JORDAHL® anchor plates

JORDAHL® anchor plates are the solution to joining concrete to steel components. The anchor plates are cast into the relevant elements flush with the component surface. Corresponding steel or stainless steel elements can be welded to their surface.

Product options

JORDAHL® supplies:

- anchor plates with approved headed studs for applications relevant to building inspection
- particularly economical anchor plates with smaller studs for less important constructional applications
- anchor plates in all desired sizes, pre-perforated if desired for fixing to the formwork (2 ∅ 7 mm) or with nailing plate
- Standard types in stainless steel 1.4301/1.4303 (A2), in stock at all times
- Special designs, for example with threading bolt welded on or eyelet sleeves at customer's request
- Application specific design and dimensioning of bolts and plates

Material and corrosion prevention

Design depending on application and customer's request in

- stainless steel 1.4571/1.4401/1.4404 (A4) 1.4301/1.4303 (A2)
- steel rolled blank or hot-dip galvanized

Typical system components for anchor plates at customers request

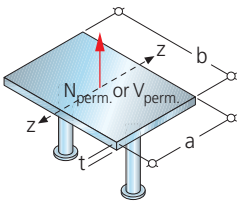
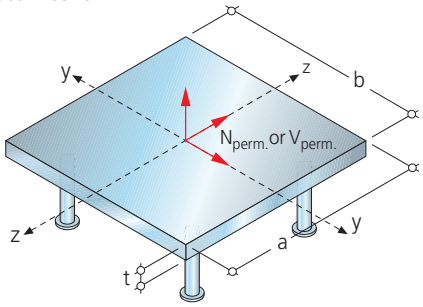
Studs ∅ [mm]	Studs length [mm]	perm. load F [kN] 1) F_{Rd} [kN]		Plate thickness [mm]
6	50	3.5	*4.9*	
9	50	7.0	*9.8*	
10	75	8.0	*11.2*	4 / 6 / 8 / 10 / 12
13	100	15.0	*21.0*	
16	125	20.0	*28.0*	

1) *Failure criterion for one stud*

The permissible loads on the anchor plates under tension, shear and bending moments are **verified on the basis of the project requirements.**

They vary as a function of plate geometry and application conditions. The perm. load values specified help in an approximate estimation. They are based on a concrete grade C 20/25 and apply to loading in tension or shear.

Standard anchor plates (A2)

Anchor plates JAP	Plate a × w × d [mm]	Bolt ∅ × length [mm]	Max. recommended individual load 2) Tension or $N_{perm.}$ [kN] N_{Rd}		transverse Tension $V_{perm.}$ [kN] V_{Rd}	
 **70/140/6** **100/140/10**	70 × 100 × 6 100 × 140 × 10	2 off 9 × 50 3)	7.5	*10.5*	7.5	*10.5*
 **160/160/12** **160/160/12 with eyelet sleeves 2 × 16 × 80** (not depicted)	160 × 160 × 12	4 off 9 × 50 3)	16.0	*22.4*	16.0	*22.4*

Design resistance to Eurocode

F_{Rd} = perm. F × 1.4

The design values of the load bearing capacities are shown in *italics* in the tables.

2) *For loading in one direction. In the case of combined stress, interaction relationships must be taken into account.*

3) *Upon request, also with headed bolt 10 × 50 according to Building Approval.*