Belaying

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Section I. Belaying Principles and Technique

Belaying is the act of containing the forces of a roped climber’s fall by controlling rope movement through a friction (belay) device. An effective belay consists of three components that work harmoniously together:

- anchor system
- friction
- stance and position

An anchor system is vital due to the forces involved in a climbing fall. At an indoor wall, the anchors are configured into the wall’s framework and ropes are hung off of them. Since the ropes are anchored at the top of the wall, climbing in this system is termed "top roping". Anchor systems can range from the simple, where forces are minimal (e.g. top rope system at a climbing wall), to complex (multi-pitch anchor systems), where forces can be much more severe. Regardless of where you climb, or the type of climbing you do, it’s imperative to utilize an anchor system that is safe and can handle the forces involved in a climbing fall. For more information on configuring top rope anchors, go to the anchors page.

Friction is provided as the rope passes through a belay device controlled by the belayer. A certain amount of friction is also provided whenever the rope runs through carabiners in the climbing chain, or around a set of anchor carabiners. The belayer maintains friction by holding onto the rope with the "brake hand" after it passes through the belay device. An important maxim for belayer’s to adopt is to "never let go of the brake hand", even for an instant.

A belayer’s stance and position are also important in containing the forces of a fall. If you’re not braced securely for a fall, you could be jerked off the belay stance and lose control of the rope. More than one belayer has been slammed into the wall because the forces exerted by a fall were far greater that could be contained by a solid stance and good body position. A belayer in good position is oriented in the direction of anticipated force and braced to absorb it. At the climbing wall this means standing with one foot in front of the other (well braced), in a direct line with the top rope anchor (not facing the climber).

Falls can happen very quickly. When belaying, you MUST be well positioned and prepared to instantly hold a fall, regardless of whether you’ve been belaying for five minutes or two hours. Be alert at all times, learn the hand motions necessary to take rope in and feed it out and provide the braking action specific to the belay system. Friction is pointless if you don’t manage the rope properly!

Buddy Checks

Prior to beginning to belay and climb, the climbing partnership should perform checks of each other’s setup. The belayer should check that the climber has:

- buckled the harness properly and doubled back the buckles at three points: the waist buckle and each leg loop
- tied into the climbing rope properly with a dressed figure-of-eight knot through the critical points (swami and leg loops)
- tied into the correct strand of rope. For example, into the rope closest to the wall on a route using a belay bar as an anchor.

The climber should check that the belayer has:

- donned the harness properly as described above.
- fed the rope correctly through the belay device.
- attached the belay device and rope into a locking carabiner clipped into the proper harness location (the belay loop for harness with one)
- locked the locking carabiner.

Section II. Using Floor Anchors

At some point, the force of a fall exceeds the holding threshold of even the most well braced stance and position. Two situations come to mind: belaying a climber who is much heavier than you, and belaying a lead climber. If you anticipate that controlling the forces of a fall will be difficult regardless of your stance and position in relation to the top anchor, attach to a floor or ground anchor.

Section III. Spotting A Climber

Spotting is a technique used to provide a safety net for someone climbing near the ground without ropes (bouldering). The main responsibility of a spotter is to redirect a climber’s fall so that the chances of injury are negated or minimized.
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