# GUIDE SPECIFICATION

# **MANUFACTURER:**

4Front Engineered Solutions - Kelley US Corporate Office 1612 Hutton Drive, Suite 140 Carrollton, Texas 75006 (800) 558-6960 voice (972) 323-2661 facsimile www.kelleycompany.com

# SECTION 11 13 19.13 aFX-C - AIR POWERED LEVELERS

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

# PART I - GENERAL

# I.I 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:
  - I. [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]

# 1.2 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.

#### 1.3 SUBMITTALS

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.

- 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.
  - 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. Informational Submittals: Submit following:
  - I. Manufacturer's instructions.
- E. Closeout Submittals: Submit following in accordance with Section 01 78 00
  - I. 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

# 1.5 WARRANTY

- A. Special Warranty: Prepare and submit in accordance with Section 01 78 36.
  - I. Manufacturer's standard prorated ten-year warranty for structural components upon approval of written application.
  - Manufacturer's limited 5-year parts & labor warranty on lifting system (bag, motor, hoses, gaskets, fittings, & seals). Limited 1-year parts and labor warranty on remaining components.

# PART 2 - PRODUCTS

# 2.I MANUFACTURERS

# A. Acceptable Manufacturers:

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

#### 2.2 AIR POWERED DOCK LEVELERS

The following description is for an air powered dock leveler to insure low maintenance and reliable performance. All options are included within brackets. Select each option and choice according to project need.

opions are included within prackets. Select each opion and choice according to project need.

#### A. General:

- I. Capacity: [30,000] [35,000] [40,000] [45,000] [50,000] (per ANSI MH14.1-1987).
- 2. Platform Width: [6] [6.5] [7] feet.
- 3. Platform Length: [6] [8] feet
- 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] [Lip rod 1 inch solid steel].
- 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 for 6' and 8' long models. 18" above and 12" below for 10' long models.
- 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. Pit Frame: 3 inch x 3 inch x 1/4 inch steel angle, welded corners and anchors for casting into concrete.
- 11. Identification: Attach to dock leveler in conspicuous place stating:
  - a. Capacity
  - b. Name of Manufacturer.
  - c. Model Number.
  - d. Serial Number.

# 12. Standard Features:

- a. Full operating range toe guard protection.
- b. High Efficiency 60,000 lbs structural dock level support legs.
- c. Integral Maintenance strut.
- d. Integral Lip Lock.
- e. Open frame design-open front structure to allow easy clean out.
- f. High volume, low pressure air bag lifting mechanism.
- g. Direct connection of fan unit to air bag, no hoses or clamps accepted.
- h. Shimless front and rear frame design.

# 13. Options:

- a. [Master control panel with combination device controls.]\*See Master Control Panel specs. Master control panel to be 100% UL and CSA approved (not just components).
- b. [Energy Guard Perimeter Weatherseal System]
- c. [Galvanized ramp, lip, and frame.] Type [spray] or [hot dipped.]
- d. [Self-forming.][Pour in place box.]
- e. [Insulated ramp.] Type [Foam spray]

# B. Motor Operation:

- 10 amp fan with two-stage, single speed, self-cleaning filter, UL-approved motor; powered by 110 volt single-phase electrical power.
- 2. Remote Control Station: Constant pressure push button station complying with NEMA 4.
  - a. Constant Pressure on Control Button: Raise unit.

C. Acceptable Model and Manufacturer: Kelley model aFX-C: 4Front Engineered Solutions, 1612 Hutton Drive, Suite 140, Carrollton, TX 75006 (P)972-466-0707

See manufacturer's comparative chart for standard and optional features of each device.

#### 2.3 FABRICATION

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

# 2.4 FINISHES

- A. Dock Equipment Finish:
  - I. 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: 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. Coordinate forming of pit to receive dock leveler.
  - I. 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" for 6', 8' long][24" for 10' long] pit depth for new construction.
      - 2. [20" to 24" sloped pit depth for food and food service applications to facilitate easy pit cleanout of debris and water. (6' and 8' long units only).]
  - 4. 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 Ou		ation and maintaining	of installed units	Drawida hawad aany
A. Instruct Ow of manufact	ner's personnel in oper urer's operation and ma	ration and maintenance or aintenance manual at time	e of instruction.	Provide bound copy
		END OF SECTION		
4Front Engineered Solu	utions - Kelley Guide Specific	ation		Air Powered Levelers