



SECTION 11 13 00

LOADING DOCK EQUIPMENT
Display hidden notes to specifier.

PART 1 GENERAL

1.1 SECTION INCLUDES

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

1.2 RELATED SECTIONS

- A. Section 03 11 19 - Insulating Concrete Forming.
- B. Section 03 30 00 - Cast-in-Place Concrete.
- C. Section 05 50 00 - Metal Fabrications.

1.3 REFERENCES

- A. American National Standards Institute (ANSI):
 - 1. ANSI MH30.1 - Industrial Loading Dock Boards (Ramps).

1.4 SUBMITTALS

- A. Section 01 33 26 - Source Quality Control Reporting.
- B. Product Data: For each product specified. Indicate unit dimensions, method of anchorage, and details of construction. 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. Manufacturer Qualifications:
 - 1. Manufacturer specializing in manufacturing Products specified with minimum 30 years' experience.
 - 2. Manufacturer to have quality assurance improvement programs and ISO certified.

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.
- C. Installer Qualifications: Company specializing in performing the Work of this Section with minimum 5 years' experience.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store and handle materials and products in strict compliance with manufacturer's instructions and recommendations and industry standards. Store materials within absolute limits for temperature and humidity recommended by manufacturer. Protect from damage.
- B. Store products in manufacturer's labeled packaging until ready for installation.

1.7 WARRANTY

- A. Warranty: Provide manufacturer's standard warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Blue Giant Equipment Corporation, which is located at: 410 Admiral Blvd.; Mississauga, ON, Canada L5T 2N6; Toll Free Tel: 800-872-2583; Tel: 905-457-3900; Fax: 905-457-2313; Email: marketing@bluegiant.com; Web: <https://www.bluegiant.com>
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

2.2 MECHANICAL DOCK LEVELERS

- A. Mechanical Dock Levelers: Dock Levelers, Model 'M' as manufactured by BLUE GIANT.
 1. Type: Recessed, pit installed hinged dock leveler. Manually operated dock leveler shall be mechanical and complete with ratchet 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 M6006: Deck Size - 72 inches (1829 mm) W by 75-1/2 inches (1918 mm) L to suit Pit Size – 74 inches (1880 mm) W by 63 inches (1600 mm) L.
 - b. Model M6008: Deck Size - 72 inches (1829 mm) W by 99-1/2 inches (2527 mm) L to suit Pit Size – 74 inches (1880 mm) W by 87 inches (2210 mm) L.
 - c. Model M6010: Deck Size - 72 inches (1829 mm) W by 123-1/2 inches (3137 mm) L to suit Pit Size – 74 inches (1880 mm) W by 111 inches (2819 mm) L.
 - d. Model M6606: Deck Size - 78 inches (1981 mm) W by 75-1/2 inches (1918 mm) L to suit Pit Size – 80 inches (2032 mm) W by 63 inches (1600 mm) L.
 - e. Model M6608: Deck Size - 78 inches (1981 mm) W by 99-1/2 inches (2527 mm) L to suit Pit Size – 80 inches (2032 mm) W by 87 inches (2210 mm) L.
 - f. Model M6610: Deck Size - 78 inches (1981 mm) W by 123-1/2 inches (3137 mm) L to suit Pit Size – 80 inches (2032 mm) W by 111 inches (2819 mm) L.
 - g. Model M7006: Deck Size - 83 inches (2108 mm) W by 75-1/2 inches (1918 mm) L to suit Pit Size – 85 inches (2159 mm) W by 63 inches (1600 mm) L.
 - h. Model M7008: Deck Size - 83 inches (2108 mm) W by 99-1/2 inches (2527 mm) L to suit Pit Size – 85 inches (2159 mm) W by 87 inches (2210 mm) L.
 - i. Model M7010: Deck Size - 83 inches (2108 mm) W by 123-1/2 inches (3137 mm) L to suit Pit Size – 85 inches (2159 mm) W by 111 inches (2819 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.
 - e. Vertical deployment and restoring ranges by model and lip length.
3. Operation:
 - a. Mechanical Operating System: No manual lifting involved. Attendant pulls release chain at rear of deck that releases the locking hold down system, lip will extend and operator to walk dock down to truck bed.
 - b. 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.
 - c. Hold down is designed to minimize cross traffic bounce and provide instant hold when in working position, unit will float with truck movement.
 - d. A second chain is pulled to disengage the fall safe legs and allow below level operation.
 - e. 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. Structural deck support to include minimum eight each high-tensile solid steel J-beam members.
 - a. Rated Capacity: As scheduled and indicated on Drawings.
 - b. Rated Capacity: Workhorse class ANSI MH30.1 - 12,500 lb (5,700 kg).
 - c. Rated Capacity: Heavy class (ANSI MH30.1 - 19,000 lb) (8,700 kg).
 - d. Rated Capacity: Super class (ANSI MH30.1 - 26,000 lb) (11,800 kg).
5. Standard Safety Devices:
 - a. Toe Guard: Full working range metal toe guard protection.
 - b. Mechanical fall safe legs to limit free fall, provide emergency support in the event a truck departs and below level lip control for end-loading.
 - c. Cross traffic support - lip engaged in saddles.
 - d. Corner below level stops.
 - e. V-grooved dock strut, integral to unit (standard).
 - f. Lip leading edge, optimized bevel (standard).
 - g. Lip leading edge, extended bevel (option).
 - h. Clean Pit Frame (standard).
6. Finish and Color:
 - a. Powder Coated and bake cure, resistant to chemicals, corrosion, and incorporates UV inhibitors to reduce fading of colors (standard).
 - b. Deck, lip, frame powder coated gray or color as specified.
 - c. Toe guards powder coated safety yellow as specified by ANSI Z535.1. High visibility OSHA safety striping on stationary side toe guards.
 - d. Remainder of unit zinc enriched powder (option).
 - e. Remainder of unit galvanized coated (option).
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. Resist unauthorized entry beneath locked overhead door.
 - b. 16 inch (406mm) long lip

9. Dock Bumpers: Standard, two model DB411 laminated bumpers 14 inches (356 mm) W by 10 inches (254 mm) H by 4.5 inches (114 mm) D.
10. Lip Size: As scheduled and indicated on Drawings.
11. Lip Size: 16 inches (406 mm) long (standard)
12. Lip Size: 18 inches (457 mm) long (option)
13. Lip Size: 20 inches (508 mm) long (option)
 1. Tapered Lip for 72 inches (1829 mm) and 78 inches (1981 mm) wide models (option).
 2. Full Width (Non-tapered) Lip for 83 inches (2104 mm) wide models (option).
 3. Optional Features/Accessories: Provide the following optional features/accessories:
 - a. Side weather seals, rubber style.
 - b. Side weather seals, nylon brush style.
 - c. Side weather seals, safety brush, yellow black zebra striped.
 - d. Rear weather seals, rubber style.
 - e. Rear weather seals, nylon brush style.
 - f. Foam insulation underside of deck.
 - g. Pour-in pan (dock leveler welded to a steel pan, allowing it to be "poured in place" after concrete slab is poured).
 - h. Toe Guard: Full yellow operating range metal toe guard protection.
 - i. Pour-in pan (dock leveler welded to a steel pan, allowing it to be "poured in place" after concrete slab is poured).
 - j. Closed pit frame (option).
 - k. 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.
 - l. Automatic Light Communication Package (model TLC24-A): Lights are automatically operated via a 24VDC proximity switch or photo-eye sensor. Can be set to manual operation. Includes LED interior bulbs and LED exterior traffic lights.
 - m. Vehicle Restraints.