



Teaching and Assessing Top Rope Belay Competence

What are we looking for in a competent belayer?

Often during Climbing Wall Instructor or Rock Climbing Instructor assessments candidates are asked to demonstrate the teaching of belaying. The normal response is “well you do V, knee, 1,2,3.” Well that is a part of the process, but it’s just one small element of a more complex task. (It is also worth noting that some in countries, such as Germany, this style of taking in slack rope is felt to bring too much prominence to the “V” part of the system. Where this method is used it should be emphasised that the V is the most vulnerable position for the climber and that there should be minimal time spent in this position during the process. V to the knee can also be taken literally with novices taking in large lengths of rope and reaching all the way down to the knee.) Why not try “Chest to pocket, reach round and lock it?” Many years ago I listed the components I thought important when asked to do a site specific test for a group of teachers I was working with. This not only provided a good list of components, but also provided good discussion points and raised some interesting training needs of the staff. I still use this list today on training courses.

Top rope Belay Checklist

| Candidate Name | | Venue | | |
|----------------|---|-------|--|--|
| | | | | |
| No | Criteria | Dates | | |
| 1 | Buddy Checks <i>Systematic checking of harnesses, knot, belay dressing, rope, anchor, route.</i> | | | |
| 2 | Communication <i>Effective commands between belayer and climber at start of climb. Terminology on route, “take”, “watch me”.</i> | | | |
| 3 | Positioning <i>Defensive stance at appropriate distance from the wall.</i> | | | |
| 4 | Set up a ground anchor <i>Use a bag, person, or floor anchor effectively and appropriately.</i> | | | |
| 5 | Attentive <i>Constant attention to the climber, not distracted.</i> | | | |
| 6 | Smooth Controlled belay action <i>Fluid, autonomous belay action.</i> | | | |
| 7 | Locking Off belay device <i>Constant control of the dead rope and locked off when climber is still.</i> | | | |
| 8 | Controlled Lowering <i>Communication prior to lowering, tight rope, smooth controlled descent.</i> | | | |
| 9 | Dynamic positioning <i>Movement where possible to create space (other users) or move rope from part of the wall to aid climber.</i> | | | |
| 10 | Hold and unexpected fall <i>Can hold an unexpected fall. Set up by the instructor (tailed).</i> | | | |

In addition to the above it is recommended that all belayers are considered a novice until the above has been successfully demonstrated. All novices should be tailed. Competence is demonstrated over a period of time or occasions. Therefore three date columns are provided. A selection of belay devices should be considered and identified, (Slick, grippy, or geometry or mechanically assisted) and how they react with varying ropes

| Name | Signed | Qualification | Date | Competent | |
|------|--------|---------------|------|-----------|----|
| | | | | Yes | No |
| | | | | | |

Walls don’t always have the luxury of such a detailed competency test with public climbers, but with novices there really should be a structured process. A ten point process such as the one above cannot be completed in a quick training session. We should not only aim to teach the practical elements of belay technique, but start to help develop judgement. For example, “do I need a ground anchor?” ‘Which belay device would be best with this rope/climber?’

Belaying is a critical technique that needs time and practice to become an autonomous skill.

So how do we teach novices? A structured session with lots of practice, but this isn't always easy with a larger group. So here are a few methods that allows a few people to practice at the same time without any climber being too vulnerable.

- 1) Clip a rope into the first runner at a wall and get the belayer on one end at the wall and the climber on the floor at the other end way from the wall. The climber walks towards the wall whilst the belayer takes in. Then putting a little weight into the system the Climber/walker walks back to simulate lowering.
- 2) Attach a rope into the first runner on two routes and have two people belaying either end of the rope. One pays out as the other takes in, shout swap to change roles. To add more realism add a sling between the ropes and occasionally pull the sling to simulate a fall. (Pic 1)
- 3) Tie one climber into 4 ropes and have four belayers all belaying as the climber ascends. You just need to tail one rope and can offer feedback to all



(Pic1)



belayers. For lowering rather than the climber coming straight down, see if the group can co-ordinate a falling leaf motion from one side to the other. (Pic 2) You can obviously do this with 2 climbers and 8 belayers and tail one rope on each system, or get the participants to learn to tail. This leads nicely into having one climber two belayers with two tailers and so on to aid progression.

(Pic 2)

With all of these methods you can teach multiple belayers at the same time with minimal risk to anyone.

Which belay device is best for novices? Well there is plenty to argue about here. But the usual answer is the one they have just bought from the retailer. If they don't own one give them the chance to try many and see which one they get on best with. Each style has their own merits. For example a mechanically break assisted device is great and may add a little more safety to the system initially, but they are expensive, so the novice then buys something cheap they don't know how to use.

Learning to use differing devices will help develop knowledge and understanding. Here are some common devices in their four main categories.

Slick devices



Gripping devices



Geometry assisted devices



Mechanical assisted devices



Tubed devices are often slick.

Gripping devices are generally tubed devices that have a narrowing and or teeth to aid friction.

Geometry assisted devices use their shape to assist breaking.

Mechanically assisted devices use moving parts to cam/pinch rope to aid friction.

Its worth spending time explaining the use and pro's and con's of different devices and the correct karabiner to use with each. Also explain the appropriate rope diameter required for each device and how a climbers weight may affect

them. It is again worth noting that some countries request anyone in a teaching/instructing role only use break assisted devices.

The following questions usually accompany the belay competence test.

Belay Quiz.

1. Describe two different types of climbing ropes and their uses:
2. What do these rope symbols mean, and why are they important to a belayer?



3. What is the climbing call protocol

T... I., T.... M., C.... W... R..., C....., O.

4. Name one slick, one grippy, one geometry assisted and one mechanical assisted belay device.
5. Why should a climber remove, keys, phone, money etc from their pockets before climbing?
6. How does the diameter of the rope affect the belayer?
7. How does the weight of the climber affect the belayer?
8. What knot do most climbing walls prefer you to tie in with and why?
9. What checks should be made to ensure a harness is fitted correctly?
10. When can a novice belayer be deemed competent?

So practice well, teach lowering as well as taking in, see participants hold and unexpected fall, always tail a novice, consider can you really manage more than two lines and use many devices and variables to test from. This will provide a greater depth of understanding and hopefully safe belayers. Good luck.

Take care, make good choices and stay safe.

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