



Essential Safety Information for Cavers Using Resin Bonded Anchors

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Resin anchors are intended for use by experienced cavers only who have understood the pre-use inspection requirements below, who appreciate the importance of fall factors and backup belays and who know how to use the anchors to rig safely avoiding rope rub and other pitch hazards.

During your trip, check all anchors before use:

Cavers must perform a pre-use inspection of all resin anchors: Twist the anchor using the fingers, while observing any movement. Slight flexing or rotational movement (+/-1mm) of the anchor, as long as there is no egress of the anchor or resin from the hole, is acceptable but any more and the anchor should not be used.

The following points should also be checked before using or loading any anchors:

- Looseness of the rock in which the anchor is placed.
- Fractures in the rock within approximately 20cm of the anchor.
- Grooves or abrasion inside the curvature of the anchor.
- Obvious damage to the anchor or placement (e.g. from rock fall).
- Excessive rotation of the resin within the drilled hole, or egress of the resin.
- Rotation of the anchor within the resin, or egress of the anchor from the resin.

NEVER use any anchors which, based on the pre-use inspection, you are not confident in.

REPORT any anchors which you have concerns about to your Regional Caving Council.

ALWAYS rig caves to consider possible points of failure; **ALWAYS** ensure more than one anchor is used in any rigging; where possible use Y-hangs at pitch heads to spread the load directly across two or more anchors to minimise fall factors in the event of a single anchor failure, and always include at least one (ideally more) anchor (or naturals) as backup away from the pitch head (i.e. in a distant piece of rock to negate the risk of failure of the limestone).

NEVER assume an anchor indicates a safe descent can be made from there without rope rub or exposure to water; it is entirely for the experienced rigger to plan your route and ensure anchors are used in such a way as to achieve a descent free from hazards such as rope rub and falling water.

Use of anchors installed low down or on the ground near pitches:

In certain locations it is necessary to locate the anchor placement low or at ground level. This is due to the geological constraints of the entrance, cave passage or pitch head. e.g. Rowten Pot entrance pitch and, Cow Pot entrance pitch in the Yorkshire Dales.

When clipping into an anchor at ground level and progressing towards the pitch, it is possible for the attachment krabiner to become detached from the anchor. Anchors that have been placed below waist height on traverses may produce a similar result. See photo:



When using anchors placed in rock at ground level or anchors that have not been placed correctly on traverses e.g. too low and the wrong alignment. Certain extra precautions need to be observed.

1. Be observant for this issue and watch attachment krabs while manoeuvring.
2. Consider use of screwgate/twistgate krabs for cowstails rather than snagates.
3. Always have two attachment points (this should be standard practice anyway).
4. Clipping into the knot of a belayed rope is usually preferable.