

LOADING DOCK EQUIPMENT

PART 1 GENERAL

- 1.1 SECTION INCLUDES
 - A. Loading dock equipment of the following types:
 - 1. Dock levelers.
 - 2. Control stations.

1.2 RELATED SECTIONS

- A. Section 03100 Concrete Forms and Accessories: Placement of anchors into concrete.
- B. Section 03300 Cast-In-Place Concrete: Docks and pits.
- C. Section 05500 Metal Fabrications: Metal angles for edge of dock.

1.3 REFERENCES

- A. American National Standards Institute (ANSI):
 - 1. ANSI MH30.1- Industrial Loading Dock Boards (Ramps).
 - 2. ANSI MH29.1- Industrial Scissor Lifts.
 - **3.** ANSI MH30.3- Vehicle Restraining Devices (Safety, Performance, and Testing)

1.4 SUBMITTALS

- A. Section 01330 Submittals Procedures: Procedures for submittals.
- B. Product Data: For each product specified.
 - **1.** Bumpers: Indicate unit dimensions, method of anchorage, and details of construction.
 - 2. Levelers: Indicate materials and finish, installation details, roughing-in measurements, and operation of unit.
- C. Shop Drawings:
 - 1. Indicate required opening dimensions, tolerances of opening dimensions, placement dimensions, and perimeter conditions of construction.
 - 2. Wiring diagrams including location of control stations and disconnect switches.
- D. Assurance/Control Submittals:
 - 1. Certificates: Manufacturer's certificate that Products meet or exceed specified requirements.
 - **2.** Qualification Documentation: Submit documentation of experience indicating compliance with specified qualification requirements.

1.5 QUALITY ASSURANCE

A. Dock Levelers: Conform to requirements of ANSI MH30.1.

- B. Vehicle Restraining Devices: Conform to requirements of ANSI MH30.3.
- C. Manufacturer Qualifications:
 - 1. Manufacturer specializing in manufacturing Products specified with minimum 30 years experience.
 - 2. Manufacturer to have quality assurance improvement programs.
 - **3.** Manufacturer shall be associated with Loading Dock Equipment Manufacturers (LODEM) setting ANSI standards.
 - 4. Manufacturers welding procedure compliant with A.W.S.D1 .1 specifications.
- D. Installer Qualifications: Company specializing in performing the Work of this Section with minimum 5 years experience.
- 1.6 DELIVERY, STORAGE, AND HANDLING
 - A. Refer to Section 01600 Product Requirements: Transporting, handling, storage, installation and protection of products.
- 1.7 WARRANTY
 - A. Warranty: Provide manufacturer's standard warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS

 A. Acceptable Manufacturer: Blue Giant Equipment Corp., which is located at: 85 Heart Lake Rd. S., Brampton, ON, Canada L6W 3K2 Toll Free Tel: 800-668-7078 Tel: 905-457-3900 Email: <u>marketing@bluegiant.com</u> Web: <u>www.BlueGiant.com</u>

2.2 HYDRAULIC DOCK LEVELERS

- A. Hydraulic Dock Levelers: Edge-of-Dock (EOD) Dock Levelers, Model MDC-H as manufactured by BLUE GIANT.
 - 1. Type: Hydraulic edge-of-dock, hinged dock leveler welded to 8 inches (203 mm) pour-in channel embedment within foundation dock face and comes complete with wall mounted bumper blocks. Deck length includes 15 inches (381 mm) lip when extended.
 - a. Model: MDC7230H: 72 inches (1829 mm) W by 27 inches (686 mm) L.
 - b. Model: MDC7830H: 78 inches (1981 mm) W by 27 inches (686 mm) L.
 - 2. Function:
 - a. Vertical Travel: Working range up to 5 inches (127 mm) above and below dock level.
 - b. Automatic Vertical Compensation: Unit provides float up to 5 inches (127 mm) above and below dock level.
 - c. Lip Operation: Lip automatically extends as unit is lowered onto truck bed. Lip is returned to stored position upon truck's departure. The length of the lip shall not be less than 15 inches (381 mm) overall length.
 - **3.** Operation:

- a. Hydraulic Model: Electro-hydraulic raising of the deck, controlled from a remote mounted NEMA4X rated push-button control station, 3-1/4 inches W x 8 inches H x 5-3/4 inches D (83 x 165 x 130 mm) in size. Attendant presses the constant pressure type push-button and deck is hydraulically powered to the vertical position. Attendant releases push button and lip extends while deck lowers. Supplied with a 1 HP motor.
- Remote push-button control station: Provide a single operation push button control station with constant pressure "I" (UP) button. Control station is NEMA4X/IP65 rated, 3-1/4 inches W x 6 -1/2 inches H x 5 1/8-inches D (83 x 165 x 130 mm) in size.
- 4. Rated Capacity:
 - Welding procedure compliant with ANSI AWS D1.1 (2008) specifications. ANSI/NFPA70 approved electrical components. Capacity 30,000 lb (13,636kg). Deck and lip constructed out of high tensile steel. Four way diamond tread plate. Grease fittings on lips.
- **5.** Power: ____V, ___ Amps, ___ Phase.
- 6. Finish and Color:
 - a. Dock Levelers: Unit painted gray.
- 7. Warranty: Warranties are subject to standard limitations on liability. Consult manufacturer for full details on warranty information and product registration.
- 8. Standard Accessories:
 - a. Night Locks.
 - b. Two model DB411 laminated bumpers 14 inches W by 10 H by 4.5 inches D (355 by 254 by 114mm).
 - c. 15 inch (381 mm) long lip
- **9.** Optional Accessories:
 - Manual light communication package with 115VAC main power feed. Includes exterior direct and mirror image driver's warning signs. Control station includes red and green indicator lights and shall be NEMA4X rated with a keyed selector switch for manual selection features. Overall dimension of control station is 5.9 inches W x 5.9 inches H x 3.57 inches D (150 x 150 x 91 mm). Also includes LED exterior traffic lights: housing shall be one-piece, weatherproof constructed and made of ultra high molecular weight plastic. The lights shall be 4 inches (101 mm) diameter of red and green color and measure 5 inches W x 11-1/2 inches L x 1/2 inches D (127 x 292 x 13 mm) in size. 24VDC LED lights, Exterior light is always opposite color from interior light.
 - b. 8 inch (205 mm) pour-in channel.

PART 3 EXECUTION

- 3.1 EXAMINATION
 - A. Section 01700 Execution Requirements: Verification of existing conditions before starting work.
 - B. Verification of Conditions: Verify that field measurements, surfaces, substrates and conditions are as required, and ready to receive Work.
- 3.2 INSTALLATION

- A. Install dock leveler and/or dock lift unit in prepared opening in accordance with manufacturer's instructions.
- B. Set square and level.
- C. Anchor unit securely, flush with dock. Weld back of dock leveler to pit frame. Touch-up welds with matching paint.
- D. Install dock bumpers in accordance with manufacturer's instructions.
- 3.3 ADJUSTING
 - A. Adjust installed unit for smooth and balanced operation.

END OF SECTION