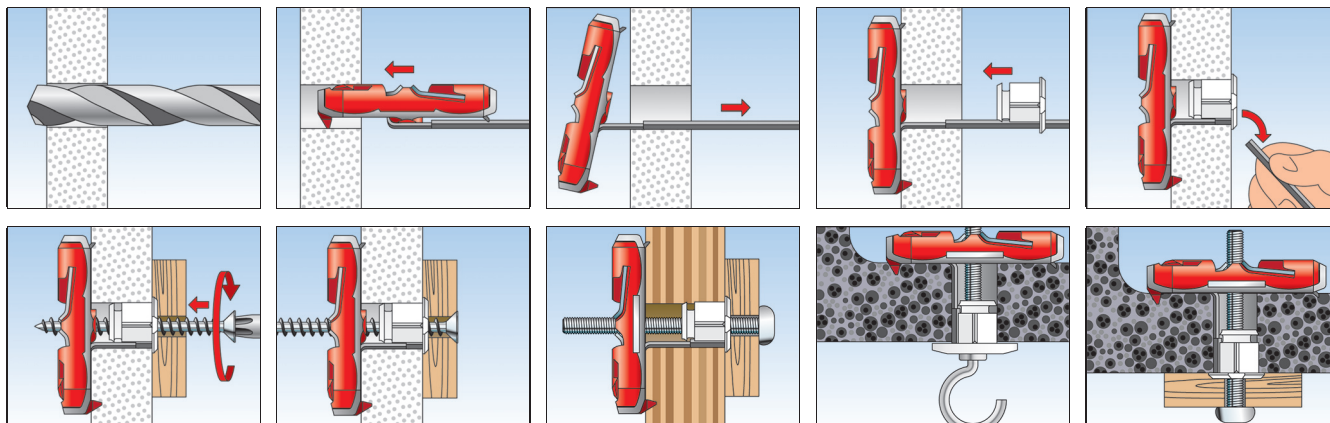
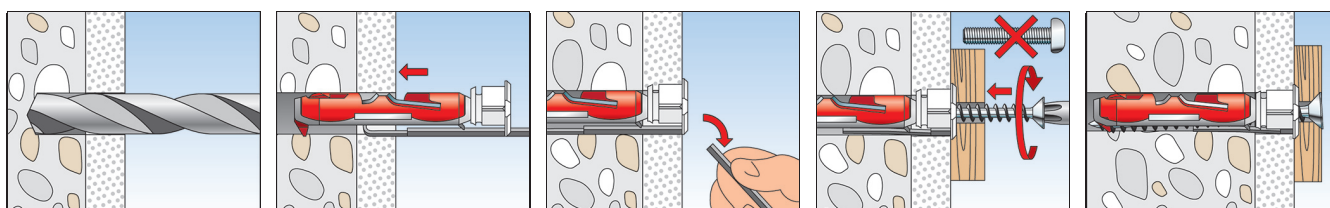


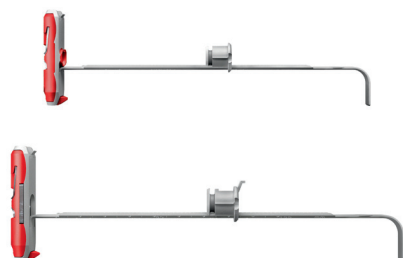
INSTALLATION IN PLASTERBOARD AND CAVITY FIXINGS



INSTALLATION HITTING IN SOLID MATERIALS

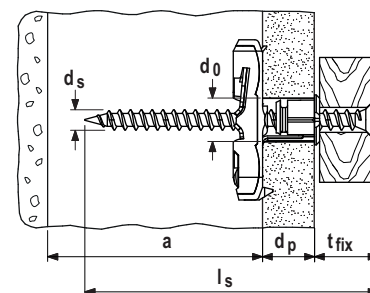


TECHNICAL DATA BOARD MATERIAL



Nylon toggle **fischer DUOTEC 10**

Nylon toggle **fischer DUOTEC 12**



Item	Art.-No.	Drill hole diameter d_0 [mm]	Min. panel thickness d_p [mm]	Max. panel thickness d_p [mm]	Min. cavity depth a [mm]	Screw diameter d_s [mm]	Screw length l_s [mm]	Sales unit [pcs]
fischer DUOTEC 10	537258	10	12	55	40	4,5 - 5,0	$\geq d_p + t_{fix} + 20$	50
fischer DUOTEC 10 S	537259 ¹⁾	10	12	55	40	5,0	70	25
fischer DUOTEC 10 S PH	539025 ²⁾	10	12	55	40	5,0	70	25
fischer DUOTEC 12	542796	12	12	55	50	5,0 - 6,0 / M6	$\geq d_p + t_{fix} + 20$	10
fischer DUOTEC 12 S PH M	542797 ²⁾³⁾	12	12	55	50	M6	55	10
fischer DUOTEC 12 RH	542798 ⁴⁾	12	12	55	50	5,5	70	10

1) DUOTEC S - with chipboard screw countersunk head

2) DUOTEC S PH - with chipboard screw panhead

3) DUOTEC S PH - with machine screw panhead

4) DUOTEC RH - with screw with round hook

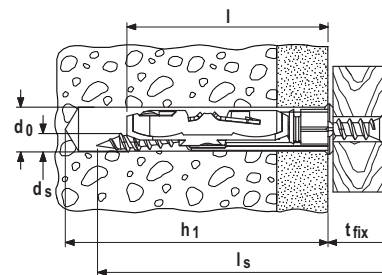
TECHNICAL DATA HITTING IN SOLID MATERIALS



Nylon toggle **fischer DUOTEC 10**



Nylon toggle **fischer DUOTEC 12**



Item	Art.-No.	Drill hole diameter d_0 [mm]	Min. drill hole depth h_1 [mm]	Screw diameter [mm]	Min. screw length l_s [mm]	Anchor length l [mm]	Max. fixture thickness t_{fix} [mm]	Sales unit [pcs]
fischer DUOTEC 10	537258	10	$l_s - t_{fix} + 10$	4,5 - 5,0	$t_{fix} + 55$	50	$l_s - 55$	50
fischer DUOTEC 10 S	537259 ¹⁾	10	65	5,0	70	50	15	25
fischer DUOTEC 10 S PH	539025 ²⁾	10	65	5,0	70	50	15	25
fischer DUOTEC 12	542796	12	$l_s - t_{fix} + 10$	5,0 - 6,0	$t_{fix} + 65$	60	$l_s - 65$	10
fischer DUOTEC 12 RH	542798 ³⁾	12	75	5,5	55	60	—	10

1) DUOTEC S - with chipboard screw countersunk head

2) DUOTEC S PH - with chipboard screw panhead

3) DUOTEC RH - with screw with round hook

LOADS

Nylon toggle fischer DUOTEC

Highest recommended loads ¹⁾⁴⁾ for a single anchor.

Type		DUOTEC 10				DUOTEC 12			
		Chipboard screw	Metrical screw	fischer Hook		Chipboard screw	Metrical screw	fischer Hook	
Screw diameter	[mm]	4,5	5	5	5	5	6	6	5,5
Recommended loads in the respective base material $F_{rec}^{2)}$ 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	0,43	0,43	0,43	0,43	0,43
Gypsum fibreboard	12,5 mm	[kN]	0,51	0,51	0,30 ³⁾	0,51	0,51	0,51	0,50 ³⁾
Chipboard	16 mm	[kN]	0,71	0,71	0,71	0,75	0,80	0,80	0,50 ³⁾
OSB board	18 mm	[kN]	0,75	0,75	0,75	0,75	1,30	1,20	0,50 ³⁾
Recommended loads in the respective base material $F_{rec}^{2)}$ 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	0,36	0,36	0,36	0,36	0,20
Gypsum plasterboard	2 x 12,5 mm	[kN]	0,59	0,59	0,59	0,70	0,80	0,80	0,50 ³⁾
Gypsum fibreboard	12,5 mm	[kN]	0,75	0,75	0,75	0,80	1,10	1,10	0,50 ³⁾
Chipboard	16 mm	[kN]	0,75	0,75	0,75	0,80	1,40	1,30	0,50 ³⁾
OSB board	18 mm	[kN]	0,75	0,75	0,75	0,80	1,50	1,40	0,50 ³⁾
Recommended loads in solid building materials $F_{rec}^{2)}$									
Concrete	$\geq C20/25$	[kN]	0,45	0,75	-	0,30 ³⁾	0,40	0,75	0,30
Wood		[kN]	0,30	0,75	-	0,30 ³⁾	0,20	0,65	0,30
Recommended loads in the respective base material $F_{rec}^{2)}$									
Hollow block of lightweight aggregate concrete 'Sepa Parpaing'	$f_b \geq 8$ N/mm ²	[kN]	-	-	-	-	0,65	1,00	1,00
Pre-stressed hollow-core concrete slabs		[kN]	-	-	-	-	1,00	1,40	1,30
Hollow block of lightweight aggregate concrete Hbl acc. EN 771-3	$f_b \geq 2$ N/mm ²	[kN]	-	-	-	-	0,90	1,00	1,00

¹⁾ Required safety factors are considered.

²⁾ Valid for tensile load, shear load and oblique load under any angle.

³⁾ Bending of the hook is decisive. Only for tension load.

⁴⁾ 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.