UOW SAFE@WORK

Roof Safety Survey

BUILDING 23

Version 5
# Contents

1. Introduction .....................................................................................................................................................3
2. Purpose ............................................................................................................................................................3
3. Disclaimer ........................................................................................................................................................3
4. Building 23 Roof Area Aerial Photo Zone Layout ..........................................................................................4
5. Risk Management ............................................................................................................................................5
   5.1 Risk Matrix ...........................................................................................................................................5
   5.2 Risk Control ..........................................................................................................................................5
   5.3 Contractors Risk Assessment ................................................................................................................6
6. Roof Safety Survey Building 23 ......................................................................................................................7
   6.1 Building 23 General Information .........................................................................................................7
   6.2 Building 23 Safety Systems Aerial Photo Layout ..................................................................................9
   6.3 Building 23 Roof Photos .....................................................................................................................10
7. Program Evaluation .......................................................................................................................................11
8. Related Documents ........................................................................................................................................12
9. References .....................................................................................................................................................12
   9.1 Legislation ..........................................................................................................................................12
   9.2 Australian Standards ..........................................................................................................................12
   9.3 Codes of Practice ................................................................................................................................12
10. Version Control Table ...................................................................................................................................12
11. Appendix A: Sample Images ........................................................................................................................13
1 Introduction

The following document outlines the Roof Safety Survey (RSS) for Building 23 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 23 Roof Area Aerial Photo Zone Layout

**Zone: A**
- Main Roof
- South Window Gantry
- North Window Gantry

**Legend:**
- Highlighted Zone Areas
- Main Roof Access Door
- Main Roof Fixed Roof Access Ladder
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>Consequence</th>
<th>Description</th>
<th>Likelihood</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe</td>
<td>Death or extensive injury</td>
<td>Almost Certain</td>
<td>Is expected to occur in most circumstances</td>
</tr>
<tr>
<td>Major</td>
<td>Medical treatment</td>
<td>Likely</td>
<td>Will probably occur in most circumstances</td>
</tr>
<tr>
<td>Moderate</td>
<td>First aid treatment</td>
<td>Possible</td>
<td>May occur at some time</td>
</tr>
<tr>
<td>Minor</td>
<td>Injury report, no treatment</td>
<td>Unlikely</td>
<td>May occur, but probably never will</td>
</tr>
</tbody>
</table>

Step 1 – Consider the Consequences
What are the consequences of this incident occurring? Consider what could reasonably have happened as well as what actually happened. Look at the descriptions and choose the most suitable consequence.

Step 2 – Consider the Likelihood
What is the likelihood of the consequence identified in step 1 happening? Consider this without new or interim controls in place. Look at the descriptions and choose the most suitable Likelihood.

Step 3 – Calculate the Risk
1. Take step 1 rating and select the correct column
2. Take step 2 rating and select the correct line
3. Circle the risk score where the two ratings cross on the matrix below.

H = High, M = Medium, L = Low

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>
</tr>
</thead>
<tbody>
<tr>
<td>Firstly</td>
<td>Eliminate</td>
<td>Removing the hazard, eg taking a hazardous piece of equipment out of service.</td>
</tr>
<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>
</tr>
<tr>
<td>Thirdly</td>
<td>Isolation</td>
<td>Isolating the hazard from the person at risk, eg using a guard or barrier.</td>
</tr>
<tr>
<td>Fourthly</td>
<td>Engineering</td>
<td>Redesign a process or piece of equipment to make it less hazardous.</td>
</tr>
<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>
</tr>
</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>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 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>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


6 Roof Safety Survey Building 23

6.1 Building 23 General Information

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

Building:
University of Wollongong Campus Building 23

Description:
Multi storey low pitched metal roof with services that include air conditioning units and roof ventilation. Window gantry’s are installed to the north and south side of the building overhead lifelines are installed.

SafetyNet Risk Assessment Reference Number:
- UOW01622

Roof Access:

Main Roof Access:
Access to the main roof area is via the buildings internal stairwell located at the eastern end of building 23. The roof access door is located on the top floor, eastern end of the toilet corridor. An unmarked door is a small cleaners storage cupboard which contains the roof access door. On exiting the door follow the walkway around to the main roof fixed access ladder.

North & South Window Gantry Access:
- Access to the north and south window gantry’s is via a gate located on the north and south side of the buildings. Users must be connected to the overhead lifeline prior to opening the access gates.

Signage:
- Various restricted areas

Compliance Plates:
- Data Plate for Lifelines & Anchor point data tags

Height of Building:
- Multi storey

Pitch:
- < 5 degrees

Roof Construction:
- 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 (Manufacture’s User Manual in link below)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. SALA SAYFGLIDA</td>
<td>Current</td>
<td>Riverlands Roofing</td>
</tr>
</tbody>
</table>

*(End users must follow manufacturer’s instructions and use compatible attachments. More specifically, the connection system for horizontal lifelines Sayf8 or Sayfglida 12 must use the ss130 shuttle device)*

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
- ☑ Handrail
- ☐ Vertical Lifelines
- ☐ Walkway
- ☐ Parapets

Work Activity & Frequency:

- Clean gutters/routine maintenance – 6 months
- Service A/C plant- monthly
6.2 Building 23 Safety Systems Aerial Photo Layout

The following aerial photo indicates access points and safety systems layout.

Legend:

<table>
<thead>
<tr>
<th>AD</th>
<th>Main Roof Access Door</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL</td>
<td>Roof Access Ladder</td>
</tr>
<tr>
<td></td>
<td>Anchor Point</td>
</tr>
<tr>
<td></td>
<td>Lifeline</td>
</tr>
</tbody>
</table>

North Window Gantry Lifeline
South Window Gantry Lifeline
6.3 Building 23 Roof Photos

Main Roof

<table>
<thead>
<tr>
<th>Image 1</th>
<th>Image 2</th>
<th>Image 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.jpg" alt="Image" /></td>
<td><img src="image2.jpg" alt="Image" /></td>
<td><img src="image3.jpg" alt="Image" /></td>
</tr>
<tr>
<td>Building 23 main roof access via the eastern end of the building</td>
<td>Building 23 main roof access via the internal stairwell</td>
<td>Building 23 main roof access eastern end toilet corridor unmarked cleaners cupboard</td>
</tr>
<tr>
<td><img src="image4.jpg" alt="Image" /></td>
<td><img src="image5.jpg" alt="Image" /></td>
<td><img src="image6.jpg" alt="Image" /></td>
</tr>
<tr>
<td>Building 23 main roof access cleaners cupboard roof access door</td>
<td>Building 23 main roof area with walkway leading to the main roof fixed access ladder</td>
<td>Building 23 main roof lading with walkway &amp; handrail</td>
</tr>
<tr>
<td><img src="image7.jpg" alt="Image" /></td>
<td><img src="image8.jpg" alt="Image" /></td>
<td><img src="image9.jpg" alt="Image" /></td>
</tr>
<tr>
<td>Building 23 main roof area with roof ventilator</td>
<td>Building 23 main roof with lifeline (Certification by Riverlands Roofing Status Current)</td>
<td>Building 23 main roof area with walkway and air conditioning units</td>
</tr>
</tbody>
</table>
### Building 23 main roof are with anchor point (Certification by Riverlands Roofing Status Current)

### Building 23 main roof are with anchor point, walkway/handrail (Certification by Riverlands Roofing Status Current)

### South & North Window Gantry’s

### Building 23 south window gantry access gate and lifeline user must be connected to the lifeline prior to opening the access gate (Certification by Riverlands Roofing Status Current)

### Building 23 north window gantry access gate and lifeline user must be connected to the lifeline prior to opening the access gate (Certification by Riverlands Roofing Status Current)

## 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
- NSW Public Health Regulation 2012
- Public Health Amendment (Legionella Control) Regulation 2018

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 Guidelines for Legionella Control in Cooling Water Systems

10  Version Control Table

<table>
<thead>
<tr>
<th>Version Control</th>
<th>Date Released</th>
<th>Approved By</th>
<th>Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>November 2012</td>
<td>Manager WHS</td>
<td>New document</td>
</tr>
<tr>
<td>2</td>
<td>April 2014</td>
<td>Manager WHS</td>
<td>Re-certification update</td>
</tr>
<tr>
<td>3</td>
<td>February 2018</td>
<td>Manager WHS</td>
<td>Revision and update</td>
</tr>
<tr>
<td>4</td>
<td>March 2019</td>
<td>Manager WHS</td>
<td>Revision and update</td>
</tr>
<tr>
<td>5</td>
<td>October 2020</td>
<td>Manager WHS</td>
<td>Document recreated by GO from Riverlands Roofing. All information reviewed/updated.</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

Anchor Point Data Tag