

Artificial Climbing Structures

Adventure Activity Standards (AAS)

For
**Organisations, Guides and Leaders
Conducting Adventurous Activities for Participants
(Commercial or Non-Commercial)**



- Written by the Outdoor Recreation Centre Inc.
- Endorsed by Victoria's Outdoor Recreation and Adventure Tourism Sectors
- Supported by Victorian State Government



ADVENTURE ACTIVITY STANDARDS

Artificial Climbing Structures

Edition 2 – April 2005



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- The Rock Adventure Centre



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- Indoor Rock Climbing Gyms of Australia (IRGOA)



- Cliff-hanger Climbing Gym

- Victorian Climbing Centre

- Victoria Ranges Indoor Rock Climbing Centre

- Victorian Work Cover Authority



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The AAS will not cover each and every circumstance of an adventure activity. Nor can they, when adhered to, entirely eliminate the risk or possibility of loss or injury. Consequently they should be used as a guide only. Whenever using the information contained in this publication or any AAS, all adventure activity providers should carefully evaluate the specific requirements of the intended adventure activity and the persons participating in it. If necessary advice should be obtained from a suitably experienced and qualified professional person.

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ADVENTURE ACTIVITY STANDARDS - WHY HAVE STANDARDS?

AAS are voluntary guidelines for undertaking potentially risky activities in a manner designed to promote:

1. **Safety** for both participants and providers,
2. **Protection** for providers against legal liability claims and criminal penalties, and
3. **Assistance** in obtaining insurance cover.

These AAS are **NOT** statutory standards imposed by law.

BASIS OF LEGAL LIABILITY

Legal liability for personal injuries or property damage is primarily governed by the law of:

1. **Contract**; and
2. **Negligence**.

Although provisions of statutes such as the *Trade Practices Act* (Cth) and the *Fair Trading Act* (Vic) are also relevant.

CLAIMS IN CONTRACT

For there to be a claim in contract there must be a legally enforceable agreement (i.e. a contract) between the person who has suffered injury or loss and the provider against whom the claim is being made. For example, there is a contract between a provider and a client, where the provider agrees to provide services for payment. The contract can be in writing or oral, or both. The claim in contract can only be made by one party to the contract against the other party, unlike a claim in negligence, which is not so limited.

Apart from the express terms of the contract, the law will usually imply certain terms into a contract that require a service provider to do a number of things when providing that service. Those implied terms might include a requirement to provide competent guides and instruction, safe equipment, and a general requirement to exercise the degree of reasonable skill and care which is to be expected of a competent provider. Some of these terms will be implied by sections of the *Trade Practices Act 1974* (Cth) and the *Fair Trading Act 1999* (Vic).

If injury or damage occurs because the provider did not exercise reasonable care in the provision of the service a court will find there was a breach of the contract entitling a party to claim compensation (damages) for the loss or injury suffered.

CLAIMS IN NEGLIGENCE

Over recent years the Law of Negligence has undergone substantial legislative change in Victoria. These changes are set out in the *Wrongs Act 1958* (Vic) (as amended).

The essential elements of a claim in negligence are:

1. a duty of care being owed by the provider to take reasonable measures for the safety of their clients / participants;
2. a breach of this duty of care, and
3. the breach of the duty of care being a **cause** of the harm suffered by the participant.

A successful claim in negligence against a provider will result in an award of damages against that provider to compensate for the loss or injury thereby suffered.

Although the law does not automatically impose a duty of care, it is likely such a duty will be imposed when one party (the provider) assumes responsibility for another in the provision of adventure activities.

The duty of care is a legal requirement imposed by the courts on a provider to take reasonable care to protect a client or participant from foreseeable harm or loss.

If a claim is made and a court finds that a duty of care is owed, the court must then decide what is the appropriate level or standard of that duty of care, to determine if the provider has acted reasonably or alternatively has breached the duty of care. The standard of care is determined by all the relevant circumstances and the particular facts of each case. A court will have regard to the experience of the providers and the clients, the conditions at the time, and ultimately may seek the guidance from experts in the field. A court will find that the standard of care has not been met, (i.e. there has been a breach of the duty of care) if the evidence, **on the balance of probabilities**, establishes that the provider has not acted reasonably in the circumstances. If that conduct has caused loss and damage the provider will be liable to pay damages to compensate the party who has been injured or has suffered a loss.

For example, in an outdoor recreation activity some participants could find themselves in a situation suited to more advanced participants. There may be persons in the group who have been lead to believe by the provider that a certain skill level was not required and enrolled to join a group mis-described as being for “beginners”.

If, an accident occurred due to their inexperience, and these “novice” participants were injured, it is possible that a legal action to recover damages might be based as follows:

- in the law of contract, against the provider, if it can be demonstrated that the provider incorrectly described the group as being for “beginners”; and
- in the law of negligence, against the leader and guide, as well as the provider because of a failure to adequately instruct, advise and perhaps supervise the group.

The duty of care of the provider is higher than that placed on the ordinary citizen because the provider has agreed to provide services for a reward or assumed a responsibility of care for others e.g. by holding him/herself out as experts or specialists who have agreed to take participants into potentially dangerous or remote situations.

Whilst not an exclusive list the following is a guide to the standards that must be met by an provider, guide, instructor, teacher or staff member:

- ensure the activity is appropriate for the skills and experience of the intended participants;
- ensure the intended activity is appropriate given the known, expected and forecasted conditions;
- provide adequate staff/leader supervision;
- provide competent and appropriately trained staff/leaders;
- provide safe and properly functioning and adjusted equipment;
- provide reasonable food and safe shelter (if relevant to the activity);
- provide reasonable guidance, instruction and direction to participants; and
- depending on the activity, have an adequate knowledge of the area in which it is to take place and be able to provide reasonable first aid, emergency backup and rescue.

The law will require the provider to protect participants from known hazards, but also from those risks that could arise (that is, those that the provider, instructor, teacher or staff member guide should reasonably have foreseen) against which reasonable preventative measures could be taken.

In these circumstances, in order to limit potential for legal liability and to minimize the risk of injury, each organisation needs to implement risk and safety management processes, which have identified foreseeable risks and put in place measures to control such hazards. For the same reasons, all providers, leaders or guides ought, as a minimum, to have completed appropriate first aid and activity specific training.

This is particularly so where the activity is a specialised one. In these circumstances, as a participant will be seen as relying on the expertise of the provider, leader or guide, a high duty of care will be imposed because they will be considered as having a responsibility for the control, guidance and protection of the participant.

All of the elements of any claim must be proved by the claimant **on the balance of probabilities**. (i.e. more probable than not.)

DEFENCES AGAINST CLAIMS BY PARTICIPANTS

Establish No Negligence

The most obvious defence to a claim in negligence is for the operator to establish that he / she acted with all reasonable care in the circumstances – that is, was not negligent.

In attempting to do so the following questions must be considered:

- was the risk of harm foreseeable?
- was the risk not insignificant? and
- would a reasonable operator have taken additional precautions that would have prevented the harm?

In determining whether a reasonable operator would have taken additional precautions a court will consider the following (amongst other relevant things):

- the probability that harm would occur if care were not taken;
- the likely seriousness of the harm;
- the burden of taking precautions to avoid the risk of harm, and
- the social utility of the activity that creates the risk of harm.

Voluntary Assumption of Risk

If it can be proved, on the balance of probabilities, that a participant was fully aware of and freely accepted the risk of suffering injury in an activity then this will be a defence to a claim in negligence. It will not be a defence, however, if the injury was caused by the inexperience or incompetence of the provider, defective equipment, inadequate supervision or instruction as it is highly unlikely that any participant would have consented to accept such risks.

If the risk of harm was an obvious one then there is a rebuttable presumption that the person who suffered the harm was aware of the risk.

Duty to Warn

A person who owes a duty of care to another person to give a warning, or other information in respect of a risk, satisfies that duty if reasonable care is taken to give that warning, or other information. This is potentially very important in the context of an Adventure Activity where it may be prudent for the provider to give all participants printed instructions and warnings (where appropriate) and obtain signed acknowledgements.

Contributory Negligence

If the accident was caused or contributed to by lack of reasonable care on the part of the participant then this will be a partial defence, according to the apportionment of responsibility made by the court between the provider and the participant. In cases of extreme acts of negligence by the participant, contributory negligence can be very high (e.g. 80 / 90%) and sometimes a complete defence.

Inherent Risks

A person is not liable in negligence for harm suffered by another person as a result of an inherent risk. An inherent risk is a risk of something occurring that cannot be avoided by the exercise of reasonable care.

Waiver to Sue / Exclusion of Liability Agreements

Amendments to the *Trade Practices Act 1974* (Cth) and the *Fair Trading Act 1999* (Vic) now enable the suppliers of “recreational services” to limit their legal liability to their customers, who are 18 years of age or over for death or personal injury. This is done by having a written Waiver to Sue signed by each customer prior to the supply of the services. A Waiver to Sue is a legally enforceable contract not to sue the supplier of recreational services should the customer be

injured or killed by the provision of the service. The Waivers must be carefully drafted and, in Victoria, must comply with the wording set out in the *Fair Trading Act*. The use of a signed Waiver to Sue under this Act enables suppliers of recreational services to exclude their liability for negligence and to limit their liability to injury or death suffered by a customer caused by **reckless conduct** described in the *Fair Trading Act* as **“Gross Negligence.”**

To qualify for this legislative protection the service provided must come within the meaning of “recreational services” as defined in the *Trade Practices Act* and the *Fair Trading Act*.

Pursuant to these Acts “recreational services” mean services that consist of participation in: -

- (a) sporting activity or a similar leisure - time pursuit, or
- (b) any other activity that involves a significant degree of physical exertion or physical risk and is undertaken for the purposes of recreation, enjoyment or leisure.

GOOD SAMARITANS, VOLUNTEERS, APOLOGIES

Good Samaritans

Under the *Wrongs Act 1958 (Vic)* (as amended) an individual who provides assistance, advice or care to another person in an emergency or accident, where there is no expectation of payment by money or other means, will not be able to be sued for any injury or harm he / she causes.

Volunteers

Volunteers are also protected by this Act from liability for injury to another when they are providing a community service within the scope of the work provided by their community organisation.

Apologies

This Act also provides that a person by saying that they are “Sorry” or apologising for causing injury or harm to another does not constitute an admission of liability **provided it does not** include a clear acknowledgement of fault. Likewise, a reduction or waiver of fees payable for a service is not an admission of fault or liability.

LIMITATION ON CLAIMS FOR PERSONAL INJURY DAMAGES

The *Wrongs Act* provides that an injured person cannot obtain damages for pain and suffering unless they suffer permanent whole person physical impairment of greater than 5%. If the injury is psychological / psychiatric the impairment must be greater than 10%.



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This Act also imposes a cap on damages for pain and suffering of a maximum of \$371,380-00 (indexed annually) together with other limitations on claims for both past and future economic loss.

APPLYING THE ADVENTURE ACTIVITY STANDARDS

Having suitable risk management programs and strategies in place, and ensuring the AAS are met, will minimise the likelihood of injury or loss. However, evidence of compliance with such programs and the AAS will also assist in the legal defence of claims and in proving that a provider and its leaders have acted reasonably in the circumstances (i.e. were not negligent). It is also likely such programs will assist providers in obtaining more favourable insurance arrangements.

DISCLAIMER

The above comments on legal liability in Contract and Negligence and defences and limitations thereto, including recent legislative changes, do not purport to be a complete and accurate description of the law on these topics. Outdoor Recreation Centre Inc., its servants and agents are not by these comments providing legal advice to any person, company or organisation and make no warranties with respect thereto and to the maximum extent permitted by law disclaim all liability and responsibility for any direct or indirect loss, damage or liability which may be suffered or incurred by any person, company or organisation as a consequence of or in reliance upon anything contained in, implied by, or admitted in this document.



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BOULDERING

Bouldering may take place on natural rock and/or artificial structures. It involves rock climbing within 2 meters of the ground where adequate safety can be implemented by 'spotting' rather than requiring additional systems of harness, belay, ropes etc.

Bouldering serves many purposes including warming up, introduction to climbing techniques and advanced skills training. The following are brief bouldering activity standards and are intended to be interpreted in conjunction with the following AAS for ACS.

Location

1. Areas with potentially hazardous ground areas (impact zones) must not be used for bouldering activities involving groups of dependant participants. **(See 1.4.2 below)**

Procedure

1. The emergency strategy for bouldering activities must be consistent with that of the relevant climbing standards (Natural surfaces and /or ACS)
2. Bouldering must not be conducted above 2 meters from the ground unless significant additional measures are undertaken to control a fall.
3. Constant supervision by a competent person must be provided with participants in constant visual contact at all times.
4. The ground surface must be considered adequate to minimise injury resulting from a fall and must have a uniform surface with no gaps. (I.e. foam blocks, mattresses, and/or gymnasium pads with a single tarpaulin cover ensuring no spaces and spotting is strongly recommended)
5. Where 4. is not possible, participants must be 'spotted' and appropriate spotting techniques must be demonstrated and practiced before participation.

ACTIVITY DESCRIPTION

AAS for Artificial Climbing Structures (ACS) are written specifically for the construction and use of any artificial climbing structures. AAS describe the aspects relating to the safety of both group and individual participants and differ significantly from the Rock Climbing AAS because the controlled environment of an ACS (constant conditions, emergency access, lack of remoteness) significantly alters the inherent risks.



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1 PLANNING

The planning section of the activity standards contains the documented administrative aspects of AAS. It is here you will find the requirements that must be completed before undertaking any activity plan and in the case of ACS, before using the structure.

1.1 DESIGN AND CONSTRUCTION

The design and construction of an ACS are essential to both the enjoyment and the safety of the experience offered. A major advantage of an ACS as a climbing environment is the relatively safe and constant environment. Before using an ACS ensure that the design and construction have been tested in accordance with EN12572: 1998 Artificial Climbing Structures – Protection points, stability requirements and test methods or equivalent.

Existing structures should comply with the intent of the above standard, i.e. the installation should take the required loadings for the intended purpose as an ACS.

1.2 TOP ROPE ATTACHMENT

As with the design and construction of the ACS, it is essential that the attachment systems are specifically designed and tested to sustain the required loadings. The top rope attachment may be on the wall, roof or other structure but must be tested to EN12572:1998 (as above) and must be designed in such a way that the intended attachment/anchor is obvious (no confusion with wall fittings, fire extinguishers or other pipes) and that it is not possible to attach the rope inadvertently in a manner which it would be incapable of sustaining the required loadings.

1.3 ENGINEERS CERTIFICATION

Certification of the ACS design and construction, top rope attachment and anchors (where relevant) must be in accordance with EN 12572:1998 This certification should be supplied by the engineer carrying out the assessment and the following specifics must be included:

- For all anchors assessed, a list identifying all individual components in place at time of testing.
- Where the ACS is attached to a building or additional structure, certification must also be included to state that the additional building structure is sound and has the structural integrity to take the loading from the ACS.
- A certified engineer must provide all certification.

1.4 FLOORING/ENERGY ABSORPTION

1.4.1 Flooring for designated climbing areas

Much discussion has taken place regarding the specific benefits of energy absorbent flooring for a climbing area. The objectives of absorbent flooring are to minimise the likelihood and severity of injuries resulting from:

- A climber being lowered too rapidly by the belayer.
- An uncontrolled climber decent from a low level (start of a climb) where the belayer has not adjusted the slack appropriately.

Flooring for the potential impact zone of any designated climbing areas (at least 2 meters from the wall, overhang, roof anchor, climbing rope, or climbing ladder where provided) must be covered by suitable energy absorbent flooring (this should be in accordance with Australian Standard AS/NZS 4422:1996 Playground surfacing – specifications, requirements and test method).

In circumstances where it is reasonably impractical for absorbent flooring (overhangs, restricted space, infrequently used outdoor locations) then extra consideration must be given as a result of a specific risk assessment for that area. Options may include but will not be limited to enhanced supervision, friction pulleys and climber/belayer competency assessments.

1.4.2 Flooring for designated bouldering areas

Areas designated as bouldering areas (permanent or temporary) must have appropriate matting for the height and complexity of the specific area being used. The surface must be considered adequate to minimise injury resulting from a fall and must have a uniform surface with no gaps. (i.e. foam blocks, mattresses, and/or gymnasium pads with a single tarpaulin cover ensuring no spaces)

1.5 RESTRICTIONS TO PARTICIPATION

Individual restrictions to participation on an ACS should apply to participants deemed to be under the influence of alcohol or drugs, including prescription drugs which may affect performance and to participants who are unable or unwilling to follow instructions.

1.6 DOCUMENTATION

Documentation deemed to be required for any use of an ACS include the following:

- Emergency Strategy
See 2.2, this should be documented to facilitate consistency, ease of access and efficient response speed.
- Health Forms
Health forms record awareness of any conditions which may affect a participants performance.

- Acknowledgement of risk
To be signed by every participant, parent or guardian following a clear full brief. (see 2.5)
- It is also recommended that signatures be acquired to acknowledge that the correct belaying procedures have been instructed and understood by participants.

2 RESPONSIBILITY OF THE SUPERVISOR

This section includes all aspects of the activity that involve supervision. This section covers the basic requirements and specific competency required of supervisors/staff at an ACS.

2.1 COMPETENCIES

In the absence of any established and recognised national training qualification for all ACS activity providers, any supervision, leadership must be provided by a person or persons having satisfied a process of skill acquisition which must be at least equivalent to that described by the following selected units from the Australian National Training Authority (ANTA).

A statement of attainment for these units is not compulsory. However the inclusion of this section is intended to provide a suitable benchmark describing the skills that a leader should have as described within the National Outdoor Recreation Industry Training Package.

GENERIC		
These units relate to generic competency (soft skills) expected of any individual in a position of Leadership or Management in the outdoors.	Leadership & Management Skills Respond to emergency situations Provide First Aid Facilitate a group Deal with conflict Undertake risk analysis of activities Apply sport and recreation law Follow defined Occupational Health and Safety policy and procedures	Code SRXEMR001A SRXFAD001A SRXGRO001A SRXGRO002A SRXRIK001A SRXINU002A SRXOHS001B
	Outdoor Recreation Skills Plan outdoor recreation activities Guide outdoor recreation sessions Plan for minimal environmental impact	SROODR002A SROODR005A SROOPS002B
ACS - GUIDES		
These units relate to climbing specific competency (hard skills), Vertical Rescue and abseiling are among the pre-requisite units and integrated assessment within these units.	Apply climbing skills on artificial surfaces Establish belays for climbing on artificial surfaces Guide climbing activities on artificial surfaces	Code SROCLA002A SROCLA003A SROCLA008A

Details of these units can be accessed free by logging on to the Australian National Training Authority (ANTA), National Training Information Service website at www.ntis.gov.au.

The following will enable you to locate the unit you are interested in viewing.

- 1/ On the opening page select 'Training Packages',
- 2/ On the Training Packages Page: Insert SRO03 (03 as in the year 2003) to the box requesting "Training Package CODE" and search.
- 3/ Select "Outdoor Recreation Industry"
- 4/ On the left of the new page select "Units of Competency"
- 5/ The page which opens will have a complete listing of unit codes and unit titles. Find (easiest by unit code) and select the unit you wish to view. Each unit has key aspects of the unit (elements), details for each aspect (Performance criteria) and other information relevant to the assessment of the unit by a recognised training organization (RTO) such as the "Range of Variables" and "Evidence Guide".

*(Please note that some units contain pre and co requisite units which are displayed in "2. Interdependent assessment of units" in the **Evidence Guide**. **The contents of these are an essential component of the unit for which they are pre/co-requisites.**)*

The above units are components of national training courses that encompass the specification of knowledge areas and skills relevant to the outdoor recreation industry and the application of that knowledge and skill to a standard of performance required in the workplace.

2.2 FIRST AID AND EMERGENCY STRATEGY

Everyone in a role of supervising climbing at an ACS must have a current level 2 first aid certificate or equivalent.

Supervisors, staff or guides at an ACS must have easy access to a first aid 'kit A' or 'kit B' which should be maintained correctly.

Use of an ACS must only be initiated once a thorough emergency strategy has been drafted which must include but is not limited to

- Procedures for dealing with any reasonably foreseeable emergencies such as those requiring emergency evacuation (fire, bomb threat).
- Procedures for dealing with any reasonably foreseeable activity related emergencies (Injury, rescue, medical complications).

All supervising personnel (supervisor, staff, guide) must be adequately trained in these procedures.



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2.3 SPECIFIC RESPONSIBILITIES OF THE SUPERVISOR

The following are the responsibilities of a supervisor. Individual tasks may be delegated but the responsibility remains with the supervisor.

Whenever participants are using an ACS, it is the supervisors' responsibility to ensure that the level of knowledge, ability, skill and equipment of each participant is appropriate for the level of difficulty and complexity of the climbing routes used and to receive acknowledgement from all participants that he/she (as the supervisor) is responsible for the activity.

- Confirm group experience/capabilities.
- Ensure all attendees/participants receive and understand a full clear brief.(See 2.5)
- Ensure that all equipment is used correctly at all times.
- Maintain constant awareness of the physical and psychological condition of the participants.
- Control the pace of the participants and rest if necessary.
- Maintain constant surveillance/observation of participants to ensure, to the best of your ability, that all participants avoid situations beyond their known capabilities.
- Appropriately designate responsibility to support staff/participants.
- Check all equipment on return.
- Ensure that any incidents are reported.

2.4 ASSISTANT TO THE SUPERVISOR

All designated assistants to the supervisor (climbing gym staff, leaders, guides, participants) must be provided with appropriate induction training and more specific training and assessment in relation to the required competencies for the role they undertake. (Climber supervision, equipment inspection and maintenance, climber/belayer instruction)

2.5 COMMUNICATION AND AUTHORITY

As for all activities involving formal participation, all participants, guides and supervisors must use an agreed and understood system of communication. It is essential that this system be devised before the activity and agreed as a component of the pre activity briefing.

Every communication system requires a clear full briefing. This may be delivered differently according to organisational preference and, where relevant, the length and complexity of an activity but must include and is not limited to each and every element of the following.

- Introduction of supervision (staff, guide) and explanation of respective authority.
- Introduction of the climbing area to be used (and not to be used where relevant).
- Explain routes or specific areas (route, bouldering area, novice, expert).
- The nature of the activity, inherent risks, emergency strategy, group conduct.
- Equipment use and fit.

- Climbing procedures.
- Explanation of communication requirements.

2.6 SUPERVISION RATIOS

Obvious variables will affect the supervision ratios. These include the nature of the ACS (indoor climbing gym, indoor climbing wall, outdoor climbing wall, use of friction pulleys, type and extent of absorbent flooring) and the participants (individuals, groups, a mix of these and experience, competence, fitness of each participant). There are clearly situations where your judgement will dictate a requirement that there be a smaller numbers of participants per supervisor.

Essential considerations for allocating appropriate supervision include but will not be limited to:

- Sufficient to detect and correct the use of improper procedures.
- Layout of the facility and number of belay stations available.
- Number of participants.
- Ability and experience of participants.
- Age of participants.
- Requirements of participants (disabilities).
- Experience of supervisors.
- Nature of activity (climbing as groups, climbing as individuals, bouldering).
- Sufficient staff should be available to ensure continuous line of sight supervision.
- Only the number of participants that can be adequately supervised should be permitted to use the ACS at any time and spectators must view participants from a location deemed safe and must not interfere with the activity.

3 EQUIPMENT

Equipment requirements vary with the objectives of the activity and the environmental conditions likely to be endured. When planning equipment requirements for an ACS activity it is important to plan ahead as much as possible for all eventualities taking into account the appropriate information and forecast conditions where relevant.

3.1 CLIMBER ATTACHMENT METHOD

There are several recognised options available for climber attachment on an ACS. The nature of the activity allows for individual preference and provided care is taken to instruct and assess participants, guides, supervisors and assistants it is not the place of AAS to 'dictate' specific details as long as the method of attachment at least complies with harness manufacturers instructions.



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It is however, essential that the method used to attach the climbing harness to the belay rope must not rely on a single screw gate karabiner. It must be a recognised climbing attachment (Documented in training manuals) and it is recommended that it include a back-up connection.

The recommended method is 'clip & tie' utilising both screwgate karabiner and rethreaded figure of eight.

3.2 BELAY SYSTEMS AND CONNECTIONS

Belay systems and connections are essential to the safe use of an ACS. It is important that the components of these systems and connections are clearly visible from the ground and these should be numbered, colour coded or have each component tagged for identification important to maintenance, fault reporting and general condition checks.

Where ground anchors are used, they must be tested to satisfy European standard EN 12572:1998 Artificial Climbing Structures – Protection Points, stability requirements and test methods.

Participants acting as non-anchored belayers must undertake additional assessment and consideration must be given to relative weights (belayer, climber and equipment)

All equipment/components used in a belay system must be specifically designed for use in a belay system, must compliment the procedures and systems being used and must be consistent throughout the ACS.

3.3 EQUIPMENT USED FOR AN ACS

3.3.1 Belay Ropes

All climbing ropes used in top rope systems must be certified by the manufacturer as suitable for single rope belay purposes. Appropriate standards include EN 892 Dynamic mountaineering ropes and EN 1891 personal protective equipment for prevention of falls from a high – low stretch kernmantle ropes.

All climbing ropes in lead climbing systems should be certified by the manufacturer as suitable for this purpose. An appropriate standard is EN 892. Single, twin or half ropes may be used depending on the individual climbing facility's policy and procedures.

3.3.2 Karabiners

- Personal protection system: If used to connect the climber and belayer to the belay station, Karabiners must have a dual opening action (manual locking or automatic locking gate) and be certified for such use by the manufacturer.
- Lead climbing protection points: Karabiners for use at lead climbing protection points (on the lower ends of quickdraws) may be single opening action (spring-gate).
- Equipment to ACS interface: Any karabiner used to connect equipment to the ACS must be a dual action Karabiner, a semi permanent connection such as a tube nut connector (e.g.



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mation rapide) or locked shackle and must be certified by the manufacturer as suitable for supporting persons.

3.3.3 Harnesses

Only climbing harnesses which comply with European Standard EN 12277 Mountaineering equipment, harnesses, safety requirements and test methods, UIAA or equivalent should be used.

Harnesses must also be used, maintained and repaired according to manufacturers recommendations.

It is recommended that harnesses be used for a maximum of a five-year period. This is standard for harnesses as deterioration may not be visibly identifiable.

3.3.4 Equipment belonging to participants

Climbing centres, supervisors and guides should be aware that customer/participant supplied equipment may be stored and maintained differently to that of issued equipment. Consideration of this issue is essential.

Climbing centres, supervisors and guides may choose to;

- Visually inspect all customer/participant supplied equipment to ensure it is appropriate.
- Acquire a customer/participant signature stating that the equipment is appropriate.
- Implement a policy of no customer/participant equipment use.

All supervisors, guides and assistants must be fully aware of any policy relating to participant supplied equipment and must act appropriately.

3.4 EQUIPMENT CONDITION, MAINTENANCE AND STORAGE.

3.4.1 Equipment Log

If an incident is investigated, a certain query will be that of the equipment age, condition and use at the time. To enable such questions to be accurately and easily answered an equipment log should be kept for all equipment used on an ACS. This log should contain information sufficient to;

- Identify each piece of equipment.
- Track each piece of equipment (first used, inspection dates and results, any maintenance actions/repairs and when the item should be put out of service).

It is not important how this information is stored but it should be kept for an amount of time deemed reasonable by any relevant business record keeping requirements (A civil action can still be taken up to seven years after a claimant is injured).



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3.4.2 Equipment inspections

The frequency of inspection, maintenance and repair should be determined by manufacturers recommendations and your own risk assessment. These checks are likely to include daily, weekly, monthly or even more infrequent checks (every year or two for the ACS its self)

To track equipment with more ease, equipment should be easily identifiable (numbered) or isolated (permanently allocated to within one belay system)

Only a competent person can suitably inspect equipment and judgment should err on the safe side, if in doubt remove the item from service until more sound advice is obtained.

3.4.3 Equipment re certification

As already discussed, the ACS and the anchors must be assessed to certain standards. It is commonly accepted that these assessments be re assessed by an independent assessor to the same standards. The time lapse for re-assessment should vary upon the characteristics of the ACS and equipment. If the ACS is indoor and used infrequently then it may be reasonable that re-certification should be no more than 2 years, it may be reasonable for an outdoor ACS to be re assessed each year. Deciding on a reassessment strategy should be derived from a risk assessment and should consider;

- Frequency of use.
- Prevailing conditions.
- Deterioration/wear and tear.
- Years in service.

4 DEFINITION OF TERMS USED

Organisation - A group of persons organized for a particular purpose and assuming the role of providing a climbing activity on an ACS (Activity Provider) being commercial (for profit) or non-commercial (not for profit / community group).

Participant – A person whose welfare is the responsibility of a guide or trip leader or instructor. (NOLRS “Client”)

Guide, assistant, staff – A person who assumes the responsibility for a group of participants on an adventure activity “climbing” with the intention to offer the experience of the activity and to satisfy the objectives of the session. (Commercial or not)

Trip leader/supervisor – A senior guide who assumes the responsibility of the guide and co-ordinates the entire group “including supervision” to satisfy the objectives of the group session and/or individual participants session. (Commercial or not)



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5 FURTHER INFORMATION

The Outdoor Recreation Centre Victoria Inc. would like to acknowledge the following background reading included in the planning of this document.

1. The Victorian State Government existing standards, guidelines and codes of practice.
2. Ross Cloutier – “Legal Liability and Risk Management in Adventure Tourism”
3. NSW Work cover authority climbing gyms doc...
4. IRGOA Indoor climbing assessment
5. Australian Indoor Climbing Gym's Association NSW Inc. Code of ethics and practice.
6. Sport and Recreation Training Australia – “National Outdoor Recreation Industry Training Package”

The Outdoor Recreation Centre Victoria Inc would also like to extend sincere thanks to the members of the working party who invested their own time and expertise to represent their respective organisations in support of this document (details can be obtained from the Outdoor Recreation Centre Inc.)