

**SPECIFICATIONS****HEADFRAME ASSEMBLY**

The headframe assembly shall consist of a hot dipped galvanized top plate, with sheave support plates fabricated from a minimum 11 gauge steel sheet. The sheave support plate shall be welded to the headframe base plate.

Hoist cables shall operated over corrosion resistant 5-inch diameter aluminum steel sheaves. The main power cord shall 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 stainless steel shafts.

On the under-side of the headframe shall mount three cast aluminum guide sockets. The socket opening shall be tapered cone shaped for locking and aliening the stainless steel locking pin mounted on the luminaire ring up against the headframe. The minimum height of the aluminum guide socket is 4 inches.

All hardware is corrosion resistant stainless steel.

The headframe assembly shall have a spun aluminum cover, retained on a complete 360 degree radius by a stainless steel clamp band with stainless steel safety latching pin with self-locking hardware. Atop the headframe shall be a 36" lightning rod.

The headframe shall bolt directly to the high mast pole. The headframe base plate and pole top plate shall have four 9/16" by 3" slotted holes on 10-3/4" arc to accommodate 1/2" type 18-8 stainless steel hardware..

**THE LUMINAIRE RING ASSEMBLY**

The luminaire ring shall be fabricated to 6" x 2" x #7 gauge spun steel per ASTM A-569, with the appropriate number of luminaire mounting tenons, hot dipped galvanized per ASTM A-123 after fabrication. The luminaire ring shall have a prewired weathertight aluminum box with 3 conductor, 16 AWG., type SEO 105 degree cable. The prewired distribution box shall be capable of accepting upto 16 fixtures. A weathertight twist lock test inlet shall be mounted to the terminal box to permit testing of the luminaires while the ring is in the lowered position.

The luminaire ring shall contain 14 PVC fixed rollers mounted on the inside of the luminaire ring to protect the ring from impacting the pole.

Highly visible 6" minimum retroreflective indicator flags shall be mounted on the ring which will provide positive indication at the handhole that the required 300 pounds of total seating force has been applied, visible from an extended operating position 20' from the base of the pole.

The three hoist cables shall be 1/4-inch stainless steel wound anti-rotational cable. Winch cable is 1/4"-inch stainless steel wound anti-rotational cable. These special cables are specifically designed for lowering device applications and virtually make "twistings" a thing of the past. Swivel bearings may be used in the transition assembly but they shall not take the place of the anti-rotational cable.

The three hoist cables shall pass up through the pole shaft, over the headframe sheaves, to the luminaire ring, where they travel through guides and a compression spring and terminate with a collate-type device.

A safety mechanism shall be located in the base of the pole and consist of a stainless steel safety cable and hook to act as a backup to the winch cable assembly in maintaining the tension on the transition assembly. The safety cables shall be secured to the foundation or anchor bolts and not attached to the pole structure.

**INTERNAL MOTOR ASSEMBLY**

A Square D circuit breaker shall be mounted on the winch sub-plate to act as the disconnecting means for the lowering device. Prewired to the breaker shall be a twist-lock, weathertight connector matching those used in the system, mounted to a 8' 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 inlet and the internal motorized winch assembly.

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

The internal motorized winch assembly shall incorporate a 120V Milwaukee drill press motor (which incorporates both the motor and reducer in one unit), a torque limiter, drive shaft electrical controls and a Stepdown Transformer. The Torque limiter is factory set to provide safe reliable operation. Twenty foot long cord on the remote electrical control box provides for remote operation of the internal motorized winch assembly.