



# Hilti HLC Sleeve Anchor

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**Sleeve anchor HLC**



**BASE MATERIALS**

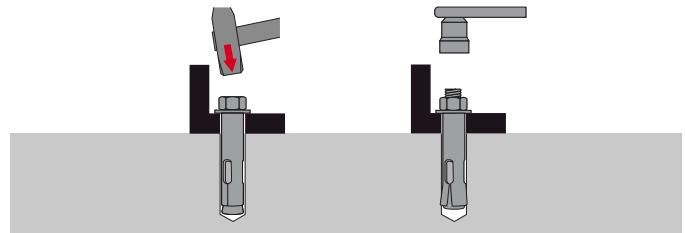
- Concrete (uncracked)
- Masonry (solid)

**APPLICATIONS**

- Suitable for a large range of temporary fastening applications, fastening small items etc.

**ADVANTAGES**

- Variety of lengths and sizes allows for a multitude of applications
- Pre-assembled anchor for fast, easy installation
- Suitable for different base materials due to expansion principle
- Ideal for through-fastening applications
- Practical information printed on the sleeve indicates the right drill bit
- Bulged middle section of sleeve with triangular diamond shaped openings prevent the anchor from rotating in its hole or dropping out of an overhead hole



These are abbreviated instructions which may vary according to the application.

**Technical data**

<b>Environmental conditions</b>	Indoor, dry conditions
<b>Material composition</b>	Steel, zinc-plated (min. 5 µm)
<b>Material, corrosion</b>	Steel, zinc-plated
<b>Type of fastening</b>	Pre-fastening, Through-fastening
<b>Approvals / test reports</b>	Fire

Recommended load (kN), non-cracked concrete at 25N/mm<sup>2</sup>, safety factor(γ)=3

Model	Size	M5	M6	M8	M10	M12	M16
HLC, HLC-H, HLC-EC / EO, HLC-L, HLC-SK, HLC-T	Tensile Load, N <sub>rec</sub>	0.7	1.2	1.5	2.4	3.3	4.4
	Shear Load, V <sub>rec</sub>	1.1	2.3	2.9	4.8	6.7	6.7

Remarks:

- 1) All the data applies to no edge distance, spacing and other influences
- 2) For detail design method, please refer to Fastening Technology Manual

## HLC (Stud head)



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Ordering designation	Anchor length	Anchor length under washer	Drill bit diameter	Thread diameter	Drilling depth	Max. fixture thickness at standard embedment depth	Anchorage depth	Required tightening torque	Base plate clearance hole	Sales pack quantity	Item number
HLC 6.5X25/5 (M5)	30mm	25 mm	6.5 mm	M5	30 mm	5 mm	16 mm	5 Nm	7 mm	100 pc	385811 <sup>1)</sup>
HLC 6.5X40/20 (M5)	45mm	40 mm	6.5 mm	M5	30 mm	10 mm	16 mm	5 Nm	7 mm	100 pc	385812 <sup>1)</sup>
HLC 6.5X60/40 (M5)	65mm	60 mm	6.5 mm	M5	30 mm	40 mm	16 mm	5 Nm	7 mm	100 pc	385813 <sup>1)</sup>
HLC 8X40/10 (M6)	46mm	40 mm	8 mm	M6	40 mm	10 mm	26 mm	8 Nm	10 mm	100 pc	385814
HLC 8X55/25 (M6)	61mm	55 mm	8 mm	M6	40 mm	25 mm	26 mm	8 Nm	10 mm	100 pc	385816
HLC 8X70/40 (M6)	76mm	70 mm	8 mm	M6	40 mm	40 mm	26 mm	8 Nm	10 mm	100 pc	385817 <sup>1)</sup>
HLC 8X85/55 (M6)	91mm	85 mm	8 mm	M6	40 mm	55 mm	26 mm	8 Nm	10 mm	100 pc	385818 <sup>1)</sup>
HLC 10X40/5 (M8)	48mm	40 mm	10 mm	M8	50 mm	5 mm	31 mm	25 Nm	12 mm	50 pc	385819 <sup>1)</sup>
HLC 10X50/15 (M8)	58mm	50 mm	10 mm	M8	50 mm	15 mm	31 mm	25 Nm	12 mm	50 pc	385820
HLC 10X60/25 (M8)	68mm	60 mm	10 mm	M8	50 mm	25 mm	31 mm	25 Nm	12 mm	50 pc	385822 <sup>1)</sup>
HLC 10X80/45 (M8)	88mm	80 mm	10 mm	M8	50 mm	45 mm	31 mm	25 Nm	12 mm	50 pc	385823 <sup>1)</sup>
HLC 10X100/65 (M8)	108mm	100 mm	10 mm	M8	50 mm	65 mm	31 mm	25 Nm	12 mm	50 pc	385824 <sup>1)</sup>
HLC 12X55/15 (M10)	65mm	55 mm	12 mm	M10	65 mm	15 mm	33 mm	40 Nm	14 mm	50 pc	385825
HLC 12X75/35 (M10)	85mm	75 mm	12 mm	M10	65 mm	35 mm	33 mm	40 Nm	14 mm	50 pc	385827
HLC 12X100/60 (M10)	110mm	100 mm	12 mm	M10	65 mm	60 mm	33 mm	40 Nm	14 mm	25 pc	385829 <sup>1)</sup>
HLC 16X60/10 (M12)	72mm	60 mm	16 mm	M12	75 mm	10 mm	41 mm	50 Nm	18 mm	25 pc	385830
HLC 16X100/50 (M12)	112mm	100 mm	16 mm	M12	75 mm	50 mm	41 mm	50 Nm	18 mm	10 pc	385831 <sup>1)</sup>
HLC 16X140/90 (M12)	152mm	140 mm	16 mm	M12	75 mm	90 mm	41 mm	50 Nm	18 mm	10 pc	385832 <sup>1)</sup>
HLC 20X80/25 (M16)	95mm	80 mm	20 mm	M16	85 mm	25 mm	41 mm	80 Nm	21 mm	10 pc	385833 <sup>1)</sup>
HLC 20X115/60 (M16)	130mm	115 mm	20 mm	M16	85 mm	60 mm	41 mm	80 Nm	21 mm	10 pc	385834 <sup>1)</sup>
HLC 20X150/95 (M16)	165mm	150 mm	20 mm	M16	85 mm	95 mm	41 mm	80 Nm	21 mm	10 pc	385835 <sup>1)</sup>
HLC 8X40/10 (M6) BUCKET	46mm	40mm	8 mm	M6	40 mm	10 mm	26 mm	8 Nm	10 mm	500 pc	385815
HLC 10X50/15 (M8) BUCKET	58mm	50mm	10 mm	M8	50 mm	15 mm	31 mm	25 Nm	12 mm	400 pc	385821
HLC 12X55/15 (M10) BUCKET	65mm	55mm	12 mm	M10	65 mm	15 mm	33 mm	40 Nm	14 mm	250 pc	385826
HLC 12X75/35 (M10) BUCKET	85mm	75mm	12 mm	M10	65 mm	35 mm	33 mm	40 Nm	14 mm	200 pc	385828

1) For detailed stock availability and lead time information please contact your Hilti representative.

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## HLC-H (Hexagon head)



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Ordering designation	Anchor length	Anchor length under washer	Drill bit diameter	Drilling depth	Thread diameter	Max. fixture thickness at standard embedment depth	Anchorage depth	Base plate clearance hole	Required tightening torque	Sales pack quantity	Item number
HLC-H 8x40/10	46 mm	40 mm	8 mm	40 mm	M6	10 mm	26 mm	10 mm	8 Nm	100 pc	385836 <sup>1)</sup>
HLC-H 8x55/25	61 mm	55 mm	8 mm	40 mm	M6	25 mm	26 mm	10 mm	8 Nm	100 pc	385838 <sup>1)</sup>
HLC-H 8x70/40	76 mm	70 mm	8 mm	40 mm	M6	40 mm	26 mm	10 mm	8 Nm	100 pc	385840 <sup>1)</sup>
HLC-H 10x40/5	48 mm	40 mm	10 mm	50 mm	M8	5 mm	31 mm	12 mm	25 Nm	50 pc	385841 <sup>1)</sup>
HLC-H 10x60/25	68 mm	60 mm	10 mm	50 mm	M8	25 mm	31 mm	12 mm	25 Nm	50 pc	385842
HLC-H 10x80/45	88 mm	80 mm	10 mm	50 mm	M8	45 mm	31 mm	12 mm	25 Nm	50 pc	385845 <sup>1)</sup>
HLC-H 10x100/65	108 mm	100 mm	10 mm	50 mm	M8	65 mm	31 mm	12 mm	25 Nm	50 pc	385847 <sup>1)</sup>
HLC-H 12x55/15	65 mm	55 mm	12 mm	65 mm	M10	15 mm	33 mm	14 mm	40 Nm	50 pc	385848 <sup>1)</sup>
HLC-H 12x75/35	85 mm	75 mm	12 mm	65 mm	M10	35 mm	33 mm	14 mm	40 Nm	50 pc	385849 <sup>1)</sup>
HLC-H 12x100/60	110 mm	100 mm	12 mm	65 mm	M10	60 mm	33 mm	14 mm	40 Nm	25 pc	385852 <sup>1)</sup>
HLC-H 16x60/10	72 mm	60 mm	16 mm	75 mm	M12	10 mm	41 mm	18 mm	50 Nm	10 pc	385853 <sup>1)</sup>
HLC-H 16x100/50	112 mm	100 mm	16 mm	75 mm	M12	50 mm	41 mm	18 mm	50 Nm	15 pc	385854 <sup>1)</sup>
HLC-H 16x140/90	152 mm	140 mm	16 mm	75 mm	M12	90 mm	41 mm	18 mm	50 Nm	10 pc	385855 <sup>1)</sup>
HLC-H 8x55/25 bucket	61 mm	55 mm	8 mm	40 mm	M6	25 mm	26 mm	10 mm	8 Nm	500 pc	385839 <sup>1)</sup>
HLC-H 10x60/25 bucket	68 mm	60 mm	10 mm	50 mm	M6	25 mm	31 mm	12 mm	25 Nm	300 pc	385844 <sup>1)</sup>
HLC-H 10x80/45 bucket	88 mm	80 mm	10 mm	50 mm	M6	45 mm	31 mm	12 mm	25 Nm	200 pc	385846 <sup>1)</sup>
HLC-H 12x75/35 bucket	85 mm	75 mm	12 mm	65 mm	M10	35 mm	33 mm	14 mm	40 Nm	150 pc	385851 <sup>1)</sup>

1) For detailed stock availability and lead time information please contact your Hilti representative.

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## HLC-SK (Concrete/sunk head)



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Ordering designation	Anchor length	Drill bit diameter	Drilling depth	Thread diameter	Max. fixture thickness at standard embedment depth	Anchorage depth	Base plate clearance hole	Required tightening torque (in concrete)	Sales pack quantity	Item number
HLC-SK 6.5X45/20 (M5)	45 mm	6.5 mm	30 mm	M5	20 mm	16 mm	7 mm	5 Nm	100	385856 <sup>1)</sup>
HLC-SK 6.5X65/40 (M5)	65 mm	6.5 mm	30 mm	M5	40 mm	16 mm	7 mm	5 Nm	100	385857 <sup>1)</sup>
HLC-SK 6.5X85/60 (M5)	85 mm	6.5 mm	30 mm	M5	60 mm	16 mm	7 mm	5 Nm	100	385858 <sup>1)</sup>
HLC-SK 8X60/25 (M6)	60 mm	8 mm	40 mm	M6	25 mm	26 mm	10 mm	8 Nm	100	385859
HLC-SK 8X75/40 (M6)	75 mm	8 mm	40 mm	M6	40 mm	26 mm	10 mm	8 Nm	100	385860 <sup>1)</sup>
HLC-SK 8X90/55 (M6)	90 mm	8 mm	40 mm	M6	55 mm	26 mm	10 mm	8 Nm	100	385861 <sup>1)</sup>
HLC-SK 10X45/5 (M8)	45 mm	10 mm	50 mm	M8	5 mm	31 mm	12 mm	25 Nm	50	385862 <sup>1)</sup>
HLC-SK 10X85/45 (M8)	85 mm	10 mm	50 mm	M8	45 mm	31 mm	12 mm	25 Nm	50	385863
HLC-SK 10X105/65 (M8)	105 mm	10 mm	50 mm	M8	65 mm	31 mm	12 mm	25 Nm	50	385864 <sup>1)</sup>
HLC-SK 10X130/95 (M8)	130 mm	10 mm	50 mm	M8	95 mm	31 mm	12 mm	25 Nm	25	385865 <sup>1)</sup>
HLC-SK 12X80/35 (M10)	80 mm	12 mm	65 mm	M10	35 mm	33 mm	14 mm	40 Nm	50	385866 <sup>1)</sup>

<sup>1)</sup> For detailed stock availability and lead time information please contact your Hilti representative.

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## HLC-EC (Closed eyebolt)



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Ordering designation	Anchor length	Anchor length under washer	Drill bit diameter	Drilling depth	Max. fixture thickness at standard embedment depth	Anchorage depth	Base plate clearance hole	Required tightening torque	Sales pack quantity	Item number
HLC-EC 8x40	70 mm	40 mm	8 mm	40 mm	14 mm	26 mm	10 mm	8 Nm	50 pc	385871
HLC-EC 10x50	80 mm	50 mm	10 mm	50 mm	20 mm	31 mm	12 mm	25 Nm	50 pc	385872
HLC-EC 16x100	160 mm	100 mm	16 mm	75 mm	59 mm	41 mm	18 mm	50 Nm	10 pc	385873 <sup>1)</sup>
HLC-EC 16x160	200 mm	140 mm	16 mm	75 mm	119 mm	41 mm	18 mm	50 Nm	15 pc	385874 <sup>1)</sup>

<sup>1)</sup> For detailed stock availability and lead time information please contact your Hilti representative.

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## HLC-EO (Open eyebolt)



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Ordering designation	Anchor length	Anchor length under washer	Drill bit diameter	Drilling depth	Anchorage depth	Base plate clearance hole	Required tightening torque	Sales pack quantity	Item number
HLC-EO 8x40	70 mm	40 mm	8 mm	40 mm	26 mm	10 mm	8 Nm	50 pc	385875

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## HLC-T (Eyebolt head)



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Ordering designation	Anchor length under washer	Drill bit diameter	Drilling depth	Anchorage depth	Base plate clearance hole	Required tightening torque	Sales pack quantity	Item number
HLC-T 6,5x25	25 mm	6.5 mm	30 mm	16 mm	7 mm	5 Nm	50 pc	385877

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## HLC-L (Rounded head)










Ordering designation	Anchor length	Drill bit diameter	Min. Drilling depth	Thread diameter	Max. fixture thickness at standard embedment depth	Anchorage depth	Base plate clearance hole	Required tightening torque (in concrete)	Sales pack quantity	Item number
HLC-L 10X50/15 (M8)	50 mm	10 mm	50 mm	M8	15 mm	31 mm	12 mm	25 Nm	50 pc	385867 <sup>1)</sup>
HLC-L 10X60/25 (M8)	60 mm	10 mm	50 mm	M8	25 mm	31 mm	12 mm	25 Nm	50 pc	385868 <sup>1)</sup>
HLC-L 10X80/45 (M8)	80 mm	10 mm	50 mm	M8	45 mm	31 mm	12 mm	25 Nm	50 pc	385869 <sup>1)</sup>
HLC-L 10X100/65 (M8)	100 mm	10 mm	50 mm	M8	65 mm	31 mm	12 mm	25 Nm	50 pc	385870 <sup>1)</sup>




<sup>1)</sup> For detailed stock availability and lead time information please contact your Hilti representative.

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# HLC Light duty metal anchors

## Economical sleeve anchor

Anchor version			Benefits
	HLC (M5-M16)	Hex head nut with pressed-on washer	- Various head shapes and fastenings thickness
	HLC-H (M5-M16)	Bolt version with washer	
	HLC-L (M5-M16)	Torx round head	
	HLC-SK (M5-M16)	Torx counter sunk head	
	HLC-EC (M5-M16)	Loop-hanger head, eyebolt closed	
	HLC-EO (M5-M16)	Loop-hanger head, eyebolt open	
	HLC-T (M5-M16)	Ceiling hanger	

Base material	Load condition
 Uncracked Concrete  Solid brick	 Fire resistance

### Approvals / certificates

Description	Authority / Laboratory	No. / date of issue
Fire test report	IBMB, Braunschweig	PB 3093/517/07-CM / 2007-09-10
Assessment report (fire)	Warringtonfire	WF 327804/A / 2013-07-10

### Recommended general notes

\* The below clauses based on Hilti product qualifications are for references only. Selection of clauses by the engineer shall be based on the specific application needs. Please contact Hilti's technical team for further details.

- Anchor shall be a sleeved expansion anchor, with four noses on the expansion cone and three ribs on the expansion sleeve, which is tested for use in un-cracked concrete and solid masonry.
- Anchor shall have setting mark on the sleeve to ensure correct embedment during installation
- Anchor shall be installed as per the manufacturer's approved procedure and equipment
- The recommended tension load of the anchor should not be not less than \_\_ kN in concrete strength at 25N/mm<sup>2</sup> (including overall global safety factor=3)
- Effective anchorage depth of the anchor should not exceed \_\_mm

### Basic loading data (for a single anchor)

All data in this section is Hilti technical data and applies to:

- Correct setting (See setting instruction)
- No edge distance and spacing influence
- Concrete as specified in the table
- *Steel failure*
- Minimum base material thickness
- Concrete C 20/25,  $f_{ck,cube}=25 \text{ N/mm}^2$ . Concrete strength influence factor can be applied when concrete grade > C20/25, when steel failure does not govern.

### Effective anchorage depth

Anchor size		M5	M6	M8	M10	M12	M16
Nominal embedment depth	$h_{ef}$ [mm]	16	26	31	33	41	41

### Characteristic resistance

Anchor size		M5	M6	M8	M10	M12	M16
Tension $N_{Rk}$	[kN]	2,1	3,5	4,5	7,2	10,0	13,2
Shear $V_{Rk}$	[kN]	3,2	7,0	8,8	14,4	20,0	20,0

### Design resistance

Anchor size		M5	M6	M8	M10	M12	M16
Tension $N_{Rd}$	[kN]	1,2	2,0	2,5	4,0	5,6	7,4
Shear $V_{Rd}$	[kN]	1,8	3,9	4,9	8,0	11,1	11,1

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

Anchor size		M5	M6	M8	M10	M12	M16
Tension $N_{Rec}$	[kN]	0,7	1,2	1,5	2,4	3,3	4,4
Shear $V_{Rec}$	[kN]	1,1	2,3	2,9	4,8	6,7	6,7

a) Includes global safety factor of 3.0

### Materials

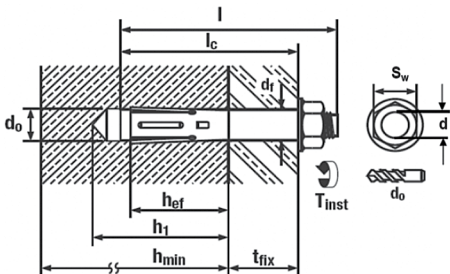
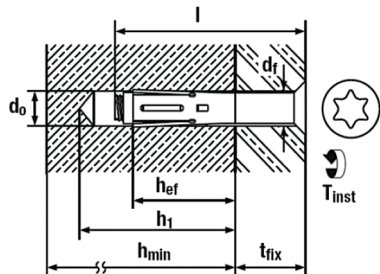
#### Material quality

Part	Material	
Anchor	HLC HLC-EC HLC-EO	Carbon steel tensile strength 500 MPa galvanized to min. 5 $\mu\text{m}$
	HLC-H HLC-L HLC-SK HLC-T	Steel Bolt Strength 8.8, galvanized to min 5 $\mu\text{m}$

**Anchor dimensions a)**

Anchor version	Thread size	$h_{ef}$ [mm]	d [mm]	l [mm]	$l_c$ [mm]	$t_{fix}$ [mm]
HLC, HLC-H, HLC-EC/EO carbon steel anchors	6,5 x 25/5	16	M5	30	25	5
	6,5 x 40/20			45	40	20
	6,5 x 60/40			65	60	40
	8 x 40/10	26	M6	46	40	10
	8 x 55/25			61	55	20
	8 x 70/40			76	70	40
	8 x 85/55			91	85	55
	10 x 40/5	31	M8	48	40	5
	10 x 50/15			58	50	15
	10 x 60/25			68	60	25
	10 x 80/45	33	M10	88	80	45
	10 x 100/65			108	100	65
	12 x 55/15			65	55	15
	12 x 75/35			85	75	35
	12 x 100/60	41	M12	110	100	60
	16 x 60/10			72	60	10
	16 x 100/50			112	100	60
	16 x 140/90	41	M16	152	140	95
	20 x 80/25			95	80	25
	20 x 115/60			130	115	60
20 x 150/95	165			150	95	
HLC-SK carbon steel anchors	6,5 x 45/20	16	M5	45	-	20
	6,5 x 65/40			65		40
	6,5 x 85/60			85		60
	8 x 60/25	26	M6	60	-	25
	8 x 75/40			75		40
	8 x 90/55			90		55
	10 x 45/5	31	M8	45	-	5
	10 x 85/45			85		45
	10 x 105/65			105		65
	10 x 130/95			130		95
12 x 55/15	33	M10	80	-	35	

a) Please refer to the product catalogue on the Hilti Hong Kong website for standard portfolio

**HLC, HLC-H, HLC-EC/EO, HLC-L**

**HLC-SK**




## Setting information

### Setting details

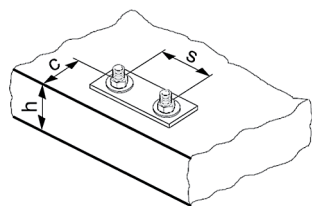
Anchor size			M5	M6	M8	M10	M12	M16
Nominal diameter of drill bit	$d_0$	[mm]	6,5	8	10	12	16	20
Cutting diameter of drill bit	$d_{out} \leq$	[mm]	6,4	8,45	10,45	12,5	16,5	20,55
Depth of drill hole	$h_1 \geq$	[mm]	30	40	50	65	75	85
Width across nut flats	HLC	SW [mm]	8	10	13	15	19	24
	HLC-H	SW [mm]				17		
	HLS-SK	Driver				PZ 3		
Diameter of clearance hole in the fixture	$d_f \leq$	[mm]	7	10	12	14	18	21
Effective anchorage depth	$h_{ef}$	[mm]	16	26	31	33	41	41
Max. torque moment concrete	$T_{inst}$	[Nm]	5	8	25	40	50	80
Max. torque moment masonry	$T_{inst}$	[Nm]	2,5	4	13	20	25	-

### Installation equipment

Anchor size	M5	M6	M8	M10	M12
Rotary hammer for setting	TE 2 – TE 16				
Other tools	hammer, torque wrench, blow up pump				

### Setting parameters

Anchor size	M6	M8	M10	M10	M12	M16		
Minimum base material thickness	$h_{min}$	[mm]	60	70	80	100	100	120
Critical spacing for splitting failure and concrete cone failure	$s_{cr}$	[mm]	60	100	120	130	160	160
Critical edge distance for splitting failure and concrete cone failure	$c_{cr}$	[mm]	30	50	60	65	80	80

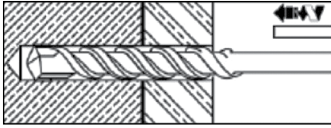


## Setting instruction

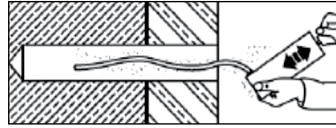
\* For detailed information on installation see instruction for use given with the package of the product.

### Setting instruction for HLC

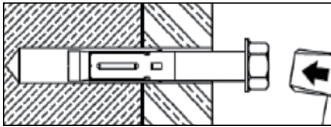
#### 1. Drill hole with drill bit



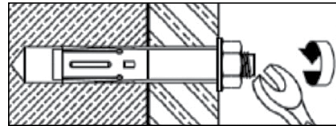
#### 2. Blow out dust and fragments



#### 3. Install anchor



#### 4. Apply torque



### Basic loading data (for a single anchor) in solid masonry units



#### All data in this section applies to

- Load values valid for holes drilled with TE rotary hammers in hammering mode
- Correct anchor setting (see instruction for use, setting details)
- The core / material ratio may not exceed 15% of a bed joint area.
- The brim area around holes must be at least 70mm
- Edge distances, spacing and other influences, see below

#### Anchorage depth

Anchor size		M5	M6	M8	M10	M12
Nominal anchorage depth	$h_{nom}$ [mm]	16	26	31	33	41

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

Anchor size		M5	M6	M8	M10	M12	
<b>Solid clay brick Mz12/2,0 (Germany, Austria, Switzerland)</b>							
	DIN 105/ EN 771-1	Tension $N_{Rec}^{c)}$ [kN]	0,3	0,5	0,6	0,7	0,8
	$f_b^{b)}$ $\geq 12$ N/mm <sup>2</sup>	Shear $V_{Rec}^{c)}$ [kN]	0,45	1,0	1,2	1,4	1,6
<b>Solid clay brick Mz12/2,0 (Germany, Austria, Switzerland)</b>							
	DIN 106/ EN 771-2	Tension $N_{Rec}^{d)}$ [kN]	0,4	0,5	0,6	0,8	0,8
	$f_b^{b)}$ $\geq 12$ N/mm <sup>2</sup>	Shear $V_{Rec}^{d)}$ [kN]	0,65	1,0	1,2	1,6	1,6

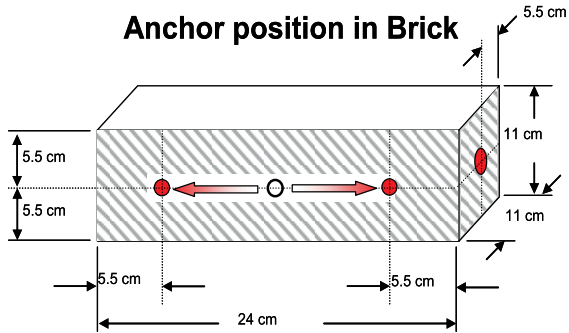
a) Recommended load values for German base materials are based on national regulations.

b)  $f_b$ =brick strength

c) Values only valid for  $M_z$ (DIN 105) with brick strength  $\geq 19$  N/mm<sup>2</sup>, density 2,0 kg/dm<sup>3</sup>, min. brick size NF (24,0 cm x 11,5 cm x 11,5 cm)

d) Values only valid for  $K_z$ (DIN 106) with brick strength  $\geq 29$  N/mm<sup>2</sup>, density 2,0 kg/dm<sup>3</sup>, min. brick size NF (24,0 cm x 11,5 cm x 11,5 cm)

**Permissible anchor location in brick and block walls**



**Edge distance and spacing influences**

- The technical data for the HLC sleeve anchors are reference loads for MZ 12 and KS 12. Due to the large variation of natural stone solid bricks, on site anchor testing is recommended to validate technical data.
- The HLC anchor was installed and tested in the centre of solid bricks as shown. The HLC anchor was not tested in the mortar joint between solid bricks or in hollow bricks, however a load reduction is expected.
- For brick walls where anchor position in brick cannot be determined, 100% anchor testing is recommended.
- Distance to free edge free edge to solid masonry (Mz and KS) units  $\geq 300$  mm
- The minimum distance to horizontal and vertical mortar joint (cmin) is stated in the drawing above.
- Minimum anchor spacing (smin) in one brick/block is  $\geq 2 \cdot c_{min}$

**Limits**

- Applied load to individual bricks may not exceed 1,0 kN without compression or 1,4 kN with compression
- All data is for multiple use for non-structural applications

Plaster, graveling, lining or levelling courses are regarded as non-bearing and may not be taken into account for the calculation of embedment depth.

Attn. : To whom it may concern

Date : 26 September 2023  
Ref. : 122/AM/DY/23

Subject : Country of Origin- Hilti HLC Sleeve Anchor

Dear Sir / Madam,

Enclosed please find the information of Hilti HLC Sleeve Anchor.

Brand Name : Hilti

Model Name : Hilti HLC Sleeve Anchor

Manufacturer : Hilti Corporation

Address of Manufacturer : FL-9494, Principality of Liechtenstein.

Manufacturer Contact Person : Dennis Yeung

Supplier : Hilti (Hong Kong) Ltd

Address of Supplier : 701-704, 7/F, Tower A, Manulife Financial Centre,  
223 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong

Supplier Contact Person : Dennis Yeung (+852 9723 4621)

Country of Origin : China

Should you have further questions, please do not hesitate to contact our Technical Representatives, Customer Service Hotline at 8228-8118, or email us at [hksales@hilti.com](mailto:hksales@hilti.com).

Yours faithfully,



Dennis Yeung  
Head of Product Leadership Strategy, F&P



## Hilti HLC Sleeve Anchor Job Reference

Year	Project Name	Customer Name	Project type
2020	HKIA SKYCITY COMPLEX BLDG A2&A3	PYROFOE (M/E) ENGINEERING CO	Retail
2020	NW KLN RECLAM 6 & FAT TSEUNG ST W	GOLDEN CITY FIRE ENGINEERING LTD	Residential
2020	TUEN MUN AREA 56 (500),KWUN CHUI RD	SUCCESS BASE ENGINEERING LIMITED	Residential
2020	FAN GARDEN POLICE STAFF QUARTERS	PYROFOE (M/E) ENGINEERING CO	Residential
2020	QUEEN'S HILL HOUSING SITE 1 PH 1,6	HIP HING ENGINEERING CO LTD	Residential
2020	LO FAI RD (EAST) TPTL 223 & 229	SUEN TAT METAL MACHINE FACTORY LTD	Residential
2020	KAI HING RD KOWLOON BAY 5982	KWONG KIN COMPANY LIMITED	Residential
2020	KAI TAK AREA 1F SITE 2, NKIL 6556	HIP HING CONSTRUCTION CO LTD	Office
2020	TAI WAI STATION NW RES	SUCCESS BASE ENGINEERING LIMITED	Residential
2020	OCEAN PARK WATER PARK	AMIABLE ENGINEERING HK LIMITED	Sport & Recreation
2021	YAU MA TEI- KWONG WAH HOSPITAL PHASE 1	LANDMASS ENGINEERING SERVICES	Health
2021	HKIA SKYCITY COMPLEX BLDG A2&A3	PYROFOE (M/E) ENGINEERING CO	Retail
2021	KAI TAK SPORTS PARK	YOTTA ENGINEERING COMPANY LIMITED	Sport & Recreation
2021	CINGLEOT LOGISTICS CENTRE, AIRPORT - ALIBABA	YUAN ENGINEERING E&M CO LIMITED	Industrial
2021	KAI HING RD KOWLOON BAY 5982	KWONG KIN COMPANY LIMITED	Residential
2021	LO FAI RD (EAST) TPTL 223 & 229	SUEN TAT METAL MACHINE FACTORY LTD	Residential
2021	IMMIGRATION HEADQUARTERS, TKO	WELL UNITED FIRE SERVICES	Office
2021	KAI TAK AREA 1K1 (6567)	YOTTA ENGINEERING COMPANY LIMITED	Residential
2021	WONG CHUK HANG STATION PH2 (SITE B)	HINGMOU STEEL & IRON ENGINEERING	Residential
2021	1-11 AU PUI WAN ST, FO TAN		Residential
2022	CINGLEOT LOGISTICS CENTRE, AIRPORT - ALIBABA	YUAN ENGINEERING E&M CO LIMITED	Industrial
2022	IMMIGRATION HEADQUARTERS, TKO	WELL UNITED FIRE SERVICES	Office
2022	KAI TAK SPORTS PARK	WELL UNITED FIRE SERVICES	Sport & Recreation
2022	UNITED CHRISTIAN HOSPITAL	PYROFOE (M/E) ENGINEERING CO	Health
2022	YIN PING RD, TAI WO PING (6542)	PYROFOE (M/E) ENGINEERING CO	Residential
2022	ON SAU RD, SITE KT2A, ANDERSON RD QUARRY - SCHOOL	CHUN WO-STEC-VASTEAM JOINT VENTURE	Education
2022	KWAI CHUNG HOSPITAL PH2 & 3	RICH IN ENGINEERING LIMITED	Health
2022	WONG CHUK HANG STATION PH3 (SITE C)	KEI IP ENGINEERING LIMITED	Residential
2022	TKO LOHAS PARK PH12 (SITE D)	PYROFOE (M/E) ENGINEERING CO	Residential
2022	YAU MA TEI- KWONG WAH HOSPITAL PHASE 1	LANDMASS ENGINEERING SERVICES	Health
2023	KAI TAK SPORTS PARK	PRODUCTIVE ENGINEERING LIMITED	Sport & Recreation
2023	KAI TAK SPORTS PARK	YOTTA ENGINEERING COMPANY LIMITED	Sport & Recreation
2023	IMMIGRATION HEADQUARTERS, TKO	WELL UNITED FIRE SERVICES	Office
2023	KWAI CHUNG HOSPITAL PH2 & 3	RICH IN ENGINEERING LIMITED	Health
2023	YIN PING RD, TAI WO PING (6542)	PYROFOE (M/E) ENGINEERING CO	Residential
2023	UNITED CHRISTIAN HOSPITAL	PYROFOE (M/E) ENGINEERING CO	Health
2023	WONG CHUK HANG STATION PH3 (SITE C)	KEI IP ENGINEERING LIMITED	Residential
2023	TKO LOHAS PARK PH12 (SITE D)	PYROFOE (M/E) ENGINEERING CO	Residential
2023	TIN SHUI WAI T.L.23 TIN WING STOP	CHIT TAT ELECTRICAL ENGINEERING LTD	Residential
2023	HKIA 3508 TERMINAL 2	CHEONG KIN ENGINEERING COMPANY	Transport
2023	53-55A KWUN TONG RD	EVER GAIN AIR CONDITION ENGINEERING	Residential