

Risk Assessment Form (RAAC)

Space covered by this Risk Assessment

Date of assessment

Department

Date review due

Description of Task/Process

Assessment carried out by

Additional information	<p>Emergency Response:</p> <ul style="list-style-type: none"> • Establish communication protocols and emergency response procedures. • Keep emergency contact information readily available. <p>Inspections and Maintenance:</p> <ul style="list-style-type: none"> • Regularly inspect the RAAC roof for signs of damage or degradation. • Implement a maintenance schedule to address any identified issues promptly. <p>Review and Monitoring:</p> <ul style="list-style-type: none"> • Regularly review and update the risk assessment as conditions change or new hazards emerge. • Monitor the effectiveness of control measures and adjust them as needed. <p>Record Keeping:</p> <ul style="list-style-type: none"> • Maintain records of risk assessments, training, inspections, and incident reports. <p>Communication:</p> <ul style="list-style-type: none"> • Establish clear lines of communication among all parties involved in the project, including workers, supervisors, and emergency responders.
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Potential RAAC hazard identified, location and how they may cause harm	Who may be at Risk?	Existing Control Measures (See Appendix 1)	Current Risk Level* (Critical, High, Medium, Low)	What additional Control Measures are required? (See Appendix 1)	Action required by whom & by when?	Final Risk Level* (Critical, High, Medium, Low)
Humanities has RAAC roof panels Structural Integrity:	Estates staff	Structural assessment by a qualified engineer before entry. Ensure proper signage warning of RAAC on ceiling.	MEDIUM	All staff, contractors and visitors to complete a briefing (Either by senior manager trained on RAAC or zone manager – Andy BASTable) –	Andy Bastable (manager or line manager)	LOW

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<p>Potential collapse or damage to the RAAC roof due to age, weathering, or structural weaknesses.</p> <p>Risk of falling debris from the roof.</p> <p>Weather conditions (e.g., rain, snow) affecting roof stability</p>	<p>Contractors – estates contractors</p> <p>IT.</p> <p>Students (Student union only)</p>	<p>Provide appropriate training on identifying material condition and RAAC awareness.</p> <p>Monitor weather conditions and delay entry if adverse conditions could affect safety.</p> <p>Clear all access and egress routes of obstructions.</p> <p>Provide adequate lighting for safe movement within the building.</p> <p>Students Union is escorted.</p> <p>All contractors are escorted – or work is agreed a week prior to commencement with zone manager.</p> <p>Ensure all personnel with a potential to access the building have suitable training in RAAC awareness.</p> <p>Secured via SALTO and key lock.</p>		<p>to include the following advice:</p> <p>Assess space before entering for debris, dampness (water ingress), any changes, any adverse loading. To escalate to university contact or line manager and zone manager – to include limitations of access and exit in regards to fire safety.</p> <p>Limit time in the space to only essential need and as little time as possible.</p> <p>Keep a log of who has received briefing.</p> <p>REFER TO ADDITIONAL CONTROL MEASURES AS ADVISED BY QUALIFIED/COMPETENT STRUCTURAL ENGINEER</p>	<p>Ongoing</p> <p>Andy Bastable (ZONE MANAGER)</p> <p>Andy Bastable</p> <p>By Estates/ structural surveying team. End OCT 23</p>	

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		<p>are highlighting in appendix B (Blue/grey boxes)</p> <p>IT assess is agreed through Zone Manager.</p>		<p>USING APPENDIX 1 AS GUIDANCE.</p> <p>Weekly monitoring to be carried out. Records of visual inspections kept.</p> <p>When works carried out in not RAAC area, adjacent clear demarcation to be but in place.</p> <p>Formal deputisation to be agreed</p>	<p>By Estates/ structural surveying team. End OCT 23</p> <p>Andy Bastable.</p> <p>Andy Bastable.</p>	

*See Risk Matrix below

Risk Matrix (Taken from the Institute of Structural Engineers publication ‘Reinforced Autoclaved Aerated Concrete (RAAC) Investigation and Assessment – Further Guidance, April 2023’)

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Assessment category	Risk category	
Red	Critical risk	Requires urgent remedial works which may include taking out of use or temporary propping to allow the safe ongoing use of a building. Depending on the extent, this may be part or all of the building. Combined with awareness campaign for occupants including exclusion zones.
	High risk	Requires remedial action as soon as possible. Combined with awareness campaign for occupants, which may include exclusion zones, signage, loading restrictions and the need to report changes of condition, eg, water leaks, debris, change in loading, etc.
Amber	Medium risk	Requires inspection and assessment on a regular basis, eg, annually. Combined with awareness campaign for occupants, which may include signage, loading restrictions and the need to report changes of condition, eg, water leaks, debris, etc.
Green	Low risk	Requires inspection and assessment occasionally, say three year period depending on condition. Combined with awareness campaign for occupants, which may include signage, loading restrictions and the need to report changes of condition, eg, water leaks, debris, etc.

Overall Final Risk Rating (Highest level in final column above)	LOW
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Additional Comments from Risk Assessor	
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Approved By	Heather Loosemore
Date	18-10-23

Position	Acting Head of Maintenance
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Please print a copy, sign it and keep for your records

Document History

Version	Date	Reviewer	Comments
1	18-10-23	Andy Bastable	Reviewed on site and updated.

Appendix 1 Risk Control Measures (Taken from the Institute of Structural Engineers publication 'Reinforced Autoclaved Aerated Concrete (RAAC) Investigation and Assessment – Further Guidance, April 2023')

Remediation

Remedial action should be undertaken on any panels assessed to be Red (High or Critical risk) condition, with planned remedial action determined for Amber (Medium risk) condition panels. In some instances, it may be appropriate to apply remedial action only to the affected panels. Alternatively, depending on the remedial works, this may be applied to all panels within the building being assessed. The response to Red (High or Critical risk) panels should be considered as time dependent. In some instances, immediate exclusion zones or the introduction of temporary propping to allow the safe ongoing use of a building may be recommended. In all instances, the ongoing use of buildings with RAAC panels identified to be in a Red (High or Critical risk) category should be risk assessed. Engineers undertaking the risk assessments should be aware of the approach being developed for the management of high-risk buildings under the Building Safety Act. Remediation strategies may include:

- The addition of secondary supports or beams at the end bearing to provide an increased effective bearing length. This is applicable to panels with short bearings length and misplaced transverse anchorage bars. This strategy will not be suitable for cut panels with no transverse anchorage reinforcement
- Positive remedial supports to actively take the loading from the panels. This could include the addition of new timber or lightweight structures to support the panels directly
- Passive fail safe supports to mitigate catastrophic failure of the panels if a panel was to fail. Such as a secondary structure designed to support the panels
- Removal of individual panels and replacement with an alternative lightweight solution • Entire roof replacement

Management Strategy

A management strategy should be applied to Amber (Medium risk) and Green (Low risk) RAAC panels. This should be developed by the building occupant/owner. It is expected that panels presenting a Low or Medium risk will deteriorate over time, but precise details of the mechanism that causes this, or the rate at which it will occur is not yet known. The management strategy should consider the current condition of the RAAC panels and include:

- Monitoring plans for RAAC panels and inspection regime
- Risk assessment details • Areas for proposed future remediation

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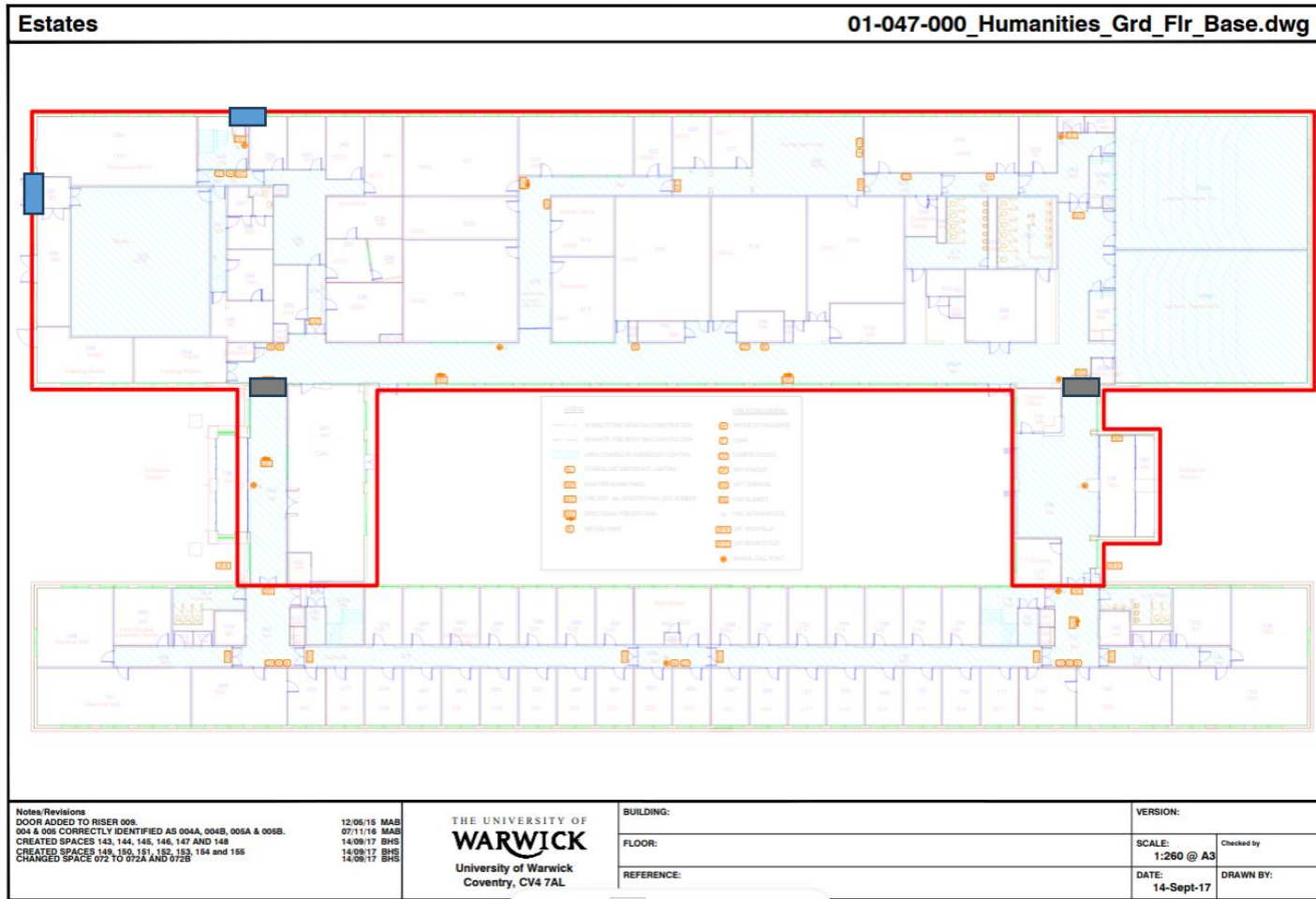
- The assumption on degradation of RAAC panels that have informed the plans – this should be informed by the structural engineer, based on site conditions
- The management strategy should also include plans for reducing the risks associated with RAAC panels

These should include plans for limiting:

- o Applied operational loads, for example no-walk zones on RAAC roofs, maintaining roof drainage and removal of ponding water
- o Applied fixed loads, for example, restricting new or removal of existing building services equipment
- o Durability risks, for example reducing humidity in plant or kitchen spaces, re-roofing including insulation laid to falls

An awareness campaign should be implemented so that all occupants are aware of the concerns about RAAC. This should provide reassurance that measures are being undertaken, but also help involve occupants in the management. Occupants should be encouraged to notify the responsible person if conditions change, for example, if leaks are detected, debris is found, or adverse loading noted.

Appendix B: Restricted Areas



	SALTO ACCESS
	KEY ACCESS

Notes/Revisions
 DOOR ADDED TO RISER 009
 004 & 005 CORRECTLY IDENTIFIED AS 004A, 004B, 005A & 005B.
 CREATED SPACES 143, 144, 145, 146, 147 AND 148
 CREATED SPACES 149, 150, 151, 152, 153, 154 and 155
 CHANGED SPACE 072 TO 072A AND 072B

12/05/18 MAB
 07/11/18 MAB
 14/09/17 BHS
 14/09/17 BHS
 14/09/17 BHS

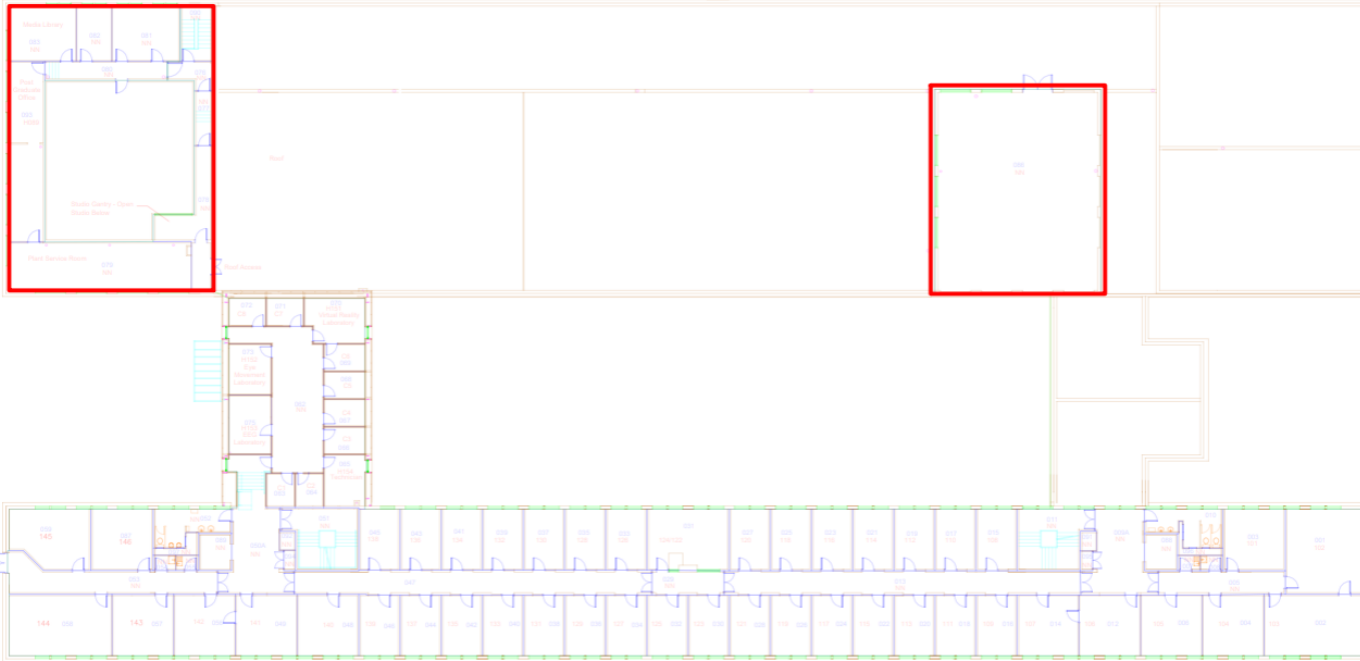


BUILDING:
 FLOOR:
 REFERENCE:

VERSION:
 SCALE: 1:260 @ A3
 DATE: 14-Sept-17
 Checked by:
 DRAWN BY:

Estates

01-047-L01_Humanities_1st_Flr_Base.dwg



Notes/Revisions
 ROOM DESCRIPTION REMOVED TO 001.
 CREATED SPACE 094, 095, 096 AND 097
 CHANGED SPACE 009 AND 050 TO 009A AND 050A

13/03/15 MAB
 14/09/17 BHS
 14/09/17 BHS



BUILDING:
 FLOOR:
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 DRAWN BY: