

GUIDE SPECIFICATION

MANUFACTURER:
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SECTION 11 13 19.13 **EOD 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 Edge-of-Dock (EOD) levelers, complete with all available options and accessories.

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 4Front Engineered Solutions – 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]

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 leveler equipment.
- C. Shop Drawings: Submit drawings indicating fabrication and erection of dock levelers including plans, elevations and large-scale details.
 - 1. Show anchorage, critical installation clearances, connections, and accessory items.
 - 2. Provide location template drawings for items supported or anchored to permanent construction.
- D. Informational Submittals: Submit following:
 - 1. Manufacturer's instructions.
- E. Closeout Submittals: Submit following in accordance with Section 07 78 36.
 - 1. Maintenance data.
 - 2. Warranty: Specified warranty.

I.4 QUALITY ASSURANCE

- A. Single Source Responsibility: Each component of dock leveler 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. Installer Qualifications: Approved in writing by manufacturer with documented experience on at least five projects of similar nature in past five years.
- D. Regulatory Requirements: In compliance with ANSI MH14.1-1987 and the safety and labeling requirements of ANSI MH30.1-2007.
- E. Certifications: Submit manufacturer's certification that products furnished for Project meet or exceed specified requirements.
- F. 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 limited one year warranty for structural components.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers:

- I. 4Front Engineered Solutions - KELLEY, 1612 Hutton Drive, Suite 140, Carrollton, Texas, (972) 466-0707 voice, (972) 323-2661 facsimile

2.2 MECHANICAL EDGE OF DOCK LEVELER

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The following description is for a mechanical edge of dock leveler. Select each option and choice according to project need.

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A. General:

1. Capacity: [20,000 lbs.] [30,000 lbs.] (per ANSI MH14.1-1987).
2. Platform Width: [66] [72] [78] [84] inches.
3. Platform Length: [27-3/4 inch with 15" lip] [29-3/4 inch with 17" lip]
4. Platform Deck Thickness: [3/8 inch for 20,000 lb units] or [1/2 inch for 30,000 lb units] safety checker plate steel [with abrasive non-skid finish].
5. Lip: [15] [17] inch extension, [3/8 inch for 20,000 lb units] or [1/2 inch for 30,000 lb units] thick safety checker plate steel [with abrasive non-skid finish].
6. Vertical Compensation: Floating travel up and down to compensate for loading and unloading of truck.
7. Service Range: 3 inches above and 3 inches below dock level.
8. Side to Side Cross-Tilt: 4 inches maximum over width of ramp.
9. Yieldable lip.
10. Bumper block out with 4 x 10 x 12" dock bumpers on curb embed channel installations.
11. [Less bumper supplied by others for pit style installations.]
12. Options:
 - a. [Pit style unit for installation in pit without bumper blocks]
 - b. [Post office style with 2 inch cart guard barrier lip.]
 - c. [Steel faced bumpers.]
 - d. [Galvanized construction]

B. Acceptable Product & Manufacturer: **4Front Engineered Solutions - KELLEY**

Mechanical Edge-of-Dock Leveler Model:

[KM6620] [KM6630] [KM7220] [KM7730] [KM7830] [KM8430]

2.3 AIR-POWERED EDGE OF DOCK LEVELER

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The following description is for a hydraulic edge of dock leveler. Select each option and choice according to project need.

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A. General:

1. Capacity: [20,000 lbs.] [30,000 lbs.] (per ANSI MH14.1-1987).
2. Platform Width: [66] [72] [78] [84] inches.
3. Platform Length [27-3/4 inch with 15" lip] [29-3/4 inch with 17" lip]
4. Platform Deck Thickness: [3/8 inch for 20,000 lb units] or [1/2 inch for 30,000 lb units] safety checker plate steel [with abrasive non-skid finish].
5. Lip: [15] [17] inch extension, [3/8 inch for 20,000 lb units] or [1/2 inch for 30,000 lb units] thick safety checker plate steel [with abrasive non-skid finish].
6. Vertical Compensation: Floating travel up and down to compensate for loading and unloading of truck.
7. Service Range: 3 inches above and 3 inches below dock level.
8. Side to Side Cross-Tilt: 4 inches maximum over width of ramp.
9. Options:
 - a. [Pit style unit for installation in pit without bumper blocks]
 - b. [Post office style with 2 inch cart guard barrier lip.]

- c. [Steel faced bumpers.]
- d. [Galvanized construction]

- B. Motor (Electric Fan) Operation:
 - 1. Electrical Fan (includes motor and fan assembly) 120 volt, 60 HZ, 1 phase motor.
 - 2. Remote Control Station:
 - a. Constant pressure push button station complying with NEMA 4.
 - b. Release Pressure on Button: Allow leveler to descend by gravity to truck bed.
 - 3. Platform operated Air Bag.
 - 4. Engineer unit to float with truck bed.
- C. Acceptable Model and Manufacturer: **4Front Engineered Solutions - KELLEY**
Air-Powered Edge-of-Dock Leveler Model:
[KA6620] [KA6630] [KA7220] [KA7230] [KA7830] [KA8430]

2.4 HYDRAULIC EDGE OF DOCK LEVELER

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 The following description is for a hydraulic edge of dock leveler. Select each option and choice according to project need.

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- A. General:
 - 1. Capacity: [20,000 lbs.] [30,000 lbs.] (per ANSI MH14.1-1987).
 - 2. Platform Width: [66] [72] [78] [84] inches.
 - 3. Platform Length: Platform Length[27-3/4 inch with 15" lip] [29-3/4 inch with 17" lip]
 - 4. Platform Deck Thickness: [3/8 inch for 20,000 lb units] or [1/2 inch for 30,000 lb units] safety checker plate steel [with abrasive non-skid finish].
 - 5. Lip: [15] [17] inch extension, [3/8 inch for 20,000 lb units] or [1/2 inch for 30,000 lb units] thick safety checker plate steel [with abrasive non-skid finish].
 - 6. Vertical Compensation: Floating travel up and down to compensate for loading and unloading of truck.
 - 7. Service Range: 3 inches above and 3 inches below dock level.
 - 8. Side to Side Cross-Tilt: 4 inches maximum over width of ramp.
 - 9. Options:
 - a. [Pit style unit for installation in pit without bumper blocks]
 - b. [Post office style with 2 inch cart guard barrier lip.]
 - c. [Steel faced bumpers.]
 - d. [Galvanized construction]
- B. Motor (Hydraulic) Operation:
 - 1. Electrical power pack (includes motor, pump and valve assembly) of 1 HP, [120] [208] [240] volt, 60 HZ, [1 phase motor] or [208] [240] [480] [575] volt [3 phase motor].
 - 2. Remote Control Station: Constant pressure push button station complying with NEMA 4.
 - a. Constant Pressure on Control Button: Raise unit.
 - b. Release Pressure on Button: Allow leveler to descend by gravity to truck bed.
 - 3. Platform operated by hydraulic cylinder.
 - 4. Engineer unit to float with truck bed.
- C. Acceptable Model and Manufacturer: **4Front Engineered Solutions - KELLEY**
Hydraulic Edge of Dock Leveler Model:
[KH6620] [KH6630] [KH7220] [KH7230]

2.5 FABRICATION

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

2.6 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 rust-inhibitive primer.
 - 3. Color: Manufacturer's standard color.

PART 3 - EXECUTION

3.1 EXAMINATION

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

3.2 PREPARATION

- A. [Pit Mount]
 - 1. Provide dimensions for pit curbing and anchors, rough-in sizes and templates to appropriate trade for installation into recess in accordance with product specifications.
 - 2. Pit embed angle curbing by others.
 - 3. Ensure pit curb angles are level and flush with recess surfaces for pit installations.
 - 4. Ensure that curb angles are in proper place and recess is of adequate size to receive leveler.
 - 5. On Air or Hydraulic powered levelers ensure conduits used to run power have been installed and made ready for installation.
- B. Face Mount
 - 1. Provide correct embed channel dimension in accordance with product specifications
 - 2. Embed channel by others.
 - 3. Ensure channel is properly installed and is flush with the building floor and wall.
 - 4. On Air or Hydraulic powered levelers ensure conduits used to run power have been installed and made ready for installation.

3.3 INSTALLATION

- A. Dock Leveler: Install in accordance with Section 01 60 00.
 - 1. Install dock levelers [in recesses in loading dock] or to embed channel provided.
 - 2. Level units as required to provide flush surface with dock surface; anchor securely flush to substrate.
 - 3. Weld back of leveler frame to [pit curb] or embed channel.
 - 4. Touch-up welds with primer and apply finish to match leveler finish.
 - 5. Connect motor and electrical leads with control units on Air or Hydraulic powered levelers.
 - 6. Remote Control Station: Locate where indicated on Air or Hydraulic powered levelers.

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