

BELAYING » GET IT RIGHT!



British Mountaineering Council
Working for Climbers, Hill Walkers and Mountaineers



CHECK
HARNES

CHECK
KNOT

CHECK
BELAY

www.bmc.org.uk

PAY ATTENTION!

KNOW HOW TO USE YOUR GEAR

There are many different ropes and belaying devices available. Read and understand the manufacturer's instructions. If still unsure, get advice from someone more experienced. **Never** belay with equipment you do not know how to use.

CONTROL THE ROPE

Belaying is a complex skill requiring practice and experience to become competent.

Inattentive belaying is the cause of many preventable climbing accidents. Mistakes can result in serious injuries for climber, belayer or both. Check both climber's knot and belay device before starting a climb. Ensure your rope is long enough for your climb. If in doubt knot the free rope end.

Pay attention and keep a **controlling hand** on the rope.

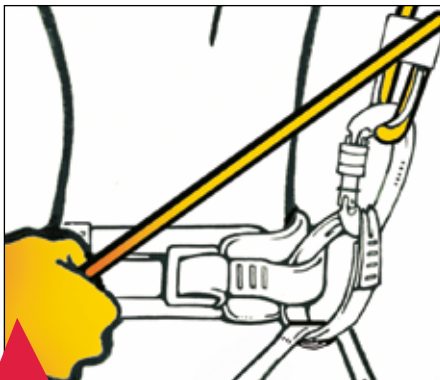
GET IN THE BEST POSITION

Anticipate the direction of pull, and position yourself appropriately.

If you stand near the foot of a climb you are less likely to be pulled off balance when holding a fall or lowering a climber.

If there is a lot of rope paid out the climber could hit the ground. Standing near the climb results in less rope between belayer and climber.

When the climber is not moving, hold the rope in the **locked position**.



BELAY DEVICE DESIGN

There are two types of belay device: manual devices and assisted braking devices. A manual device employs mainly friction, allowing some rope slippage when holding a fall. Choose the correct karabiner to use with your belay device. Check the device's instructions if you are unsure.

Some manual devices are symmetrical.



Others are asymmetrical with grooves or channels on one side.

Grooves and channels will increase the friction when lowering or holding a fall.



**WHICH
BELAY
DEVICE?**



Assisted braking devices pinch the rope allowing very little rope slippage when holding a fall. They are **not** hands-free devices. These devices give the most assistance when holding a fall. Extra care may be needed when lowering, as the pinching mechanism is progressively disabled.

THERE IS GREAT VARIABILITY IN THE DESIGN OF MANUAL DEVICES. SIMILAR LOOKING DEVICES CAN BEHAVE QUITE DIFFERENTLY, EVEN WHEN USED WITH THE SAME ROPE.

CHARACTERISTICS OF CLIMBER & BELAYER

If the climber and belayer have significantly different physical characteristics, consider the most appropriate belay device for each to use. Do not assume that the same device will be appropriate for both people. Less experienced belayers could consider rope and belay device combinations that provide greater levels of friction for assistance when lowering or holding a fall.

As grip strength varies, different people may not be able to control the rope equally effectively using the same belay device and rope. Young children, for example, are likely to have less grip strength than adults. Some people use belay gloves to protect their hands when belaying.

If the climber is heavier than the belayer, the belayer may not be able to control the rope effectively, and when holding a fall, the belayer can be pulled off the ground. This can cushion the fall for the climber, but care must be taken to ensure safety is not compromised. Attaching a ground anchor to the central loop of the belayer's harness can help in some circumstances.



ROPE DESIGN & DIAMETER

Belay devices are designed for use with a range of rope diameters. The performance of any belay device will depend upon the diameter of the rope being used.

If the rope is too thin for the belay device, it may not be possible to hold a fall, or lower the climber in a controlled manner. If the rope is too thick, there may be too much friction to manage the rope effectively. Ensure that your chosen device and rope are compatible before belaying. Using a thin rope with a worn belay device has caught out many experienced climbers. Always check before you use in anger, and replace your device in timely fashion.

Some ropes have protective treatments which can make them very smooth, especially when new. Such coatings can make the rope easier to handle, and may require the belayer to grip the rope more than expected when lowering or holding a fall. Take extra care when using a new rope for the first time.

STYLE OF CLIMBING

Different climbing styles introduce different levels of friction into the rope system. The less friction created by the rope system, the greater the force the belayer will have to apply with their controlling hand to hold a fall or lower the climber. Different belay devices can be used for different climbing styles to provide the desired level of friction or assistance.

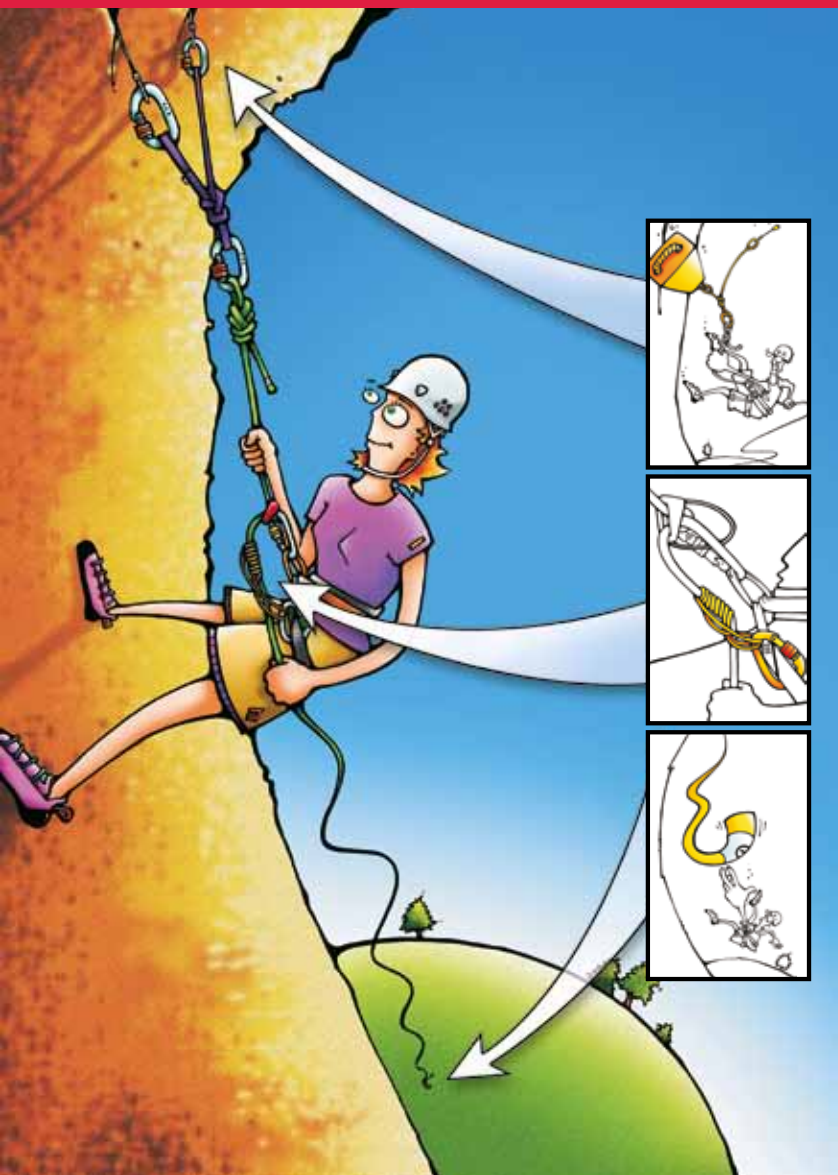
At climbing walls there is very little friction in the rope system since the rope runs straight and hardly touches the wall. When climbing outside there are many more variables that can create friction.

Manual devices are appropriate for all styles of climbing. Most assisted braking devices are only appropriate for climbing on bolts at a climbing wall or on a sport climb. Assisted braking devices can be particularly useful when a climber is working a sport route and weighting the rope for extended periods of time.

ABSEILING » GET IT RIGHT!



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CHECK THE
ANCHORS

USE A
PRUSIK

KNOT THE
ROPE

ABSEILING » GET IT RIGHT!

1. CHECK THE ANCHORS

Anchor failure is not an option – if in any doubt **always** leave extra gear behind. **Check** the rope is properly threaded through the anchor. **Check** the abseil device is correctly attached to both you and the rope.

2. USE A PRUSIK

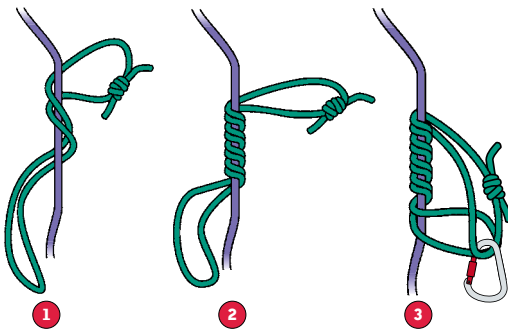
A *French Prusik* can be used as a backup when abseiling. The prusik should grab the rope if control is lost, but this is not foolproof. The prusik can be used in a variety of ways, and when abseiling on two ropes it must be wrapped around both. When used correctly, the prusik should not become trapped in the belay device.

3. KNOT THE ROPE

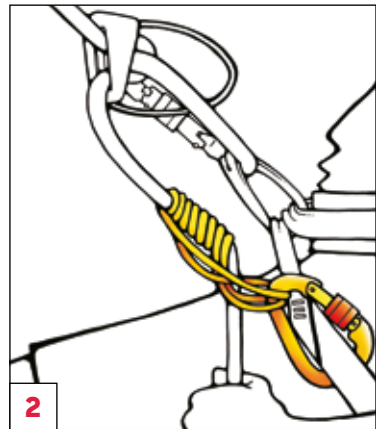
The consequences of abseiling off the end of a rope are usually fatal. Tying a big enough knot in the ends of all ropes should prevent this from happening.

ABSEILING ACCIDENTS KILL!

HOW TO TIE A FRENCH PRUSIK



Source: *Rock Climbing – Essential Skills & Techniques*, MLTUK



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