

Roof Safety Survey

GENERAL INFORMATION

CAMPUS: Wollongong Campus
BUILDING: Biological Sciences (35)
DESCRIPTION: 2 storey L shaped building with a sloped metal roof comprising two wings (northern - Biology and southern - Infomatics). There is a covered walkway linking the western end of the northern wing to Building 15. Two glass covered atriums over stairwells. Multiple domed skylights around the building.

RISK ASSESSMENT #: UOW01097

ROOF ACCESS: Two access points:
 1) Northern (Main) Access to Northern wing plantroom via Stair 1. Access to the roof is via a permanent ladder situated in room to immediate right of the door. Signage on door - Caution High Noise Level and Caution Chemical Hazard (PPE available in toolbox on door if required)
 2) Southern Access to Southern wing plantroom via Stair 4 through glass door across from the plantroom. There is an enclosed area requiring a temporary ladder to access the roof.
 3) Bridge to Building 6 Lifeline

SIGNAGE: Danger - No Access to Roof without a Buildings and Grounds Roof Access UOW Permit to work; Warning - Authorised Personnel Only

COMPLIANCE PLATES: Tags on anchor points. Plates for Horizontal lifelines on Northern Wing located at top of ladder access. Plate for Horizontal lifeline on Southern Wing located beside line on northern side.

MARKED SAFE AREAS: None

ROOFING SYSTEM: Sala Evolution Lifeline
 Sala Sayflgida & Sayf8 Lifeline
 Typical Anchors

HEIGHT OF BUILDING: Two storey
PITCH: 10-15 degrees
ROOF CONSTRUCTION: Metal
STRUCTURAL INTEGRITY: Sound, however skylight areas - fragile

VEGETATION: Yes

ADJOINING ROOFES: Austin Keane (15) but no access from

SERVICES:

Gutters	Yes
A/C Units	Yes
Exhaust Fans	Yes
Ducts	Yes
Roof Ventilators	Yes
Fume Cupboards	15
Telco Towers	Yes
Lights	No

Satellite Dishes	Yes
Antenna	Yes
Skylights Domes	Yes
Glass Skylights	Yes
Pipework	Yes
Cooling Tower	Yes
Water Tank	Yes
Weather Station	Yes

EXISTING SAFETY ITEMS:

Horizontal Lifelines	Yes
Anchor Points	Yes
Vertical Lifelines	No

Handrail	No
Walkway	No
Parapets	No

WORK ACTIVITY DETAILS:

Clean Gutters / Routine Maintenance	Yes
Service A/C Plant	Yes
Cooling Tower Maintenance	Yes
Fume Cupboards	Yes

Frequency

Every 6 weeks
Monthly
Monthly
Every 6 months

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

Roof Safety Survey

RISK ASSESSMENT

Risk Assessment / Task Location

BUILDING 35

Note: The hazards identified do not include hazards that related to specific work tasks. These should be identified in the Safe Work Method Statement (SWMS) of the contractor.

Hazard Identification		Risk Assessment & Control Measures		Risk Control
What is the Activity/Service Item	What are the potential Hazards	What is the Risk Level	List any Control Measures already Implemented	Describe what can be done to eliminate risk or reduce the harm
Access to Roof via Fixed ladder	Fixed ladder- Falling Non compliant access ladder at roof access to be replaced.	M	Maintain 3 points of connection	Maintain 3 points of connection
Access to Roof	Unauthorised access	M	All access points to roof are locked and made secure so are not accessible by unauthorised persons; signage	Risk Assessment and Roof Safety Survey
Access to roof	Temporary ladder - No designated access point from southern plantroom courtyard to roof of southern wing	M	Anchor point on the eastern side but none on western. Access to southern wing from Northern access.	Install ladder bracket(s) on southern courtyard wall and additional anchor points.
Gutter Edge Maintenance	Falling	H	Horizontal Lifeline & Anchors Installed	Ensure Horizontal Lifeline and Anchors used correctly
Exhaust Fan & Roof Ventilator Maintenance	Falling, Trip Hazard - Roof Sheeting & Refer to SWMS of contractor for maintenance work / Multiple skylights fragile and brittle roof fall through.	H	Horizontal Lifeline & Anchors Installed	Ensure Horizontal Lifeline and Anchors used correctly. Hazards identified - Additional lifeline system to be installed to safely access equipment.
Fume Cupboard Maintenance	Falling, Trip Hazard - Roof Sheeting & Refer to SWMS of contractor for maintenance work / Multiple skylights fragile and brittle roof fall through.	H	Horizontal Lifeline & Anchors Installed	Ensure Horizontal Lifeline and Anchors used correctly. Hazards identified - Additional lifeline system to be installed to safely access equipment.
Fume Cupboard Maintenance	Fume Cupboard Emissions	M	Nil	Signage and liaise with Faculty Officer so that fume cupboards are tagged out of service when regular maintenance is required.
Skylight domes	Falling near or through skylight dome	H	Horizontal Lifeline & Anchors Installed	Ensure Horizontal Lifeline and Anchors used correctly. Hazards identified - Additional lifeline system to be installed to safely access equipment. Multiple skylights require fragile and brittle roof signage. Protective gridmesh or handrail around skydomes.
Glass Roofs	Falling near or through glass skylight	H	Horizontal Lifeline & Anchors Installed	Ensure Horizontal Lifeline and Anchors used correctly. Hazards identified – Additional lifeline system to be installed to safely access equipment. Multiple glass skylights require fragile and brittle roof signage.
Antenna, Satellite Dish, or Water Tank Maintenance	Falling & Refer to SWMS of contractor for maintenance work / Radio frequency hazards	H	Horizontal Lifeline & Anchors Installed	Ensure Horizontal Lifeline and Anchors used correctly. Hazards identified – Additional lifeline system to be installed to safely access equipment.
Maintenance	RF hazard	H	www.rfnsa.com.au/nsa/index.cgi	Adequate signage required and demarkation
Working on Roof	Trip Hazard from guy wires	M	Safe Work Procedure	Demarkation via signage or paint
General	Trip Hazard - Horizontal Lifeline or Anchor Points	M	Signage and system is visible	Be aware of location of horizontal lifelines and anchor points.
General	Slipery roof from Pine Needles from overhead trees	M	Regular Maintenance	Be aware of pine needles and ensure the roof is cleaned regularly
General	Environmental Hazards - Spiders, Wasps, and other	M	Appropriate PPE and insect repellent; Pest control as required	On-going pest control measures
General	Weather Trips/Slips - Wet Roofs	H	Safe Work Procedure, no work while roofs are wet	Do not work while roofs are wet or have dew
General	Weather - Windy Condition	H	Safe Work Procedure, no work in high wind condition	Do not work in windy conditions
General	Weather - Hot Conditions / Burns from hot roof	M	Safe Work Procedure	Use sunscreen, hats and remain hydrated and take appropriate breaks have adequate coverage over skin to avoid burns from hot roof.

Reference Documentation

Legislation

NSW Work Health and Safety Regulation 2017 Part 4.4 Falls
Public Health (Microbial Control) Regulation 2000

Australian Standards

AS 1657 - 2013 : Fixed platforms, walkways, stairways and ladders - Design, construction and installation
AS 1891.1 - 2007 : Industrial fall-arrest systems and devices - Harnesses and ancillary equipment
AS 1891.2 - 2001 : Industrial fall-arrest systems and devices - Horizontal lifeline and rail systems
AS 1891.3 - 1997 : Industrial fall-arrest systems and devices - Fall-arrest devices
AS 1891.4 - 2009 : Industrial fall-arrest systems and devices - Selection, use and maintenance
AS 1892.5 - 2000 : Portable ladders - Selection, safe use and care
AS 2210.1 - 2010 : Safety, protective and occupational footwear - Guide to selection, care and use
AS 2243.8 - 2006 : Safety in Laboratories - Fume Cupboards
AS 2243.9 - 2009 : Safety in Laboratories - Recirculating Fume Cabinets
AS 3666- 2011 : Air-handling & Water Systems for Buildings - Microbial Control
AS 4994.1 - 2009 : Temporary edge protection - General requirements
AS 4994.2 - 2009 : Temporary edge protection - Roof edge protection - Installation and dismantling
AS 5532 - 2013 : Manufacturing requirements for single-point anchor device used for harness-based work at height

Code of Practice

SafeWork NSW - Managing the Risk of Falls at WorkPlaces
NSW Health Department Code of Practice for the Control of Legionnaires' Disease

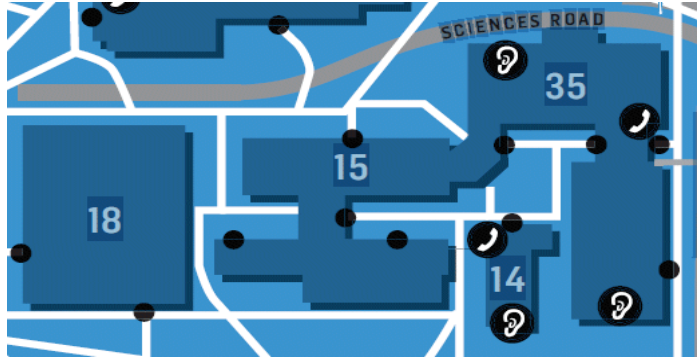
UOW Documentation

Managing the Risk of Falls Guidelines
Thermal Comfort Guidelines
UOW Roof Access Permit
UOW Roof Access Certificate

Other

[SALA - Fall Arrest and Height Safety Systems - Fall Protection Manual](#)
WorkCover - Safe Working at Heights Guide 2006
WorkCover Safety Guide - Portable Ladders February 1999

Building 35 Roof Safety Assessment



- P - location of compliance plate
- A - location of access to roof
- - Anchor point
- _____ Horizontal Lifeline
- L - location of ladder

Building 35 Roof Safety Assessment



Northern wing - looking back towards the southern wing



Northern wing - looking west towards northern wing of Building 15



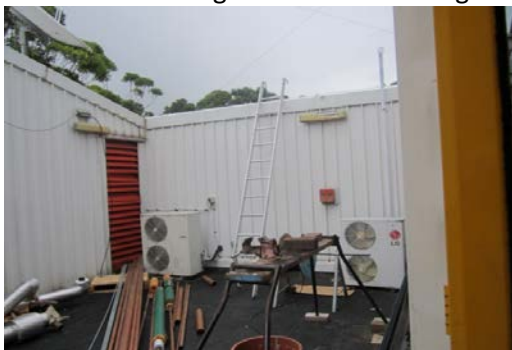
Permanent ladder to northern wing roof



Northern wing and Southern wing roof access looking south from Building 41



Northern wing - eastern view showing glass skylight over stairwell



Southern wing enclosed area showing temporary ladder to roof



View of link between northern and southern wings



Roof over link between Building 15 and 35

Building 35 Roof Safety Assessment



B35 new access platform



B35 New ladder cover