

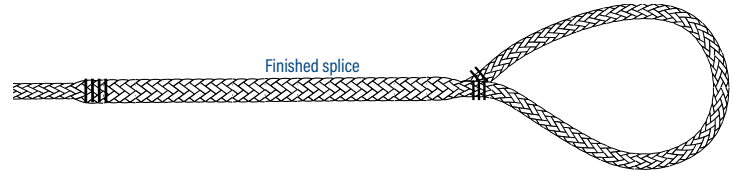
# 12-Strand Class II Eye Splice

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

**Note:** For Saturn-12, this splice method is only suitable for ropes up to, and including, 1-1/4" (30mm) in diameter. For larger diameters of Saturn-12, follow the modified 12-Strand Class II Tuck-Bury Eye Splice for Saturn-12.

The eye splice is used to place a permanent loop in the end of a rope, generally for attachment purposes to a fixed point. An eye is also used to form the rope around a thimble, which is used to protect the rope, especially when it is to be attached to a shackle, chain, or wire rope.

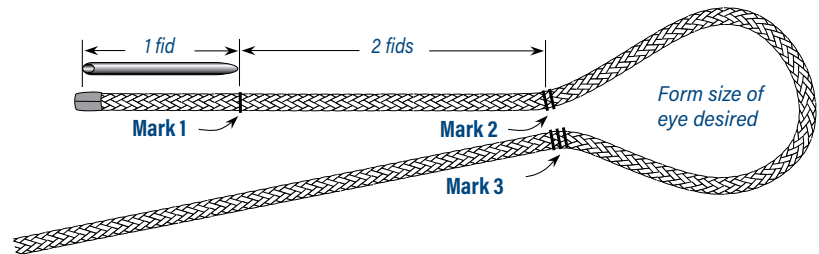
This eye splice may be performed on new or used rope. This is an all-purpose splice technique designed for people who generally splice used rope as frequently as new rope. By following the procedure below, the splice can retain from 90% to 100% of average new rope strength and in used rope up to the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



## STEP 1 MEASURING

Tape end of line to be spliced and measure 1 tubular fid length from taped end of line and make Mark 1.

From Mark 1 measure 2 tubular fid lengths and make Mark 2. Now form size of eye desired and make Mark 3.

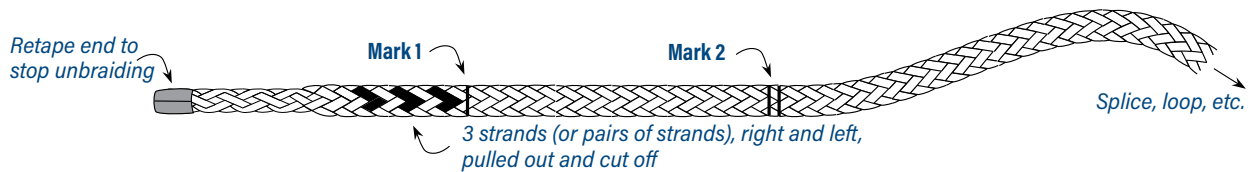


## STEP 2 MAKING TAPER

From Mark 1, in the direction of the taped end of the line, mark every second right and left strand\* for 3 strands.\*\* Pull every marked strand out of line and cut (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.

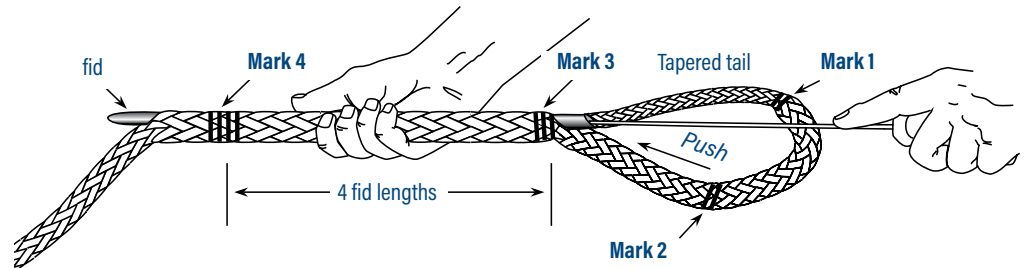
*\*Some rope diameters may have pairs of strands in right and left direction. In this case, treat the pairs of strands as a single strand, marking and cutting both in each direction as described above.*

*\*\*Some very small diameter ropes may be 8-strand. For an 8-strand construction, mark every 3rd left and right strand for 2 strands.*



## STEP 3 BURYING TAIL INTO STANDING PART OF LINE

Measure 4 tubular fid lengths from Mark 3, make Mark 4. Insert fid and tapered tail at Mark 3 and bring fid out beyond Mark 4. Pull fid and tapered tail out. Do not let the line twist.





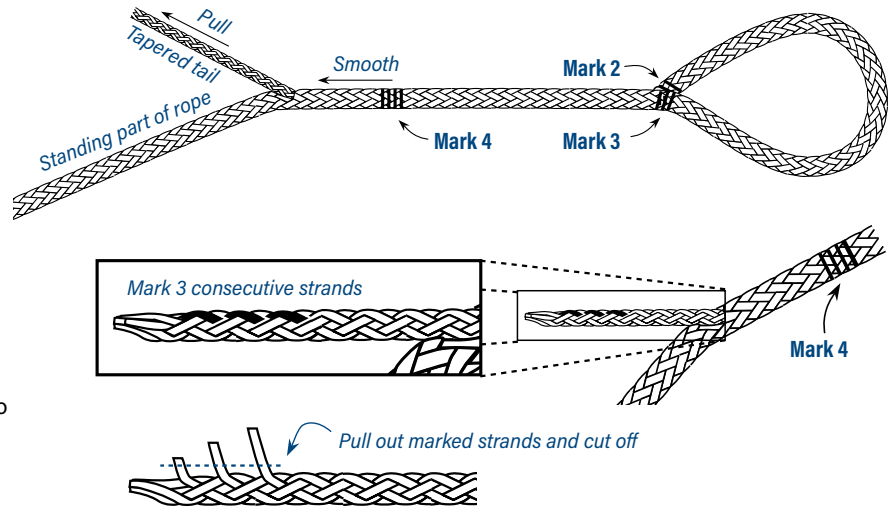
# 12-Strand Class II Eye Splice

## STEP 4 FINISHING BURYING

Remove fid. Pull hard on tapered tail with one hand. With the other hand, smooth bunched line towards eye splice until Marks 2 and 3 converge.

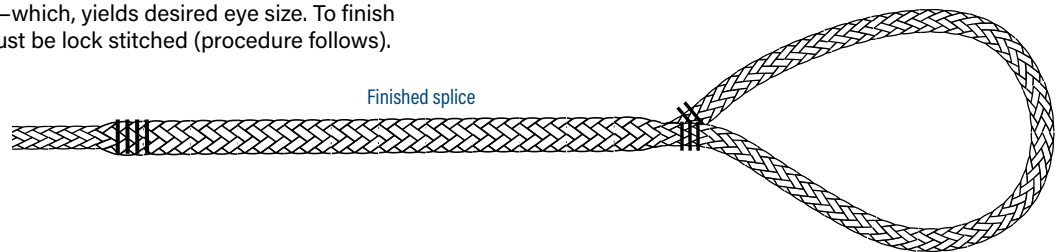
**4A** Remove the fid and any tape at the end of the tail. From the end of the tail, mark 3 consecutive strands, as shown. Pull them out of the braid and cut off close to the body of the rope.

**4B** Now, using both hands and the weight of your body, smooth the cover slack from Mark 3 towards Mark 4. The tail will disappear into the rope, and a smooth, gradual taper should result.



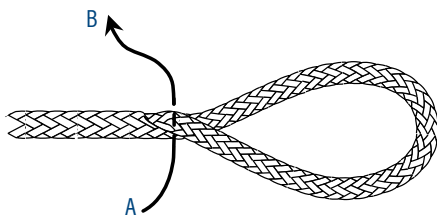
## STEP 5 FINISHING THE EYE SPLICE

When finished, Mark 2 and Mark 3 should be at the same point at the vertex of the eye—which, yields desired eye size. To finish eye splice, the splice must be lock stitched (procedure follows).

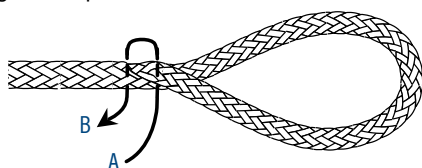


# Lock Stitching Procedure

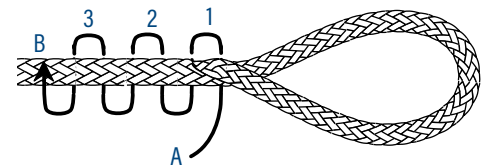
**STEP 1**  
Start the stitching twine just below the entry point of the splice and pass it directly through to the other side. The stitching should start no farther than 1/4 fid length below the entry point, as shown.



**STEP 2**  
Reinsert twine through the rope. The twine should cover 2 rope picks from the exit point. Pull the twine snug, but not tight.



**STEP 3**  
Continue to reinsert as shown until you have at least 3 complete stitches on each side of the rope. Each stitch should cross over 2 rope picks.



**STEP 4**  
After stitching 3 complete stitches on 2 sides of the rope take the bitter ends of the stitching twine and tie a square knot as close to the rope as possible. Bury the square knots into the rope between the rope picks directly where the twine enters the rope. After the knots are buried, cut off any remaining twine sticking out.

