

1.6 Anchoring system and anchor forces

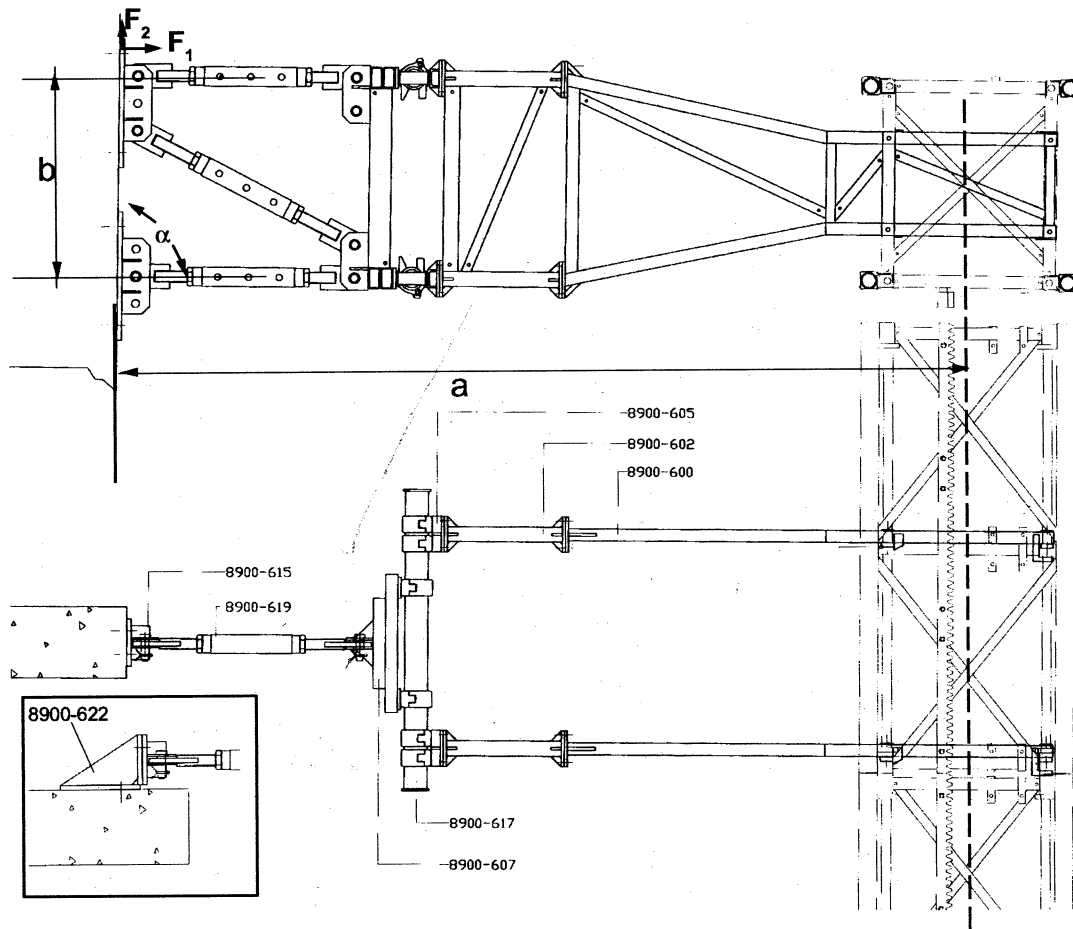


Fig.1-4 Anchoring system, type A

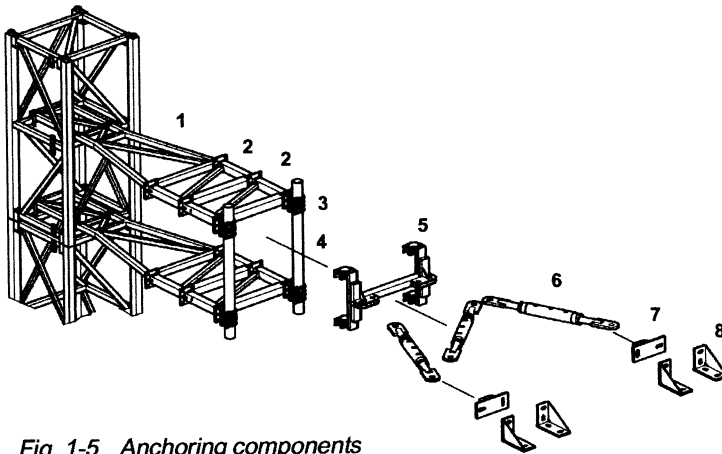


Fig. 1-5 Anchoring components

Parts		Anchoring system			Remarks
Description	P/N	type A P/N 8900-650	type B	type C	
1. Anchor frame	8900-600	2	2	2	Max. permitted vertical distance between both frames 30 in (750mm)
3. End piece	8900-605	4	4	4	
4. Tube	8900-617	2	2	2	L = 3.3 ft (1m) $\varnothing = 3$ in (76.1mm) t = 0.3 in (8mm)
5. Adapter	8900-607	1	1	1	
6. Adjusting tube	8900-619	3	2	n.a.	L = 23-32 in (600-820mm)
7. Wall plate	8900-615	2	2	2	
2. Extension frame	8900-602	max. 4 (2*2)	max. 4 (2*2)	max. 4 (2*2)	Optional, L= 15.9 in (403mm)
6. Adjusting tube	8900-610	n.a.	1	3	Optional, L = 34-54 in (860-1360mm)
8. Bracket	8900-622	4	4	4	Additional bracket for 8900-615

- Maximal two extension frames (fig. 1-5, 2) shall be mounted behind each other.
- Fasteners included in part numbers.
- Anchoring system type A only, can be ordered as a kit.
- Anchoring systems type B and type C are based on type A with different anchor tubes (fig. 1-5,1).
- When anchoring a Pro 5500 (TWIN) the spread (fig. 1-4, b) is restricted to 26 in (0.66 m), unless extension frames (fig. 1-5, 2) are applied.
- Use table 1-6 when determine which anchor type (A,B or C) shall be used.
- Based on the distance between mastcentre and object (fig. 1-4, a) the possible spread (b) of the wall plates can be determined.
- **Note: $a/b \leq 3.35$!**

Anchoring dimensions

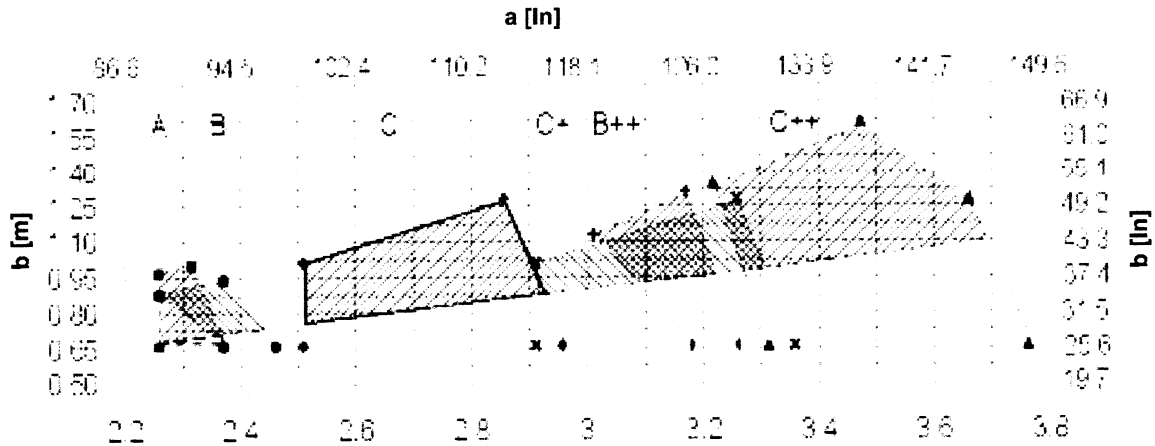


Fig.1-6 Anchoring overview

- type A
- type B
- + type C + 2*8900-602
- type C
- * type C - 8900-602
- ▲ type C + 2*8900-602

Calculating anchor forces

Metric units must be used in the following calculations.

Eagle Pro
5500 - Single $F_1 = a/b * 11.5 + 4.1 + 5.1/b$ [kN]

$F_2 = \max (11.5; F_1 / \tan\alpha)$ [kN]

Eagle Pro
5500 - Dual $F_1 = a/b * 15.6 + 7.3 + 7.3/b$ [kN]

$F_2 = \max (15.6; F_1/\tan\alpha)$ [kN]

Example

Eagle Pro 5500 - Single

$a = 7.5 \text{ ft (2.3m)}, b = 2.2 \text{ ft (0.68m)}, \alpha = 90^\circ$

Result

$F_1 = 50.5 \text{ kN}, F_2 = 11.5 \text{ kN}$