USERS' GUIDE

Completing Turnouts Using Fast Tracks QuickSticks (UG11)
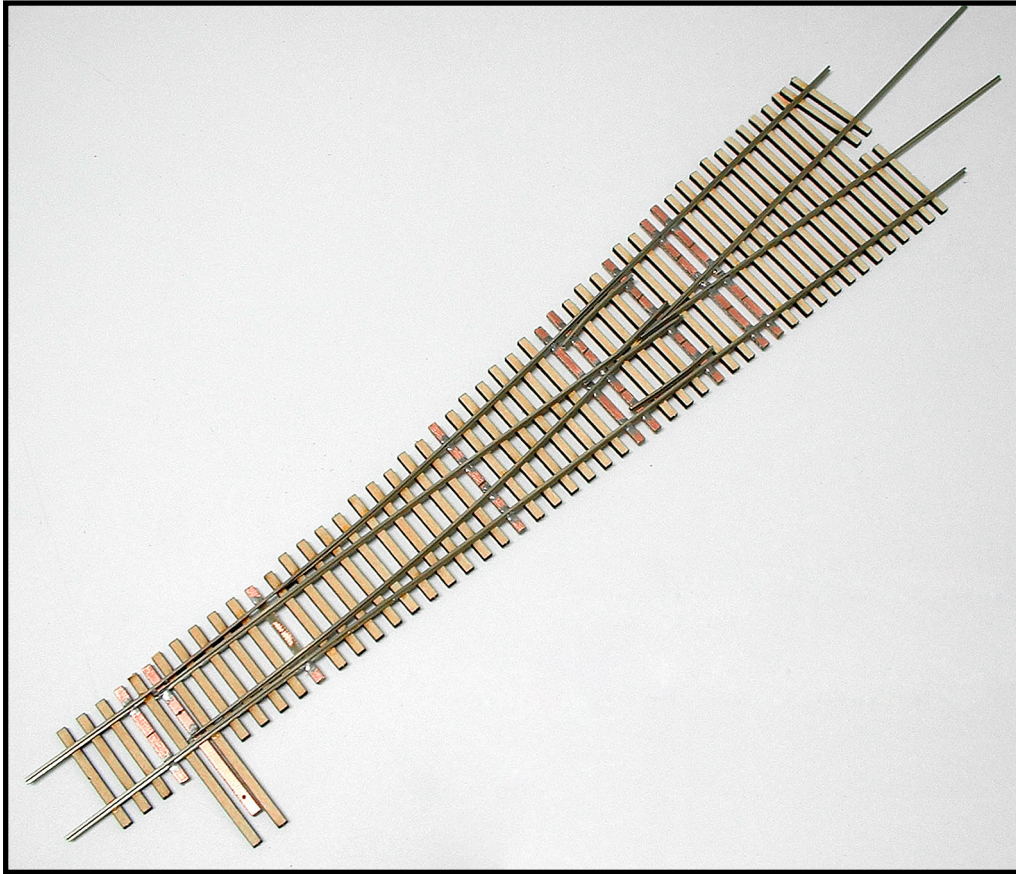
Fast Tracks QuickSticks Users' Guide

QuickSticks laser cut ties offers the Fast Tracks user a quick and easy method to construct finished trackwork that rivals even the most experienced modelers.

Each QuickSticks lattice[1] is designed to be used with trackwork that has been built using a Fast Tracks assembly fixture and are available for both standard and narrow gauge track.

Standard gauge versions of QuickSticks are a neater, more maintained version of railroad ties, while narrow gauge versions have a more "rustic" feel to them; reflective of the more neglected maintenance practices common to rural narrow gauge operations.

This users' guide is applicable to either standard or narrow gauge QuickSticks, and will detail how to complete a turnout with QuickSticks using the recommended "adhesive" method of construction as well as the optional "spikes" method of installation.

The images shown in this document may not be your specific fixture, however these instructions are suitable for all Fast Tracks QuickSticks.

Larger, printable versions of the images in this manual are supplied with the documentation CD that is included with any track construction tools that you purchase from Fast Tracks. Look for the link under the "Additional Documentation" section of the CD menu that is displayed when you insert the CD into your computer.

The latest version of this guide is always available for download from the Fast Tracks website at www.handlaidtrack.com/documents.html

This document was last updated on September 21, 2004.

---

[1] The "Lattice" is what we call the QuickSticks assembly.

Related Documents

The following documents may be referred to in this document and may be needed during construction. You may want to print out copies of them now.

They will be included on the documentation CD that you received with your order, or you can download the latest version from our website.

Document ID	Document Title	Download The Latest Version at:
UG01	Constructing Turnouts Using Fast Tracks Assembly Fixtures	www.handlaidtrack.com/documents/ug01.pdf
AN02	Painting Trackwork	www.handlaidtrack.com/documents/an02.pdf
UG09	Using Fast Tracks PC Board Ties	www.handlaidtrack.com/documents/ug09.pdf

Completing A Turnout With QuickSticks Laser Cut Ties

Follows is a step-by-step guide for using QuickSticks laser cut ties with turnouts that have been built using Fast Tracks assembly fixtures.

Step 1

Turnouts that will be completed using QuickSticks should be built with extra long rails extending well past the end of the assembly fixture in order to accommodate a full set of ties. (Image 2)

For easy reference, place a QuickSticks lattice (Image 1) under the assembly fixture while you are constructing your turnout to ensure that the rails are long enough. (Image 3)

Step 2

Each QuickSticks lattice has two removable ties, one for a hinged turnout and one for a solid point turnout. Place your completed turnout over the lattice to determine which one (or both) needs to be removed for your turnout. (Image 4)

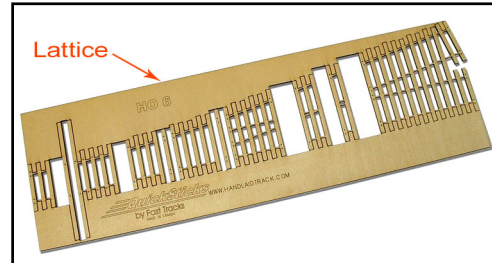Ties are easily removed by simply snapping them out of the lattice.

Image 1

Lattice

Image 2

Extend the rail past the end of the assembly fixture to accommodate a full set of ties.

Image 3

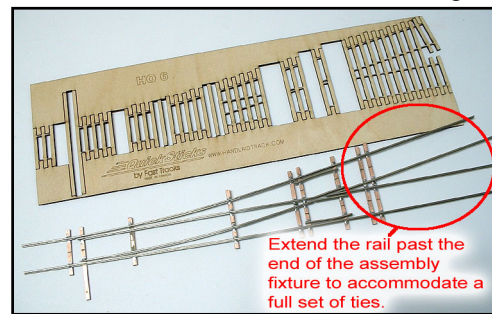Place a QuickSticks lattice under the Assembly Fixture to determine how much rail you need.
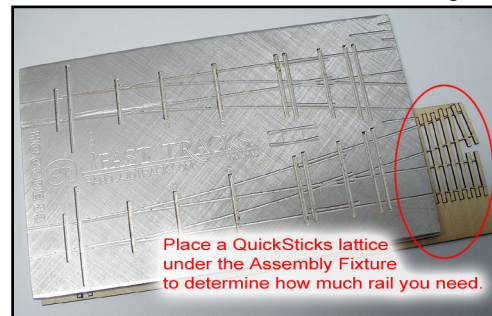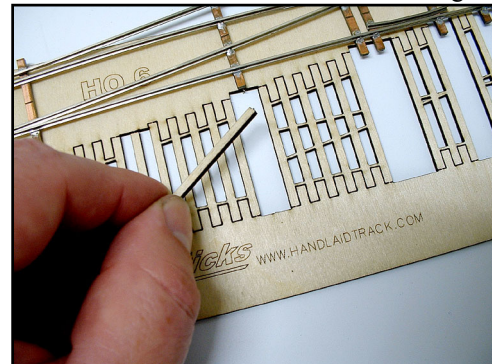
Image 4

Image 5

Adhesive Method

We will first detail how to fasten the QuickSticks lattice to your turnout using the adhesive method. If you prefer to spike the turnout to your layout, go to page 8.

Image 6

Step 3

Since your Fast Tracks constructed turnout is firmly held together with PC board ties, the lattice is not needed to provide any structural support for the turnout and only needs to be glued in place.

I recommend that you use Pliobond (available for order from Fast Tracks) to glue the lattice to the trackwork. Pliobond is a contact cement type of adhesive, and is very well suited for this type of application. (Image 5)

Image 7

Like contact cement Pliobond needs to be applied to both surfaces that are to be glued together and allowed to sit for a few minutes before joining the lattice to the trackwork. The glue should not be "wet" when joined.

To make the application of the Pliobond a little easier, I modify a replacement nozzle from a CA glue container. These containers are available at most hobby stores. This makes the job a little easier, but certainly isn't a requirement.

Image 8

Do not apply any adhesive to these rails!

Step 4

Apply a bead of Pliobond to the bottom of all the rails on the turnout (Images 6 & 7) _**except for**_ the moving point rails as shown in the area marked in Image 8.

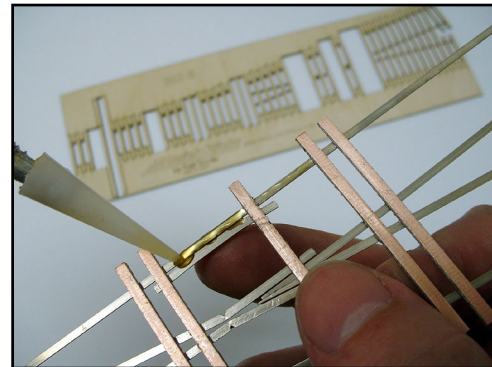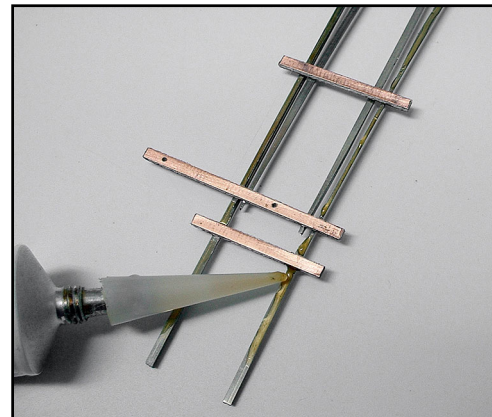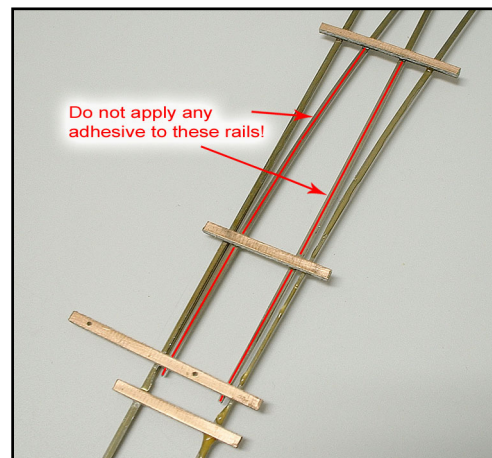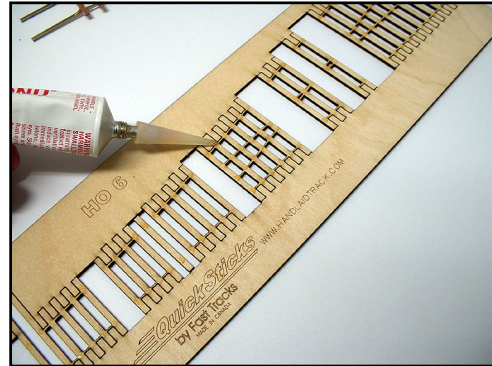Care must be taken not to get any adhesive on any moving parts of the turnout.

Step 5

Apply a bead of Pliobond along the webbing between the ties of the lattice being very careful not to apply any adhesive where the moving points rails will be. (Image 9)
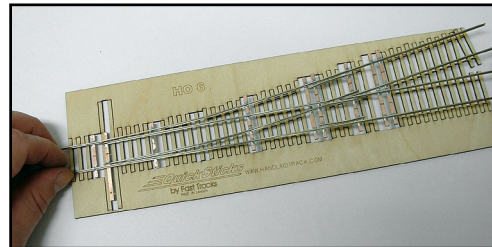
Step 6

Once the adhesive has set up, about 3 or 4 minutes, carefully place the turnout onto the lattice using the webbing between the ties for alignment. (Image 10)

When using a contact type of adhesive you only get one shot at it; as soon as the two surfaces tough they are immediately bonded so care must be taken! Use a couple of three-point track gauges to ensure the rails stay in perfect gauge. (Image 11)

Image 10

Step 7

Clamp or weight the turnout in place and let it set up for at least 1 hour. 24 hours is even better. (Image 12)
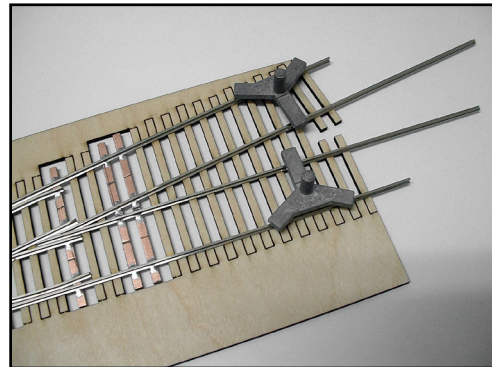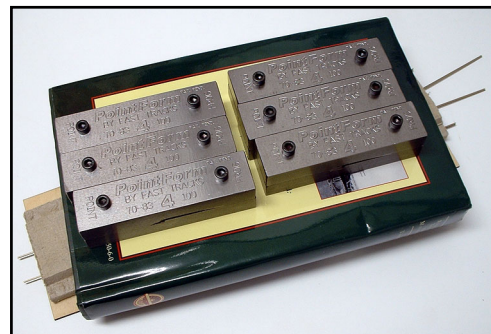
Image 11

Image 12

Step 8

Once the adhesive has set it is time to remove the excess material from the lattice. The best way to do this is by "snapping" the material free of the ties. You can try using a knife, but I have found that the shock of the knife cut can sometimes cause the glue joints to weaken, so it is usually better to simply use your fingers.

To start, firmly support one side of the ties with your fingers (Image 13) and starting at one end of the turnout gently work the material back and forth until the ties break free. (Image 14) Work your way down the entire turnout until it has completely broken free. Discard the extra material. Repeat this process for the other side.

Should any ties come unglued during this process simple re-apply some Pliobond and attach them in the same way that you did in steps 4 and 5.

Image 13

Image 14

And You Are Finished!

It's that easy! Your turnout is complete and ready to paint and install on your layout! If you would like to learn how to spike the turnout to your layout rather than using glue to fasten the QuickSticks lattice to the turnout, go to page 8 of this guide.

To learn how to paint your completed turnout, check out our "Painting Trackwork" application note. (AN02)

This application note is included on the CD or can be downloaded from our website at www.handlaidtrack.com/documents/an02.pdf.

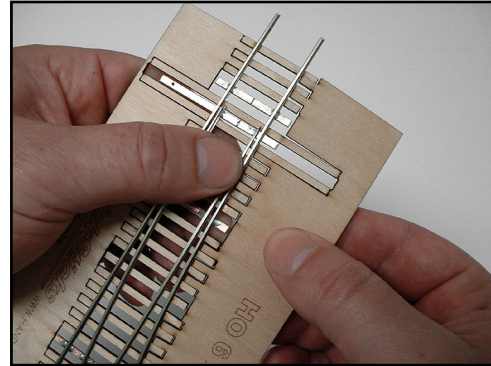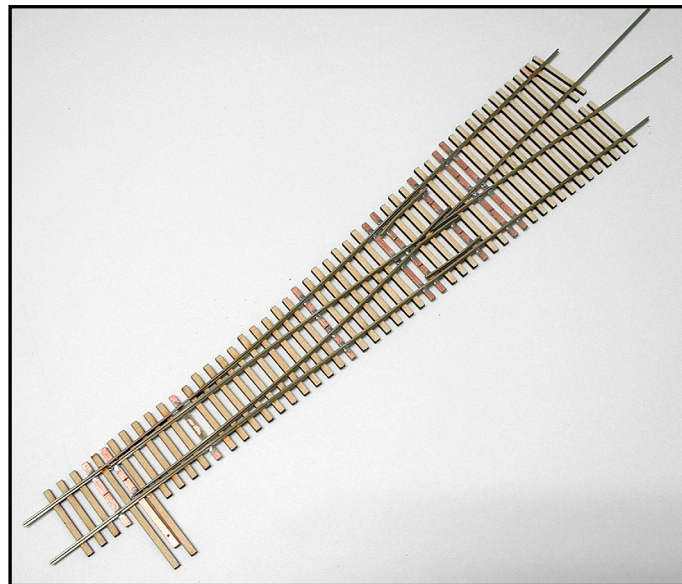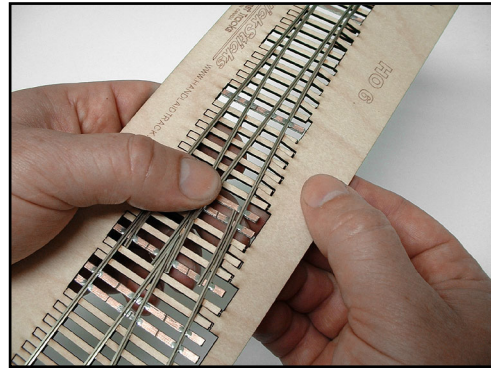**Spike Method**

An alternative to gluing QuickSticks laser cut ties to your completed turnout is to spike the turnout to the ties on your layout.

This method is for the modeler who prefers the look of hand-spiked trackwork throughout their layout. Pre-drilled holes (Image 15) are available as an option that will aid in spiking and will ensure that the finished turnout remains in gauge.

Holes are placed in critical locations on the turnout to provide maximum rigidity.

Image 16

Whenever possible, it is advisable to place ties from the turnout outward by gluing the QuickSticks lattice in position first, then adding the standard length ties in place. This will aid in getting good alignment between the turnout and ties.

It is assumed that you have already laid out all the necessary centerlines for your trackwork and that you are familiar with the techniques required for spiking rail.

Complete steps 1 & 2 on page 4 before carrying on with step 3.

Image 17

Step 3

Cut into the end ties of the QuickSticks lattice are small notches that will aid in aligning the lattice onto your track centerlines. (Image 16) Align the notches with the centerlines that you have drawn on your roadbed.

Once in place, draw a line along the ends of the lattice to aid in placing the lattice once adhesive is applied. (Image 17)

Step 4
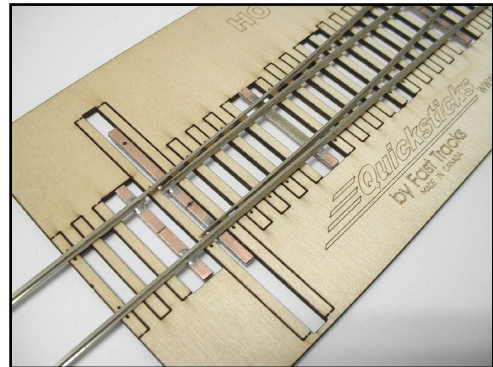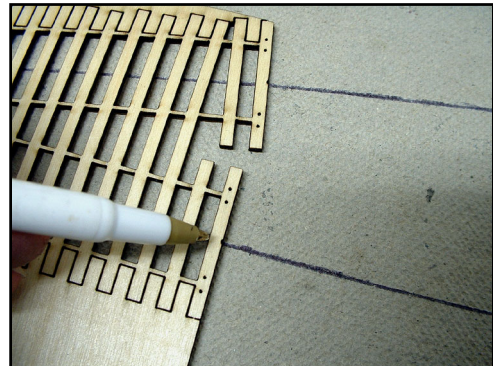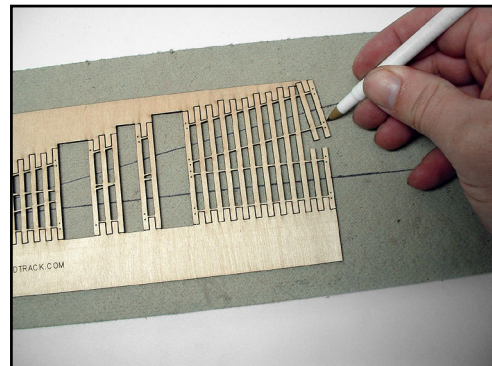
Apply adhesive to the bottom of every tie along the center of the lattice; be sure not to get any glue on the removable portion of the lattice. (Image 17) I recommend using regular carpenters adhesive.

Step 5

Place the lattice onto the roadbed lining it up with the line drawn in step 3. Place some weights to hold the lattice in place until the adhesive sets up. (Image 19)

While the adhesive is curing, place the ties leading into and away from the turnout. QuickSticks "Flexi" ties are shown in image 20.

If you are using individual wood ties for the trackwork going into and out of the turnout, it may be necessary to lightly sand the ties flush with the lattice to ensure that all of the ties are flat and will provide a level surface for the rails.

Step 6

Starting at the point end of the turnout, place spikes in the first tie ensuring that the throw bar is properly centered between the long throw bar ties. (Image 21)
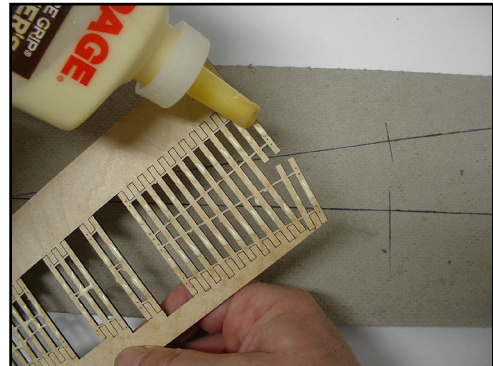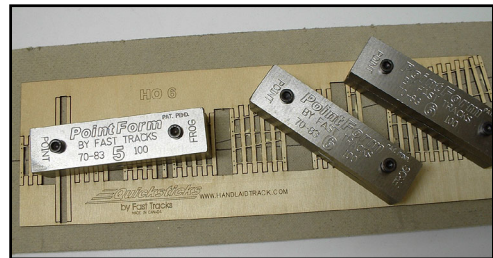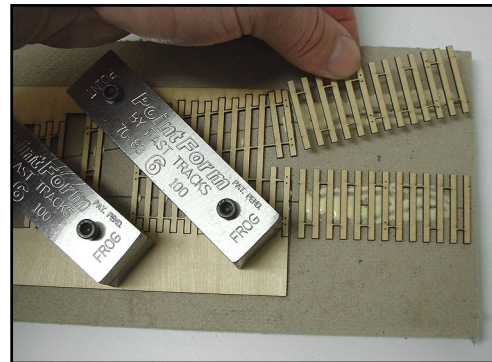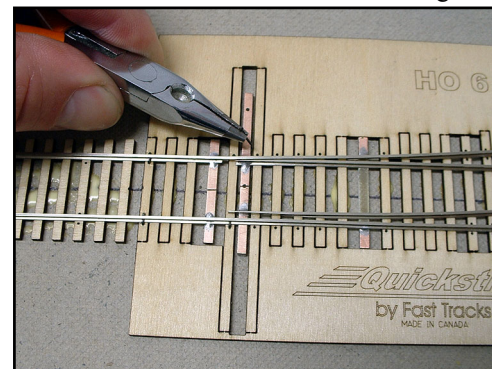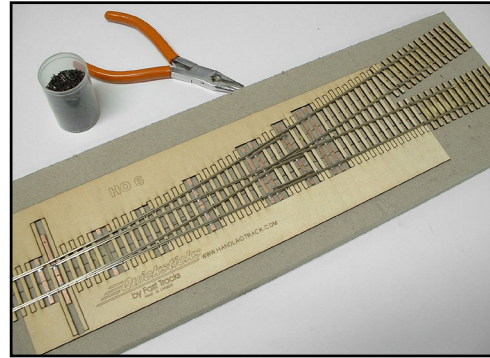
Image 18

Image 19

Image 20

Image 21

Step 7

Continue spiking using the pre-drilled holes as a guide. (Image 22)
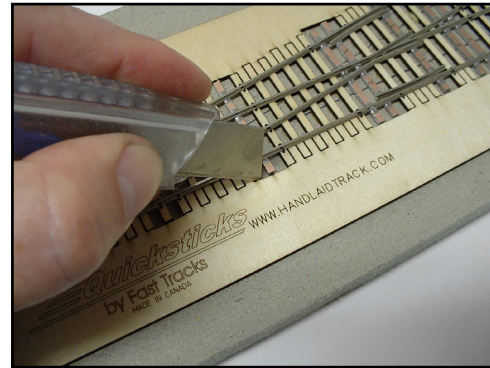
Step 8

Working from one end to the other, use a knife to cut the small tabs holding the ties to the lattice. (Image 23)

Once all the tabs are severed, slowly work and remove the excess material from the lattice and discard. Repeat this step for the other side. (Image 24)

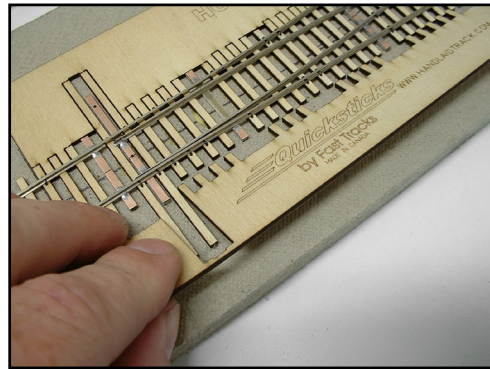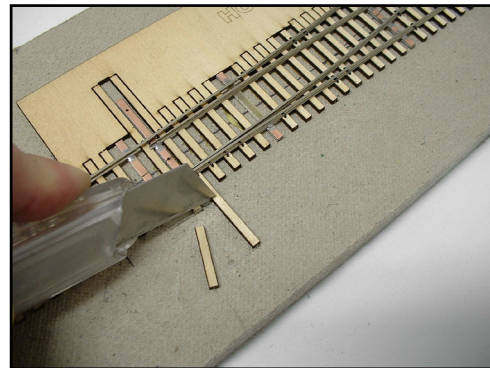Using several small cuts trim one side of the switch stand ties flush with the rest of the ties. (Image 25)

Image 22

Image 23

Image 24

Image 25

And You Are Finished!