Loads

Nylon toggle DuoTec

Recommended loads[1) 2)] for a single anchor.

Type			DuoTec 10			DuoTec 12			
			Chipboard screws		fischer Hook	Chipboard screws		Metrical screw	fischer Hook
Screw diameter		[mm]	4.5	5.0	5.0	5.0	6.0	6.0	5.5
Recommended loads in the respective base material F_{rec}[3)] for a span in the construction b = 625 mm									
Gypsum plasterboard	9.5 mm	[kN]	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Gypsum plasterboard	12.5 mm	[kN]	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Gypsum plasterboard	2 x 12.5 mm	[kN]	0.43	0.43	0.30[4)]	0.43	0.43	0.43	0.43
Gypsum fibreboard	12.5 mm	[kN]	0.51	0.51	0.30[4)]	0.51	0.51	0.51	0.50[4)]
Chipboard	16 mm	[kN]	0.71	0.71	0.30[4)]	0.75	0.80	0.80	0.50[4)]
OSB board	18 mm	[kN]	0.75	0.75	0.30[4)]	0.75	1.30	1.30	0.50[4)]
Recommended loads in the respective base material F_{rec}[3)] for a span in the construction b = 120 mm									
Gypsum plasterboard	9.5 mm	[kN]	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Gypsum plasterboard	12.5 mm	[kN]	0.36	0.36	0.30[4)]	0.36	0.36	0.36	0.20
Gypsum plasterboard	2 x 12.5 mm	[kN]	0.59	0.59	0.30[4)]	0.70	0.80	0.80	0.50[4)]
Gypsum fibreboard	12.5 mm	[kN]	0.75	0.75	0.30[4)]	0.80	1.10	1.10	0.50[4)]
Chipboard	16 mm	[kN]	0.75	0.75	0.30[4)]	0.80	1.40	1.30	0.50[4)]
OSB board	18 mm	[kN]	0.75	0.75	0.30[4)]	0.80	1.50	1.40	0.50[4)]
Recommended loads in solid building materials F_{rec}[3)]									
Concrete	≥ C20/25	[kN]	0.45	0.75	0.30[4)]	0.40	0.75	-	0.30
Wood		[kN]	0.30	0.75	0.30[4)]	0.20	0.65	-	0.30
Recommended loads in the respective base material F_{rec}[3)]									
Hollow block of lightweight aggregate concrete ‚Sepa Parpaing'	$f_b \geq 8$ N/mm²	[kN]	-	-	-	0.65	1.00	1.00	0.50[4)]
Pre-stressed hollow-core concrete slabs		[kN]	-	-	-	1.00	1.40	1.30	0.50[4)]
Lightweight concrete hollow block Hbl acc. to EN 771-3	$f_b \geq 2$ N/mm²	[kN]	-	-	-	0.90	1.00	1.00	0.50[4)]

[1)] Required safety factors are considered.

[2)] The recommended loads are reference values and depending to the building material and the workmanship. The values are only valid for the given screw diameter.

[3)] Valid for tensile load, shear load and oblique load under any angle.

[4)] Bending of the hook is decisive. Only for tension load.