

Mast Design Audit Certificate

Mast Reference Type	N600
Mast Description	24m Triangular Tubular Lattice Mast
Mast 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:

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	B
Site Altitude	0m Above Mean Sea Level
Ground Datum	0m
Mast Loading	1m ² at 24m above NGL 0.636m ² (900mm Ø Dish) at 12m above NGL
Mast Deflection	1.0 Degree
Steel Material Grade	S355JR
Bolt Grade	Grade 8.8
Mast Width	600mm c/c between main leg members
Main Leg Members	
L1	102mm OD 6mm thk Circular Hollow Section
L2	102mm OD 5mm thk Circular Hollow Section
L3	89mm OD 5mm thk Circular Hollow Section
L4	63mm OD 4.5mm thk Circular Hollow Section
L5	60mm OD 3.5mm thk Circular Hollow Section
L6	43mm OD 3mm thk Circular Hollow Section
L7	32mm OD 2.5mm thk Circular Hollow Section
L8	32mm OD 2mm thk Circular Hollow Section
Diagonal & Horizontal members	
L1	22mm OD Circular Rods
L2	20mm OD Circular Rods
L3	20mm OD Circular Rods
L4	20mm OD Circular Rods
L5	16mm OD Circular Rods
L6	16mm OD Circular Rods
L7	16mm OD Circular Rods
L8	16mm OD Circular Rods
Horizontal Members - 3m Common Section	16mm OD Circular Rods
Mast Sections	8 x 3m Common Sections
Bolt Quantity	9xM20 Bolts (3 per leg) between 3m sections.

	Pal nuts to be used if self-locking nuts or lock washers are not used.
Holding Down Bolts	9xM24 HDB embedded to a depth of 600mm. See drawings for details.

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

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