

INSTALLATION HINTS & HELPFUL ATTRIBUTES

HitcHinge & our staff strive to offer Quality & Service for the Best dock hinge on the market.

As we can not recommend the best installation method or dock systems for your needs, as it always a balance of your location, accessibility, abilities, needs, the number of volunteers and cash flow, however we have generated a short list of hopefully helpful hints. These considerations are to help provide you with the vision, insight, and awareness to go along with the Installation, maintenance and enjoyment of the **HitcHinge Products**, durability, silent, self-supporting, and self contained, child and pet friendly gaps.

Things to consider:

1. The type of structure for attachment, example: wood, aluminum, steel, cement, stone etc.
2. The size of mounting hardware being used- 1/2" bolts, 3/8" bolts, 5/16" bolts or a direct weld on to aluminum
3. The HitcHinge utilizes over-sized round holes for mounting hardware, that are sized to receive and seize the square head of carriage bolts and over-sized for convenience of drilling for bolts.
4. The HitcHinge is engineered when working in pairs, to maintain loads of 4000 lbs, with a x3 safety factor
5. Consider the body of water, with the winds, storms, and wave activity, your location may be subjected to when considering attachment, hardware's, backing plate, throughout the dock structure
6. Consider your location, wind, waves, loads, anchors, tethers, floods, and river flows etc., as all of this needs to be retained, at the discretion of the installer.

Tools Needed:

3/4" or 19mm or ratchet wrench, or tire iron, or adapters for power tools in order to activate (tighten or loosen)) the HitcHinge all working down from above.

- ***IMPORTANT:*** the actuation bolt is SS and we recommend you avoid the use of high speed and torque impacts, as this may cause (*gulling*) and impair the actuation bolts ability to function.

We recommend carriage bolts through all framework, single or multiple layers (*recommended for strength*)

IMPORTANT: You may consider Lag screw bolts as a simple attachment, however these lag screws often become the easiest point of fatigue in a system. For your convenience we have a small selection of Hardware Carriage bolts, lock washer, and nuts, as assemblies in 3" and 4.5" See Part # BH

- If installing on existing docks, often it will be the same bolt pattern and it may be possible to reuse existing bolts and holes.

We provide aluminum backing plates, corner brace and free board corner stabilizer brackets.

See Product # BP, FBS, CFBS

Consider the Length of the hardware needed and add a little length to make assembly easier.



INSTALLING THE HITCHINGE

- If installing **HitchHinge**, on existing docks, often it will be the same bolt pattern and it may be possible to reuse existing bolts and holes.

(Consider the location of **Hitch & Hinge** mounts, using two **HitchHinge** per segment docks jointed.)

- We also provide an Industrial **HitchHinge** (with a chain anchor loop welded to side), with the Hinge and anchor in one part and anchor adjustment made from the top with the ability to pre-load tension.

(When layout is viewed, consider the location of internal structures, for best mounting locations for both the **Hitch & Hinge** attachment)

- When considering the layout on opposite segments use the centre alignment holes to match width on opposing halves.
- When installing **HitchHinge** on bridges or ramps, always use the Hitch Half attached to both ends, for self supporting feature.

We provide a Hinge Half with a raised or lowered centre axis for alignment of decking surfaces in alternate frame materials.

- When installing **HitcHinge** on bridges or ramps use the **Hinge Half** on shoreline or floating docks

(Consider using a square to draw a two perpendicular and parallel centre lines, use these lines o layout centres of **HitcHinge**)

(Consider installing the **HitcHinge** with the top of hinge at flush with top of framework, or 1.5" down from decking's finished surface)

(Consider using deck screws through the centre alignment holes, on the scribe's centre line for attachment while drilling holes)

- **It is important to install the *HitcHinge* square and parallel to opposing half as it has a controlled bushing to provide even wear.**

(Consider double checking the intended locations for mounting, before drilling holes and tightening bolts.)

- By installing at 1.5" down from top of finished decking, allows for a 1.5" x 1.5" filler board to be attached to reduce gap in decking's.
- When reducing the gap, consider local storm surges, water tables, drips, and floods.

NOTE: the two segments should never meet!

(Consider gap reduction by extending deck boards 1.5" and create or leave an access hole over activation bolt.)

We have a Slip Coupler option with the ability to easily adjust your docks slip opening width to fit alternate sized boats. Part # 1/2-8, 3/8-8 or 5/16-8

- ***Important: Water is corrosive, and SALTWATER is worse! It may be necessary to extensively use a marine grade anti seize lubricant on the actuation bolt and nut assembly.***
- ***(if using in SALTWATER then the use of SS carriage bolts for mounting hardware should be considered!)***