

# Meteorology

## Triangular Tower

### DATA SHEET

Product no. MET 110,0M -00  
Ref. nr. 03.01.01.10  
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## Series MET

40-130 m

### Description:

The MET-Tower is made of solid-round bars, which are welded or bolted together. The design is optimized for wind measurements, and a slender structure composed of slim elements is the basis of the design. The tower is built of a number of sections, which are normally between 6 and 12m in length each.

The leg dimensions vary from 20 to 120mm in diameter and bracings from 12 to 40mm. For the bigger tower sections, bolted diagonals are used with outer diameter of 42 to 90mm.

The mast is designed to carry booms for instruments with a small wind drag area. A varying anemometer boom length ensures a flow distortion < 1% for the mast and 0.5% for the booms.

Ladder and fall-arrest system can be made as requested.

### Specification:

Standard wise, the steel is hot dip galvanized according to EN ISO 1461. Painting on top of the galvanizing in various colours is possible.

### The design criteria:

EN 1993-3-1 – Design of steel structures – Towers and masts,  
EN 1991-1-4 – Actions on structures – Wind actions.  
IEC 61400-12-1 – Power Performance Measurements.

For tall and slim structures, like meteorology towers, ice load is of great importance. Site specific environmental loads like wind- and ice loads are taken into account during design.

### Foundation types:

Normally a traditional Pier & Pad foundation is designed and casted for a MET tower. Carl C. can assist with the design, if required, based on site specific geotechnical specifications.

