

## SECTION 111319 - STATIONARY LOADING DOCK EQUIPMENT

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:

- 1. Recessed dock levelers.

- B. Related Requirements:

- 1. Section 055000 "Metal Fabrications" for curb angles at edges of recessed pits and loading dock platform edge channels.

#### 1.3 DEFINITIONS

- A. Operating Range: Maximum amount of travel above and below the loading dock level.

- B. Working Range: Recommended amount of travel above and below the loading dock level for which loading and unloading operations can take place.

#### 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.

- 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for stationary loading dock equipment.
- 2. Include rated capacities, operating characteristics, electrical characteristics, and furnished specialties and accessories.

- B. Shop Drawings: For stationary loading dock equipment.

- 1. Include plans, elevations, sections, details, and attachments to other work.
- 2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of anchors and field connection.
- 3. Include diagrams for power, signal, and control wiring.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.

- B. Welding certificates.
- C. Product Test Reports: For each dock leveler, for tests performed by manufacturer and witnessed by a qualified testing agency.
  - 1. Indicate compliance of dock levelers with requirements in MH 30.1 for determining rated capacity, which is based on comprehensive testing within last two years of current products.
  - 2. Submittal Form: According to MH 30.1.
- D. Sample Warranty: For manufacturer's special warranty.

#### 1.6 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For stationary loading dock equipment to include in operation and maintenance manuals.

#### 1.7 QUALITY ASSURANCE

- A. Installer Qualifications: An authorized representative who is trained and approved by manufacturer.
  - 1. Maintenance Proximity: Not more than two hours' normal travel time from Installer's place of business to Project site.
- B. Welding Qualifications: Qualify procedures and personnel according to the following:
  - 1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."
  - 2. AWS D1.3, "Structural Welding Code - Sheet Steel."

#### 1.8 FIELD CONDITIONS

- A. Field Measurements: Verify actual dimensions of construction contiguous with stationary loading dock equipment, including recessed pit dimensions slopes of driveways and heights of loading docks, by field measurements before fabrication.

#### 1.9 WARRANTY

- A. Manufacturer's Special Warranty: Manufacturer agrees to repair or replace dock levelers that fail in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Structural failures including cracked or broken structural support members, load-bearing welds, and front and rear hinges.
    - b. Faulty operation of operators, control system, or hardware.
    - c. Deck plate failures including cracked plate or permanent deformation in excess of 1/4 inch between deck supports.
    - d. Hydraulic system failures including failure of hydraulic seals and cylinders.
  - 2. Warranty Period for Structural Assembly: 10 years from date of Substantial Completion.

3. Warranty Period for Hydraulic System: Five years from date of Substantial Completion.
4. Warranty shall be for unlimited usage of leveler for the specified rated capacity over the term of the warranty.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

### 2.2 MECHANICAL DOCK LEVELER

- A. General: Recessed, hinged-lip-type dock levelers designed for permanent installation in concrete pits preformed in the edge of loading platform; of type, function, operation, capacity, size, and construction indicated; and complete with controls, safety devices, and accessories required.
  1. Basis-of-Design Product: Subject to compliance with requirements, provide product indicated on Drawings or comparable product by one of the following:
    - a. 4Front Entrematic - Kelley, 1612 Hutton Drive, Suite 140, Carrollton, TX 75006, (972) 466-0707 voice, (972) 389-4752 facsimile Distributor/Sales Rep. (If Applicable): Name: : Contact: ; Phone: ; Web/Email:

### 2.3 DOCK LEVELERS

- A. General:
  1. Capacity: 30000 (per ANSI MH14.1-1987).
  2. Platform Width: 7 feet.
  3. Platform Length: 6 feet.
  4. Platform Deck Thickness: 1/4 inch high tensile steel safety tread plate.
  5. Lip: 16" (Standard), extension, 5/8 inch thick high tensile steel safety tread plate.
  6. Vertical Compensation: Floating travel up and down to compensate for loading and unloading of truck.
  7. Service Range: 12 inches above and 12 inches below dock level.
  8. Side to Side Cross-Tilt: 4 inches maximum over width of ramp.
  9. Pit Floor Slope: Minimum 1/2 inch, back to front.
  10. Identification: Attach to dock leveler in conspicuous place stating:
    - a. Capacity.
    - b. Name of Manufacturer.
    - c. Model Number.
    - d. Serial Number.
  11. Standard Features:
    - a. Structural Safety Legs
    - b. Permanently mounted hinged maintenance safety strut
    - c. Automatic Night locks

- d. Cross traffic supports.
- e. 40K-45K capacity 3-wheel Structural Center Support Beam
- f. Clean frame design-open front structure to allow easy clean out
- g. Working range toe guard protection
- h. Hold down system to provide unlimited leveler float
- i. Soft Release Hold-Down
- j. Shimless rear frame design
- k. Grease fittings.

12. Options:

- a. Weatherseal: None.
- b. Spray Foam Insulated Deck: None.
- c. Bumper Type: Horizontal Laminated 10x14x4 (Standard).

- B. Acceptable Model and Manufacturer: Kelley model CM6X6: 4Front Entrematic, 1612 Hutton Drive, Suite 140, Carrollton, TX 75006 (P)972-466-0707

2.4 FABRICATION

A. Dock levelers:

- 1. Welded base frame construction.
- 2. Unit supplied completely assembled, ready for use.

2.5 FINISHES

A. Dock leveler Finish:

- 1. Preparation: Clean surfaces free from slag and splatter, loose mill scale, oil, grease, or rust.
- 2. Dock leveler: Factory apply manufacturer's standard DTM (Direct to Metal) Water based Paint with built in rust inhibitors.
- 3. Color: Gray.
- 4. Optional Special Finish: None.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine conditions and proceed with Work in accordance with Section 014000.

3.2 PREPARATION

- A. Coordinate forming of pit to receive dock leveler.

- 1. Pit angle curbing and embeds by others.
- 2. Ensure curb angles are square, level and flush with pit surfaces.
- 3. Ensure that curb angles are in proper place and pit is of adequate size to receive leveler.

a. Pit Design:

1) 20 inch pit depth for new construction.

B. Ensure that power accessories have been installed and made ready for installation.

3.3 INSTALLATION

A. Install in flat or sloped prepared pit in accordance with manufacturers installation instructions.

B. Adjust dock leveler height by manufacturer's recommendations as required to provide flush alignment with leveler and dock floor. Weld leveler frame securely to embedded curb steel.

C. Adjust installed unit for operation as specified by manufacturer.

3.4 ADJUSTING AND CLEANING

A. Adjust installed unit for smooth, safe, efficient and balanced operation.

B. Remove temporary labels and coverings and protection of adjacent work areas.

C. Repair or replace damaged products.

D. Remove construction debris from site and dispose.

3.5 INSTRUCTION OF OWNER'S PERSONNEL

A. Instruct Owner's personnel in operation and maintenance of installed units. Provide bound copy of manufacturer's operation and maintenance manual at time of instruction.

END OF SECTION 111319