[mm]	$40 + t_{fix}$	$46 + t_{fix}$	$56 + t_{fix}$
Screw diameter	(anchoring principle A/B)	$d_s$	[mm]	4 - 5		
	(anchoring principle C)	$d_s$	[mm]	5 - 6		
Wall / panel thickness	(anchoring principle A)	$h$	[mm]	4 - 12	15 - 19	24 - 28
	(anchoring principle B)	$h$	[mm]	12 - 16	19 - 25	28 - 32
	(anchoring principle C)	$h$		35	42	50



### Installation equipment

Anchor size	HLD 2	HLD 3	HLD 4
Rotary hammer	TE 2- TE16		
Other tools	Screwdriver		

### Setting instruction

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

Setting instruction	
<b>1. Drill hole with drill bit</b> 	<b>2. Install anchor</b> 
<b>3. Install anchor</b> 	<b>4. Drive in the screw</b> 

