



# SITE SPECIFIC TRAINING

Bottom Roped Climbing and Traversing  
Sept 2015 Version

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## **PARTICIPATION STATEMENT**

The BMC Participation Statement says that: *The BMC recognises that climbing and mountaineering are activities with a danger of personal injury or death. Participants in these activities should be aware of and accept these risks and be responsible for their own actions.*

This document, and the training which accompanies it, do not provide for all aspects of climbing wall management or instruction thereof. The wall management who has contracted the training is entirely responsible for ensuring that all of the aspects concerning operating a climbing wall are complied with and kept to a standard acceptable to the relevant National Governing Bodies and any other applicable guidelines and or regulations.

Upon successful completion of this training, and the following assessment, the participant will have been deemed competent with regard to the skills and techniques covered under the syllabus. This training and the respective trainer cannot ensure that safe practices are adhered to on a daily basis, this is the responsibility of the individual trainee and the Management of the respective climbing wall. Additionally, this training does not assess the individual with regard to their personal attributes or their suitability as an instructor other than that they have shown competence on the day of assessment. The climbing wall management is wholly responsible for insuring candidates are suitable for the position as an instructor.

Each candidate will be issued a copy of this syllabus to act as reference and a logbook for recording historical and continued experience. It is the duty of the individuals to keep this record current. It is the responsibility of the facility management to monitor that this is being completed. If supervisors are not actively using their skills they may require refresher training, it is the duty of the supervisors and management to seek advice should there be any question about techniques or skills.

Candidates working outside the specific remit of this training programme as stated on the Statement of Competence (SOC) are not endorsed. It is strongly recommended that if there are any questions about the remit of the training, the provider be contacted.

By taking part in this training programme, the participants and the management of the facility agree to accept full responsibility for their own actions and all liability associated with operating a climbing wall. It must be understood that climbing has risks inherent to the activity, which may include injury or death. If the participants have any medical condition or otherwise are not able to supervise other climbers, they agree to identify this and remove themselves from the training.



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**Supervisor Details**

Name:

Name and Address of Climbing Wall:

Initial Site Specific Training Date:

Trainer:

Initial Assessment Date:

Assessor:

Pass

Deferred

Fail

Assessor Comments / Limitation:

Site Specific Recertification (Maximum 1 Year Validity)

Date	Outcome	Assessor	Comments



## 1 Introduction

1.1 In the U.K., there is no legal requirement for any qualifications to be held by a supervisor, coach or instructor working at a climbing wall. However, there is an expectation that people in this position have an enhanced duty of care and should ensure that they are competent to manage the activities they provide. Mountain Training administers climbing and mountain instructor qualifications, however it recognizes that the Awards that it administers may be considered inappropriate for those who may only work in a limited range of activities and particularly which have a controlled environment. To fill that gap the Site-Specific scheme has been created to provide an accreditation system for prospective supervisors.

## 2 Remit

2.1 The training is designed for adults who wish to supervise climbing activities on a particular indoor or outdoor climbing wall, artificial boulder or tower (this range of structures will be referred to from now on as 'wall'). It is primarily concerned with ensuring best practice and the supervision of safe enjoyable climbing sessions. It covers the supervision and management of traversing and bottom roped climbing, it excludes the supervision of bouldering, lead climbing, abseiling and top-roping activities.

2.2 Completion of a training course alone, without passing the assessment, is not to be considered as a qualification in itself.

2.3 An additional module is available for those candidates who wish to supervise bouldering, abseiling, top roping and/ or hoists.

2.4 This scheme has been designed to provide a level of basic competence for those who supervise climbing activities at a wall.

2.5 This training is valid only at the designated site or sites.

2.6 For the purposes of this scheme, a climbing wall is:

- An artificial structure, designed for the purpose of being used for climbing activities (this includes towers, artificial boulders and mobile climbing walls)
- Indoors or outdoors
- A structure which has safety equipment, such as top anchors, in place and is maintained through a management regime

2.7 It is the duty of the employer or organising authority to decide whether a supervisor possesses the personal attributes needed to take responsibility for the appropriate care and management of participants and for ensuring that child protection requirements are met. It is the combination of technical skills, breadth of experience and personal qualities that form the basis for effective supervision. This scheme assesses the technical skills and experience only; the employer or organising authority must gauge the personal qualities.

2.8 It will be the responsibility of the employer or organising authority if wishing to deploy award holders beyond the scope of this scheme, candidates working outside the specific remit noted on the Statement of Competence are not endorsed.

2.9 The scheme does not cover:

- Rock-climbing and supervising others on natural crags
- Multi-pitch rock climbing skills
- The teaching or supervision of lead climbing
- The teaching or supervision of Bouldering
- The use of leader-placed protection, natural or otherwise



- The supervision of high or low ropes courses
- The supervision of ice climbing walls, including dry tooling
- The assessment of candidates' personal qualities (other than with regard to the syllabus)
- A Criminal Records Bureau check
- A First Aid check

## 3 Experience Requirements

Please consider the advice given below:

- To be involved in the scheme one must have an interest in climbing and the supervision of novices in the activity.
- Before attending a training course it is recommended that you have climbed on artificial walls on at least five occasions.
- Between training and assessment you must consolidate new ideas and techniques and gain additional climbing experience. You must record at least five practice sessions during the consolidation period.
- Candidates should not present themselves for assessment until they have practiced the supervision of climbing on at least five additional sessions, ideally at a variety of facilities.

## Stages in the Site Specific Climbing Wall Scheme

- 1 Attending an approved training course and be issued a training manual.
- 2 Undertake a consolidation period between training and assessment.
- 3 Attend and pass an assessment course (including home paper) and be issued a Statement of Competence.
- 4 Record continuing experience in the logbook as part of the recertification process.
- 5 Attend and pass a refresher assessment course.

Note: The assessment and following Statement of Competence is valid for a maximum of one year, however, if a candidate has not maintained their skills as an active instructor they may need refresher training, this is the responsibility of the instructor themselves and the management of the climbing wall to monitor and request if necessary.

## 5 Logbook

Experience gained by candidates must be recorded in the logbook. Entries should be concise, easily read and should include all rock-climbing and other relevant experience.

## 6 Consolidation Period

Candidates will generally see new ideas and techniques during training and will therefore need some time to practise and evaluate these before taking the assessment. During this period of consolidation, candidates are advised to visit as wide a range of venues as possible, both as an individual and when assisting with the supervision of



others, depending on prior experience the trainer may dictate requirements to each candidate which they will need to achieve during this period

## 7 Assessment

7.1 Before attending an assessment course, candidates must:

- Have attended a training course or been granted exemption
- Completed and recorded the consolidation period
- Be proficient in the use of the designated climbing wall
- Have practiced the trained techniques of climbing supervision on at least five recorded sessions
- Complete the Home paper

7.2 For an Abseiling module assessment candidates must already have:

- Passed the Site Specific Climbing Wall (Bottom Roped) assessment
- Completed the Abseiling module training process or been granted exemption

7.3 During the assessment course, candidates will be tested in accordance with the syllabus requirements; this will be theoretical and practical.

7.4 The Director of Assessment will endorse the logbook in one of three ways:

**Pass:** where satisfactory knowledge and application of the syllabus and the necessary experience, skills, knowledge and attributes were demonstrated.

**Defer:** where the performance was generally up to standard but complete proficiency was not attained in some aspects of the syllabus. Some form of re-assessment will be required.

**Fail:** where the performance has been generally weak, or the necessary experience and attributes have not been shown. Further training may be recommended before another complete assessment is taken.

## 8 Technical Competence

### 8.1 Equipment

Candidates must be able to:

- a. Identify equipment suitable for personal and group use at the given climbing wall
- b. Demonstrate an ability to evaluate the condition of equipment and ensure appropriate care and maintenance
- c. Demonstrate the ability to use associated equipment appropriately
- d. Demonstrate an understanding of the use and limitations of different types of surfaces, holds, safety mats and anchors

### 8.2 Belaying

Candidates must be able to:

- a. Connect self and others to the climbing rope
- b. Attach self and others to the belay system
- c. Use the endorsed belay device(s) competently and choose the most appropriate device for a given situation
- d. Supervise a bottom-rope system and choose the most appropriate belay system for a given situation (e.g. Bell Ringing or other)
- e. Hold falls



- f. Lower climbers safely
- g. Supervise peer belaying

### 8.3 Personal Climbing Skills

- a. Choose and climb (leading not required) routes suited to personal ability
- b. Move with confidence on chosen routes

### Equipment, Anchors and Belaying

Candidates should be aware of the range of equipment suitable for use by novices as well as that for personal climbing use. It would be expected that they could offer advice on choice and suitability of equipment, as well as having a reasonable knowledge of its care, maintenance and life expectancy.

The maintenance of fixed safety equipment such as anchor points, extenders and in-situ bottom ropes is normally the responsibility of the climbing wall, not of its users. Candidates should be aware of the most common means by which such equipment wears out or can become damaged through extended use and be capable of basic visual inspection to detect obvious problems (see equipment maintenance section).

There is a requirement that candidates will be familiar and competent with basic skills such as harness fitting, tying in and belaying, including various group belaying methods which are commonly used at climbing walls.

### Equipment Use

#### Harnesses

Candidates should be familiar with the harnesses used at the designated centre, including the safety considerations concerning the buckling and monitoring of harnesses while in use. They should be able to select and fit appropriate harnesses for the client group, evaluate wear and damage and ensuring that candidates are aware of good practice with their own harnesses. Consideration should be given to the occasions when a full-body or chest harness might be used as is the case with individuals with “lack of defined hips” e.g. small children or those with a large midriff and why this is important in the instance of inversion.



With regard to sit harnesses there are two major types; those with a centralized attachment point and those with an attachment point which joins the waist loop and leg loops.





Both can be used with groups or individuals and have advantages and disadvantages inherent to their design. Candidates should be familiar with both types and understand how to use and fit them correctly. Manufacturers will supply instructions relating to correct usage of their equipment, their recommendations should be followed.

It is an essential part of the instructor's job to ensure that harnesses are fitted and attached correctly. In the case of sit harnesses the waist belt must be fitted securely above the hips and secured according to the manufacturer's recommendations. Most group harnesses will have large buckles securing the waist belt and each of the leg loops, these all must be **doubled back** and have a minimum of 10cm of webbing protrusion to be considered safe. Instructors should adopt a clear and systematic checks for ensuring harnesses are secure.

## Ropes

For indoor climbing there are two types of rope generally used; low stretch and dynamic. Regardless of type it is imperative that the rope be a Single type rope designated by the following symbol and in good condition:



-Low Stretch rope is usually white or black in colour and normally used as a rigging line or for the main abseil line, it will stretch approximately 3%-10% depending on the manufacturer, age and diameter, low stretch rope should not be used to lead climb.

-Dynamic rope can be almost any colour and is normally used as the main climbing rope; it is more pliable and can stretch up to 30% depending on the manufacturer, age, and diameter.

Ropes should be checked before each session and stowed neatly, off the ground with no knots left in place

## Helmets

Helmet-use guidelines for supervised groups vary between walls and organizations and the correct procedure should be confirmed with your supervisor prior to running a session. However, we recommend that helmets be used during all youth climbing sessions (under 18) and recommend that all beginners be encouraged to use helmets. Any rated mountaineering helmet is acceptable for use, but in some cases there may be good reason for not wearing one (such as climbing with auto-belay devices, where they may become hung up and suspend the climber). You must be familiar with the type of helmet used at your wall, how to fit it and when not to use it.



### **Karabiners**

There are two main types of Karabiners, locking and non-locking; they can be made from either steel or aluminium.

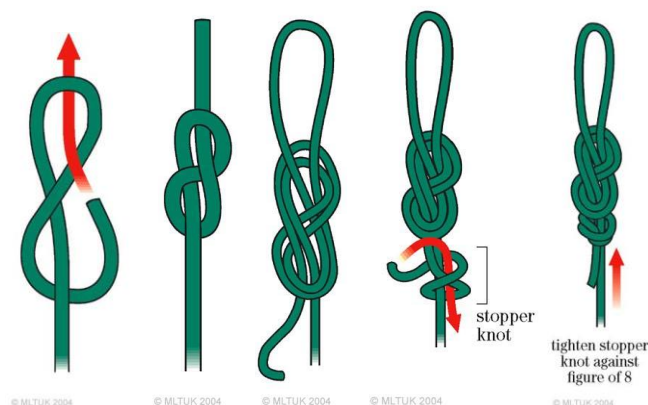
- Locking karabiners will normally be of the screw-gate variety and will be either HMS/Pear, “D” or oval shaped. HMS/Pear shaped karabiners are normally used with friction belay devices and necessary when using the Italian Hitch as it allows space for the knot to pass through, “D” shaped locking karabiners are normally used with assisted braking devices. Screwgate locking karabiners are used in critical positions where the opening of the gate would possibly cause a dangerous situation.

- Snap-gate karabiners are normally “D” shaped and used as lead protection points.

### **📌 Tying in**

The harness’s manufacturer recommended method of attachment to the rope should always be used. The differences in appropriate attachment for different harnesses should be understood and candidates will be required to spot incorrect fitting and attachment. There are two normal methods of tying in, one with a figure of eight on a bight directly to the harness and the other using karabiners attached to a pre-tied figure of eight on a bight clipped to the belay loop of the harness. There are positives and negatives to each situation however it needs to be noted that on some harnesses the manufacturer recommends tying in directly with the rope only.

We normally recommend tying in directly to the rope as it; encourages the instructor to take the time to look at the harness, giving another chance to re-confirm that it is fastened correctly; it dissuades the leaving of knots in the rope after sessions are finished and finally it uses the least amount of equipment and therefore variables for failure or error.



Teaching your group to tie the figure 8:

A clear demonstration will help your group learn how attach themselves to the rope, important factors are:

- Find the correct distance from the end of the rope to tie the
- Use one of the techniques taught on the training course to tie the first step of the knot
- Thread the rope through the correct attachment point(s) on the harness
- Re-thread the figure 8, ensuring the knot is snug to the harness
- Finish the knot with a stopper knot, leaving a short tail
- Introduce “Buddy Checks” (2,4,6,8 etc...)

### Belay Devices / Techniques

There are a wide variety of belay devices and techniques. A supervisor should be able to use the devices common to the wall they operate at. There are three basic categories of devices / techniques: Friction Belay Device (ATC or similar), Assisted Braking Device (Gri-Gri or similar) and Friction Knot (Italian Hitch), the use of each will be demonstrated during the training course (as appropriate dependent on the requirements of the facility) but with all systems it is essential to **never** let go of the brake hand! This is particularly important with the Gri-Gri where there is a tendency for reliance on the assisted-braking feature, it can and does fail. **The Gri Gri is not a hands free device!**

**Below are three examples of common belay devices:**



ATC Sport



Reverso



Gri Gri 1



It is acceptable to use any of these for its designed purpose however, it is critical you know how to operate the device, including how to tie it off.

## 📌 Teaching your group to belay:

The belayer is directly responsible for the safety of the climber; the importance of this **MUST** be understood by the group.

There are a few important points to remember when teaching belaying and when supervising peer belaying:

- Demonstrations should include all aspects of the process, including checks and communication
- Practice while on the ground
- Beginners will ALWAYS be backed up
  - o The supervisor belaying is the most direct style of supervision
  - o The next removed step is the supervisor backing up
  - o Lastly, another responsible and trained group member will back up
- **Until belayers are competent, they may require direct intervention, this must be expected, therefore only allow ONE live climber on the wall at a time until belayers show an acceptable ability level!**

We recommend teaching beginners to belay using a normal friction device, such as an ATC or DMM Bug.

- Identify how to thread the rope through the device and connect the karabiner
- Connect the karabiner to the belay loop on the harness and squeeze check the karabiner
- Identify the “live” rope (to the climber) and the “dead” rope (brake hand)
- Stress the importance of keeping the dead rope locked down and only briefly bring it up while taking in
- Stress the importance of maintaining control of the dead rope and “strong hands”
- Demonstrate the belaying process
  - o Buddy Checks (harness, knot, device, karabiner)
  - o Good communication (climbing calls – on belay?...)
  - o Small movements
  - o No extra rope in the system
  - o 5 step hand process or “V” towards the knee (eye to the thigh) for taking in rope
    - Maintain good body position
    - Keep hands slightly away from device
    - Top hand grabbing rope at face height
    - Don’t let go of the dead rope!
  - o Belayer to keep pace with the climber
  - o When the climber is ready to descend take the rope tight and communicate before lowering
  - o Slow and controlled lower with both hands on the dead rope
- Have the group practice on the ground, coaching as needed



**Falls and Lowers:** It is important to demonstrate the ability to hold a fall, even when unexpected and lower a climber safely ground. This becomes tricky when there is a marked weight difference or if there are distractions but as an instructor you are responsible for your climber(s) at all times and you must be fully aware of their position.

Other considerations:

- Belayer position and why not to stand too far away
- How to back-up a belayer
  - o Correct length of rope between belayer and backer – keep a smile, not enough to touch the ground
  - o Stay attentive
- Using a sand bag
  - o Attach to belay loop (not to obstruct the belay device)
  - o Keep the bag to the side and back

## **Group belaying:**

For non-teaching sessions, different techniques may be better suited to enable the most climbing in the time available. These techniques may not be suitable for all sites and may not be taught during the training or endorsed for the supervisors to use. They are included as reference only and if there is any doubt if these techniques are approved, it is strongly recommended to check the Statement of Competence or contact the training provider.

**Bell Ringing:**

This technique is effective for involving many participants; it uses an Italian Hitch to control the rope and the group to participate in the belay process. The supervisor must brief the group and manage them closely throughout the activity. If this technique is endorsed for your facility it will be demonstrated in detail during the training, however a few important points are:

- The ringer must be briefed and supervised so that nothing can be caught in the hitch
- The rope must ALWAYS be backed up by the supervisor
- Two lines maximum to be supervised at the same time
- The “Ringer” is to sit or stand to the side of the climbing line
- Do not allow slack in the system
- Keep hair, fingers and everything else from getting caught in the hitch
- You must tie the Italian Hitch properly!

**Sack Haul:**

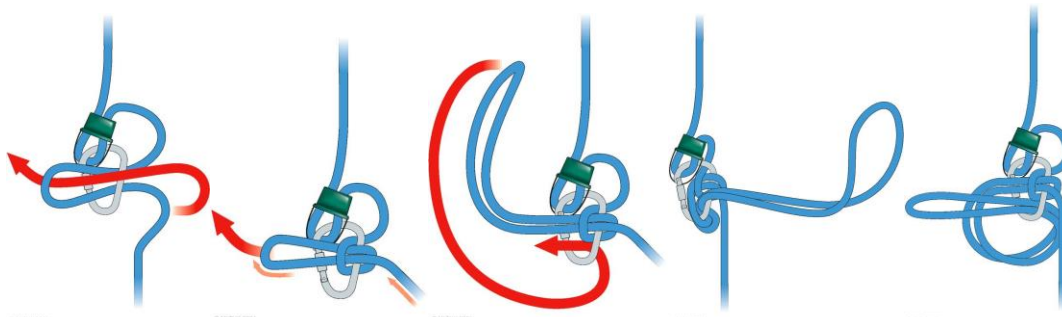
This technique is very good for involving many of the group and can be excellent fun, it is simple and has very little chance for error, however it must be noted that communication to the climber can be difficult and it should not be used if there is a chance the climber will freeze or need assistance. The technique will be demonstrated in detail during the training however a few points to remember are:

- The belayer group will be at least four people of equal or greater size as the climber
- Only use when the area is clear
- Stagger the isolation loops to avoid tripping

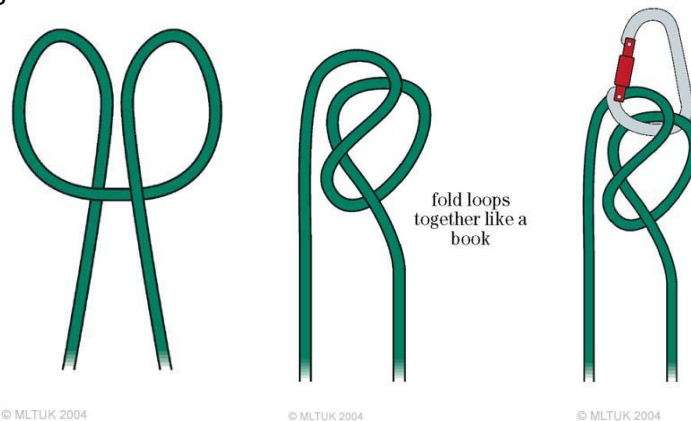


- Do not allow the climber to start until the belayers are ready
- The supervisor can control the amount of assistance the group gives, don't allow the climber to be dragged

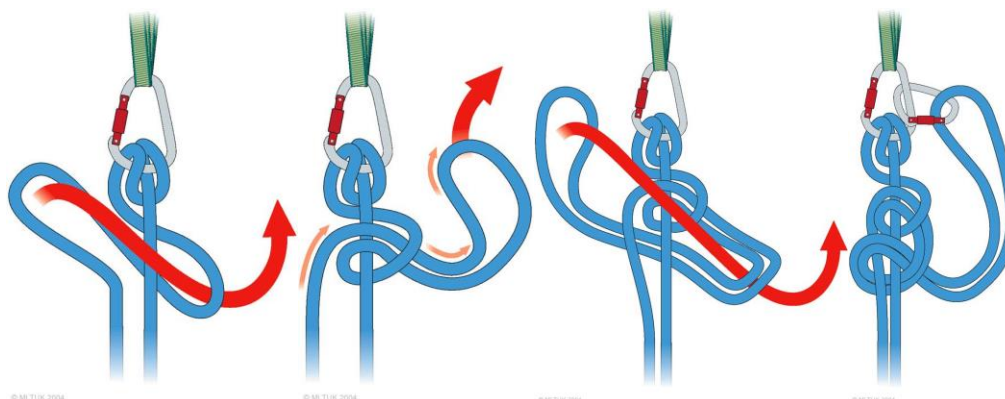
The figures below demonstrate the procedure for tying off a device.



The following figures demonstrate how to tie off an Italian Hitch:



Tied off:



The best practice method for belay and lowering instruction will be demonstrated during the course, if you have any questions please address the trainer.

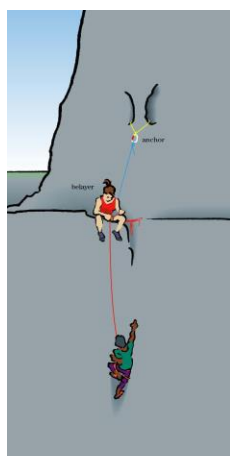
## 📌 Top and Bottom Ropes

Top-roping is not covered within the syllabus of this scheme. To avoid confusion, the words 'top' and 'bottom' refer to the position of the belayer, not the anchor.

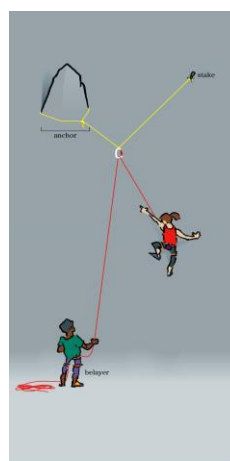
Top-roping describes a situation whereby the belayer is positioned at the top of the wall, with the rope going down from the belayer to the climber.



Bottom-roping describes a situation whereby the belayer is positioned at the foot of the wall, with the rope going from the belayer through a top anchor and down to the climber. The availability of bottom ropes varies from wall to wall; some walls have none in place and provide no top access to anchors so that the instructor will need to rig the ropes. This rigging is considered “leading” and is not a requirement of this award so we will assume that there are ropes or pull cord in place, if students desire to learn the skills to rig the anchor points or effectively lead climb, this may be possible during the training course, please confirm this with your trainer.



Top Roping



Bottom Roping

## 9 Sessions

Candidates must demonstrate competence in the following areas:

### Planning

When planning a session instructors should consider the implications of factors such as the group’s experience and expectations, the venue, authorizing organizations (where applicable) and other wall users. Groups may use walls for a one-off session or a long-term programme, and candidates should be aware of possible implications this will have upon the way in which an individual session is planned and executed.

- a. Plan both individual sessions and programmes of activities
- b. Assess the abilities and objectives of the group participating in this plan
- c. Check the underlying aims and objectives of the event
- d. Demonstrate an awareness of responsibility to any authorising organisation, parents, individual group members, the group as a whole and other site users
- e. Demonstrate an understanding of the impact of weather on climbing, if appropriate
- f. Have built in flexibility when planning activities in order to respond to changing circumstances
- g. Know where to find and use basic first aid equipment in the case of an accident or injury and know how to call for expert help if necessary
- h. Be aware of and comply with current legislation regarding children and vulnerable persons



## Organising

Group members should be issued with suitable equipment and through clear briefings be made aware of its appropriate use and how they should behave during a climbing session. A badly organised group may be a danger not only to themselves but also to other wall users.

- a. Brief individuals and the group appropriately (including safety checks)
- b. Issue appropriate equipment and check correct fitting and use
- c. Store equipment appropriately after each session

## Managing the session

Supervisors need to develop a range of group management strategies. Even within the same group there is likely to be a range of personal ability and motivation, and working with each group member as an individual is challenging for even the most experienced supervisor.

Clear communication is the basis of good management and effective group work, tell them what you want them to do and what might happen if they do not follow instructions, set clear and definite ground rules and keep to them.

“Teach on the ground, do on the wall” is a good motto, good instruction is not yelling to a student at the top of the wall because they did not complete a good demonstration on the ground.

Don't force your student to “Sit back into the harness” to be lowered, there is nothing wrong with down-climbing.

Make the group aware of the hazards associated with climbing and have them involved in the management of these risks.

Managing group members whilst climbing should be seen as only one element of supervision, as it is the management of group members not climbing that is often more complex. This can be especially true at a busy wall with many distractions.

Ideally experience of group supervision alongside more experienced supervisors should be gained between training and assessment. As with personal climbing, this experience should be as varied as possible and ideally gained at a variety of walls with groups undertaking bouldering and roped climbing. Finally, climbing should be fun! Managing a group effectively should not detract from a group enjoying themselves.

Candidates will be able to:

- a. Demonstrate a range of appropriate group management strategies and techniques
- b. Demonstrate the safe and responsible management of all group members irrespective of whether or not they are directly involved in the climbing activity
- c. Demonstrate an understanding of how to avoid common group climbing issues
- d. Manage the individuals and the group effectively by:
  - Good communication skills
  - Setting and reviewing targets. Identifying and reacting to the needs of the group in relation to involvement, interest, enjoyment and achievement
  - Supervise a group belaying





- e. Manage time appropriately in relation to the plan, activity and conditions
- f. Deliver technical instruction to individuals
- g. Suitable choice and fitting of harnesses
- h. Correct attachment of the climbing rope to the harness
- i. Demonstrate effective use of chosen belay device / techniques

## Session Structure

There are two basic structures to sessions; one-off or developmental. A one-off session will be mainly focused on climbing as much as possible and will not focus as much on teaching skills (although if skills can be taught, do so!). Developmental sessions will focus on teaching and developing the students as climbers. Examples of each session are below however; if the group has been before they may be able to do some of the build-up or teaching themselves, get them involved and foster a feeling of ownership in the activity but remember, ultimately the supervisor is always responsible for safety.

You must make your climbers aware of the risks of the activity and manage them as necessary. Most importantly you must be diligent with your group control, it is critical for the safety of your group. Group management begins with your initial safety briefing, you are required to set the tone for the session and make your group aware of the risks associated with climbing; if they make a mistake, don't follow instructions or act poorly serious injury could happen, being dropped from the top of the wall will cause so very real problems. The best way to brief your group is to develop a standard briefing which you use all the time (writing this down helps) obviously this will need to be adapted to suit different groups (kids parties vs. adult groups) but they will have the same basic points:

- 1) Supervisor Checks
  - Check all paperwork has been completed
  - Check for medical conditions
  - Check that all clients are wearing appropriate clothing (no entrapment possibilities, correct footwear, no hazards)
  - Check that pockets are empty and rings/ jewellery are removed or made safe and hair is out of the way or tied back
- 2) Facility Brief
  - Toilets, fire exits, emergency procedures
  - Locker rooms, or storage for non-climbing kit
  - Keep the climbing area clear (bags, bottles, chalk...)
  - Other relevant info
- 3) Activity Safety Brief
  - Explain the seriousness of the activity, injuries can and do happen while climbing.
  - Make them understand how important it is to follow instructions
  - Lay down the Law that no one leaves the ground without permission (or even goes near the wall if needed)
  - Be aware of other climbers, they can be above you



- Holds may spin, if they do report them to the supervisor
  - Climb in control
- 4) Behaviour Briefing (Group Dependent)
- No horseplay, the area is NOT a play area
  - Only a set number of climbers on the wall at a time
  - Only allowed to climb in certain areas of wall

NOTE: Whilst supervising climbing you will need to be authoritative and if the behaviour of the group becomes a hazard it is your responsibility to stop the activity. If this is necessary than take your group out of the climbing area and discuss with them what you need them to do in order to continue. If they do not behave in accordance with your instructions and wall policy it may be necessary to end the session. It is better to stop the activity than have to explain why someone got hurt

Once the briefing is complete the body of the session begins:

Warm-up	Whole Body (jogging – increase heart rate) Core – major muscles – minor muscles – climbing specific Climbing Similar (Swimming away from a shark)
Ice Breakers (if needed)	I am a climbing animal Freeze Simon Says Twister
Traversing	Once warm you may be able to use the bottom of the wall or dedicated traverse (or bouldering) wall to coach movement and help technique
Equipment	If harnesses are not laid out then issue them to the group (pre-use checks required)
<b>Check</b>	Once all harnesses are fitted stop and do a formal check, this is a critical point, also check the group for any other hazards and re-establish group control if needed
Session Content	Teaching or climbing as required but remember to start easy Work on a challenge Training Games and or Exercises

Many of the “Fun” games can be used to re-enforce good climbing movement and act as useful coaching aids, but don’t be afraid to change the sessions or the games to suit what you think will work with your climbers.

Please be aware that inadequate warm-ups or climbing too far beyond personal ability can lead to injury.



## 📌 10 Climbing Exercises and Games:

**Finding balance:** From sitting in a chair stand up, first try to do so with your feet directly underneath you (not using hands) and then try to do so again with your feet further away. This demonstrates the link between centre of balance and pushing with the legs: when the body's centre of balance is positioned above the feet it is much easier to stand up.

**Add a Move:** Begin by starting the first sequence of moves. The first climber gets on the wall and climbs or traverses this sequence of moves. When the first climber finishes, he/she adds one more move. Each time a climber completes the sequence he/she adds on another move. You can play "hands only" where any foothold can be used, or specify both handholds and footholds.

**The stick game:** The person designated as the pointer will use a broom handle or any pole to point out the next hold. The climber begins climbing. The pointer taps the next hold. This should be done so the next hold is tapped just ahead of the person climbing. A good pointer makes it challenging but not beyond the climber's ability. The game ends when the climber falls. The climber and pointer then switch positions.

**Memory Game:** The first person points out a sequence of 4 to 10 moves. There are no markings placed on the wall. The second person has to climb the route remembering each hold. The value of this climbing game is it teaches you to remember the holds in the route, making it an easier transition from preview to climbing.

**Take Away:** Create a route of about 20 holds. Mark the holds with chalk marks. Each climber climbs the route. After each successful climb/traverse the finishing climber rubs out a chalk mark. If the next climber cannot climb/traverse it without falling the turn is passed to the next person. If no one can do it the original climber must prove it can be done. If he cannot do the move the mark is put back on.

**Twister:** Designate a section of the wall just like a play field for the game "Twister". It has the same rules as normal twister.

**Dice Game:** Each climber rolls dice to see how many holds they can use to traverse the wall (you can make the end points shorter or longer) they each have three tries the winner has the most successes.

**Laps:** The first climber traverses across the wall back and forth using any holds (or harder using only one colour) for as long as possible without stepping off. Each subsequent climber tries to beat the score.

**Time's Up:** For as many players as desired. Start with a five or ten second time limit. First player gets ready, and a timekeeper says when to go. The climber gets to as many holds as he/she can before the timekeeper yells, "Time". Second climber tries to beat that number. If the climber does, they win, and their time is the new goal. After everyone goes, end of round one, add time, start round two.



**Shark Attack:** This climbing game can be played with as many climbers as you can fit on the wall. It is very similar to musical chairs. The climbers start in a circle in the middle of the floor facing inwards - when you shout "Shark Attack!" they must get onto the wall as quickly as they can. The last person on the wall is out (either out of the game, or "loses" an arm or leg). You can add many variations to this game e.g. climbers may not use legs, etc.

**Simon Says:** You can play this with a group of people. There is a leader (Simon, I suppose), this leader gives the group 15 seconds to get off the ground and stay there. After that time, the leader calls out various commands: "Simon says... move your left foot" for example and everyone must move the nominated limb to a new hold unless the command is not prefixed with "Simon says". Players are out if they fall off or do not obey the commands.

**I went to the wall and used...:** One person starts at one end of the bouldering wall. Their spotter calls out "I went to the wall and used a..." then they call out a move e.g. crimp, undercut smear etc. After the move has been completed the climber steps off and the partner repeats the move. The new spotter calls out the next move to be used. "I went to the wall and used a crimp and a smear." Repeat the moves for as long as you can manage it.

**Taps:** There will have to be a person on the floor to keep track of totals. This game was made up to assist the young climbers with concentration. What they have to do is climb like normal but every time they use any hand they have to first tap their head and then count out loud starting at one. The goal is to have the climber try to beat their personal best by trying to lessen the number of times they use their hands.

**Tap Its:** Working in pairs or more, one person chooses a hold for each hand and one foot. With the other foot they then see how many holds they can touch whilst their partner counts. They then swap places using the same holds, the person that touches the most wins. All about flexibility and realizing where and how far they can reach. They are not allowed to move the other foot or hands.

**Freeze:** All participants engage in traversing at the same time in the same direction at different locations on the route while one stays on the floor and randomly calls out "freeze." When that command is given the climbers must cease all movement, even if in the middle of moving from one hold to the next, for a pre-decided amount of time. Climbers may not move until given a "go" from the officiator timing the freeze. If a climber moves while in a "freeze" or falls off the wall he/she is out until next round. Last man standing (hanging) wins.

**Ninja Feet:** A game/training exercise aimed at developing precise foot placement. A group of climbers are asked to traverse a wall silently. Someone else stands at a reasonable distance from the wall with a blindfold on and someone else to help them walk safely. When the listener thinks they have heard someone they shout 'freeze' and walk towards the wall, touching exactly where they think the climber is. If they touch a climber they are out and the process is repeated until there is one 'silent' winner left.



## 11 Emergency procedures

### **Problem Avoidance**

Most, if not all, problems can be avoided, proper and thorough checks of the climbers, clear instructions and close supervision are all critical to smooth and safe sessions. Below are some guidelines to help, however each facility and each group need to be risk assessed to determine which methods / procedures are appropriate.

#### **Before the session:**

Check the wall and equipment (including auto-belays, if appropriate)

Check paperwork and medical issues

Look for conflicts of use

#### **At the start of the session:**

Check the climbers, look for appropriate clothing / footwear, empty pockets, entrapment features and snag hazards (long hair, jewellery or clothing)

Give a complete and clear safety briefing. Tell them what hazards are present and how important it is to pay attention and listen to you. Tell them what you want them to do and not to do.

Make sure all equipment is in good condition and fitted properly.

#### **During the Session:**

Maintain tight group control and close supervision (ratios are recommended to be 1:9 max for supervisor to climbers)

Don't get distracted. Focus on your group and if you need to divert your attention save your climbers (ground / tie off plate) and group first.

Keep checking equipment (harnesses, knots and belays) and ALWAYS have beginning belayers backed up!

### **Problem Resolution**

The most common situation is a "stuck" climber, in essence most times gentle coaxing and clear instructions will get them down, remember down-climbing is fine! Complicated rescues are outside the scope of this training and if there are hazards may which necessitate complex procedures additional may be required, this should be discussed with your trainer and any methods discussed documented.



In any situation, the most important thing is to stay calm, do not allow the situation to escalate, if this means grounding the group than do so.

During the practical training, the trainer will work with the group to determine the best methods to resolve foreseeable situations. Below please identify any methods, which have been taught:

Situation: Entrapped climber (past frozen)

Resolution: Radio / call for help, counter weight rope to move climber up (tie off plate if necessary) – send up climber on adjacent line to assist ideally a staff member - lower

Situation: Auto Belay Malfunction (hung up)

Resolution: Radio / call for help – send up climber on adjacent line to assist ideally a staff member – attach new system to climber – lower down (extra weight on belayer as necessary)

Situation: Hair/other caught in IH / Device or jammed device–

Resolution: Climber back on wall (or counter weight as necessary) – free entrapment - add new device – clean system if necessary - lower to ground



## 12 Equipment Maintenance

All equipment used at any climbing facility should be subject to a thorough PPE (Personal Protective Equipment) checking and management system which should be written policy followed by all staff. It should cover appropriate storage, regular thorough equipment checks by a suitably competent person, recording of checks, equipment lifetimes and guidance on pre-use checks. The training provided as part of this site specific scheme is aimed at ensuring an appropriate level of competence to carry out pre-use and basic checks. The basic checks should be done at a minimum of every 6 months (or more frequently depending on use), however the basic check may not be suitable if there are detailed questions or a higher level of judgement is required. This higher-level check should be completed by a “competent person” who is knowledgeable and experienced in the detailed assessment of personal protective equipment.

### **All equipment needs to be inspected. We recommend that:**

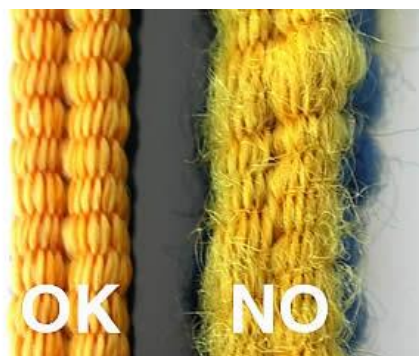
- Each piece of equipment be uniquely identifiable
- The date of purchase be recorded
- The date of first use be recorded
- Each scheduled inspection to be recorded (minimum 6 monthly)
- The records be kept of the life of the equipment
- The inspection programme to be overseen by a competent person
- Manufacturer’s recommendations are followed for lifespan and maintenance

There are many acceptable types of equipment designed for the same use, check with the manufacturer if you are in doubt as to whether or not you are using it properly, you may need additional training for some devices and equipment, seek this from a suitability qualified individual. Included are some pictures of worn equipment to look out for.

### **Ropes:**

All ropes have a lifespan recommended by the manufacture depending on use and condition; however as with all textiles (ropes, slings, harnesses) they normally have a maximum shelf lifespan of 10 years and a maximum in-use lifespan of 5 years. Ropes must be stored and looked after carefully to ensure they are safe to use, care information will normally be provided with the equipment when purchased.

The ropes (as all equipment) must be inspected prior to use. You will inspect the rope for any: abnormalities or fuzzy areas, strong deformities (stiffness, nicks and sponginess), damage to the sheath or if the core is showing, any evidence of contact with a chemical agent (oil, grease, acid) and any damage from heat, abrasion or friction. If any of the above is found or suspected the equipment must be isolated and brought to the attention of your supervisor in accordance with the management’s operating procedures. You are personally liable if you knowingly use damaged equipment.



## **Harnesses:**

As with ropes the lifespan of the harness will depend on the type, manufacturer and usage. The inspection of harnesses will look at all weight bearing areas for wear or damage to the strands of the webbing. The buckles will be examined for signs of cracking or burring and all stitching will be inspected to ensure that it is complete.

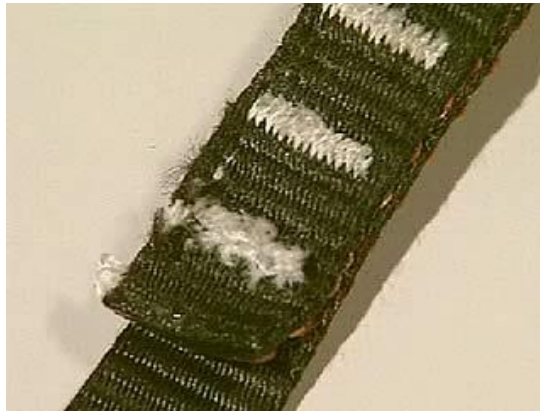


## **Slings:**

There are many types of climbing slings. As with any textiles, care should be taken if the sling is exposed to prolonged sunlight or has had possible contact with chemicals. When inspecting a sling you will look for any damage to the fibres of the sling (sometimes indicated by a furry appearance) and any abnormalities or damage to the stitching (as pictured below). Refer to manufacturers guidelines for specific instructions and care guidelines. If any discoloration of any textile is noticed it should not be used and passed to the person in charge of PPE checking for a thorough inspection.

-Note: some slings are made from Dyneema and although very strong and light can melt at relatively low temperatures (144 - 152 degrees Celsius), be aware to keep them from rubbing as catastrophic failure could result.





## 📌 Helmets:

Any modern climbing or mountaineering helmet will be acceptable for use. There are many types available but most fall into two categories, plastic or Styrofoam. Plastic helmets should be inspected for cracks or deep scratches but are normally more resilient and can be used after minor impacts. Styrofoam helmets are not as resilient and must be retired after an impact even if minor. They are to be inspected for cracks, scratches and/or dents to the exterior. Both types of helmets need to be used and fitted properly so that they protect the forehead of the climber and cannot move freely. An easy method to check is to do a “shake” test after fitting them. This will be demonstrated during the training. For care and maintenance refer to the manufacturers guidelines.



## 📌 Karabiners:

As with all metalwork, karabiners normally have a conditional dependent lifespan; this means that they can be used indefinitely so long as they are not damaged and function properly.



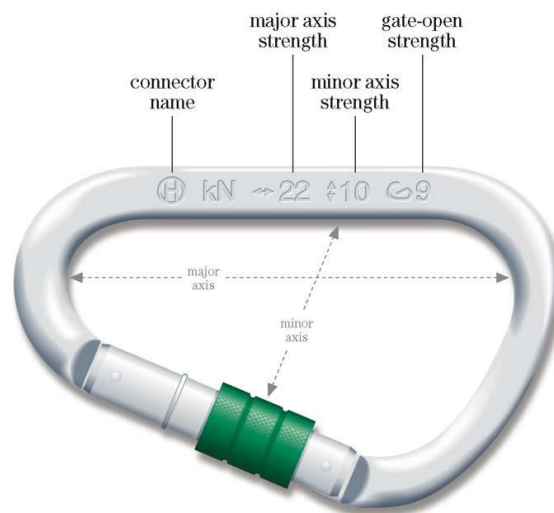
When inspecting karabiners you will check:

- That the gate moves properly and does not stick
- The locking barrel winds and unwinds (if screw-gate)
- That there is no grooving present
- That there are no nicks burrs or sharp area on the karabiner
- That there is no corrosion present



Heavily Grooved Karabiner

All Karabiners are marked for strength and have information as noted below:



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Free Climbing Grading Systems						
YDS (USA)	British Tech/Adj		French	UIAA	Saxon	Australia
5.2			1	I	I	
5.3			2	II	II	11
5.4			3	III	III	12
5.5	4a	VD	4	IV	IV	12
5.6		S	5a	V+	V	13
5.7	4b	HS	5b	VI-	VI	14
	4c					15
5.8		VS	5c	VI	VIIa	16
5.9	5a	HVS	6a	VI+	VIIb	17
5.10a		E1	6a+	VII-	VIIc	18
5.10b	5b		6b	VII		19
5.10c		E2	6b+	VII+	VIIIa	20
5.10d	5c		6c		VIIIb	21
5.11a		E3	6c+	VIII-	VIIIc	22
5.11b			6c+	VIII-		23
5.11c	6a	E4	7a	VIII	IXa	24
5.11d			7a	VIII	IXb	
5.12a		E5	7a+	VIII+	IXc	25
5.12b	6b		7b			26
5.12c		E6	7b+	IX-	Xa	27



<p>Front Two</p>	<p>Jug</p>	<p>Open Crimp</p>	<p>Closed (Full) Crimp</p>
<p>Sloper</p>	<p>Guppy</p>	<p>Two Finger Stack</p>	<p>Gaston</p>
<p>Two Finger Pocket</p>	<p>Mono</p>	<p>Pinch</p>	<p>Drag (Open Hand)</p>
<p>Heel Hook</p>	<p>Toe Hook</p>	<p>Bicycle</p>	<p>Heel / Toe</p>



## REFERENCES

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Lyon Technical Data, From Lyon Equipment Technical Division

Working At Height Regulations 2005, HSE

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Much of this document has been formed from the combination of multiple other guidance documentation from the Mountain Training Board:

The CWA Handbook

The SPA Handbook

Site Specific Guidance Notes

Pictures are thanks to:

Nathaniel McMullan

Petzl

The MTB

**More information on climbing games can be found at:**

[http://www.indoorclimbing.com/climbing\\_games.html](http://www.indoorclimbing.com/climbing_games.html)

Climbing Games By: Paul Smith (can be bought from Amazon)



## HOME PAPER

Candidate Name:

Climbing Wall Name:

Date:

- What are the roles of the
  1. Climbing wall owner?
  2. Climbing wall manager?
  3. Climbing wall instructor?
  
- Within a climbing wall facility, who has overall responsibility for the maintenance of the wall?
  
- Describe your understanding of the BMC participation statement, and should you make your group aware of this?
  
- What is the AALA?
  
- Does a climbing wall need to have an AALA license?
  
- Do you need to have insurance to lead a session at a climbing wall?
  
- Does the climbing wall you are using need to have insurance?
  
- If an accident happened and it was due to faulty equipment associated with the climbing wall, who would be liable for:
  1. The fabric/fixings of the wall?
  
  2. Equipment issued by the wall?
  
- Who should manage Health and Safety at work at the climbing wall?
  
- What is RIDDOR?
  
- If a wall establishment says it is a member of the ABC, what does this mean?
  
- List five potential hazards that you need to check for in a wall that is shared with another user; e.g. a badminton court.
  - You have a group of young people who you are going to take to the climbing wall for their first climbing experience. What equipment should you take with you?
  
- What items of equipment would be different for groups comprising children compared to adult groups?





- What should you do if a hold rotates when your group is using it?
- Why do many lead walls have two karabiners at the top of routes?
- Name two hazards associated with loose crash mat style bouldering mats.
- Before starting a traversing session with a group, what briefing would you give them?
- When you are equipping your group with their harnesses and helmets, are there any issues that you should be aware of? If so what are they?
- How can you help prevent injuries at the wall?
- What would you put into a warm-up?
- If someone's finger made a cracking noise when they were climbing, what would be your advice?
- What are the potential hazards associated with an auto-belay machine and how could you minimize these risks?
- If you have not supervised a climbing session for an extended period of time and asked to do so, should you seek additional training?
- What is the minimum qualification for the instruction of lead climbing (indoors and outdoors)?
- Who is responsible for the safety of an instructed group and that their equipment is properly fitted?
- A student climber is dropped by another student belayer, who is responsible?