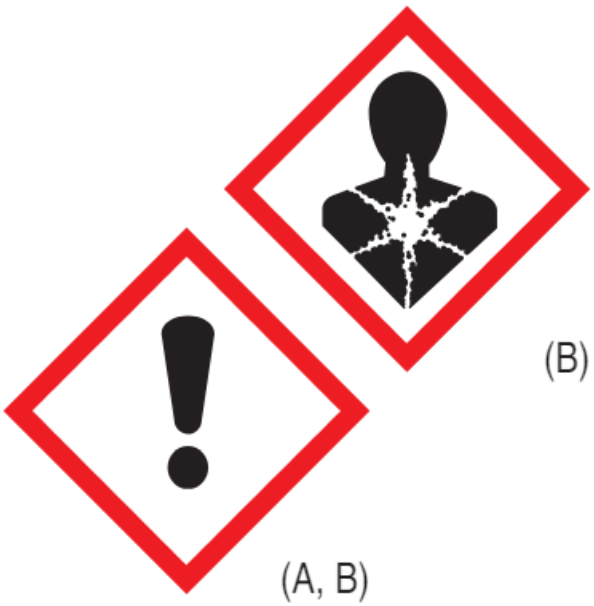
HILTI W2V2-MQJT-Q21X-RT73 Plus Rotary Instruction Manual

Contents

HILTI W2V2-MQJT-Q21X-RT73 Plus Rotary

WARNING

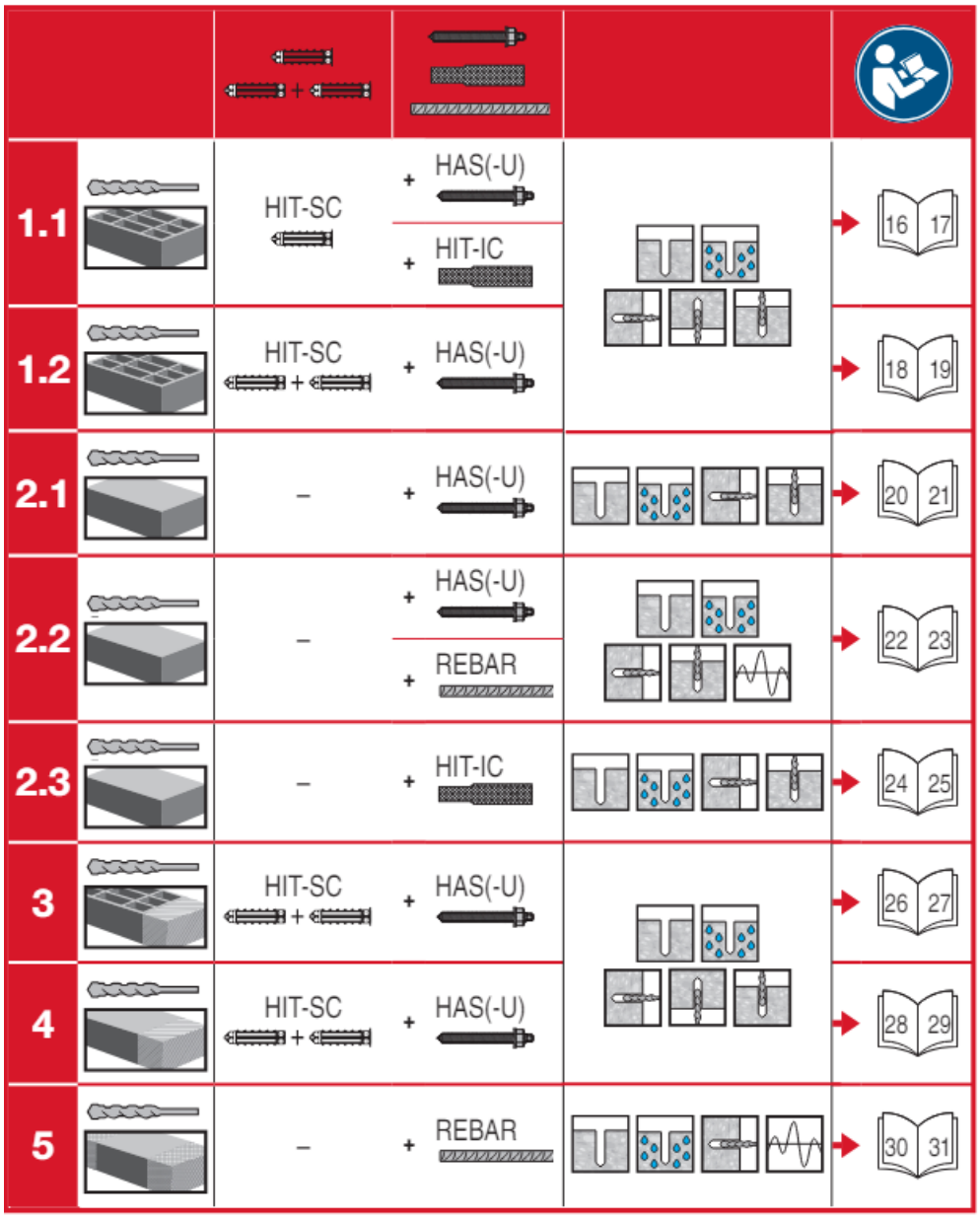
- **Contains:** Methacrylates (A), 4-tert-butylpyrocatechol (A), dibenzoyl peroxide (B) May cause an allergic skin reaction. (A,B) Causes serious eye irritation (A) Harmful to aquatic life with long-lasting effects. (A) Very toxic to aquatic life with long-lasting effects. (B)



- W2V2-MQJT-Q21X-RT73 (A)8N43-7QKH-C21E-WXGJ (B)

Adhesive anchoring system for anchor fastenings in hollow and solid masonry. Read the safety precautions, safety data sheet, and product information before use. Read the safety precautions and the product information of the accessories before use.

WHAT IN THE BOX

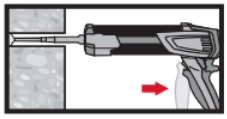


OVERVIEW

- Hollow brick
- Solid brick
- Render/ stucco or other non-load-bearing layers on hollow brick or block
- Render/ stucco or other non-load-bearing layers on solid brick or block
- Load-bearing layer (e.g., strong plaster) on solid brick

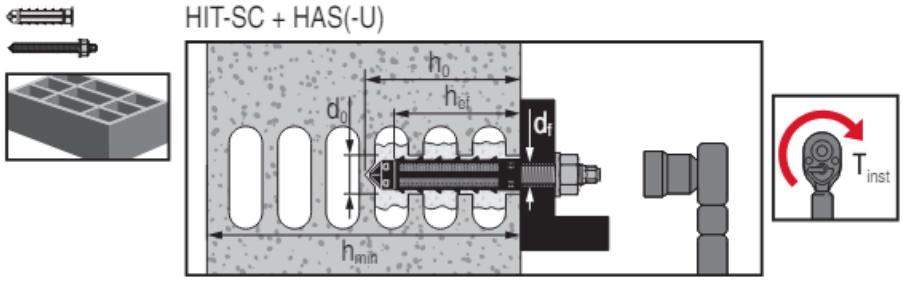
- Temperature of base material
- Push-through installation
- Dry base material
- Water-saturated base material

- Technical data



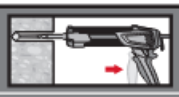
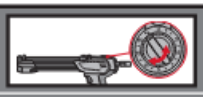

- Trigger pulls
- Rotary drilling
- Hammer drilling
- Working time
- Curing time

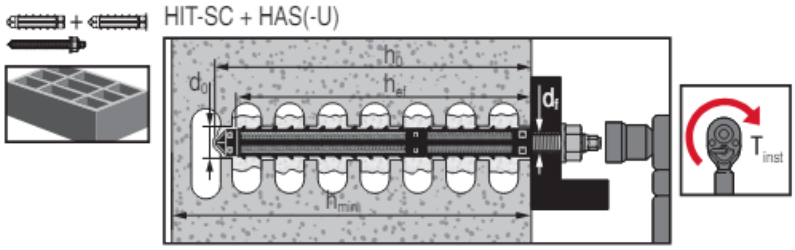
USING INSTRUCTION



	HIT-SC	d_0 [mm]	h_0 [mm]	h_{ef} [mm]	h_{min} [mm]	HIT-RB	d_f [mm]	T_{inst} [Nm]
M6	12 x 85	12	95	80	115	12	7	≤ 3 [≤2*]
M8	16 x 50	16	60	50	80	16	9	
	16 x 85		95	80	115			
M10	16 x 50		60	50	80		12	≤ 4 [≤2*]
	16 x 85		95	80	115			
M12	18 x 50	18	60	50	80	18	14	≤ 6 [≤3*]
	18 x 85		95	80	115			
M16	22 x 50	22	60	50	80	22	18	≤ 8 [≤6*]
	22 x 85		90	80	115			

* Parpaing creux

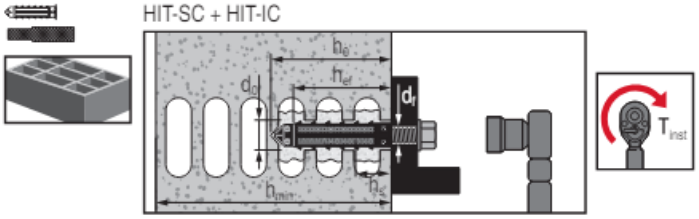
HIT-SC	V [ml]	 HDM	 HDE 500
12 x 85	24	5	4
16 x 50	18	4	3
16 x 85	30	6	5
18 x 50	24	5	4
18 x 85	36	8	6
22 x 50	30	6	5
22 x 85	48	10	8



	HIT-SC		d_0 [mm]	h_0 [mm]	h_{ef} [mm]	h_{min} [mm]	HIT-RB	d_f [mm]	T_{inst} [Nm]
M8		16x50 + 16x85	16	145	130	195	16	9	≤ 3
		16x85 + 16x85		180	160	230			
M10		16x50 + 16x85	16	145	130	195	16	12	≤ 4
		16x85 + 16x85		180	160	230			
M12		18x50 + 18x85	18	145	130	195	18	14	≤ 6
		18x85 + 18x85		180	160	230			
M16		22x50 + 22x85	22	145	130	195	22	18	≤ 8
		22x85 + 22x85		180	160	230			

	V [ml]		
HIT-SC		HDM	HDE 500
16x50 + 16x85	18 + 30	4 + 6	3 + 5
16x85 + 16x85	30 + 30	6 + 6	5 + 5
18x50 + 18x85	24 + 36	5 + 8	4 + 6
18x85 + 18x85	36 + 36	8 + 8	6 + 6
22x50 + 22x85	30 + 48	6 + 10	5 + 8
22x85 + 22x85	48 + 48	10 + 10	8 + 8

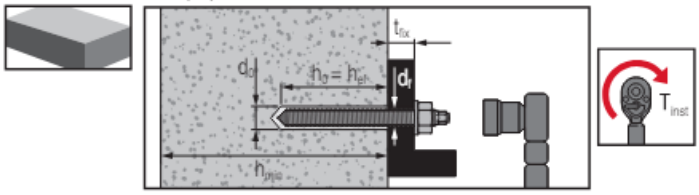
HIT-SC + HIT-IC



	HIT-SC	d_0 [mm]	h_0 [mm]	h_{min} [mm]	HIT-RB	d_f [mm]	h_s [mm]	T_{inst} [Nm]
M8 x 80	16 x 85	16	95	115	16	9	8...75	≤ 3
M10 x 80	18 x 85	18	95	115	18	12	10...75	≤ 4
M12 x 80	22 x 85	22	95	115	22	14	12...75	≤ 6

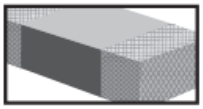
HIT-SC	V [ml]	HDM	HDE 500
16 x 85	30	6	5
18 x 85	36	8	6
22 x 85	48	10	8

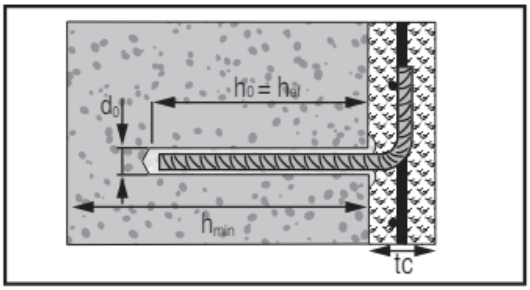
HAS(-U)



	d_0 [mm]	$h_0 = h_{ef}$ [mm]	h_{min} [mm]	HIT-RB	d_f [mm]	T_{inst} [Nm]	Filling Set: $t_{fix, max}$ [mm]
M8	10	50...300	h_0 + 30	10	9	≤ 5	
M10	12	50...300	h_0 + 30	12	12	≤ 8	
M12	14	50...350	h_0 + 30	14	14	≤ 10 (≤ 5*)	
M12	14	50...350	h_0 + 30	14	14		200
M16	18	50...300	h_0 + 36	18	18	≤ 10	

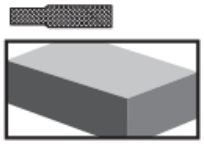
REBAR

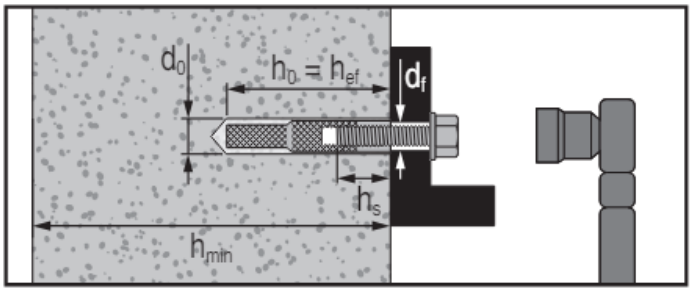




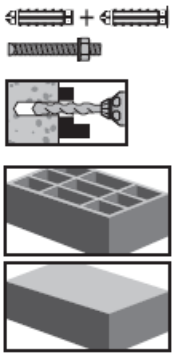
	d_0 [mm]	$h_0 = h_{ef}$ [mm]	h_{min} [mm]	tc [mm]	HIT-RB
8	12	100...200	$h_0 + 30$	30...50	12
12	14	50...350	$h_0 + 30$	30...50	16

HIT-IC

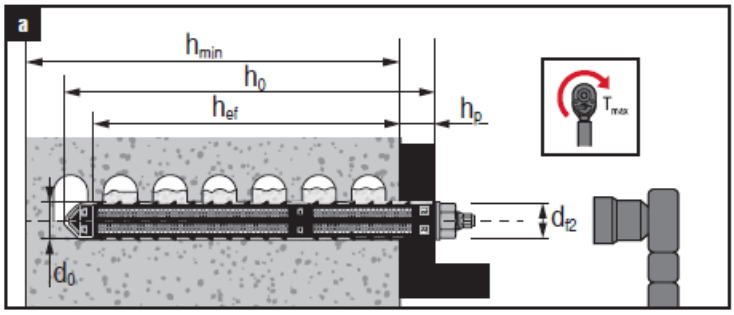


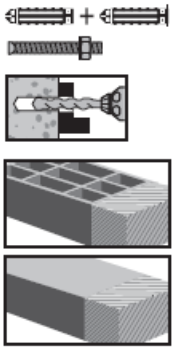


	d_0 [mm]	$h_0 = h_{ef}$ [mm]	h_{min} [mm]	HIT-RB	d_f [mm]	h_s [mm]	T_{inst} [Nm]
M8 x 80	14	80	115	14	9	8...75	≤ 5
M10 x 80	16	80		16	12	10...75	≤ 8
M12 x 80	18	80		18	14	12...75	≤ 10

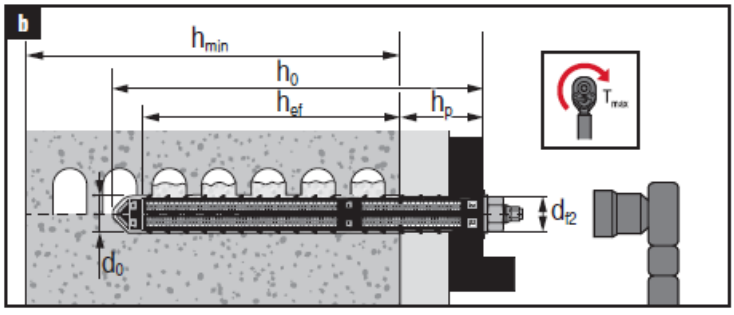


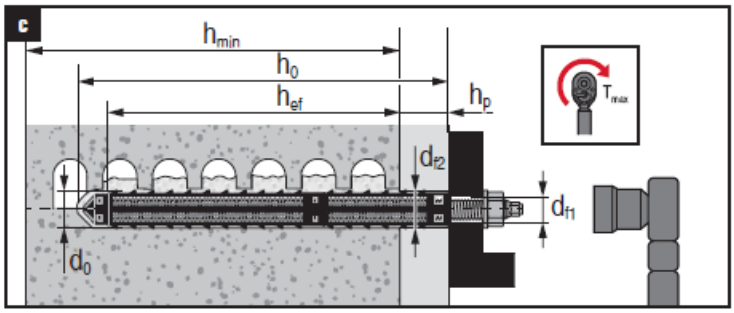
HIT-SC + HAS(-U)





HIT-SC + HAS(-U)





	HIT-SC		d_0 [mm]	h_0 [mm]	h_{ef} [mm]	$h_{p\ max}$ [mm]	h_{min} [mm]	HIT-RB	d_{f1} [mm]	d_{f2} [mm]	T_{inst} [Nm]
M8		16x50 + 16x85	16	145	≥ 80	≤ 50	h_{ef}+65	16	9	17	≤ 3 [≤ 2*]
		16x85 + 16x85		180	≥ 80	≤ 80	h_{ef}+70				
M10		16x50 + 16x85	16	145	≥ 80	≤ 50	h_{ef}+65	16	12	17	≤ 4 [≤ 2*]
		16x85 + 16x85		180	≥ 80	≤ 80	h_{ef}+70				
M12		18x50 + 18x85	18	145	≥ 80	≤ 50	h_{ef}+65	18	14	19	≤ 6 [≤ 3*]
		18x85 + 18x85		180	≥ 80	≤ 80	h_{ef}+70				
M16		22x50 + 22x85	22	145	≥ 80	≤ 50	h_{ef}+65	22	18	23	≤ 8 [≤ 6*]
		22x85 + 22x85		180	≥ 80	≤ 80	h_{ef}+70				

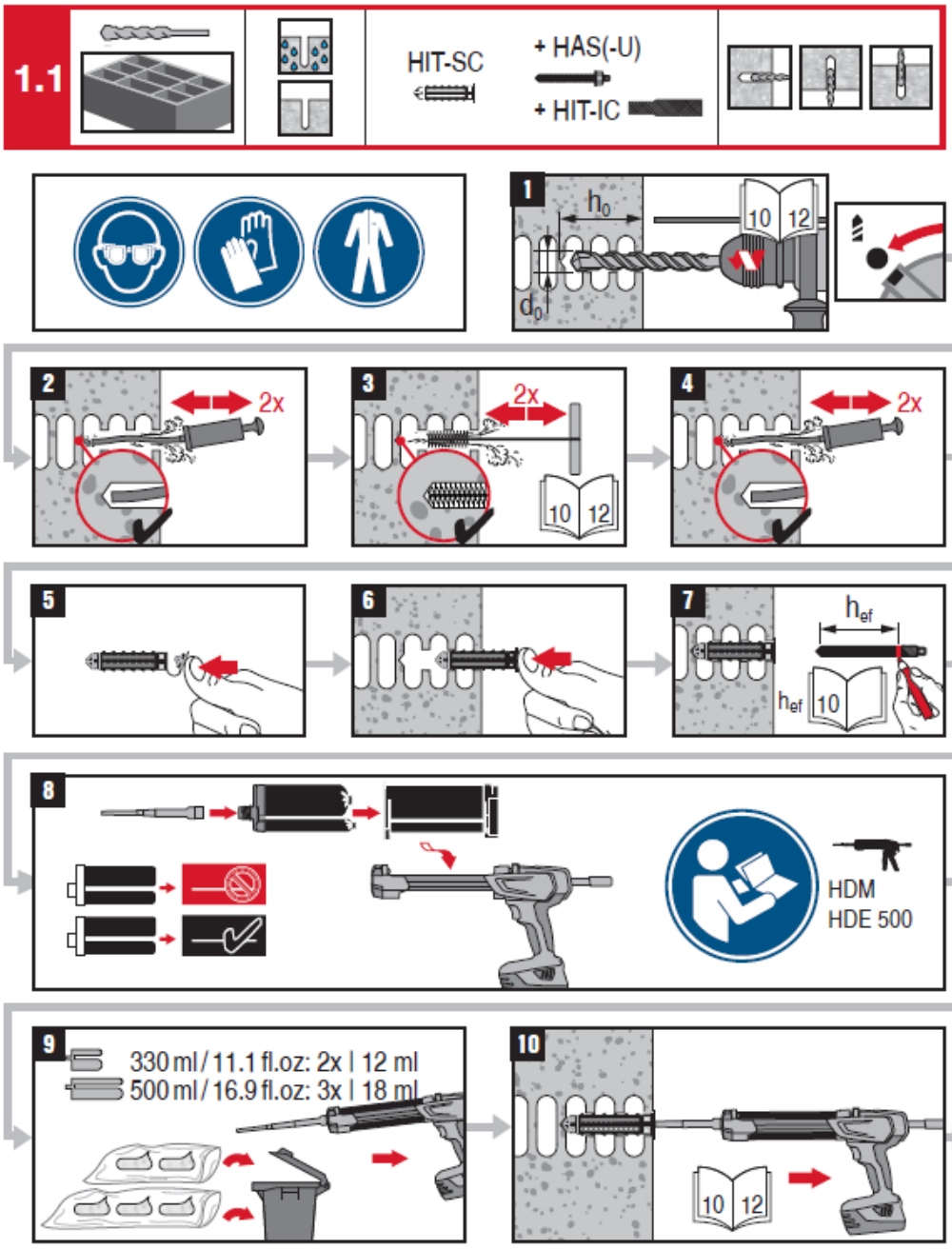
* Parpaing creux

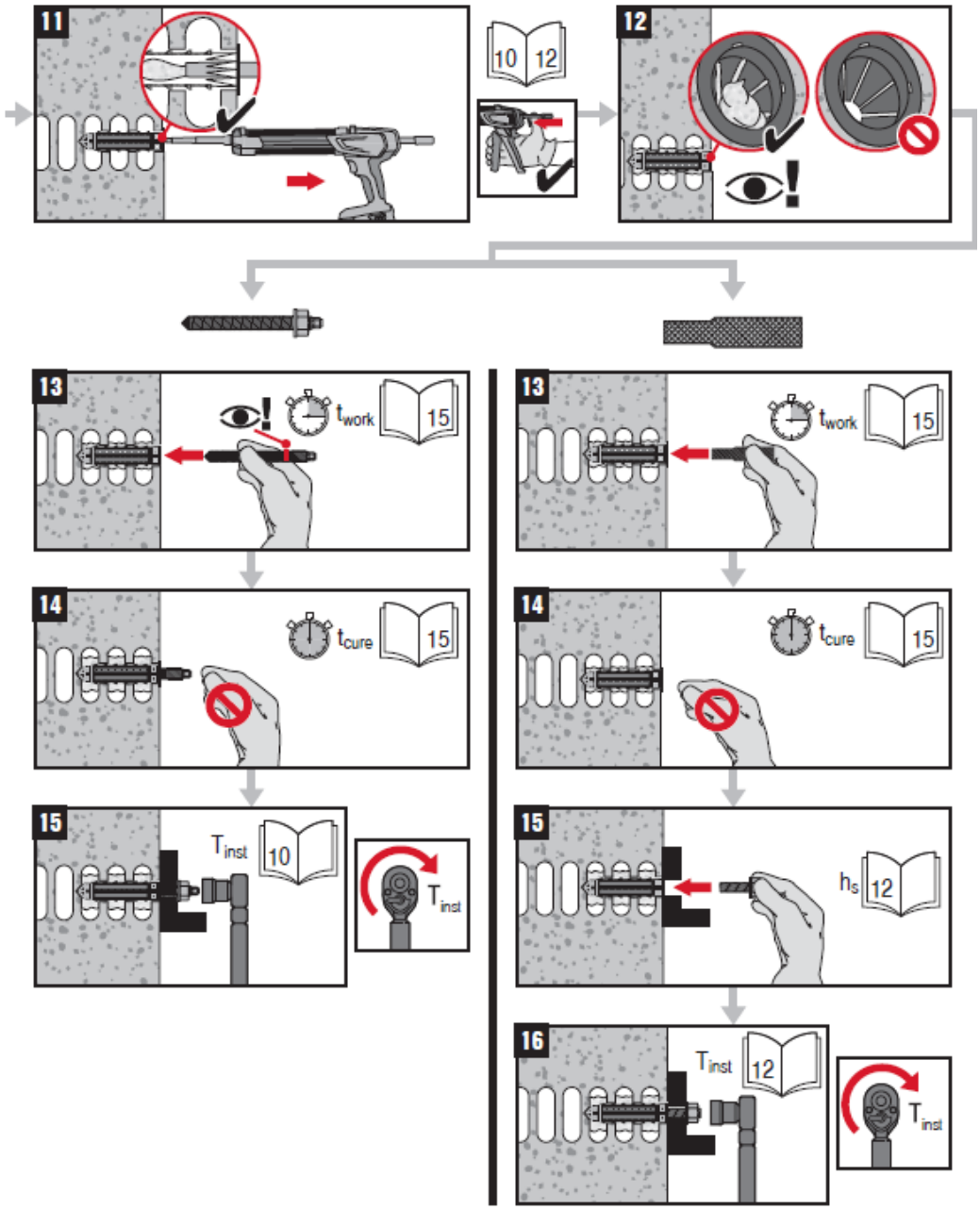
HIT-SC	V [ml]	HDM	HDE 500
16 x 50 + 16 x 85	18 + 30	4 + 6	3 + 5
16 x 85 + 16 x 85	30 + 30	6 + 6	5 + 5
18 x 50 + 18 x 85	24 + 36	5 + 8	4 + 6
18 x 85 + 18 x 85	36 + 36	8 + 8	6 + 6
22 x 50 + 22 x 85	30 + 48	6 + 10	5 + 8
22 x 85 + 22x 85	48 + 48	10 + 10	8 + 8

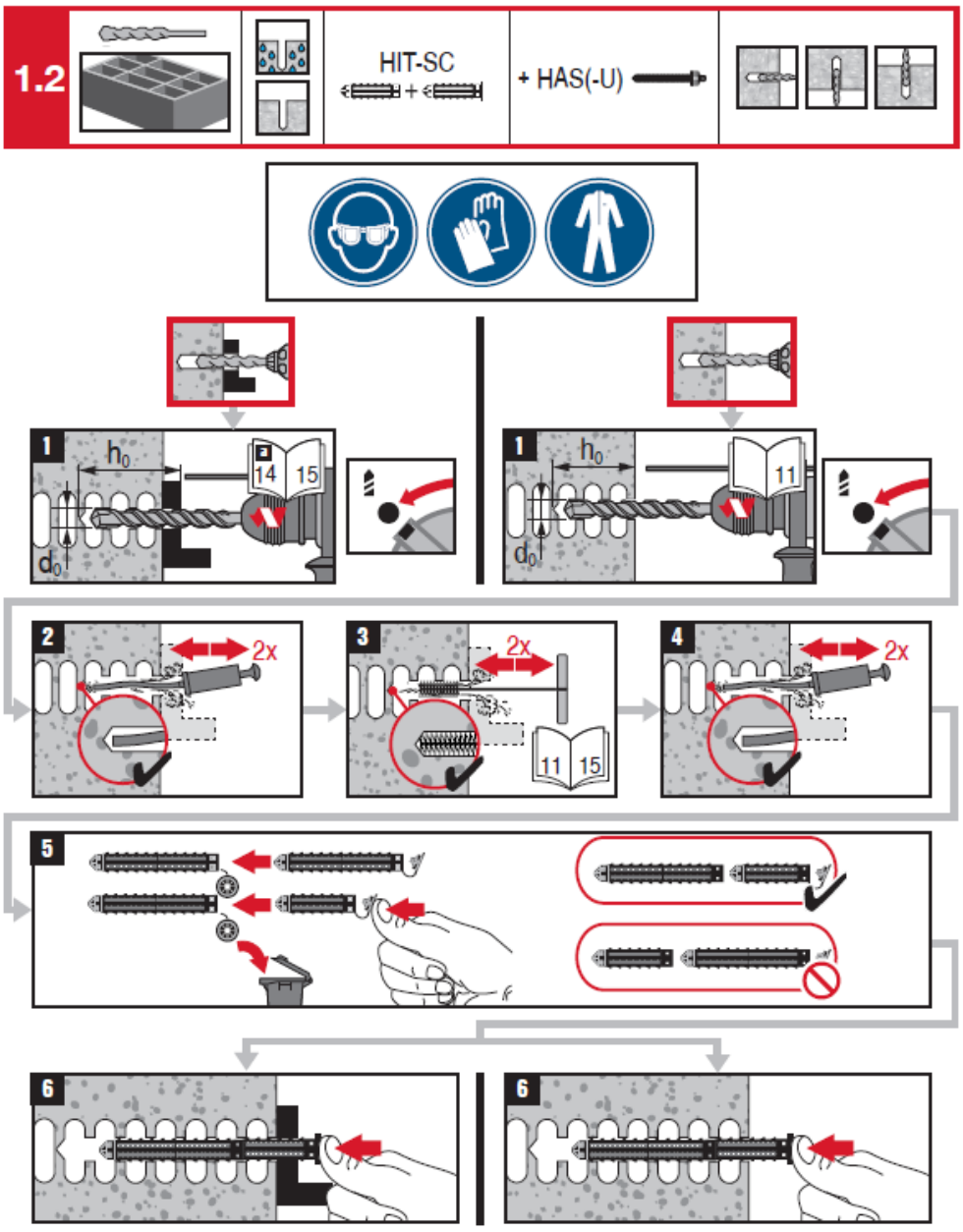
°C	°F	t_{work}	t_{cure}
-5...-1	23...30	10 min	6h
0...4	32... 39	10 min	4h
5...9	41... 48	10 min	2.5h
10...19	50... 66	7 min	1.5h
20...29	68... 84	4 min	30 min
30...39	86... 102	2 min	20 min
40	104	1 min	15 min

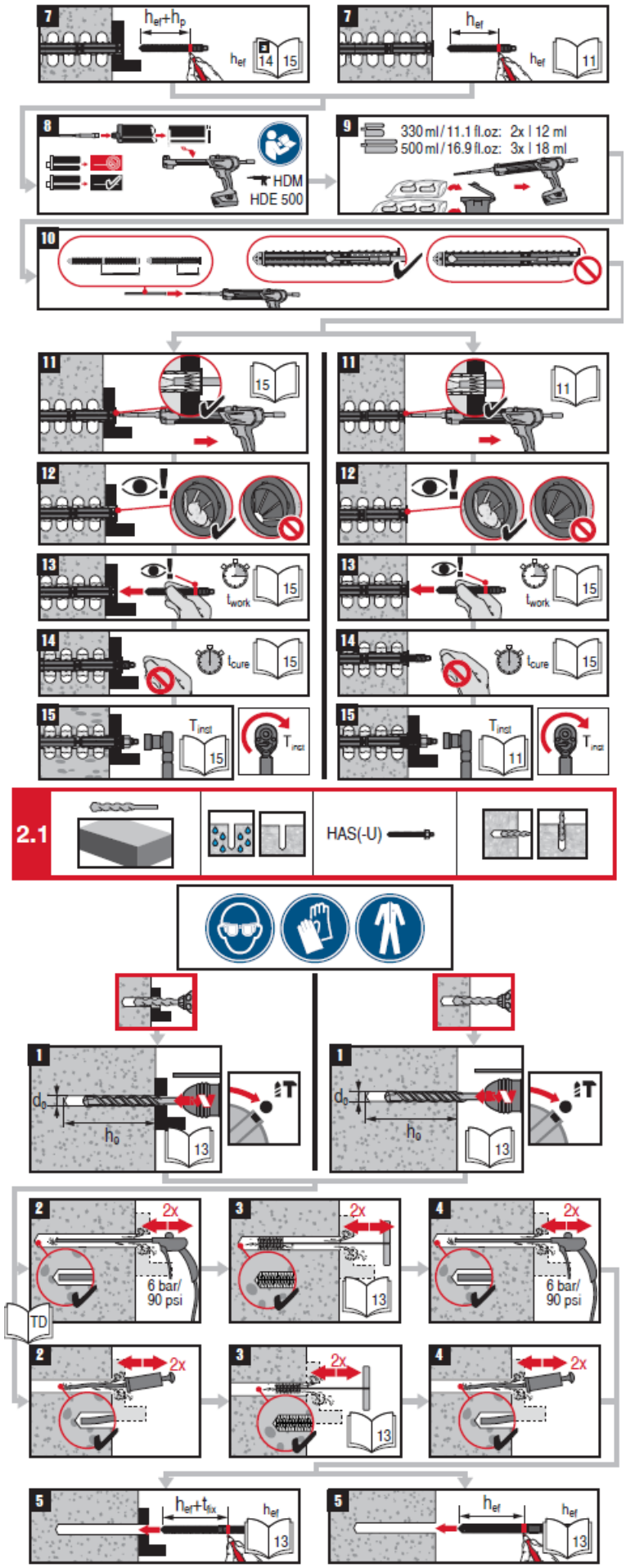
°C	°F	t_{work}	t_{cure}
5...9	41...48	10 min	2.5 h
10...19	50...66	7 min	1.5 h
20...29	68...84	4 min	30 min
30...39	86...102	2 min	20 min
40	104	1 min	15 min

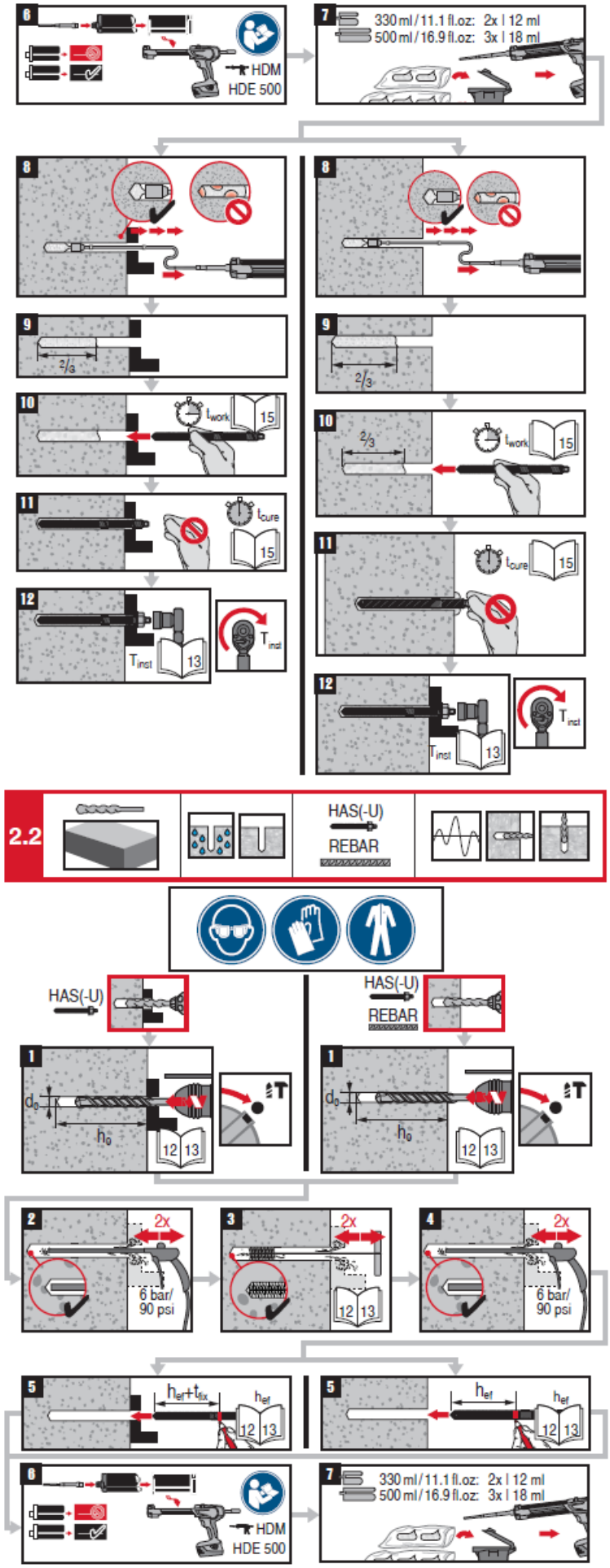
INSTALLATION INSTRUCTION

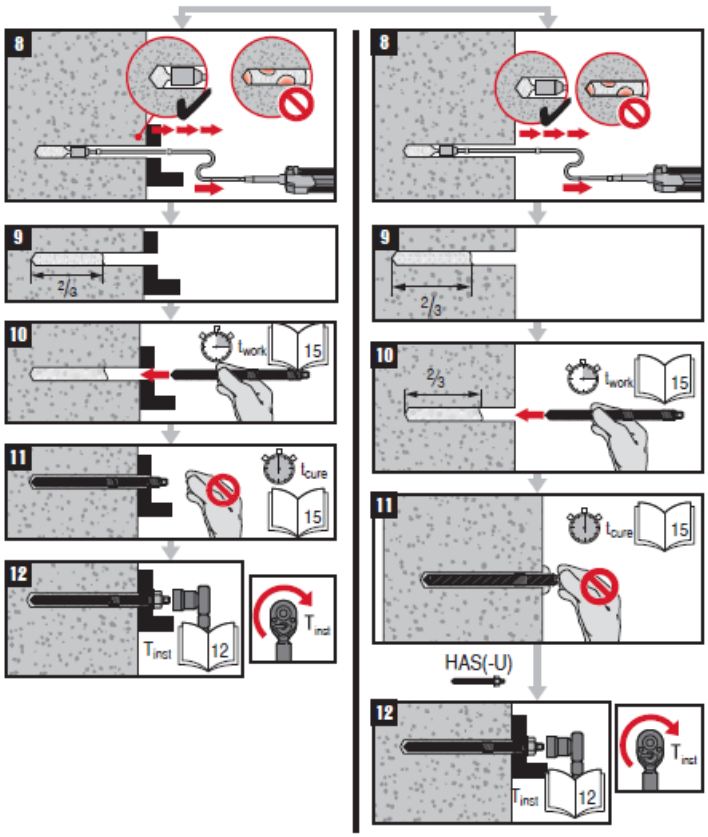

1.1
HIT-SC
+ HAS(-U)
+ HIT-IC
1
h_0
d_0
10 12
2
2x
3
2x
10 12
4
2x
5
6
7
h_{ef}
h_{ef} 10
8
HDM
HDE 500
9
330 ml / 11.1 fl.oz: 2x | 12 ml
500 ml / 16.9 fl.oz: 3x | 18 ml
10
10 12

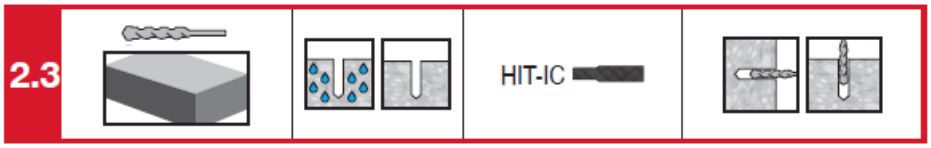

11
10 12
12
13
t_{work}
15
14
t_{cure}
15
15
T_{inst}
10
T_{inst}
13
t_{work}
15
14
t_{cure}
15
15
h_s
12
16
T_{inst}
12
T_{inst}

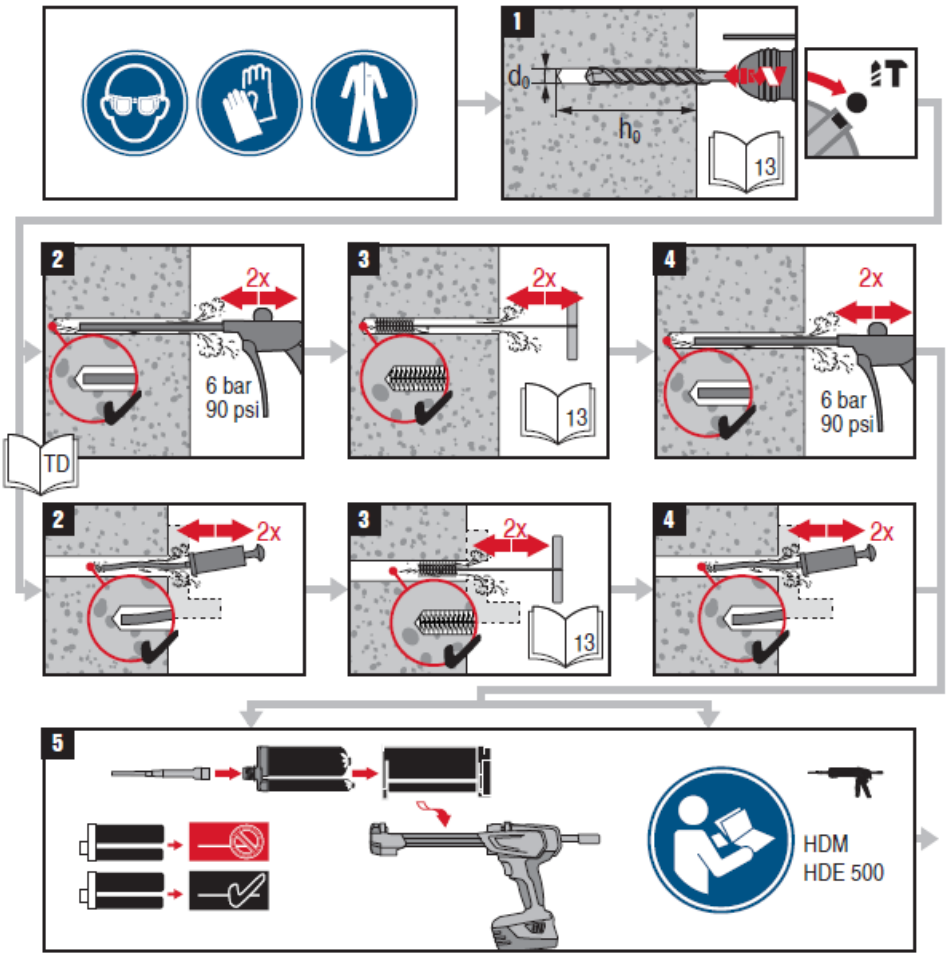

1.2
HIT-SC
+ HAS(-U)
1
h_0
d_0
14
15
11
2
2x
3
2x
11
15
4
2x
5
6
6

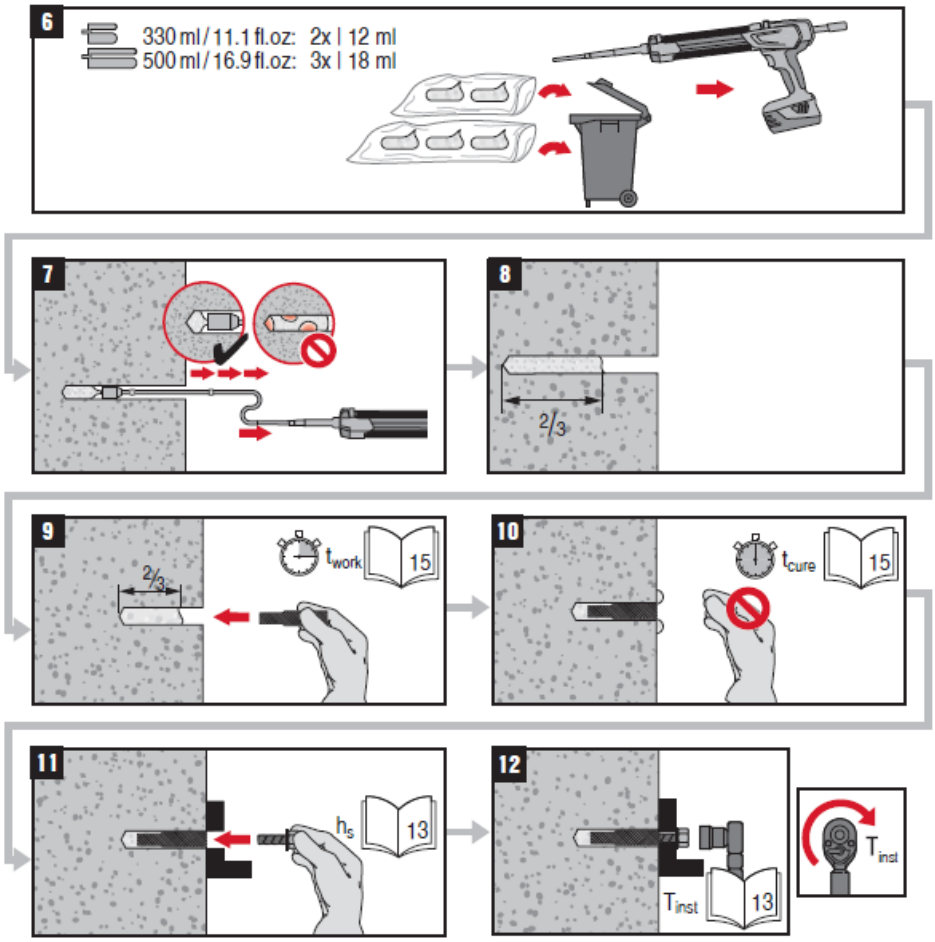

7
$h_{ef}+h_p$
h_{ef}
14
15
7
h_{ef}
h_{ef}
11
8
HDM
HDE 500
9
330 ml / 11.1 fl.oz: 2x | 12 ml
500 ml / 16.9 fl.oz: 3x | 18 ml
10
11
15
11
11
12
12
13
t_{work}
15
13
t_{work}
15
14
t_{cure}
15
14
t_{cure}
15
15
T_{inst}
15
T_{inst}
15
T_{inst}
11
T_{inst}
2.1
HAS(-U)
1
d_0
h_0
13
T
1
d_0
h_0
13
T
2
2x
6 bar/
90 psi
TD
3
2x
13
4
2x
6 bar/
90 psi
2
2x
3
2x
13
4
2x
5
$h_{ef}+t_{fix}$
h_{ef}
13
5
h_{ef}
h_{ef}
13

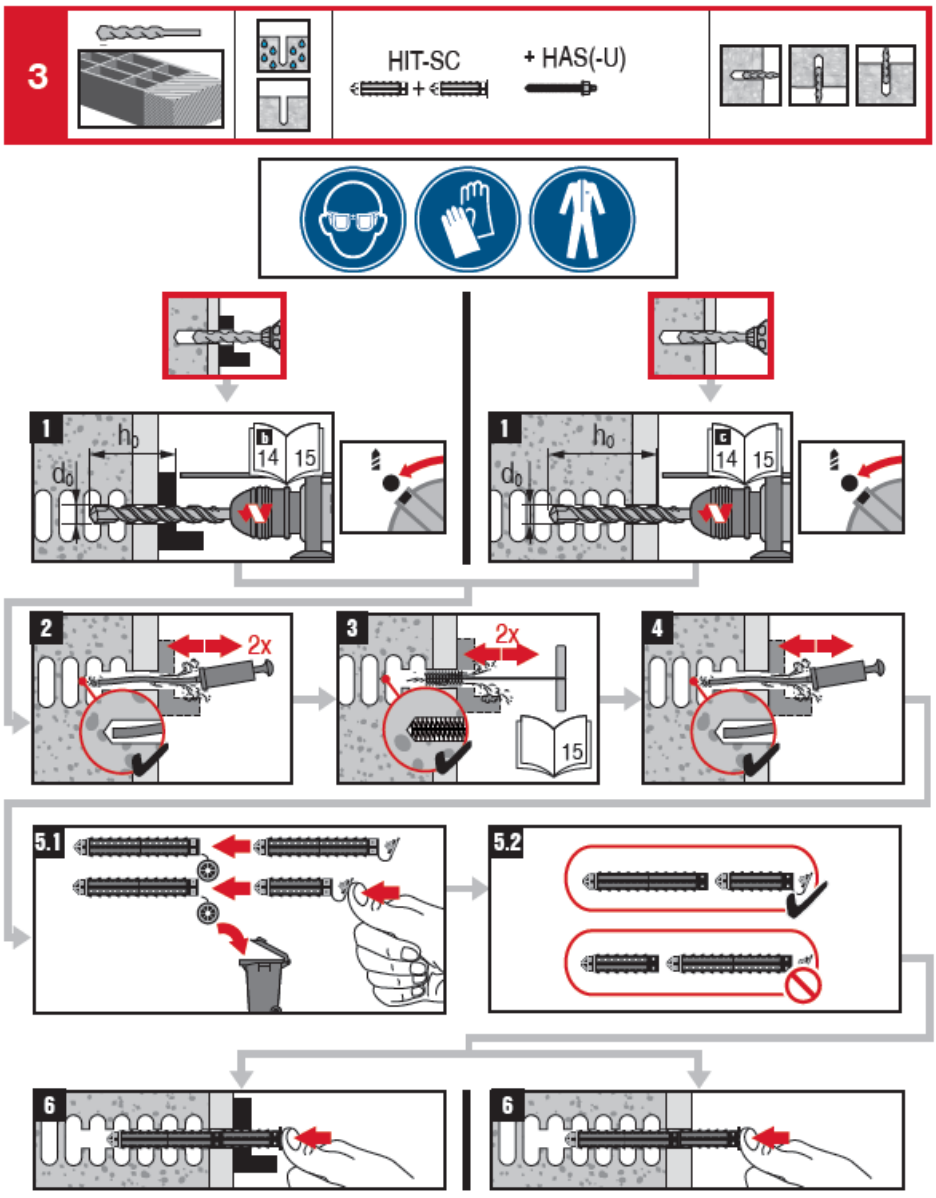

6
HDM
HDE 500
7
330 ml / 11.1 fl.oz: 2x I 12 ml
500 ml / 16.9 fl.oz: 3x I 18 ml
8
9
2/3
10
t work
15
11
t cure
15
12
T inst
13
T inst
8
9
2/3
10
2/3
t work
15
11
t cure
15
12
T inst
13
T inst
2.2
HAS(-U)
REBAR
HAS(-U)
REBAR
1
d0
h0
12 13
T
1
d0
h0
12 13
T
2
2x
6 bar/
90 psi
3
2x
12 13
4
2x
6 bar/
90 psi
5
hef+tfix
hef
12 13
5
hef
hef
12 13
6
HDM
HDE 500
7
330 ml / 11.1 fl.oz: 2x I 12 ml
500 ml / 16.9 fl.oz: 3x I 18 ml

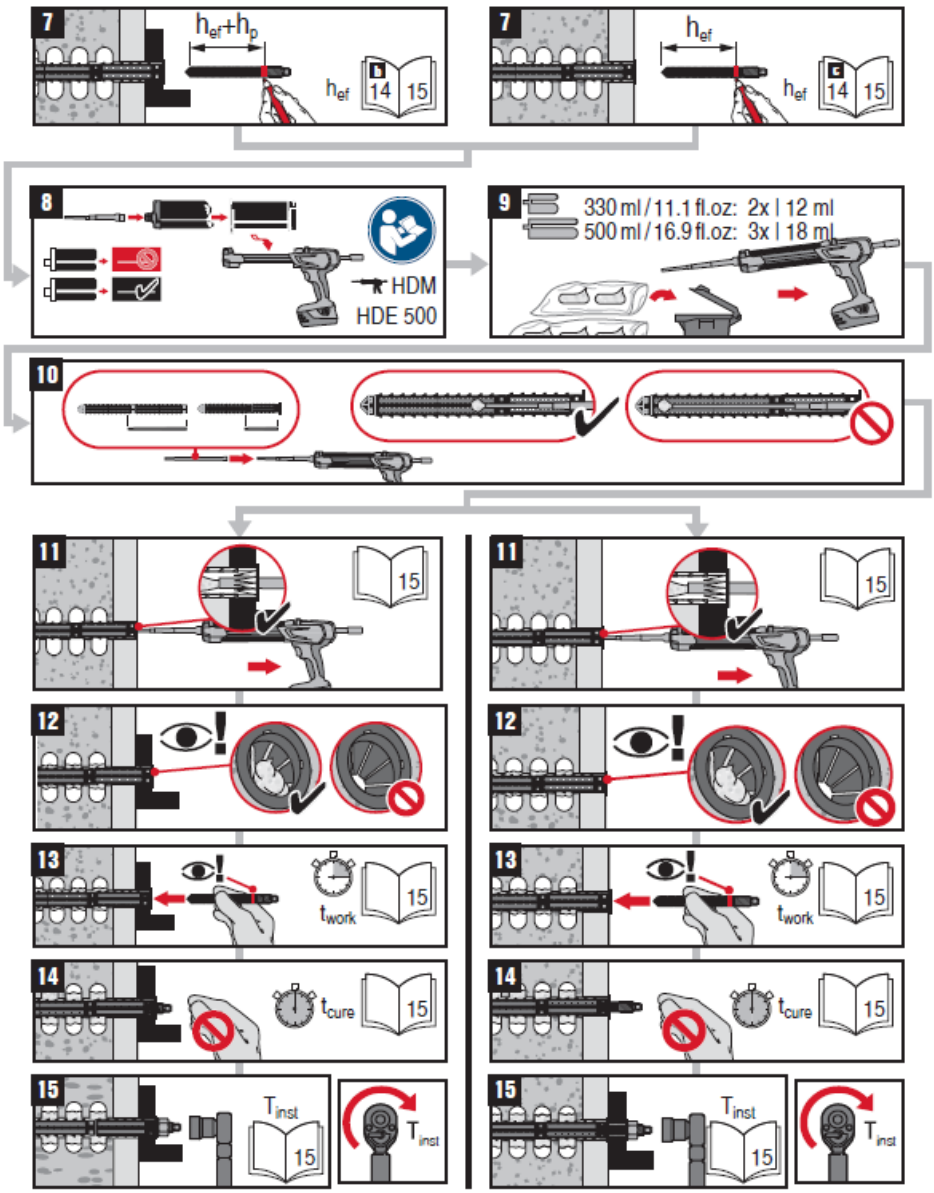

8
9
2/3
10
t work
15
11
t cure
15
12
T inst
12
T inst
8
9
2/3
10
2/3
t work
15
11
t cure
15
HAS(-U)
12
T inst
12
T inst

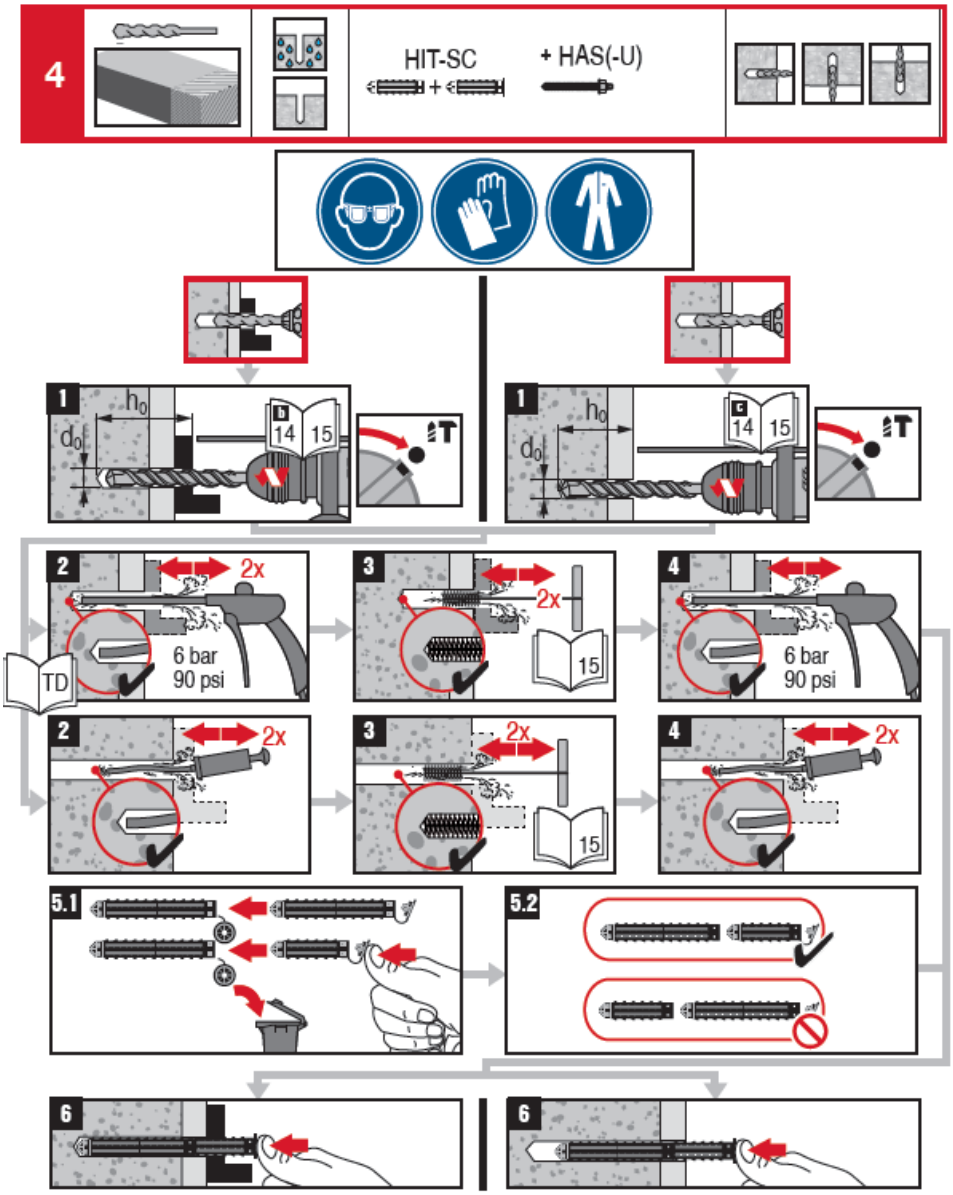

2.3
HIT-IC

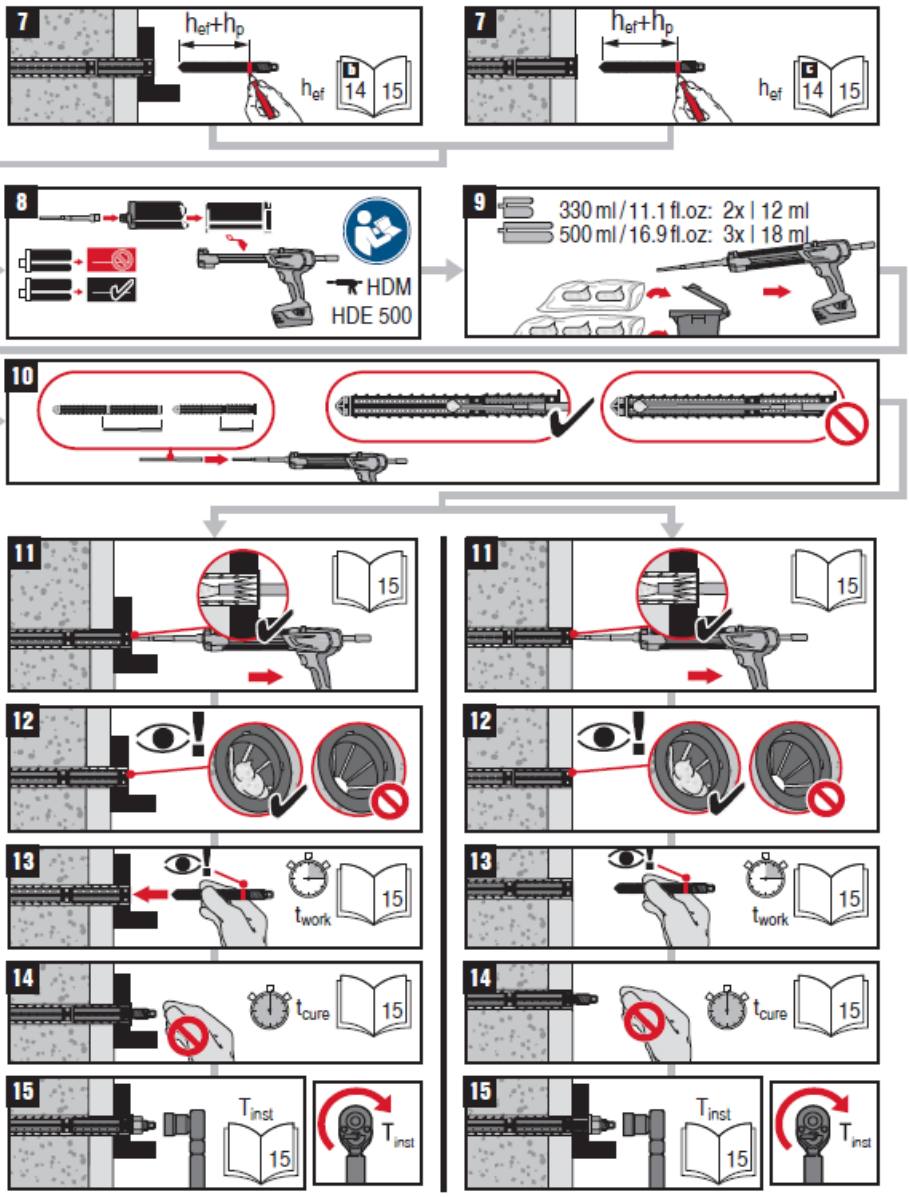

1
d0
h0
13
T
2
2x
6 bar
90 psi
TD
3
2x
13
4
2x
6 bar
90 psi
2
2x
3
2x
13
4
2x
5
HDM
HDE 500

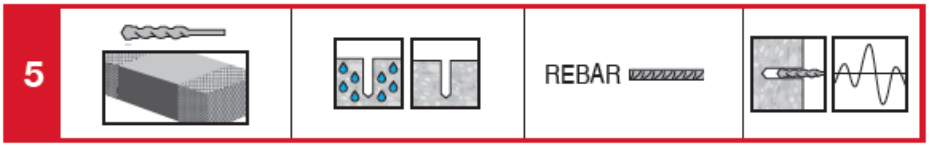

6
330 ml / 11.1 fl.oz: 2x | 12 ml
500 ml / 16.9 fl.oz: 3x | 18 ml
7
8
2/3
9
2/3
t work
15
10
t cure
15
11
h s
13
12
T inst
13
T inst

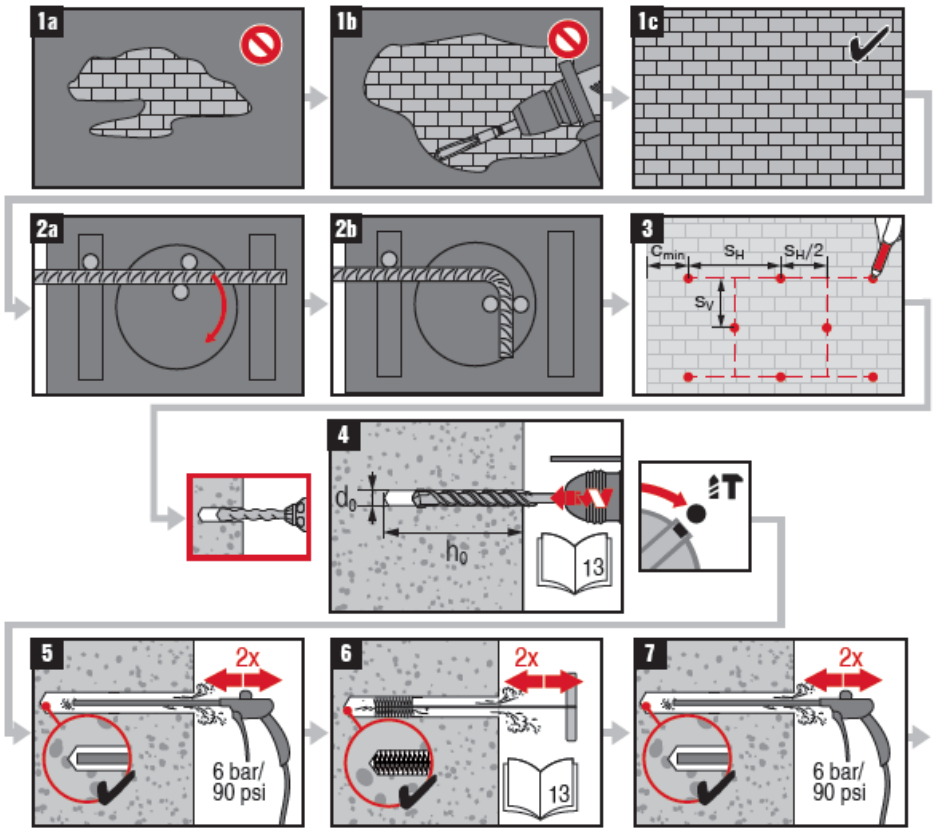

3
HIT-SC
+ HAS(-U)
1
h_0
d_0
14
15
2
2x
3
2x
15
4
5.1
5.2
6
6

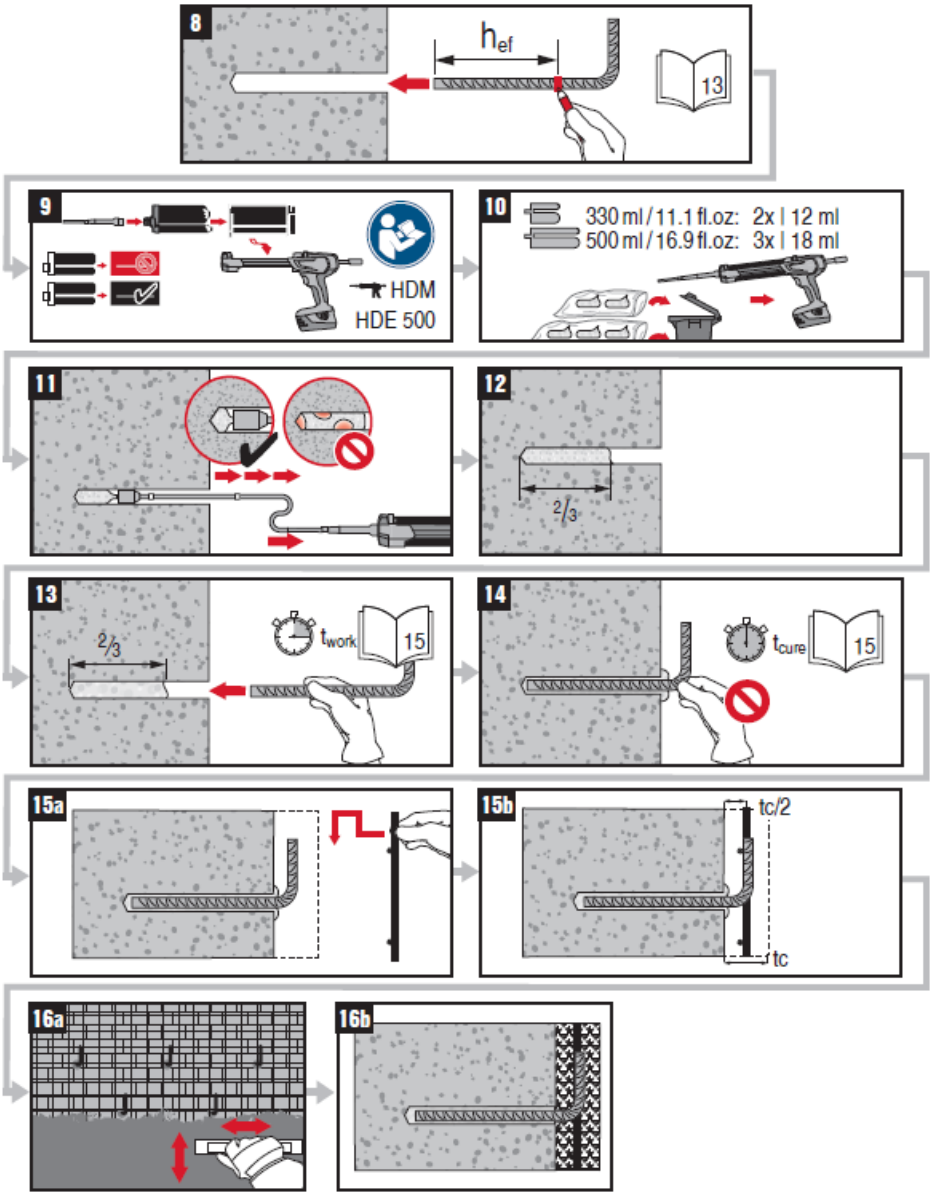

7
$h_{ef}+h_p$
h_{ef}
14 15
7
h_{ef}
h_{ef}
14 15
8
HDM
HDE 500
9
330 ml / 11.1 fl.oz: 2x | 12 ml
500 ml / 16.9 fl.oz: 3x | 18 ml
10
11
15
11
15
12
12
13
t_{work}
15
13
t_{work}
15
14
t_{cure}
15
14
t_{cure}
15
15
T_{inst}
15
T_{inst}
15
T_{inst}


4
HIT-SC
+ HAS(-U)
1
h_0
d_0
14
15
2x
6 bar
90 psi
TD
3
4
5.1
5.2
6


7
$h_{ef}+h_p$
h_{ef}
14 15
7
$h_{ef}+h_p$
h_{ef}
14 15
8
HDM
HDE 500
9
330 ml / 11.1 fl.oz: 2x | 12 ml
500 ml / 16.9 fl.oz: 3x | 18 ml
10
11
15
11
15
12
12
13
t_{work}
15
13
t_{work}
15
14
t_{cure}
15
14
t_{cure}
15
15
T_{inst}
15
T_{inst}
15
T_{inst}


5
REBAR


1a
1b
1c
2a
2b
3
Cmin
SH
SH/2
SV
4
d0
h0
13
T
5
2x
6 bar/
90 psi
6
2x
13
7
2x
6 bar/
90 psi



Adhesive anchoring system for anchor fastenings.
Adhesive anchoring system for anchor fastenings in hollow and solid clay brick, sand-lime block, concrete, concrete block, aerated concrete and natural stone.

Hilti HIT-HY 270

Contains: methacrylates (A), 4-tert-butyl pyrocatechol (A), dibenzoyl peroxide (B)

Warning
W2V2-MQJT-Q21X-RT73 (A) / 8N43-7QKH-C21E-WXGJ (B)

- H317 May cause an allergic skin reaction. (A,B)
- H319 Causes serious eye irritation. (A)
- H410 Very toxic to aquatic life with long lasting effects. (B)
- H412 Harmful to aquatic life with long lasting effects. (A)

- P262 Do not get in eyes, on skin, or on clothing.
- P280 Wear protective gloves/protective clothing/eye protection.
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.

Disposal considerations

Empty packs

- EAK waste material code: 150102 plastic packaging

Full or partially emptied packs:

- Must be disposed of as special waste by official regulations. EAK waste material code: 08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances. or EAK waste material code: 20 01 27* paint, inks, adhesives and resins containing dangerous substances.
- **Content:** 330 ml / 11.1 fl.oz. 500 ml / 16.9 fl. oz
- **Weight:** 540 g/19.0 oz 820 g/28.9 oz

Hilti accepts no liability for damage or failure caused by:

- Storage and transport not by the specified conditions.
- Failure to observe the instructions for use and setting data, incorrect use
- Inadequate design of the anchor points, inadequate load-bearing capacity of the base material
- Other influences of which Hilti is not aware or on which Hilti has no influence, e.g. use with products from a third party.

Product Information

- Always keep these instructions together with the product even when given to other persons.
- Check expiration date: See imprint on foil pack manifold (month/year). Do not use expired products.
- Foil pack temperature during usage: between +5 °C and 40 °C / 41 °F and 104 °F.
- Base material temperature at the time of installation: between –5 °C and 40 °C / 23 °F and 104 °F. Exception in solid clay brick: between +5 °C and 40 °C / 41 °F and 104 °F.
- Conditions for transport and storage: Keep in a cool, dry and dark place between 5 °C and 25 °C / 41 °F and 77 °F.
- For any application not covered by this document / beyond the values specified, please contact Hilti.
- Partly used foil packs must remain in the cassette and have to be used within 4 weeks. Leave the mixer attached on the foil pack manifold and store within the cassette under the recommended storage conditions. If reused, attach a new mixer and discard the initial quantity of anchor adhesive.

NOTICE
Improper handling may cause mortar splashes.

- Always wear safety glasses, gloves and protective clothes during installation.
- Never start dispensing without a mixer properly screwed on.
- Attach a new mixer prior to dispensing a new foil pack (ensure snug fit).
- Use only the type of mixer (HIT-RE-M) supplied with the adhesive. Do not modify the mixer in any way.
- Never use damaged foil packs and/or damaged or unclean foil pack holders (cassettes).

Poor load values / potential failure of fastening points due to inadequate borehole cleaning and setting.

- The boreholes must be free of debris, dust, water, ice, oil, grease and other contaminants before adhesive injection.
- For blowing out the borehole – blow out with oil-free air until the return air stream is free of noticeable dust.
- For brushing the borehole – only use a specified steel wire brush. The brush must resist insertion into the borehole – if not the brush is too small and must be replaced.
- If no significant resistance is felt over the entire depth of the hole when drilling (e.g. in unfilled butt joints), the anchor should not be set at this position
- For applications under seismic actions, non-bearing layers have to be removed.

Borehole filling in solid masonry and concrete: Ensure that boreholes are filled from the back of the borehole without forming air voids. If necessary use the accessories/extensions to reach the back of the borehole. In the event of drilling into a cavity, either use HIT-SC or check loads with on-site testing according to TR 053. For overhead applications use the overhead accessories HIT-SZ and take special care when inserting the fastening element. The excess adhesive may be forced out of the borehole. Make sure that no mortar drips onto the installer.
Borehole filling in hollow masonry: Use HIT-SC mesh sleeve. Fill the mesh sleeve with mortar from the centring cap until mortar escapes at the centring cap (filling control).

Note: Hilti HIT-HY 270 is not tested for use with climbing anchors. Applications of this kind are carried out at the user's own risk.

Not adhering to these setting instructions can fail fastening points!

- 21 Hilti Corporation,LI-9494 SchaanHilti Werke2873-CPR-201-7ETA-13/1036Notified Body 2873ETAG 029 **www.hilti.group**
- 21 Hilti Corporation, LI-9494 Schaan Hilti Werke 2873-CPR-201-49 ETA-19/1060 Notified Body 2873 EAD 330076-00-0604 **www.hilti.group**
- 22 Hilti Corporation,LI-9494 SchaanHilti Werke2873-CPR-201-79ETA-22/0395Notified Body 2873EAD 330076-01-0604-01Mental injection anchor for use in masonry **www.hilti.group**
- 24 Hilti Corporation, LI-9494 Schaan Hilti Plants UK 0836-CPR-23/P6983 UKTA-23/6693 Approved Body 0836 UKAD 330076-00-0604 Bonded injection anchor for use in concrete **www.hilti.group**

Documents / Resources

	HILTI W2V2-MQJT-Q21X-RT73 Plus Rotary [pdf] Instruction Manual W2V2-MQJT-Q21X-RT73 Plus Rotary, W2V2-MQJT-Q21X-RT73, Plus Rotary, Rotary

References

- User Manual