

SPECIFICATIONS

TOP PLATE ASSEMBLY

The headframe assembly shall consist of a 1/4" thick minimum top plate, with sheave support plates fabricated from a minimum 11 gauge steel sheet. The sheave support plates shall be welded to the headframe base plate. All steel plates shall be laser cut for accuracy. The complete headframe assembly shall be hot dipped galvanized per ASTM A-123 after fabrication.

Hoist cables shall operate over corrosion resistant 5-inch diameter steel sheaves. The entire cable groove surface shall be machined to eliminate any rough surface on which the cable shall ride.

The main power cord shall each be supported by a minimum of two large 6-inch non-conductive thermoplastic polymer power cord sheaves grooved to provide for a non-abrasive smooth operation. A two piece threaded male and female thermoplastic polymer insulating bushing assembly shall be installed on the headframe opening to prevent wear on the power cord as it travels up and down the pole.

All sheaves shall have sintered bronze oilite bearings and run on a stainless steel axle secured with selflocking stainless steel hardware. Keeper bars shall be positioned at both ends of the sheave assemblies to keep the cord in its track during pole erection and during normal operation.

The top latching assembly shall contain three (3) symmetrically located, extremely stout, precision cast matching stainless steel latch pin and enclosed cam mechanism to assure corrosion resistant, trouble-free operation for years to come. All moving latch parts are bolted to the ring for servicing from the ground. There shall be no moving latch parts or springs attached to the headframe assembly. All motion required to achieve latching or unlatching shall be internal to the latch cam.

Latching occurs by the alternate raising and lowering of the floodlighting service platform. When latching of the service platform occurs no horizontal movement of the fixtures which can cause fixture damage is permitted.

Two cast aluminum stabilizing and guide sockets shall be mounted on the underside of the headframe assembly. The 1-3/4" socket opening shall be tapered, cone shaped for locking an aliening the 1-1/2" x 12" min. galvanized steel locking pin mounted on the sportlighting service platform up against the headframe. The galvanized steel locking pin shall insert a minimum of 6" into the cast aluminum guide socket. This will provide both stabilization of the platform and prevent horizontal movement of the service platform when

in its latched position. The minimum height of the aluminum guide socket is (4) inches.

When in the latched position the space between the headframe and the sportlighting service platform shall be no more than six inches when in the locked position. All hardware is corrosion resistant stainless steel.

The headframe assembly shall have a copper-free, spun aluminum cover, retained on its 360 degree perimeter by a stainless steel clamp band with stainless steel safety latching pin with self-locking hardware. The dome and clamp band assembly shall provide a weather-tight seal against the elements for the top plate roller assemblies. A 36" lightning rod will mount atop of the headframe.

THE FLOODLIGHTING SERVICE PLATFORM ASSEMBLY

The floodlighting service platform for more than 12 fixtures, shall be fabricated from two 6"x 2" x #7 gauge spun steel rings per ASTM A569, with the appropriate length of 2-1/2" square tubing for mounting of up to 27 GE floodlighting fixtures plus 2 GE HMAA high mast fixtures, hot dipped galvanized per ASTM A-123 after fabrication. The floodlighting service platform shall have a prewired, weathertight, corrosion resistant aluminum enclosure with 3 conductor, 16 AWG., type SEO 105 degree cable. The prewired distribution box shall be capable of accepting up to 24 fixtures, with 600 volt terminal blocks for each individual fixture wire. The distribution box to permit testing of the floodlighting fixtures while the service platform is in the lowered position.

On the underside of the service platform shall mount a quantity of three, roller-contact, spring-loaded stainless steel centering arms with polymer rollers to balance and center the ring and prevent shock to the lamps from impact of service platform with the pole.

Highly visible 6" minimum retro-reflective position indicator flags make for easy day or night operation.

The three hoist cables shall be stainless steel wound anti-rotational aircraft cord, 1/4" diameter manufactured to meet MIL-W83420C. These special cables are specifically designed for lowering device applications and virtually make "twistings" a thing of the past.

A transition assembly shall be supplied to attach the stainless steel wound anti-rotational aircraft cord. The winch cable shall be 5/16" diameter manufactured to meet MIL-W83420C.

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Three hoist cables shall pass up through the pole shaft, over the top plate hoist cable sheaves, to the service platform, where they travel through the stainless steel latch pin and stainless steel guides and compression spring assembly and terminate with a collet-type strand-vice device.

THE INTERNAL MOTORIZED WINCH PLATE ASSEMBLY

A quantity of one (3 pole) Square "D" circuit breakers shall be mounted in an aluminum enclosure on the winch sub-plate to act as the disconnecting means for the lowering device. Prewired to the breaker shall be twist-lock, weathertight connectors matching those used in the system, mounted to a 10' tail of power cord of the same type, gauge and number of conductors as the power cord. This cord and connector shall be used to alternately supply power to the lowering device system, the test inlets and the internal motorized winch assembly.

The winch shall be an enclosed oil-bath worm gear winch, set with a reduction ratio of 30 to 1. The selflocking precision winch protects against ring runaway in the event of a power failure.

The internal motor assembly shall incorporate a heavy duty 2 horsepower minimum, reversing type drive motor, torque limiter, drive shaft and electrical controls. A twenty-five-foot long cord on the remote electrical control box provides for remote operation of the system.