

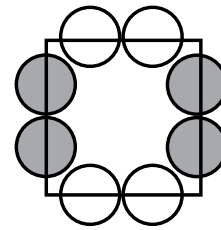


8-Strand Class II End-for-End Splice

Class II ropes are made in whole or part from any of the following high modulus fibers: HMPE, LCP (Liquid Crystal Polymer), Aramid, and PBO.

GETTING STARTED

8-strand ropes, also known as plaited ropes, are composed of 8 strands grouped into 4 pairs. 2 of these pairs turn to the left (shown in gray), and 2 pairs turn to the right (shown in white.) Seen in this cross-section, the 4 strand pairs form the sides of a square. The strands that are on opposite sides of the square will rotate in the same direction.

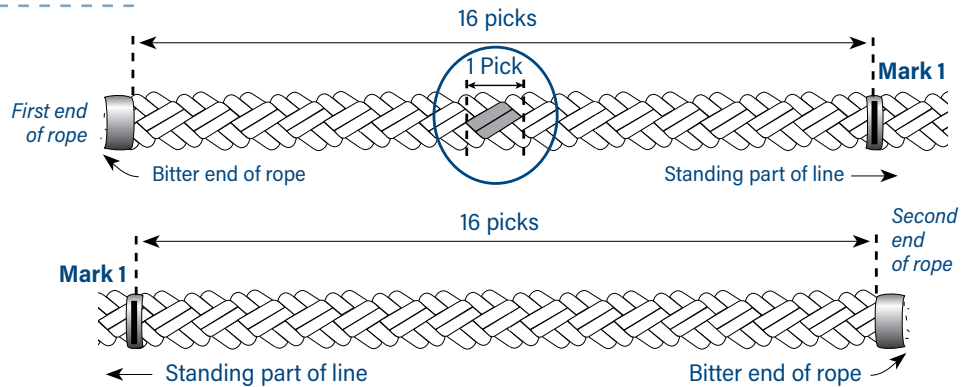


TOOLS REQUIRED

A splicing fid or marlinspike, sharp knife or scissors, plastic or masking tape, marking pen.

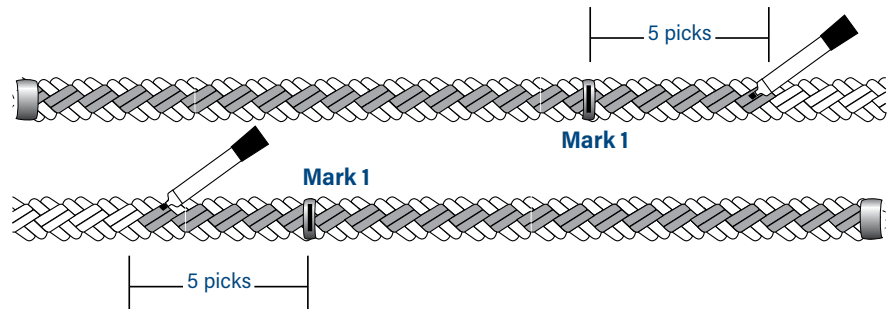
STEP 1 COUNTING AND MARKING

From the end of the rope, count a distance of 16 picks and apply tape securely around the rope immediately after the 16th pick, as shown in the illustration. This is Mark 1. Apply the tape securely enough so that it will not move during the splicing procedure.



STEP 2 MARKING THE ROPE

Holding the end of the rope, note the pairs of strands going to the left. Mark these pairs. Mark the strands up to Mark 1 and continue to mark the strands for 5 picks beyond Mark 1.



STEP 3 SEPARATING & TAPING

Remove tape from the bitter end of the rope then tape the end of each strand. Start unlaying strands in their respective pairs. It is important to keep each pair of strands together. After they are separated into pairs up to Mark 1, unravel each strand pair without allowing the individual strands to untwist or loosen. Retaining the twist of each strand is important to the resulting splice. Tape the ends of pairs together with a taper as shown.

3A Lay out rope as shown in Fig. A. Working from the right hand rope. Unmarked strand pairs are shown in white. Marked strand pairs are shown in gray. The left hand rope mirrors this arrangement.

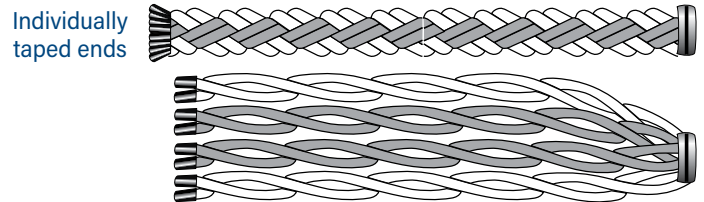
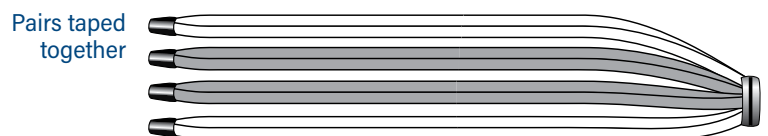


Figure A





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STEP 4 JOINING THE PAIRS

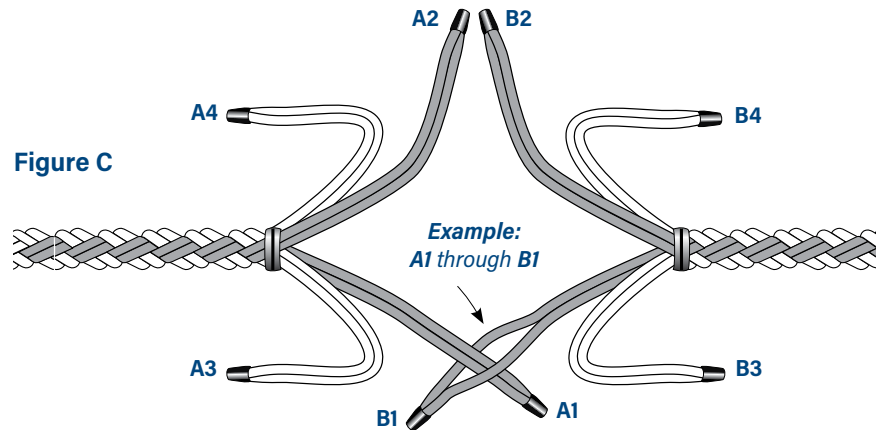
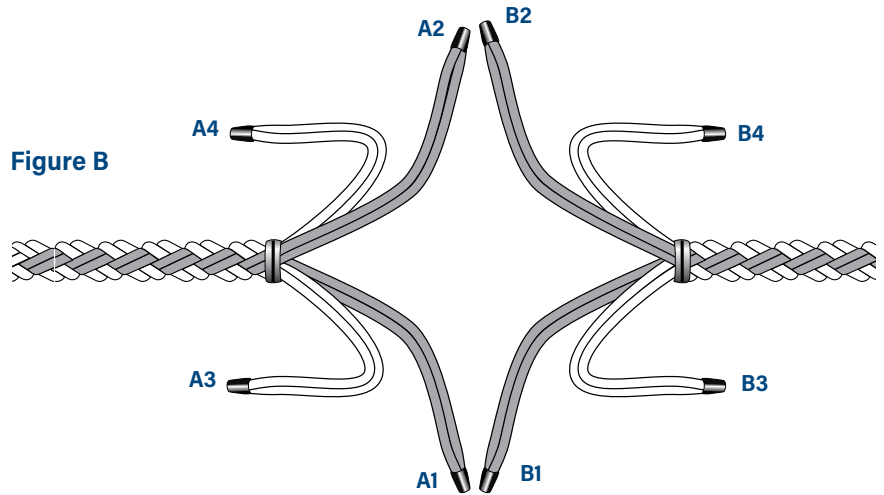
To start, lay out the marked and unmarked strands as they appear in Fig. B.

4A It is important that the next steps of the procedure be followed carefully as shown in Fig. C.

Marked A1 strands go through marked B1 strands. Marked B2 strands go through marked A2 strands.

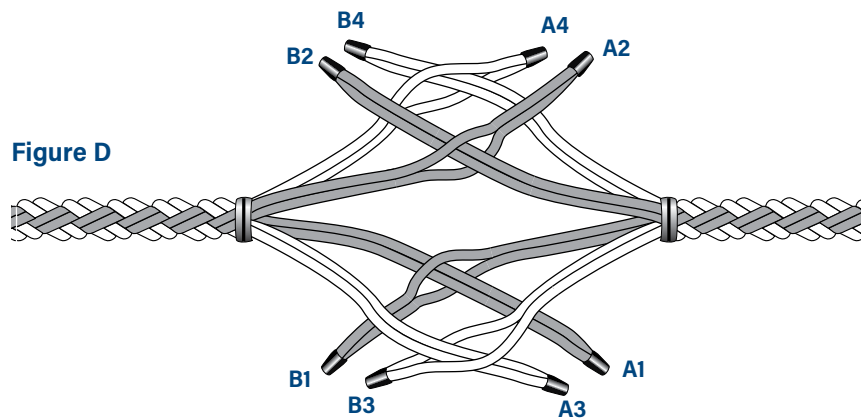
Unmarked A3 strands go through unmarked B3 strands.

Unmarked B4 strands go through unmarked A4 strands. Keep strands untwisted.



STEP 5 MARRYING THE ROPES

After the initial step has been completed on all strands, you should have something that looks like Fig. D. Marry the ropes as shown in Step 6. This part is preferably a 2-person job.

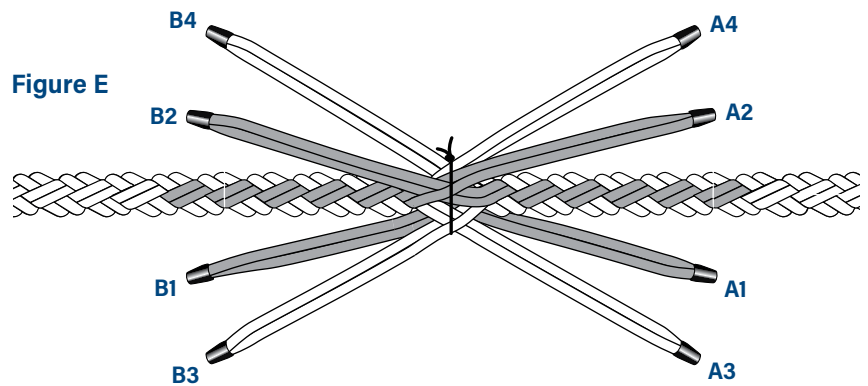




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STEP 6 FINISHING MARRIAGE

Carefully pull each strand all the way through it's counterpart until the two ropes are snugly adjoined. Tie a piece of string tightly around the junction as shown in Fig. E. Remove tape from Mark 1 of both pieces of rope.

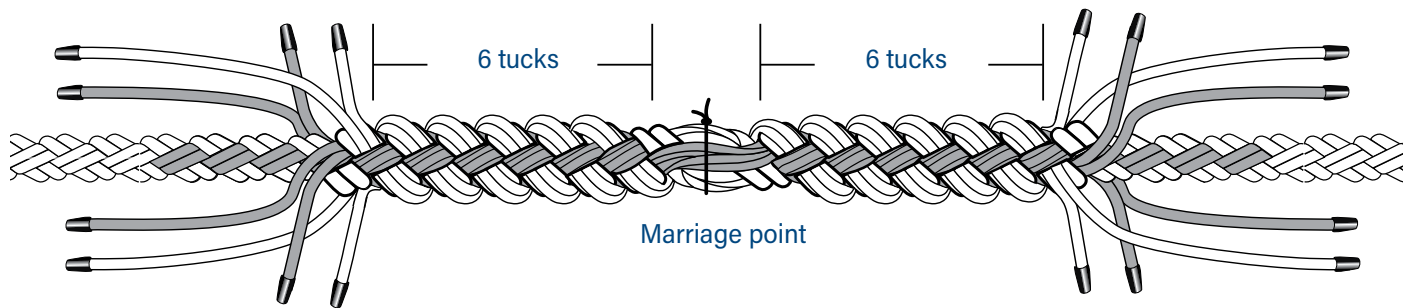


STEP 7 STARTING THE TUCKS

Beginning at the marriage, take one marked strand pair, pull it straight across the marriage point and tuck underneath the nearest unmarked strand pair of the opposite rope. This will line up the strand pair with another strand pairing of the opposite rope. Continue to follow this strands pattern until you have completed 6 tucks.

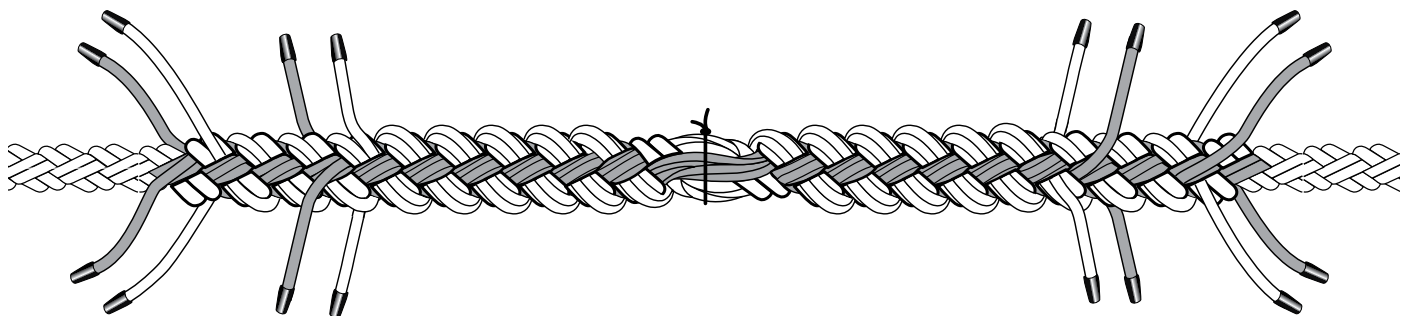
Complete 6 tucks of each strand pairing, completing tucks of all 4 strand pairs of one rope before moving to the second rope.

Following the tucks, select one strand from each strand pairing, tape approximately 8-10 inches from where the strand protrudes from the rope body and cut off the remainder. Selecting to cut the strand from each pair that lays closer to the marriage point will make the next step easier.



STEP 8 CONTINUING TUCKS

For the strands remaining uncut, perform 3 additional tucks. Throughout the tucking process, ensure that individual strands retain their level of twist and structure. Each strand should appear visually similar to the other strands making up the main rope body.

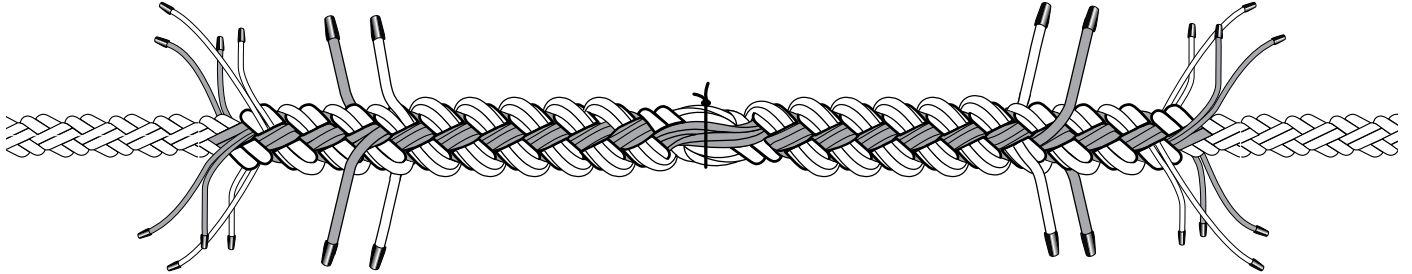




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STEP 9 FINISHING THE SPLICE

9A Following the 3 tucks, perform an additional taper on the one remaining strand, reducing the volume by half. Count the number of yarns that comprise each strand and divide as evenly as possible. Tape approximately 8-10 inches from where the strand protrudes from the rope body and cut off the remainder of one half of each strand and cut off the remainder from this half.



9B With each of the 4 remaining half-volume strands, perform 3 additional tucks. Following these tucks, tape approximately 8-10 inches from where the strand protrudes from the rope body and cut off the remainder. Also remove the string from the marriage point.

