



Double Braid Class II Eye Splice

Class II (core-dependent) double braids are made in whole or part from any of the following high modulus fibers: Dyneema®, Vectran®, Technora®, and Zylon®.

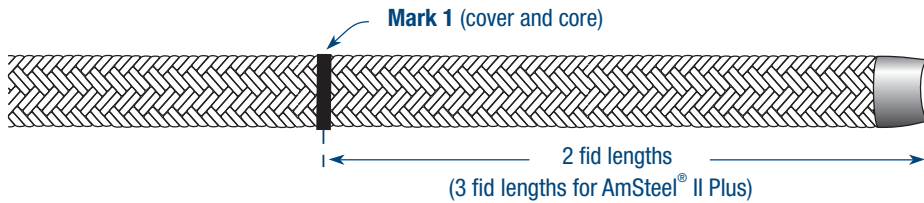
The eye splice is used to place a permanent loop in the end of a rope, generally for attachment purposes to a fixed point. An eye is also used to form the rope around a thimble, which is used to protect the rope, especially when it is to be attached to a shackle, chain, or wire rope.

The following procedure is intended to preserve the strength of double braided rope constructions where the rope's core is the primary strength member.



STEP 1 MARKING THE COVER

1A Measure 2 tubular fid lengths back from bitter end: Place Mark 1 on cover and on core.
(For AmSteel® II Plus: the required bury length is 3 fids.)



Measure eye size back from Mark 1 and place Mark 2 on both the cover and core, as done with Mark 1.

When splicing on a thimble with ears, slide thimble on and position between Mark 1 and Mark 2. Leave in place and continue with the splice. Thimble must be positioned between "X" points (see Step 1B).

1B From Mark 1 on the cover, going towards the end of the rope, measure Z length 1 and make a mark at extraction Point X1.

From Mark 2 on the cover, going towards the end of the rope, measure Z length 2 and make a mark at extraction Point X2.

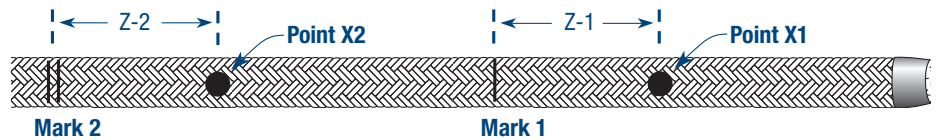
LENGTH OF Z SECTION BASED ON SIZE OF ROPE IS AS FOLLOWS:

Double Braid Class II Ropes (including AmSteel® II)

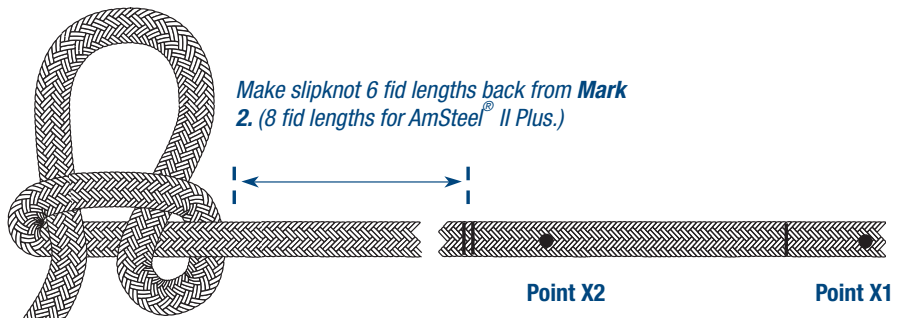
Size (Dia.)	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"	7/8"	1"	1-1/8"	1-1/4"	1-5/16"	1-1/2"
Z Length 1	5-1/2"	5-1/2"	5-1/2"	5-1/2"	5-1/2"	6-1/2"	7-1/2"	8"	10-1/2"	12"	13-1/2"	14"	15"	15"
Z Length 2	4-1/2"	4-1/2"	4-1/2"	4-1/2"	4-1/2"	5-1/2"	6-1/2"	7"	9-1/2"	11"	12-1/2"	13"	14"	14"

AmSteel® II Plus

Size (Dia.)	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"	7/8"	1"	1-1/8"	1-1/4"	1-5/16"	1-1/2"
Z Length 1	7"	7"	7"	7"	7"	8-1/2"	9"	10"	14"	16"	18"	18-1/2"	20"	20"
Z Length 2	6"	6"	6"	6"	6"	7-1/2"	8"	9"	13"	15"	17"	17-1/2"	19"	19"



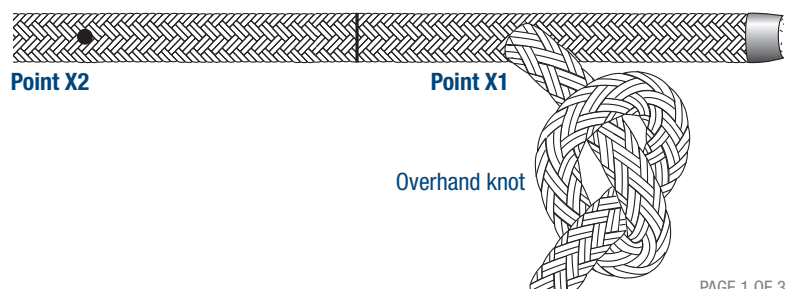
1C Put a slipknot or pin in the rope 6 fid lengths back from Mark 2. (8 fid lengths for AmSteel® II Plus.)



Make slipknot 6 fid lengths back from Mark 2. (8 fid lengths for AmSteel® II Plus.)

STEP 2 EXTRACTING THE CORE

Extract core at Point X1 nearest end of rope. Put an overhand knot in core at the point where it comes out of the cover.

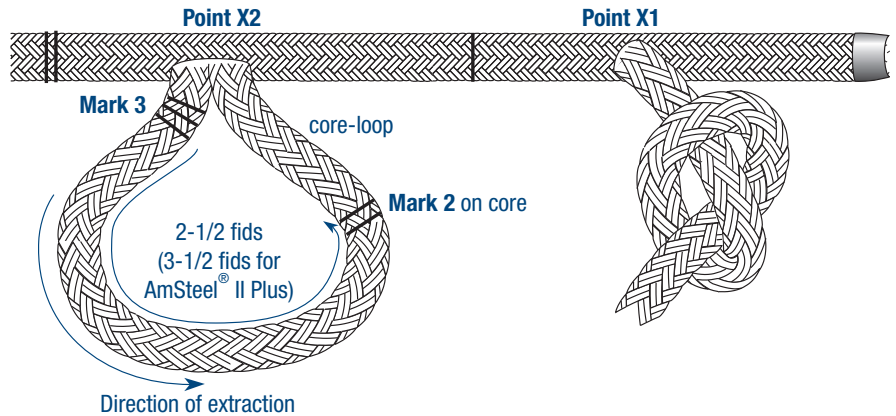




Double Braid Class II Eye Splice

2A Now extract core at Point X2 in the form of a loop. Expose 2-1/2 fids from Mark 2 and make Mark 3. (3-1/2 fids for AmSteel® II Plus.)

When using thimble with ears, move rope around thimble to expose second extraction point.

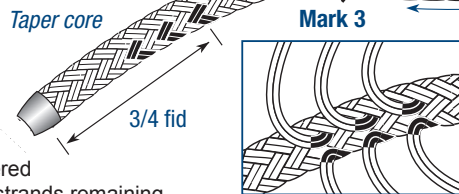


STEP 3 INSERTING CORE INTO CORE

Remove knot in core and insert core tail into core loop at Mark 2 for 2-1/2 fid lengths and beyond Mark 3. Pull core tail through until Mark 1 on core meets Mark 2 on core loop. Keep these marks together by inserting an awl or a pusher through both marks. (3-1/2 fids for AmSteel® II Plus.)

From the end of the core, go back 3/4 of a fid, mark every other right and left strand for 3 strands.

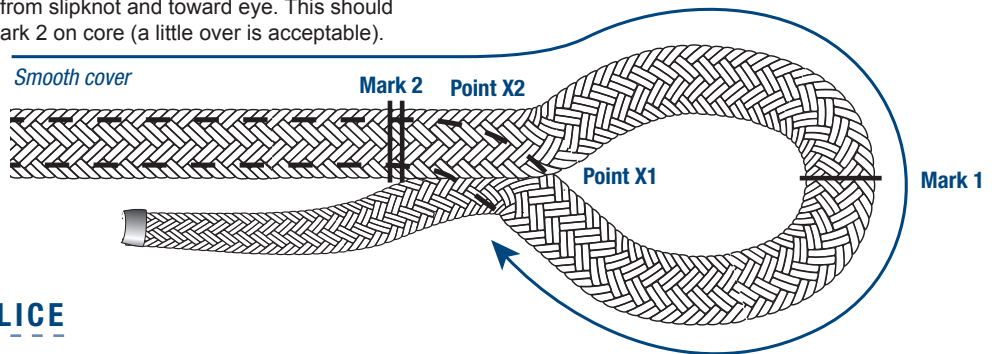
Pull every marked strand out of line and cut (tape at end can cause resistance and may have to be removed in order to pull out cut strands.) Tapered end will now have only 6 strands remaining.



** For an 8-strand core mark every other right and left strand for 2 strands.

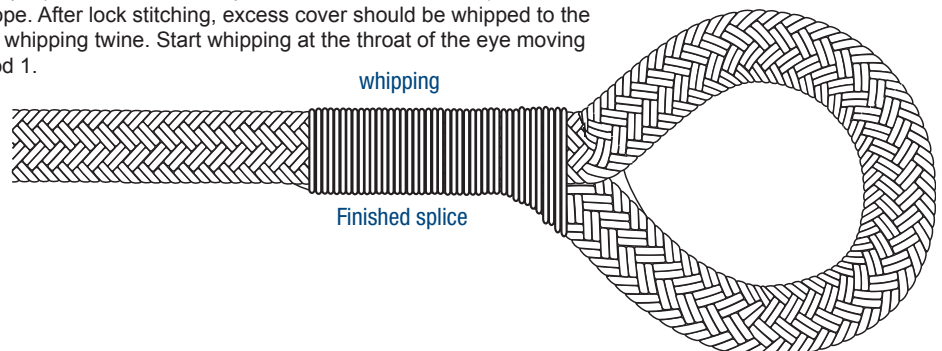
STEP 4 SMOOTHING COVER

Milk up cover completely away from slipknot and toward eye. This should bring cover up to Mark 1 and Mark 2 on core (a little over is acceptable).



STEP 5 FINISHING THE SPLICE

Bring cover-tail down on side of rope (minimum 2 times rope circumference in inches) and lock stitch (or tape) excess cover to rope. After lock stitching, excess cover should be whipped to the neck of the rope with appropriate whipping twine. Start whipping at the throat of the eye moving toward tail using Whipping Method 1.





Whipping Method I and Seizing Method II

Choosing twines for whipping:

In general, braided nylon twine is preferred for whipping. Polyester twines, or twisted twines in either polyester or nylon, can also be used.

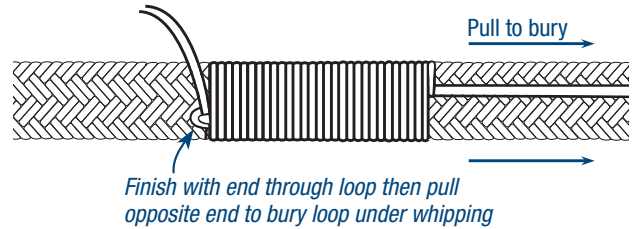
For double braids the twine used should be approximately twice the diameter of the strands in the cover.

Whip or seize the end of the spliced area with whipping twine for extra security and a professional touch. Keeping tension on rope while wrapping results in tighter whipping.

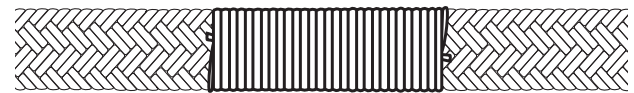
STEP 1 Form loop along the rope with whipping twine and wrap end around the back.



STEP 2 Continue wrapping at least 1 rope diameter in length.

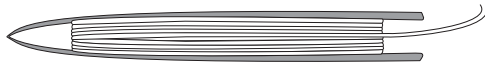


STEP 3 Cut both ends close to whipping.

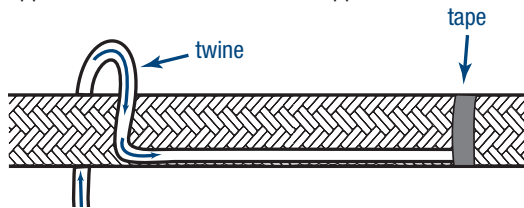


Seizing Method II

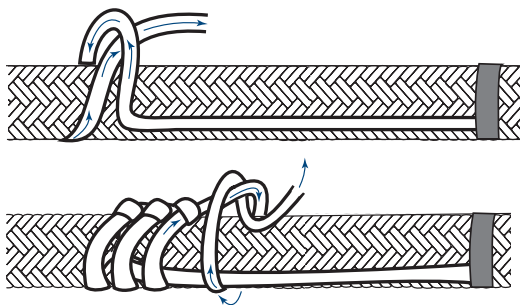
STEP 1
Attach twine to netting needle.



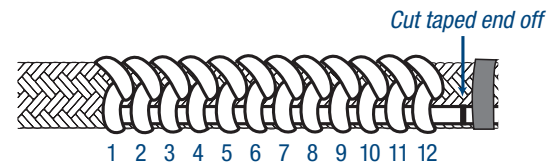
STEP 2
Tape the free end of the twine to the opposite side of the area to be whipped.



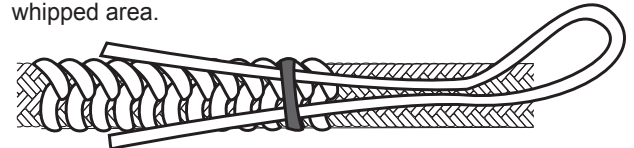
STEP 3
Start seizing. Wrap the needle around the circumference of the rope 1 complete turn. Pass the netting needle under the complete wrap left to right. Pull the loop tight. Pull the needle up maintaining tension on the completed half hitch and then quickly pull back down to lock the half hitch in place.



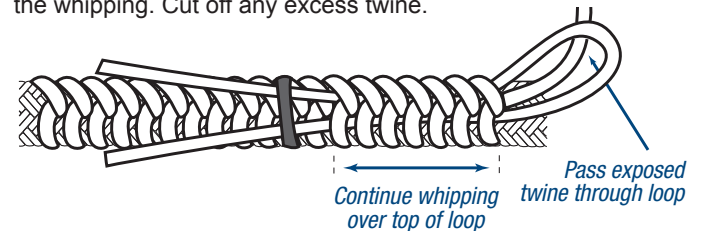
STEP 4
Continue with this procedure until the whipped area is approximately 1/2 of the desired length, then cut off the taped end near the last wrap.



STEP 5
Using some spare twine, tape a loop that covers the length of the intended whipping distance, letting the 2 free ends of the looped twine lay over the completed whipping. Tape the free ends of the loop past the already whipped area.



STEP 6
Continue whipping for the desired total length over the top of the looped twine. After whipping is complete, pass the exposed whipping twine through the loop. Remove the tape on the looped twine and pull the ends to draw the loop under the whipping. Cut off any excess twine.



STEP 7
Pull the loop through the whipped area. This should place the remaining whipping twine under the whipped area.

