

SECTION 11165
DOCK BUMPERS

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NTS: This specification section requires careful review by the specifier. The specifier is required to modify the section according to the requirements of the project. Brackets indicate items to be checked, completed, edited, selected, or filled in. NTS notations and brackets should be removed in the final printing.

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PART 1 -- GENERAL

1.1 THE REQUIREMENT

- A. The CONTRACTOR shall furnish all labor tools, equipment, materials, and supplies required to complete the work as indicated on the Drawings and specified herein.
- B. This Section covers the furnishing and installation of dock bumpers, complete, as shown, specified or required for a complete and proper installation.

1.2 RELATED WORK SPECIFIED ELSEWHERE (Not Used)

1.3 REFERENCE SPECIFICATIONS, CODES AND STANDARDS

- A. Comply with the applicable reference specifications as specified in the GENERAL REQUIREMENTS.

1.4 CONTRACTOR SUBMITTALS

- A. Submittals shall be made in accordance with the GENERAL REQUIREMENTS.
- B. The following submittals and specific information shall be provided.
 - 1. Complete materials list of all items proposed to be furnished and installed under this Section.
 - 2. Manufacturers' specifications and other data required to demonstrate compliance with the specified requirements.
 - 3. Shop drawings showing precise dimensions of the work and all other data needed to ensure proper and adequate provision in concrete forming, reinforcement, and placement to accommodate the work of this Section.
 - 4. The manufacturer's recommended installation procedures, which will become the basis for inspecting and accepting or rejecting actual installation procedures used on the work.

1.5 QUALITY ASSURANCE (Not Used)

1.6 DELIVERY, STORAGE AND HANDLING

- A. Protect materials before, during and after installation and protect installed work and materials of all other trades. In the event of damage, immediately make all repairs and replacements necessary to the acceptance of the ENGINEER and at no additional cost to the CITY.
- B. Deliver all materials to the jobsite in their original unopened containers with all labels intact and legible at time of use. Store in strict accordance with the manufacturer's recommendations as reviewed by the ENGINEER.

PART 2 -- PRODUCTS

2.1 MATERIALS

- A. Bumpers: 4 inches or 4-1/2 inches by 12 inches (on dock) and by 36 inches (on wall) individual pieces of rubberized fabric. These pieces shall be stacked together to form sections approximately 36 inches long and assembled on edge and compressed between two pieces of stainless steel angle 3 inches by not less than 2-1/4 inches by 3/8 inches and through bolted with 3/4-inch diameter stainless steel rods having both ends threaded and secured with stainless steel nut and washer. Assembly shall be compressed to approximately 1,500 pounds.
- B. Steel Rods: Either one end welded to an end angle and the other end threaded and secured with nut and washer or threaded both ends. Rod may be 3/4-inch round or 1/4 inches by 3 inches flat bar with threaded bolt welded on ends. Provide lock nuts on threaded connections.
- C. End Angles: Outstanding leg drilled to receive two anchor bolts.
- D. Bottom Angle: Stainless steel provided at the bottom of each bumper. Angle shall be welded and drilled to receive three anchor bolts.
- E. Anchor Bolts: 3/4-inch diameter, stainless steel "J" bolts, not less than 10 inches long, 1-1/4-inch threaded projection.
- F. Other Materials: All other materials, including but not necessarily limited to anchorage devices, shall be as recommended by the manufacturer.
- G. Type (On Wall): Bumpers shall be 12 inches high by 36 inches wide by 4 inches or 4-1/2 inches thick, laminated truck tire type rubberized fabric bound by 3/4-inch diameter stainless steel rods full length with 1/4-inch stainless steel angle end plates.

2.2 MANUFACTURERS OR EQUAL

- A. Rite-Hite Corp.;
- B. Overhead Door Corp.;

PART 3 -- EXECUTION

3.1 INSPECTION

- A. Examine the areas and conditions under which dock bumpers will be installed. Remedy conditions detrimental to proper and timely completion of the work. Do not proceed until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install dock bumpers in strict accordance with the recommendations of the manufacturers, anchoring all components firmly into position for long life under hard use. Provide anchor bolts of type and sizes required for welding to steel or building into concrete. Install bumper end angles on bolts, and fasten securely in place.

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