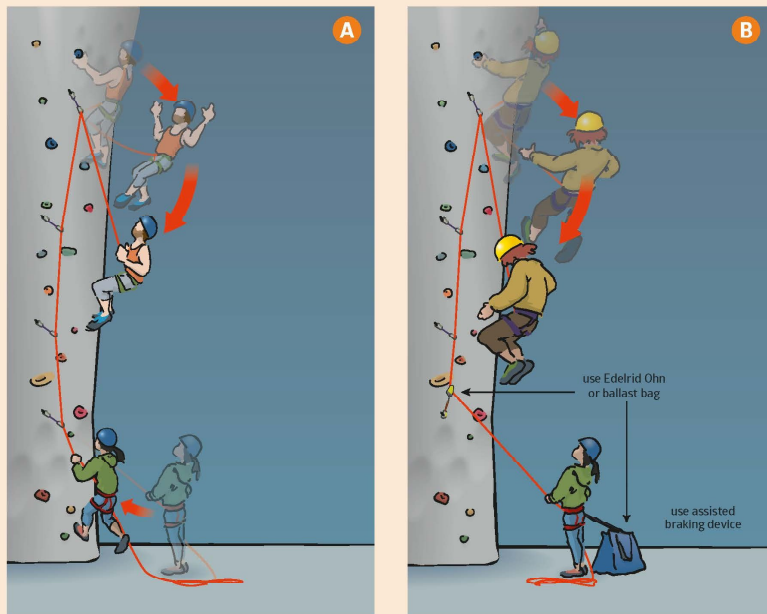


Managing weight differences – lighter belayer

**(A) Equal weight/small difference**

Small weight difference: less than 10-15kg

Belayer displacement inwards/upwards small. Manageable for experienced belayer using familiar belay device and compatible rope.

(B) Much lighter belayer

Significant weight difference: more than 10-15kg

Belayer displacement inwards/upwards large. Requires additional mitigation measures. Avoid this situation with inexperienced and/or young belayers.

7.8.5 Reducing the risk of ground fall and effective belaying

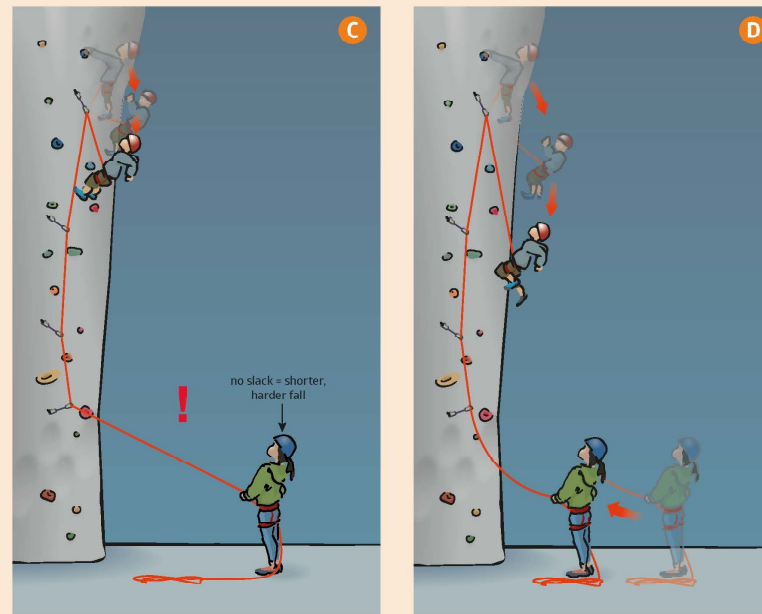
Leading up to the third or fourth bolt is where a ground fall is most likely. Reaching the first bolt may involve spotting, in which case the belayer pays slack through the belay device and adopts a hands raised stance tracking the leader's waist. Once the first bolt is clipped, the belayer takes in slack ready for belaying.

Clipping low bolts requires both the climber and belayer to be on high alert. The belayer stands close to the wall with minimal slack out but ready to pay out slack quickly or hold a fall; lightning reactions are called for. The climber avoids high clips to minimise extra slack out (see Figure 7.13).

Standing too far out, having too much slack out or simply not paying close attention are common belayer errors that increase the risk of a ground fall especially if it's really steep (see Figure 7.12). These errors are compounded when the climber is heavier than the belayer.

Once the leader is above about the fourth bolt, and assuming the belayer is, not significantly lighter than the leader, they can take a small step away from the

Managing weight differences – heavier belayer

**(C and D) Heavier belayer – dynamic belaying**

A heavier belayer may need to reduce the impact of a fall to minimise injury to the leader as they collide with the wall. Also referred to as giving a soft catch, dynamic belaying avoids bringing a lead fall to a short sharp stop by altering the arc of the fall. It is commonly achieved by the belayer taking a few quick steps in towards the wall or, if already close to the wall, making a small jump to coincide with the moment the climber's weight comes onto the rope. Don't let the rope run through the device.

NB this is an advanced technique that should be practised with great caution; a short hard fall is better than a ground fall, so it is not normally used until the leader has climbed above the fourth clip and beyond the ground fall danger zone.

wall in order to use body position adjustments to make paying out slack more efficient. By stepping in towards the wall as the leader clips and back out again as they climb up past the bolt, fewer hand movements are required, and slack can be given to the leader quickly.

7.8.6 Holding lead falls

The leader may not shout out before a fall, but an attentive belayer may notice tell-tale signs; shaking/disco leg, skidding feet and signs of pump like frequent shaking out. Unexpected falls due to a foot slip or spinning hold are also common. Either way, the belayer maintains the low brake hand position, a tight grip on the brake rope, a stable but dynamic stance and will be ready for the impact. The relative weight difference of leader and belayer will greatly influence holding leader falls as illustrated in the *Managing weight differences* box above.