# Eye-Splice For Class II 12-Strand Ropes

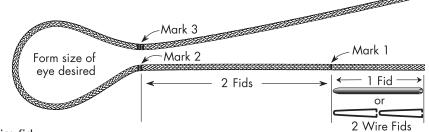
Class 2 12-Strand ropes are made in whole or part from any of the following high modulus fibers: Dyneema®, Vectran®, Technora®, and PBO®.



This eye splice may be performed on new or used rope. This is an all-purpose splice technique designed for people who generally spliced 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...Measurement

Tape end of line to be spliced and measure 1 tubular fid length (or 2 wire fid lengths because wire fids are half the length of tubular fids) from taped end of line and make **Mark 1**.



From Mark 1 measure 2 tubular fid lengths (or 4 wire 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 three strands.

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

Three strands (or pairs of strands), right and left, pulled out and cut off



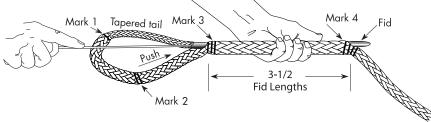
Tapered end will now have only 6 strands remaining. Tape tapered tail tightly to keep from unbraiding.

\*Larger 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.

# Step 3...Bury Tail into Standing Part of Line

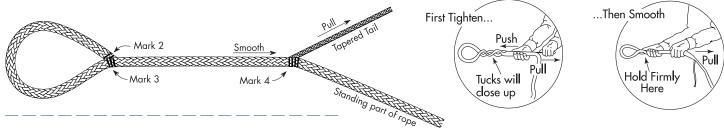
Measure 3-1/2 tubular fid lengths (7 wire fid lengths), make **Mark 4**. Insert fid and tapered tail at **Mark 3** 

and bring fid out at **Mark 4**. Pull fid and tapered tail out. Don't let the line twist.



## Step 4...Finish Burying

Remove fid. Pull hard on tapered tail with one hand. With other hand, smooth bunched line towards eye splice until marks 2 and 3 converge. Now, smooth the cover away from eye towards mark 4. Mark the tapered tail where it emerges at mark 4. Pull tail out several inches, cut tail off at an angle, so the angle cut ends at this mark. Then with both hands and weight of body, smooth cover slack to bury tail in standing part of the line.



## Step 5...To Finish Eye Splice

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

## **Lock Stitch Procedure**

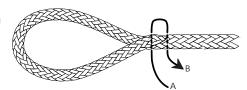
Material Required: Approximately 1/2 fid length of nylon or polyester whipping twine or rope approximately the same size of the strands in the rope you are stitch-locking.

## Step 1

Pass stitching through spliced area near throat of eye as shown.

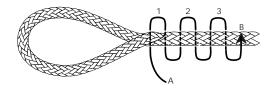
#### Step 2

Reinsert as shown pulling snug but not tight.



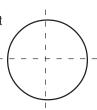
#### Step 3

Continue to reinsert as shown until you have at least 3 complete stitches.



### Step 4

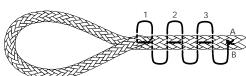
After completing *Step 3*, rotate spliced part of rope 90° and reinsert end **A** into spliced area in the same area and in the same fashion as in *Steps 1*, 2 and 3. The splice will now be stitched on two planes perpendicular to each other.



#### Step 5 -

After stitching at least three complete stitches as in *Step 3*, extract both ends **A** and **B** together through the same opening in the braid. Tie

them together with a square knot and reinsert back into braid.



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