



HST3 Expansion anchor



Static and quasi-static loading (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
- Concrete C 20/25, $f_{ck, cube} = 25 \text{ N/mm}^2$

Effective anchorage depth for static

| Anchor size | | M8 | M10 | | M12 | | M16 | | M20 | M24 |
|----------------------|---------------|----|-----|----|-----|----|-----|----|-----|-----|
| Eff. Anchorage depth | h_{ef} [mm] | 47 | 40 | 60 | 50 | 70 | 65 | 85 | 101 | 125 |

Recommended Loads: (a)

| Anchor size | | M8 | M10 | | M12 | | M16 | | M20 | M24 |
|-----------------------------|------------------|-----|------|------|------|------|------|------|------|------|
| Non-cracked concrete | | | | | | | | | | |
| Tension N_{Rd} | HST3/HST3-BW | 5,7 | 6,1 | 10,5 | 8,5 | 11,9 | 12,6 | 18,8 | 24,4 | 28,6 |
| | HST3-R/HST3-R-BW | 5,7 | 6,1 | 10,5 | 8,5 | 11,9 | 12,6 | 18,8 | 24,4 | 28,6 |
| Shear V_{Rd} | HST3/HST3-BW | 7,9 | 12,5 | 13,5 | 19,4 | 20,2 | 31,1 | 31,6 | 47,9 | 44,8 |
| | HST3-R/HST3-R-BW | 9,0 | 14,6 | 14,5 | 17,8 | 21,0 | 27,8 | 36,3 | 55,5 | 63,2 |
| Cracked concrete | | | | | | | | | | |
| Tension N_{Rd} | HST3/HST3-BW | 3,8 | 4,3 | 7,1 | 6,1 | 9,5 | 9,0 | 13,4 | 17,4 | 19,0 |
| | HST3-R/HST3-R-BW | 4,0 | 4,3 | 7,1 | 6,1 | 9,5 | 9,0 | 13,4 | 17,4 | 19,0 |
| Shear V_{Rd} | HST3/HST3-BW | 7,9 | 11,6 | 13,5 | 16,8 | 20,2 | 30,6 | 31,6 | 47,9 | 44,8 |
| | HST3-R/HST3-R-BW | 9,0 | 11,6 | 14,5 | 16,8 | 21,0 | 27,8 | 36,3 | 55,5 | 59,9 |

- a) 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,