



## **Crawley – Risk Assessment**

**RISK ASSESSMENT**

**RISK MANAGEMENT**

**RISK LEVELS AND ASSESSMENT OF RISK**

**RISK EVALUATION**

**Original Date: November, 2006**

**Review Dates:**

January, 2008  
January, 2009  
January, 2010  
February, 2011  
February, 2012  
February, 2013  
February, 2014  
February, 2015  
February, 2016  
April, 2017

## **RISK ASSESSMENT**

This risk assessment applies specifically to the activities and actions that may take place on or directly around the climbing wall and does not attempt to consider the wider implications of activities taking place within the leisure centres, including general evacuation procedures.

This section refers to risks and activities common across all High Sports Group operated climbing walls.

<b>Risk / Activity</b>	<b>Resolutions</b>	<b>Reference Number</b>
Injury due to falling	Instructor training, Safety test, Rescue from heights training, use of helmets	1, 3, 9, 16, 24
Equipment failure	Equipment Inspections	4, 5
Incorrect use of equipment	Instructor training, Safety test,	1, 3, 6, 7, 16
Deliberate misuse of equipment	Instructor training	7
Climber stuck at height or refusal to be lowered	Rescue from heights training	8
Unattached climber at height	Rescue from heights training	9
General access to climbing wall	Sign in procedure	10
Climbing above safe guideline level during un-roped session	Instructor training, Rescue from Height training, Conditions of use	11
Spinning or broken climbing holds	Route setting guidelines, Code of Practice, Conditions of Use, Reporting system	12
Trip hazards & slippery surfaces	Safety briefing, Hazards marked	13
Electrical appliances	PAT tests	14
Lifting heavy objects	Staff training, Staff Handbook, Lifting Guidelines	15
Unsupervised experienced climbers	Safety test, Sign in procedure, Boulder Induction	10, 16, 29
Junior climbing	Age restrictions, Junior Clubs, registration process, use of helmets	17, 24
External instructors	Proof of qualifications, Instructor to climber ratios	10, 18
Novice climbers	Safety Test, Mentoring policy	16, 19
High Sports instructed groups	Instructor training, Instructor to climber ratios, Sign in procedure, use of helmets.	1, 2, 3, 6, 7, 10, 21, 24
Abseil	Abseil training, access control	1, 2, 10, 22
Use of ice climbing training tools	Sign-in procedure and specific centre rules	23
Climbing wall maintenance	Route setting risk assessment, staff training, Access restrictions	25
Storage of cleaning materials	Use of storage boxes, staff training, usage guidelines, COSHH assessment	26
Unauthorised access to the	Physical barriers, signage, staff induction, Rescue	10, 27

climbing wall	from Height training	
Traversing	Instructor Training, conditions of use	1, 2, 11, 28
Bouldering	Code of Practice, crash matting, signs, Boulder Induction	1, 2, 29
Auto-Belay	Marked landing zone, rules and safety information displayed, Sign in procedure	9, 16, 20

The following section refers to risks and activities specific to this location.

<b>Risk / Activity</b>	<b>Resolutions</b>	<b>Reference Number</b>
Training Area	Child usage policy, Warnings about over-exertion	1, 2, 30, 31
Access to top of bouldering wall	Code of Practice, Signs, Boulder Induction, Cleaning and Maintenance procedures	1, 2, 29, 32
Access to high abseil ledge via cave-style feature	Abseil training, access control,	1, 2, 33

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## **RISK MANAGEMENT**

### **Reference Number**

1. Staff that are to be involved with the running of climbing activities **MUST** have completed the appropriate High Sports training for the level of activity to be conducted.
2. All instructed climbing sessions should commence with a briefing by the instructor on good practice, highlighting safety issues.
3. Climbers must tie directly into the rope using an appropriate climbing knot finished with a double stopper knot. Belaying must be handled by or under the direct supervision of a competent climber, High Sports Instructor or External Instructor at all times. Groups under instruction from High Sports staff may, at the discretion of the instructor, be clipped in to the rope using a pre-tied figure 8 knot and a locking karabiner. During instructed sessions, the instructor must tail any active ropes and tie a suitable stopper knot in the dead rope to arrest the rope in the event of a belayer letting go during a climber fall.
4. All equipment associated with the climbing wall must be listed in an equipment log indicating an 'in service' date and a 'retirement' date. The equipment log should also indicate the maintenance schedule that is to be applied to each item of equipment.
5. All equipment used in a climbing session should be subject to a visual check by the instructor before and after the session. If in doubt, **DO NOT** use the equipment.
6. All instructors are trained in the correct use of the climbing equipment at the climbing wall. Any new equipment introduced should be subject to a review of the training materials.
7. Equipment should only be issued to novice climbers on an 'as needed' basis. Instructors should not carry equipment on their harness that is not required for the session being run.

The lowering technique using the Petzl Gri-Gri device has the potential for deliberate and accidental miss-use therefore instructors must be an integral part of this process.

8. Under no circumstances should an instructor attempt to climb un-rope to assist a stuck climber or a climber refusing to 'let go'. Often time and gravity will result in tiredness and an eventual controlled fall. In exceptional circumstances (emergency evacuation) the climber can be pulled from the wall by using the rope leading to the belayer. This technique is taught as part of the 'rescue from height' training.
9. Under no circumstances should an instructor attempt to climb un-rope or rope to assist an un-attached climber. These techniques have been practiced in a controlled environment and have failed in almost every instance, increasing the risk of injury to both parties.

Being mindful of the safety of other climbers, quickly stacking the crash mat(s) directly beneath the climber is the most effective rescue plan.

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Consider the likelihood of a projected jump when deciding how wide to make the stack of mats.

If receptive, encourage the climber to 'down climb'. Even one or two moves before falling will reduce the risk of injury.

- 10.** Out of hours when the climbing wall is not in use entry gates/doors must be kept locked shut, all climbers both supervised and unsupervised must sign in at reception.
- 11.** Climbing above safe guideline level is not inherently dangerous if the encroachment is small therefore immediate reference to the Code of Practice and Conditions of Use should be used. Where an attempt is made to gain significant height staff members should immediately invoke the procedures for a climber untied at height and stop the climbing session.

- 12.** Climbers are made aware (COP/COU) that climbing holds may occasionally spin or break. This may lead to a fall. Normal operating procedures will protect the climber, including the belayer arresting the fall or matting protecting an un-roped climber.

Any spinning hold should be re-tightened at the earliest opportunity. When holds cannot be tightened immediately laminated notices informing climbers of where the spinning hold is located should be placed at eye level in the area the route begins until such time the hold can be re-tightened.

All spinning or broken holds are to be reported to a member of staff, as per the Conditions of Use. A 'Spinners' log is maintained at the reception area to document spinning holds and remedial actions.

- 13.** The 'no running' policy must be enforced during climbing sessions.

Other climbing equipment can also create trip hazards and when not in direct use should be stored in the designated storage space well away from the climbing wall and reception area. Chairs and other seating areas should be kept back against walls and prevents from creating trip hazards.

Cleaning using the hoover and mopping of sealed surface floors creates potential trip and slip hazards. All cleaning activities must display a hazard board and be conducted, whenever possible, outside of customer opening times or when low customer volumes are expected.

- 14.** Annual PAT tests for all electrical equipment used on site.
- 15.** Manual handling does not form part of normal instructor or supervisor duties however for para climbing sessions and maintenance tasks including route setting and hold washing all staff undertaking these activities will be trained on correct techniques as part of their induction. A reminder of risk and reference to correct lifting is provided in the staff handbook. Reminder signage is located adjacent to hold pool storage.
- 16.** All unsupervised climbers using the roped wall must pass a Safety Test to ensure they are able to correctly fit a climbing harness, tie into a rope with an appropriate climbing knot and appropriate stopper knot (the most common being the retied figure of 8 with a double fisherman's or a bowline with a double fisherman's) and show an ability to attach a belay device to the

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rope then use it to allow a climber to ascend, arrest a falling climber and lower them safely to the ground.

The Safety Test includes a familiarisation with the auto-belay device at sites with these devices in place.

- 17.** Junior climbers younger than 14 cannot climb unsupervised at the centre. They must attend a Junior Club or be part of an instructed session.

Children under 14 may climb with a parent or guardian providing that person complies with the normal registration and safety test procedures. Junior climbers may not belay an adult or take part in 'peer to peer' belaying unless a competent adult is directly supervising the activity.

Unsupervised climbing is allowed for 14 to 17 year olds subject to the successful completion of a safety test and the completion of a 14+ Registration form requiring parental consent which must be signed, in person, by a parent or guardian.

Lead climbing is not permitted by persons younger than 18 outside of an instructed session unless a parent or guardian has attended the climbing wall and discussed the specific risks associated with this form of climbing and has signed a consent form to indicate they are happy for their child to lead climb, peer belay and be belayed by another child.

- 18.** In order for an external instructor to supervise a group at the climbing wall they must first produce proof of qualifications from a recognised body, their first aid certificate and insurance cover note and have copies produced for our records.

The correct instructor to climber ratios must be maintained at all times for the appropriate level of qualification. All members of the group, both experienced and novice must sign in before they are allowed to climb.

- 19.** Both adult and junior novice climbers must be mentored by an appropriate person over the age of 18, and both the mentored and the experienced climber must read, understand and sign the mentoring policy.

- 20.** Paint or hazard tape must be used to mark the landing zones of all automatic belay devices to ensure that climbers on the floor are aware of their locations when in use. The rules and safety information for the devices use must be clearly displayed within view of the device.

To help protect against climbers using the device without clipping in devices must be secured using coloured triangles which are secured at the base of the climb to restrict access to the lower holds. Signs will be positioned 2-3m from the ground reminding climbers to re-check they are clipped in.

If required for the activity the appropriate sign in forms must be fully completed.

- 21.** The ratio of climbers to instructor is stated in the product description document for each session and must be strictly adhered to.

In order to climb all members of a group must complete the appropriate sign in documentation.

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- 22.** The abseil must only be operated by a suitably trained instructor during appropriate instructed sessions following the set procedure.
- 23.** The use of Schmoolz, Fig4 and other similar artificial ice axe tools is subject to a separate signing in procedure where customers are alerted to the specific risks associated with this activity. Attached to the signing in sheet are the rules that apply specifically to this activity.
- 24.** High Sports requires the use of helmets for all juniors under the age of 14 participating in instructed sessions while climbing on roped lines. School groups and other external groups may provide their own helmets. Helmets are not to be worn by juniors while bouldering or using an autobelay device, as there is a risk that the helmet can become attached to elements of the wall and the junior's feet left unsupported. All climbers over the age of 14 should be given the choice to wear a helmet before they start climbing.
- 25.** Climbing wall maintenance includes the placing and removal of holds (route setting), checking of anchors and other removable elements on the climbing structures and at height cleaning. For roped walls these activities are covered by the route setting risk assessment and specific maintenance training for staff. All cleaning maintenance work is to be conducted from ground level or via the bouldering ladder in accordance with route setting guidelines.
- 26.** General cleaning requires the use of high street cleaning materials carrying appropriate usage instructions. Hold cleaning utilises a proprietary cleaner called Benky Gripwash. All materials are to be stored in a lidded container and held in an area away from ropes and any technical equipment. Where appropriate documentation on safe use will be displayed (Benky Wash). Use and storage is subject to COSHH assessment.
- 27.** All High Sports climbing walls have gated access to secure the climbing wall out of hours. Signage indicates that access is not authorised. During opening hours any attempt by a member of the public to gain access to the wall is addressed in the Unauthorised Access Policy, staff inductions and training during the Rescue from Height course.
- 28.** Traversing is the act of climbing sideways across a climbing surface and is conducted on purpose built structures or at the bottom of a climbing wall.
- Rubber crumb safety flooring is provided to cushion an accidental fall. This flooring has a critical fall height rating adequate for the safe guideline level.
- Sign-in procedures will require users to read the conditions of use and rules applicable to traversing.
- 29.** The bouldering area has its own specific Code of Practice and Induction Procedure and must be observed by climbers at all times. Crash matting is in place to protect climbers in the case of a fall but its limitations, set out in the Code of Practice, are highlighted to customers via signage and, where appropriate, discussion.
- Signage must be in place to make climbers aware of the increased risk within a confined space from a falling climber and to generally exercise additional caution to avoid the risk of climbing injuries.
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A boulder induction is given to all unsupervised, experienced climbers on their first visit to the centre to ensure they are aware of risks in the bouldering area and will comply with the bouldering code of practice.

Climbers under the age of 14 must be supervised at all times on the Boulder Wall by a Parent or Guardian, over the age of 18, who must also receive and sign for the Boulder Induction.

- 30.** Due to the high impact nature of the training area and training aids and in line with advice from the BMC and other advisory bodies, juniors under the age of 16 are not permitted in the training area or to use the training facilities. The only exception to this rule is junior squad members who have attended a familiarisation session; they can use the facilities as part of squad sessions or when accompanied by a suitably experienced adult.
- 31.** The risk of sporting injury is increased due to the nature of the high impact training programmes being followed which can result in physical strains and sprains. These risks are highlighted through increased signage warning of the dangers.
- 32.** The bouldering wall has a top out capability and is subject to strict access restrictions. This is addressed in staff inductions and backed up by site signage.
- 33.** The door accessing this section of the facility is kept shut whenever it is not directly in use on an instructed session. A minimum of two staff members are on site when a session utilises this section of the facility in order to provide adequate supervision to customers not on the interior of the wall.

## **RISK LEVELS AND ASSESSMENT OF RISK**

Taken from HSE RIDDOR definitions

Fatality

Major Injury

Fracture of skull, spine or pelvis

Fracture of arm, leg or wrist

Amputation

Loss of sight

Injury or loss of consciousness from electric shock

Loss of consciousness from inhalation, absorption contact or ingestion of any substance

Acute illness resultant from exposure to pathogen or infected material

Minor Injury

Environmental/equipment damage

Likelihood of Occurrence

Likely Occurs repeatedly and harm can be expected

Probable Occurs several times

Possible Occurs sometimes

Remote Unlikely but conceivable

Improbable Close to zero probability

Matrix of Risk Levels

	<b>LIKELY</b>	<b>PROBABLE</b>	<b>POSSIBLE</b>	<b>REMOTE</b>	<b>IMPROBABLE</b>
<b>FATAL</b>	SIGNIFICANT	SIGNIFICANT	SIGNIFICANT	MODERATE	INSIGNIFICANT
<b>MAJOR</b>	SIGNIFICANT	SIGNIFICANT	MODERATE	INSIGNIFICANT	INSIGNIFICANT
<b>MINOR</b>	MODERATE	MODERATE	INSIGNIFICANT	INSIGNIFICANT	INSIGNIFICANT
<b>ENVIRONMENTAL OR EQUIPMENT DAMAGE</b>	MODERATE	INSIGNIFICANT	INSIGNIFICANT	INSIGNIFICANT	INSIGNIFICANT

## **RISK EVALUATION**

### **Risks and activities common to all High Sports Group operated climbing walls**

<b>RISK / ACTIVITY</b>	<b>WORST CASE</b>	<b>LIKELIHOOD</b>	<b>RISK</b>
Falling (1)	Fatal	Remote	Moderate
Equipment failure	Major	Remote	Insignificant
Incorrect use of equipment	Major	Remote	Insignificant
Deliberate miss-use	Minor	Remote	Insignificant
Stuck climber or refusal	Minor	Possible	Insignificant
Unattached at height	Fatal	Remote	Moderate
Access to climbing wall	Major	Remote	Insignificant
Climbing above safe level	Minor	Possible	Insignificant
Spinning/broken holds	Major	Possible	Moderate
Trip hazards & slippery surfaces	Minor	Possible	Insignificant
Electrical appliance risk	Major	Remote	Insignificant
Lifting heavy objects	Minor	Remote	Insignificant
Unsupervised experienced climbers	Major	Remote	Insignificant
Junior climbing	Major	Possible	Moderate
External instructors	Major	Remote	Insignificant
Novice climbers	Major	Possible	Moderate
High Sports instructed groups	Major	Remote	Insignificant
Abseil	Fatal	Remote	Moderate
Ice climbing training	Minor	Possible	Insignificant
Climbing wall maintenance	Major	Remote	Insignificant
Use of cleaning materials	Major	Remote	Insignificant
Unauthorised access	Major	Possible	Moderate
Traversing	Major	Possible	Moderate
Bouldering	Major	Possible	Moderate
Auto-Belay	Major	Possible	Moderate

### **Risks and activities specific to this location**

<b>RISK / ACTIVITY</b>	<b>WORST CASE</b>	<b>LIKELIHOOD</b>	<b>RISK</b>
Training Area	Minor	Possible	Moderate
Access to top of bouldering wall	Major	Remote	Insignificant
Access to high abseil ledge via cave-style feature	Fatal	Remote	Moderate

(1) This hazard does not apply to normal climber falls that are arrested in the correct manner by the belayer

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## **RELATED DOCUMENTS**

### **Incident Management (Emergency Action Plan)**

Reference document:

*Incident Management – Safety and Maintenance*

### **Conditions of Use and Code of Practice**

Reference documents:

*Conditions of Use – Products, Activities and Conditions*

*Code of Practice – Products, Activities and Conditions*

*Bouldering Code of Practice – Products, Activities and Conditions*

*Bouldering Conditions of Use - Products, Activities and Conditions*

### **Maintenance and Equipment Inspection**

Reference documents:

*LOLER Policy – Policies & Procedures – Safety and Maintenance*

*Risk Assessment – Route Setting – Safety and Maintenance*

### **COSHH Assessments**

Reference document:

*Benky Gripwash COSHH Assessment – Safety and Maintenance*

### **Unauthorised Access Policy**

Reference document:

*Unauthorised Climbing Wall Access – Policies & Procedures – Safety & Maintenance*

### **Instructor Training**

Reference documents:

*Instructing Standards V2.3 [SD017] – Staff Training – Instructor Resources*

*High Sports Instructor Induction Syllabus – Staff Training – Syllabus'*

*Instructor Development Pathway – Staff Training – Instructor Resources*

*Boulder Induction – Onsite Activities – Uninstructed Climbing*

*Safety Test – Safety and Maintenance*