

PLUS Bolt high corrosive resistant anchor

Design Tables based on ETAG 001 pt3

Table 1: Mean Ultimate resistance ($N_{ru,m}$ from test results)

Anchor Size (mm)	10	12	16	20
H_{ef} nominal (mm)	-	90	130	120
Non-Cracked Concrete	-	C30	C30	C30
Tensile $N_{ru,m}$ [kN]	-	35.13	64.36	77.82
Shear $V_{ru,m}$ [kN]	-	37.02	83.63	116.63

Table 2: Characteristic resistance (N_{rk} (1- $k_5\%$ V))

Anchor Size (mm)	10	12	16	20
H_{ef} nominal (mm)	-	90	130	120
Non-Cracked Concrete	-	C30	C30	C30
Tensile N_{rk} [kN]	-	30.35	47.93	62.20
Shear V_{rk} [kN]	-	30.22	54.91	101.20

Table 3: Design resistance ($N_{rk} = N_{rk}/\gamma_m$) γ taken as 1.8 (1.5 for steel/shear)

Anchor Size (mm)	10	12	16	20
H_{ef} nominal (mm)	-	90	130	120
Non-Cracked Concrete	-	C30	C30	C30
Tensile N_{rd} [kN]	-	16.86	26.62	34.55
Shear V_{rd} [kN]	-	20.14	30.50	67.40

Table 4: Recommended Load ($N_{rec} = N_{rd}/\gamma$) γ taken as 1.4

Anchor Size (mm)	10	12	16	20
H_{ef} nominal (mm)	-	90	130	120
Non-Cracked Concrete	-	C30	C30	C30
Tensile N_{rec} [kN]	-	12.04	19.01	24.67
Shear V_{rec} [kN]	-	14.39	21.79	48.10

For specific performance test data in Sprayed Concrete Lining, please contact us.