



## LOADING DOCK EQUIPMENT

### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Loading dock equipment of the following types:
  - 1. Dock levelers.

#### 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.
- 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: [marketing@bluegiant.com](mailto:marketing@bluegiant.com)  
Web: [www.BlueGiant.com](http://www.BlueGiant.com)

### 2.2 MECHANICAL DOCK LEVELERS

- A. Mechanical Dock Levelers: 'U' Series Dock Levelers, Model 'MU' as manufactured by BLUE GIANT.
  - 1. Type: Recessed, pit installed hinged dock leveler. Manually operated complete with locking hold down mechanism and rear fixed hinge with 4 inches (102 mm) lateral ramp flex. Pit Depth: Front 20 inches (508 mm) and Rear 19-1/2 inches (495 mm). Deck length includes 16 inches (406 mm) lip.
    - a. Model MU6006: Deck Size - 72 inches (1829 mm) W by 75-1/2 inches (1918 mm) L.
    - b. Model MU6008: Deck Size - 72 inches (1829 mm) W by 99-1/2 inches (2527 mm) L.
    - c. Model MU6606: Deck Size - 78 inches (1981 mm) W by 75-1/2 inches (1918 mm) L.
    - d. Model MU6608: Deck Size - 78 inches (1981 mm) W by 99-1/2 inches (2527 mm) L.
    - e. Model MU7006: Deck Size - 83 inches (2108 mm) W by 75-1/2 inches (1918 mm) L.
    - f. Model MU7008: Deck Size - 83 inches (2108 mm) W by 99-1/2 inches (2527 mm) L.
  - 2. Function:
    - a. Vertical Travel: Working range of 12 inches (305 mm) above and 12 inches (305 mm) below dock level.
    - b. Automatic Vertical Compensation: Unit provides float of 12 inches (305 mm) above and 12 inches (305 mm) below dock level.

- c. Automatic Lateral Compensation: Leveler shall have deck flex up to 4 inches (102 mm) to compensate for non-level trailer beds. Rear hinge fixed and does not come up above floor level.
    - d. Lip Operation: Mechanically operated lip that automatically extends and locks into position. Lip will yield under impact of incoming truck and will automatically drop pendant upon truck's departure. The length of the lip extension shall not be less than 16 inches (406 mm) from the ramp edge.
- 3. Operation:
  - a. Mechanical Operating System: No manual lifting involved. Attendant pulls release chain that activates the locking hold down system designed to minimize cross traffic bounce and provide instant hold. The deck is driven up by heavy-duty lift springs and the lip is smoothly powered out. Dock is then "walked" down onto the truck bed. A second chain is pulled to disengage the fall safe legs and allow below level operation. When the truck departs, the lip releases, allowing the unit to be returned to the cross-traffic position.
- 4. Rated Capacity:
  - a. Welding procedure compliant with A.W.S.D1.1 specifications. All units rated in compliance with ANSI MH30.1. Rated capacity range is 30,000 lbs (13,608 kgs) to 45,000 lbs (20,412 kgs). Structural deck support to include minimum six each high-tensile solid steel U-beam members.
- 5. Standard Safety Devices:
  - a. Toe Guard: Full operating range metal toe guard protection.
  - b. Mechanical fall safe legs to limit free fall and below level lip control for end-loading, supplied as standard in the US; optional in Canada.
  - c. Cross traffic support - lip engaged in saddles.
  - d. Corner below level stops.
  - e. Telescopic v-grooved maintenance strut, integral to unit.
  - f. Beveled lip.
- 6. Finish and Color:
  - a. Toe guards painted safety yellow as specified by ANSI Z535.1. High visibility OSHA safety striping on stationary side toe guards.
- 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. 16 inch (406 mm) long lip
- 9. Optional Accessories:
  - a. Foam insulation underside of deck.
  - b. Pour-in pan (dock leveler welded to a steel pan, allowing it to be "poured in place" after concrete slab is poured).
  - c. Three wheel forklift center deck support, up to 45,000 lb (20,412 kg) capacity.
  - d. Mechanical fall safe legs to limit free fall and below level lip control for

- e. end-loading, supplied as standard in the US; optional in Canada.  
Clean Pit Frame.
- f. Manual Light Communication Package (model TLC24-M): Lights are manually operated via a keyed selector switch. Includes LED interior bulbs and LED exterior traffic lights.

## 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