



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.

Dock Lifts:

1. Product: LDL Series Dock Lifts as manufactured by Pentalift Equipment Corporation.
2. Dock lift shall be built of checker plate deck with bevel toe guards. The unit shall have a vertical travel of 59 inches (1499 mm) and a lowered height of 8 inches (203 mm).
3. An 18 inches by 60 inches (457 mm by 1524 mm) one piece, high tensile steel bridge plate shall be provided on the rolling end.
4. The hydraulic lift cylinder(s) shall be PentaFLOW style, equipped with an automatic bypass system at the top of cylinder stroke. A hydraulic velocity fuse shall be incorporated to prevent platform free-fall in the event a hydraulic hose is accidentally severed.
5. Pivot points to have chromed pins and "lubricated for life" bearings.
6. Unit shall have two removable guardrails 42 inches (1067 mm) high with mid rails and 4 inches (102 mm) high kick plates.
7. An integral maintenance stand shall be provided for safety during servicing.
8. Controls shall be NEMA 4X pendant type push-button.
9. The power unit shall be remote mounted and consist of a totally enclosed motor with integral hydraulic fluid reservoir. The motor shall be equipped with NEMA 12 pre-wired enclosure.
10. Power supply to be ____/____/____.
11. The dock lift shall be shipped complete with hydraulic fluid.
12. Unit shall have Pentalift gray finish.
13. Model LDL 68: 72 inches by 96 inches (1829 mm by 2438 mm).
14. Model LDL 69: 72 inches by 108 inches (1829 mm by 2743 mm).
15. Model LDL 610: 72 inches by 120 inches (1829 mm by 3048 mm).
16. Model LDL 78: 84 inches by 96 inches (2134 mm by 2438 mm).
17. Model LDL 79: 84 inches by 108 inches (2134 mm by 2743 mm).
18. Model LDL 710: 84 inches by 120 inches (2134 mm by 3048 mm).
19. Model LDL 88: 96 inches by 96 inches (2438 mm by 2438 mm).
20. Model LDL 89: 96 inches by 108 inches (2438 mm by 2743 mm).
21. Model LDL 810: 96 inches by 120 inches (2438 mm by 3048 mm).
22. Capacity: Side and end edge load ratings shall be 2500 lb (1134 kg).
23. Capacity: 5,000 lb (2268 kg).
24. Capacity: 6,000 lb (2722 kg).

25. Provide toe sensor. Note: increases lowered height to 8 inches (203 mm).
26. Provide larger bridge sizes 48" - 96".wide x 18" - 42" long..
27. Provide aluminum bridge(s).
28. Provide split bridge(s).
29. Provide spring assisted bridge(s).
30. Provide power units with increased hp for faster lift times.
31. Provide up travel limit switch.
32. Provide platform mounted push button control.
33. Provide push button on coil cord.
34. Provide wall mounted push button.
35. Provide removable push button on post on platform.
36. Provide up / down key operated selector switch.
37. Provide two second warning bell (sounds prior to lift movement).
38. Provide swing out night stops.
39. Provide overhead door interlocking.
40. Provide additional guard rails (platform or floor mount).
41. Provide manual lowering valve.

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