



SECTION 11160

LOADING DOCK EQUIPMENT

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Loading dock equipment of the following types:
 - 1. Dock levelers.
 - 2. Vehicle restraints.
 - 3. Dock seals.
 - 4. Dock shelters.
 - 5. Dock lifts.

1.2 RELATED SECTIONS

- A. Section 03300 - Cast-In-Place Concrete: Coordination with dock construction.
- B. Section 16050 - Basic Electrical Methods and Materials: Coordination with power requirements and controls/safety circuits.

1.3 REFERENCES

- A. American National Standards Institute (ANSI): ANSI MH29.1 Safety Requirements for Industrial Scissor Lifts.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Shop Drawings: Showing overall dimensions (width, height) and location of electrical service panels and motor locations. Supporting construction requirements and equipment structural attachment. Operating range and required clearances.
- D. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Providing sole source for design, engineering, manufacturing and warranty claims handling. Company specializing in manufacturing products specified with a minimum 20 years experience.
- B. Installer Qualifications: Trained, certified and approved by manufacturer, with documented experience on similar projects.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.

1.7 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.8 WARRANTY

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

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Pentalift Equipment Corp., which is located at: 21 Nicholas Beaver Rd. ; Guelph, ON, Canada N1H 6H9 ; Tel: 519-763-3625; Fax: 519-763-2894; Email: [request info \(dock@pentalift.com\)](mailto:dock@pentalift.com); Web: www.pentalift.com
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

Mechanical Dock Levelers:

1. Product: MD Series Mechanical Dock Levelers as manufactured by Pentalift Equipment Corp.
2. Dock leveler(s) shall be semi-automatic with no manual lifting required. The Easy-Float Hold-Down Assembly requires a minimal release force of only 8 lb (3.6 kg) and shall maintain lip contact with the truck/trailer bed by allowing the deck to float with the suspension of the truck/trailer.
3. A high strength, braided nylon strap shall be used to connect the deck and frame assemblies and to absorb shock loads. All adjustments shall be conveniently located at the front of the dock leveler(s). The Posilock lip mechanism will ensure safe walk down of the deck and allow lip to retract if impacted during truck/trailer positioning.
4. The lip hinge shall to be full width, piano style with a full width hinge pin. The lip hinge shall be welded to a high tensile headboard. The rear hinge shall be a full width, fixed style.
5. 16 inches (406 mm) lip length.
6. 18 inches (457 mm) lip length.
7. 20 inches (508 mm) lip length.
8. The deck design shall provide 4 inches (102 mm) of lateral deck compensation for canted truck/trailer beds. Dock leveler(s) shall be equipped with operating range toe guards, night lock and a maintenance stand.
9. Working Range: Dependent on application and dock leveler length. Designed to maximize the above and below level service range while maintaining a safe incline and decline angle of the deck plate.
10. Two molded rubber bumpers shall be provided.
11. Dock leveler(s) shall have Pentalift gray finish.
12. Model MD66: 6.0 feet by 6.0 feet (1829 mm by 1829 mm).
13. Model MD68: 6.0 feet by 8.0 feet (1829 mm by 2438 mm).
14. Model MD610: 6.0 feet by 10.0 feet (1829 mm by 3048 mm).
15. Model MD6.56: 6.5 feet by 6.0 feet (1981 mm by 1829 mm).
16. Model MD6.58: 6.5 feet by 8.0 feet (1981 mm by 2438 mm).
17. Model MD6.510: 6.5 feet by 10.0 feet (1981 mm by 3048 mm).
18. Model MD76: 7.0 feet by 6.0 feet (2134 mm by 1829 mm).
19. Model MD78: 7.0 feet by 8.0 feet (2134 mm by 2438 mm).

20. Model MD710: 7.0 feet by 10.0 feet (2134 mm by 3048 mm).
21. Capacity: 25000 lb (11340 kg).
22. Capacity: 30000 lb (13608 kg).
23. Capacity: 35000 lb (15876 kg).
24. Capacity: 40000 lb (18144 kg).
25. Capacity: 45000 lb (20412 kg).
26. Capacity: 50000 lb (22680 kg).
27. Provide pour-in-place installation style.
28. Provide mechanical fallsafe with below level control.
29. Provide weatherseal (rubber or brush).
30. Provide easy sweep frame design.
31. Provide full range toe guards.
32. Provide lip hinge grease fittings.
33. Provide foam insulated deck.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION