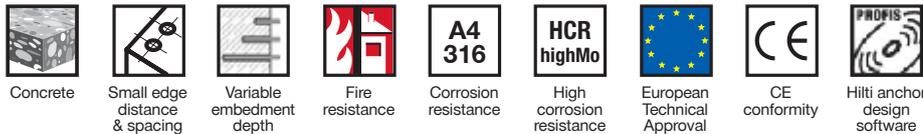


HIT-RE 500 with HIT-V / HAS rods

Injection Mortar System	Benefits
 <p>Hilti HIT-RE 500 330 ml foil pack (also available as 500 ml and 1400 ml foil pack)</p>  <p>Static mixer</p>  <p>HAS rods HAS-E (Zinc) HAS-E-F (Gal) HAS-E-R (A4-70) HAS-HCR rods</p>  <p>HIT-V rods HIT-V (Zinc) HIT-V-F (Gal) HIT-V-R (A4-70) HIT-V-HCR rods</p>	<ul style="list-style-type: none"> ■ suitable for non-cracked concrete C 20/25 to C 50/60 ■ high loading capacity ■ suitable for dry and water saturated concrete ■ under water application ■ large diameter applications ■ high corrosion resistant ■ long working time at elevated temperatures ■ odourless epoxy ■ varied embedment depths ■ small edge distance and anchor spacing possible



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
- Steel failure
- Base material thickness, as specified in the table
- One typical embedment depth, as specified in the table
- One anchor material, as specified in the tables
- Non cracked concrete $f_{c,cyl} = 32$ MPa
- Temperature range I (min. base material temperature -40°C , max. long term/short term base material temperature: $+24^{\circ}\text{C}/40^{\circ}\text{C}$)
- Installation temperature range $+5^{\circ}\text{C}$ to $+40^{\circ}\text{C}$

Embedment depth and base material thickness for the basic loading data

Recommended loads

Anchor size	M8	M10	M12	M16	M20	M24	M30	M36
Typical embedment depth [mm]	80	90	110	125	170	210	270	330
Base material thickness [mm]	110	120	140	165	220	270	340	410

Recommended loads

Anchor size	Anchor HIT-V grade 5.8						Anchor HAS grade 8.8	
	M8	M10	M12	M16	M20	M24	M30	M36
Tensile N_{rec} [kN]	8.6	13.8	20.0	36.4	58.1	79.4	115.7	152.1
Shear V_{rec} [kN]	5.1	8.6	12.0	22.3	34.9	50.3	120.6	173.5

Note: For varied embedment depths please contact your local Hilti engineer for further details.

Approvals / certificates

Description	Authority / Laboratory	No. / date of issue
European technical approval a)	DIBt, Berlin	ETA-04/0027 / 2009-05-20
Fire test report	IBMB, Braunschweig	UB 3565 / 4595 / 2006-10-29 UB 3588 / 4825 / 2005-11-15
Assessment report (fire)	warringtonfire	WF 166402 / 2007-10-26 & suppl. WF 172920 / 2008-05-27

a) All data given in this section according ETA-04/0027, issue 2009-05-20.

Curing time for general conditions

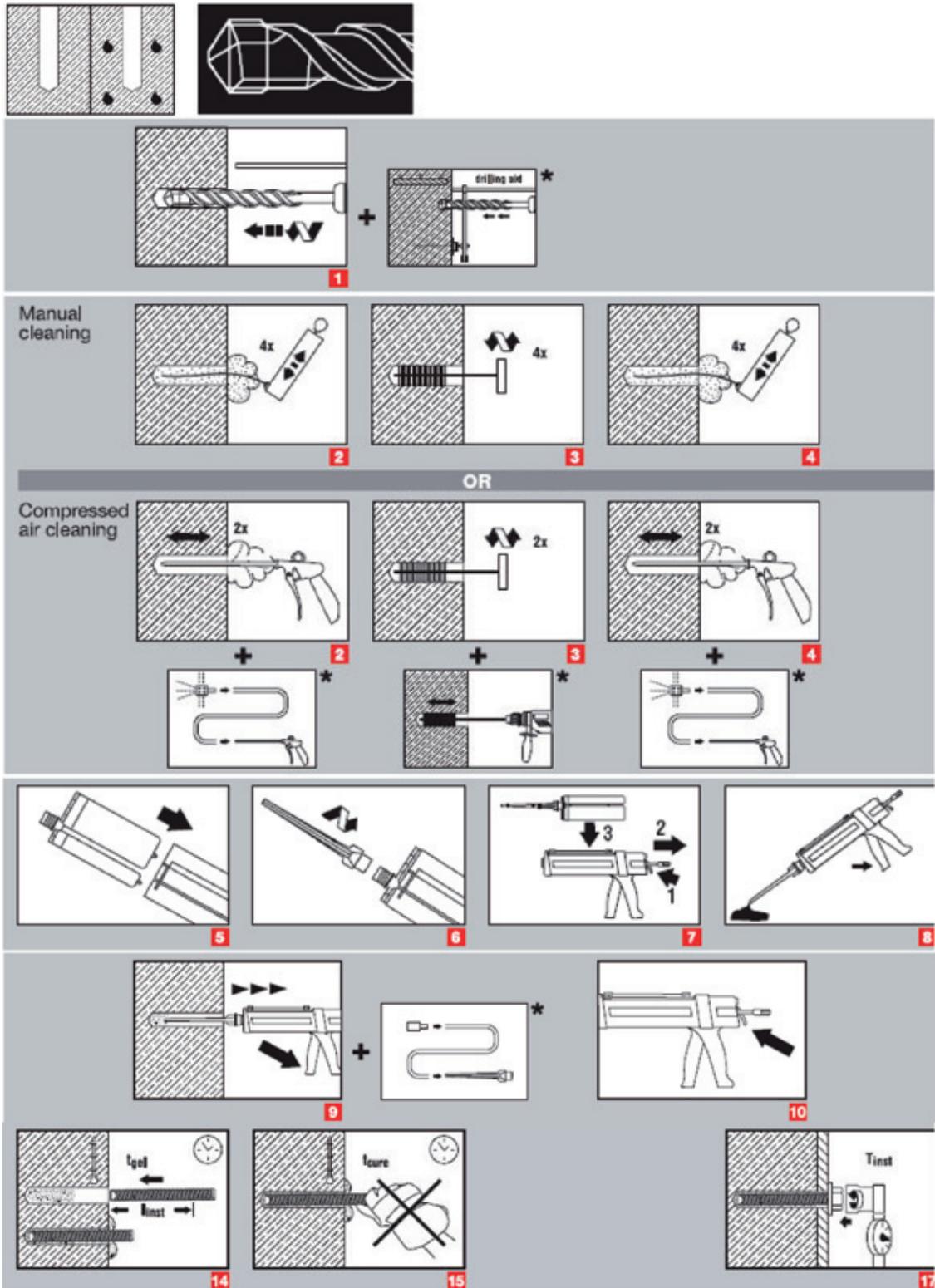
Data according ETA-04/0027, issue 2009-05-20		Additional Hilti technical data	
Temperature of the base material	Curing time t_{cure} before anchor can be fully loaded	Temperature of the base material	Working time t_{gel} in which anchor can be inserted and adjusted
40 °C	4 h	40 °C	12 min
30 °C to 39 °C	8 h	30 °C	20 min
20 °C to 29 °C	12 h	20 °C	30 min
15 °C to 19 °C	24 h	15 °C	1 ½ h
10 °C to 14 °C	48 h	10 °C	2 h
5 °C to 9 °C	72 h	5 °C	2 ½ h

Setting details

Anchor size		Data according ETA-04/0027, issue 2009-05-20							Additional Hilti technical data
		M8	M10	M12	M16	M20	M24	M30	
Nominal diameter of drill bit	d_0 [mm]	10	12	14	18	24	28	35	40
Effective anchorage and drill hole depth range a)	$h_{ef,min}$ [mm]	40	40	48	64	80	96	120	144
	$h_{ef,max}$ [mm]	160	200	240	320	400	480	600	720
Minimum base material thickness	h_{min} [mm]	$h_{ef} + 30 \text{ mm} \geq 100 \text{ mm}$			$h_{ef} + 2 d_0$				
Diameter of clearance hole in the fixture	d_f [mm]	9	12	14	18	22	26	33	39
Minimum spacing	s_{min} [mm]	40	50	60	80	100	120	150	180
Minimum edge distance	c_{min} [mm]	40	50	60	80	100	120	150	180
Torque moment b)	$T_{max}^{b)}$ [Nm]	10	20	40	80	150	200	300	360

Setting instructions

Dry and water-saturated concrete, hammer drilling



a)

Brush bore hole with required steel brush HIT-RB

a) **Note:** Manual cleaning only for hef ≤ 250 mm and anchor size ≤ M16

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