

Specification for High Masts of the Hinging type

LIGHTING STRUCTURES "MIDHINGE" TYPE MAST

The mast shall be designed in accordance with SANS 0225 and manufactured by an **ISO 9001: 2008** accredited company.

Designs shall be appropriate for the applicable Altitude and Terrain Category where the mast is to be installed

Mast Shaft

The mast shall be constructed to form a continuously tapered, totally enclosed, octagonal shaft.

The mast shaft shall consist of a fixed lower portion to which is hinged, at the mid-point, the "Lid" or counterbalance portion of the mast.

The upper portion of the mast is slip fitted to the lid section

The hinge shall comprise of two side plates welded to the lid section and round steel pin passing through the side plates and base section of the mast.

The lower portion shall be fitted with a suitably designed base plate for securing the holding down bolts of the mast foundation.

Floodlight Mounting Assembly

The mast shall be fitted with a suitable cross arm/luminaire mounting assembly fabricated from steel sections and capable of carrying the specified number and type of luminaires.

All steelwork must be hot dipped galvanised to SABS ISO1461

Electrical Equipment

The Electrical distribution board shall be mounted in the base section of the mast and accessible only once the lid section has been partially opened

A multicore trailing cable shall be permanently connected to the distribution board and the splitter box mounted on top of the mast

Hinging of the mast

The lid section shall be secured to the base section by means of a bolt requiring a purpose designed spanner to loosen the bolt

The lid section shall be secured to the base section with a removable chain to prevent accidental or unplanned opening of the lid section

The lid section must be opened only once it has been secured to a rope or, where applicable, to the purpose made portable winch secured to the mast base

During raising and lowering and while in the horizontal position, the mast must withstand the wind forces from any direction as well as it's own weight and any inertial effects due to sudden stoppage.