

Loads

Standard nails DFN and high-performance nails DFNH

Recommended loads¹⁾ of a single nail for multiple use in the respective building material for non-structural applications.

Substrate	Setting depth h_{ef} [mm]	Recommended tensile load ¹⁾ F_{rec} [kN]	
		DFN	DFNH
Concrete C20/25	≥ 14	0.10	-
	≥ 16	0.18	-
	≥ 18	0.20	0.22
	≥ 20	0.20	0.50
Concrete C50/60	≥ 14	-	0.12
	≥ 17	-	0.18
	≥ 18	-	0.22
Solid sand-lime brick KS ²⁾ DIN EN 771-2 / KS 16 998 x 200 x 623 mm	≥ 20	0.50	-
	≥ 25	0.68	-
	≥ 27	0.80	-
	≥ 29	0.95	-
Solid brick Mz ²⁾ DIN EN 771-1 / Mz 20, DF	≥ 14	0.10	-
	≥ 16	0.16	-
	≥ 18	0.19	-
	≥ 20	0.19	-
Steel S235JR acc. to EN 10025-2	≥ 8	-	0.96
Member thickness and edge distance for concrete as substrate			
Minimum member thickness	h_{min} [mm]	60	60
Minimum edge distance	c_{min} [mm]	70	70
Member thickness and edge distance for steel as substrate			
Minimum member thickness	h_{min} [mm]	-	4
Minimum edge distance	c_{min} [mm]	-	14
Maximum fixture thickness			
Wood	t_{fix} [mm]	25	25
Metal sheet	t_{fix} [mm]	2.5	2.5

¹⁾ For static and quasi-static load. Required safety factors are considered. Not for safety relevant single point fixings. For $h_{\text{ef}} \geq 14$ mm at least 6 and for $h_{\text{ef}} \geq 18$ mm at least 4 fixing points are required. All visible setting errors must be corrected. Use only in dry areas. To confirm the technical data given here, it is recommended to carry out tests on the construction site.

²⁾ The load values are valid for unperforated solid bricks.