

# GUIDE SPECIFICATION

## MANUFACTURER:

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## SECTION 11 13 19.13 HK HYDRAULIC LEVELERS

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This guide specification section has been prepared by 4Front Engineered Solutions - Kelley, and is intended to assist the specifier in preparing a specification for hydraulic dock levelers.

Edit entire section to suit project requirements. Modify or add items as necessary. Delete items, which are not applicable. Words and sentences within brackets [ ] reflect a choice to be made regarding inclusion or exclusion of a particular item or statement. This section may include performance, proprietary and descriptive type specifications. Edit to avoid conflicting requirements.

This guide specification is written around the Construction Specifications Institute (CSI), Section Format, and standard references to section names and numbers are based on the CSI MasterFormat 2004.

For specification assistance on specific product applications or information about other Kelley products, please contact our offices above or any of our local product representatives throughout the country.

4Front Engineered Solutions – Kelley reserves the right to modify these guide specifications at any time. Updates to this guide specification will be posted to the manufacturer's web site and/or in printed matter as they occur. 4Front Engineered Solutions – Kelley makes no expressed or implied warranties regarding content, errors, or omissions in the information presented.

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## PART I - GENERAL

### I.1 SUMMARY

- A. Related Documents: Provisions established within General and Supplementary Conditions of the Contract, Division 1 - General Requirements and Drawings are collectively applicable to this Section.
- B. Related Sections:
  - 1. [Section 11 13 19.33: Loading Dock Truck Restraints]
  - 2. [Section: 11 13 16: Seals and Shelters]
  - 3. [Section: 11 13 13: Loading Dock Bumpers]

### I.2 SYSTEM DESCRIPTION

- A. Design Requirements: Provide fixed-in-place adjustable loading and unloading platform for difference in height and gap between truck bed and building loading dock.
- B. Provide loading dock equipment, which has been manufactured, fabricated, and installed to withstand loads specified and to maintain performance criteria stated by manufacturer without defects or failure.
- C. Comply with ANSI MH14.1-1987.

### **I.3 SUBMITTALS**

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 Include submittal requirements below, which are consistent with the scope of the project and extent of work of this section. Only request submittals, which are necessary for review of design intent.

Do not request submittals if drawings sufficiently describe the products of this section or if proprietary specifying techniques are used. The review of submittals increases the possibility of unintended variations to drawings.

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- A. General: Submit in accordance with Section 01 33 00.
- B. Product Data: Submit product data for dock equipment.
- C. Shop Drawings: Submit drawings indicating fabrication and erection of dock equipment including plans, elevations and large scale details.
  - 1. Show anchorage, [pit sizes,] critical installation clearances, connections, and accessory items.
  - 2. Provide location template drawings for items supported or anchored to permanent construction.
  - 3. Provide rough-in drawings for electrical service in advance of concrete work.
- D. Closeout Submittals: Submit following in accordance with Section 01 78 00.
  - 1. Maintenance data.
  - 2. Warranty: Specified warranty.

### **I.4 QUALITY ASSURANCE**

- A. Single Source Responsibility: Each component of dock equipment is required to be from same manufacturer.
- B. Manufacturer Qualifications: Company specializing in manufacturing Products specified in this Section with minimum ten years documented experience.
- C. Regulatory Requirements: In compliance with ANSI MH14.1-1987 and the safety and labeling requirements of ANSI MH30.1-2007.
- D. Certifications: Submit manufacturer's certification that products furnished for Project meet or exceed specified requirements.
- E. Manufacturer to hold current ISO 9001 certification

### **I.5 WARRANTY**

- A. Special Warranty: Prepare and submit in accordance with Section 01 78 36.
  - 1. Manufacturer's standard prorated ten-year warranty for structural components upon approval of written application.

Parts include Lip, lip hinge, and shaft: deck plate and beams: rear frame and rear hinges

- 2. Manufacturer's standard 1-year base parts & labor warranty plus additional 4-year parts only warranty for hydraulic power unit and cylinders.

## **PART 2 - PRODUCTS**

### **2.1 HYDRAULIC DOCK LEVELERS**

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The following description is for a hydraulic dock leveler using premium hydraulics to insure low maintenance and reliable performance. All options are included within brackets. Select each option and choice according to project need.

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A. General:

1. Capacity: [30K] [35K] [40K] [45K] [50K] (per ANSI MH14.1-1987).
2. Platform Width: [6] [6.5] [7] feet
3. Platform Length: [6] [8] [10] feet (12)
4. Platform Deck Thickness: [1/4 inch high tensile steel safety tread plate for 30-35K] [with abrasive non-skid finish]. [5/16 inch high tensile steel safety tread plate for 40-50K] [with abrasive non-skid finish].
5. Lip Length: [16] [18] [20] inch extension [5/8 inch high tensile steel safety tread plate for 30K-35K capacity] [with abrasive non-skid finish], [11/16 inch thick high tensile steel safety tread plate for 40-50K capacity] [with abrasive non-skid finish].
6. Service Range: 12 inches above and 12 inches below dock level for 6' and 8' long levelers, 15" above and 12" below for 10' long levelers, 16" above and 12" below for 12' long levelers..
7. Side to Side Cross-Tilt: 4 inches maximum over width of ramp.
8. Pit Floor Slope: Minimum 1/2 inch, back to front.
9. Vertical Compensation: Floating travel up and down to compensate for loading and unloading of truck.
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. Full operating range toe guard protection.
  - b. Dock level Structural Safety Legs.
  - c. Integral Maintenance strut.
  - d. Non Adjustable emergency velocity fuse.
  - e. Open frame design-open front structure to allow easy clean out.
  - f. Shimless front and rear frame design.

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See manufacturer's comparative chart for standard and optional features of each device. Power unit mounted in remote location inside dock (mounting under deck is optional).

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12. Options:

- a. [Master control panel with combination device controls.]\*See Master Control Panel specs.  
Master control panel to be 100% UL listed (not just components).
- b. [Non-Metallic Interlock Capable control panel.]
- c. [Insulated ramp.] Type [Foam spray]
- d. [Independent Hydraulic Lip Control. Mushroom stop push button.]
- e. [Energy Guard Perimeter Weatherseal System]
- f. [Brush Weatherseal.]
- g. [Automatic Return to Dock.]
- h. Automatic night locks.
- i. 5" high safety barrier lip. 40K-50K models only]

B. Motor (Hydraulic) Operation:

1. Electrical power pack (includes motor, pump and valve assembly) of 1 HP, [120] [208] [240] volt [1 phase motor], or [208] [240] [480] [575] volt [3 phase motor]
2. Control Panel: Heavy duty, single push-button activation.
3. Platform and lip operated by hydraulic cylinders.
4. Lip automatically extends and holds.

5. Engineer unit to "free float" with truck bed.
  6. Provide drop-safe hydraulic safety stop.
- C. Acceptable Model and Manufacturer: **Kelley model HK: 4Front Engineered Solutions, 1612 Hutton Drive, Suite 140, Carrollton, TX 75006 (P)972-466-0707**

## **2.2 FABRICATION**

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

## **2.3 FINISHES**

- A. Dock Equipment 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: Baked enamel green paint finish.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- A. Examine conditions and proceed with Work in accordance with Section 01 40 00.

### **3.2 PREPARATION**

- A. Coordinate forming of pit to receive dock leveler.
1. Manufacturer of Leveler to provide pit curbing and anchors, rough-in sizes and templates to appropriate trade for installation into pit.
  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" for 6', 8' long][24" for 10' long] pit depth for new construction.
  4. Ensure that power accessories have been installed and made ready for installation.

### **3.3 INSTALLATION**

- A. Dock Leveler: Install in accordance with Section 01 60 00.
1. Install in prepared pit in accordance with manufacturer's instructions
  2. 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.

### **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**