

LeBLANC CIH Lighting Structures (Pty) Ltd

Reg No. 2001/002285/07

Specialists in the design, supply and installation of Towers and Masts for
Telecommunications, Broadcasting and Lighting

DETAILED TECHNICAL SPECIFICATION FOR MIDHINGE MAST

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

The mast must consist of a fixed lower part and a moving part hinged to the fixed part at approximately half the height of the mast.

The moving part of the mast shall have the floodlight cross-arm mounted on it and must be adequately counterbalanced.

The hinge must be made from stainless steel.

The hot dip galvanized mast must be manufactured from Grade 300WA steel having a minimum tensile strength of 430 N/mm square with **a minimum wall thickness of 4mm at any point in the mast structure.**

The moving portion shall consist of sections fitted together on site by slip-joints.

No welding on site is allowed.

The mast, when fully equipped with the luminaries, must be designed to withstand a wind velocity appropriate to the site conditions. During raising and lowering and while in the horizontal position, the mast must withstand the wind forces from any direction as well as its own weight and any inertial effects due to sudden stoppage.

An opening shall be provided in the base of the mast for access to the electrical distribution board. The opening shall only be accessible after the mast lid section has been hinged open. A safety chain must be provided which will ensure safe working conditions while work is conducted on the distribution board.

The mast must be lowered and raised with a lightweight, manually operated but robust portable winch which can be stored in the base compartment.

The winch unit must be securely attached to fixed lower part of the mast and the winch cable to the movable part.

A spring-loaded gravity ratchet must ensure that when the operating handle is released during the raising and lowering operation, the moving part stops in

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Directors: Dr T. Mokgokong (South African) MJ Madungandaba (South African) G.E. Patton (Canadian)
J Perry (British)

18 Johnson Road, Pretoriusstad, Nigel 1491 South Africa. E-mail: gordon@lightingstructures.co.za
P.O.Box 1592, Nigel 1490. South Africa. Tel: 27 11 814-1404/5/6 Fax: 27 11 814-1444

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whatever position it is in. The ratchet must be fitted with a lever which must be depressed with a constant pressure during the whole operation of lowering the mast. A round bracket must be welded into the top fixed part of the mast to prevent damage to the trailing cable while lowering or raising the mast.

The luminaries must be permanently connected to the supply cable, to facilitate testing when the mast is in the lowered position. No additional cable or connections are allowed.

Masts which require any form of power disconnection while being lowered will not be considered.

The mast manufacturer shall be ISO 9001 2000 certified. Failure to submit the proof of certification from your mast supplier may render your tender invalid.

Specification Check List

Specification Statement	Indicate YES or NO
Has the mast been designed according to SANS 0225	Yes
Is the mast designed using a minimum thickness steel plate of 4mm	Yes
Is your mast supplier ISO 9001 2000 accredited as requested in the specification	Yes
Has a copy of your mast suppliers ISO 9001 2000 certification been included with your tender as per specification requirement	Yes
Is the mast designed to work with a Hand operated winch as per specification	Yes
Is the mast a bent up section mast as per specification	Yes

Contact persons should further information be required :

Raymond Nel **General Manager** **011 814-1404 or 082 449 2252**
Jacques Tait **Sales Representative** **011 814-1404 or 083 701 4253**

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