

ZERO IMPACT DOCK BUMPERS DB5024 – DB5026 & DB5034 – DB5039 INSTALLATION GUIDE



A Product of



340 Gateway Park Drive
North Syracuse, NY 13212
Phone: 315-463-7348
Toll Free: 866-235-7468
Fax: 315-463-8559
Email: sales@dlmanufacturing.com
www.dlmanufacturing.com

Zero Impact Dock Bumper Installation Guide

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What is Supplied

Your Bumper Arrives Fully Assembled All Bumper Hardware Included.
Wall Mounting Hardware or Weld Rod Are Not Included

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Owner Responsibilities

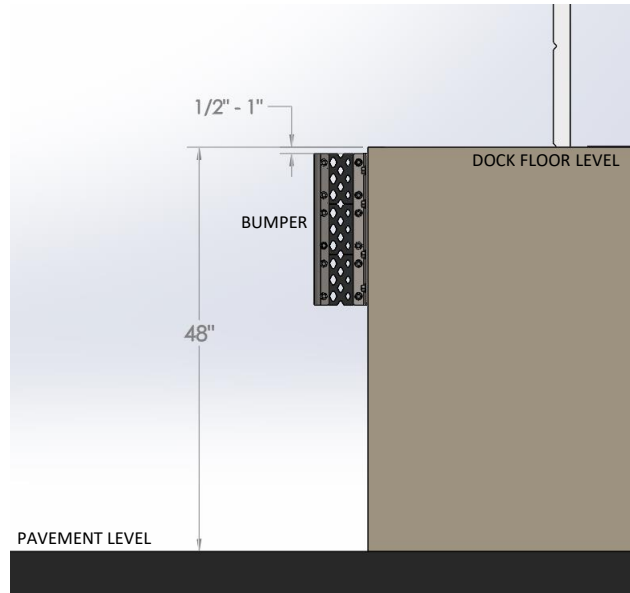
1. The owner should understand and comply with all safety standards. The owner is responsible for training and adhering to all safety standards when working with DL Manufacturing products.
2. All posted safety instructions should be visible to all operators and staff involved with the installation of the Zero Impact Dock Bumper to the dock door. No posted safety instructions shall be obscured from view.
3. Installation of the Zero Impact Dock Bumper on any loading docks that have experienced issues such as failure or structural damage should be postponed until repaired by a qualified technician.
4. Any modifications made to the bumpers as a result of installation must have written permission from DL Manufacturing in order to maintain a valid warranty.

SAFETY RECOMMENDATIONS

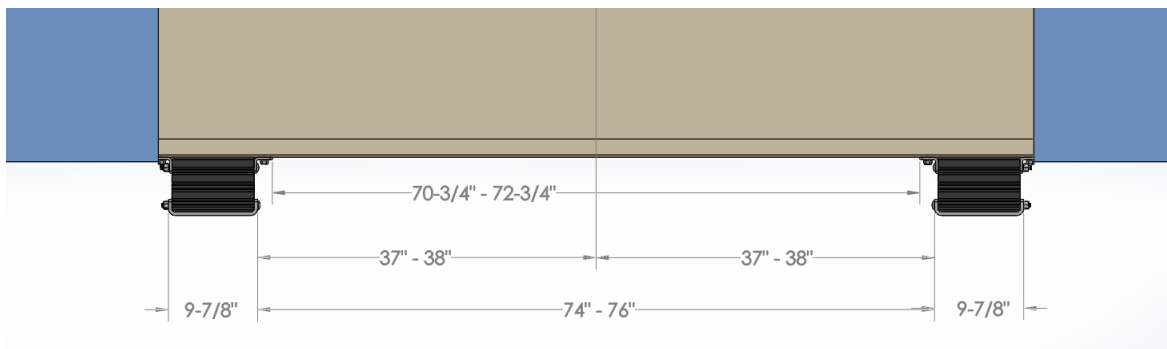
- **DO NOT INSTALL ALONE.**
- **Use Safety Glasses**
- **Use Welding Shield**
- **Use Leather Gloves**
- **Be aware of your surroundings**
- **Do not clutter your work area.**

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Standard Loading Dock Dimensions



The standard dock floor height is usually around 48" [122 cm] tall.



If no dock lever is present a standard's bumpers width should be between 74" [188 cm] and 76" [193 cm] apart, equally spaced between the bumpers front plates.

Install the bumpers 1/2" [12.7 mm] thru 1" [25.4 mm] below the standard dock's 48" [122 cm] floor level.

Disclaimer:

Optimal mounting location of dock bumpers can vary due to types of trucks, dock layouts, dock shelter/seal configurations, dock leveler size/angle types and wall integrity. Due consideration should be taken prior to installing. Some docks floor level's are not the standard 48" [122 cm] height. These docks often require specially designed custom brackets to raise or lower the dock bumpers for them to fall within the proper mounting height range

Some bumper installs require a projection larger than 6-3/8" [16 cm] and need an additional extended backing or build-out box.

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Required Tools and Supplies	
Hammer Drill/ Extension Cord	Welder/ Face Shield/ Gloves
9/16" Masonry Drill Bit	Welding Rods For Steel
Impact Gun	Tape Measure/ Marker
3/4" Deep Socket	Grinder with Cut-Off Wheel
Black Spray Paint	Level
1/2" Diameter Corrosion-Resistant Concrete Anchors A Minimum of 3" Long or Longer	

The Three Different Wall Mounting Options:

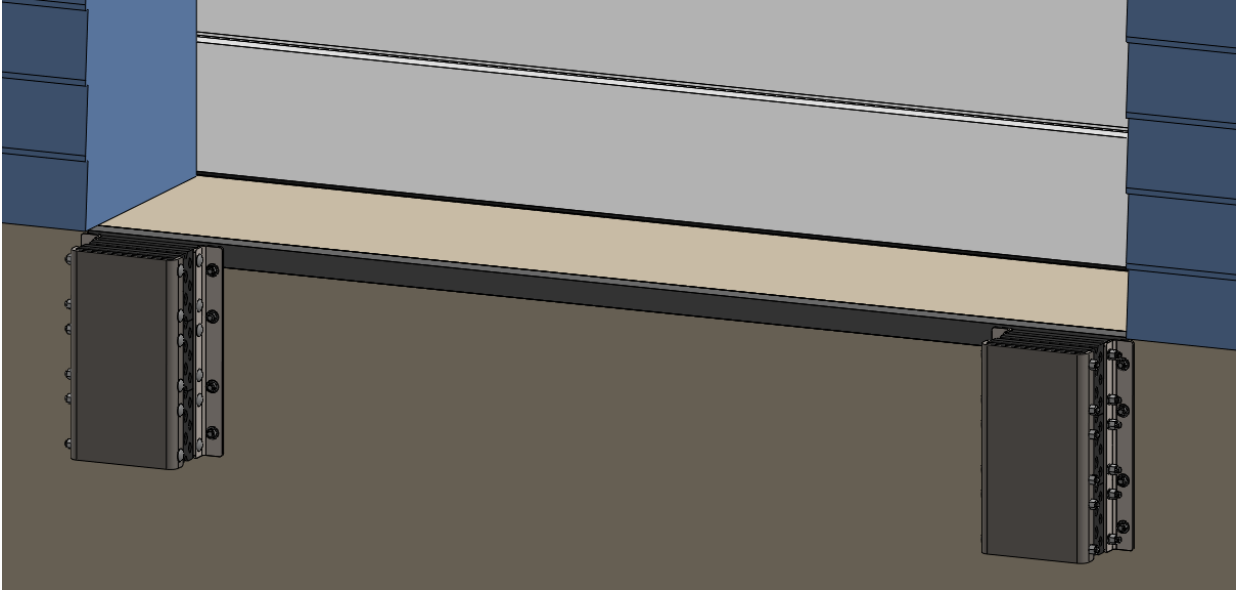
- **Double Angle (See page 6)**– This mounting method is used when all you have is a concrete wall to mount to.
- **Single Angle (See page 7)**– (This is the most common mounting method) – This mounting method is used when you have a steel angle embedded in the wall around a dock leveler to weld to and only a concrete wall on the outside.
- **Flat Mount (See pages 8 & 9)**– This mounting method is used when the wall has a steel plate embedded in it that is large enough to weld to both sides of the bumper. Or if you are using a extended steel bumper backing box.

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Double Angle – Best for bare concrete walls.

DO NOT USE Anchors near any seams on concrete that has degraded.

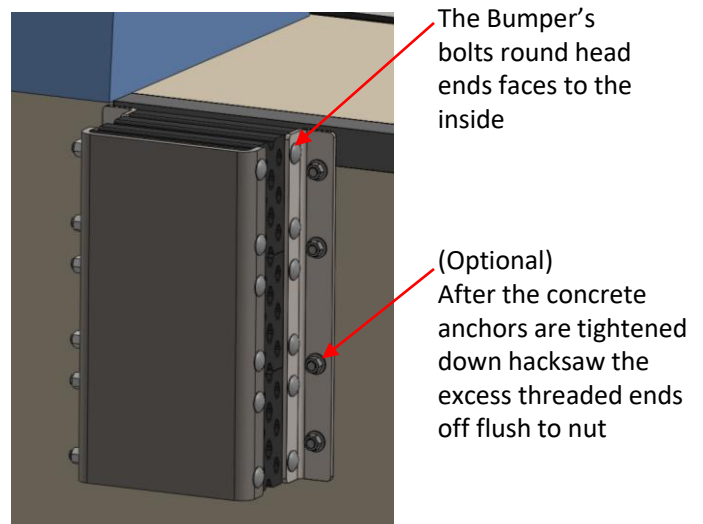
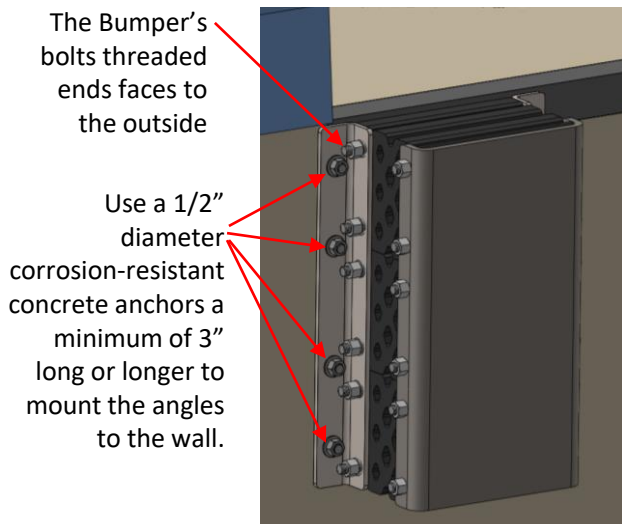
Model Numbers: DB5024, DB5034, DB5037



If no dock lever is present a standard's bumpers width should be 70-3/4" [180 cm] apart equally spaced between the back angles. Or 74" [188 cm] apart equally space between the front plates. Install the bumpers 1/2" [12.7 mm] – 1" [25.4 mm] below the standard dock's 48" [122 cm] floor level.

After the bumpers are properly located use the bumpers themselves as a template to mark where to drill the 9/16" [14.3 mm] dia. holes in the concrete wall for the 1/2" [12.7 mm] concrete anchors.

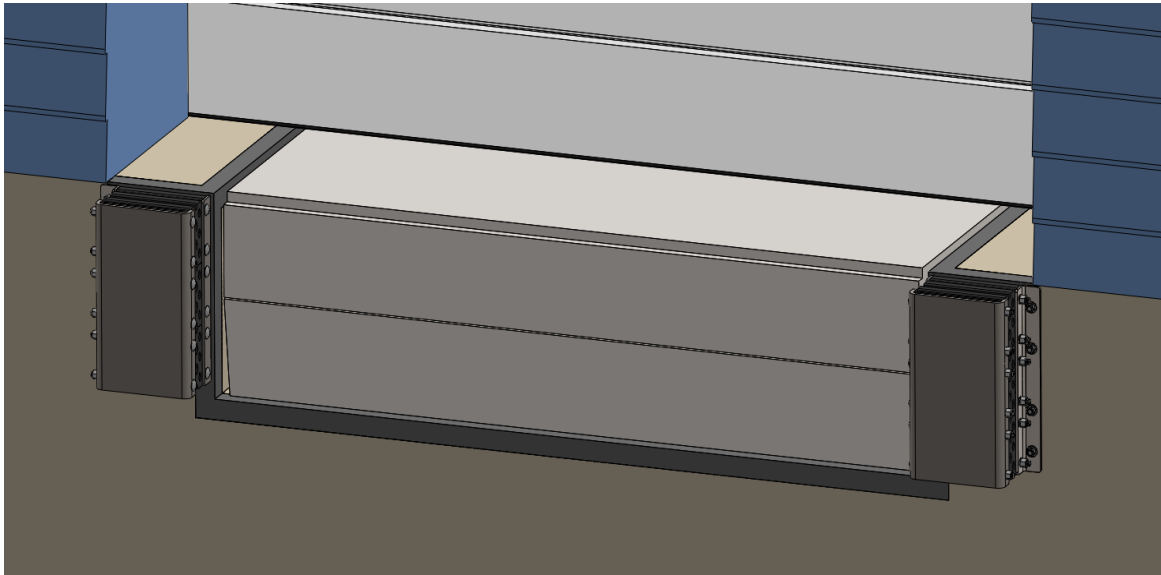
After mounting bumper to wall, tighten all bumper bolts to 57 ft-lb of torque.



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Single Angle – (This is the most common mounting method) This mounting method is used when you have a steel angle embedded in the wall around a dock leveler you can weld to and a bare concrete wall on the outside. **DO NOT USE** Anchors near any seams on concrete that has degraded.

Model Numbers: DB5025, DB5035, DB5038



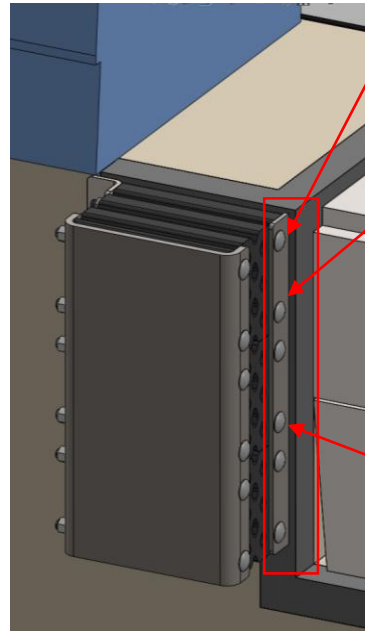
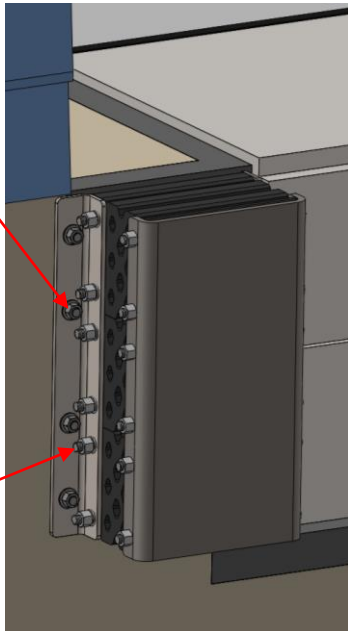
Use a 1/2" diameter corrosion-resistant concrete anchors a minimum of 3" long or longer to mount the angles to the wall.

After the bumpers are properly located use the bumpers themselves as a templet to mark where to drill the 9/16" dia. holes in the concrete wall for the 1/2" concrete anchors.

(Optional)

After the concrete anchors are tightened down hacksaw the excess threaded ends off flush to nut

After mounting bumper to wall, tighten all bumper bolts to 57 ft-lb of torque.



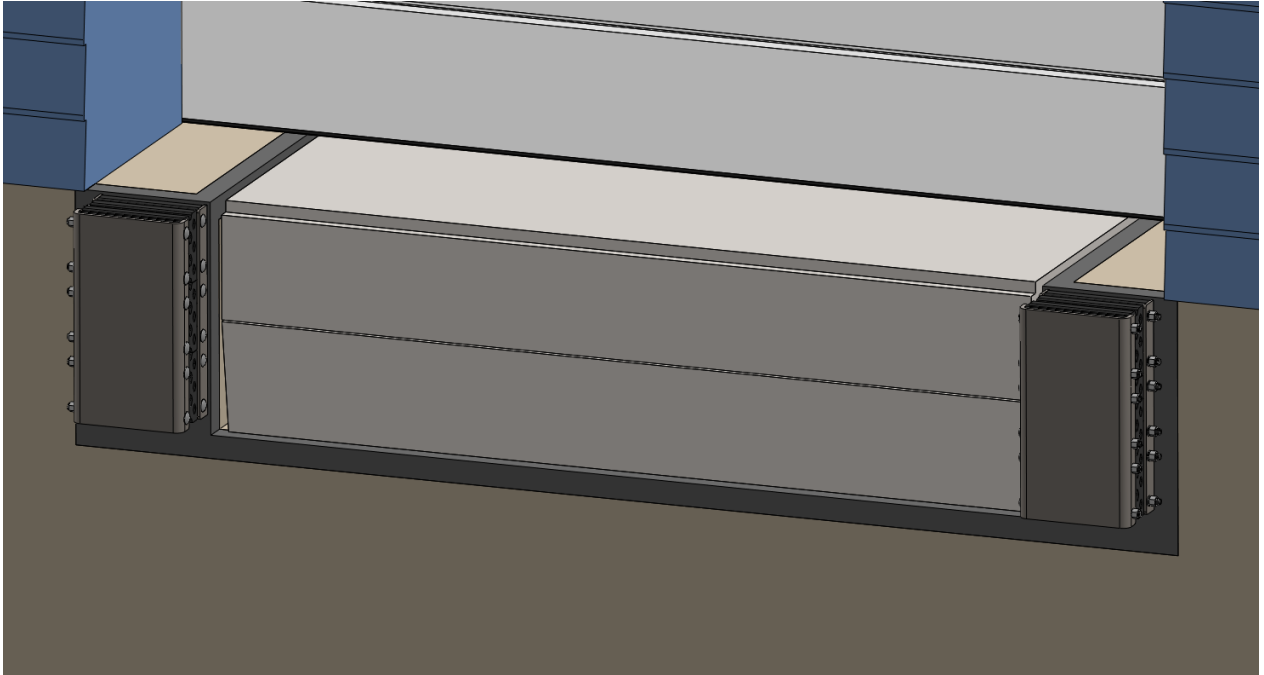
Make sure surface is clear of dirt and is suitable to weld on.

Stitch weld the bumpers flat Plate side 1/4" – 1/2" off the inside edge of the dock's steel edge. Make sure to clean the welds and paint black after completion

The Bumper's bolts round head ends faces to the inside

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Flat Mount – This mounting method is used when a steel plate is embedded in the wall that is large enough to weld to both sides of the bumper. Or if you are using an extended steel bumper backing box. Model Numbers: DB5026, DB5036, DB5039

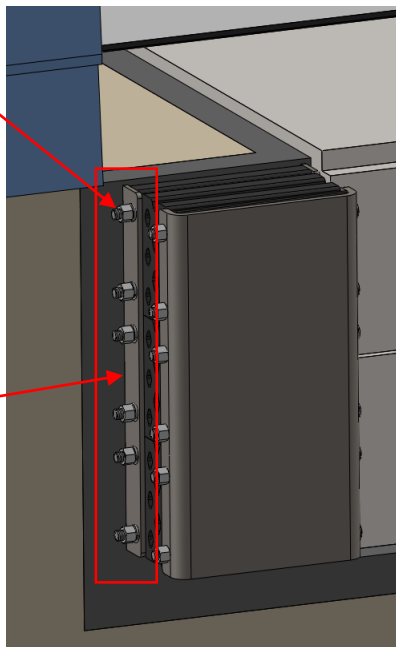


After mounting bumper to wall, tighten all bumper bolts to 57 ft-lb of torque.

The Bumper's bolts threaded ends faces to the outside

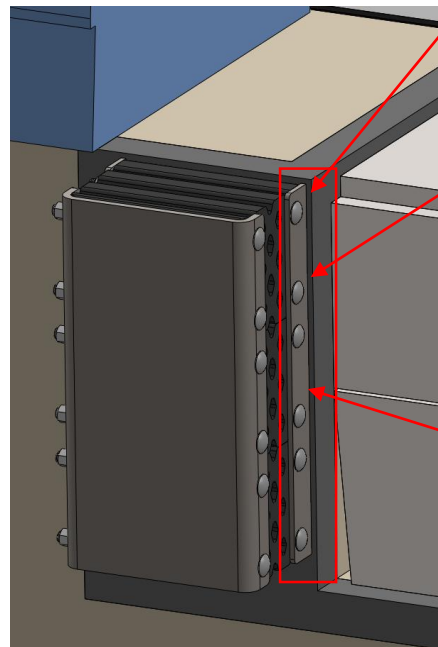
The Bumper's bolts round head ends faces to the inside

Stitch weld 1/4" fillet 2" long on a 5" center line. Clean welds and paint black after completion



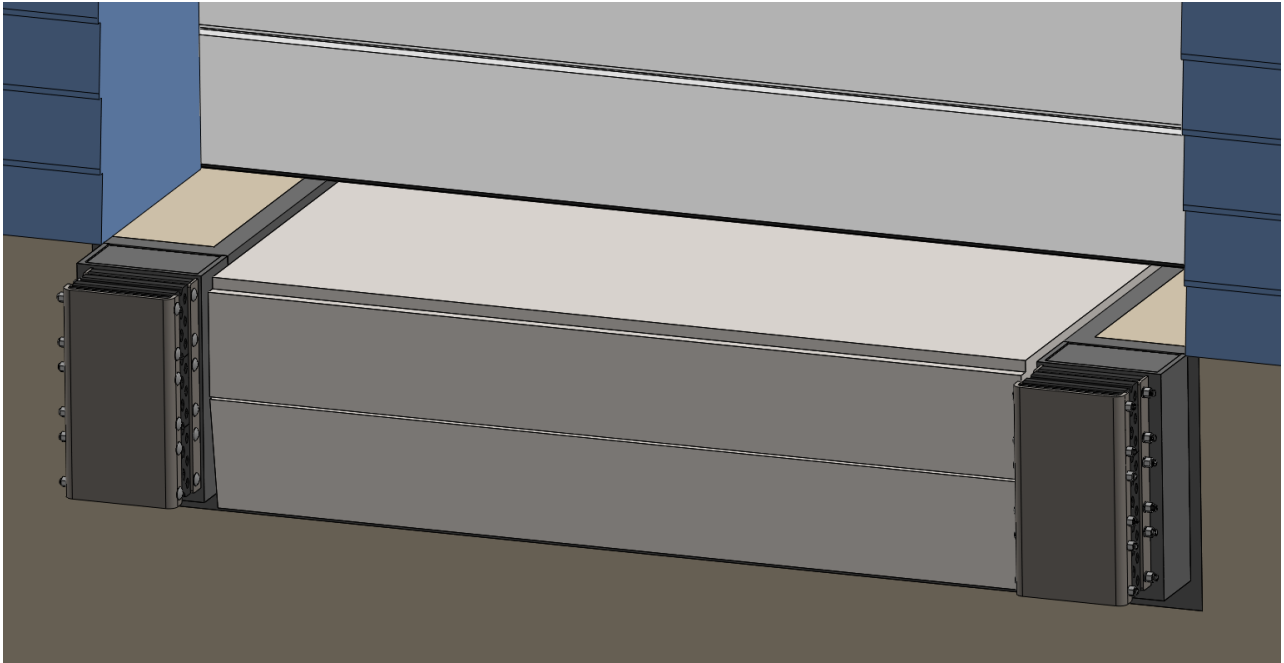
Make sure surface is clear of dirt and is suitable to weld on.

Stitch weld the bumpers flat Plate side 1/4" – 1/2" off the inside edge of the dock's steel edge. Clean welds and paint black after completion 1/4" Fillet weld stitched 2" long on a 5" center lines



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Flat Mount Cont. – A extended steel bumper backing box is shown below Model Numbers: DB5026, DB5036, DB5039

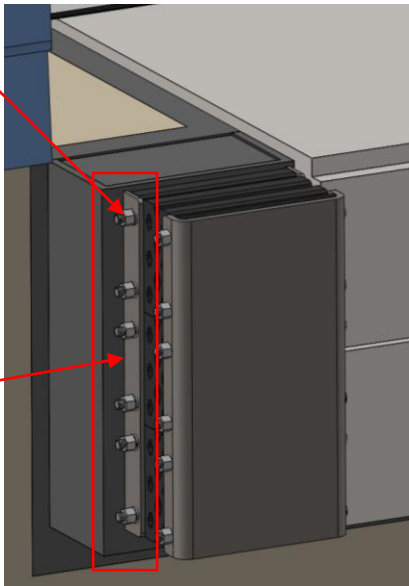


After mounting bumper to wall, tighten all bumper bolts to 57 ft-lb of torque.

The Bumper's bolts threaded ends faces to the outside

The Bumper's bolts round head ends faces to the inside

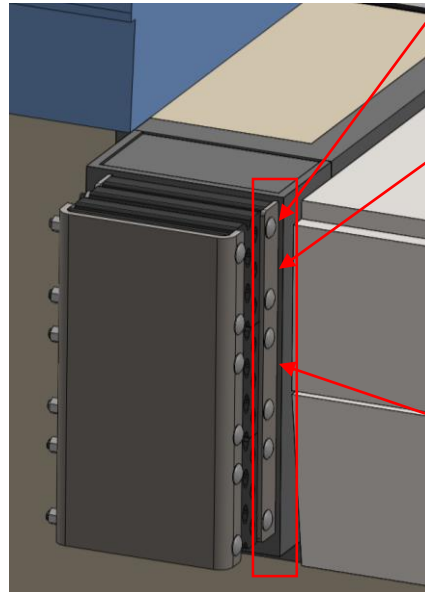
Stich weld 1/4" fillet 2" long on a 5" center line. Clean welds and paint black after completion



Make sure surface is clear of dirt and is suitable to weld on.

Stich weld the bumpers flat Plate side 1/4" – 1/2" off the inside edge of the dock's steel edge. Clean welds and paint black after completion

1/4" Fillet weld stitched 2" long on a 5" center lines



DL Manufacturing

Terms / Conditions/ Warranty

Shipping Times

- ~ Orders for stock items received by 3:00pm EST will be processed for shipment the next day. Orders requesting 2nd Day Air or Overnight Air received by 1:00pm will be processed for same day shipment.

Shipments / Freight

- ~ All DL Manufacturing orders will ship directly from our facility in North Syracuse, NY.
- ~ All parts will be shipped via UPS Ground unless you authorize a different service. UPS shipments are prepaid and the charges are added to your invoices.
- ~ For orders shipping by common carrier, the freight will be FOB, North Syracuse, NY. When “best way” is the preferred shipping method on your order, DL Manufacturing will choose the carrier, unless otherwise stated, for the orders shipping from this facility. No adjustments will be made after the order has shipped.

Returns

- ~ DL Manufacturing will issue a Returned Material Authorization (RMA) number for any product, parts and accessories. Returns sent without a RMA number will not be accepted. Please contact the customer service department at DL Manufacturing for information.
- ~ Replacement parts will be invoiced at the time of shipping. Invoices will be credited upon receipt and inspection of Returned Material Authorization (RMA).
- ~ Freight for returns is paid for by the shipper unless otherwise specified by DL Manufacturing.
- ~ A restocking fee will be assessed at the time of returns. Restocking fees are based on product type.
- ~ All replacement parts are warranted for a period of 90 days from shipment.

Cancellation Fees

- ~ Cancellation charges may be incurred on orders cancelled with DL Manufacturing. Please contact DL Manufacturing to discuss each situation.

Warranty Policy

- ~ All Products (excluding bulbs) manufactured by DL Manufacturing are warranted to be free from defects for a period of 12 months from the date of shipment, excluding doors, which have a warranty period of 12 months from date of installation or 18 months from shipment, whenever occurs first. This warranty does not cover unreasonable/improper use or use beyond rated conditions, improper storage, negligence or accident; damage because of incorporated use of equipment with Goods, after Customer has or reasonably should have, knowledge of any defect; or improperly installed by any other Person that is unauthorized by DL Manufacturing. This warranty is subject to customer covenants to inform all subsequent buyers of the Goods of the limitation on and exclusive of warranties provided for herein. Customer hereby indemnifies and agrees to hold DL Manufacturing harmless from and against all losses, costs and expenses, including reasonable attorney's fees incurred by DL Manufacturing as a result of any third party claim relating to the purchase, sale or use of, or otherwise relating to, the Goods covered by this Agreement. In no event shall DL Manufacturing be required to repair, replace or reimburse Customer for more than the part or material that is found to be defective and DL Manufacturing's liability shall in such event be no greater than the invoiced price of the item and shall not include labor, shipping or other costs incurred in connection with the reshipment of defective Goods to DL Manufacturing or the reinstallation of such Goods after any repair or replacement. The remedy set forth in this paragraph is expressly agreed to be the sole and exclusive remedy for any breach of warranty. This warranty is exclusive and in lieu of all other warranties expressed or implied, including but not limited to any warranty of merchantability or of fitness for a particular purpose. Limitation of Liability - In no event as a result of breach of contract, warranty or negligence shall DL Manufacturing be liable for special, or consequential damages including but not limited to loss of profits or revenues, loss of any equipment, cost of capital, cost of substitute equipment, facilities or services, downtime costs or claims of purchasers of the Customer for such damages. Additionally, DL Manufacturing will not be liable for any delay in the performance of contracts and orders, or in the shipment and delivery of goods, or for any damage suffered by the Customer by reason of delay, when such delay is, directly or indirectly, caused by force majeure, including war, Government interference, strikes, embargoes, shortage of labor, fuel, fires, floods, or any other cause or cause whether or not similar in nature to any of those herein before specified beyond DL Manufacturing's control.