



AUTOBELAY SAFETY

RISK REDUCTION
STRATEGIES

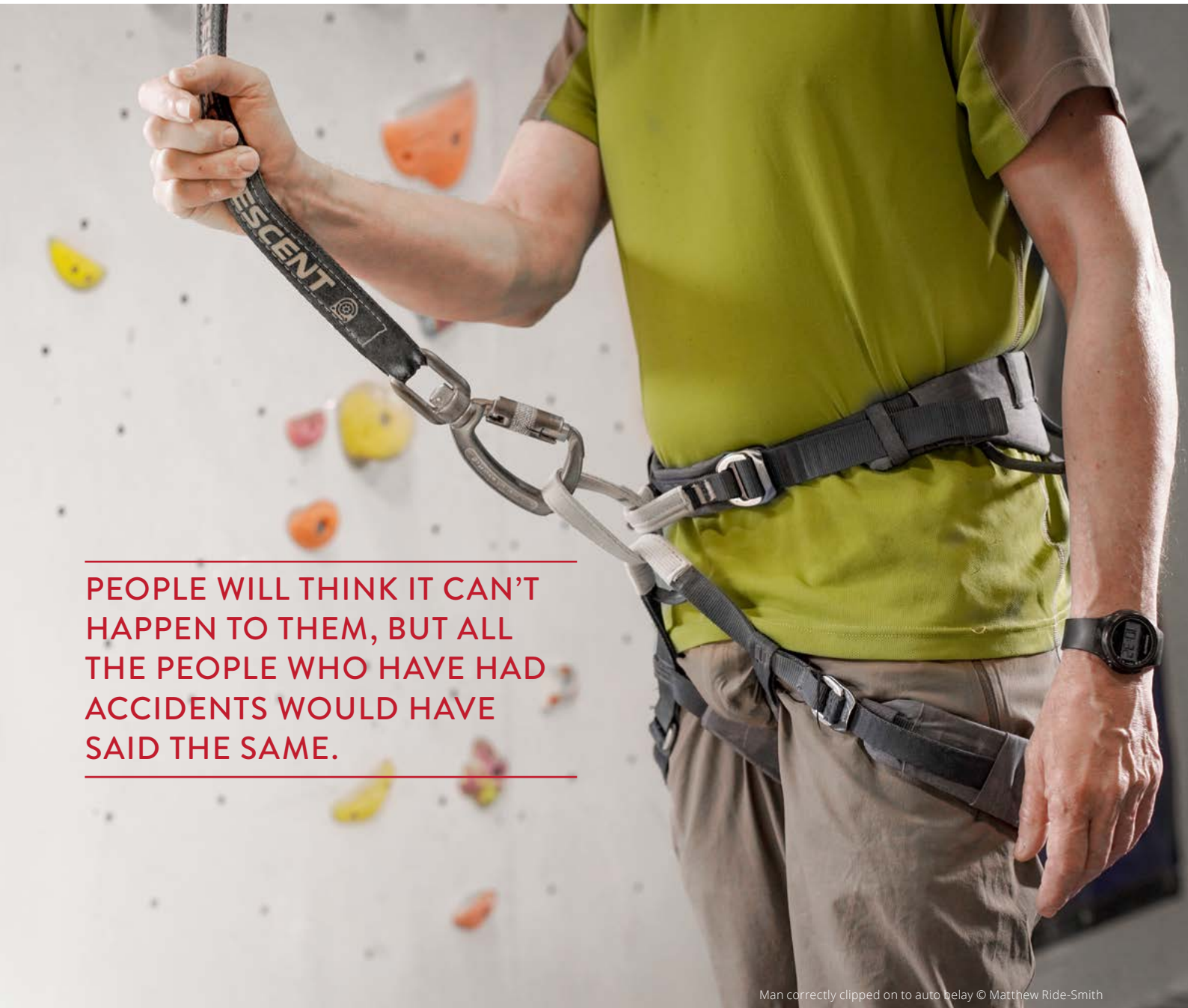


BACKGROUND

The intention of these guidelines is to improve auto belay safety by elevating the respect given to auto belays by climbers, and walls.

Anecdotally both in the UK and US it has been observed that a number of incidents around auto belays have happened with experienced climbers, for example at the end of a successful session on auto belay then getting distracted and failing to clip in. These accidents therefore are generally not about lack of basic skills or mechanical failure but about complacency in the climber; human error. People will think it can't happen to them, but all the people who have had accidents would have said the same.

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Man correctly clipped on to auto belay © Matthew Ride-Smith

MINIMUM GOOD PRACTICE RECOMMENDATIONS:

1 SPECIFIC AUTO BELAY COMPETENCY TEST

Walls are encouraged to back date this where possible e.g. as part of a membership/skills refresh

For people who are roped climbing competent, a specific auto belay test (in line with what is used to assess roped climbing competency) should be required and the results documented. This test assumes knowledge about putting on a harness safely but not about auto belay specific protocols.

The importance of the test should be introduced with some contextual information which makes people think about the consequences of their actions, their own fallibility and the specific dangers around auto belay usage.

E.g. We have had a number of accidents in the UK where people have climbed on an auto belay route without clipping in. Some of those people have been very experienced climbers and some new to auto belay. It is important to understand that however experienced you are, people can still make mistakes. In the context of climbing, not using safe procedures can be very dangerous indeed.

This test aims to ensure people understand the risks associated with auto belay climbing and are technically competent to undertake the activity.

[Please follow this link to download the ABC auto belay competency test.](#)

2 AUTO BELAY INDUCTION

For people who are not roped climbing competent (or fail the auto belay test) a specific auto belay induction is required.

The auto belay induction should be treated with the same level of seriousness and respect as a roped climbing induction. It should take the form of a physical induction delivered by a competent member of staff.

Regardless of experience or industry climbing qualifications, the staff member should be 'competent' to carry out auto belay inductions by undergoing an internal training programme that is auto belay and location specific and covers the broad induction points set out below.

- ▶ Fitting a harness (attachment points for different harnesses)
- ▶ Understanding the environment (awareness of people descending, flag on floor etc)
- ▶ Clipping in
- ▶ Testing the connection ('function test'/ retraction test)
- ▶ Letting go and lowering down
- ▶ Awareness of danger of climbing without clipping in
- ▶ Location specific information (e.g. awareness of quick draws on the route)

3 PHYSICAL BARRIER (E.G. FLAG)

The physical barrier, usually a 'flag' is a really critical start of the safety chain for auto belays and should be big enough that people can't miss it when they approach the wall.

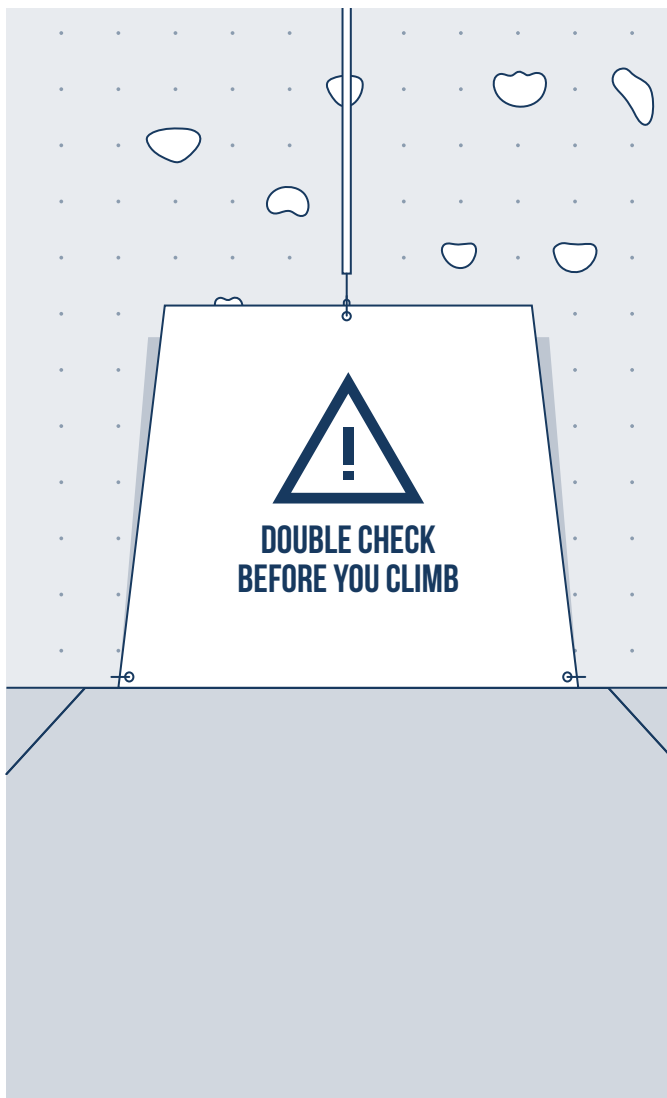
The barrier needs to be of a size, and the route setting needs to work, such that it is inconceivable that someone could begin to climb without clipping into the auto belay. The barrier should be wide, closely fitted to the wall and highly visible. It should impede a climber from starting any of the routes on the line and make it very difficult for someone to climb over it.

BARRIERS SHOULD IMPEDE A CLIMBER FROM STARTING ANY ROUTE ON THE LINE

Good practice flags should communicate about checks for correct attachment and warn of climbers above on reverse when in use:

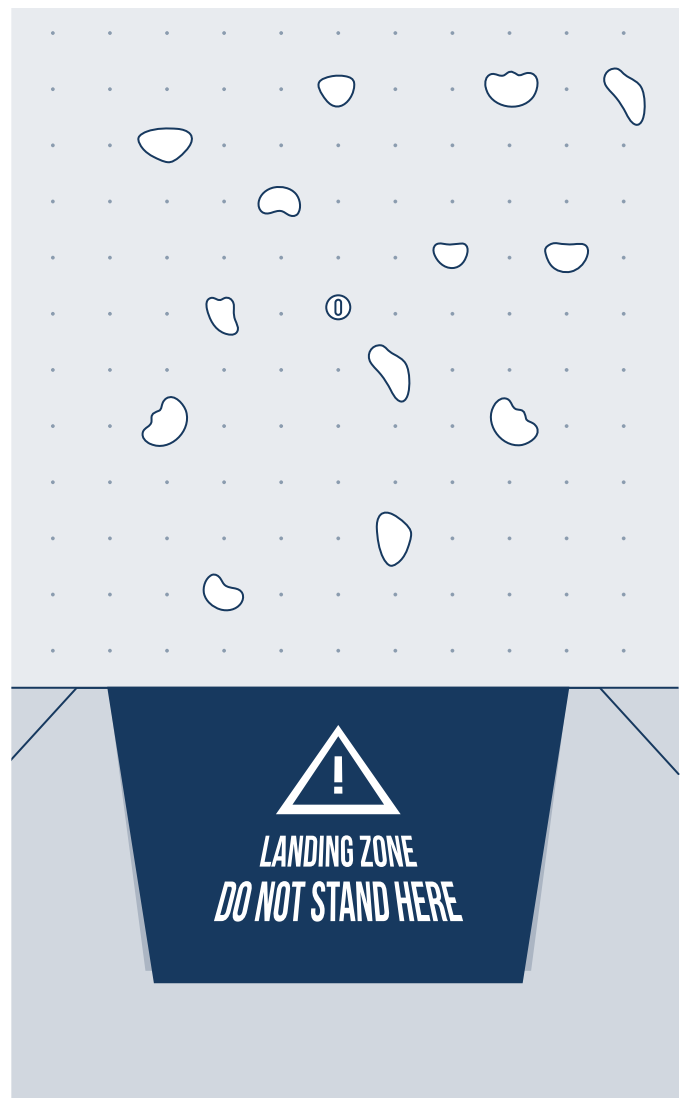
Flag up

Auto belay not yet in use



Flag down

Auto belay in use



4 AUTO BELAY SAFETY COMMUNICATIONS

Double check before you climb comms

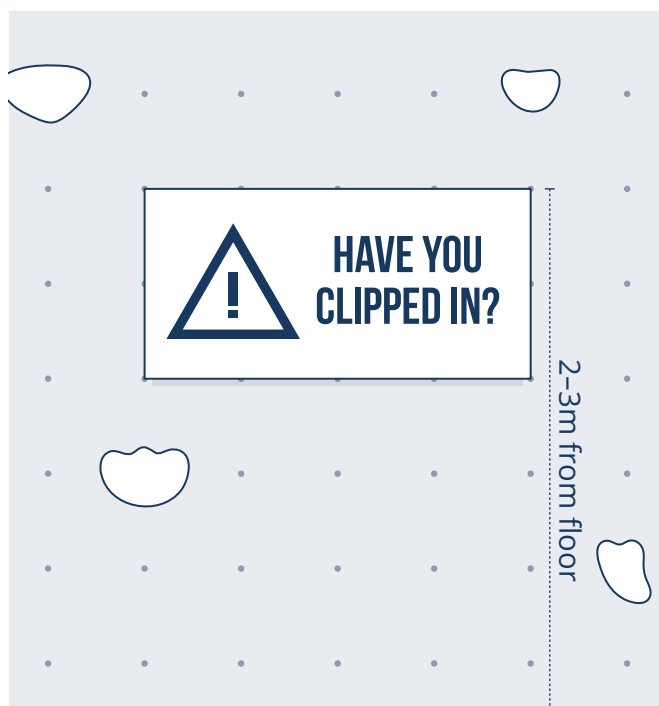
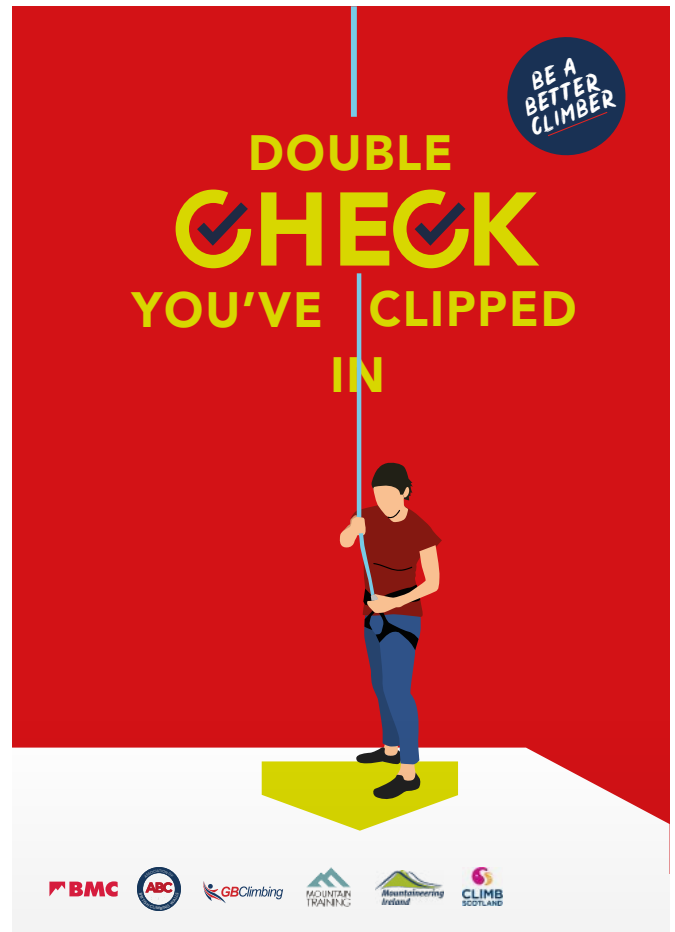
Ensure there is clear ‘double check before you climb’ messaging/ posters in or near to the auto belay area. The ‘double check’ means a visual harness self-check and ‘function test’ where climbers are asked to physically test the function of the auto belay by pulling down on the tape and releasing to feel a tug on the harness.

This ‘double check’ mentality should play into the importance of buddy/self-check in the round.

An ABC & partners endorsed ‘Double check you’ve clipped in’ auto belay poster is available at this [link](#) and we would recommend regular other communication/ reminders around this issue e.g. on social channels to keep it front of mind.

[You can buy pre printed copies of wall safety posters here.](#)

Auto belay manufacturers also provide safety posters which make these points.



Last minute reminder comms

While posters, lines or other visual reminders can become ‘wallpaper’ to regular climbers, they may serve to give some pause for thought and a final vital check. We would therefore recommend some bold and unmissable signage on the auto belay line simply asking “Have you clipped in?”

‘DOUBLE CHECK’ MENTALITY IS PART OF GENERAL GOOD CLIMBING PRACTICE

5 CONNECTION POINT

We strongly recommend a self locking karabiner is used as the connection point and we recommend having the same device on all auto belay lines throughout your centre.

FLOORWALKERS SHOULD ACTIVELY ENGAGE WITH CUSTOMERS ABOUT RISKS AND GOOD PRACTICE

6 STAFF TRAINING

A large number of walls deploying auto belays use floorwalking staff to monitor the safety of customers. It is recommended that such staff are all made aware of the potential issues with unclipped climbers and that there is a response plan in place for detached users at height. It is also recommended that staff observe users making repeated use of the units and actively engage customers with a friendly reminder of the consequences of a lapse in attention.

APPENDIX

CONSULTING PARTNERS:

- ▶ ABC board
- ▶ BMC
- ▶ Climbing Wall Association (America)
- ▶ NICAS
- ▶ Mountaineering Ireland
- ▶ Mountaineering Scotland
- ▶ Al Halewood, Technical Advisor
- ▶ Joby Maw Davis, Technical Advisor
- ▶ Ryan Meardon, Head Rush Technologies (Trublue)
- ▶ Operations Manager, Nick Cooper, The Castle
- ▶ Lead route setter, Mike Langley, The Castle

Woman climbing on auto belay © Matthew Ride-Smith



Association of British Climbing Walls (ABC)

admin@abcwalls.co.uk

www.abcwalls.co.uk