## TELECOMMUNICATION <br> Triangular Tower <br> DATA SHEET

## Series TEL

## 36m 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 $=4980 \mathrm{~kg}$
Leg distance at tower base $=1630 \mathrm{~mm}$
Foundation bolts: $12 \times \mathrm{M} 36$

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 <br> England, Corn- <br> wall and Wales, <br> $\left(\mathrm{V}_{\mathrm{b} 0}=24 \mathrm{~m} / \mathrm{s}\right)$ | In most areas <br> up to Southern <br> Scotland, <br> $\left(\mathrm{V}_{\mathrm{b} 0}=27 \mathrm{~m} / \mathrm{s}\right)$ | In most areas up to <br> Northern Scotland <br> $\left(\mathrm{v}_{\mathrm{b} 0}=29 \mathrm{~m} / \mathrm{s}\right)$ |
| :---: | :---: | :---: | :---: |
| Bearing capacity $\left(\mathrm{A}_{\mathrm{w}}\right)$ <br> for terrain category II | $20 \mathrm{~m}^{2}$ | $13 \mathrm{~m}^{2}$ | $9 \mathrm{~m}^{2}$ |

$A_{w}$ 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 $-0,14 \mathrm{~m}^{2} / \mathrm{m}$.

The following feeder load is assumed:
$0,20 \mathrm{~m}^{2} / \mathrm{m}$ for each operator, (total of $0,60 \mathrm{~m}^{2} / \mathrm{m}$ ) 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.


