

INSTALLATION GUIDE & INSTRUCTIONS

FAIL NOT Hardware System™
Patent Pending



FENCE QUARTER
Fence Products and Tools

Custom Pre-Sized Installation Instructions






Thank you for your Purchase. Here is what you can expect as we process your Custom Order.

You will receive three shipments,



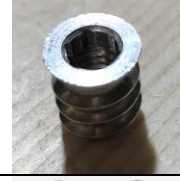
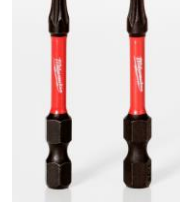
1. You will receive any hardware and tools necessary to install the hardware
2. We will send you the Fail Not Sheer Struts for you to install on your Deck Railing Frame.
3. The last shipment will be your Deck Railing Inserts.

Before you begin, please read through this guide to become familiar with the overall process. There are Notes, Suggestions, Safety Notes, Cautions and great information to have a successful end result.








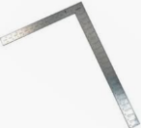


Tools included with your purchase:

	Security Screwdriver FN-T9	Qty 1
	Security Screw Bit FN-T7 NOTE: Never use this bit with a drill as it can slip and damage the product. Always use with the FN-T10	Qty 2
	Security Stubby Screwdriver FN-T10 This Ratchet Driver is to use in tight spaces	Qty 2
	Lock Down Screw Driver FN-T15 This is used to drive the FN-H4 Hardware into position	Qty 1
	4oz Topcoat Touch-up Kit Includes a Paint Brush	Qty 1

Hardware included with your purchase:

	Female Lock Down Screw FN-H4	Qty will be determined by length of Railing Insert – 1 bag per section
	Security Screw FN-H6	Between 4 – 6 pcs per railing section 1 bag per section
	Female Lock Down Screw FN-H4	Between 4 – 6 pcs per railing section 1 bag per section
	Fail Not Sheer Strut Driver FN-T8	Qty 2

Tools you will need to provide:

	Hole Center Punch	You will need this to install the Carbon Fiber Sheer Strut. The purpose is to align the screw to hold the sheer strut perfectly in the center. If you do not do this, the screw may not fit correctly in the carbon fiber and could shift the carbon fiber off the mark
	3/8" Drill Bit	Bit shown is our FN-T13 Lock Down Screw Bore Bit You can find this in our store. This tool has a flat end, and although not necessary, reduces excess and unnecessary "v" shape found in standard wood drill bits
	Clamps Clamps Shown are our FN-T20 These clamps can be found in our store. We guarantee these for life and the rubber is guaranteed to never come off.	NOTES: Really, any clamps will work and there are a variety at your local home improvement store
	Tape Measure	
	Drill	
	Drill Driver	A drill driver is different from a regular drill as it ratchets what you are driving down.
	Level	Levels come in different lengths. The longer the level, the better the read as it averages out any inconsistencies in the lumber
	Square	Just like the level, the larger the square, the better the read, as it will average out the inconsistencies in the lumber
	Pencil	We like this stile pencil as compared to a contractors pencil as we obtain a better, more precise mark
	Tape	If your Deck Railing Frame is already painted, use the tape to make your marks on so you do not have a repair issue

Tools that may be purchased or Rented for making your installation easier and more percise



FN-KIT-T1

This Installation Kit includes all the tools needed to install the FAIL NOT Hardware System.

You can Rent or Purchase

Includes:

- 2 FN-T3 Positioning Tools
- 4 FN-T20 Clamps
- 2 FN-T12 Drill Bit
- 1 FN-T13 Counter Bore Driver
- 2 FN-T10 Security Stubby Driver
- 1 FN-T9 Security Screwdriver
- 1 Case
- 2 FN-T8 Sheer Strut Driver
- 1 FN-T15 Lock Down Screw Driver
- 1 FN-T17 Center Hole Punch

NOTE 1:

The FN-T3 Positioning Tools are used for 2x4's and 2x6's. They are used to quickly position the Carbon Fiber Sheer Strut centered on the Main Rails of your Deck Railing Frame. If your top rail is a 2x6, it must be centered on the post for these tools to work.

NOTE 2:

You can find these tools sold separately in our Store

Installation Instructions

STEP 1: FINISHING & SETUP

If you will be painting your Deck Railing Frame, you must paint before you install the hardware for a cleaner application. Because one of the key features of a Fence Quarter Deck Railing Insert is removable, you will need to have the Frame and the Insert painted and dried separately. If you are staining, you can pre-install the system, however it should be stained prior to the FAIL NOT Hardware System installation for a better result.

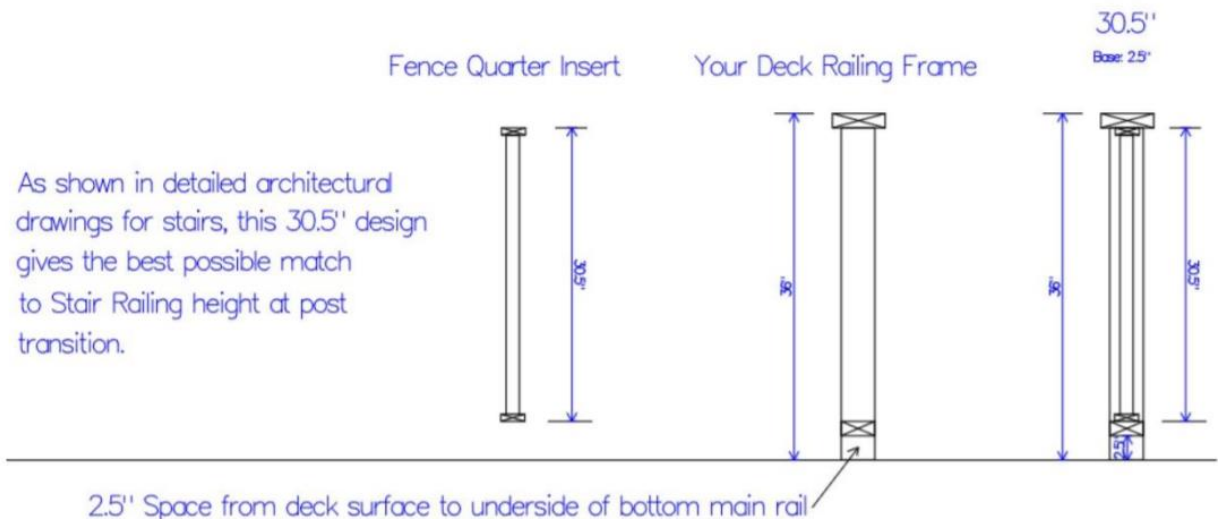
Your Deck Railing height between the Upper and Lower Main Rails needs to be:

1. 30 1/2" without paint and with paint, or...
2. 30 9/16" with paint to accommodate the paint thickness

The below Chart shows a Cross Section chart on the assembly of your Deck Railing Frame. You can also find a printable version at www.FenceQuarter.com -> Resources -> "Cross Section Height Configuration"

Cross Section Height Configuration

FRAME STYLE SHOWN: 2X6 CAP/TOP RAIL ON TOP OF POSTS, 2X4 BOTTOM RAIL, 4X4 POSTS



STEP 2: CENTER MARK RAILS FROM POST TO POST

For each Deck Section, do the following steps

MEASURE AND CHECK

- a. Measure the halfway point on the top of the bottom rail from post to post and make a light pencil mark.
- b. **CHECK** Double Measurement Check - Recheck your center point by measuring the halfway mark from each side, of which both measurements should match.

TRANSFER CENTER MARK AND CHECK

- c. Take a 30" or so long level and measure and mark the center of the top rail by transferring the center mark on the bottom rail to the top rail.
- d. Transfer the mark to the bottom of the top rail and draw a light line on the bottom.
- e. **CHECK** Repeat the double measurement technique by measuring each side and confirming the distance to the left and right of the line are a match.

SQUARE CHECK

- f. Use your square and confirm that all (4) corners are square. This is very important as your deck railing lengths will be Cut to the size you specify. If the posts are skewed, then the Insert will have difficulty fitting.

NOTES: Your Posts must be perpendicular, and if they are the **CHECK's** will be spot on, otherwise, check that your posts and top rail are plum and level respectively.

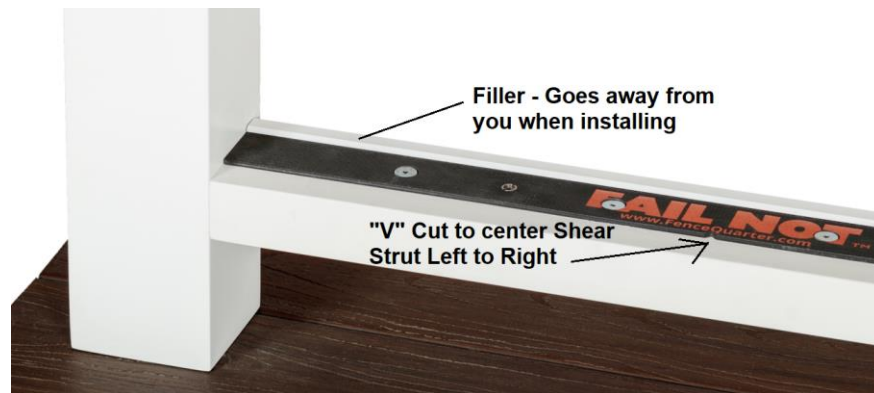
STEP 3: UNPACK AND DISTRIBUTE THE FAIL NOT HARDWARE

Remove the Fail Not Hardware called Sheer Struts out of their box(s). You will note that there is a Positioning Marker aka Sticker attached to each of the two Struts you need for each section. This positioning mark will give you the Position Section Name you provided us when you ordered. Also included in the Sheer Strut Box will have a copy of your Deck Map with the Position Marker Names you provided. Refer to your map and place each set of two Struts at each section.

NOTE: Go to www.FenceQuarter.com – under "Resources", then "Measuring Guide". The customer will fill this out by drawing a map of their railing section locations. They will upload it to our system, and we will send them a laminated copy when they receive parts.

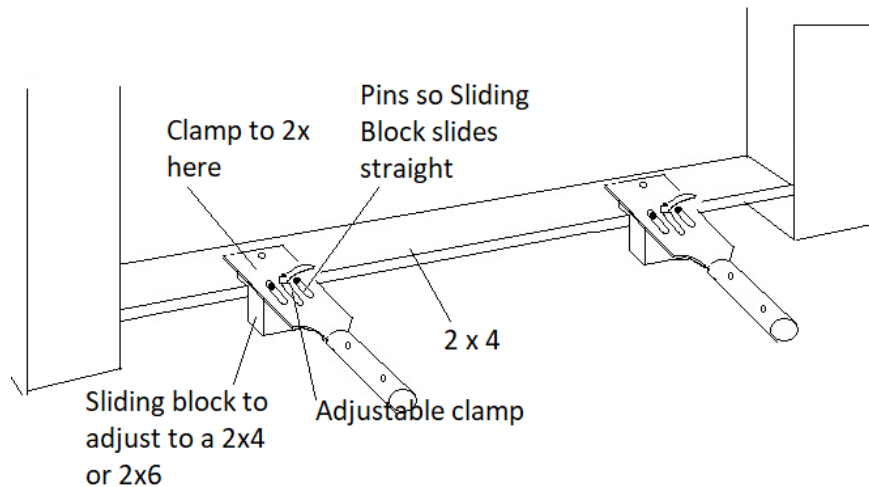
STEP 4: POSITION THE FAIL NOT ON THE BOTTOM RAIL

- a. At each section, place a Sheer Strut on top of the bottom main rail. The sheer strut should match the Drawing Position at each section. When positioning the Sheer Strut, the Filler that is attached to the Sheer Strut, shown below goes away from you, or to the outward side of the deck.



- b. You will note that there is a "V" cut on the Sheer Strut which should be centered on the pencil mark you made in Step 2
- c. Using two of the **FN-T3** Positioning Tools, adjust the tool for either a 2x4 or 2x6. Let's start with the bottom main rail which is most likely a 2x4.
- d. Clamp each of the two **FN-T3** Tools provided about 6" or so inches from each end using your own clamps. Make sure the Positioning Tool is butted up to the Sheer Strut Filler
- e. Now find the center marks on the Fail Not Sheer Strut which are indicated by physical notches in the center of each Strut. Slid the Strut left or right until it is centered on the Struts notches.





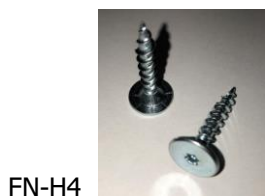
STEP 5: FIRST ATTACHMENT - THE BOTTOM FAIL NOT TO THE MAIN BOTTOM RAIL

- a. Using the Center Punch **FN-T17**, lightly tap the center punch into the smaller holes (SEE PICTURE BELOW) to allow for the Fail Not Sheer Strut Screw **FN-H8** to be set dead center. The fewer larger holes are addressed in Step 6.



Shear Strut Screw Holes
 Use a Center Punch before installing the Shear Strut Screws

- b. Note: (The **FN-T3** Positioning Tools might be covering some of the holes, this is ok as we will correct that in just a moment)
- c. Take the Fail Not Sheer Strut Screws **FN-H4** and drive them into the tapped holes using the Fail Not Sheer Strut Driver **FN-T8**.



FN-H4



FN-T8

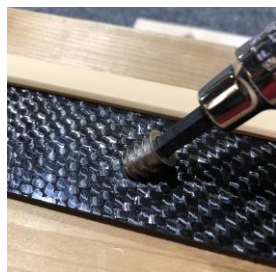
- d. Now your Fail Not Sheer Strut is nice and secure. Remove the **FN-T3** Positioning Tools.
- e. Repeat 5a – 5c for any holes that the **FN-T3** Positioning Tools were covering up.

STEP 6: FINISH INSTALLING THE BOTTOM FAIL NOT

- a. Using one of the **FN-T3** Positioning Tools, place the tool so that the hole in the clear plastic is right over the hole on the Fail Not. While holding the tool firmly in place in one hand, gently slide you're your drill with the Female Lock Down Screw Bore Bit **FN-T13** into the hole and into the Fail Not. Your drill should be perfectly perpendicular to the Fail Not and slowly bore through the wood until the FN-T13 stops on the FN-T3. The purpose of this part of the **FN-T3** Positioning Tool is to prevent marring the Carbon Fiber.



- b. Repeat for the remaining Lock Down holes, either 2 or 6 depending on the overall length of your railing insert.
- c. Check to make sure no wood shavings got between the Fail Not and the Main Rail surface. Although rare, if the Fail Not is bowing upward, you must remove any shavings. The purpose of installing the screws first is to hold the Shear Strut down tight to avoid wood shaving from getting stuck in between the Deck rail and the Shear Strut.
- d. Now put the Female Lock Down Screw Driver **FN-T15** onto your driver drill. A driver drill is different from a regular drill as it ratchets what you are driving down.



- e. Load the Female Lock Down Screw **FN-H4** onto the Female Lock Down Screw Driver **FN-T15**, while holding the Driver Drill exactly perpendicular, you must apply some light pressure around the hole, and firmly drive the Lock Down Screw FN-T15 until it is flush with the top of the Fail Not

Sheer Strut. You will usually have one shot at this, so we have provided two sample Female Lock Down Screws **FN-H4** and a small Sample Carbon Fiber to test with. If you drive the Female Lock Down Screw too fast, it could buckle the Sheer Strut.



- f. Repeat for the other Lock Down Holes.

STEP 7: INSTALL THE TOP FAIL NOT SHEER STRUT

- a. Using the two **FN-T3** Positioning Tools again, adjust the tool for either a 2x4 or 2x6, which ever your top rail is.

(IMPORTANT: The Top Rail must be centered on the posts because the Positioning Tools align the hardware, so the finished Insert is centered on your rails. Please note that the Sheer Strut may appear offset after it is installed. That is how it is designed so that when you install the Insert, everything is vertical.)

The Tool assumes that your 2x4 or 2x6 Top Main Rail is centered perfectly on the posts. Most likely you are using a 2x6, so adjust the tools accordingly.

- b. Repeat the steps 4b through 6f. The only difference is you will be installing the hardware on the underside of the Top Main Rail.
- c. Repeat for the next deck railing section on your map. You could choose to install all Fail Not Shear Struts on the bottom rails first and then install to the Top Main Rails, that is up to you.

STEP 8: INSTALL YOUR RAILING INSERTS

- a. By now you may have already installed your hardware as described above. Un-package your railing inserts and position them in to position by matching the positioning tag or sticker to that of your map.
- b. Note that each Railing Insert's positioning sticker is always on the top and your Railing Insert. Slip your railing insert into position. If you are having trouble, verify that your rails are not sagging or bowed and that your posts are not twisting and that the posts are plumb. Although we build the Railing Inserts to your exact dimensions down to the 1/16 of an inch, there are times of which you may need to shave the railing frame opening to allow for it to fit. It is ok to sand or lightly trim the ends of the Railing Insert sub rail ends only if necessary.

(SAFETY: Always use a mask if shaving or cutting the Carbon Fiber.)

- c. Once the Insert is snug, use one of the options provided in your kit, the Security Screwdriver **FN-T9**, or the Security Stubby Screwdriver **FN-T10** to install the 4 or 6 Security Screws into the Female Lock Down Screws **FN-H4** you installed earlier.
- d. The Security Screw Driver **FN-T7** should fit snug

(CAUTION: DO NOT USE A DRILL to install the Security Screws as it can get away from you and damage the Insert)

- e. Repeat for all your deck railing inserts and all your stair railing inserts. The FAIL NOT Hardware System is not available for stairs. The reason is that the FAIL NOT Hardware System is designed to increase the strength of the Wood Railing Insert in case someone falls against it. If someone falls on the Stairs, they will tumble down the stairs and not into a Stair Insert.