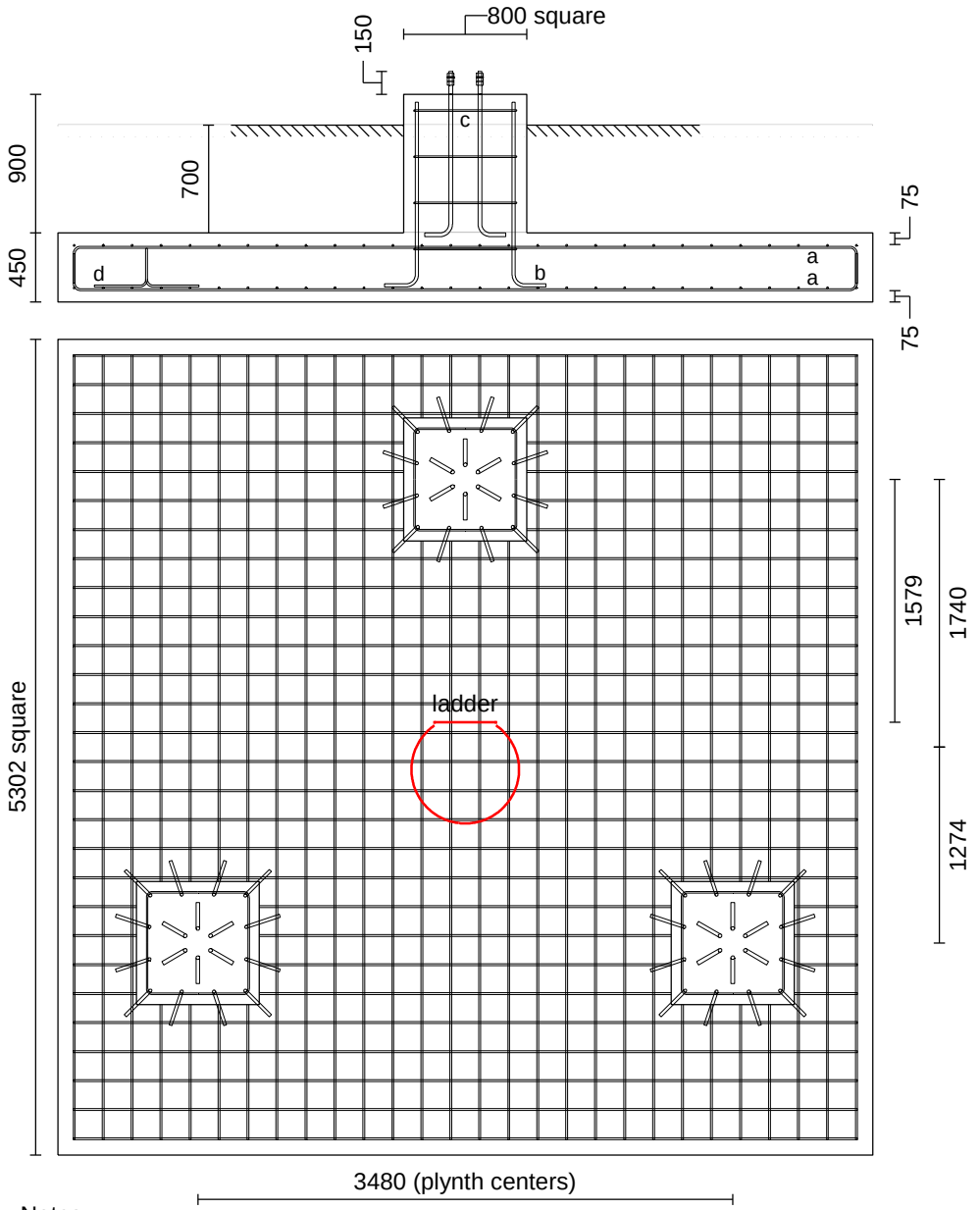
SECTIONAL POLES
Since 1966

Drawing Number
FD-CW-739385.5361.pdf

Mast/Structure Description: Lattice 30m 14m² Cat2 1000m

Bending Moment (ULS):	1017.1 kNm	Concrete Volume:	14.4 m^3
Shear Force (ULS):	56.7 kN	Concrete Strength:	30 MPa - Note!
Structure Mass:	3210.1 kg	Reinforcement Mass:	721.1 kg
Applied vertical force (ULS):	0.0 kN	Reinforcement Strength:	450 MPa
		Excavation Volume:	32.3 m^3
Required Soil Pressure:	77.9 kPa	Backfill Volume:	18.3 m^3

Vertical Centroid Offset (Tower Template & Foundation): 0.27 m



Shape codes and dimensions of steel reinforcement according to SABS 82:

Ref.	Quantity Top	Quantity Bottom	Diameter Top	Diameter Bottom	Full Length Top	Full Length Bottom		Shape Code / Diagram
a	56	56	12	12	5522	5522		38 — A=240, C=240, B=5102
b	36		20		1371			37 — A=220, B=1201
c	12		10		2705			60 — A, B; A,B=670
d	24		12		1424			83 — A, B, C, D; A,C,D=347, B=252

Notes:
1. Foundation Bolts (EN8), per plynth: 6x M24Bend, 190 mm PCD ,UTS 550 MPa min, fixing templates to be placed at top and bottom of bolts before casting
2. Positioning of stools (Ref. d) to be determined on site to provide sufficient support between Top and Bottom bars (Ref. a)
3. Bottom and top reinforcement mats each consist of 28 x 28 bars at 189 mm spacing