



# WR2 SPLICE

FIGURE 1

Size mm	Core mm	Core inch	fid dim. inches	Brummel Tail Side fid + 1/4 fid	Brummel Bury Side fid + 1/3 fid	Cover Bury	First Measurement in Inches
3	2	0.079	1.654	2 1/16	2 3/16	1 10/16	5 15/16
4	3	0.118	2.480	3 2/16	3 5/16	2 8/16	8 14/16
5	4	0.157	3.307	4 2/16	4 6/16	3 5/16	11 13/16
6	5	0.197	4.134	5 3/16	5 8/16	4 2/16	14 13/16
7	6	0.236	4.961	6 3/16	6 10/16	4 15/16	17 12/16

In accordance with offshore sailing rules (ISAF) for HMPE lifelines, covered lines must have their strength member (the core) exposed at the termination point to allow for inspection. As a result the splice for WR2 is a tapered cover procedure combined with any of the single braid splices appropriate for a HMPE high-tech single braid rope.

The following is the procedure utilizing a Brummel splice as the high-tech single braid splice. Accordingly the table shows the key dimensions for WR2 utilizing the combined procedures.

FIGURE 2



## Part I: Extracting the core from the cover.

**Step #1-** From the bitter end of the rope mark the first measurement as noted in the table above.

FIGURE 3



Form the desired eye size and mark the point opposite the first mark as shown.



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FIGURE 4



**Step #2-** Extract the core at this second mark

FIGURE 5



**Part 2: Brummel Splice**

**Tip:** Before beginning the splice, cut the bitter ends of the rope on a slight angle, this will help when inserting the end back into the rope.

**Step #1** – From the bitter end of the rope (End 1) measure  $1 \frac{1}{4}$  Fill Fid Lengths (24 rope diameters) and mark the rope. This is Mark A. From Mark A form the desired size eye and make a mark directly across from A. This is Mark B.

FIGURE 6



**Step #2** – Attach a splicing fid to End 1. Pass fid through rope at Mark B until Mark A and B are aligned.

**Note:** Open the rope so that the fid passes between the strands (not snagging any fiber), and with an equal number of strands on each side.



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FIGURE 7



**Step #3** – Attach the splicing fid to the other end of the rope “End 2”. On the rope / tail of End 1 measure a distance equal to one rope diameter below where it exits the body of the rope (a Mark B). This is Mark C.

FIGURE 8



Open the rope at C and pass the fid with End 2 through the tail of End 1.

**Note:** Open the rope so that the fid passes between the strands (not snagging any fiber) and with an equal number of strands on each side.

FIGURE 9



Pull End 2 all the way through; pulling splice tight so that both cross over points are snug to each other.



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FIGURE 10



**Step #4** – Attach the fid to End 1. On the standing part of the rope, measure one rope diameter below where the rope exits the tail of End 1. This will be the entry point. The exit point will be an additional 1 full fid plus a short fid (+1/3 fid) below the entry point.

FIGURE 11



Insert fid with End 1 into rope at the entry point, down the hollow center of the rope, and out the exit point.

**Note:** Open the rope so that the fid passes between the strands, taking care not snagging any fiber.

FIGURE 12



**Step #5** – After End 1 has been extracted from the rope, remove fid and tape, pull End 1 until 1/2 of a full fid length is exposed. Fan all the ends out and cut ends on an angle to provide a smooth taper.



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FIGURE 13



**Step #6** – Once the taper is complete, milk the rope back from the eye towards the exit point, this should bury the tapered tail back into the rope.

FIGURE 14



### Part 3: Bury the cover:

**Step #1-** Milk the cover towards the extraction point to ensure the core and cover are balanced. Mark the core where it exits the cover as this will be the entry point for burying the cover. Attached the cover tail to the fid. Insert fid with into the core at the entry point, down the hollow center of the rope, and out at an exit point at least one fid length down the rope.

**Note:** Open the rope so that the fid passes between the strands, taking care to not snag any fiber.

FIGURE 15



**Step #2-** Milk the rope from the entry point to the exit point; then mark the cover tail where it exits the rope. This mark delineates how much excess cover you have.



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FIGURE 16



Pull the cover out at the exit point such that at least 1/3 of a fid length of additional cover is exposed. Cut off the excess cover just inside the mark you made. Then fan out all the ends of the exposed cover and cut ends on an angle to provide a smooth taper.

Once the taper is complete, milk the rope back from the cover entry point to the exit point, this should bury the tapered cover tail back into the rope.

FIGURE 17



### Part 4: Finish the rope:

**Step #1-** Cross stitch with whipping twine both the buried cover and also the tapered tail of the Brummel eye splice

FIGURE 18



**Step #2-** Whip where the cover enters the core.