HIT-HY 170 injection mortar

Anchor design (ETAG 029) / Rods&Sleeves / Masonry

Injection mortar system	Benefits

Hilti HIT-HY 170
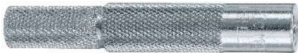
500 ml foil pack
(also available as
330 ml foil pack)

Anchor rod:
HIT-V
HIT-V-F
HIT-V-R
HIT-V-HCR
(M8-M12)

Internally
threaded sleeve:
HIT-IC
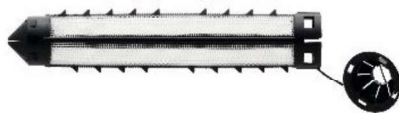(M8-M12)

HIT-SC
sieve sleeve
(16-22)

Benefits
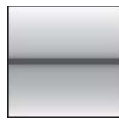
- Chemical injection fastening for the most common types of base materials:
- Hollow and solid clay bricks, calcium silicate bricks, normal and light weight concrete blocks
- Two-component hybrid mortar
- Versatile and convenient handling with HDE dispenser
- Mortar filing control wit HIT-SC sleeves

Base material

Solid brick   Hollow brick

Load conditions

Static/
quasi-static

Installation conditions
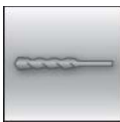
Hammer drilled holes
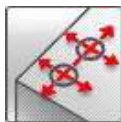
Small edge embedment depth
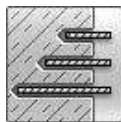
Variable embedment depth

Other information

European Technical Assessment

CE conformity
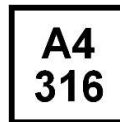
A4 316
Corrosion resistance

HCR highMo
High corrosion resistance

PROFIS Anchor design software

Approvals / certificates

Description	Authority / Laboratory	No. / date of issue
European technical Approval [a)	DIBt, Berlin, Germany	ETA-15/0197 / 2015-12-09

b)   All data given in this section according to ETA-15/0197, issue 2015-12-09.

Brick types and properties

Instruction to this technical data

– Identify/choose your brick (or brick type) and its geometrical/physical properties on the following tables.Information about edge and spacing criteria for every brick is available on page 4.

– The pages reffered on the last column of the table below contain the design resistance loads for pull-out failure of the anchor, brick breakout failure and local brick failure for each respective brick. Notice that the data displayed on these tables is only valid for single anchors with distance to edge equal to or greater than c_{cr} – for other cases not covered, use PROFIS Anchor software, consult ETA-15/0197 or contact Hilti Engineering Team.

– The resistance loads provided by this technical data manual are valid only for exact same masonry unit (hollow bricks) or for units made of the same base material with equal or higher size and compressive strength (solid bricks). For other cases, on-site tests must be performed-please consult page 8.

Exterior brick dimensions
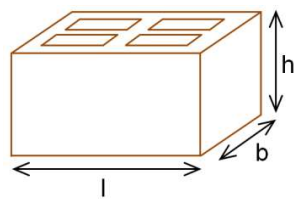
Generic bricks

Interior dimensions of the majority of the holes
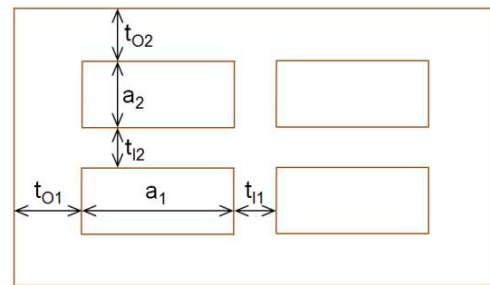
Brick types and properties

| Brick code	Data	Brick name	Image	Size [mm]	t_O [mm]	t_I [mm]	a [mm]	fb [N/mm2]	ρ [kg/dm3]	Page
Solid Clay										
SC	ETA	Solid clay brick Mz, 2DF		l: ≥ 240 b: ≥ 115 h: ≥ 113	-	-	-	12	2,0	17
Hollow Clay										
HC	ETA	Hollow clay brick Hlz, 10DF		l: 300 b: 240 h: 238	t_{O1}:12 t_{O2}:15	t_{I1}:11 t_{I2}:15	a_1: 10 a_2: 25	12/20	1,4	17
Solid Calcium Silicate										
SCS	ETA	Solid silica brick KS, 2DF		l: ≥ 240 b: ≥ 115 h: ≥ 113	-	-	-	12/28	2,0	17
Hollow Calcium Silicate										
HCS	ETA	Hollow silica brick KSL, 8DF		l: 248 b: 240 h: 238	t_{O1}:34 t_{O2}:21	t_{I1}:12 t_{I2}:30	a_1: 50 a_2: 50	12/20	1,4	17
Hollow lightweight concrete										
HLWC	ETA	Hollow lightweight concrete brick		l: 495 b: 240 h: 238	t_{O1}:45 t_{O2}:51	t_{I1}:35 t_{I2}:36	a_1:196 a_2: 52	2/6	0,8	18
Hollow normal weight concrete										
HNWC	ETA	Hollow normal weight concrete brick		l: 500 b: 200 h: 200	t_{O1}:30 t_{O2}:15	t_{I1}:15 t_{I2}:15	a_1:133 a_2: 75	4/10	1,0	18

Anchor installation parameters

Brick position:

Spacing and edge distance:
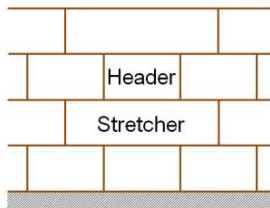
- **Header (H):** The longest dimension of the brick represents the width of the wall
- **Stretcher (S):** The longest dimension of the brick represents the length of the wall
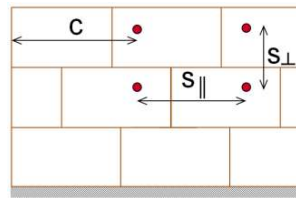
- c - Distance to the edge
- $s_{\parallel}$ - Spacing parallel to the horizontal joint
- $s_{\perp}$ - Spacing perpendicular to the horizontal joint

Minimum and characteristic spacing and edge distance parameters

- c_{min} – Minimum edge distance

- c_{cr} – Characteristic edge distance

- $s_{min\,\parallel}$ - Min. spacing distance parallel to the bed joint

- $s_{cr\,\parallel}$ - Characteristic spacing distance parallel to the bed joint

- $s_{min\,\perp}$ - Min. spacing distance perpendicular to the bed joint

- $s_{cr\,\perp}$ - Characteristic spacing distance perpendicular to the bed joint

Allowed anchor positions:

$c \geq c_{cr} = c_{min}$

$c \geq c_{cr} = c_{min}$

$s_{II} \geq s_{cr\,II} = s_{min\,II}$
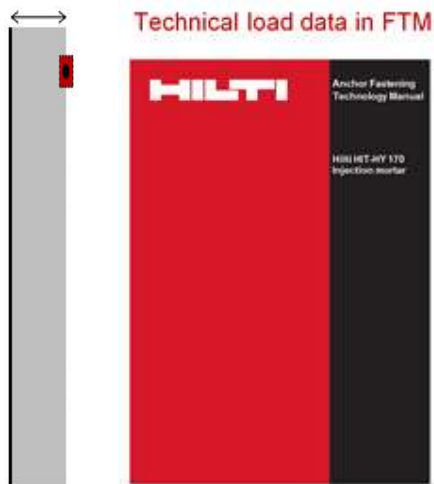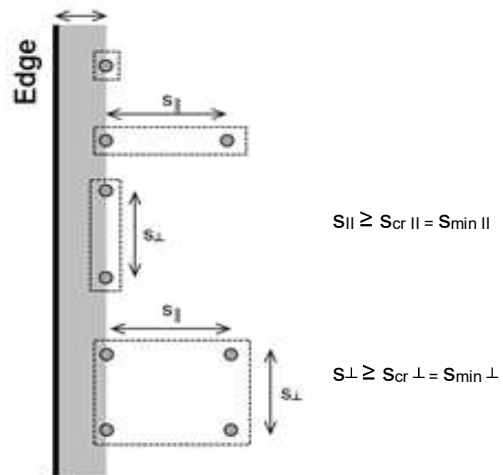
$s_{\perp} \geq s_{cr\,\perp} = s_{min\,\perp}$

- This FTM includes the load data for single anchors in masonry with a distance to edge equal to or greater than the characteristic edge distance.

$s_{II} \geq s_{cr\,II} = s_{min\,II}$

$s_{\perp} \geq s_{cr\,\perp} = s_{min\,\perp}$

Edge and spacing distances per brick

Brick code	$c_{min} = c_{cr}$ [mm]	$s_{minII} = s_{crII}$ [mm]	$s_{min\perp} = s_{cr\perp}$ [mm]
SC	115	240	115
HC	150	300	240
SCS	115	240	115
HCS	125	248	240
HLC	250	240	240
HNC	200	200	200

Anchor dimensions

Anchor size		M8	M10	M12
Embedment depth	HIT-V-(R, HCR) h_{ef} [mm]		80	
Embedment depth	HIT-IT h_{ef} [mm]		80	

Design

– Anchorages are designed under the responsibility of an engineer experienced in anchorages and masonry work.
– Verifiable calculation notes and drawings are prepared taking account of the loads to be anchored. The position of the anchor is indicated on the design drawings (e.g. position of the anchor relative to supports, etc.).
– Anchorages under static or quasi-static loading are designed in accordance with: ETAG 029, Annex C, Design method A.

Basic loading data (for a single anchor)

The load tables provide the design resistance load for a single loaded anchor.

All data in this section applies to:

– Edge distance $c \geq c_{cr} = c_{min}$.
– Correct anchor setting (see instruction for use, setting details)

Anchorages subject to:	Hilti HIT-HY 170 with HIT-V or HIT-IC	
Masonry	**in solid bricks**	**in hollow bricks**
Hole drilling	hammer mode	rotary mode
Use category: dry or wet structure	Category d/d - **Installation and use** in structures subject to **dry** internal conditions. Category w/d - **Installation in dry or wet** substrate and **use** in structures subject to **dry**, internal conditions. Category w/w - **Installation and use** in structures subject to **dry or wet** environmental conditions.	
Installation direction	horizontal	
Use category	b (solid masonry)	c (hollow or perforated masonry)
Temperature in the base material at installation	+5° C to +40° C	-5° C to +40° C
In-service temperature — **Temperature range Ta:**	-40 °C to +40°C	(max. long term temperature +24°C and max. short term temperature +40 °C)
In-service temperature — **Temperature range Tb:**	-40 °C to +80°C	(max. long term temperature +50°C and max. short term temperature +80 °C)

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Tension loading

The design tensile resistance is the lower value of

- Steel resistance: $N_{Rd,s}$

- Pull-out of the anchor: $N_{Rd,p}$

- Brick breakout failure: $N_{Rd,b}$

- Pull out of one brick $N_{Rd,pb}$

Shear loading

**The design shear resistance is the lower value of**

- Steel resistance: $V_{Rd,s}$

- Local brick failure: $V_{Rd,b}$

- Pushing out of one brick: $V_{Rd,pb}$

Design tension and shear resistances – Steel failure for HIT-V

Anchor size			M8	M10	M12
Tension $N_{Rd,s}$	HIT-V 5.8(F)	[kN]	12,2	19,3	28,1
	HIT-V 8.8(F)		19,5	30,9	44,9
	HIT-V-R		13,7	21,7	31,6
	HIT-V-HCR		19,5	30,9	44,9
Shear $V_{Rd,s}$	HIT-V 5.8(F)	[kN]	7,4	11,6	16,9
	HIT-V 8.8(F)		11,7	18,6	27,0
	HIT-V-R		8,2	13,0	18,9
	HIT-V-HCR		11,7	18,6	27,0
$M^0_{Rd,s}$	HIT-V 5.8(F)	[Nm]	15,0	29,9	52,4
	HIT-V 8.8(F)		24,0	47,8	83,8
	HIT-V-R		16,9	33,6	59,0
	HIT-V-HCR		24,0	47,8	83,8

Design tension and shear resistances – Steel failure for internally threaded sleeves HIT-IC

Anchor size			M8	M10	M12
Tension $N_{Rd,s}$	HIT-IC	[kN]	3,9	4,8	9,1
Shear $V_{Rd,s}$	HIT-IC	[kN]	7,4	11,6	16,9
	Screw 8.8		11,7	18,6	27,0
$M^0_{Rd,s}$	HIT-IC	[Nm]	15,0	29,9	52,4
	Screw 8.8		24,0	47,8	83,8
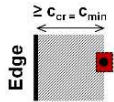
Design tension and shear resistances – Pull-out failure of the anchor, brick breakout failure and local brick failure at characteristic edge distance ($c \geq c_{cr} = c_{min}$) for single anchor applications

Load type	Anchor size		h_{ef} [mm]	f_b [N/mm²]	w/w and w/d		d/d	
					Ta	Tb	Ta	Tb
					Loads [kN]			
SC - Solid clay brick Mz, 2DF								
$N_{Rd,p} = N_{Rd,b}$ ($c_{cr} = c_{min}$ = 115mm)	HIT-V	M8, M10, M12	80	12	1,2	1,0	1,2	1,0
	HIT-IC	M8			1,2	1,0	1,2	1,0
	HIT-IC	M10, M12			1,6	1,4	1,6	1,4
	HIT-V + HIT-SC	M8, M10, M12			1,6	1,4	1,6	1,4
	HIT-IC + HIT-SC	M8, M10, M12			1,6	1,4	1,6	1,4
$V_{Rd,b}$ ($c_{cr} = c_{min}$ = 115mm)	HIT-V HIT-V + HIT-SC HIT-IC HIT-IC + HIT-SC	M8, M10, M12 M8, M10, M12 M8, M10, M12 M8, M10, M12	80	12	1,4			
HC - Hollow clay brick Hlz, 10DF								
$N_{Rd,p} = N_{Rd,b}$ ($c_{cr} = c_{min}$ = 150 mm)	HIT-V + HIT-SC HIT-IC + HIT-SC	M8, M10, M12 M8, M10, M12	80	12	1,2	1,0	1,2	1,0
				20	1,4	1,2	1,4	1,2
$V_{Rd,b}$ ($c_{cr} = c_{min}$ = 150 mm)	HIT-V + HIT-SC HIT-IC + HIT-SC	M8, M10, M12 M8, M10, M12	80	12	0,8			
				20	1,2			
SCS - Solid silica brick KS, 2DF								
$N_{Rd,p} = N_{Rd,b}$ ($c_{cr} = c_{min}$ = 115 mm)	HIT-V HIT-IC	M8, M10, M12 M8, M10, M12	80	12	2,2	2,0	2,4	2,0
				28	3,4	3,0	3,4	3,0
	HIT-V + HIT-SC HIT-IC + HIT-SC	M8, M10, M12 M8, M10, M12		12	1,6	1,4	2,2	2,0
				28	2,4	2,2	3,2	3,0
$V_{Rd,b}$ ($c_{cr} = c_{min}$ = 115 mm)	HIT-V HIT-V + HIT-SC HIT-IC HIT-IC + HIT-SC	M8, M10, M12 M8, M10, M12 M8, M10, M12 M8, M10, M12	80	12	1,6			
				28	2,4			
HCS - Hollow silica brick KSL, 8DF								
$N_{Rd,p} = N_{Rd,b}$ ($c_{cr} = c_{min}$ = 125 mm)	HIT-V + HIT-SC HIT-IC + HIT-SC	M8, M10, M12 M8, M10, M12	80	12	1,2	1,0	1,4	1,2
				20	1,6	1,4	2,0	1,8
$V_{Rd,b}$ ($c_{cr} = c_{min}$ = 125 mm)	HIT-V + HIT-SC HIT-IC + HIT-SC	M8, M10, M12 M8, M10, M12	80	12	3,4			
				20	4,8			

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Multimaterial

Chemical anchors

Mechanical anchors

Plastic/Light duty metal anchors

Insulation anchors

| Load type	Anchor size		h_{ef} [mm]	f_b [N/mm²]	w/w and w/d		d/d	
					Ta	Tb	Ta	Tb
					Loads [kN]			
HLWC – Hollow lightweight concrete brick **HBL, 16DF**								
$N_{Rd,p} = N_{Rd,b}$ ($c_{cr} = c_{min} = 250$ mm)	HIT-V + HIT-SC HIT-IC + HIT-SC	M8, M10, M12 M8, M10, M12	80	2	0,5	0,4	0,6	0,5
				6	0,8	0,6	1,0	0,8
$V_{Rd,b}$ ($c_{cr} = c_{min} = 250$ mm)	HIT-V + HIT-SC HIT-IC + HIT-SC	M8, M10, M12 M8, M10, M12	80	2	1,0			
				6	1,6			
HNWC – Hollow normal weight concrete brick **Parpaing creux**								
$N_{Rd,p} = N_{Rd,b}$ ($c_{cr} = c_{min} = 200$ mm)	HIT-V + HIT-SC HIT-IC + HIT-SC	M8, M10, M12 M8, M10, M12	80	4	0,4			
				10	0,5		0,6	
$V_{Rd,b}$ ($c_{cr} = c_{min} = 200$ mm)	HIT-V + HIT-SC HIT-IC + HIT-SC	M8, M10, M12 M8, M10, M12	80	4	1,0			
				10	1,6			

Design tension and shear resistances – Pull out and pushing out of one brick failures

Pull out of one brick (tension):

$N_{Rd,pb} = 2 \cdot l \cdot b \cdot (0,5 \cdot f_{vko} + 0,4 \cdot \sigma_d) / (2,5 \cdot 1000)$ [kN]
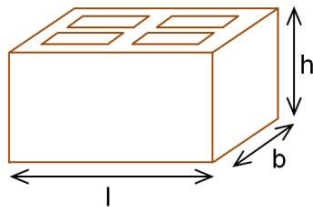
$N_{Rd,pb}* = (2 \cdot l \cdot b \cdot (0,5 \cdot f_{vko} + 0,4 \cdot \sigma_d) + b \cdot h \cdot f_{vko}) / (2,5 \cdot 1000)$ [kN]
* this equation is applicable if the vertical joints are filled
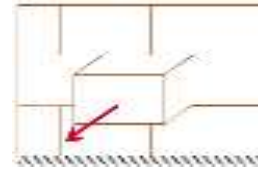
Pushing out of one brick (shear):

$V_{Rd,pb} = 2 \cdot l \cdot b \cdot (0,5 \cdot f_{vko} + 0,4 \cdot \sigma_d) / (2,5 \cdot 1000)$ [kN]

σ_d = design compressive stress perpendicular to the shear (N/mm²)
f_{vko} = initial shear strength according to EN 1996-1-1, Table 3.4

Brick type	Mortar strength	f_{vko} [N/mm²]
Clay brick	M2,5 to M9	0,20
	M10 to M20	0,30
All other types	M2,5 to M9	0,15
	M10 to M20	0,20

For other bricks in solid or hollow masonry, not covered by the Hilti HIT-HY 170 ETA or this technical data manual, the characteristic resistance may be determined by on-site tension tests (pull-out tests or proof-load tests), according to ETAG029, Annex B.

For the evaluation of test results, the characteristic resistance shall be obtained taking into account the β factor, which considers the different influences of the product.

The β factor for the brick types covered by the Hilti HIT-HY 170 ETA is provided in the following table:

Use categories		w/w and w/d		d/d	
Temperature range		Ta*	Tb*	Ta*	Tb*
Base material	Elements				
Solid clay brick	HIT-V or HIT-IC	0,97	0,83	0,97	0,83
	HIT-V + HIT-SC				
	HIT-IC + HIT-SC				
Solid calcium silicate brick	HIT-V or HIT-IC	0,96	0,84	0,97	0,84
	HIT-V + HIT-SC	0,69	0,62	0,91	0,82
	HIT-IC + HIT-SC				
Hollow clay brick	HIT-V + HIT-SC	0,97	0,83	0,97	0,83
	HIT-IC + HIT-SC				
Hollow calcium silicate brick	HIT-V + HIT-SC	0,69	0,62	0,91	0,82
	HIT-IC + HIT-SC				
Hollow lightweight concrete brick	HIT-V + HIT-SC	0,89	0,81	0,97	0,86
	HIT-IC + HIT-SC				
Hollow normal weight concrete brick	HIT-V + HIT-SC	0,97	0,80	0,97	0,80
	HIT-IC + HIT-SC				

*Ta / Tb, w/w and d/d anchorage parameters, as defined on Tables pages 8-9

Applying the β factor from the table above, the characteristic tension resistance N_{Rk} can be obtained. Characteristic shear resistance V_{Rk} can also be directly derived from N_{Rk}. For detailed procedure consult ETAG 029, Annex B.

Materials

Material quality

Part	Material
Threaded rod HIT-V 5.8 (F)	Strength class 5.8, A5 > 8% ductile Steel galvanized $\geq 5\mu m$; (F) Hot dip galvanized $\geq 45~\mu m$
Threaded rod HIT-V 8.8 (F)	Strength class 8.8, A5 > 8% ductile Steel galvanized $\geq 5\mu m$; (F) Hot dip galvanized $\geq 45~\mu m$
Threaded rod HIT-V-R	Strength class 70 for ≤ M24 and class 50 for > M24, A5 > 8% ductile Stainless steel 1.4401; 1.4404; 1.4578; 1.4571; 1.4439; 1.4362
Threaded rod HIT-V-HCR	A5 > 8% ductile High corrosion resistant steel 1.4528, 1.4565
Internally threaded sleeve HIT-IC	A5 > 8% ductile Electroplated zinc coated $\geq 5\mu m$
Washer	Steel galvanized
	Stainless steel 1.4401; 1.4404; 1.4578; 1.4571; 1.4439; 1.4362
	High corrosion resistant steel 1.4529, 1.4565 EN 10088
Hexagon nut	Strength class 8 Electroplated zinc coated $\geq 5\mu m$ Hot dip galvanized $\geq 45\mu m$
	Strength class 70 Stainless steel grade A4 1.4401;1.4404;1.4578;1.4571;1.4439; 1.4362
	Strength class 70, high corrosion resistant steel,1.4529; 1.4565
Internally threaded sleeve HIT-IC	A5 > 8% ductile Electroplated zinc coated $\geq 5~\mu m$
Sieve sleeve HIT-SC	Frame: Polyfort FPP 20T Sieve: PA6.6 N500/200

Base materials:

- Solid brick masonry. The characteristic resistances are also valid for larger brick sizes and larger compressive strengths of the masonry unit.
- Hollow brick masonry
- Mortar strength class of the masonry: M2,5 at minimum according to EN 998-2: 2010.
- For other bricks in solid masonry and in hollow or perforated masonry, the characteristic resistance of the anchor may be determined by on-site tests according to ETAG 029, Annex B under consideration of the β-factor according to Table page 9.

Setting information

Installation temperature range:
-5°C to +40°C

In service temperature range
Hilti HIT-HY 170 injection mortar may be applied in the temperature ranges given below. An elevated base material temperature may lead to a reduction of the design bond resistance.

Temperature range	Base material temperature	Max. long term base material temperature	Max. short term base material temperature
Temperature range I	-40 °C to + 40 °C	+ 24 °C	+ 40 °C
Temperature range II	-40 °C to + 80 °C	+ 50 °C	+ 80 °C

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Multimaterial
Chemical anchors
Mechanical anchors
Plastic/Light duty metal anchors
Insulation anchors

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.

Working time and curing time

Temperature of the base material	Maximum working time t_{work}	Minimum curing time t_{cure}
-5 °C ≤ T_{BM} ≤ 0 °C [a]	10 min	12 h
0 °C ≤ T_{BM} ≤ 5 °C [a]	10 min	5 h
5 °C ≤ T_{BM} ≤ 10 °C	8 min	2,5 h
10°C ≤ T_{BM} ≤ 20 °C	5 min	1,5 h
20 °C ≤ T_{BM} ≤ 30 °C	3 min	45 min
30 °C ≤ T_{BM} ≤ 40 °C	2 min	30 min

The curing time data are valid for dry base material only. In wet base material the curing times must be doubled.
   a)   Data valid for hollow bricks only

Insallation Paramenters

Single sieve sleeve, 50mm > h_{ef} > 80mm
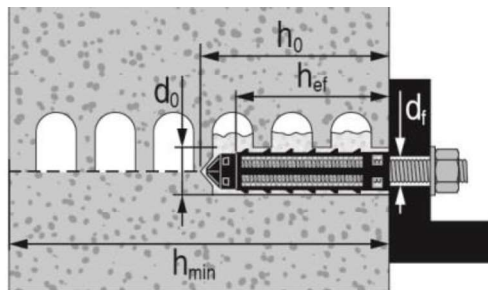
Installation parameters of HIT-V with sieve sleeve HIT-SC in hollow and solid brick

| Threaded rods and HIT-V			M8	M10	M12
with HIT-SC			16x85		18x85
Nominal diameter of drill bit	d_0	[mm]	16	16	18
Drill hole depth	h_0	[mm]	95	95	95
Effective embedment depth	h_{ef}	[mm]	80	80	80
Maximum diameter of clearance hole in the fixture	d_f	[mm]	9	12	14
Minimum wall thickness	h_{min}	[mm]	115	115	115
Brush HIT-RB			16	16	18
Number of strokes HDM			6	6	8
Number of strokes HDE 500-			5	5	6
Maximum torque moment for all brick types except "parpaing creux"	T_{max}	[Nm]	3	4	6
Maximum torque moment for "parpaing creux"	T_{max}	[Nm]	2	2	3

Installation parameters of HIT-IC with HIT-SC in hollow and solid brick

HIT-IC with HIT-SC			M8 16x85	M10 18x85	M12 22x85
Nominal diameter of drill bit	d_0	[mm]	16	18	22
Drill hole depth	h_0	[mm]	95	95	95
Effective embedment depth	h_{ef}	[mm]	80	80	80
Thread engagement length	h_s	[mm]	8…75	10…75	12…75
Maximum diameter of clearance hole in the fixture	d_f	[mm]	9	12	14
Minimum wall thickness	h_{min}	[mm]	115	115	115
Brush HIT-RB			16	18	22
Number of strokes HDM			6	8	10
Number of strokes HDE-500			5	6	8
Maximum torque moment	T_{max}	[Nm]	3	4	6

Solid bricks without sieve sleeves [a)]
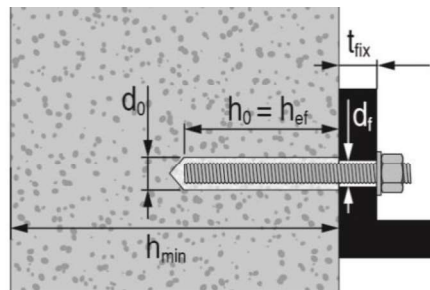
Installation parameters of HIT-V in solid bricks

Threaded rods and HIT-V			M8	M10	M12
Nominal diameter of drill bit	d_0	[mm]	10	12	14
Drill hole depth = Effective embedment depth	$h_0= h_{ef}$	[mm]	50…300	50…300	50…300
Maximum diameter of clearance hole in the fixture	d_f	[mm]	9	12	14
Minimum wall thickness	h_{min}	[mm]	h_0+30	h_0+30	h_0+30
Brush HIT-RB			10	12	14
Maximum torque moment	T_{max}	[Nm]	5	8	10

a) Hilti recommends the anchoring in masonry always with sieve sleeve. Anchors can only be installed without sieve sleeves in solid bricks when it is guaranteed that it has not any hole or void.
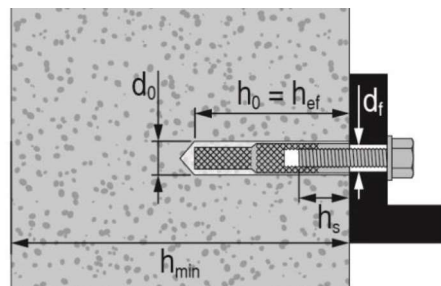
Installation parameters of HIT-IC in solid bricks

HIT-IC			M8x80	M10x80	M12x80
Nominal diameter of drill bit	d_0	[mm]	14	16	18
Drill hole depth = Effective embedment depth	$h_0 = h_{ef}$	[mm]	80	80	80
Thread engagement length	h_s	[mm]	8…75	10…75	12…75
Maximum diameter of clearance hole in the fixture	d_f	[mm]	9	12	14
Minimum wall thickness	h_{min}	[mm]	115	115	115
Brush HIT-RB			14	16	18
Maximum torque moment	T_{max}	[Nm]	5	8	10

a) Hilti recommends the anchoring in masonry always with sieve sleeve. Anchors can only be installed without sieve sleeves in solid bricks when it is guaranteed that it has not any hole or void.

Installation equipment

Anchor size	M8	M10	M12
Rotary hammer	TE2(A) – TE30(A)		
Other tools	compressed air gun or blow out pump, set of cleaning brushes, dispenser		

Drilling and cleaning parameters

HIT-V a)	HIT-V + sieve sleeve	HIT-IC a)	HIT-IC + sieve sleeve	Hammer drill	Brush HIT-RB	Piston plug HIT-SZ
				d_0 [mm]	size [mm]	
M8	-	-	-	10	10	-
M10	-	-	-	12	12	12
M12	-	M8	-	14	14	14
-	M8	-	-	16	16	16
-	M10	M10	M8	16	16	16
-	M12	M12	M10	18	18	18
-	-	-	M12	22	22	22

a) Installation without the sieve sleeve HIT-SC can be used only in case of solid bricks.

Setting instructions

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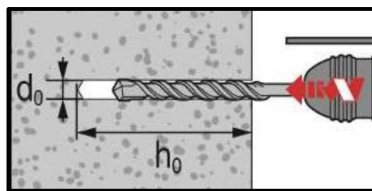
Safety regulations.

Review the Material Safety Data Sheet (MSDS) before use for proper and safe handling! Wear well-fitting protective goggles and protective gloves when working with Hilti HIT-HY 170.
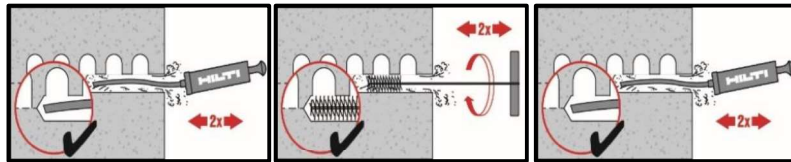
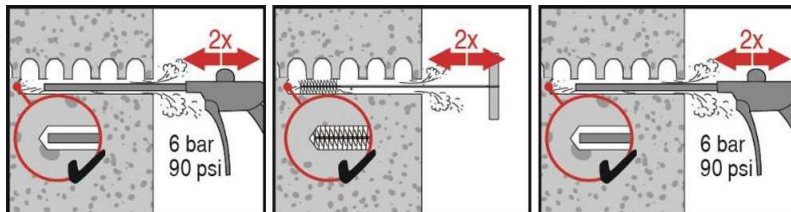**Drilling**
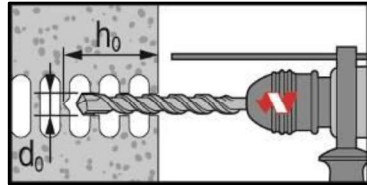
In hollow bricks: rotary mode
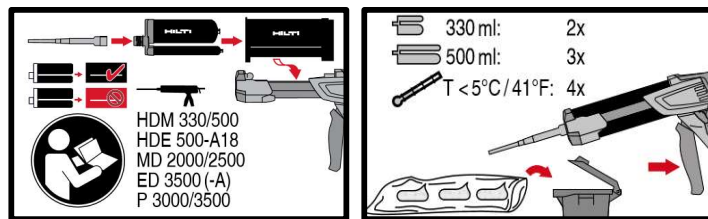
In solid bricks: hammer mode

Cleaning

Manual cleaning (MC)

Compressed air cleaning (CAC)

Instructions for solid bricks without sieve sleeve

Injection system

HDM 330/500
HDE 500-A18
MD 2000/2500
ED 3500 (-A)
P 3000/3500

330 ml: 2x
500 ml: 3x
T < 5°C / 41°F: 4x

Injection system preparation.
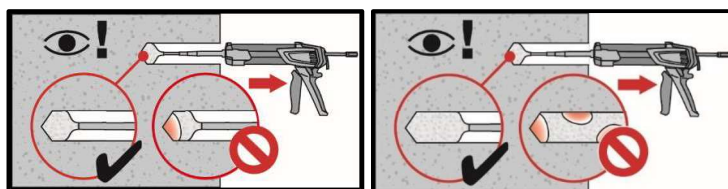
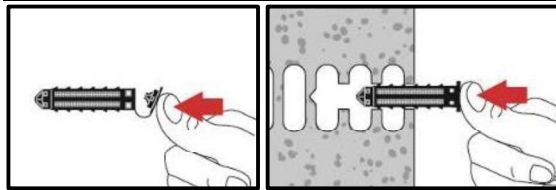**Injection** method for drill hole

Setting the element
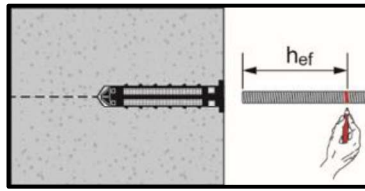
Presetting element, observe working time "t_{work}",
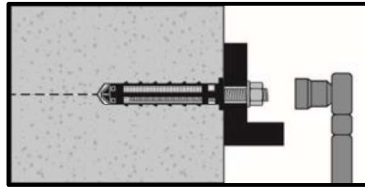
Loading the anchor: After required curing time t_{cure} the anchor can be loaded.
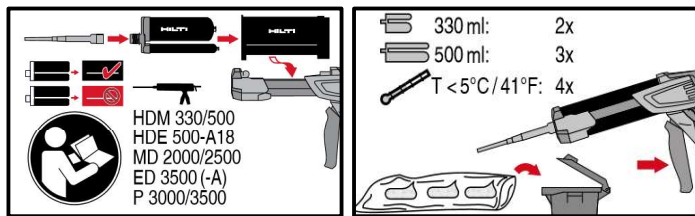
Instructions for hollow and solid bricks with sieve sleeve
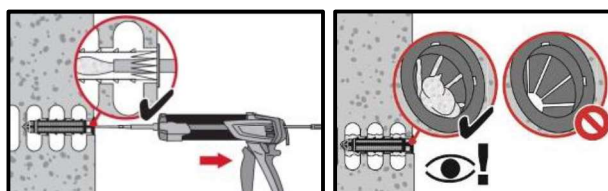
Praparation of the sieve sleeve

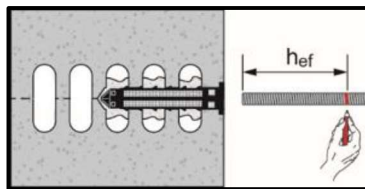Close lid and insert sieve sleeve manually

Injection system

HDM 330/500
HDE 500-A18
MD 2000/2500
ED 3500 (-A)
P 3000/3500

330 ml: 2x
500 ml: 3x
T < 5°C / 41°F: 4x

Injection system preparation.

Injection system: hollow bricks
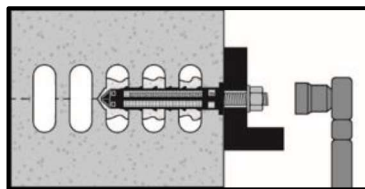

Installation with sieve sleeve HIT-SC

Setting the element

Presetting element, observe working time "t_{work}",

Loading the anchor: After required curing time t_{cure} the anchor can be loaded.