

SECTION 11160 - LOADING DOCK EQUIPMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Dock bumpers.
 - 2. Dock seals.
 - 3. Metal hoods
- B. See Structural Drawings for Division 5 Section "Metal Fabrications" for curb angles at edges of recessed pits.

1.3 DEFINITIONS

- A. Operating Range: Maximum amount of travel above and below the loading dock level.
- B. Working Range: Recommended amount of travel above and below the loading dock level for which loading and unloading operations can take place.

1.4 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
 - 1. Include concrete pit details showing pit dimensions, and locations for curb steel embeds.
- C. Samples: For each type of dock seal cover material indicated.
- D. Maintenance data.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.
 - 1. Maintenance Proximity: Not more than four hours' normal travel time from Installer's place of business to Project site.
 - 2. Maintenance Availability: Authorized representative shall employ service technicians that are available for emergency repair service 24 hours every day, and 365 days a year.

- B. Field Verification: Authorized representative shall visit the project site and field-verify the size of dock door openings, and driveway sloping conditions prior to product fabrication. Any deviation in openings sizes, or clearance obstructions shall be identified, and shown to the project superintendent.
- C. Dock-Leveler Standard: Comply with MH 30.1 "Safety, Performance, and Testing of Dock Leveling Devices.

1.6 COORDINATION

- A. Dock Seals: Coordinate size and locations of seal pads and metal hoods to ensure proper clearances for installation

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Refer to Harris Teeter National Account Contact List and provide the following loading dock equipment:
 - 1. Dock bumpers.
 - 2. Dock seals.
 - 3. Metal hoods.

2.2 DOCK BUMPERS

- A. Laminated Vertical Tread Bumpers: Provide units of size indicated, fabricated from multiple plies cut from fabric-reinforced rubber tires to a uniform thickness of 6 inches by 10 inches wide by 20 inches high. Laminate plies under pressure on 3/4-inch diameter steel supporting rods that are welded and bolted to 1/4-inch-thick structural steel angle closures with predrilled anchor holes. Size angles to provide not less than 1 inch of tread plies extending beyond the face of the closure angles.
 - 1. Coordinate the thickness with the thickness of the dock seal and that the seals are not compressed more than 4 inches.
- B. Anchorage Devices: Provide anchor bolts, nuts, washers, bolts, sleeves, cast-in-plate and other anchorage devices as required to fasten bumpers securely in place and suit installation type indicated. Provide hot-dip galvanize anchorage components.

2.4 DOCK SEALS

- A. General: Provide the manufacturer's standard dock seals consisting of fabric-covered foam pads designed to compress under pressure of the truck body to form an air-tight seal at the jambs and head of loading dock openings.
- B. Size of Jamb Pads: Provide jamb pads not less than 12 inches wide and 12 inches deep, sized to suit opening height.
 - 1. Reinforcing: Inside surface of both side panels shall be reinforced full length with weight 40 oz./sq. yd. Hypalon coated nylon.

- C. Size and Type of Head Pad: Provide head pad of the same depth as jamb pads, sized to suit opening width, and as follows:
 - 1. Type: Provide stationary head pads.
 - a. Height: Not less than 18 inches.
- D. Construction: Provide the manufacturer's standard construction consisting of single- or double-ply, coated, fabric-covered, urethane-foam core with supporting frame.
 - 1. Cover Fabric: Vinyl-coated nylon or polyester cover fabric with total minimum weight of 40 oz. per sq. yd.
 - 2. Fabric Color: Black.
 - 3. Guide Strips: 4-inch-wide, coated, nylon guide strips on jamb pads. Color shall be yellow.
 - 4. Pleated Protectors: Provide protectors of face of jamb pads of overlapping layers of coated fabric attached to base fabric.
 - 5. Treated Wood Support Frame: Select structural-grade dimension lumber according to DOC PS 20, kiln-dried, with steel mounting hardware.
- E. Unit Projection: Coordinate unit projection, and taper pads to accommodate driveway approach as indicated on site plans (3 percent grade maximum, unless otherwise noted on plans). Prior to fabrication of dock seals, field verify finished driveway approach, and taper projection of pads for any grade percentage greater than 1.

2.5 METAL HOODS

- A. General: Provide the manufacturer's standard metal units designed to form a self-contained hood system complete with fasteners, supports and gutters.
- B. Shape and Size: Fabricate units to sizes and shapes indicated or required to fit door opening sizes shown.
- C. Construction: Provide materials complying with the following requirements.
 - 0. Metal Hoods: Fabricate hoods and gutters of 16 gauge G-90 galvanized steel as is standard with the manufacturer.
 - 1. Metal Framing: Fabricate center supports of 14 gauge G-90 galvanized steel, as is standard with the manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of loading dock equipment.
- B. Examine walls and floors of pits for suitable conditions where recessed dock equipment is to be installed. Pits shall be plumb and square, and properly sloped for drainage from back to front of dock.
- C. Proceed with installation of loading dock equipment only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. General: Coordinate installation of loading dock equipment indicated to be attached to or recessed into concrete or masonry, and furnish anchoring devices with templates, diagrams, and instructions for their installation.

3.3 INSTALLATION

- A. General: Comply with manufacturer's detailed written instructions for installing loading dock equipment. Install loading dock equipment, including accessories as required for a complete installation.
- B. Examine curb angles, walls and floors of pits for suitable conditions where recessed loading dock equipment is to be installed. Pits shall be plumb and square and properly sloped for drainage from back to front of loading dock.
- C. Dock Bumpers: Attach dock bumpers to the structure in a manner that complies with requirements indicated for spacing, arrangement, and position relative to top of platform and anchorage.
 - 1. Bolted Attachment: Attach dock bumpers to preset anchor bolts embedded in concrete or to cast-in-place inserts or threaded studs welded to embedded steel plates or angles. If preset anchor bolts, cast-in-place inserts, or threaded studs welded to embedded plates or angles are not provided, attach dock bumpers by drilling and anchoring with expansion anchors and bolts.
- D. Dock Seals: Attach supporting frames securely to building structure in proper relation to openings, dock bumpers, and dock levelers to ensure compression of dock seals when trucks are positioned against dock bumpers.
- E. Metal Hoods: Securely attach metal hoods to the building structure in proper relationship to openings, in accordance with hood manufacturer's recommendations.

3.4 CLEANING AND PROTECTING

- A. Restore marred, abraded surfaces to their original condition.
- B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure loading dock equipment is without damage or deterioration at the time of Substantial Completion

3.5 DEMONSTRATION

- A. Startup Services: Engage a factory-authorized service representative to perform startup services and to train Owner's maintenance personnel as specified below:
 - 1. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
 - 2. Train Owner's maintenance personnel on procedures and schedules related to startup and shutdown, troubleshooting, servicing, and preventive maintenance.
 - 3. Review data in maintenance manuals. Refer to Division 1 Section "Closeout Procedures".
 - 4. Schedule training with Owner, through Contract Manager, with at least seven days advance notice

END OF SECTION 11160

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