Site: Christian Brothers College – Junior School, 2021

OPERATIONS & MAINTENANCE MANUAL

Height Safety Systems

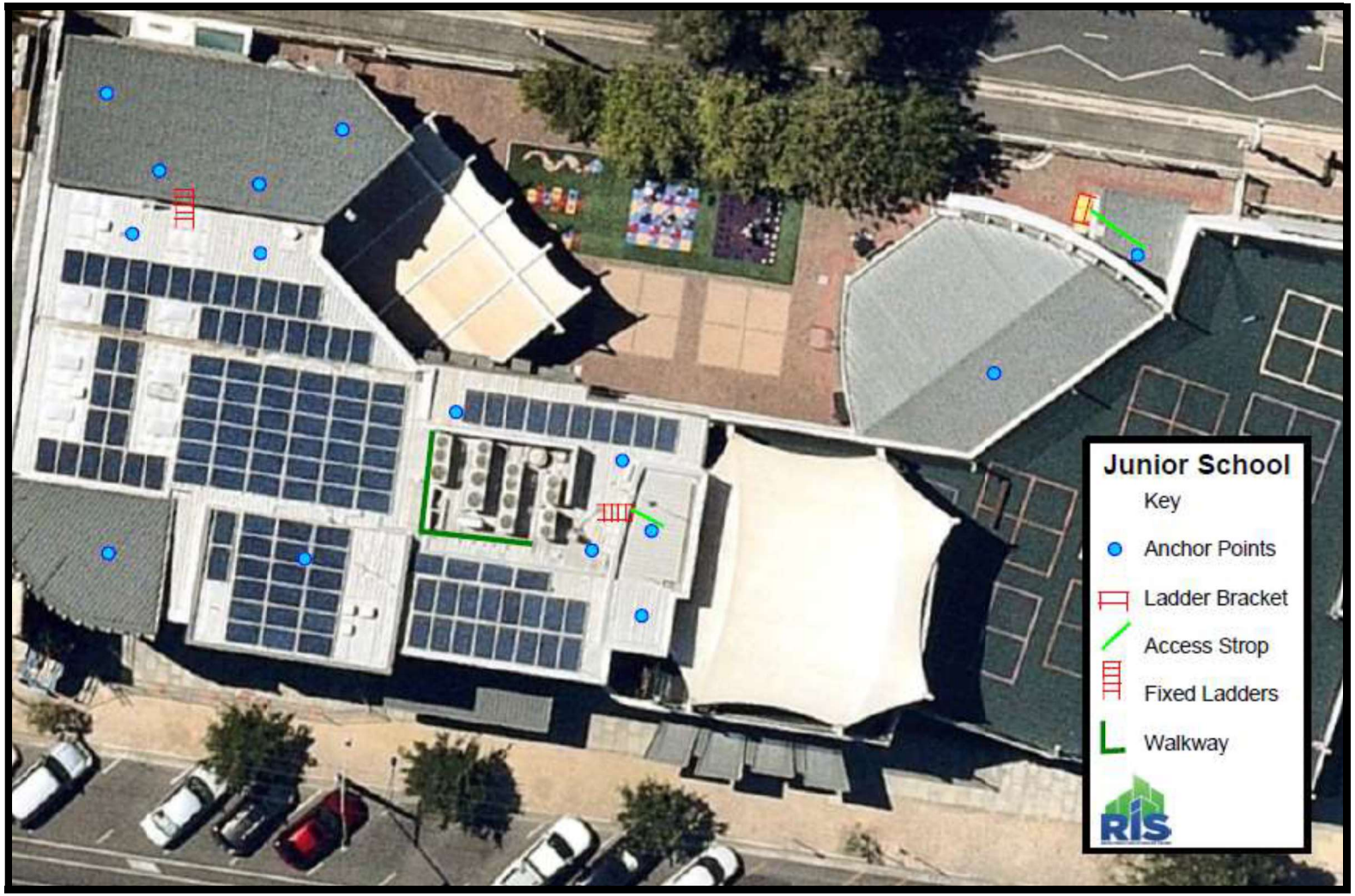
Height systems are designed following the risk assessment process, identifying work situations where a worker will need added protection through the use of PPE (personal protective equipment) and a physical connection with the structure they are working on.

Site Address: 324 Wakefield Street, Adelaide, SA 5000

RIS certifies that the systems as outlined in the site Roof Plan Layout for the Junior School are certified* to meet the requirements of AS/NZS 1891.4.2009 Industrial Fall Arrest Systems & Devices Part 4: Selection, Use & Maintenance.

* Where items of non-conformance are listed on the certificate of inspection as per Appendix of document the items do NOT conform with AS/NZS 1891.4.2009 Industrial Fall Arrest Systems & Devices Part 4: Selection, Use & Maintenance or with AS/NZS 1657-2013 Fixed Platforms, walkways, stairways, ladders – Design, construction and installation. Details of why items are non-conformant will be clearly listed

Roof Layout


Junior School
Key
Anchor Points
Ladder Bracket
Access Strop
Fixed Ladders
Walkway

Safe Use

Step 1

Complete your site induction with the system owner and confirm that the users can demonstrate competence in the activity of working at heights by provision of a nationally recognised certification or equivalent.

Step 2

Develop and sign off on risk assessment/work method statement for the task, considering task specifics elements that will affect the user's safety:

- Type of work
- Length of time required to complete the work
- Surface conditions
- Materials to be used
- Ladder requirements
- Placement of the materials
- Additional hazards introduced by the task such as:
    - Working around plant and equipment
    - Working near energised electrical installations
    - Public safety and security
    - Dropped objects
- PPE, plant and equipment inspection pre-use (ladders, scaffold, scissor lifts etc)
- Rope length requirements for the work
- Anchor testing requirements
- Rescue requirement s for any activity where fall arrest techniques are to be used

Safety Warning:

All height safety systems are designed to be used by competent trained persons only. The way all height systems are used will be relative to a range of variables not able to be captured in this operations manual. These user instructions are indicative only and may change depending on site conditions, types of work required to be completed and number of person involved in the task. Progressing to complete work without assessing and controlling the risk relative to the work and the use of the systems is in contravention of work health and safety regulations and highly dangerous and not recommended. The above list is not exhaustive.

Safe Work Method Statement - Roof Anchors

- **Ensure that all people working on roof have been competently trained in Height Safety and possess at a minimum a nationally recognised work safely at heights qualification that is less than 2 years old or equivalent.**

- **Make sure you possess and wear the correct equipment.**

ACCESS TO ROOF AREA IS VIA: Stairwell Access

INFORM MANAGEMENT OR SECURITY THAT WORK IS BEING CONDUCTED ON THE ROOF AREA BEFORE COMMENCEMENT OF ANY WORKS – ALWAYS WORK ON THE ROOF AREA WITH A SECOND PERSON (ANOTHER WORKER or SPOTTER)

Always read and comply with the instructions for use that accompanies the system and safety equipment required.

Entrance is via stairwell to main roof that is pitched less than 5 degrees and pitched over 15 degrees on one section where constant attachment is required.

- Unlock and open roof door
- Be aware as solar panels have changed the layout of the anchors system
- Climb onto roof
- Fit Harness and connect a 300mm Shock Absorbing Lanyard to the rear attachment point on the Harness
- Connect the loose ends of the same lanyard to a rope adjusted and rope grab
- Store all excess rope and tools in Backpack
- Follow walkway to anchor system
- Connect the end knot of the rope and grab to the anchor point with the karabiner
- Connect the lanyard to the rope grab
- Check connections
- Make your way to the next available Anchor Point by adjusting the Rope and Rope Adjuster to allow movement.
- When you reach the next Anchor available to connect to, stop in a position where you can reach the Anchor safely.
- Redirect the Rope through the Anchor via a Karabiner.
- Continue on using this process until you reach your desire configuration and position to suit the work and rescue requirements outlined by your Safe Work Method Statement.
- Perform work using care
- If working within 2meters of an edge follow safe work method for anchor points

NOTE: If the roof slope is greater than 15 degrees the user must remain connected to an anchorage point at all times.

NOTE - When utilising the Adjustable Rope Grab & Rope system it is important that the user adjusts the lanyard length (i.e. make sure the Rope and Shock Absorber are taut to prevent any working slack. It is advisable to have NO working slack.

Safe Work Method Statement - Roof Anchors

- **Ensure that all people working on roof have been competently trained in Height Safety and possess at a minimum a nationally recognised work safely at heights qualification that is less than 2 years old or equivalent.**

- **Make sure you possess and wear the correct equipment.**

ACCESS TO ROOF AREA IS VIA: TEMPORARY LADDER

- **INFORM MANAGEMENT OR SECURITY THAT WORK IS BEING CONDUCTED ON THE ROOF AREA BEFORE COMMENCEMENT OF ANY WORKS – ALWAYS WORK ON THE ROOF AREA WITH A SECOND PERSON (ANOTHER WORKER or SPOTTER)**

- Roof pitch is less than 15 degrees.
- Fit Harness and connect a 300mm Shock Absorbing Lanyard to the rear attachment point on the Harness
- Connect the lose ends of the same lanyard to a rope adjusted and rope
- Store all excess rope and tools in Backpack
- Position the Ladder to the roof access point (Ladder Bracket) ensuring the footing of the
- Ladder is on stable ground.
- Ladder angle is to be 4:1
- Ladder is to be positioned 1m above the resting point and secured on the Ladder Bracket. Maintain three points of contact whilst climbing the Ladder.
- When within 1m of the top of the Ladder, stop and reach for the roof mounted Access Strop.
- Then connect the free end of the Personal Shock Absorber to the Anchor Strop via the Karabiner.
- Connect to the Access Strop while maintaining three points of contact.
- Make your way to the next available Anchor Point by adjusting the Rope and Rope Adjuster to allow movement.
- When you reach the next Anchor available to connect to, stop in a position where you can reach the Anchor safely.
- Redirect the Rope through the Anchor via a Karabiner.
- Continue on using this process until you reach your desire configuration and position to suit the work and rescue requirements outlined by your Safe Work Method Statement.
- NOTE: If the roof slope is greater than 15 degrees the user must remain connected to an anchorage point at all times.
- NOTE - When utilising the Adjustable Rope Grab & Rope system it is important that the user adjusts the lanyard length (i.e. make sure the Rope and Shock Absorber are taut to prevent any working slack. It is advisable to have NO working slack.
- Perform the work required using care.
- NOTE – When accessing the corners of the building connect the Karabiner to the Adjustable Rope and then connect the Karabiner to the Diversion Anchor to prevent a pendulum effect.
- Detach yourself from the anchor point only when you are in a position (i.e. greater than 2 meters from the edge)
- To attach to the other anchor points, ensure that you repeat the above steps.

Recommended Personal Fall Protection Equipment per user:

1 x TUKITTW – Ultimate Roof Workers Kit

1 x ULMP02 – Harness

1 x WLSA01 – 300mm Shock Absorbing Lanyard

1 x WL01 – 1.5m Lanyard with Karabiner or Snaphook

1 x ROPE20M – 20m Rope with Grab

4 x L024NH – Karabiners

1 x AK040 Backpack kit Bag 50m capacity

User Competence and Risk Assessment

People that work at heights are exposed to the risk of falling. Falling from heights at work is one of the most common causes of serious injury and death in the Australian workplace. Installing safety systems is one element of managing these risks. In order to meet the full requirements of all State, Territory and Commonwealth Work Health and Safety Laws and Regulations, fall prevention system users must be competent in the use of the systems, and a risk assessment must be undertaken prior to use.

Every system will have subtle differences that may impact the way a user can operate the system effectively. Issues such as the work environment, type of work, access and other activities in close proximity to the work must be considered before beginning work, and must be part of a documented pre-start risk assessment.
Work Health and Safety Regulations require that the person commissioning the work ensures that those completing the work (be they an employee, contractor or volunteer) have a thorough understanding of the risks involved with the work and can demonstrate competence in completing the task, including being prepared to react to a rescue scenario where fall arrest systems are utilised in a workplace.

Periodic Inspections Testing & Certification

The RIS Altitude products that form the system are tested and certified to the following Australian standards:

AS/NZS 1891.2	Industrial Fall Arrest Systems & Devices Part 2: Horizontal Lifeline and Rail Systems
AS/NZS 1891.3	Industrial Fall Arrest Systems & Devices Part 3: Fall Arrest Devices
AS/NZS 1891.4	Industrial Fall Arrest Systems & Devices Part 4: Selection, Use & Maintenance

Your RIS system(s) requires regular inspections to ensure they remain fit for use. Every location will have differences, and the inspection time frames will be relative to possible deterioration caused by many factors including but not limited to age, weathering, site conditions and usage factors. Inspection time frames may differ based on a risk assessment and depending on the product type.

As the manufacturer of the product, RIS recommends inspection time frames in alignment with Australian Standards recommendations of 12 months. RIS may recommend alternative inspection time frames in the following cases:

1. Frequently used systems
    a. Any RIS systems that is used more than 5 times in 1 week
2. Infrequently used systems
    a. Any RIS systems that is used less than 1 time in 12 months
3. Once off installation not to be used again

Inspections should be carried out by a competent height safety inspector that can demonstrate a capacity to inspect the systems thoroughly against the installation and certification criteria set out below:

- Has been trained and certified by RIS to undertake inspections and certification activity for RIS products.
- Demonstrates relevant industry experience in the inspection and use of height safety equipment.
- Can develop and implement a risk management approach to the inspection of the systems in order to inspect and review suitability prior to connecting to the anchor.
- Can demonstrate capacity to update and advise the owner at the time of the inspection regarding any defects and warranty issues.
- Works within the guidelines of the professional indemnity insurance carried by RIS that protects the systems owner from liability for the activities relevant to certification and inspection of new and existing systems.
- Provides a signed work method statement prior to the inspection relevant to the inspection, including the RIS systems recertification inspection criteria.

Appendix: Harness Fitting Guide