

PHILLY BRUMMEL LOCK SPLICING INSTRUCTIONS

PHILLYSTRAN ROPES: 12-Strand HMPE Braids

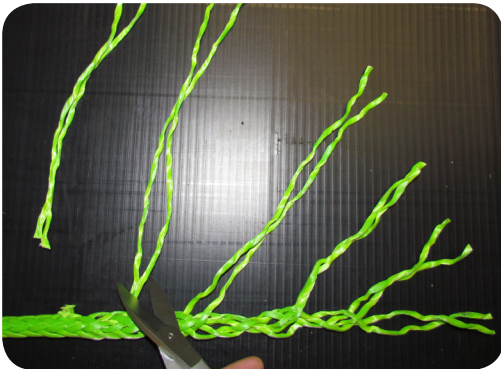
MATERIALS NEEDED: Scissors, Masking tape, Electrical tape

STEP ONE – SETTING UP FOR THE SPLICE:

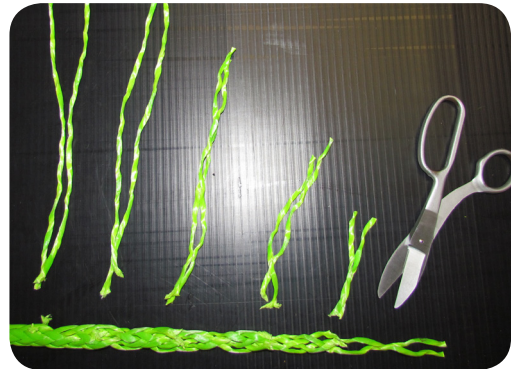
- A. Measure the tail length.
 - Length of tail = $82 \times$ bare diameter.
 - Mark the tail length by wrapping masking tape tightly around it.
- B. Measure the eye length.
 - The eye should be at least $(30 \times$ bare diameter) for HMPE braids.
 - Measure this length from the tail mark away from the end of the rope.



- C. Mark the taper.
 - Taper = 5 marks @ $5.5 \times$ bare diameter.



- D. Perform the taper.
 - Cut out 2 strands at each taper-mark.

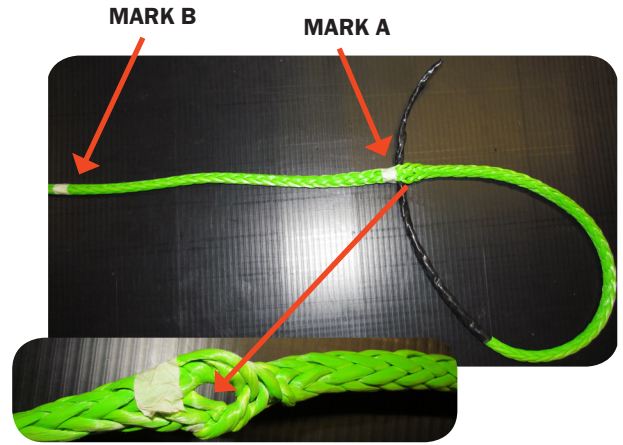
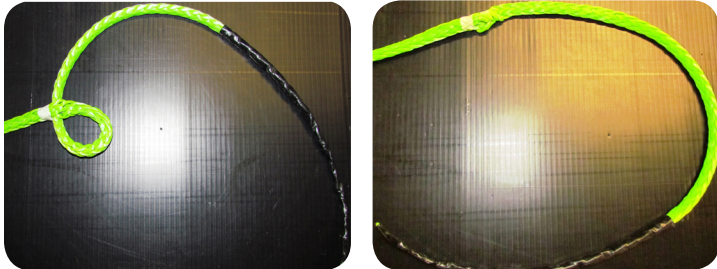


- E. Tape over the tapered area.
 - Using black electrical tape, tape over the entire tapered area.

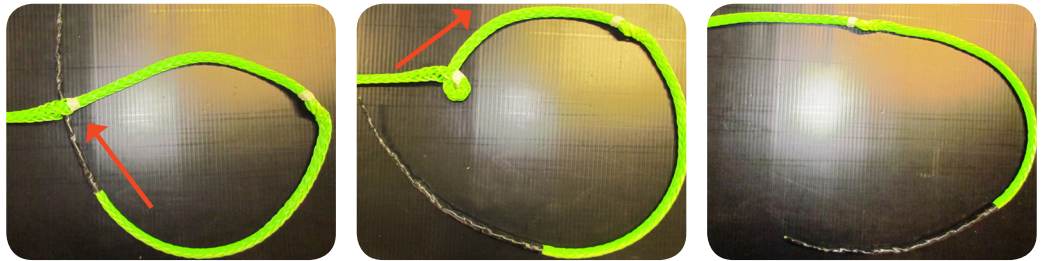


STEP TWO – PERFORMING THE PHILLY BRUMMEL-LOCK

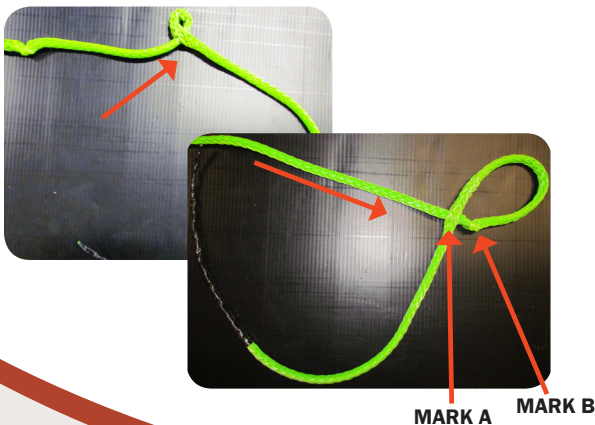
- A. Insert the end of the tail through Mark “A”.
- Do not let the tail twist.
 - Be sure to insert it through the middle of the braid (verify that there are 6 strands above and below the inserted tail).
 - Pull all the way through and invert the braid at Mark “A”.



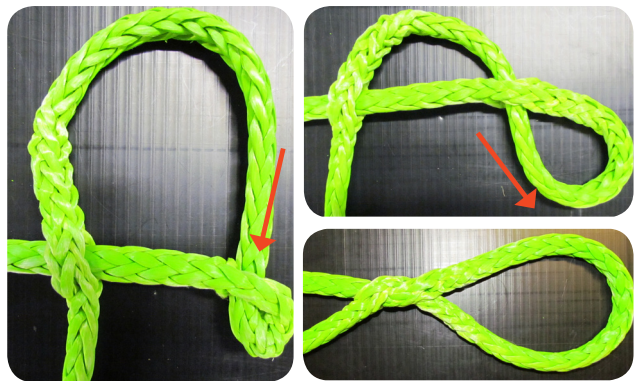
- B. Insert the end of the tail through Mark “B”.
- Follow the same procedure as in Step 2A.
 - Mark “A” should pass through Mark “B” at this point.



- C. Un-invert the braid at Mark “A” and then push Mark “B” through Mark “A”.

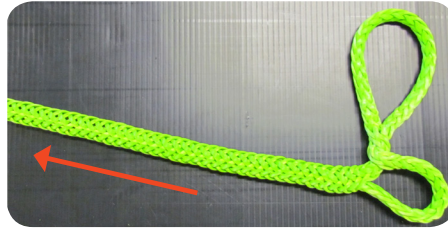
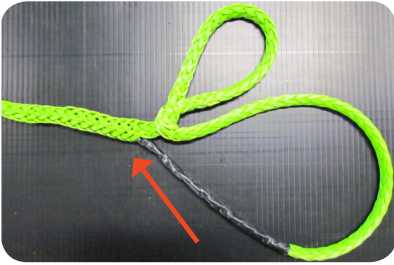


- D. Un-invert Mark “B” such that the loop that is produced forms the eye of the splice.

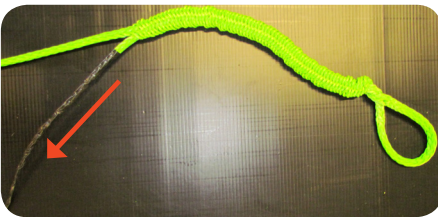


STEP THREE - TUCKING THE TAIL

- A. Insert the end of the tail 2-3 braid picks down from the Philly Brummel-Lock.
– Carefully tuck the entire tail into the standing part of the rope.



- B. Remove the tape and separate the tapered portion of the braid.
– Once the entire tail is tucked, open the braid and pull the taped tail out.
– Remove the tape from the tapered portion and separate the individual strands.



- C. Firmly grip the top of the eye and milk the bunched up section of braid down so that the tail is drawn in to the standing part of the rope.



CAUTION: Break Strength: The breaking strength of a rope is the load at which a new rope will break when tested under laboratory conditions. Break strength should not be mistaken for safe working load. **Safe Working Load:** Because of the wide range of rope use, rope condition and the degree of risk of life or property, it is not possible to make a blanket recommendation for safe working load. It is ultimately dependent on the rope user to determine what percentage of break strength is their own safe working load. **Wear:** Ropes wear out with use; the more severe the usage, the greater the wear. It is often not possible to detect wear on a rope by visible signs alone. Therefore, it is recommended that the rope user determine a retirement criteria for ropes in their application. For assistance in developing safe working load and retirement criteria for each application please call or write Phillystran.

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