

SPRING BOLT RAIL HARDWARE INSTALLATION

1. Cut an 1/4" thick slice of railing. This becomes your "drill template" for drilling holes for the springs.
2. Mark one face of the drill template with an "X". Locate the "X" close to the center of the rail.
3. With the mark facing you, align the drill template to the face of the joint you are about to make and drill an 1/8" hole through the middle of the "X" until the drill bit has made a 1/4" deep hole in the face of the surface behind the drill template.
4. Remove the drill template from the surface you have just drilled. With the "X" mark faced away from you, align the drill template to the face of the other surface you are about to join. Drill an 1/8" hole through the hole in the drill template until the drill bit has made a 1/4" deep hole in the face of the other surface you are about to join.
5. Using the marks made by the 1/8" bit, use a 5/8" paddle bit to drill a 1 1/4" deep hole into the face of both faces to be joined
6. Screw one spring into the base of each hole. ***It is important that both springs are screwed tight to the bottom of the hole.***
7. At this point you have several options.

A. ***To make the joint permanent using Tight Bond.*** After you have screwed the springs into the base of both 5/8" holes you can moisten both faces of the joint with water. Apply **Tight Bond** glue to both surfaces and, with a finger, push the glue into the end grain or the face of both joints. Next apply another layer of Tight Bond glue to both surfaces. Insert the steel pin inside of either of the springs. Align the two springs and engage same by twisting. Twist the springs 4 times after the two surfaces have come in contact with each other. Do not over twist. At this time you must move quickly to align the profiles of the two pieces you are joining as the glue will begin to lock up within seconds. If you glue locks up before you were able to align the profile, untwist the joint immediately, apply another layer of glue, twist back together and align the profiles.

B. ***To make the joint temporary*** you can apply a few drops of glue into the joint after you twist the two pieces together. Once twisted together rock the two pieces you are joining to open them up enough to allow you to drip a few drops of glue into the joint. Once the glue locks up you can blend the profiles. A strong tap on the joint will break the joint and allow you to unscrew same in order to deliver to the job site and make the joint permanent at the job site.

A. ***To make the joint permanent using epoxy.*** After you have screwed the springs tightly into the base of both 1 1/4" deep holes, mix approx. 1/2 oz. of epoxy and fill both spring holes half full with epoxy. Next apply epoxy to the face of both surfaces to be joined. With a putty knife, push the epoxy into the end grain or the face of both joints. Insert the steel pin inside of either of the springs. Align the two springs and engage same by twisting. Twist the springs 4 times after the two surfaces have come in contact with each other. Do not over twist. Align the profiles of the two pieces you are joining. Let the joint set until the epoxy has set. We recommend Epoxy 88 by Fasco or an equal. Epoxy 88 has an approximate set time of 5 minutes. Do not wipe off epoxy that has oozed from the joint. Sand the epoxy after the epoxy has set.