

# GUIDE SPECIFICATION

## MANUFACTURER:

4Front Engineered Solutions – Kelley  
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## SECTION 11 13 19.23

### KOMBO DOCK™ - LEVELER/LIFT COMBINATION

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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 a specialty dock equipment, including combination leveler/lifts, 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 2010.

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.

## 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 03 30 00 - Cast-In-Place Concrete: Concrete pit.]
  - 2. Section 05 50 00 - Metal Fabrications: [Perimeter guard rails and inserts.] [Dock slab and door protection edge angles.]
  - 3. [Division 16 - Electrical: Connections to dock equipment.]

### 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. Same unit capable of operating from ground level to 59" in travel.
- 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 MHI (Material Handling Institute) 30.1.

**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 anchorages, [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. Informational Submittals: Submit following:
  - 1. Manufacturer's instructions.
- E. 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 to hold current ISO 9002 certification
- C. Manufacturer Qualifications: Company specializing in manufacturing Products specified in this Section with minimum ten years documented experience.
- D. Installer Qualifications: Approved in writing by manufacturer with documented experience on at least five projects of similar nature in past five years.
- E. Regulatory Requirements: In compliance with ANSI MH 30.1 and applicable OSHA requirements.
- F. Certifications: Submit manufacturer's certification that products furnished for Project meet or exceed specified requirements.

**I.5 WARRANTY**

- A. Special Warranty: Prepare and submit in accordance with Section 01 78 36.
  - 1. Manufacturer's standard one-year parts and labor warranty.

**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 DOCK LEVELER/LIFT COMBINATION

### A. General:

1. Leveler Capacity: (G) 40,000 lbs.
2. Lift Capacity: 16,000 lbs.
3. Platform Width: [6.5] [7] feet.
4. Platform Length: 12 feet.
5. Platform Deck Thickness: 3/8 inch safety checker plate steel [with abrasive non-skid finish].
6. Lip: [18] [20] inch extension, 3/8 inch thick safety checker plate steel [with abrasive non-skid finish].
7. Vertical Compensation: Floating travel up and down to compensate for loading and unloading of truck.
8. Service Range: Ground up to 59 inches above ground level.
9. Pit Floor Slope: Minimum 1/2 inch, back to front.
10. Identification: Attach to dock leveler in conspicuous place stating:
  - a. Capacity and load rating.
  - b. Name of Manufacturer.
  - c. Model Number.
  - d. Serial Number.
11. Standard Features:
  - a. Full range toe guard protection.
  - b. Built-in safety maintenance strut.
  - c. Yieldable lip under impact of incoming vehicle.
  - d. Side and rear weather seals.
  - e. Non Adjustable emergency velocity safety stop.
  - f. Inside and outside warning lights
  - g. Independent Motor operation for lift and leveler
  - h. Mushroom style emergency stop button stops leveler in any position without the constant button pressure.
  - i. Quick Cycle button to extend lip independent of platform
  - j. Leveler shall automatically return to a safe level position above or below dock with the lip extended. No manual operation to store leveler to a safe cross traffic position.
  - k. Manufacturer to provide regenerative hydraulic system.
12. Options:
  - a. [Master control panel controlling leveler and restraint device, [lights] [inflatable shelter] [overhead door operation].\*See Master Control Panel Specification  
Master control panel to be 100% UL and CSA approved (not just components).
  - b. [Galvanized ramp, lip, and frame.] Type [spray] or [hot dipped.]
  - c. [Insulated ramp.] Type [Foam spray] or [Foam with galvanized cladding]
  - d. [Minimum lip crown.]
  - e. [Energy Guard Perimeter Weatherseal system]
  - f. [Dock Guard Safety Gate.]
  - g. [Dock Guard Barrier Lip.]

### B. Motor (Hydraulic) Operation:

1. Electrical power pack (includes motor, pump and valve assembly) of 1.0 HP leveler motor and 7.5 HP lift motor; [208] [220] volt, 60 HZ, [1] [3] phase motor.
2. Remote Control Station: Constant pressure push button station complying with NEMA 12.
  - a. Constant Pressure on Control Button: Raise unit.
  - b. Release Pressure on Button: Allow leveler to descend by gravity to truck bed. Provide emergency mushroom style "E" stop.
  - c. Lift control to be supplied with up, down stop buttons
3. Platform and lip operated by hydraulic cylinders.
4. Platform operated by single regenerative hydraulic cylinder
5. Lip automatically extends and holds.

6. Engineered unit to float with truck bed.
  7. When truck departs, automatic lip and platform return to cross traffic dock position or push button return from any position.
  8. Provide drop-safe hydraulic safety stop.
  9. Switches not allowed in pit or on cylinders.
- C. Acceptable Model and Manufacturer: **4Front Engineered Solutions - Kelley Kombo Dock™ [6'6" w unit LL126.500] [7' w unit LL12700]**

## **2.3 FABRICATION**

- A. Dock Equipment:
1. Weld base frame construction.
  2. Unit supplied completely assembled, ready for use.
  3. Sub frame to be Clean Frame design, open front for easy clean out.

## **2.4 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 applied manufacturer's standard rust-inhibitive primer.
  3. Color: Manufacturer's standard color. (Grey)

## **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 recess to receive dock leveler.
1. Provide pit curbing and anchors, rough-in sizes and templates to appropriate trade for installation into recess.
  2. Ensure curb angles are square, level and flush with recess surfaces.
  3. Ensure that curb angles are in proper place and recess is of adequate size to receive leveler.
  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.

### **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**