

# Suggested installation methods

The Stairsteady system requires a connection that can hold 1 KN (225lbs) of force in any direction on the handle. This translates to a mechanical advantage of approximately 6.6 KN (1500lbs) of force to the rail. You must seek out and follow all local or federal laws that pertain to the installation of this product. If questions arise please contact your local professional licensed contractor. **Please read all instruction before beginning.** Here are the suggested installation instructions:

(Fig #1) Measure your stairs toe to toe. Add 36" to this measurement. This is used only if there are no obstructions at the bottom or top. (Fig #2) Obstructions, like doors, do not allow for the full length and must be cut shorter to accommodate the door. All cuts should be square and done using a cold cut saw or hacksaw **not an abrasive saw**. If two rails are required to achieve the length do not cut to size where they join, cut at the ends.

Fig #1

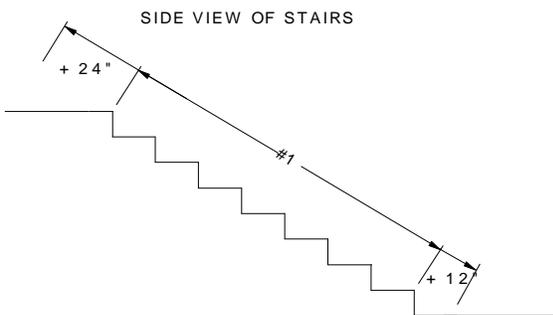
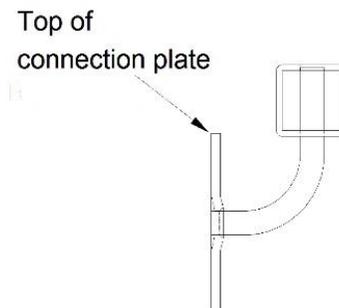
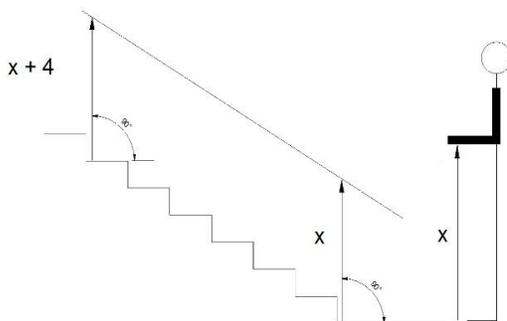


Fig #2



After accommodating any hallways, doors etc. you now must determine the installation height for the user. With the users arms bent at the elbow measure from the floor to the center of the wrist. Use this measurement for the placement of the top of the connection plate. **This is a min.size it can be higher but not shorter.** To find the second measurement for the top of the stairs add 4" to the initial measurement, as seen below.



To fasten the rail to the wall you must find out the type of wall construction you have and view the suggested methods of attachment. The lag bolts supplied are suggested for all type of attachment.

A professional contractor should be consulted at this point if questions arise.

All views are end view cut away.

Figure # 1 shows wood stud construction with a 2" x 6" x 8' ledger board attached along the wall with 4" min. structural wood screws through to all the vertical wood studs " min 2 screws per stud" then the rail is fastened using lag bolts to the ledger board.



Structural wood screw

Figure #2 shows poured concrete with sleeved anchors bolts to make the connection.

Figure #3 shows concrete block construction with sleeved anchors bolts to make the connection.

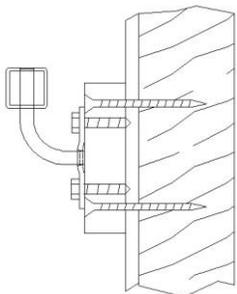


Fig #1

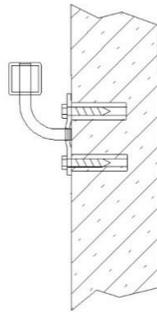


Fig #2

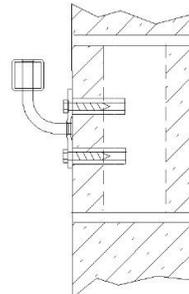
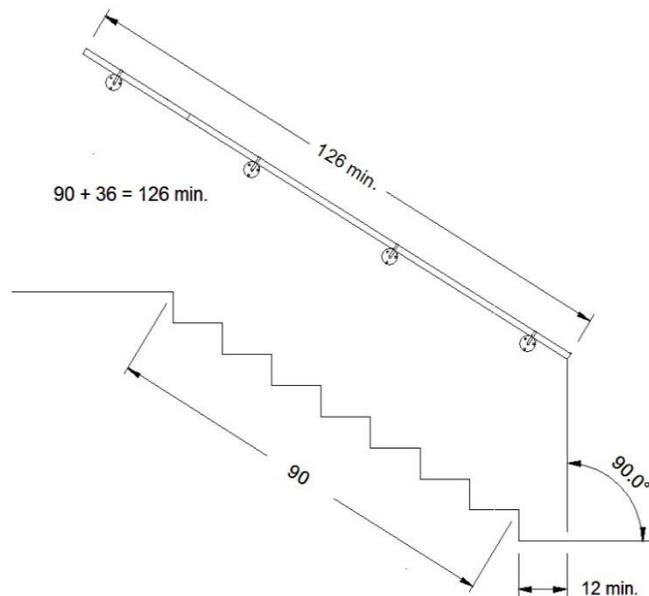
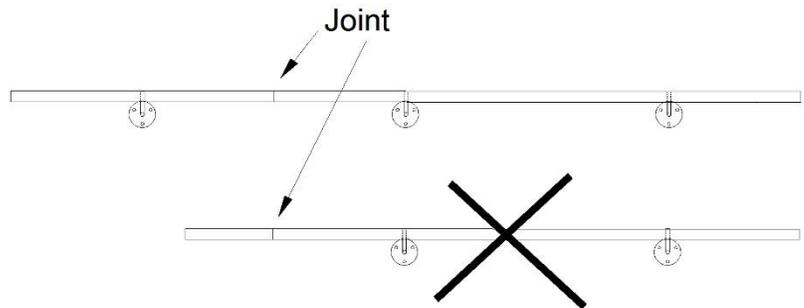


Fig #3



Sleeved anchor bolt

Please insure that all joints have a connection plate on both sides. This may mean that the rail might have to be cut from both ends.



The illustration to the left shows a correct installation using the suggested minimum measurements. In most cases the connection plate is in line with the middle of the first step. However, in the example it shows that the connection plate is ahead of the step. This is still correct as long as the min. 12 inches from the front of the step to the end of the rail is achieved. This is providing that there are no obstructions at the bottom of the stairs.

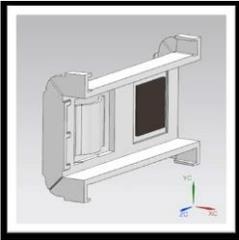
To join the rails, use the coupler (863) provided. Holding on to the threaded bolt, insert the couple (863) until the slots are all the way in the first rail attached to the wall. Tighten the bolt until tight and then slide the second rail over ( a soft blow hammer may be required to get them together) then bolt the rail in location.



The handle assembly provided will do left or right depending on the configuration of the parts. We will start by looking up from the bottom of the stairs. The handle designation is determined by the installation of the rail. "Left or Right"

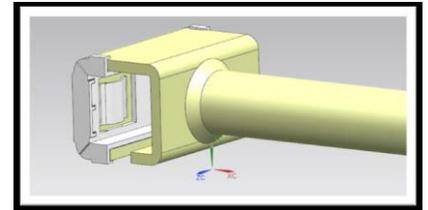
## With the rail on the left, this is the configuration required:

Fig.#1

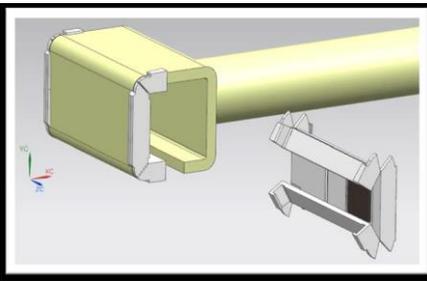


This part (20141) is installed by sliding the part as viewed Fig#1 through the slot and snap it in place as shown here Fig#2. Please note that there is a spring and a gripping pad (black square) that must be in the correct direction as viewed. With the handle held in operating position the spring should be closest to the wall with the spring at the bottom.

Fig.#2

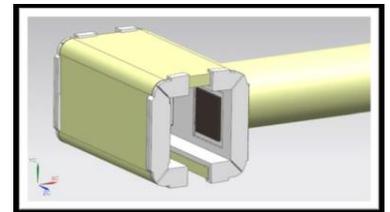


Fig#3

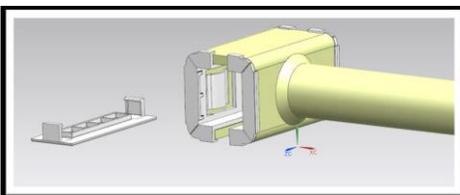


The second step is to take part (20141) and bend the sides as viewed in Fig#3. **This step is very challenging to the assembly.** Please note where the spring and gripping pad (black square) are located it should be opposite to the other part. Slide the part through. Tip the top bent piece into the other part to help get the part snapped into location. Open the hinge closest to the slot first. Snap it in.

Fig#4

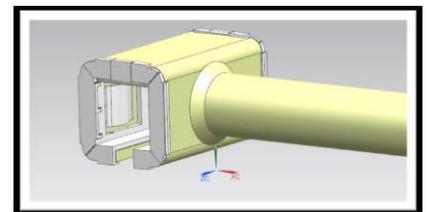


Fig#5



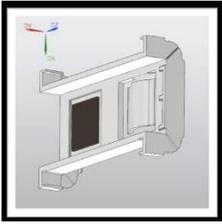
Third step is to insert part (20143) in to the two parts as shown in Fig#5 and Fig#6. There are no direction requirements for this part.

Fig#6



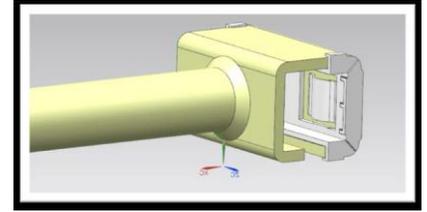
## With the rail on the right, this is the configuration required:

Fig#7

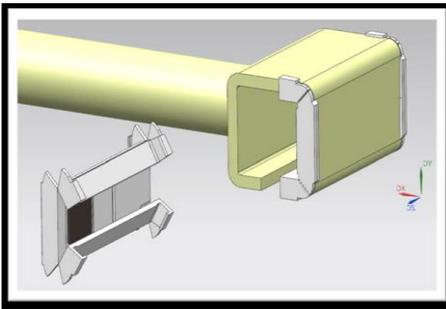


This part (20141) is installed by sliding the part as viewed Fig#7 through the slot and snap it in place as shown here Fig#8. Please note that there is a spring and a gripping pad (black square) that must be in the correct direction as viewed. With the handle held in operating position the spring should be closest to the wall with the spring at the bottom.

Fig#8

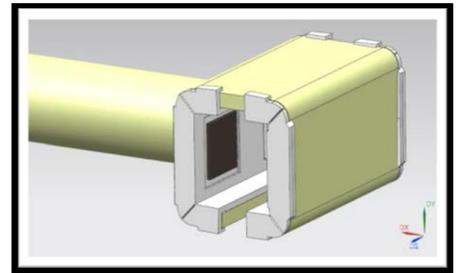


Fig#9

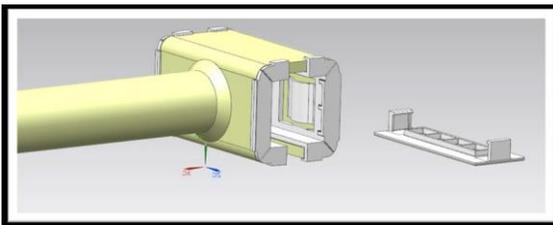


Secondly, take part (20141) and bend the sides as viewed in Fig#3. **This step is very challenging to the assembly.** Please note where the spring and gripping pad (black square) are located it should be opposite to the other part. Slide the part through and tip the top bent piece into the other part to help get the part snapped into location. , open the hinge closest to the slot first. Snap it in.

Fig#10

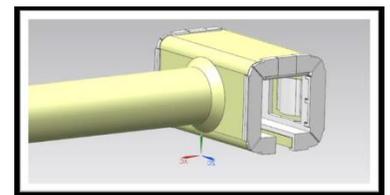


Fig#11

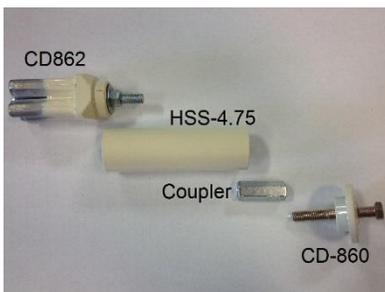


Third step is to insert part (20143) in to the two parts as shown in Fig#11 and Fig#12. There are no direction requirements for this part.

Fig#12



Slide the handle on to the rail about 12" then put the finishing hardware on as follows:



Using the reducer (CD862) place it in the end of the rail and tighten until the reducer can't be pulled out then go 1-2 full turns more. Place the 3/8 coupler over the bolt and tighten. Place the park tube(HSS-4.75) over the coupler and tap into place with a soft blow hammer. Place the washer (CD-860) on the end of the park tube and tighten the assembly with the bolt until tight. Return the handle to its resting position and repeat the process to the top of the rail.

