



**Architectural Specification**

**Nordock BARRIER™ Series – Model NB Hydraulic Docklevelers**

Available Capacities: 30, 40, 50, 60, 80, 100 & 120 (000's) lb. Capacities  
Available Widths: 6', 6'6" & 7'  
Available Lengths (Nominal): 6', 8', 10' & 12'

SECTION 11161  
DOCKLEVELERS

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Factory assembled dockleveler with subframe, crossover lip, hydraulic activators, electric controls, and full operating side guards.
- B. Curb angles or pour-in-pan assembly.
- C. Installation and Owner's Manual.

1.02 RELATED WORK

- A. Section 11160 - Truck Restraints.
- B. Section 11164 - Seals and Shelters.
- C. Section 11165 - Dock Bumpers.

1.03 REFERENCES

- A. ANSI/ASME MH 14.1 1987, "Loading Dock Levelers and Dockboards."

1.04 SYSTEM DESCRIPTION

- A. Hinged barrier lip, hydraulic, recessed dockleveler to the following requirements:
  - 1. Nominal Size: ( ) wide x ( ) long.
  - 2. Capacity: ( ) lbs. per ANSI/ASME MH 14.1 1987.
  - 3. Service Range: Twelve inches above dock level and twelve inches below dock level. (12' Units - 18" above 12" below)
  - 4. Velocity Fuse: Deck lock integral with lift cylinder to activate if truck fails to support lip under load.
  - 5. Barrier Lip: 6" high protection from accidental run off of dock.
  - 6. Lip projection: 13 inches beyond front face of standard 4" bumpers. (See Options)

## 1.05 SUBMITTALS

- A. Submit Manufacturer's installation instructions.
- B. Submit shop drawings showing pit dimensions, conduit positions and wiring schematics.

## PART 2 PRODUCTS

### 2.01 ACCEPTABLE MANUFACTURERS

- A. BARRIER™ Series - Model NB (\_\_\_\_\_) as manufactured by Nordock Inc.

### 2.02 EQUIPMENT

- A. Curb angles (Optional): 8-piece 3 x 3 x 1/4 inch angle iron with concrete anchors to cover all pit edges.
- B. Pour-In-Pan (Optional): 6-piece angle iron frame with concrete anchors and fully enclosed steel pan on sides, back and bottom. Dockleveler to be pre-installed in pan with rear conduit for wiring connections.
- C. Dockleveler:
  - 1. Ramp: 50-55,000 psi-yield steel tread plate, reinforced with 50,000 psi-yield steel beams. Beams to be formed channel type 6" high with 2" top and bottom flanges for additional plate support. 60,000 lb. capacity and higher units to have 6" wide flange structural beams with 4" flanges. Unitized welded ramp to allow side-to-side tilt to follow uneven truck beds. Rear hinge to run full width of deck. Lip hinge lugs and header plate to beam connections to be continuously welded. Front and rear hinge rods to be zinc plated SAE 1045 factory coated with anti-seize lubricant. Side guards to be welded to deck with hinged telescoping sections to provide full operating protection. Ramp to have center deck beam for additional plate support on 30, 40 & 50K capacity.
  - 2. Lip: The lip barrier to be 6" high and to be a permanent fixed (stay-put) design to prevent a moving lift truck from accidentally falling off the dock through an open door or if a truck pulls out while end loading. Lip structure to be designed to withstand a 10,000 pounds forklift impact at four miles per hour without failure. Tread plate and lug material to be 50-55,000 psi. Lugs to be continuously welded to lip plate. Plate to be full width of deck, non-tapered with leading edge chamfer to be milled at maximum 15 degrees.
  - 3. Subframe: Welded assembly to have a rear structural angle welded to hinge tubes and seven solid steel rear supports connected to the longitudinal members. Front center section to be open for easy pit cleaning. Lip supports to act as locks to prevent illegal entry to the building when the door is closed.
  - 4. Hydraulic System: Ramp and lip to be powered by regenerative hydraulic cylinders with hard chrome plated and polished rod, guide bearings, and high-pressure seals. Ramp cylinder housing to be connected to deck with rod extending downward to prevent debris from collecting and allow self-bleeding. Ramp cylinder equipped with non-adjustable velocity fuse to stop downward deck movement within 3 inches if support is removed under load. Integral power unit with filters, valves, pump and oil reservoir as required. Hoses to be SAE 100R2 high-pressure with factory crimped fittings.
  - 5. Motor and Controls: Hydraulic pump powered by 1.5 HP totally enclosed non-ventilated type motor. Control box to have NEMA 12 dust tight enclosure

containing motor starter and single push-button. Control panel to be UL/CSA approved.

6. Maintenance Supports: Provide separate ramp and lip supports to hold the ramp in its raised position and the lip in its extended position for routine inspection and maintenance.
7. Finish: All surfaces to be degreased and painted with high solid machinery enamel. Provide standard manufacturer's color.

D. Options:

1. Longer lip to project 15" beyond a 4" bumper
2. Emergency stop button on control panel that will when pressed remove power and stop movement of the ramp until the operator reinstates its normal position.
3. Independent ramp and lip controls to allow extension of lip in any position.
4. Safe and automatic return to stored level position of dock leveler if not properly stored after servicing trucks.

## PART 3 EXECUTION

### 3.01 PREPARATION

- A. Provide curb angles for setting pit edges. (Optional)
- B. Provide dock leveler in pour-in-pan for setting in place. (Optional)

### 3.02 INSTALLATION

- A. Install in prepared pit in accordance with manufacturer's instructions.
- B. Adjust installed unit for operation as specified by Manufacturer.