

Tower Design Audit Certificate

Tower Reference Type	T1100
Tower Description	36m Triangular Tubular Parallel Lattice Tower
Tower Type	Self-supporting
Manufacturer / Supplier	RTS

The tower has been audited to SANS specifications and approved for construction with respect to the following design parameters as detailed below:

Tower Outline GA Drawing No.	28 / 11 / 16 / 36M – N4
Design Specification	SANS 10160-3:2011
Basic Fundamental Wind Speed	28m/s
3-Second Gust Wind Speed	39.2m/s
Wind Return Period	50yrs
Terrain Category	B
Site Altitude	0m Above Mean Sea Level
Ground Datum	0m
Wind Load Safety Factor – SANS1-160-3:2011	1.3
Tower Loading	2m ² at 1m below Apex of Tower (35m)
Tower Deflection	1.0 Degree
Material Grade	S355JR
Bolt Grade	Grade 8.8
Tower Width	1100mm
Tower Sections	12x 3m Sections
Main Leg Members	
L1	193.7 OD 4.0mm Circular Hollow Section
L2	165.1 OD 4.0mm Circular Hollow Section
L3	139.7 OD 4.0mm Circular Hollow Section
L4	127.0 OD 4.0mm Circular Hollow Section
L5	101.6 OD 4.0mm Circular Hollow Section
L6	101.6 OD 4.0mm Circular Hollow Section
L7	76.2 OD 3.5mm Circular Hollow Section
L8	76.2 OD 3.5mm Circular Hollow Section
L9	60.3 OD 2.5mm Circular Hollow Section
L10	60.3 OD 2.5mm Circular Hollow Section
L11	38.1 OD 2.5mm Circular Hollow Section
L12	38.1 OD 2.5mm Circular Hollow Section
Diagonal Members	
D1	38.1 OD 4.0mm Circular Hollow Section
D2	38.1 OD 4.0mm Circular Hollow Section

D3	38.1 OD 4.0mm Circular Hollow Section
D4	38.1 OD 2.5mm Circular Hollow Section
D5	38.1 OD 2.5mm Circular Hollow Section
D6	38.1 OD 2.5mm Circular Hollow Section
D7	38.1 OD 2.5mm Circular Hollow Section
D8	38.1 OD 2.5mm Circular Hollow Section
D9	38.1 OD 2.5mm Circular Hollow Section
D10	38.1 OD 2.5mm Circular Hollow Section
D11	38.1 OD 2.5mm Circular Hollow Section
Horizontal Members	
H1	38.1 OD 4.0mm Circular Hollow Section
H2	38.1 OD 4.0mm Circular Hollow Section
H3	38.1 OD 4.0mm Circular Hollow Section
H4	38.1 OD 2.5mm Circular Hollow Section
H5	38.1 OD 2.5mm Circular Hollow Section
H6	38.1 OD 2.5mm Circular Hollow Section
H7	38.1 OD 2.5mm Circular Hollow Section
H8	38.1 OD 2.5mm Circular Hollow Section
H9	38.1 OD 2.5mm Circular Hollow Section
H10	38.1 OD 2.5mm Circular Hollow Section
H11	38.1 OD 2.5mm Circular Hollow Section
H12	38.1 OD 2.5mm Circular Hollow Section

This document does in no way relieve the supplier of any of their responsibilities for the structure.

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