



# **Beaundesert Outdoor Adventures**

## **Standard Operating Procedure (SOP) & Risk Assessment: Via Ferrata**

**Document ID:** SOP-BOA-VF-001

**Effective Date:** 5th January 2026

**Review Date:** January 2027

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### **1.0 Purpose**

To outline the standardized, safe, and progressive procedure for conducting Via Ferrata sessions at Beaundesert Outdoor Adventures. This document ensures a high-quality instructional experience while maintaining paramount safety standards in the unique Quarry environment.

#### **Brief History of Via Ferrata:**

*For Instructors to share during the introduction.*

"Via Ferrata" is Italian for "Iron Path." Or "The Iron Way". Its origins lie in the **First World War (1914–1918)**, specifically in the Dolomite mountains of Italy. To allow troops to move men and supplies safely through inaccessible mountain ranges, armies fixed iron ladders, cables, and rungs to the rock faces. Today, these historic routes (and modern sporting ones like ours) allow non-climbers to access vertical terrain safely using a continuous safety system. There are stories of the Hungarian Kaeser Jaeger and the Italian "Alpini" Special Forces, using these routes to conduct operations in the Alps during this time.

### **2.0 Scope & Instructor Competence**

This SOP applies to all staff involved in Via Ferrata. Due to the high-risk nature of the activity, strict qualification tiers apply:

- **Technical Advisor (TA):** Joby Davis (MIA + **Via Ferrata Safety Workshop, French Alps**).
- **Authorisation:** All staff must be authorized by the TA and signed off locally by **Martin Kirby, Luke Chance, or Richard Irvine**.





- **Lead Instructor:** Must be assessed as competent in the full delivery **AND** the specific rescue procedure (Petzl Jag/I'D Lower).
- **Assistant Instructor:** May assist with supervision and setup but is **not** qualified to perform the complex rescue alone.

## 3.0 Location & Ratios

### 3.1 Location

- **The Quarry:** The activity takes place exclusively in the designated Quarry area.
- **Access Control:** The Quarry Gate and the Access Ladders must remain **locked** when not in use to prevent unauthorized access.
- **Test Area:** The low-level "Training Wall" must be used for the initial competence check.

### 3.2 Ratios

- **Standard Ratio:** 1:12 (One Instructor to twelve participants).
- **Maximum Ratio:** 1:15 (Session duration must be extended to 1.5 hours and the kit must be shared).

## 4.0 Equipment

### 4.1 Personal Protective Equipment (PPE)

- **Helmets:** Mandatory for ALL participants and staff in the Quarry (due to rockfall risk).
- **Harnesses:**
  - **Sit Harness:** VF specific sit harness.
  - **Lanyards:** Coudou Pro **ZAZA** continuous belay system.
  - **Connectors:** KONG Delta lanyards (or approved equivalent) connecting harness to the Zaza block.
- **Note:** Chest harnesses are **not** generally required for this system.

### 4.2 Rescue Equipment (Mandatory in Quarry)

- **Rescue Pack:** Must be present at the base of the route.
- **Contents:**
  - Petzl **JAG** System (for hauling/releasing tension).
  - Petzl **I'D** (for lowering the participant).
  - Appropriate ropes and slings.
  - "Key" to unlock Connector and release someone from the system on rescue after being attached to the I'D / Jag rescue system.



## 5.0 Safety Briefing & Rules

*Mandatory briefing before entering the vertical zones.*

1. **Continuous Attachment:** The Zaza system ensures you cannot unclip from the safety wire. Do not force the block at the anchor plates.
2. **One Person Per Section:** Only one participant is allowed on a section of wire (between two bolts) at a time.
  - *Exception:* The Burma Bridge may accommodate two participants if spacing allows.
3. **Movement:** Three points of contact (two hands, one foot / two feet, one hand) on ladders/rungs.
4. **Loose Items:** Empty pockets. No rings or loose jewellery (degloving risk).
5. **Falling:** If you slip, shout "FALLING" to warn those below.

## 6.0 Session Procedure

### 6.1 Pre-Session Checks (Lead Instructor)

- **Access:** Unlock Quarry Gate and Ladder.
- **Environment:** Check for **overhanging vegetation** obstructing the route or fallen debris. Check rock face for new seepage/wet patches making staples slippery.
- **Structure:** Visual check of cables, staples, and the Zaza plates.
- **Rescue Kit:** Verify the Rescue Pack is complete and in place.

### 6.2 Introduction & Setup

1. **Welcome & History:** Deliver the brief history (Section 1.0).
2. **Kitting Up:** Fit harnesses and helmets (outside the rockfall zone if possible).
3. **Medical Check:** Confirm no pregnancy or heart conditions (harness pressure/suspension trauma risk).

### 6.3 Phase 1: The Test Wall (Training)

- **Mandatory Practice:** All participants **must** complete the low-level Test Wall/Course first.
- **Skill Check:** Instructors verify that participants can manipulate the Zaza block over the plates smoothly and understand the "One Person Per Section" rule.
- **Go/No-Go:** If a participant cannot manage the Test Wall, they cannot proceed to the main high course.



## 6.4 Phase 2: The Ascent

- **Positioning:**
  - **Lead Instructor:** Positions themselves to supervise the whole group, often climbing efficiently to a vantage point or monitoring the "crux" points.
  - **Assistant:** Managing the start of the climb/ground traffic.
- **Progression:** Participants move up the ladders/rungs. Instructors monitor spacing.
- **Communication:** Clear voice commands between Instructors and Group.

## 6.5 Phase 3: Descent & Conclusion

- **Exit:** Guide participants via the Burma Bridge to the exit path.
- **Steps:** Ensure participants walk slowly down the exit steps (often steep/slippery).
- **De-Kit:** Inspect kit for wear after use.
- **Security:** **LOCK THE LADDER AND GATE** immediately after the session.

## 7.0 Maintenance & Repairs

- **Routine Maintenance:** Typically undertaken by **Luke Chance**.
- **The "Double-Check" Rule:** Any replacement of critical safety components (e.g., Maillon Rapides, Cable Clamps, Kong Deltas) must be **Double-Checked** and signed off by the **Operations Manager (Martin Kirby)** before the course is reopened for use.

## 8.0 Emergency & Rescue Procedure

1. **Stuck Participant (Conscious):**
  - Coaching: Talk them through the move.
  - Assistance: Instructor climbs to them (using PPE) to assist physically.
2. **Incapacitated/Unconscious Participant (Rescue):**
  - **Command:** "STOP - RESCUE IN PROGRESS."
  - **Lead Instructor:** Deploys the **Petzl JAG system** to raise the participant slightly and unweight their lanyard. Connects the **Petzl I'D** to the participant and lowers them safely to the ground.
  - **Assistant:** Manages the group on the ground/safe ledges and calls for the Duty Manager/Ambulance if required.
3. **Emergency Access:** Keys for the Quarry Gate must be accessible to emergency services.



## 9.0 Risk Assessment

**Activity:** Via Ferrata

**Review Date:** January 2027

**Assessment by:** Martin Kirby – Operations Manager

What are the hazards?	Who might be harmed?	Controls: What are you doing to control hazards?	Risk Rating (with controls)
<b>Falls from Height</b>	Participants, Instructors	<ul style="list-style-type: none"> <li>• <b>Continuous Belay:</b> Zaza system prevents accidental unclipping.</li> <li>• <b>Competence:</b> Lead Instructors assessed by Technical Advisor (Joby Davis).</li> <li>• <b>Test Wall:</b> Mandatory practice at low level.</li> </ul>	<b>Trivial</b>
<b>Rockfall / Falling Debris</b>	Group	<ul style="list-style-type: none"> <li>• <b>PPE:</b> Helmets mandatory for everyone in the Quarry.</li> <li>• <b>Maintenance:</b> Periodic scaling of loose rock and cutting back of overhanging vegetation.</li> <li>• <b>Zones:</b> Spectators kept out of fall zones.</li> </ul>	<b>Tolerable</b>
<b>Slips (Vegetation/Damp)</b>	Participants	<ul style="list-style-type: none"> <li>• <b>Environment:</b> Instructors check for wet/slippery staples (damp quarry environment).</li> <li>• <b>Vegetation:</b> Overhanging vegetation cut back periodically to prevent moss/slime buildup on holds.</li> <li>• <b>Briefing:</b> "Three points of contact" rule emphasized.</li> </ul>	<b>Tolerable</b>

What are the hazards?	Who might be harmed?	Controls: What are you doing to control hazards?	Risk Rating (with controls)
<b>Rescue Failure (Suspension Trauma)</b>	Participants	<ul style="list-style-type: none"> <li>• <b>Equipment:</b> Specific Rescue Kit (Petzl Jag + I'D) present at all sessions.</li> <li>• <b>Training:</b> Lead Instructors specifically assessed on Lowering Rescue.</li> <li>• <b>Response Time:</b> Rescue initiated immediately if participant is hanging motionless.</li> </ul>	<b>Tolerable</b>
<b>Unauthorized Access</b>	Public / Guests	<ul style="list-style-type: none"> <li>• <b>Security:</b> Quarry Gate and Access Ladders locked when not in use.</li> <li>• <b>Signage:</b> Warning signs displayed at entry points.</li> </ul>	<b>Trivial</b>
<b>Maintenance Failure</b>	Participants	<ul style="list-style-type: none"> <li>• <b>Protocol:</b> "Double Check" rule. Repairs by Luke Chance must be verified by Martin Kirby.</li> <li>• <b>Checks:</b> Daily visual check of cables/staples by Lead Instructor.</li> </ul>	<b>Trivial</b>
<b>Weather (Lightning/High Wind)</b>	Group	<ul style="list-style-type: none"> <li>• <b>Activity Stop:</b> Activity suspended during lightning (metal cables conduct) or high winds.</li> <li>• <b>Cold:</b> Quarry can be a cold trap; clothing checked.</li> </ul>	<b>Trivial</b>



## 11.0 Document Control & Review History

### Document Creation

Action	Name / Role	Date
<b>Created By</b>	Martin Kirby – Operations Manager	December 2025
<b>Approved By</b>	Martin Kirby, Luke Chance & Oliver Tombs (OM / SI / AOM)	January 2026
<b>Technical Auth.</b>	Joby Davis (Technical Advisor)	January 2026

### Review Log

*This document is to be reviewed annually or following any significant incident or change to the activity.*

Date of Review	Reviewed By	Comments / Changes Made	Next Review Due
January 2026	MKirby / OTombs / LChance	Document Created (V1.0). Rescue Protocols (Jag/I'D) and Maintenance Double-Check added.	January 2027

