

## Jacobs Ladder

**Activity Area:** Low Ropes area  
**Minimum Staffing Level:** 1 Instructor per group  
**Staff/Pupil Ratio:** 1:15 (1:1 when climbing)  
**Staff Qualifications:** In-house Training MIA assessed  
**Maximum Number of Participants:** 15  
**Role of Accompanying Adult:** Supervision of group at seating area.

Hazard	Outcome/Injury	Persons at risk	Rating	Existing Controls
Fall from height	Death Serious injury	Participants Instructors	3 - 1	Participants clipped to safety line. Correctly fitted helmets and harnesses worn by all participants. Participant descent controlled by trained instructor via safety rope.
Equipment failure	Death Serious injury	Participants Instructors	3 - 1	All equipment checked by instructors prior to use. Daily and weekly equipment checks carried out.
Incorrectly fitted equipment	Death Serious Injury	Participants Instructors	4 - 1	Instructor training and observations using equipment.
Belay equipment	Cuts, Crush injury, Bruising	Participants Instructors	2 - 3	Instructors trained in correct use of belay equipment. Belay equipment checked for defects prior to each use.
Trip hazards (ground anchors)	Sprains, Cuts, Bruises	Participants Instructors Observers	3 - 4	Ground anchors clearly marked.
Ascending/descending	Death Serious injury	Participants Instructors	4 - 1	Instruction provided on safe ascent and descent of ladder. Correctly fitted helmets worn by staff and climber. Participants instructed to push poles away from them when descending. Instructors train in correct use of belay equipment.
Ropes tangled in branching	Death Serious injury	Participants Instructors	4 - 1	Activity areas checked weekly for low hanging branches. Branches removed If necessary.
Cable failure	Death Serious injury	Participants Instructors	4 - 1	Cable work to be checked yearly by senior staff member. Weekly checks carried out on ground anchors and equipment checked before and after every use.
Adverse weather conditions (outdoor walls)	Electrocution, Exposure	Participants Instructors Observers	4 - 1	Weather reports monitored. Activity stopped during electrical storms, high winds and heavy rain.
Unauthorised Access	Death Serious injury	All	3 - 1	Group Leader briefing, signage & controlled access. Area locked and secure when not in use.

### Key

**Rating:** Likelihood (1 = Very High, 2 = High, 3 = Medium, 4 = Low) - Consequence (1 = Fatal 2 = Major Injury 3 = Minor Injury 4 = No Injury)