

Series TEL

42m TEL - Normal

Description:

The given tower is designed as an equilateral triangle, with a fully welded steel lattice structure, composed by legs and bracings made of solid round bars.

The tower is prepared for installation of a 2 m toppole.

Specification:

Total theoretical tower weight = 6490 kg

Leg distance at tower base = 1715 mm

Foundation bolts: 12 x M36

The steel is hot dip galvanized according to BS/EN ISO 1461.

The design of the lattice tower is made according to:

BS/EN 1993-3-1 – Design of steel structures – Towers, masts and chimneys.

BS/EN 1991-1-4 – Actions on structures – Wind actions.

	In most areas in England, Cornwall and Wales, ($v_{b0}=24$ m/s)	In most areas up to Southern Scotland, ($v_{b0}=27$ m/s)	In most areas up to Northern Scotland ($v_{b0}=29$ m/s)
Bearing capacity (A_w) for terrain category II	19 m ²	13 m ²	8 m ²

A_w is the maximum total wind drag area incl. shape factor, that can be equally distributed over the top 9 m.

Ladder with hoops from base to top – 0,14 m²/m.

The following feeder load is assumed:

0,20 m²/m for each operator, (total of 0,60 m²/m) distributed on 2 sides.

Foundation types:

Normally a traditional Pier & Pad foundation is designed and casted for a TEL tower.

Carl C. can assist with the design if required, based on site specific geotechnical specifications.

