

PART 1 - GENERAL

- 1.1 RELATED REQUIREMENTS
- .1 Section 01 33 00 - Submittal Procedures..
 - .2 Section 01 45 00 - Quality Control.
- 1.2 MEASUREMENT AND PAYMENT
- .1 Vertical Rubber Fenders: will be paid by the unit. Supplied and installed as per drawing details.
- 1.3 REFERENCE STANDARDS
- .1 ASTM International
 - .1 ASTM D 412-[06ae2], Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers-Tension.
 - .2 ASTM D 429-[08], Standard Test Methods for Rubber Property - Adhesion to Rigid Substrates.
 - .3 ASTM D 2240-[05(2010)], Standard Test Method for Rubber Property-Durometer Hardness.
- 1.4 ACTION AND INFORMATIONAL SUBMITTALS
- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
 - .2 Shop Drawings:
 - .1 Submit drawings stamped and signed by Contractor.
 - .2 Indicate items as follows:
 - .1 General arrangement of fender units.
 - .2 Location and sizes of anchor bolts.
 - .3 Arrangement and attachment of tires.
 - .4 Supporting system and connection to deck structures.
- 1.5 DELIVERY, STORAGE AND HANDLING
- .1 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
 - .2 Storage and Handling Requirements:
 - .1 Store materials on site and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store and protect materials from damage.
 - .3 Replace defective or damaged materials with new.

PART 2 - PRODUCTS

2.1 MATERIALS

- .1 Rubber Fender:
 - .1 Material: New marine black EPDM standard hardness of 75 duro.
 - .2 Physical Properties: 250 mm x 250 mm x 2265 mm long, D-shape with D-bore extruded rubber fender.
 - .3 Attach to wharf with (4) four 25 mm mm long galvanized lag bolts.
 - .4 100 mm x 19 mm thick galvanized steel flat bar full length of fender.

PART 3 - EXECUTION

3.1 EXAMINATION

- .1 Verification of Conditions: verify conditions of substrates previously installed under other Sections or Contracts are acceptable for tire bumper installation in accordance with manufacturer's written instructions.
 - .1 Visually inspect substrate in presence of Departmental Representative.
 - .2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied.

3.2 INSTALLATION

- .1 Install in accordance with accompanying drawings details.
- .2 Alter system components in accordance with written permission of Departmental Representative only.

3.3 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
 - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.