

Mast Design Audit Certificate

Mast Reference Type	Trailer Mast
Mast Description	25m Triangular Tubular Lattice Mast
Mast Type	Triangular Guyed Mast
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:

Mast Outline GA Drawing No.	New Design
Design Specification	SANS 10160-3:2019
Basic Fundamental Wind Speed / 3-sec Gust	40m/s
Wind Return Period	50yrs
Terrain Category	A
Site Altitude	0m Above Mean Sea Level
Ground Datum	0m
Mast Loading	0.5m ² at 25m above NGL
Mast Deflection	1.0 Degree
Steel Material Grade	S355JR
Bolt Grade	Grade 8.8
Mast Width	L1 – 900.2mm L2 – 735.1mm L3 – 580.1mm L4 – 445.3mm L5 – 305.7mm
Main Leg Members	L1 – 60x4 CHS L2 – 60x3.5 CHS L3 – 43x2.5 CHS L4 – 43x2.5 CHS L5 – 34x2.5 CHS
Diagonal Members	L1 – 22 R L2 – 20 R L3 – 16 R L4 – 12 R L5 – 10 R
Horizontal Members - 3m Common Section (All common sections to have top horizontal members of C 76x38 and bottom horizontal members of 50x50x5L)	L1 – 22 R L2 – 20 R L3 – 16 R L4 – 12 R L5 – 10 R
Initial Guy Tension – G1, G2, G3	0kN
Guy Wire – G1, G2, G3	6mm
Internal Guy Distance from Chassis Centre	3.8m (Mounted on outrigger)
Middle Guy Distance from Chassis Centre	3.8m (Mounted on outrigger)

Outer Guy Distance from Mast Centre	9.24m
Mast Sections	5 x 6m Common Sections

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

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