

Los Alamos Mountaineers Toprope Anchor Bolting Reimbursement Policy

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This document is subject to change without notice!

The Los Alamos Mountaineers (LAM) seeks to promote best-of-practice toprope anchor bolting, and replacement of old bolts. Quality of materials, diameter and depth of bolts, structural soundness of placements, and unobtrusiveness of new placement are of paramount concern. As such, within its means, and subject to guidelines and constraints, the Los Alamos Mountaineers will reimburse bolters for their hardware for work done on recognized crags in White Rock Canyon.

1. Summary

LAM supports the [Bolting Agreement for Los Alamos Climbing Areas \(Including the June 2004 Amendment\)](#).

LAM will reimburse bolters for materials (hardware, drill bits) used to

1. create toprope anchors, and,
2. replace existing bolts/hangers (any) ,

on recognized crags in White Rock Canyon, within the constraints of

1. the amended bolting agreement,
2. the constraints herein, and,
3. LAM's financial status.

2. Abbreviations

LAM - Los Alamos Mountaineers

ABA - amended bolting agreement ([Bolting Agreement for Los Alamos Climbing Areas \(Including the June 2004 Amendment\)](#))

TR - toprope

WR - White Rock

ASCA - [American Safe Climbing Association](#)

3. Guidelines and Constraints

This is not a primer on bolting! Where in doubt consult with experts and recognized authorities (e.g. ASCA).

3.1 Aesthetic Constraints

Per the ABA, TR anchors should be placed over the edge (viewed from above), out of sight of the casual observer standing several feet back from the edge of the cliff.

TR anchors should be within reach from the top of the cliff, i.e. topropes should be able to be set from the top.

TR anchors should be camouflaged, either painted or as manufactured (anodized or otherwise coated).

3.2 Hardware Constraints

Per ASCA recommendations, regarding basalt as "hard rock," bolts should be a *minimum* of 3/8" x 3", stainless steel, recognized name-brand (e.g. Fixe, Rawl/Powers), national or international standards rated (e.g. ASTM), generally recognized as appropriate for climbing.

Noting that basalt is generally brittle, bolts longer than 3" are *strongly* recommended. In the interest of durability and longevity, bolts with diameter greater than 3/8" are recommended.

Other hardware (e.g. hangers, carabiners) should be of similar quality.

3.3 Structural Guidelines

Per recognized guidelines for distance between pairs of bolts and distance from cliff edge, in solid rock preferably integral with the cliff face, etc. No attempt is being made to provide actual guidelines here: where in doubt consult with experts and recognized authorities.

3.4 Financial Constraints

Reimbursement is subject to the state of LAM finances, as judged by the current Board of Trustees.

3.5 Other Considerations

The potential bolter, or bolter potentially seeking reimbursement, is encouraged to consult with the LAM Board of Trustees, or their specified designees, prior to undertaking a bolting project. LAM may reimburse after the fact, i.e. without prior consultation, entirely at the discretion of the Board of Trustees. The bolter seeking certainty of reimbursement must obtain prior approval.

LAM seeks to maintain a record of bolting activities it has subsidized. As such the following information is required.

- General area (e.g. "Potrillo Cliffs")

- Specific area or name of route, if applicable (e.g. "Polly's Folly" or "between Polly's Folly and Peter's Petard");
- Description of hardware to be used before the fact, digital photos of the hardware prior to installation;
- Estimated cost before the fact, exact cost after the fact;
- Digital photos of the finished work.

Ideally, photos with intended bolt locations (marked with tape) before the fact would be provided.