Roof Safety Survey
BUILDING 30
Version 2
1 Introduction

The following document outlines the Roof Safety Survey (RSS) for Building 30 of the University of Wollongong located at Wollongong Campus Northfields Avenue Wollongong NSW 2522.

2 Purpose

This RSS is to be used as a general guideline to provide awareness and control measures for site personnel and contractors when accessing various roof areas. Personnel must make an assessment prior to accessing the roof. Should there be any potential for falls, all personnel must ensure the necessary fall prevention systems are utilised and operated in a “fall restraint” working mode. All ends users of Fall arrest equipment must be trained to a level of national recognition. All work practices and systems operations must be identified and documented in the risk assessment and safe work method statement.

3 Disclaimer

This document should be used as a general guide for roof access purposes only. Items detailed within this document were in situ at the time of inspection and may change. End users must use caution and evaluate the conditions as suitable to themselves.

Riverlands Roofing and Waterproofing (Louey Models Pty Ltd) accepts no responsibility for the actions of persons accessing these areas and or legislative compliance of fittings and fixtures of the site.
4 Building 30 Roof Area Aerial Photo Zone Layout

KEY

- Highlighted Zone Areas
- Primary Roof Access - Services Main Roof Access Door
- South Wing Roof Access Ladder
- North East Wing Roof Access Ladder
- Lower East Roof Access Ladder
- Lower South West Roof Access from Balcony
- Roof Access Ladder

ZONE: A

- Services Main Roof
- North East Wing Roof
- South Wing Roof
- Lower East Roof
- Lower South West Roof
5  Risk Management

5.1  Risk Matrix

This risk assessment matrix below must be used reviewing in context with the University’s Risk Management Guidelines.

<table>
<thead>
<tr>
<th>CONSEQUENCES</th>
<th>LIKELIHOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe</td>
<td>Almost Certain</td>
</tr>
<tr>
<td>Major</td>
<td>Likely</td>
</tr>
<tr>
<td>Moderate</td>
<td>Possible</td>
</tr>
<tr>
<td>Minor</td>
<td>Unlikely</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>CONSEQUENCES</th>
<th>Minor</th>
<th>Moderate</th>
<th>Major</th>
<th>Severe</th>
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<tbody>
<tr>
<td>Severe</td>
<td>M</td>
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<tr>
<td>Major</td>
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<td>Moderate</td>
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<td>Minor</td>
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5.2  Risk Control

Risk control is a method of managing the risk with the primary emphasis on controlling the hazards at source. For a risk that is assessed as “high”, steps should be taken immediately to minimize risk of injury. The method of ensuring that risks are controlled effectively is by using the “hierarchy of controls”.

The Hierarchy of Controls are:

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Control Type</th>
<th>Example</th>
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</thead>
<tbody>
<tr>
<td>Firstly</td>
<td>Eliminate</td>
<td>Removing the hazard, eg taking a hazardous piece of equipment out of service.</td>
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<tr>
<td>Secondly</td>
<td>Substitute</td>
<td>Replacing a hazardous substance or process with a less hazardous one, eg substituting a hazardous substance with a non-hazardous substance.</td>
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<tr>
<td>Thirdly</td>
<td>Isolation</td>
<td>Isolating the hazard from the person at risk, eg using a guard or barrier.</td>
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<tr>
<td>Fourthly</td>
<td>Engineering</td>
<td>Redesign a process or piece of equipment to make it less hazardous.</td>
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<tr>
<td>Fifthly</td>
<td>Administrative</td>
<td>Adopting safe work practices or providing appropriate training, instruction or information.</td>
</tr>
<tr>
<td>Sixthly</td>
<td>Personal protective equipment</td>
<td>The use of personal protective equipment could include using gloves, glasses, earmuffs, aprons, safety footwear, dust masks.</td>
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</tbody>
</table>

For more information on risk management visit:  
https://www.uow.edu.au/about/services/safe-at-work/whs-framework
## 5.3 Contractors Risk Assessment

The below tables have been populated by the University with known hazards that may be applicable for roof work.

All contractors are required to establish their own risk assessment and SWP/SWMS/etc specific to each task they perform, taking into account hazards that may not have been identified by the University.

### Assessment of Hazards

<table>
<thead>
<tr>
<th>Hazard No.</th>
<th>Description of Activity/Service Item</th>
<th>Description of Hazard (What has potential to cause injury or damage to property/environment?)</th>
<th>Current Controls (What is in place today that controls the risk? List any control measures already implemented)</th>
<th>Risk rating (With current controls in place)</th>
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### Risk Control

<table>
<thead>
<tr>
<th>Hazard No.</th>
<th>Additional Control Description (What should be done in the future to control the risk? What can be done to eliminate or further reduce the risk?)</th>
<th>Control Type (Elimination, Substitution, Isolation, Engineering, Administration, PPE)</th>
<th>Person Responsible</th>
<th>Risk rating (With additional controls in place)</th>
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</table>
6  Roof Safety Survey Building 30

6.1  Building 30 General Information

Note: Before commencing any work obtain Roof Permit from Facilities Management Division

Building:
University of Wollongong Campus Building 30

Description:
Multi storey low pitched metal roof with a flat concrete main services area. The building also has an external roof area accessed from the South western external staircase and balcony. Services include, high voltage switchboards within the plant room, solar panels, air conditioning units, ducts, Antenna, roof ventilation and exposed pipework.

SafetyNet Risk Assessment Reference Number:
- UOW TBA

Roof Access:

Services Main Roof Access: (Primary Roof Access)
- Access to the Services Main Roof is via the buildings internal stairwell to Level 2. Locate the Mechanical Plantroom door. Take the stairs up to the roof access door.

North East Wing Roof Access:
- Access to the North East wing roof is via the Services main roof area. A fixed ladder is located in the north east section of the services area. Caution low head clearance and exposed pipework must be navigated to access the roof access ladder.

South Wing Roof Access:
- Access to the South Wing Roof is via the Services main roof area. A fixed ladder is located in the south western section of the services area. Caution low head clearance and exposed pipework must be navigated to access the roof access ladder.

Lower East Roof Access:
- Access to the Lower East roof area is via the north east wing roof. A fixed ladder is installed that leads down to the roof area.

Lower South West Roof Access:
- Access to the South West roof area is via the external stairs located on the south western side of the building. To access the roof area users must climb over the balcony parapet. Caution only one roof area has a lifeline installed.

North East Awning Entry Roof Access:
- Access to the North East awning entry roof is via ladder bracket from the courtyard on the south side. Anchors to awning roof.

Signage:
- Various restricted areas

Compliance Plates:
- Data Plate for Lifelines
Height of Building:

- Multi storey

Pitch:

- < 5 degrees

Roof Construction:

- Concrete & Metal

Structural Integrity:

- Sound

Vegetation:

- Yes (Trees growing over the roof area)

Fall Arrest System:

<table>
<thead>
<tr>
<th>System</th>
<th>Certification Status</th>
<th>Certification By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Various Anchor Points</td>
<td>Current</td>
<td>Riverlands Roofing</td>
</tr>
<tr>
<td>Horizontal Lifelines SALA SAYFGLIDA &amp; SAYF8 (Manufacture’s User Manual in link below)</td>
<td>Current</td>
<td>Riverlands Roofing</td>
</tr>
</tbody>
</table>

*(End users must follow manufacturer’s instructions and use compatible attachments)*

Services:

- Gutters
- A/C Units
- Ducts
- Roof Ventilators
- Fume Cupboards
- Telco Towers
- Satellite Dishes
- Antenna
- Fiberglass Skylights
- Pipework
- Cooling Tower
- Roof Top Solar Panels

Existing Safety Systems:

- Horizontal Lifelines
- Anchor Points
- Vertical Lifelines
- Handrail
- Walkway
- Parapets

Work Activity & Frequency:

- Clean gutters/routine maintenance – 6 months
- Service A/C plant- monthly
6.2 Building 30 Safety Systems Aerial Photo Layout

The following aerial photo indicates access points and safety systems layout.
6.3 Building 30 Roof Photos

Services Main Roof

<table>
<thead>
<tr>
<th>Services Main Roof (primary roof access point)</th>
<th>Services Main Roof (primary roof access point)</th>
<th>Services Main Roof (primary roof access point)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To access the Service main roof area locate the building's internal stairwell.</td>
<td>The stairs lead up to the roof access door.</td>
<td>The stairs lead up to the roof access door.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Services Main Roof (primary roof access point)</th>
<th>Services Main Roof area with services caution low head clearance</th>
<th>Services Main Roof area with services caution low head clearance exposed pipework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roof access door.</td>
<td>Services Main Roof area with services caution low head clearance</td>
<td>Services Main Roof area with services caution low head clearance exposed pipework</td>
</tr>
</tbody>
</table>
Services Main Roof (Continued)

- Services Main Roof area with services with exposed pipework
- Services Main Roof area
- Services Main Roof area Access pathway to other roof areas Caution low head clearance

North East Wing Roof

- North East Wing roof access ladder
- North East Wing Roof access ladder & landing
- North East Wing Roof area with solar panels
- North East Wing Roof area with lifeline (Certification by Riverlands Roofing Status Current)
- North East Wing Roof area with lifeline (Certification by Riverlands Roofing Status Current)
- North East Wing Roof area with fiberglass skylights
| South Wing Roof access ladder | South Wing Roof area with solar panels | South Wing Roof area with lifeline (Certification by Riverlands Roofing Status Current) |
| South Wing Roof with antenna | | |

South Wing Roof
## Lower East & Lower South West Roof

<table>
<thead>
<tr>
<th>Lower East roof area with fixed ladder and lifeline (Certification by Riverlands Roofing Status Current)</th>
<th>Lower South West roof access point up external stairs to balcony (user must climb over railing to access roof area)</th>
<th>Lower South West Roof Caution no safety systems exist on this roof area</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Lower East roof area" /></td>
<td><img src="image2" alt="Lower South West roof access point" /></td>
<td><img src="image3" alt="Lower South West Roof Caution" /></td>
</tr>
<tr>
<td>Lower South West roof area with lifeline (Certification by Riverlands Roofing Status Current)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7 Program Evaluation

Conditions that might warrant a review of the guidelines on a more frequent basis would include:

- changes to the roof
- change in the relevant legislation or Australian Standards
- organisational needs or WHS Committee concern.

8 Related Documents

- Managing the Risk of Falls Guidelines
- Working at Heights Rescue Plan
- Roof Access Permit
- Roof Access Procedure

9 References

9.1 Legislation

- NSW Work Health and Safety Regulation 2017 Part 4.4 Falls

9.2 Australian Standards

- AS 1657: Fixed platforms, walkways, stairways and ladders - Design, construction and installation
- AS 1891.1: Industrial fall-arrest systems and devices - Harnesses and ancillary equipment
- AS 1891.2: Industrial fall-arrest systems and devices - Horizontal lifeline and rail systems
- AS 1891.3: Industrial fall-arrest systems and devices - Fall-arrest devices
- AS 1891.4: Industrial fall-arrest systems and devices - Selection, use and maintenance
- AS 2210.1: Safety, protective and occupational footwear - Guide to selection, care and use
- AS 3666: Air-handling & Water Systems for Buildings - Microbial Control
- AS 4994.1: Temporary edge protection - General requirements
- AS 4994.2: Temporary edge protection - Roof edge protection - Installation and dismantling
- AS 5532: Manufacturing requirements for single-point anchor device used for harness-based work at height
- AS 2550.10 – 2006 Crane, Hoists and lifting equipment. section 5.9

9.3 Codes of Practice

- Managing the Risk of Falls at Workplaces (SafeWork NSW)
- NSW Code of Practice for the Control of Legionnaires' Disease (NSW Health)
10  Version Control Table

<table>
<thead>
<tr>
<th>Version Control</th>
<th>Date Released</th>
<th>Approved By</th>
<th>Amendment</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>19/02/2020</td>
<td></td>
<td>Original Document Created by GO Riverlands Roofing</td>
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<tr>
<td>2</td>
<td>31/08/2021</td>
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<td>Updated by Adriana Pallister – Riverlands Roofing</td>
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<tr>
<td>3</td>
<td>29/04/2022</td>
<td>WHS Advisor</td>
<td>Document reviewed by Riverlands Roofing</td>
</tr>
</tbody>
</table>

11  Appendix A: Sample Images

Before contractors use any Fall Arrest System (lifeline or Anchor point) users must complete the following:

- Locate the fall arrest systems data plate or data tag.
- Validate that the system is current and that a yearly certification has been completed.
- Complete a personal visual & physical inspection of the system.
- Users must never exceed the MAX LOAD or USERS of the system.

![Fall Arrest System Data Plate](image1)

![Anchor Point Data Tag](image2)