



HIT-HY 200 Injection Mortar



Static and quasi-static resistance (for a single anchor)

All data in this section applies to:

- Correct setting (See setting instruction)
- No edge distance and spacing influence
- Steel failure
- Minimum base material thickness
- One typical embedment depth, as specified in the table
- One anchor material, as specified in the tables
- Concrete C 20/25, $f_{a, cube} = 25 \text{ N/mm}^2$
- Temperature range I (min. base material temp. -40°C , max. long/short term base material temp.: $+24^\circ\text{C}/40^\circ\text{C}$)

For hammer drilled holes, hammer drilled holes with Hilti hollow drill bit:

Anchorage depth ¹⁾

Anchor size		M8	M10	M12	M16	M20	M24	M27	M30
HAS-U									
Embedment depth	[mm]	80	90	110	125	170	210	240	270
Base material thickness	[mm]	110	120	140	161	234	266	300	340
HIT-Z									
Effective anchorage depth ²⁾	$h_{ef} = h_{min}$	50	60	60	96	100	-	-	-
Effective embedment depth ³⁾	$h_{ef} = h_{norm, min}$	70	90	110	145	180	-	-	-
Base material thickness	[mm]	130	150	170	245	280	-	-	-

1) The allowed range of embedment depth is shown in the setting details.

2) For combined pull-out and concrete cone failure

3) For concrete cone failure

4) Hilti anchor rod HIT-Z-F: M16 and M20

For hammer drilled holes, hammer drilled holes with Hilti hollow drill bit:

Recommended Loads: (1)

Anchor size		M8	M10	M12	M16	M20	M24	M27	M30
Non-cracked concrete									
Tension N_{Rd}	HAS-U 5.8	8,6	13,8	20,0	33,6	53,3	73,2	89,4	106,7
	REBAR	11,5	16,2	23,7	33,6	53,3	73,2	106,7	106,7
	HIT-Z	11,4	18,1	25,9	42,0	58,1	-	-	-
Shear V_{Rd}	HAS-U 5.8	5,1	8,6	12,0	22,3	34,9	50,3	65,7	80,0
	REBAR	6,7	10,5	14,8	26,2	41,0	64,3	80,5	92,4
	HIT-Z	6,9	10,9	15,4	27,4	41,7	-	-	-
Cracked concrete									
Tension N_{Rd}	HAS-U 5.8	7,2	10,1	16,8	24,0	38,0	52,2	63,7	76,1
	REBAR	-	6,7	13,8	20,9	35,6	52,2	76,1	76,1
	HIT-Z	10,0	14,6	19,8	29,9	41,4	-	-	-
Shear V_{Rd}	HAS-U 5.8	5,1	8,6	12,0	22,3	34,9	50,3	65,7	80,0
	REBAR	-	10,5	14,8	26,2	41,0	64,3	69,5	92,4
	HIT-Z	6,9	10,9	15,4	27,4	41,7	-	-	-

¹⁾ With overall partial safety factor for action $\gamma = 1,4$. The partial safety factors for action depend on the type of loading and shall be taken from national regulations.