

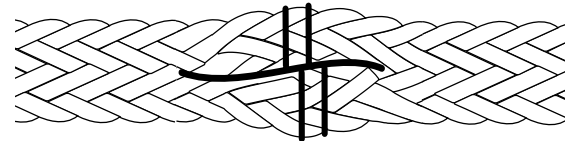


# 12-Strand Class I End-For-End Splice

Class I 12-strand ropes are made from any or all of the following fibers: olefin, polyester, or nylon.

This end-for-end splice may be performed on new or used rope. This is an all-purpose splice technique designed for people who generally splice used rope as frequently as new rope. By following the procedure below, the splice can retain from 90% to 100% of average new rope strength and in used rope up to the same proportion of residual used rope strength.

**Note:** Some small sizes of 12-strand products have been converted to an 8-strand single braid.



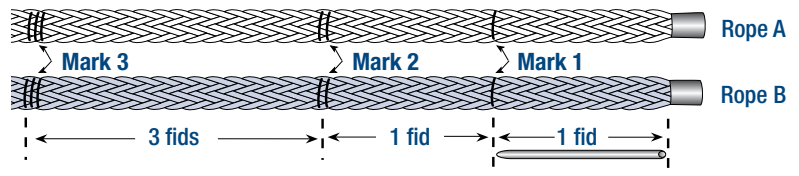
Finished splice

## STEP 1 MEASURING AND MARKING

Tape ends of line to be spliced. Lay 2 ropes to be spliced side-by-side and measure 1 tubular fid length from taped end of each line and mark. This is Mark 1.

From Mark 1 measure 1 tubular fid lengths and make Mark 2 on both lines.

From Mark 2 measure 3 tubular fid lengths and make Mark 3 on both lines.



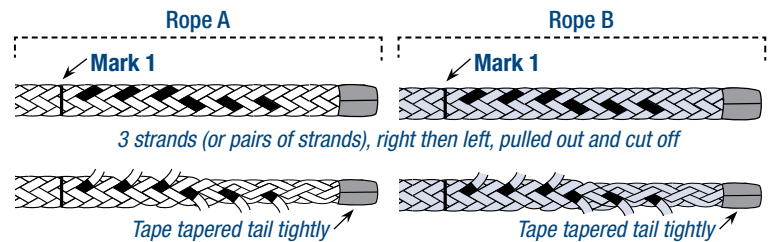
## STEP 2 TAPERING TAIL

From Mark 1, in the direction of the taped end of the line, mark every 2nd right and then every 2nd left strand\* for 3 strands.\*\*

Pull every marked strand out of line and cut off (tape at end can cause resistance and may have to be removed in order to pull out cut strands.)

Tapered end will now have only 6 strands remaining (or 4 strands for an 8-strand braid.)

Tape tapered tail tightly to keep from unbraiding.

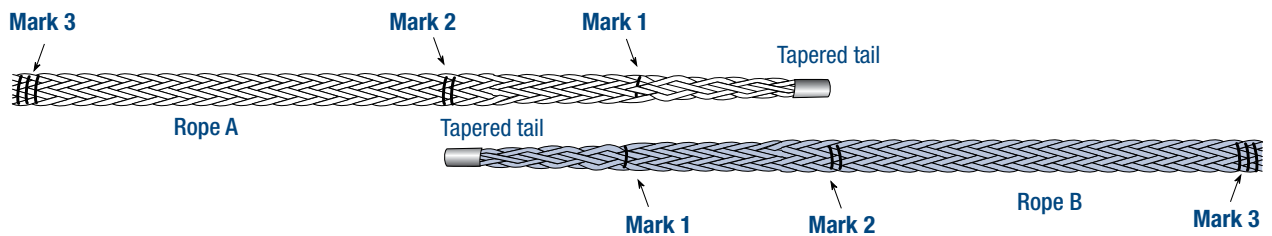


\*Some rope diameters may have pairs of strands in right and left direction. In this case, treat the pairs of strands as a single strand, marking and cutting both in each direction as described above.

\*\*For an 8-strand construction, mark every 3rd left and right strand for 2 strands.

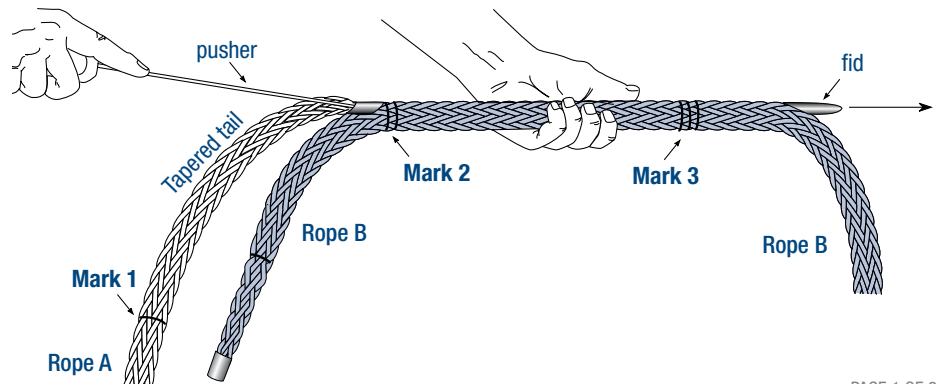
## STEP 3 REPOSITIONING ROPES

Reposition ropes for splicing according to diagram below.



## STEP 4 BURYING ROPE A INTO ROPE B

Attach fid to tapered end of Rope A and insert fid into Rope B at Mark 2. Bring out past Mark 3, then remove fid.



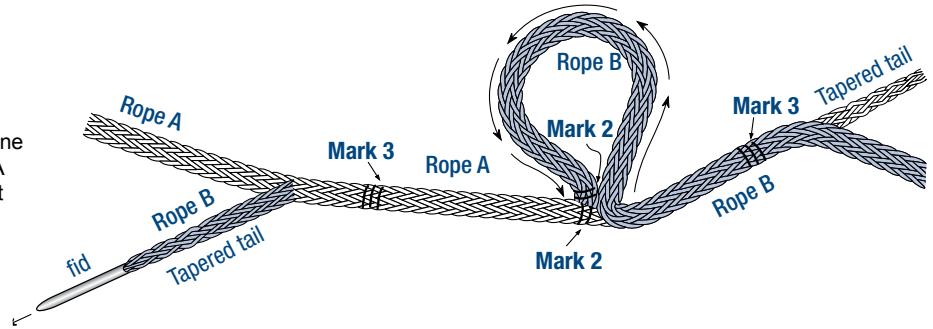
**4A** Tie off the tail of Rope A to a stationary object, then use both hands and weight of your body to smooth Rope B toward Rope A to bury Rope A up to its own Mark 2. Leave tail sticking out.



# 12-Strand Class I End-For-End Splice

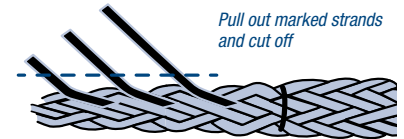
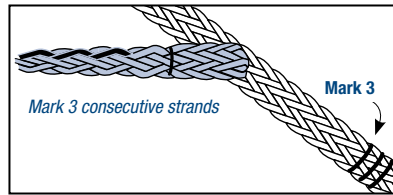
## STEP 5 FINISH BURYING

Attach tapered tail of Rope B to fid. Insert the fid into Rope A at Mark 2, approximately the diameter of the line away from insertion point of Rope A into Rope B. Bring fid and tail out at Mark 3 of Rope A. Following same procedures as Step 4A bury Rope B up to its own Mark 2. Leave tail sticking out.



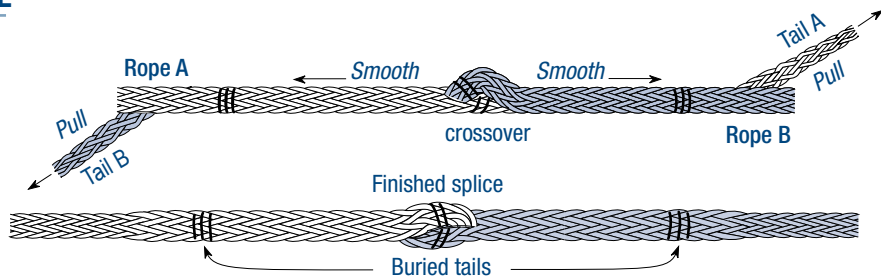
## STEP 6 PERFORMING SECOND TAPER

Mark 3 consecutive strands as shown. Pull out all 3 and cut off.



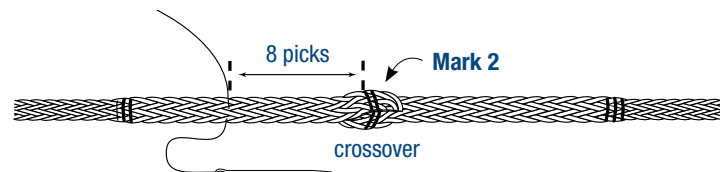
## STEP 7 SMOOTHING OUT SPLICE

Pull both tails to tighten the crossover. Now, using both hands and the weight of your body, smooth the cover slack from the crossover towards Mark 3 in both directions. The tails will disappear into the rope, and a smooth, gradual taper should result. Lock stitching should be done on both sides of the crossover of the buried tails to prevent the splice from pulling out.



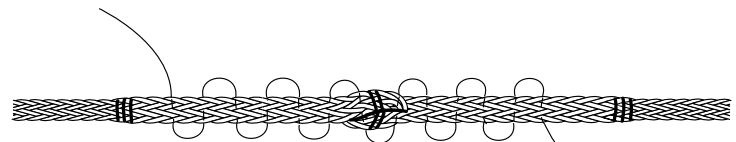
## STEP 8 LOCK STITCHING PROCEDURE

From Mark 2 at crossover, count 8 picks in either direction and insert stitching twine.

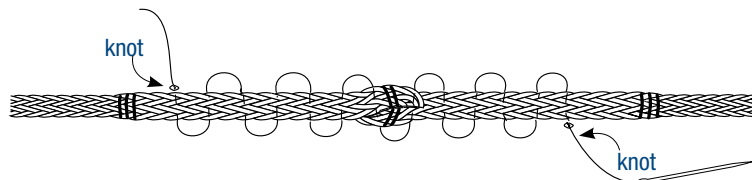


## STEP 9

Working towards the crossover, stitch twine back and forth through splice until a minimum of 3 complete stitches have been made on each side of crossover.



**9A** Tie an overhand knot in each end of the twine, as close to its exit point as possible.



**9B** Insert tail of stitching twine at exact location where twine emerges. Using needle or small fid, pull (or push) through rope at a slight angle. Pull hard on the end of the twine so that the knot disappears inside the rope. Trim off the remaining twine close to the rope. Repeat on other end of the twine.

