



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:request_info@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.

Vertical Storing Dock Leveler:

1. Product: HDV Series Vertical Storing Dock Leveler as manufactured by Pentalift Equipment Corp.
2. Deck stores vertically by leaning slightly backward without the need for a mechanical storage system.
3. Dock Leveler(s) shall be fully hydraulic with a wall mounted, push button control station. The power unit shall be a 1-1/2 Hp, remote, TENV unit installed on the wall with mounting brackets.
4. The power supply shall be ___/___/___.
5. Hydraulic functions shall be controlled by the Pentalogic Hydraulic Manifold.
6. The lip hinge shall be a full width, piano style with a full width hinge pin. The lip hinge shall be welded to a high tensile headboard. The rear hinge design shall be a full width, fixed style.
7. 16 inches (406 mm) lip length.
8. 18 inches (457 mm) lip length.
9. 20 inches (508 mm) lip length.
10. The deck design shall accommodate canted trucks/ trailers up to 4 inches (102 mm).
11. 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.
12. Dock Leveler(s) shall be equipped with double acting lift cylinder, 4 inches (102 mm) high run-off guards, velocity fuse and a swing in place maintenance stand.
13. A 10 inches (254 mm) high rear mounting channel shall be provided for casting in concrete.
14. Two molded rubber bumpers with mounting plates shall be provided.
15. Dock Leveler(s) shall have Pentalift gray finish.
16. Model HDV65: 6.0 feet by 5.0 feet (1829 mm by 1524 mm).
17. Model HDV66: 6.0 feet by 6.0 feet (1829 mm by 1829 mm).
18. Model HDV68: 6.0 feet by 8.0 feet (1829 mm by 2438 mm).
19. Model HDV6.55: 6.5 feet by 5.0 feet (1981 mm by 1524 mm).
20. Model HDV6.56: 6.5 feet by 6.0 feet (1981 mm by 1829 mm).
21. Model HDV6.58: 6.5 feet by 8.0 feet (1981 mm by 2438 mm).
22. Model HDV75: 7.0 feet by 5.0 feet (2134 mm by 1524 mm).

23. Model HDV76: 7.0 feet by 6.0 feet (2134 mm by 1829 mm).
24. Model HDV78: 7.0 feet by 8.0 feet (2134 mm by 2438 mm).
25. Capacity: 25000 lb (11340 kg).
26. Capacity: 30000 lb (13608 kg).
27. Capacity: 35000 lb (15876 kg).
28. Capacity: 40000 lb (18144 kg).
29. Capacity: 45000 lb (20412 kg).
30. Provide hydraulic dock leveler(s) interlocked to the Pentalift model HFR32 Vehicle Restraint Safety System as manufactured by Pentalift Equipment Corporation.
31. Provide hydraulic dock leveler(s) interlocked to the Pentalift model LPR35 Vehicle Restraint Safety System as manufactured by Pentalift Equipment Corporation.
32. Provide hydraulic dock leveler(s) interlocked to the Pentalift model UHR40 Vehicle Restraint Safety System as manufactured by Pentalift Equipment Corporation.
33. Provide hydraulic dock leveler(s) interlocked to the Pentalift model RVR32 Vehicle Restraint Safety System as manufactured by Pentalift Equipment Corporation.
34. Provide interlock to overhead door.
35. Provide master control panel.
36. Provide foam insulated deck.
37. Provide lip hinge grease fittings.
38. Provide rear mounting flat bar.
39. Provide draft pad.
40. Provide bumper risers.

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