## **CFI True-Cut Method of Stair Upholstery**

The following information describes the steps required to install an upholstered stair with a tread and riser with spindles on one side using the technique known as the waterfall style.

#### PLACEMENT OF TACKSTRIP

- 1. Start by securing the tackstrip to the riser and tread.
- 2. Position the tackstrip on the **RISER** approximately ½ inch to 5/8-inch up from the tread or floor below.
- 3. Point the tackstrip pins down toward the tread or the floor.
- 4. Tackstrip length is determined by the width of the stair minus 1-inch to 1 ½ inches or 2 3 inches if the stair is upholstered on both sides.
- 5. Position the tackstrip 1 to 1 ½ inches short on the side to be upholstered.
- 6. Secure tackstrip to the **TREAD** with the pins pointing toward the riser above.
- 7. Position it to allow a little less than twice the thickness of the carpet that is to be installed.
- 8. Tackstrip length is to be  $\frac{1}{4}$ -inch shorter than the width of the tread. (1/8 inch short on each side)
- 9. Secure tackstrip around each spindle in a uniform manner with a minimum of two nails for each piece of tackstrip.
- 10. Do not leave any voids to create a low area or valley in the appearance of carpet.

#### INSTALLATION OF THE CUSHION

- 1. After securing all the tackstrip, install the cushion.
- 2. Extend the cushion from the tackstrip on the tread down to the tackstrip on the riser.
- 3. Cut width of cushion to width of tread to be extended over lip of upholstered side, if there is tackstrip on the outside of the spindles, you will want to place a piece of cushion on the edge of the tread.
- 4. Do not put cushion on the underneath side of the upholstered edge.
- 5. Cut the cushion on the upholstered side of the riser at a 45 degree angle.
- 6. Cut from top of outside corner of tread down to top corner of tackstrip on riser, this creates an angle with the cushion when viewed from the front.



- 7. By doing this, carpet can be doubled over on edge of riser. The cushion will not be under the rolled edge.
- 8. Follow this procedure on both sides of the riser if stair is upholstered on both sides.
- 9. Place duct tape along nosing of each stair to protect cushion from drying out or from accelerated wear.

### MEASURING FOR THE CARPET CUT

- 1. Measure the stair to determine the size of cut for the carpet.
- 2. First measure for the **length** of carpet to cut.
- 3. Place the tape measure against the **RISER** of the second stair.
- 4. Extend the tape measure over the tread and down the riser of the first stair.
- 5. Record the measurement.
- 6. Upholstered edge of stair may extend past the riser of the second stair.



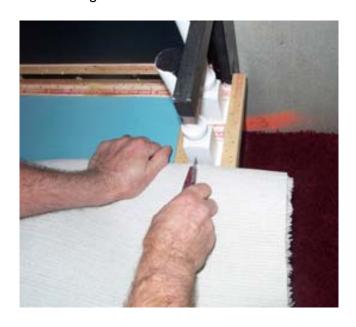
- 7. Obtain this measurement, add 2-inches and also add this to the first length measurement.
- 8. Measure for the **width** of the carpet.
- 9. Place tape measure against the stringer on the side of stair.
- 10. Extend it across the stair to the upholstered edge.
- 11. Measure all the way under the lip of the edge and add 1 inch to obtain the width.
- 12. If stair is upholstered on both sides, measure under the lips of both sides of stair.

## **INSTALLATION OF CARPET ON STAIRS**

- 1. Install each upholstered stair individually.
- 2. Cut the carpet to size.
- 3. Start at the bottom of the staircase and work to the top.
- 4. On the bottom riser, position carpet onto the tackstrip.



- 5. Leave approximately 1/4-inch curled out to be tucked under the tackstrip later.
- 6. Position the carpet flush against the stringer on the side of the stair if there is not an open end on both sides.
- 7. If the stairs are upholstered on both sides, leave enough carpet to fold under each lip of the two upholstered sides.
- 8. Secure the carpet to the tackstrip on the **riser**, by rubbing the head of a hammer or stair tool across the face of the carpet where the tackstrip is installed.
- 9. The tackstrip pins will grab into the backing of the carpet.
- 10. Fold carpet up over the bullnose and tread.
- 11. Start to cut the carpet from the back, starting at the front spindle and allowing the cut to continue in between spindles, not over the side edge of the tread.



12. Continue cutting carpet backing. Make cut at each spindle and attempt to cut on a row from the first spindle through to the top end of the carpet section.





13. Before you can kick the stair onto the tackstrip, make a relief cut at the inside corner of the spindle.



- 14. Use the kneekicker to stretch and attach the carpet to the tackstrip.
- 15. Use a stair tool and rubber mallet to drive the carpet even tighter into the gully or crotch of the stair.



- 16. Trim carpet from the riser and around the spindle the inside portion of the stairs.
- 17. Tuck the carpet behind the tackstrip on the riser.

# TO UPHOLSTER THE STAIRS

- 1. Move to the outside portion of the stairs, to begin the upholstery work.
- 2. At the outside edge of the front spindle, make a relief cut on the section of carpet to be used for the upholstered edge.
- 3. Position the carpet on the tackstrip at the back of the stair so that it will extend through the spindles and seam back up to the inside section of carpet.
- 4. Trim around the spindles.



5. The seams between the spindles cannot be overlapped or gapped.



6. Once seams are satisfactory, lift the outside edge of the carpet that is between the spindles and weld seam together with thermoplastic from a hot glue gun with an extension tip.



- 7. Thermoplastic is placed on the edge of carpet in exactly the same manner as constructing a seam with latex applying to the thickness of the primary and secondary backing.
- 8. Quickly place the outside edge of carpet into the correct position to make the seam between the spindles.
- 9. Hold this for a few seconds to allow the thermoplastic to dry and cool, securing the seam together.



- 10. Complete this procedure through all the spindles up to the riser of the next stair.
- 11. When thermoplastic has cooled, wrap the carpet over bullnose that is to be upholstered.
- 12. Mark the correct length to cut the carpet. The carpet needs to completely wrap around the bullnose where it joins the stringer. It is crucial to cut on the mark and continue the cut all the way down to the bottom of the riser.



13. Fold carpet back and cut from the back along the marks, by cutting from the back no damage will occur to woodwork or wall from knife marks.



14. Carpet must fit perfectly against wall under the lip of the upholstered bullnose, if it does not, any cushion on the edge can be compressed to allow for a slight miscut.



15. Make a cut that will run to the side of the carpet at top of tread, including the thickness of the cushion and on the very front edge above the riser.



16. This cut will separate the tread upholstery from the riser upholstery.



- 17. At an approximate 45° angle to the side of the carpet, make a cut on the riser section from the bottom of the carpet right next to the corner where the wall and riser meet.
- 18. Fold this riser section around the corner so that it looks smooth without wrinkles or bubbles.



19. Place the knife blade flat against the bottom of the tread and make a small cut in the carpet, cutting forward.



- 20. Turn the carpet back cut from this notch up to the point that was established with the cut that separates the riser from the tread.
- 21. Fold this riser flap back under tread. Leave no bubbles or wrinkles on the face.
- 22. The hot glue gun can be used to adhere the carpet to the riser.
- 23. Run a bead of hot thermoplastic down the front edge of the riser and press the carpet face pile into it.



24. Do not allow the hot glue to come in contact with the exposed side of the carpet.



- 25. Fold the tread piece over the bullnose.26. Place small cut where the riser and the bottom of the tread make an intersection.



27. Lift back the tread section and cut the angle from that notch back to the first cut that was made to separate the tread from the riser



- 28. Wrap the tread section back into place.
- 29. The mitered cuts must line up to form a seam.



- 30. Lift the underneath side of the upholstered ledge.
- 31. Apply thermoplastic from the hot glue gun.



32. Carefully fold back into place and hold tightly until the glue has bonded to the underneath side of the bullnose.



33. Use the hot glue gun to weld the miter together.



- 34. On the small return at the back of the stair, cut the carpet so that the top side of the tread piece will fall down to cover the top half of the thickness of the tread and the cushion.
- 35. The section on the bottom (underneath) part of the tread will fold up to cover the bottom half of the tread thickness.



- 36. When finished, cut from the center of the thickness of the tread up to the top outside corner of the thickness of the tread.
- 37. Return to the center of the thickness of the tread and cut down to the lower outside corner of the thickness of the tread.



- 38. A triangle will form that has no carpet when the top half of the tread piece is folded down to meet the bottom half of the tread piece.
- 39. Cover the triangle with the section of carpet that is still attached to the front edge of the bullnose.
- 40. Trim off the corners of this section so that they form a perfect "Y" seam on the back of the return.
- 41. If the carpet is folded flat, it will appear as a "W" cut.
- 42. Use the hot glue gun seam on all three pieces together and to the back of the return.



43. When finished, the upholstered stair displays no staples that will cause dimples in the appearance of this stair.