Roof Safety Survey

GENERAL INFORMATION

CAMPUS: Wollongong Campus
BUILDING: School of Information Systems & Technology (39A), X (39B) and CEDIR (39C)
DESCRIPTION: Building comprises 3 wings/blocks
Block C (western wing) Two storey metal roof building with raised glass atrium skylight and two enclosed service areas - the smaller in the south west corner beside the access door, the larger north of the atrium in the centre of the block - to the west of the other access door. Anchor points to clean gutters
Block B (southern wing) Two storey metal roof building plus underground parking with raised glass atrium skylight and enclosed service area to the north beside the access door. Anchor points to clean gutters. Stile to access Block A
Block A (northern wing) Two storey metal roof building with raised glass atrium skylights and enclosed service area to the north. Anchor points to clean gutters. Horizontal lifelines beside skylights on the western side. Stile to access Block B. Note: Trip hazard at roof access. North wing plant room access - safe use of ladders - telescopic stilts to ladder to be extended prior to access. Low head clearance on ladder.

RISK ASSESSMENT: UOW01676

ROOF ACCESS:
1) Block C (western wing west)
2) Block C (western wing east)
3) Block B (southern wing)
4) Block A (northern wing)
5) Front Awning

SIGNAGE:
Danger - No Access to Roof without a Buildings and Grounds Roof Access UOW Permit to work; Caution - Trip Hazard; Caution - Low Headroom; Caution - Chemical Hazards

COMPLIANCE PLATES:
Plate for Horizontal lifeline on wall adjacent to the line. All anchors have data tags.

SAFE WORK AREAS:
None on Block A; however three within the enclosed service areas immediately accessed from the roof access doors in Block B and C. Refer Map

ROOFING SYSTEM:
SALA “SAYFGLIDA & SAYFB” LIFELINE.

TYPICAL ANCHORS

HEIGHT OF BUILDING: 3 storeys
PITCH: < 5 degrees
ROOF CONSTRUCTION: Metal
STRUCTURAL INTEGRITY: Sound

VEGETATION: Yes

ADJOINING ROOFES: Nil

SERVICES:
- Gutters: Yes
- A/C Units: Yes
- Exhaust Fans: Yes
- Ducts: Yes
- Roof Ventilators: No
- Fume Cupboards: No
- Telco Towers: Yes
- Satellite Dishes: Yes
- Antenna: Yes
- Skylights Domes: Yes
- Glass Skylights: Yes
- Pipework: Yes
- Cooling Tower: Yes

EXISTING SAFETY ITEMS:
- Horizontal Lifelines: Yes
- Anchor Points: Yes
- Vertical Lifelines: No
- Handrail: Yes
- Walkway: No
- Parapets: Yes

WORK ACTIVITY DETAILS:
- Clean Gutters / Routine Maintenance: Yes
- Service A/C Plant: Yes
- Cooling Tower Maintenance: Yes
- Frequency:
  - Every 6 weeks
  - Monthly

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

**Risk Assessment / Task Location**

**BUILDING 39**

**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.

<table>
<thead>
<tr>
<th>Hazard Identification</th>
<th>What are the potential Hazards</th>
<th>Risk Assessment &amp; Control Measures</th>
<th>Risk Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Roof</td>
<td>Low Head Clearance &amp; Falling</td>
<td>M Caution</td>
<td>Signage for clearance and a safer access point so you are not exposed to fall</td>
</tr>
<tr>
<td>Access to Roof</td>
<td>Unauthorised access</td>
<td>M All access points to roof are locked and made secure so are not accessible by unauthorised persons; signage</td>
<td>Risk Assessment and Roof Safety Survey</td>
</tr>
<tr>
<td>Gutter Edge Maintenance with edge protection</td>
<td>Refer to SWMS of contractor</td>
<td>L Parapet &amp; Handrail Protection</td>
<td>Nil</td>
</tr>
<tr>
<td>Gutter Edge Maintenance with no protection</td>
<td>Falling</td>
<td>H Horizontal Lifelines &amp; Anchor Points Installed</td>
<td>Handrail, Horizontal Lifeline or a minimum of Anchor Points are required</td>
</tr>
<tr>
<td>A/C Maintenance not close to edge or with handrail protection</td>
<td>Refer to SWMS of contractor</td>
<td>L Safe Area or with Parapet &amp; Handrail Protection</td>
<td>Nil</td>
</tr>
<tr>
<td>A/C Maintenance close to roof edge with no protection</td>
<td>Falling &amp; Refer to SWMS of contractor for maintenance work</td>
<td>H Nil</td>
<td>Handrail, Horizontal Lifeline or a minimum of Anchor Points are required</td>
</tr>
<tr>
<td>Exhaust Fan &amp; Duct Maintenance not close to edge or with Handrail protection</td>
<td>Refer to SWMS of contractor</td>
<td>L Parapet &amp; Handrail Protection</td>
<td>Nil</td>
</tr>
<tr>
<td>Exhaust Fan &amp; Duct Maintenance close to roof edge with no protection</td>
<td>Falling &amp; Refer to SWMS of contractor for maintenance work</td>
<td>H Nil</td>
<td>Handrail, Horizontal Lifeline or a minimum of Anchor Points are required</td>
</tr>
<tr>
<td>Antenna Maintenance with fall protection</td>
<td>Refer to SWMS of contractor for maintenance work</td>
<td>H Parapet, Handrail Protection or Horizontal Lifelines &amp; Anchors</td>
<td>Ensure horizontal lifeline &amp; anchors used correctly</td>
</tr>
<tr>
<td>Antenna Maintenance with no fall protection</td>
<td>Falling</td>
<td>H Nil</td>
<td>Handrail, Horizontal Lifeline or a minimum of Anchor Points are required</td>
</tr>
<tr>
<td>Air Conditioning Maintenance</td>
<td>Atmospheric contaminants; legionnaires Disease from A/C Units</td>
<td>M Regular inspection and cleaning of Air filters; intakes and exhausts; ductwork and cooling towers</td>
<td>Continuing Maintenance</td>
</tr>
<tr>
<td>Cooling Tower Maintenance</td>
<td>Falling and Refer to SWMS of contractor for maintenance work</td>
<td>H Working at Heights Guidelines - Working from Ladders, Maintain 3 points of contact</td>
<td>Vertical Systems on the access ladders</td>
</tr>
<tr>
<td>Access near Skylights and possible cleaning</td>
<td>Falling Through</td>
<td>H Nil</td>
<td>Warning Signs if trafficable or some form of fall protection device is required. Protective gridmesh or handrail around skydomes / skylights on Block A</td>
</tr>
<tr>
<td>General</td>
<td>Trip Hazard - Roof Sheeting</td>
<td>M Safe Work Procedure</td>
<td>Install walkways</td>
</tr>
<tr>
<td>General</td>
<td>Climbing ladder</td>
<td>M Maintain 3 points of contact; Signage; and Working at Heights Guidelines - Working from Ladders</td>
<td>Ensure that ladder is used correctly</td>
</tr>
<tr>
<td>General</td>
<td>Environmental Hazards - Spiders, Wasps, and other insects</td>
<td>M Appropriate PPE and insect repellent; Pest control as required</td>
<td>On-going pest control measures</td>
</tr>
<tr>
<td>General</td>
<td>Weather Trips/Slips - Wet Roofs</td>
<td>H Safe Work Procedure, do not work on wet roof</td>
<td>Do not work while roofs are wet or have dew</td>
</tr>
<tr>
<td>General</td>
<td>Weather - Windy Condition</td>
<td>H Safe Work Procedure, do not work in windy conditions</td>
<td>Do not work in windy conditions</td>
</tr>
<tr>
<td>General</td>
<td>Weather - Hot Conditions</td>
<td>M Safe Work Procedure</td>
<td>Use suncream, hats and remain hydrated and take appropriate breaks</td>
</tr>
<tr>
<td>Block A Access</td>
<td>Low Head Clearance</td>
<td>M Caution</td>
<td>North Wing Plant Room Access Safe use of ladders - telescopic stilts to ladder to be extended prior to access.</td>
</tr>
</tbody>
</table>
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 2210.1 - 2010 : Safety, protective and occupational footwear - Guide to selection, care and use
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 - Manage the risk of falls in the workplace
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
BUILDING 39 ROOF SAFETY ASSESSMENT

P - location of compliance plate
A - location of access to roof
L - location of ladder/stile
B - location of ladder bracket

Horizontal Lifeline
Safe Roof Work Area
Anchor points
**Skylight on Cooling towers and roof**  
**Enclosed services area in SW corner of Block C**  
**Roof access to enclosed services area in SW corner of Block C**  
**Parapet and handrail on southern wall of Block C**  
**Handrail on the northern side of the main services area on Block C - looking east towards Block B**  
**Main services area on Block C looking west**  
**Looking up to access door in the main services area on Block C**  
**Horizontal lifelines around Block C**  
**Skylight and cooling towers on Block B**  
**Skylight on Block C**  
**South east corner of Block B**  

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Block A

Block A looking north from ladder

Ladder to cooling tower on Block B

Roof access door to Block B

B39 low head clearance 2

B39 low head clearance on ladder

Skylight domes on Block A

Ladder and hatch to access on Block A

Caution - Low head clearance on access ladder.