Roof Safety Survey

**GENERAL INFORMATION**

**CAMPUS:** Wollongong Campus  
**BUILDING:** Illawarra Health and Medical Research Institute (IHMRI) (32)  
**DESCRIPTION:** Modern 4 storey building with plantroom occupying the top floor. Air conditioning services located on the roof outside the plantroom. Low pitched metal roof with horizontal lifelines around building edge. Third floor walkway between Building 32 and 41 - Horizontal lifeline across the top and two anchor points and ladder rack. Solar panels located on the north western corner.

**RISK ASSESSMENT #:** UOW01631  
**ROOF ACCESS:**  
1) Via Stair 1  
Access to the plantroom on the fourth floor  
2) Via Stair 2  
Access to the plantroom on the fourth floor  
3) Via Lift 1  
Access to the plantroom on the fourth floor  
4) Lower northern roof  
Access via main plantroom - four rung stairs up onto small landing to door which opens into enclosed air conditioning services area. Opening at the western end where solar panels are located, horizontal lifelines around roof edge.  
5) Lower northern roof  
Access via Northern fume cupboard plantroom (two door open from main plantroom) - four rung stairs up onto small landing to door which opens into enclosed air conditioning services area. Opening at the western end where solar panels are located, horizontal lifelines around roof edge.  
6) Upper roof  
From A/C services area, climb 3.5 m ladder up onto upper roof - horizontal lifelines and 400mm parapet around building edge, short 3 rung ladder to raised section of roof on the southern side.  
7) South Eastern terrace  
Ascend 2.5 m ladder in South East corner of Plantroom beside Stair 2 onto landing - door opens onto terrace with 1200 m balcony (Step on landing is a trip hazard)  
8) Bridge Link  
Bridge link between Building 32 and Building 41 - EWP access only to this roof

**SIGNAGE:**  
**COMPLIANCE PLATES:**  
1) On walkway between Buildings 32 and 41 beside ladder rack, 2) On upper roof beside ladder, 3) on outer horizontal lifeline beside solar panels

**SAFE WORK AREAS:**  
1) On northside in enclosed services areas accessed from plantroom, 2) On south- eastern terrace  accessed from plantroom

**ROOFING SYSTEM:**  
Sala Evolution Lifeline  
Typical Anchors

**HEIGHT OF BUILDING:** 4 Storey  
**PITCH:** < 5 degrees  
**ROOF CONSTRUCTION:** Metal & Concrete Roof  
**STRUCTURAL INTEGRITY:** Sound

**VEGETATION:** Nil

**ADJOINING ROOFTOPS:** Nil

**SERVICES:**  
<table>
<thead>
<tr>
<th>Gutters</th>
<th>Yes</th>
<th>Satellite Dishes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/C Units</td>
<td>Yes</td>
<td>Antenna</td>
<td>Yes</td>
</tr>
<tr>
<td>Exhaust Fans</td>
<td>Yes</td>
<td>Skylights Domes</td>
<td>No</td>
</tr>
<tr>
<td>Ducts</td>
<td>No</td>
<td>Skylights</td>
<td>No</td>
</tr>
<tr>
<td>Roof Ventilators</td>
<td>No</td>
<td>Pipework</td>
<td>No</td>
</tr>
<tr>
<td>Fume Cupboards</td>
<td>No</td>
<td>Cooling Tower</td>
<td>Yes</td>
</tr>
<tr>
<td>Telco Towers</td>
<td>No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**EXISTING SAFETY ITEMS:**  
| Horizontal Lifelines | Yes | Handrail | No |  
| Anchor Points | Yes | Walkway | Yes |  
| Vertical Lifelines | No | Parapets | Yes | 400 mm |

**WORK ACTIVITY DETAILS:**  
| Clean Gutters / Routine Maintenance | Yes |  
| Service A/C Plant |  
| Fume Cupboards | Yes |  

**Frequency:**  
Every 6 months  
TBA  
Every 6 months

Note: Before commencing any work obtain Roof Permit from Facilities Management Division
## Building 32 Roof Safety Assessment

### Risk Assessment / Task Location

**BUILDING 32**

Note: The hazards identified do not include hazards that relate 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>Risk Assessment &amp; Control Measures</th>
<th>Risk Control</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access to Roof via plantroom door</strong></td>
<td>Nil</td>
<td>L step access to roof from plant area</td>
</tr>
<tr>
<td><strong>Access to Roof</strong></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>
</tr>
<tr>
<td><strong>Access to upper roof via fixed ladder</strong></td>
<td>climbing ladder</td>
<td>L fixed ladder / extendable styles</td>
</tr>
<tr>
<td><strong>Immediate roof access - upper roof</strong></td>
<td>falling</td>
<td>H Installed anchor</td>
</tr>
<tr>
<td><strong>Bridge link roof access</strong></td>
<td>Access / falling</td>
<td>H Horizontal Lifeline &amp; Anchors Installed</td>
</tr>
<tr>
<td><strong>Gutter Maintenance on roof and Awnings</strong></td>
<td>Falling</td>
<td>H Horizontal Lifeline &amp; Anchors Installed</td>
</tr>
<tr>
<td><strong>Roof Plant Maintenance greater than 2m from roof edge</strong></td>
<td>Refer to SWMS for contractor</td>
<td>M Safe Work Procedure</td>
</tr>
<tr>
<td><strong>Roof Plant Maintenance within 2m from roof edge</strong></td>
<td>Falling &amp; Refer to SWMS for contractor</td>
<td>H Horizontal Lifeline &amp; Anchors Installed</td>
</tr>
<tr>
<td><strong>Antenna Maintenance</strong></td>
<td>Falling and Refer to SWMS of contractor</td>
<td>H Anchor Points Installed</td>
</tr>
<tr>
<td><strong>General</strong></td>
<td>Trip Hazard - Roof Sheet</td>
<td>M Safe Work Procedure</td>
</tr>
<tr>
<td><strong>Fume cupboard maintenance</strong></td>
<td>Trip Hazard - Roof Sheet</td>
<td>H Safe work procedure</td>
</tr>
<tr>
<td><strong>General</strong></td>
<td>Environmental Hazards - Spiders, Wasps, and other insects</td>
<td>M Appropriate PPE and insect repellent; Pest control as required</td>
</tr>
<tr>
<td><strong>General</strong></td>
<td>Weather Trips/Slips - Wet Roofs</td>
<td>H Safe Work Procedure, do not work on wet roof</td>
</tr>
<tr>
<td><strong>General</strong></td>
<td>Weather - Windy Condition</td>
<td>H Safe Work Procedure, do not work in high wind conditions</td>
</tr>
<tr>
<td><strong>General</strong></td>
<td>Weather - Hot Conditions</td>
<td>M Safe Work Procedure</td>
</tr>
</tbody>
</table>

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**HHRD-WHS-REF-460.2 2014 March**
Reference Documentation

Legislation
NSW Work Health and Safety Regulation 2011 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 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
Safe Work Australia - 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
Fume cupboard vents on Upper roof - looking west from ladder

Small step ladder to raised section of upper roof on the southern side

Step ladder and landing leading to lower northern roof

Upper roof and a/c units looking west from top of ladder

Solar panels on western lower northern roof

Access door to balcony on south east corner

Lower northern roof

Step ladder with telescopic stiles and landing leading to lower northern roof
SAFE USE OF SALA “EVOLUTION” LIFELINE.

1. TYPICAL LIFELINE.

2. ATTACHMENT OF SHUTTLE

3. SHUTTLE IN CLOSED POSITION.

SALA EVOLUTION SHUTTLE

- Depress the large round grey button on top and small grey button under the connection ring simultaneously. The bottom jaws will open.
- Place the shuttle jaws over the cable with the jaws facing downward and the connecting ring facing toward the gutter.
- Close the jaws and check the cable is locked within the jaw.
- It is possible to orientate to different sides of the cable without the need to disconnect the shuttle from the cable. Simply depress the top round button only and swivel the “D” loop ring to the opposite side. Release the button and the ring will lock to the other side.
GUIDE LINE ONLY

THIS OPERATION MANUAL SHOULD BE CONSIDERED A GUIDE ONLY. ALL PERSONS USING THE EQUIPMENT LISTED IN THIS MANUAL MUST BE COMPETENTLY TRAINED. "THE INSTALLER" INSTALLS SYSTEMS ONLY AND DOES NOT MANUFACTURE THE SYSTEMS. END USERS TO ENQUIRE WITH "THE MANUFACTURER" (BULLIVANTS) AT THEIR OWN DISCRETION. ALWAYS FOLLOW MANUFACTURERS INSTRUCTIONS.

TYPICAL ANCHORS