

PRODUCT GUIDE

**YARD RAMPS
& PORTABLE
DOCKS**

**RAMPS &
BRIDGES**

**DOCK &
RAIL BOARDS**

**DOCK
PLATES**

**SAFETY
PRODUCTS**

**DOCK
LEVELERS**

**INDUSTRIAL
STORAGE &
HANDLING**

DURASWEEPER®

**MEZZANINE
STRUCTURES**

**CONVEYOR
CROSSOVERS
& CANTILEVER
RACK**

**STAIRWAYS,
LANDINGS
& LADDERS**

**WINE / KEG
STORAGE
& SLAB
HANDLING
EQUIPMENT**

YARD RAMPS

A safe and cost effective answer to many loading dock issues. Yard ramps are used in ground-to-dock or ground-to-truck applications.

PORTABLE STEEL YARD RAMPS – Model SYS

- All-steel welded construction
- Standard capacities: 16,000 to 60,000 pounds. Other sizes available
- Curbs 8" tall for safety and greater capacity
- Beveled approach for a smooth transition
- Solid 18" rubber tires provide excellent traction without worry of puncture. Pneumatic tires optional
- Double-acting hydraulic pump to adjust the portable unit to the proper position
- Portable 36' unit includes a 6' level-off for loading and unloading end pallets



STEEL YARD RAMPS – Model SYSNU

- All steel welded construction without undercarriage for a long-term, durable solution
- Capacities from 16,000 to 60,000 pounds
- Wide range of capacities and sizes available
- Steel serrated grating
- Beveled approach provides a smooth transition
- Safety chains included to secure Yard Ramp to dock



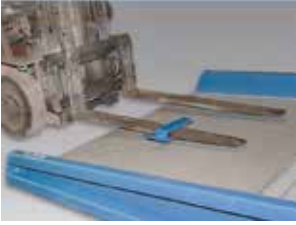
HIGH CAPACITY STEEL YARD RAMPS – Model SYSNU

- Capacities from 60,000 to 100,000 pounds
- Sturdy, all-steel welded construction with I-beam structure
- Sold without undercarriage for fixed placement
- Widths available up to 144" (may be shipped in two parts to meet transportation regulations)
- Available with fixed or adjustable legs

STEEL YARD RAMPS WITH CASTERS – Model SYS-C

- Capacities from 16,000 to 60,000 pounds
- Sturdy, all-steel welded construction with level off
- Steel serrated grating and beveled approach provides a smooth transition
- Steel casters with polyurethane for durability and smoother movement
- Includes adjustable legs. Normal service range is 42" to 59". Special sizes available

YARD RAMP FEATURES & OPTIONS



RAMP CLAMP

The Ramp Clamp assists in moving the Yard Ramp. Forklift tine inserts into the swiveling lift loop and is secured by a locking device.



TOW BAR

The optional Tow Bar features a fastlocking, easy hook-up to the Yard Ramp for towing. A quick disconnect feature improves handling efficiency.



UNDERCARRIAGE ASSEMBLY

Heavy-duty wheels and solid rubber, pneumatic profile tires make positioning the Yard Ramp easy. Included with Model SYS only.



FLIP PLATES

Flip plates give flexibility for up and down loading (+/- 3"). Available for Yard Ramps or Platforms.



HANDRAILS

Additional safety can be provided for pedestrian traffic with Bluff Manufacturing's easy-to-install hand rail system. Available for Yard Ramps or Platforms.

PORTABLE DOCK/STEEL PLATFORM



PORTABLE DOCK/PLATFORM

A fast, economical way to expand your dock area and to increase freight handling capabilities without the expense of site or concrete work. A Portable Dock affords 90 degree turnability for safe forklift maneuvering and can easily be relocated to other areas of your yard where a free-standing loading dock may be needed. Optional, adjustable, telescoping legs of 44" and 55" allow elevations to meet most dock height requirements. For remote areas, choose a portable dock along with a Bluff Yard Ramp for ease of satellite loading/unloading.

RAMPS & BRIDGES

MINI RAMPS – Model MR

- All-steel construction with no undercarriage
- Mini-Ramp available in 15' and 18' lengths
- Mini Ramp widths from 70" to 84"
- Capacities from 12,000 to 30,000 pounds
- Services heights from 16" to 32"
- Optional mobility package includes two screw jacks with steel casters



CURB RAMP

For use with hand carts. Produced in high visibility safety yellow HDPE for durable use with up to 600 lbs. load.



WALK RAMP

For use with hand carts. Lightweight aluminum construction with a twin-tooth deck for better traction.



WHEEL RISERS

WHEEL RISERS - worksheet required

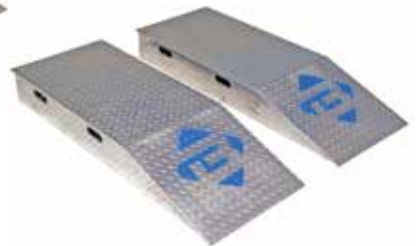
- Reduce unsafe, below dock loading conditions
- Position trailers properly above dock for more efficient loading
- Lengths to accommodate both single, dual, or tandem axle trailers. Custom sizes available
- Wheel risers can be portable or permanently positioned
- Completed worksheets ensure proper fit and function

Heights up to 12"
Widths of 18" and 24"



STEEL WHEEL RISERS – Model SWR

Tabs for anchoring



ALUMINUM WHEEL RISERS – Model AWR

Hand holes for easy moving

DOCK BOARDS – STEEL

Fully-welded steel dock boards provide a safe ramp for powered vehicles. Improve product life, safety, and efficiency by selecting the best product for your application. **See Dock Board Selection Guide on page 8 before ordering to ensure correct selection.** Bluff dock boards and dock plates are manufactured and tested in compliance with ANSI Standard MH30.2.

STEEL DOCK BOARD – Model SC

- Steel plate with welded steel curbs and locking legs
- Designed for 3,000 to 4,000 pound capacity forklifts in light use applications
- Lifting chains included. Speedy Board® option (p. 8) available
- Capacity 10,000 and 13,000 pounds
- Width of 60" and 72". Lengths from 36" to 72"



STEEL DOCK BOARD – Model T

- All-welded, double bend design allows for below dock applications
- Use with conventional, refrigerated, and container trailers
- Capacities from 15,000 to 40,000 pounds
- Two four-hole pin pockets placed on each edge for flexible positioning
- Board is held in position using two 1" stress-proof steel pins
- Fold-down lifting loops. Speedy Board® option (p. 8) available.
- Widths from 60" to 96"



STEEL DOCK BOARD – Model TFL

- All-welded, double bend design with locking legs
- Not recommended for below dock loading
- Fold-down lifting loops. Speedy Board® option available



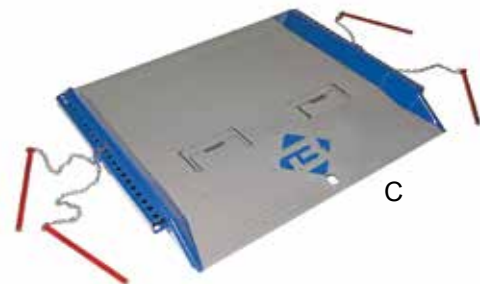
STEEL DOCK BOARD – Model TNB

- Single-bend design with lifting chains and full-width locking legs
- Lifting chains included. Speedy Board® option (p. 8) option available
- Not recommended for below dock loading



RED PIN STEEL DOCK BOARD – Model C

- All-welded construction
- Provide safe loading conditions for container and park-out and uneven trailer-to-dock applications
- Dual-pin locking system with full length side pockets. A Bluff innovation!
- Speedy Board® option (p. 8) available
- Capacities from 15,000 to 40,000 pounds
- Widths from 60" to 96". Lengths from 48" to 120"



SPEEDY BOARD® – Model SB

- Allows forklift operators to stay inside the forklift cage during board placement and retrieval. A Bluff innovation!
- Improves safety, productivity and efficiency
- Standard capacities of 10,000, 13,000, or 15,000 lbs. Higher capacities up to 40,000 lbs. available



DOCK BOARDS

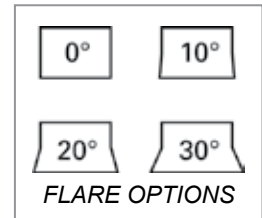
RAIL BOARD – Model R

- All-welded steel construction
- Capacities from 15,000 to 90,000 pounds
- Rectangular or flared design
- Box understructure for strength and safety
- Heavy-duty locking rings for safe, secure positioning
- Lifting loops fold flat into recessed pockets. Can also add lifting chains
- Rail boards are custom designed and built to match the specific dock conditions. Worksheet required prior to manufacturing to ensure proper fit
- Designed for use on all types of rail cars including refrigerated and special cars for the lumber and paper industries



R

All rail board applications are factory quoted upon receipt of a fully completed Rail Board Worksheet (located on the literature page of our website).



RAIL BOARD PLACEMENT



LOCKING RING DESIGN



UNDERSTRUCTURE

CONTAINER RAMP – Model CR

- Built tough to withstand heavy use
- Safely navigate the transition from ground to the container bed
- Manufactured for use with hand or powered equipment
- Full width stiffener provides strength and secure fit against the container
- Locking chains with a specially designed keeper allow you to easily lock the ramp into the holes in the container
- Standard sizes available in 15,000 to 30,000 capacities. Other sizes available



CR



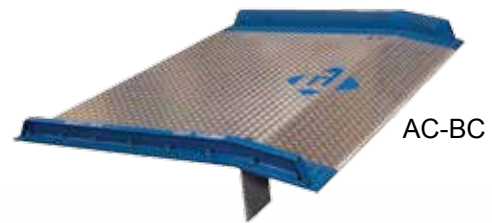
CR

DOCK BOARDS & DOCK PLATES - ALUMINUM

Aluminum products are ideal for low to medium volume dock loading application. Aluminum is a great solution for use in coastal areas or the frozen food industry where humidity and/or moisture are present. Bluff dock boards and dock plates are manufactured and tested in compliance with ANSI Standard MH30.2.

ALUMINUM DOCK BOARD – Models AC & BC

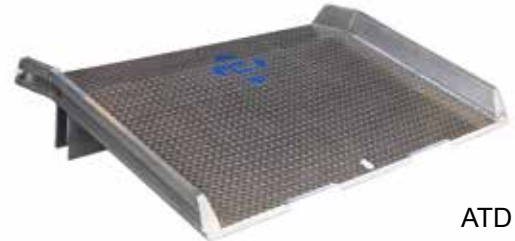
- 10,000 and 15,000 pound capacities
- Full-length structural steel bolt-on curbs for increased strength and to prevent runoff
- Locking legs provide secure positioning
- Standard lip length for conventional trailers is 11", option of 14" for refrigerated applications
- Widths from 60" to 72", and lengths from 36" to 96"



AC-BC

ALUMINUM DOCK BOARD – Model ATD

- Designed for light duty in low to medium volume applications with a forklift or pallet jack
- Welded aluminum construction with extruded curbs and legs.
- Capacities of 10,000 and 15,000 pounds
- Lengths ranging from 36" to 72". Locking legs in lengths from 8" to 13"



ATD

ALUMINUM SPRING LOADED DOCK PLATE – Model SL

- Recommended for loading applications involving hand trucks/dollies and pallet jacks
- Top-of-dock mounted, vertically stored. Dual spring lift assist
- Optional Kick Plates and Non-Skid Tape surface available



SL

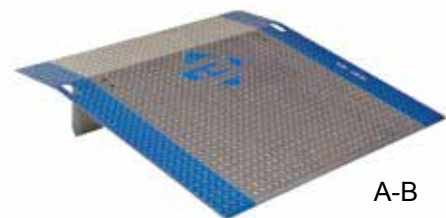


Optional Kick Plate and Non-Skid Tape

Patent No. D633,684

ALUMINUM DOCK PLATE – Models A & B

- Recommended for light activity, non-powered loading applications
- Bolt-on steel legs for securing between the dock and the trailer
- Standard lip length for conventional trailers is 11", option of 14" for refrigerated applications
- Available in two capacity ranges. Wide range of sizes available



A-B

GAS CYLINDER RAMPS – Models AWL & AWC

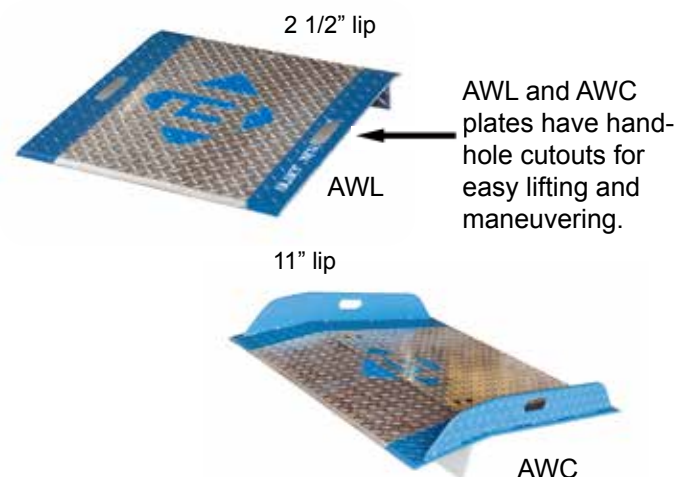
- For the safe distribution of specialty gas cylinders on and off pallets
- Used to manually maneuver cylinders with ease and control
- Light enough to be moved by hand yet strong enough to accommodate heavy cylinders

Model AWL

- Capacities from 1,300 lbs. to 4,720 lbs.
- Engineered to pallet height
- Fully welded legs

Model AWC

- Welded 3/8" thick curbs on both sides for added control
- Capacities from 1,300 lbs. to 4,380 lbs.
- Welded curbs



2 1/2" lip

AWL

11" lip

AWL and AWC plates have hand-hole cutouts for easy lifting and maneuvering.

AWC

DOCK BOARD SELECTION GUIDE

OPTIONS AVAILABLE

Z-Roll Attachment: One person positioning without the use of a forklift. Telescoping handle stores away while board is in use.

Lifting Chains: For positioning of board by forklift.

Speedy Board® Cutouts: Allows the forklift driver the ability to move, place, and retrieve the board without exiting the forklift. For boards only. Suited for forklifts with tapered, tiltable tines.



SELECTION GUIDE

When making dock board and/or dock plate selections, consider the extremes rather than the averages

CAPACITY

PLATES

- Weight of equipment and heaviest load

BOARDS

- Capacity rated for single-shift operation at a 3 mile per hour maximum rate of travel
- Stackers and other narrow aisle loaders should not be used on a dock board
- Paper roll clamp and multi-shift loading add 5,000 pounds to the board capacity

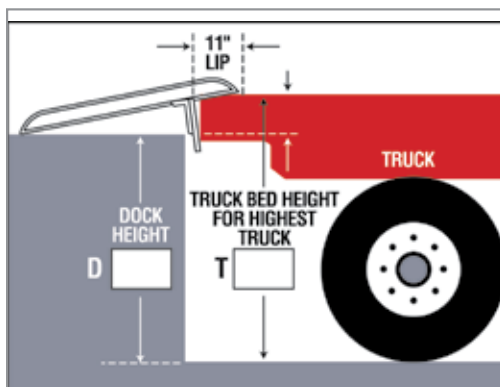
CAPACITY SELECTION CHART

4-Wheel Forklift Lifting Capacity	3-Wheel Forklift Lifting Capacity	Board Capacity Required
2,000 – 3,000	2,000	10,000
3,000 – 4,000	2,500	13,000
5,000	3,000 – 3,500	15,000
5,000 – 6,000	4,000 – 5,000	20,000

LENGTH

To determine the proper length of a dock board/plate, three items are required:

1. Dock height (D)
2. Height of highest truck and lowest truck (T)
3. Gradeability of loading equipment used.

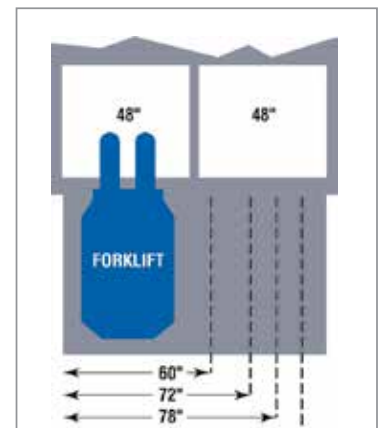


WIDTH

Bluff recommends a minimum product width of 12" to 18" wider than the overall width of the vehicle or pallet used. For improved end loading efficiency, you may consider increasing board width, as shown in the diagram (below).

MAXIMUM TRAILER HEIGHT SERVED

Truck Type	Serve Height
Freight Line Trailers	46" - 56"
Flatbed Trailers	50" - 60"+
Bob Tail Trucks	46" - 48"
Containers	56" - 62"
Refrigerated Trailers	50" - 60"



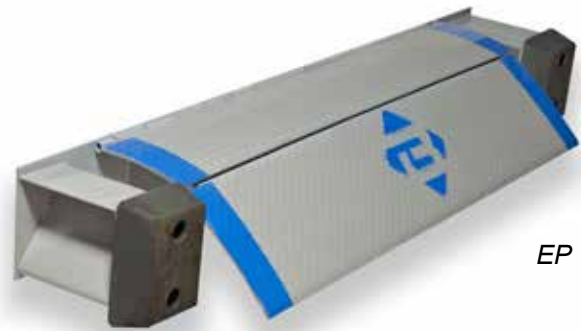
DOCK LEVELERS

Fast and easy to operate, Bluff's Edge-of-Dock Leveler is positioned by lifting a self-storing handle and pulling the handle to the dock floor. The latch assembly activates the lip, moving it forward to the floor of the trailer as the handle is lifted. When released, the handle automatically returns to a stored position.



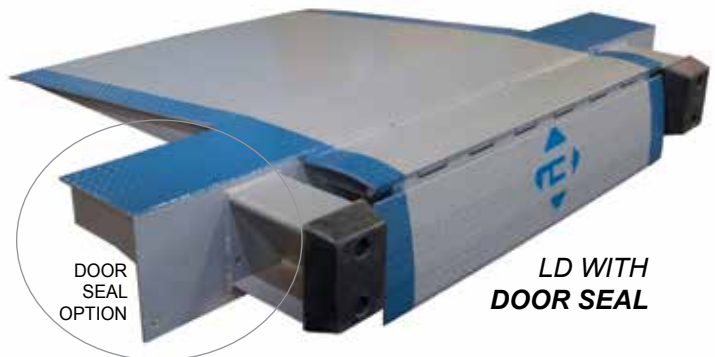
EDGE-OF-DOCK LEVELER – Model EP

- Positioned by lifting a self-storing handle and pulling the handle to the dock floor. (See illustration above.)
- Hydraulic option available. Anchor kit also available.
- Latch assembly activates the lip forward to the floor of the trailer as the handle is lifted
- Automatically returns to stored position when truck leaves
- Bumper and bumper blocks are included
- Steel faced bumpers available
- Capacities from 20,000 to 30,000 pounds
- Widths of 66", 72" & 78"
- Refrigerated lip optional
- Working range of 3" above and 3" below dock



LO-DOCK LEVELER – Model LD

- Raises Edge-of-Dock Levelers to proper working height
- Working range of 3" above and 3" below dock for electric and 5" above and 5" below dock for gas powered forklift
- Raises present dock height as much as 11" without expensive alterations
- Completely assembled; no site welding required
- Easily installed on any concrete dock without welding or modifications
- Capacities from 20,000 to 30,000 pounds
- Hydraulic option available. Anchor kit also available
- Because of gradability problems, dock levelers are not recommended for use with pallet jacks or stackers
- Refrigerated lip is optional
- Lo-Dock Leveler is available with Door Seal Option
- Completed worksheets ensure proper fit and function



SAFETY PRODUCTS

Improve plant and warehouse safety by reducing the costs associated with employee injury, machinery down-time, insurance claims and building repairs due to accidental collisions.



TUFF GUARD SAFETY RAIL (Model TGR/TGP)
Protection rated for 10,000 lbs. at 6 mph. Structural steel square tubing posts manufactured with 4" x 4" x 3/16" steel. Rail lengths up to 12'. Standard post heights 18" and 42". Hardware included.



MACHING GUARD (Model MG)
Fully welded unit creates barriers between traffic areas and valuable machinery. Quick, easy installation. Hardware not included.

DOOR TRACK GUARD (Model DG)

Protect overhead door tracks from damage. Wrap-around track design allows for free door operation. 3/16" thick steel with a 3/8" thick steel base plate. Can be bolted to floor and wall.



(DG48-3)

A smaller, lighter option allows for a tighter fit around columns. Base is 1/4" thick steel. Can also be used as a corner protector. Fasteners not included.

POST PROTECTORS (Model PC)

Various thickness and height protection available. Customizable for your posts. Fasteners not included.



BOLT-ON POST PROTECTOR (Model CP)

Maximizes aisle space by bolting directly to column - no base plate to interfere. Perfect for reinforcing damaged posts. Hardware not included.



MODULAR PROTECTIVE BARRIER (Model MPB)

Lift-out rail design allows access to areas quickly and safely. Simple to install or cut custom sizes in the field. 42" double rail meets OSHA guidelines for rail protectors for pedestrian traffic. Installation hardware not included.



PIPE GUARD (Model PG)

Helps eliminate damage to plumbing, mechanical and electrical equipment mounted to building columns. Wall-mount and column-mount styles available. Fasteners not included.



BOLT-ON BULLNOSE POST PROTECTORS (Model CPBN)

Tapered design protects rack posts from costly damage from warehouse vehicles. Bolts directly to column for easy installation. Different heights and thicknesses available. Hardware not included.



SAFETY PRODUCTS

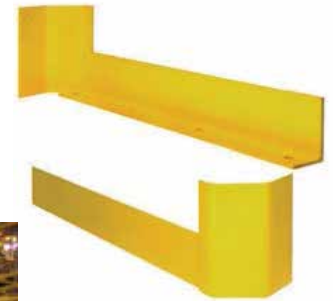


BOLLARD – Model SRB

Protects personnel and machinery. Simple bolt installation – no concrete work required. Hardware included.

RACK GUARD – Model RG

Wrap-around feature protects rack from front and aisle damage. Hardware kits sold separately.



GUIDERAIL

Protects pallet rack, cantilever and other equipment with structural steel and powder coated design. Can be used with narrow-aisle fork trucks, lifts and order pickers to direct products and vehicles through a channel, conveyor, roadway or rail system.



SAFETY CAGE – Model SG

Welded fork pockets and chains for secure fit. Customizable for your application and required size. OSHA compliant. Capacity 1000 lbs.



KNOCK DOWN SAFETY CAGE

OSHA Compliant. Lower shipping cost and easy assembly with all the strength of our welded cage. Capacity 1000 lbs.

SLAB HANDLING PRODUCTS



SHOWROOM SLAB DISPLAY RACK

Heavy duty welded steel construction. Frame showcases slabs for display. Allows for internal lighting. Double-sided.



A-FRAME SLAB DISPLAY RACK

A-Frame welded steel construction. Can store and display up to 4000 lbs. per side.

KNOCK DOWN A-FRAME

Breaks down for LTL shipping. Save money on shipping cost without losing the strength of our standard rack. Capacity 10,000 lbs. per side.



SLAB HANDLING EQUIPMENT – Model AFRAME



Heavy duty A-Frame support for display or transportation of heavy slabs such as granite. Designed with maximum safety measures. Capacity 10,000 lbs. per side.

FORKLIFT EXTENSIONS

Load and unload heavy slab, like marble and granite, more safely and with better protection of the slab. Our Forklift Extensions extend the reach of your existing forklift tines to reach deeper into the truck.



STORAGE PRODUCTS



KEGFLOW RACKS – Model KEGFLOW AND VARIABLE WIDTHS

Stores Sixers and other craft kegs in existing pallet racking. Two versions available to fit up to 120” pallet racking. Saves shelf space and allows for faster and easier handling of craft kegs. Variable widths available.



WINE FLOW – Model WINEBOTTLE42

Efficiently stores individual wine bottles in a gravity-fed flow system to allow for easier picking. Welded steel construction. Available in 3 widths to accommodate various bottle diameters.



GAS CYLINDER PALLET

Increase your efficiency and safely transport and store gas cylinders.

- Steel base plate with diamond tread.
- Maximum capacity 16 cylinders



ORDER PICKER

Moves substantial quantities of boxes or small packages quickly and safely, for order fulfillment applications. Forklift ready.



PACKING BOX RACK – Model PBR

Reduce clutter. Durable efficient rack for storing packing boxes and optimizing shipping. Conveyor and floor models available.

STORAGE PRODUCTS

Cantiliver Rack

Bluff cantiliver rack is customized designed for each application. Made of structural steel for light and heavy duty applications.

- Minimize footprint of storage space while maximizing vertical and horizontal space usage
- Capitalize on the higher lifting capacity and operational capability of current lifting equipment
- Reduce handling time and enhance efficiency of inventory control/management through improved accessibility to storage space
- Minimize cost of damaged product from storage structure obstacles



Arms

- Capacity of cantilever rack is based on the upright height and the length of the arms
- Cantilever arms are manufactured with a minimum 3 degree incline. Material storage examples include: lumber, cartons, pipe and sheet materials
- Arms are completely adjustable on 4" centers. Arms are welded to a mount plate which is then bolted to the upright

Upright Column

- Upright column height takes into consideration the limitations of ceiling height and ceiling conditions such as sprinkler system, lighting fixtures, etc. as well as the reach of your lifting equipment
- High strength steel columns are either Single-Sided or Double Sided and range in height from 8' to 20'
- Columns are pre-punched with 4" centered arm mounting holes



Cantilever Base

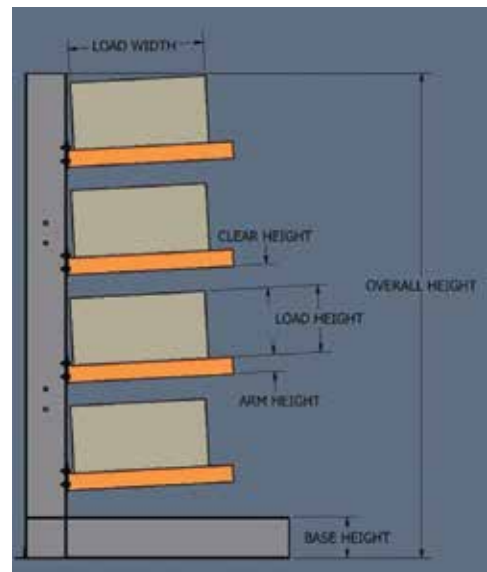
- Cantilever base has a standard bolt-on construction providing ease of installation and a stable, rigid base connection

Brace

- Bracing between uprights allows for continuous rows for longer stock and for uninterrupted loading and unloading

Options

- Material Tray – used as a product pan for loosely stored items of varying sizes.
- Colors are gray and blue. Other standard colors available. Custom colors at additional charge.



MEZZANINES

MEZZANINE STRUCTURES

- Non-welded bolt connections and flexibility of design allow for future modifications, relocation and/or expansion and potential reconfiguration
- Equipment and machinery mounting options available; multi-tiered integration of existing structures
- Maximization of vertical clearance for exceptional under-mezzanine space utilization
- High quality design and standardization of components to keep installation costs down

General Mezzanine Specifications

- Free-standing, pre-fabricated structure. Standard design requires no on-site welding
- Registered Structural Engineer to supervise or approve all designs and details
- Engineering (PE) seal on final drawings where applicable
- Pre-fabrication drawings submitted for approval
- Structural design in accordance with the American Institute of Steel Construction (AISC) Manual of Steel Construction
- Joist Construction performed in accordance with the Steel Joist Institute (SJI)

Options

- | | |
|---------------|---------------|
| Decking | Gates |
| • Bar grating | • Swing |
| • B-deck | • Slide |
| • Wood | • Drop plates |



CATWALKS & STAIRWAYS, LANDINGS & LADDERS

CONVEYOR CROSSOVER

Bluff provides crossover solutions to maximize efficiency of operations and minimize the costly potential of injury by keeping personnel safe.

Conveyor Crossover Specifications

- Bolt-together construction for easy installation
- Alternate configurations including U-shaped, Z-shaped and L-shaped with intermediate landings where necessary

STAIRWAYS

Bluff provides customizable IBC and OSHA compliant stairs; manufactured with structural steel and bolt-together installation

Stairway Specifications

- 36" standard width. Customization available.
- Tread options: bar grate or diamond plate.
- Open or closed risers depending on code.
- Custom sizes and configurations: straight, L-Shaped and U-shaped runs with intermediate landings.

LANDINGS

Bluff manufactures fully customizable structural steel landings required for vertical rises over 12 feet. IBC and OSHA compliant. Landings can be provided with stairs or sold separately.

Landings Specifications

- Custom sizes and configurations (straight, L-shaped and U-shaped runs)
- Top landings available for specific ingress/egress requirements
- Choice of decking material. (See options above)

LADDERS

Bluff provides Fixed Ladders, Caged and Uncaged Ladders as well as Ships Ladders. Ladders are designed and constructed in compliance with OSHA and ANSI Standards.



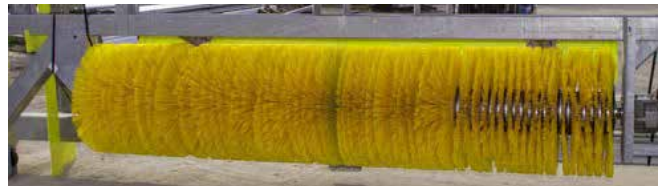
DURASWEEPER®

DuraSweeper® has a unique process for removing snow from commercial vehicle rooftops while minimizing risk of damage. DuraSweeper's automatic circuitry technology senses barriers on the rooftop and adjusts to optimally remove snow. This unique capability also allows for manual and automatic shutoff.

Increases Safety and Reduces Liability

- Fuel savings – a snow load on the top of a vehicle can decrease fuel efficiency from 2-8%.
- Safety – 17 states have laws or pending legislation regarding the removal of snow from vehicle rooftops.
- Community stewardship - keep your company's reputation and concern for safety a top priority.

The DuraSweeper will help with fuel efficiency and ensure safe roads, while minimizing the liability for truck owners.



For more information on Linde material handling equipment, please contact:

TOTAL
WAREHOUSE
TotalWarehouse.com
833-868-2500