

PRODUCT INFORMATION

TEXTILE ROPE

Fabrication

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Types of fabrication

Fibre ropes can be spliced, knotted, swaged or cast to facilitate terminal fittings, connections for rope extensions or endless splices. Knots, swages or casts cause a more or less significant reduction in the breaking strength at the point of connection. If performed properly, splices are the only safe method of fabrication with normally no more than ten percent breaking strength loss at the splice.

Splices

Splices are manually crafted rope connections, are safe and difficult to undo. They should be performed by trained personnel in accordance with existing standards or rules implemented by rope manufacturers.

For splicing the ends of the rope strands are undone and re-entered into the rope. Whether a rope can be spliced and what method is appropriate to perform the splice depends extensively on the rope construction.

Splicing methods

shown here are the most important spliced rope connections for twisted and braided rope.

Strengths when spliced

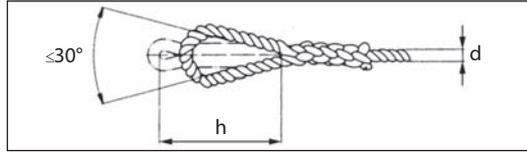
In a static tension test splice connections should achieve at least 90% the minimum rope breaking strength, long splice connections at least 60%.

Kernmantle braid splices

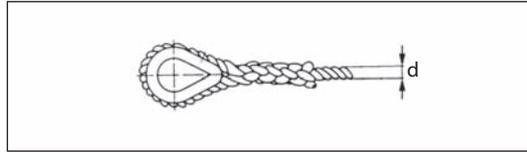
Not shown are connections for kernmantle ropes for which specifications differ depending on manufacturers.

Special requirements

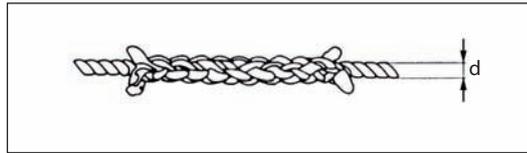
Individual advice should be sought in the event of special requirements.



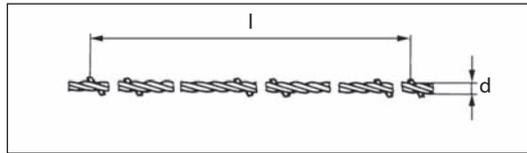
Eye splice
Twisted rope
d = Rope diameter
h = min length of eye 8d



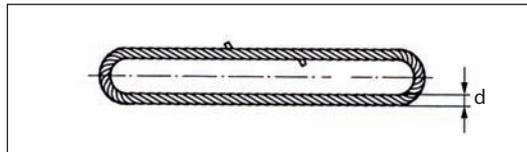
Thimble eye splice
Twisted rope
d = Rope diameter



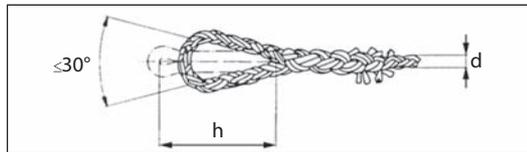
Short splice
Twisted rope
d = Rope diameter



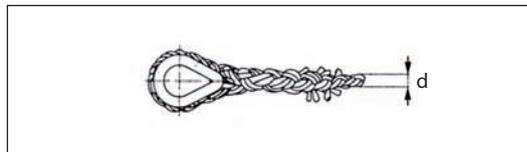
Long splice
Twisted rope
d = Rope diameter
l = min length of splice 100d



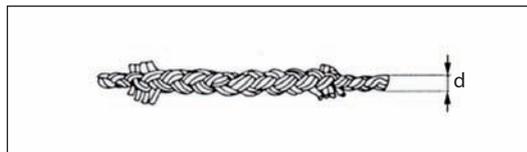
Endless laid grommet
Twisted rope
d = Rope diameter



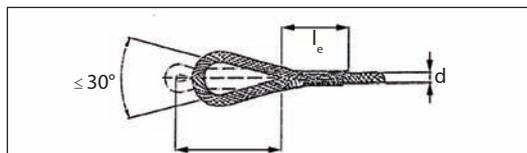
Eye splice
Square plaited rope
d = Rope diameter
h = min length of eye 8d



Thimble eye splice
Square plaited rope
d = Rope diameter



Short splice
Square plaited rope
d = Rope diameter



Eye tuck splice
Braided rope
d = Rope diameter
h = min length of eye 8d
l_e = Sufficient length to ensure rope strength maintained