Motorized Roll Drop Device- Device shall consist of an 6061-T6 aluminum alloy tube eight inches in diameter maximum, larger diameter tube shall not be acceptable for this device. Each end of the tube shall have a hub and shaft assembly pressed into the end of the tube. Connections utilizing bolts or screws shall not be acceptable. The shafts shall be machined from ASTM A193-B7 bar stock. Shaft and hub diameter shall be properly sized to carry imposed loads and fit to prevent slipping and wobble in the tube. The shafts shall be supported with two sealed self aligning pillow block bearings at each end. Bearings shall be sized to accommodate anticipated loads and speeds. Pillow blocks shall be attached to the end weldment with two each 3/4" grade eight bolts with locking nuts or lock washers. If required tube lengths shall be joined by means of a 6061-T6 aluminum alloy sleeve machined to press into the end of each roll tube. The fit shall be tight enough to prevent slipping and wobble in the roller tube. Connections utilizing bolts or screws shall not be acceptable. End weldment shall be fabricated from A36 steel tubing, not less than 1/4" thick and sized to accept the anticipated load. An arm fabricated from A36 steel tube shall extend vertically below the roller tube. This tube shall be sized to accept the loads imposed by the tensioning cable. A ½" dia. 6x19 galvanized aircraft cable terminated with a heavy pattern thimble and swage fitting at each end. The tensioning cable shall be used to pre-load the roller tube assembly. The tensioning cable shall attach to the end weldment by means of a 1" dia. 12" long jaw end draw bolt.

The device shall be engineered to accept a load of not less than fourteen (14) pounds per linear foot live load. The roll tube shall be driven by means of a #50 roller chain attached to the shaft with a steel chain sprocket keyed to the shaft. Keys shall be in accordance with ANSI B17.1. The shaft end, sprockets and chain shall be fully guarded. The motor shall be a 1/3 hp 120v ac electric motor with an integral electric break. The motor shall have a minimum AGMA service factor of 1.0 for constant operation. The break motor shall attach to a gearbox reducer. The break shall be direct acting electro-magnetic with manual release. The break shall release by energizing the coil simultaneously with the motor winding to provide fail safe breaking in the event of a power failure. The entire assembly shall be engineered to have a drop speed of not less than 39 fpm. The motor shall mount to the vertical arm of the end weldment with a welded 1/4" thick steel plate, slotted to allow for adjustment of the roller chain. Each unit shall have a mechanical rotary type limit switch as manufactured by Furnas Electric or equal. The unit shall have two independently adjustable switch/cam sets and be mounted to the end weldment in such a way which permits easy adjustment of the switch settings. Attached to the support end shall be a NEMA 3 cabinet housing two (2) Omron, or equal, control relays and electrical terminal strips. Control shall be by means of a wall mounted control panel with push-and-hold buttons gup & downh.

The device shall have a live load capacity of not less than fourteen (14) pounds per foot, 840 pounds at sixty feet. At full load the tube shall have not more than .2" of deflection. Devices having lower capacity or greater deflection under full load shall not be acceptable. Unit shall be suspended from structure by means of two (2) aircraft cables or proof coil chains or four (4) lengths of threaded rod.

Formance, Inc. Panavista3 with a tube length of ___ feet long.