



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%20info@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.

Vehicle Restraint Safety System:

1. Product: Model HFR32 Vehicle Restraint Safety System as manufactured by Pentalift Equipment Corporation.
2. The vehicle restraint(s) shall be a non-impact design with an operating range of 10-1/2 inches to 28-1/2 inches (267 mm to 724 mm) and a restraining capacity of 32,000 lb (14515 kg). Hook arrangement shall be manufactured from 100,000 PSI (689,480 kPa) steel. Operation shall be electro-hydraulic with a remote power unit.
3. The power supply shall be / / .
4. Controls shall be a remote, wall mounted control station.
5. The design shall include a heavy duty, removable steel guard.
6. A force of approximately 30 lb shall be required to activate the signal bar. All external limit switches shall be water resistant. Vehicle restraint(s) shall be supplied with a high-visibility, two-way communication system. Internally, there shall be a three light display (red/amber/green) and an instruction sign. Dual image caution signs and LED style external deluxe lights (red/green) shall be supplied for external installation. Vehicle restraint(s) shall have an audible alarm to signal when the restraint does not engage the truck/trailer's R.I.G.
7. Vehicle restraint(s) shall have Pentalift gray finish.
8. Provide weld plate for cast in concrete installation.
9. Provide cantilever /extension mounting plate.
10. Provide zinc plating.
11. Provide manual power failure release valve.
12. Provide interlocked to other loading dock equipment.

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