

Frangible Weather Masts

ICAO's Frangibility Ruling

AERODROME DESIGN MANUAL PART 6, Frangibility – First Edition, 2006 states that:

...certain airport equipment and installations, because of their function, must be located in an operational area. All such equipment and installations as well as their supports should be of **minimum mass** and **frangible** in order to ensure that impact does not result in loss of control of the aircraft. Among these equipment are for example:

- Wind direction indicators
- Anemometers
- Ceilometers
- Transmissometers

Support structures for wind direction indicators, transmissometers and forward-scatter meters should be tested for frangibility in accordance with procedures for approach lighting towers.

Exel Wind Cone Masts



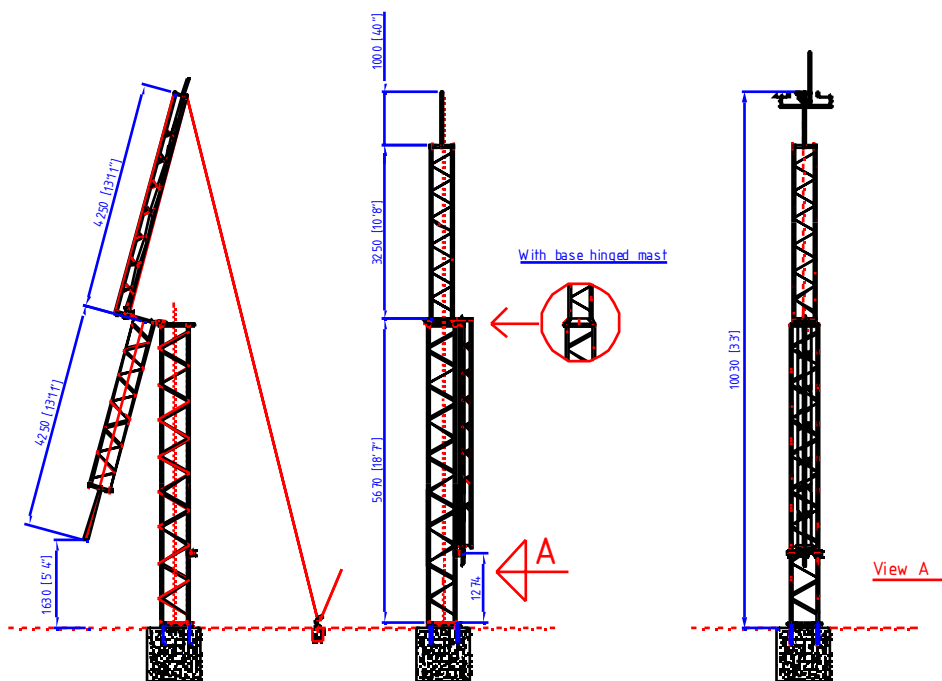
Exel wind cones are available in two configurations:

- **Externally** illuminated wind cone
 - **Internally** illuminated wind cone
- The wind cone can be full size Ø90 x 360 cm or heliport size Ø63 x 250 cm.



Exel masts are full scale impact tested according to the Aerodrome Design Manual Part 6, chapter 5 and FAA AC 150/5345-45C, section 4

- Exel lattice masts provide an excellent base for installation of various weather monitoring instruments. The **firm** but **lightweight structure** is available in a wide range of heights to cover practically any type of installation and ground condition.
- The standard colouring scheme is orange/white in seven sections, as specified in Annex 14. Other colouring schemes are available.
- The most typical installation interface for the weather instruments is a spigot at the top of the mast. Other interfaces are available upon request.
- The mast is supplied with tilting from the base as standard. For taller masts an option of centre hinge is available.



Built-in Frangibility:

- Built-in frangibility—no break-away points needed
- Rigid lattice structure of glass fibre material
- Transparent to electromagnetic signals
- Easy installation
- Maintenance free



- **Bottom hinged mast** is best suited for airports having the utility of an access platform. Servicing of the instruments can be done from the basket of the platform without lowering the mast down.
- **Centre hinged mast** can be tilted down by one service person for easy maintenance.



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