Basic knots for rope access and rescue



The National Access and Rescue Centre

www.heightec.com

Terminology

Understanding the following terms will help you to understand each instruction for how to tie the knot.

We suggest you use soft, thin rope to practice with.

Standing part

The main part of the rope - the knot is formed from, or around this.

Coil

A circular loop formed by lying the rope over itself.

Bight

A 'u' shaped loop formed in the middle of a length of rope

Working End

The end of the rope that is handled and passes around and between coils etc.

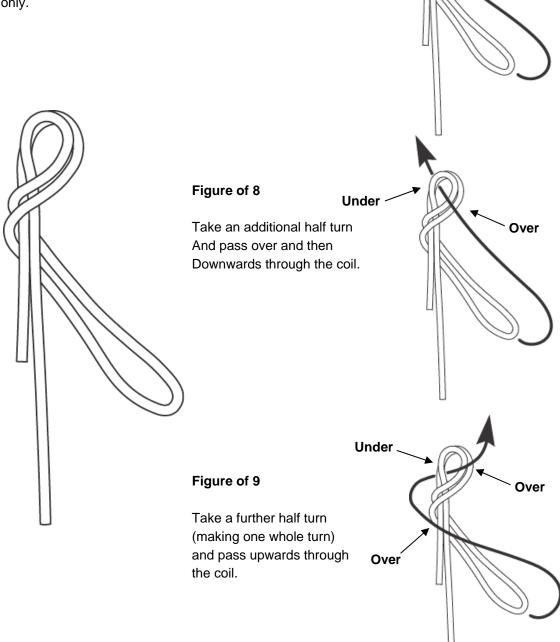
Settle

The action of arranging the rope in the knot so that it lies evenly and symmetrically around itself. This makes the knot stronger and easier to untie.

Overhand and "Figure of 8 and 9 Knots"

This basic shape is the foundation for several knots - all may be used for anchor points and should be loaded in one direction only. Overhand

Pass the bight upwards Through the coil.



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Figure of 8 on the Bight or Double Figure of 8

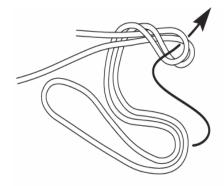
To start this know, make initial bight more than twice the length as for a figure of eight.

Then form a further double bight in this and pass upwards through the coil.

Don't pull all of the rope through – instead, pass the bight that remains over the whole know and pass along until below the whole arrangement.

Pull to tighten and settle the knot.



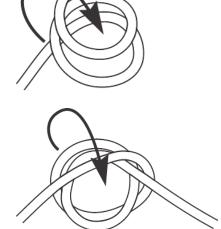




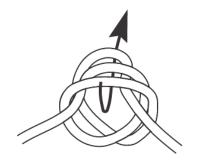
Alpine butterfly

Form two coils, one above the other. Take the rearmost "top" of a coil and move it forwards to the front and top of the other coils.

Repeat with what has become the rearmost coil.

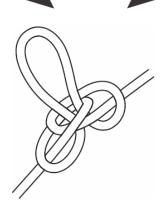


Pull the coil (now on top) up through the centre of the knot.



Pull each end of the sanding part to settle the knot.

Alpine butterfly – final appearance.



Stopper Know and Double Fisherman's

Wrap the end around the standing part twice in succession, working backwards and pass down through the loops.



Double Fisherman's

A secure knot for joining two ropes of equal thickness. The ropes are laid next to each other with ends facing in opposite directions. A stopper knot is then tied around each opposing end so that each stopper encloses the other rope.

The knot should be completed by tightening each stopper and pulling together so that they lie up against each other.

