

Portable Climbing Wall Standards Response

I. Program Site / Facility

M1 A climbing/rappelling facility on BSA property must be monitored or secured to prevent unauthorized use (disabled to a height of at least 12 feet or otherwise disabled). Warning signs must be posted at designated climbing/rappelling sites. Climbing and rappelling must be done with qualified supervision.

When not in use, the portable wall will be lowered and secured to prevent unauthorized use. All climbing will be done with the required climbing instructors.

M2 Climbing or rappelling at natural sites must be done on stable rock that is suitable for climbing and rappelling. Climbing and rappelling sites have been reviewed and approved by a climbing director. The climbing area has a designated place for onlookers that is outside the safety zone.

Portable wall to be cordoned off to prevent onlookers from interfering with the climbers or belayers. Portable wall will be lowered and secured when not in use.

M3 Constructed facilities must meet ACCT standards (Association for Challenge Course Technology, P.O. Box 47, Deerfield, IL 60015-0047; telephone 847-325-5860; fax 847-325-5864; Web site <http://www.ACCTinfo.org>; annual membership includes ACCT standards) installation standards for belay cables and terminations, ground anchors, guy cables, beams, and poles, as well as applicable state and local laws. Portable climbing/rappelling structures must be securely anchored and/or guyed, including mobile climbing facilities. Follow the manufacturer's recommendations for using portable and mobile facilities, including automatic belay systems. Climbing/rappelling surfaces must not have protruding hardware, such as screws.

Portable wall is only to be used with the outriggers fully extended and ballast in place (see "Portable Climbing Wall Set-Up & Tear-Down Procedures".)

4. If mobile climbing walls are used, the following items have been considered, implemented, and documented: applicable state and local regulations, replacement frequency for cables and equipment, the facility is used only for its intended purpose, the manufacturer's recommendations are followed, applicable climbing and COPE standards are followed, and the facility is inspected before and after each period of use. (This standard will become mandatory in 2008.)

See policy guidebook and operation manual. All applicable climbing standards are followed. The portable wall is to be inspected before and after each use using the "Structure Inspection Form".

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M5. Each climbing/rappelling structure, including bouldering walls, vertical walls, and towers, must be inspected by a structural engineer or a professional challenge course builder before initial use, within the last four years, and after any severe stress such as high winds or lightning. A written document is available that has been signed by the structural engineer or challenge course builder indicating that in his or her opinion the facility is structurally suitable for its intended purpose.

It is recommended that each climbing/rappelling structure be inspected by a structural engineer or a professional challenge course builder at least once every two years. This provision will become mandatory in 2009.

Portable wall was inspected and certified by I & S Engineers and Architects in April 2006. Copy of certification letter is available.

M6 The climbing/rappelling site is free of distractions from other program areas and from potential hazards such as dead snags, power lines, insects, vehicular traffic, and other identifiable hazards that could endanger climbers, belayers, rappellers, or onlookers. A well-planned trail system enables participants to walk safely to and from the climbing site.

See "Portable Climbing Wall Set-Up & Tear-Down Procedures" and "Portable Climbing Wall Usage & Operation Policy" for site requirements.

7 The climbing/rappelling site or facility has climbing routes that vary in difficulty to accommodate participants with different skill levels. See *Topping Out: A BSA Climbing/Rappelling Manual*, No. 32007.

Holds are installed to allow for climbers of all skill levels.

8 A written policy is in place to protect a natural site from environmental degradation. Participants are knowledgeable in the principles of Leave No Trace where they are applicable to climbing/rappelling sites.

N/A. Wall to be used only on flat, level surfaces with vehicle access.

II. Program Administration

M9 A BSA-trained climbing director or a BSA-trained instructor who is at least 21 years of age (lead instructor), or a trained bouldering facilitator must supervise the climbing/rappelling or bouldering site, respectively. A climbing director need not be present during climbing or rappelling activities, provided that an instructor who is at least 21 years of age (lead instructor) is present at the site. Each BSA climbing director and instructor has evidence of active instruction in climbing/rappelling at least once within the past six months or the last camping season. See *Topping Out: A BSA Climbing/Rappelling Manual*, No. 32007..

Climbing director or lead instructor: Keith Fitzpatrick.

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Date of certificate of training: _____ Age: _____

Each BSA local council that operates a climbing program must have a currently trained climbing director to give overall supervision to the council's climbing program.

Compliant. See above information.

M10 A minimum of two climbing directors or instructors or bouldering facilitators must supervise any climbing/rappelling activity and be present during construction, operation, and dismantling of portable structures. Each climbing director or instructor supervises no more than six participants, including adult leaders, in climbing or rappelling. The instructors must never leave participants unattended.

Two climbing instructors to be present each time the portable wall is used for council or district activities. Only two climbers will be active on the wall at a time.

M11 Natural sites for climbing/rappelling on BSA property or used for council programs must be inspected twice a year by a climbing director.

N/A

M12 Close calls (incidents that do not result in injury, but which reveal a potential safety problem), accidents, or injuries that occur during climbing/rappelling activities must be documented by the staff and periodically reviewed by the climbing director, program director, camp director, climbing committee, and council health and safety and/or risk management committee.

Close calls, accidents, and injuries will be documented on the "Event Log & Use Report". Accidents and injuries will be documented in the first aid log. All logs will be reviewed at least annually.

M13 A site-specific written maintenance checklist is used for all biannual (twice a year) inspections of facilities and equipment. A copy of this checklist should be kept with the climbing/rappelling records, the ranger's records, and the council's records.

All equipment to be inspected prior to each use and documented.

14 When possible, the program is made available to young people with disabilities. These participants are accompanied by adult leaders who are sensitive to the needs of youths with disabilities and familiar with the conditions and ability of the particular individuals. There is an appropriate ratio of instructors to participants with disabilities. See the appendix of *Topping Out: A BSA Climbing/Rappelling Manual*, No. 32007.

The portable wall is equally available to disabled youth.

15 An opportunity is provided for adult leaders to receive training in Climb On Safely.

Available at Cuyuna each week while camp is in session.

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M16 Other organizations or groups are permitted to use the camp climbing/rappelling site or facility only with a hold-harmless agreement, facility use agreement, and certificate of liability insurance in the amount of \$1 million. When the council operates the program, camp climbing equipment or approved personal equipment must be used. When an outside organization operates the program, it must provide its own equipment and instructors.

The portable climbing wall is not to be used by outside organizations per the "Portable Climbing Wall Usage & Operation Policy."

III. Staff Qualifications and Training

M17 The climbing director must be at least 21 years of age, must be a currently registered member of the Boy Scouts of America, and must have successfully completed the Climbing section of BSA National Camping School within the last five camping seasons. Evidence of continuing, active instruction in climbing/ rappelling at least once in the past year is available to the inspector. A Project COPE director may supervise a climbing tower.

Director: Keith Fitzpatrick.

Date of certificate of training: _____ Age: _____

Compliant.

M18 Climbing instructors are at least 18 years of age, are currently registered members of the Boy Scouts of America, and hold a current certificate (within two years) of training as a BSA climbing instructor. A written instructor training plan, approved by the climbing director, has been developed.

Instructor: _____

Date of certificate of training: _____ Age: _____

A written instructor training plan is available. See the "Portable Climbing Wall Training Syllabus" document. At this time training is only available for Scouters with previous climbing experience and who pass a proficiency exam in inspection and belaying techniques.

M19 All climbing instructors-in-training (IITs) must be at least 16 years of age, be currently registered members of the BSA, and have received training in climbing, rappelling, belaying, and spotting by a climbing director or instructor. When IITs assist participants, they must have been trained and be supervised by a climbing director or instructor at the site where they are being used. A climbing instructor may also train and supervise climbing IITs.

Compliant.

M20 A staff member who supervises and facilitates bouldering facilities must be a climbing director or lead instructor or an adult bouldering facilitator (at least 21 years of age) who has been trained by a climbing director or lead instructor. Participants' feet must never be higher

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above ground than their shoulder height, and participants must not be allowed to climb over the bouldering facility. The type and length of training and the number of supervising staff is determined by the climbing director or lead instructor. Bouldering sites must have an appropriate shock-absorbing ground surface (see state or local playground regulations) and/or participants are to be properly spotted. See Topping Out, No. 32007.

Not applicable.

M21 At least one climbing staff member or one or more persons at the climbing / rappelling site must be currently trained in American Red Cross Standard First Aid (a 6½ hour course that includes CPR), or Level I National Safety Council First Aid, or the equivalent from another nationally or regionally recognized organization, and must be physically present in the immediate area whenever climbing or rappelling is done. In addition, if climbing/rappelling is done outside of resident camp, Wilderness First Aid Basic (a 16-hour course) or The American Red Cross Emergency Response (a 4312-hour course) is recommended.

CPR-trained staff member: _____

Date of training: _____

First aid-trained staff member: _____

Date of training: _____

At least one climbing instructor will be CPR & First Aid trained when the wall is in use.

IV. Anchors

M22 All anchors must be fail-proof or backed up and the load distributed.

Portable wall uses 5,000 lb load tested fixed steel rings as top anchor points.

M23 Bolts must be a minimum of 3/8-inch steel and suitable for climbing. UIAA-approved (International Union of Alpinists Association) or CE-approved (Community European Norm) hangers must be installed. The length of bolts is appropriate for the type of rock; 2½ inches is the minimum. Pitons are never used in BSA climbing.

Compliant. No rock bolts are used in the portable climbing wall. All anchor bolts are 3/8" diameter or larger.

M24 Well-rooted, healthy trees or other living anchors may be used as anchor points in an anchor system. Trees must be at least 6 inches in diameter at the point of attachment. If used, a living anchor must be protected from damage.

N/A. No living anchors will be used on the portable climbing wall.

M25 Anchor systems must have a strength of at least 22.2 kiloNewtons (5,000 pounds). (Webbing may be doubled to meet this standard.) Each belay anchor is placed to provide the

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most effective protection for both the climber and the belayer. The belayer's position allows for no slack between the belayer and the anchor point and is kept in direct line with a potential fall.

Portable wall uses 5,000 lb load tested fixed steel rings as top anchor points. A fixed belay anchor bar to be used with the tow vehicle and receiver hitch is available for use outdoors. See setup instructions for details.

Indoor use will require a 50% belayer weight advantage over the climber to ensure safe belaying OR a backup "stump" will be attached to the belayer using a piece of webbing or PAS webbing tied or clipped via carabiner between the belayer and stump harnesses.

M26 A written record is available indicating that anchor bolts and hangers on council property have been installed by a qualified individual who has training and/or experience in installing climbing bolts, and have been checked at least twice annually by the climbing director.

N/A. No anchor bolts or hangers for top-roping anchoring will be used.

V. Program Equipment

M27 A UIAA- or CE-approved climbing helmet or a helmet that meets ASTM standards must be worn during all BSA climbing/rappelling activities where the participants' feet are more than their shoulder height above ground level. Each individual in the safety zone of a climbing or rappelling site also must also wear an approved rock-climbing helmet, and each rappeller must wear appropriate gloves. See *Topping Out*, No. 32007.

All climbing helmets must be retired according to the manufacturer's recommendations or sooner if conditions warrant it.

All equipment meets all current industry standards. Usage is documented with each use.

M28 All cordage used for climbing (climbing ropes, accessory cord, and webbing) must be designed for climbing and used according to the manufacturer's recommendations. All dynamic climbing ropes must be UIAA- or CE-approved. All static ropes used for rappelling must have a tensile strength (breaking strength) rating of at least 22.2 kiloNewtons (5,000 pounds) when new. A diameter of 7/16 inch or 11 millimeters is recommended for static rappelling ropes; every climbing rope must have a minimum diameter of 10.5 millimeters. All ropes and nylon webbing must be new when procured. Use of three-strand rope is prohibited. Webbing must be designed for climbing and must have a minimum breaking strength of 15.6 kiloNewtons (3,500 pounds) when new.

All equipment meets all current industry standards. Usage is documented with each use.

M29 A written log of the history of each rope used in the program must be kept, indicating: (1) the date the rope was purchased, (2) the number and type of participant uses and any unusual impacts, and (3) any environmental or severe stresses that were placed on the rope. Each rope must be uniquely marked and permanently identified. All webbing must be marked with the date of purchase. All cordage (climbing ropes, accessory cord, and webbing) must be retired according to the manufacturer's recommendations, but no more than five years from the date of

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purchase or sooner if conditions warrant. See *Topping Out*, No. 32007. It is recommended that the same rope always be used for the same application to learn what its life span is.

All equipment meets all current industry standards. Usage is documented with each use.

M30 All items of specialized equipment (carabiners, helmets, belay and rappel devices, webbing, rope, etc.) needed for conducting a safe program are available to the participants. Personal climbing/rappelling helmets, harnesses, and shoes must meet climbing equipment standards and be inspected and approved by the onsite director or lead instructor before use. Personal climbing/rappelling ropes, hardware, and webbing are not allowed.

All equipment meets all current industry standards. Usage is documented with each use. Personal ropes, hardware, and webbing are not to be used.

M31 A properly sized commercial climbing harness or a tied harness made from at least 1-inch-wide webbing is required on all belayed activities. In addition, a chest harness or full-body harness must be used for participants whose body shape could allow them to slip out of a seat harness if inverted. Harnesses must be carefully inspected before each use and retired when damaged or excessively worn. All climbing harnesses must be retired according to the manufacturer's recommendations or no more than seven years from the date of purchase, or sooner if conditions warrant it.

All equipment meets all current industry standards. Usage is documented with each use. Only commercial climbing harnesses will be used with the portable climbing wall.

M32 An appropriate, commercially produced belay device attached with a locking carabiner is used for belaying. An appropriate, commercially made rappel device attached with a locking carabiner is used for rappelling. Brake bars on carabiners are prohibited. If rappel or brake racks are used, the climbing director and instructors must have the knowledge and experience to use them in a safe manner.

All equipment meets all current industry standards. Usage is documented with each use.

M33 Equipment must be kept in locked, protective storage when not being used, away from exposure to heat, sunlight, chemicals, or destruction or contamination by animals.

All equipment to be stored in duffle bags, and securely stored in the lock box mounted on the trailer or stored off the trailer during climbing activities.

M34 Climbing directors and instructors regularly inspect climbing/rappelling equipment and are taught how to inspect equipment for defects that render equipment unsafe for usage. Retired equipment is disposed of in such a way that it cannot be retrieved.

All climbing equipment will be inspected and documented before and after each use.

M35 Written equipment records are kept that include a complete and current inventory; a record of date of purchase, issue and check-in; and a record of maintenance of facilities.

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All climbing equipment is fully documented.

VI. Participant Prerequisites

M36 Climbing/rappelling equipment and activities must be age appropriate and geared to the skill level of the participants. Age-appropriate equipment and instruction is provided. See the *Climb On Safely Training Outline*, No. 20-101A, or *Age-Appropriate Guidelines*, No. 18-260.

Climbing routes are available for all age and skill levels. Climbing harnesses are available for all ages.

M37 Personal objects that could lead to injuries are removed before participants or staff members engage in climbing/rappelling activities. Long hair must be tied up and/or tucked.

Included as part of the participant safety instruction as documented in the "Portable Climbing Wall Set-Up & Tear-Down Procedures."

M38 No one is ever coerced or pressured into attempting any activity. A participant may be encouraged to take the next small step, but the final choice of participation and performance is left entirely up to the individual.

Included as part of the participant safety instruction as documented in the "Portable Climbing Wall Set-Up & Tear-Down Procedures."

M39 Several warm-up activities are conducted at the beginning of each program session.

Included as part of the participant safety instruction as documented in the "Portable Climbing Wall Set-Up & Tear-Down Procedures."

M40 A site and safety orientation is conducted for participants by an instructor or director before the climbing/rappelling activity. A written checklist is used to ensure that all points are covered during the orientation.

Included as part of the participant safety instruction as documented in the "Portable Climbing Wall Set-Up & Tear-Down Procedures."

M41 The technique of safe spotting is explained, demonstrated, and practiced before participants are permitted to engage in any activity requiring that skill.

N/A. All climbing activities on the portable wall are to be conducted top-roped.

M42 The techniques of proper belaying and use of signals and equipment are explained, demonstrated, and practiced under safe conditions before participants are permitted to engage in climbing or rappelling.

Included as part of the participant safety instruction as documented in the "Portable Climbing Wall Set-Up & Tear-Down Procedures."

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M43 Participants are thoroughly trained in the proper use of specialized equipment such as a commercial or tied-seat harness, carabiners, belay and rappel devices, and climbing ropes before using them.

Included as part of the participant safety instruction as documented in the "Portable Climbing Wall Set-Up & Tear-Down Procedures."

VII. Program Safety Procedures

M44 The on-site climbing director or lead instructor or bouldering facilitator determines if the safety of a participant might be compromised by conditions, staffing, weather, or any other factor, and is empowered to open or close the climbing program.

Documented in the "Portable Climbing Wall Set-Up & Tear-Down Procedures."

M45 Written, site-specific rules and safety procedures are known and used by the climbing staff. See the *BSA Topping Out*, No. 32007.

Documented in the "Portable Climbing Wall Set-Up & Tear-Down Procedures."

M46 All climbing participants are top-roped. All rappelling participants are belayed. All participants rappelling on a single rope are belayed with an independent line.

All climbing activities on the portable wall are to be conducted top-roped.

M47 Participants must be belayed or anchored when climbing higher than shoulder height above the ground or in an elevated area where a fall could occur. Any time a belay is changed, procedures are in effect to ensure that a new belay or safety line is secured to the participant before a previous one is removed. Because of rope stretch, spotting must be in effect for climbers up to a height of 6 feet.

All climbing activities on the portable wall are to be conducted top-roped.

M48 Procedures are in effect to check and double-check participants' knots, carabiners, and harnesses before each use.

Documented in the "Portable Climbing Wall Set-Up & Tear-Down Procedures."

M49 Each participant is spotted with extreme care by a minimum of two spotters when bouldering. A boulderer's feet must go no higher than his or her shoulder height.

N/A. All climbing activities on the portable wall are to be conducted top-roped.

M50 Participants must be informed about the nature of the climbing experience and the physical exertion associated with it. See the appendix of *Topping Out*, No. 32007, for a suggested participant consent form. Participants must also comply with the BSA medical requirements and health screening process. For events less than 72 hours in duration, a Class I

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medical (health history) and a medical screening are required. The screener must be approved and coached in the medical screening process by a licensed health care practitioner.

The climbing director, lead instructor, or bouldering facilitator reviews the results of the screening, personally interviews participants, and privately shares pertinent medical information with instructors about each participant before the participant engages in climbing/rappelling or bouldering activities.

Documented in the "Portable Climbing Wall Set-Up & Tear-Down Procedures." Health forms to be completed by all participants.

M51 The climbing director and/or instructor, using a written checklist, must make a daily visual check of the facilities and equipment, including hardware, rope, and anchor points. Hazards identified during this inspection must be corrected before the activity is undertaken.

Documented in the "Portable Climbing Wall Set-Up & Tear-Down Procedures."

VIII. First Aid and Emergency Procedures

M52 Written, site-specific plans identifying possible emergencies, including rescues, and procedures for resolving them are reviewed with climbing staff members. Written, site-specific plans for emergency evacuations from climbing/rappelling sites are developed, and procedures are rehearsed annually by climbing staff members.

All climbing activities are conducted in urban areas where medical response is readily available. Extreme rescues to be conducted by simply lowering the wall to a horizontal position and removing the climber from ground level.

M53 A reliable means of electronic emergency communications is on-site during climbing/rappelling activities. In addition, a reliable backup emergency communications system is in place. This could be a runner if the distance to help or other more reliable method of communication is reasonable.

Climbing instructors to have cellular phones at their disposal.

M54 Medical supplies appropriate for likely climbing injuries must be available at the climbing site. Medical supplies must be accessible to staff members when climbing/rappelling takes place.

A first aid bag is stored in the trailer lock box.

M55 Equipment appropriate for rescue is available at the climbing/rappelling site when an activity is being conducted. It is used only for rescue and is color-coded or otherwise designated so that it can be distinguished from standard equipment used in the program. When used to belay two persons, a rescue rope must be rated for a two-person load.

N/A. Extreme rescues to be conducted by simply lowering the wall to a horizontal position and removing the climber from ground level.