



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.

Hydraulic Roll-Off Stop Lip Dock Leveler:

1. Product: HDRS Series Hydraulic Roll-Off Stop Lip Dock Leveler as manufactured by Pentalift Equipment Corp.
2. Model HDRS66: 6.0 feet by 6.0 feet (1829 mm by 1829 mm).
3. Model HDRS68: 6.0 feet by 8.0 feet (1829 mm by 2438 mm).
4. Model HDRS610: 6.0 feet by 10.0 feet (1829 mm by 3048 mm).
5. Model HDRS6.56: 6.5 feet by 6.0 feet (1981 mm by 1829 mm).
6. Model HDRS6.58: 6.5 feet by 8.0 feet (1981 mm by 2438 mm).
7. Model HDRS6.510: 6.5 feet by 10.0 feet (1981 mm by 3048 mm).
8. Model HDRS76: 7.0 feet by 6.0 feet (2134 mm by 1829 mm).
9. Model HDRS78: 7.0 feet by 8.0 feet (2134 mm by 2438 mm).
10. Model HDRS710: 7.0 feet by 10.0 feet (2134 mm by 3048 mm).
11. Capacity: 25000 lb (11340 kg).
12. Capacity: 30000 lb (13608 kg).
13. Capacity: 35000 lb (15876 kg).
14. Capacity: 40000 lb (18144 kg).
15. Capacity: 45000 lb (20412 kg).
16. Capacity: 50000 lb (22680 kg).
17. Capacity: 60000 lb (27216 kg).
18. Dock leveler(s) shall be fully hydraulic with a 8 inches (203 mm) high roll-off stop lip design and wall-mounted, push button control station. The power unit shall be a 1-1/2 Hp, self-contained, TENV unit installed on the dock leveler frame.
19. The power supply shall be ____/____/____.
20. Hydraulic functions will be controlled by the Pentalogic hydraulic manifold.
21. The lip shall be self-retracting. The lip hinge will be a full width, piano style with a full width hinge pin. The lip hinge will be welded to a high tensile headboard. The rear hinge design will be a full width, fixed style.
22. 16 inches (406 mm) lip length.
23. 18 inches (457 mm) lip length.
24. 20 inches (508 mm) lip length.
25. The deck design will accommodate canted trucks/trailers up to 4 inches (102 mm).
26. 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.
27. Dock leveler(s) shall be equipped with full range toe guards, night lock, hydraulic fallsafe and a maintenance stand.
 28. The lift cylinder shall be top-fed and forward-positioned behind the headboard.
 29. Two molded rubber bumpers shall be provided.
 30. Dock leveler(s) will have Pentalift gray finish.
 31. Provide pour-in-place installation style.
 32. Provide automatic return-to-stored position.
 33. Provide deck stop with independent lip control.
 34. Provide weatherseal (rubber or brush).
 35. Provide hydraulic dock leveler(s) interlocked to the Pentalift model HFR32 Vehicle Restraint Safety System as manufactured by Pentalift Equipment Corporation.
 36. Provide hydraulic dock leveler(s) interlocked to the Pentalift model LPR35 Vehicle Restraint Safety System as manufactured by Pentalift Equipment Corporation.
 37. Provide hydraulic dock leveler(s) interlocked to the Pentalift model UHR40 Vehicle Restraint Safety System as manufactured by Pentalift Equipment Corporation.
 38. Provide hydraulic dock leveler(s) interlocked to the Pentalift model RVR32 Vehicle Restraint Safety System as manufactured by Pentalift Equipment Corporation.
 39. Provide interlock to overhead door.
 40. Provide interlock to inflatable shelter.
 41. Provide master control panel.
 42. Provide easy sweep frame design.
 43. Provide lip hinge grease fittings.
 44. 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