

ITEM 10564.22 M - CABLE RESTRAINER ASSEMBLY

DESCRIPTION

The work under this item shall consist of bolting cable restrainer anchorages to the bottom flange of the existing stringers and installing the cable restrainer units at the locations shown on the Plans.

MATERIALS

The materials or components required for each cable restrainer assembly shall be as shown on the Plans or specified herein and include the following: bolts, nuts, two restrainer cables assemblies, two stringer restrainer anchorages, washers and all incidentals.

The wire rope shall be 19 mm preformed, 6 x 19, independent wire rope core (IWRC), in accordance with the requirements in Federal Specification RR-W-410D, right regular lay, manufactured of stainless steel with a minimum breaking strength of 20.86 metric tons. Two certified copies of mill test reports of each manufactured length of the wire rope used shall be furnished to the Engineer.

The restrainer cable assemblies shall consist of wire ropes, swaged fittings with stud, nuts and washers and shall conform to the following requirements:

1. The swaged fitting shall be machined from hot-rolled bars of steel conforming to AISI C1035, and shall be annealed, suitable for cold swaging. The manufacturer's identifying mark shall be stamped on the body of the swaged fitting.
2. The 25.4 mm diameter stud shall conform to the requirements of ASTM A449 after galvanizing. Prior to galvanizing, a 9.5 mm slot for the locking pin shall be milled in the stud end.
3. Nuts, shall conform to the requirements of ASTM A 325 M except they need not be Grade DH of ASTM A563 M or grade 2H of ASTM A194 M, nor is it necessary for them to be lubricated.
4. Unless otherwise specified, all steel parts shall conform to the requirements of ASTM A36 M or A 576 Grade 1030 (AISI 1030) and shall be other than rimmed or capped steel.
5. All steel parts, except the stainless steel wire rope, shall be galvanized conforming to the requirements of Subsection 719 - 01.

CONSTRUCTION DETAILS

1. A lock pin hole to accommodate a 6.35 mm plated spring steel pin shall be drilled through the head of the swaged fitting to retain the stud in proper position.
2. The swaged fittings, stud and nut assembly shall develop the specified breaking

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strength of the cable.

3. The cable assemblies shall be shipped as a complete unit including stud and nut and incidental hardware.
4. One sample of cable properly fitted with swaged fitting and right hand thread stud at both ends, one meter in total length shall be furnished by the Contractor prior to the fabrication of the cable restrainers. The sample cable restrainer shall be tested by a qualified materials testing laboratory to ascertain that the cable assembly develops the specified breaking strength of the wire rope. The Contractor shall give the Engineer the certified test results of the sample cable assembly testing. The cost of furnishing the sample cable assembly and testing shall be paid for under the cost of this item.
5. The Contractor shall be responsible for determining the required lengths of the cable assemblies.

METHOD OF MEASUREMENT

This work will be measured as each cable restrainer assembly installed. The cable restrainer assembly consists of two stringer restrainer anchorages, two cable restrainers and all bolts and hardware required to complete the work.

BASIS OF PAYMENT.

The unit price bid includes the cost of furnishing all labor, materials and equipment necessary to complete the work described in this Specification, Plans or as directed by the Engineer. The work includes installing the cable restrainers and restrainer anchorages at locations specified in the Plans.