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ADDITIONAL CIRCULATION



Town House,
ABERDEEN, 8 March 2024

URGENT BUSINESS COMMITTEE

This additional circulation has been published subsequent to the meeting in accordance with the following decision:- *“to note the intention to make the report public, subject to any redaction that may be required, towards the end of the week commencing 4 March 2024.”*

JENNI LAWSON
INTERIM CHIEF OFFICER - GOVERNANCE (LEGAL)

BUSINESS

- 5.1 Reinforced Autoclaved Aerated Concrete (RAAC) Update - RES/24/086
(Pages 3 - 90)

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ABERDEEN CITY COUNCIL

COMMITTEE	Urgent Business Committee
DATE	29 th February 2024
EXEMPT	Exempt at the stage of consideration by the Committee but subsequently made public
CONFIDENTIAL	No
REPORT TITLE	Reinforced Autoclaved Aerated Concrete (RAAC) Update
REPORT NUMBER	RES/24/086
DIRECTOR	Andy MacDonald/Steve Whyte
CHIEF OFFICER	Stephen Booth/Jacqui McKenzie/John Wilson
REPORT AUTHOR	John Wilson
TERMS OF REFERENCE	1

1. PURPOSE OF REPORT

- 1.1 At the meeting of Full Council on 11 October 2023 a presentation was given to members on Reinforced Autoclaved Aerated Concrete (RAAC). It was agreed that officers would bring subsequent update reports to the appropriate committees where updates would be useful or decisions required to be made.
- 1.2 The report provides an update on the works undertaken to identify the extent and impact of the presence of RAAC in the Balnagask area of the city. A significant number of intrusive surveys have now been completed and it is recommended that council tenants in affected properties should be rehomed. The report proposes that officers now begin engaging council tenants to understand their needs in order to identify suitable alternative accommodation, whilst further option appraisal consideration is developed to provide proposals on the viability of the long-term future of the affected properties.
- 1.3 This report highlights that support and information will be provided to private owners/tenants of the properties that are similarly affected.

2. RECOMMENDATION(S)

That the Committee:

- 2.1 Note the independent structural engineer reports (refer to Appendices C&D), appended to this report, that recommend a thorough re-evaluation of the occupancy condition for the properties identified with RAAC and instructs the Chief Officer – Early Intervention and Community Empowerment to begin engaging with council tenants impacted to understand their individual needs to

enable them to be rehomed through the implementation of a short-term management strategy to facilitate this.

- 2.2 Approve budget virements within the Housing Capital budgets for 2024/25, as detailed within section 4, Financial implications of the report, to create an initial budget of £3m to address the matters raised in this report, to cover all associated costs including but not limited to, additional staffing costs, specialist consultant fees, contractors costs for access and works, rehoming costs, temporary accommodation, school transport, utilities disconnections/connections and security costs for the wider site.
- 2.3 In relation to recommendation 2.1 above, delegate authority to the Chief Officer - Early Intervention and Community Empowerment to rehome council tenants residing at the RAAC identified properties to alternative housing with the following provisions:
 - a) Home Loss Payments and Disturbance Payments will be applicable to eligible tenants when they move permanently;
 - b) Void properties across the city will initially be reserved where appropriate and considered for offer to tenants who currently reside at the identified properties;
 - c) The creation of an additional specific 'RAAC Impact' housing list to ensure priority is provided to tenants residing at identified properties, allowing for urgent rehoming;
 - d) All affected tenants will be placed on this list and assessed by need, individual building risk and failing this further prioritised by the length of their current tenancy;
 - e) Allocation will be based on the tenants current housing need, where stock provision allows, rather than their existing property type and size;
 - f) All current applications for re-homing within the identified properties will be transferred onto the new 'RAAC Impact' housing list as noted within point (c) above;
 - g) That tenants will be provided with temporary accommodation if they no longer wish to remain in their property, as an interim arrangement, before re-homing;
- 2.4 Instruct the Interim Chief Education Officer to provide school transport for pupils, on an interim basis, should a need arise through approval of recommendation 2.3;
- 2.5 Instruct the Chief Officer – Capital to suspend any planned Housing Revenue Account (HRA) capital programme works at the affected Council properties in Balnagask.
- 2.6 Instruct the Chief Officer – Corporate Landlord not to progress any new buy-back scheme applications within any RAAC affected properties, at this time using Corporate Landlord – Delegated Powers 6.

- 2.7 Instruct the Chief Officer – Early Intervention and Community Empowerment to ensure that any current council owned void properties within the Balnagask area that are identified as having RAAC in their construction, and any that become void in the future, will remain void and designated as Unable to be Relet (UTBR).
- 2.8 Note the prioritisation of this work will impact on allocations of housing for those on all of our council housing lists.
- 2.9 Note that circa 28% of the properties identified with RAAC in the Balnagask area are privately owned. Refer to Appendix A.
- 2.10 Instructs the Chief Officer – Early Intervention and Community Empowerment to 1) ensure that private owners and tenants who reside within any privately owned properties in the Balnagask area of Aberdeen which have RAAC in their construction, are provided with support and information (at request) to assist them in assessing their housing options, and 2) add existing owner occupiers and private tenants to the proposed ‘RAAC Impact’ housing list should a need for access to council homes be identified through the process of exploring available support and housing options for them in the city.
- 2.11 Note that further detail regarding the full range of assistance that can be provided to owners and private tenants will be detailed in the further report noted in item 3.27.
- 2.12 Note that an options appraisal is being prepared to consider the future options for the properties affected by RAAC, and instructs the Chief Officer – Capital to present the preferred option to members in a further report within the next 6 months.
- 2.13 Note ongoing engagement between Council Officers and all relevant Regulatory and Professional Bodies, Working Groups, other Local Authorities and Government representatives with the purpose of identifying best practice and potential funding solutions.
- 2.14 Instruct the Chief Officer – Early Intervention and Community Empowerment to engage with the Scottish Housing Regulator 1) advising of the impact of the identification of RAAC within our housing stock, the steps required to manage it and the direct and indirect impacts it will have on our wider housing performance standards, and 2) requesting that this is taken into account during regulation and consideration of the Council’s performance.

3. CURRENT SITUATION

Background

- 3.1 Following concerns raised in relation to RAAC roof panels within buildings a desk study identified the potential presence at circa 504 addresses in the Balnagask area of Aberdeen.

- 3.2 The 504 addresses are made up of 372 individual buildings which are a mix of houses and ground/first floor flats. In the case of the flats, although it's only the top flat which has the RAAC panels in the roof, it is evident and accepted that the bottom flat will also be impacted in terms of any potential planned remedial works.
- 3.3 The RAAC impacted properties are a mix of council 364 and private ownership 140. Of the privately owned properties 27 have identified landlords registered to lease the property privately.
- 3.4 A breakdown of ownership and size of units is shown in Appendix A: Property Ownership and Housing Mix.
- 3.5 To determine the condition of the RAAC panels within the identified properties, independent external structural engineering consultants were appointed to carry out both visual and intrusive inspections.
- 3.6 The inspection scope and procedure is based on guidance by The Institution of Structural Engineers (IStructE) - Reinforced Autoclaved Aerated Concrete (RAAC) Investigation and Assessment - Further Guidance - April 2023. Refer to Appendix B.
- 3.7 For ease of access and to minimise the impact on tenants, the initial inspection and investigation process was predominantly constrained to Aberdeen City Council owned void properties. This initial sample involved inspection/investigatory work at 30 properties.
- 3.8 This preliminary assessment revealed a range of RAAC conditions across the sampled properties, the risk assessment of these conditions, across the sampled properties, is referenced in the appended 'Independent Structural Engineer's Report 'Reference 157606 - RAAC Inspections - Balnagask Mono-Pitches November 2023'. Refer to Appendix C.
- 3.9 The November 2023 report highlights areas of concern and recommends that further intervention will be necessary across the affected properties. Following on from this, work commenced to extend inspections/surveys to all Council owned occupied properties. As this inspection/ survey work progresses it will provide assurance that there are no apparent emergency health and safety issues. Further deterioration of any RAAC panels will be influenced by other factors such as the possibility of any structural alterations to the properties or water ingress through the roof.
- 3.10 At the point of finalising this report a further 19 properties, following access arrangements agreed with tenants, have had visual and intrusive inspection surveys carried out.
- 3.11 A supplementary report updating the current position with regard to these further surveys and their outcome is included within Appendix D. The general outcome of these new property surveys accord with the earlier findings as noted in paragraphs 3.8 and 3.9.

- 3.12 Within the independent Structural Engineer's Report, refer to Appendix C, the recommendation is that targeted problem specific remediation works within the properties will not give suitable comfort and more comprehensive remedial works will be required involving either the partial or full replacement of the roof structure or the installation of a secondary support structure. Such works, are envisaged to be extensive both in scale and time to carry out. This will be incredibly disruptive to tenants given the scale and number of properties affected. It is considered that this work could not be undertaken, if viable, whilst tenants remain in-situ. Officers are therefore advising that a re-homing programme for tenants is initiated at the earliest opportunity.
- 3.13 In order to facilitate a re-homing programme of this scale, some early decisions are necessary which require the consideration and approval of elected members. This requires to reflect the range of pressures currently in place regarding housing demand. To facilitate the recommended process for re-homing, decisions are required around earmarking vacant properties, prioritising vacant properties for repair and the creation of a new 'RAAC Impact' housing list. This will facilitate the allocation of tenants to the identified vacant properties.
- 3.14 Officers consider the following provisions are reasonable and necessary measures to apply in the case of council tenants;
- a) Home Loss Payments and Disturbance Payments will be applicable to eligible tenants when they move permanently;
 - b) Void properties across the city will initially be reserved where appropriate and considered for offer to tenants who are residing at the identified properties;
 - c) The creation of an additional specific 'RAAC Impact' housing list to ensure priority is provided to tenants residing at identified properties, allowing for urgent rehoming;
 - d) All affected tenants will be placed on this list and further prioritised by the length of their current tenancy;
 - e) Allocation will be based on the tenants current housing need, where stock provision allows, rather than their existing property type and size;
 - f) All current applications for re-homing within the identified properties will be transferred onto the new housing list as noted within point (c) above;
 - g) Tenants will be provided with temporary accommodation if they no longer wish to remain in their property, as an interim arrangement, before permanent re-homing, noting that any costs are additional to 2.2 and will be reported back to a future Committee.

Communication

- 3.15 Throughout the process officers have endeavored to keep both council tenants, owners and private tenants and other stakeholders including other representatives and the Housing Regulator informed. This has been a specific request from elected members.
- 3.16 In relation to communications to date when it was initially established that RAAC was present in the properties, this information was shared with all owners, council tenants and private tenants. Drop-in sessions were undertaken in October 2023 and subsequent letters were issued in November 2023 advising of a requirement to undertake further survey work in occupied properties and strongly recommending that owners seek independent advice.
- 3.17 Keeping those affected informed has been a primary objective such that a dedicated section has been developed on the Council website which contains relevant information to provide advice and support. The website can be viewed at the following address;
- www.aberdeencity.gov.uk/raac-council-housing
- 3.18 To date officers can advise of the following numbers of individuals who attended the drop-in sessions;
- Number of council tenants 19
 - Number of owners attending the drop-in sessions 25
 - Number of owners not willing to provide details 1

A wide range of questions were raised at these meetings and officers have endeavored to answer them.

Should the recommendations within this report be approved, the following would enable residents impacted by this situation to be fully informed and supported. Officers recognise the wider impact of moving home, on individuals and families, the disruption to support networks, sense of community, and links to existing education and health services. Throughout the rehoming process officers will adopt a person/family centered approach, ensuring an understanding of need at the earliest point, and involving the necessary services to support the most appropriate outcome for the individual/family within the scope of available options.

- 3.19 Each council tenant currently living within an identified property will be written to, providing the opportunity to discuss the planned next steps on an individual basis, this will allow officers to better understand the circumstances of individuals and families, and make links with other council services such as education, where appropriate. Each tenant will be invited to an appointment with a Housing & Support Officer who will become a single point of contact for them throughout the process, providing a way for tenants to be appropriately supported through this period.

- 3.20 Each Owner will receive an updated written communication, advising of the most recent findings, providing reassurance of our commitment to update them should there be any changes identified through undertaking the inspection/intrusive survey process, and the contact details for a Housing & Support Officer who can support them should they wish to consider their housing options in the city.
- 3.21 Wider communication with the Torry community, including through our established community groups, such as the Torry Partnership, and Community Council will be necessary as the situation progresses.

Buy Back Policy

- 3.22 Members will be aware that the Council operates a 'Buy Back Scheme' for properties formerly owned by the Council as a means of increasing its current housing stock to help meet the demand for affordable housing. Noted below.

www.aberdeency.gov.uk/services/ousing/buy-back-scheme

- 3.23 It is important to highlight to members that the buy-backs team have had difficulty in recruiting to posts and have a backlog of applications. In addition to this current status, the issues raised within this report highlight a requirement to prioritise the type and nature of stock we require to meet current need. On this basis this report advises members that the buy-back resource will focus on purchasing properties that best meet current immediate demand, which may result in other applications not being considered.
- 3.24 The recommendations in this report also seek approval to not consider any new buy-back applications for properties affected by RAAC. If the Council was minded to accept a buy-back application for a private property containing RAAC panels, the property would be designated as Unable to be relet (UTBR). In effect, the council would be unable to relet any property it was to buy back. As such it would not be competent to use HRA funding to do this and it is unlikely that the buy-back grant from Scottish Government would be available. There is no capacity in the General Service account to facilitate this either nor is there any compensation scheme from UK or Scottish Governments. This issue will be considered in further detail in the next report on the issue. Refer to item 3.27.

Housing Demand

- 3.25 Members should also note, that as a consequence of this report and the recommendations contained with it, this will inevitably lead to other housing pressures, such as, extended stays in temporary accommodation including hotels and increased waiting times on housing lists.
- 3.26 We are committed to working with our Registered Social Landlord (RSL) partners in the city to ensure all housing options are explored, and are reliant on the increased throughput of ready to let properties from contractors and building services to minimise this impact.

Future Report

- 3.27 Whilst inspection/intrusive surveys are ongoing, given the evidence to date, officers have commenced the preparation of a further report which will scope and consider potential remedial work options for the properties. When this work is complete it will enable a recommendation to be made on the most appropriate option for the affected properties and wider area. It is intended that this will be complete and reported to members within the next 6 months.

4. FINANCIAL IMPLICATIONS

- 4.1 Note that at the Council meeting held on 14 December 2023, authority was delegated to the Chief Officer - Corporate Landlord in consultation with the Chief Officer - Finance, Chief Officer - Capital and Chief Officer - Early Intervention and Community Empowerment, to vire monies from the Housing Capital Plan to support any works that may be required for RAAC interventions across the estate, retrospectively reporting any actions to the next available meeting of the Communities Housing and Public Protection Committee.
- 4.2 Members to note that there has not been any delegation exercised with regard to item 4.1 prior to the submission of this report.
- 4.3 As noted above in paragraph 3.12 some form of remedial intervention will be required and this will have significant financial implications given the quantity of impacted properties.
- 4.4 The level of financial intervention to mitigate the RAAC panel failure risk will be quantified as part of the option appraisal within the OBC referred to in item 3.27.
- 4.5 However, given the survey findings to date, action has been recommended which if approved will have financial implications. This will include but not be limited to, additional staffing costs, specialist consultant fees, contractors costs for access and works, rehoming costs, utilities dis-connections/connections and security costs for the wider site.
- 4.6 A brief summary for each of the above costs is included in Appendix E.
- 4.7 It is considered that a £3m budget is necessary at this stage to be able to deliver the recommendations outlined in the report. For the avoidance of doubt this budget will not cover the cost of any recommendations resulting from the future report. Refer to item 3.27.
- 4.8 As noted above in paragraph 4.1, it is recommended that the vired monies from the approved Housing Capital Plan is as set out in the following table;

<u>Approved HRA Capital Plan 24/25</u>	<u>Approved Spend 24/25 £'000</u>	<u>New Proposed Spend 24/25 £'000</u>	<u>Vired Amount £'000</u>
Free from Serious Disrepair	25,560	23,655	1,905
Energy Efficient	<u>15,603</u>	<u>14,651</u>	<u>952</u>
Modern Facilities & Services	<u>16,212</u>	<u>15,260</u>	<u>952</u>

Total	<u>57,375</u>	<u>53,566</u>	<u>3,809</u>

Vired Monies from the Approved Housing Capital Plan

The figures in the above table includes allowance for slippage as per the approved Housing Capital Budget 2024/25 to 2028/29

Home Loss Payments and Disturbance Payments

- 4.9 Under the Land Compensation (Scotland) Act 1973 and the Housing (Scotland) Act 1987, social landlords are obliged to make Home Loss and Disturbance Payments to tenants if they are to be displaced due to demolition or other redevelopment proposals affecting their home.
- 4.10 Even at this early stage, officers are clear that whatever mitigation intervention is recommended, refer to item 3.27, the impact will be such that it is recommended that the outcome should be treated as if it were a redevelopment, given the recommendation is to rehome tenants.
- 4.11 To be eligible for a Home Loss Payment in Scotland, a tenant must have been living in their home (as their main or sole residence) for at least one year before the date they are required to move out and they must have a right to such occupation (e.g. by way of lease).
- 4.12 Home Loss Payments for tenants are a fixed amount, currently £1,500 per property.
- 4.13 It is recognised that some tenants may have existing rent arrears, former tenancy arrears or outstanding legal expenses with Aberdeen City Council. Officers also recognise the additional pressures that the cost of living is bringing to individuals / families. Our tenants will therefore be supported to reduce any outstanding balance when moving into their new tenancy and engagement with our Financial Inclusion Team will be encouraged, where appropriate. The home loss payment provides an opportunity to support with this financial pressure and will therefore be used to reduce any outstanding balances accrued. In addition tenants would still be eligible to receive the disturbance payment, ensuring that the financial impact of moving is minimised.
- 4.14 In addition to Home Loss Payments, tenants in Scotland may also be eligible for Disturbance Payments. These payments are intended to cover the reasonable expenses incurred by tenants when they are required to move out of their home due to demolition or redevelopment proposals affecting their home. The amount of the payment varies depending on the individual circumstances of the tenant and the expenses they have incurred.

For example, the following expenses would generally be covered by the disturbance payment

- Cost of a removal by a removal company
- Alternatively cost of a self-drive hire and petrol (within the limits of the above option)
- Disconnection & reconnection of white goods
- Cost of carpets and curtains

Officers will be available to provide support and assistance to tenants who are unable to manage all aspects of moving home themselves.

- 4.15 In terms of Disturbance Payments, it would be prudent to budget for an amount of £3,000 per property.
- 4.16 The total figure for both Home Loss and Disturbance Payments is approximate and may change when the further report, referred to in item 3.27 is complete.

Rent Loss

- 4.17 As tenants move on from the affected properties it is recognised that whilst the safety and wellbeing of our tenants is paramount there will be a loss of income from the rent that these properties generate. The current weekly rental charges for the identified property types is set out in the Table below.

Property Size/Type	Number of let properties	Weekly Rental Charge
1 bedroom flat	172	£80.83
3 bedroom cottage	103	£106.93
4 bedroom cottage	23	£113.44
7 bedroom cottage	1	£133.01

- 4.18 As a result of reserving properties we could incur rent loss, as properties may be held whilst we complete the allocation, organise and support the move for tenants into their new property. Officers would ensure that the time properties are held are kept to a minimum, reviewing the type and volume of properties being held at any point regularly to meet the identified housing needs.

5. LEGAL IMPLICATIONS

- 5.1 Consideration has been given to the range of legal implications arising from the content of the report and required next steps.
- 5.2 Ensuring lawful tenant rehoming is paramount. Rehoming should be in compliance with tenant leases, the Housing (Scotland) Act 2006 and the applicable human rights laws such as the European Convention on Human Rights (ECHR). Any rehoming process must reflect the rights and protections governed by the legislation.
- 5.3 Services will ensure that robust processes and measures are in place to reduce potential claims of discrimination during any relocation process in compliance with equality legislation and the Equality Act 2010, and that detailed Impact Assessments are prepared to provide an overall understanding of the risks.
- 5.4 Buy-Back applications are progressed at the sole discretion of the Council in compliance with grant conditions. Further work will be carried out between Housing and Legal services to ensure transparency and compliance with Scottish Government grant criteria in the context of the Council's Buy-Back Scheme policy.

- 5.5 Consideration should be given to structural engineering guidelines and independent structural engineer's report recommendations. Building, tenant and resident safety concerns are being prioritised and any rehoming process will be aligned with relevant legislation, mitigating potential liabilities.
- 5.6 Funding and compensatory considerations in respect of Home Loss Payments and Disturbance Payments must align with statutory obligations outlined in the Land Compensation (Scotland) Act 1973 and the Housing (Scotland) Act 1987.
- 5.7 As legal risks and implications develop, Legal Services will continue to monitor the guidance and legislation, and will continue to provide legal support and advice as necessary and appropriate.

6. ENVIRONMENTAL IMPLICATIONS

- 6.1 There are no direct environmental implications arising from the recommendations of this report however environmental consideration will be part of the future report referred to in paragraph 3.27.

7. RISK

- 7.1 The primary risk for RAAC panels at Balnagask is whether or not a RAAC panel within the roof of the property will fail.
- 7.2 When considering the condition of the RAAC panels there are a number of risk factors that need to be examined;
- End bearing;
 - Anchorage reinforcement;
 - Cut panels;
 - Cracking;
 - Builder's works / building modifications;
 - Water ingress;
 - Deflection measurements;
 - Adverse or changes in loading;

Further explanation of the above risk factors is contained within Appendices B and C.

- 7.3 Taking account of the above, the assessment of risk contained within the table below is considered to be consistent with the Council's Risk Appetite Statement.
- 7.4 During the rehoming process, tenants whose homes are subject to this exercise will receive the highest priority under our allocations policy. This may result in others on our housing list being bypassed for certain allocations

Category	Risks	Primary Controls/Control Actions to achieve Target Risk Level	*Target Risk Level (L, M or H) *taking into account controls/control actions	*Does Target Risk Level Match Appetite Set?
Strategic Risk	Failure of a RAAC panel.	Continue to carry out further surveys to manage risk. Current findings have found that that the void properties surveyed will require remedial action. To mitigate the expected similar outcome in occupied properties, affected tenants should be rehomed.	M	Yes
Compliance	Failure of a RAAC panel. Legal process and housing regulator	This is a health and safety issue. As above, affected tenants should be rehomed. A short-term management strategy should be applied to properties containing RAAC panels until such time as the property is decanted. Legal advice is being taken at all parts of the process. Officers will write to the Housing Regulator advising them of the impact of the identification of RAAC within our housing stock and the subsequent steps required to manage it, will have on our wider housing performance standards. Officers will also seek to engage with the Housing Regulator on our proposed approach and will keep them informed around all decisions (as appropriate).		Yes
Operational	Failure of a RAAC panel.	This is a health and safety issue. As above, affected tenants should be rehomed. A short-term management strategy should be applied to properties containing RAAC panels until such	L	Yes

	Wider pressure on housing stock.	time as the property is decanted. Housing team to manage and monitor and report to the Board where there is significant change.	M	Yes
Financial	The current financial burden to mitigate the RAAC impact is currently unknown and still to be quantified.	Work with housing, legal, finance and external advisor teams to understand and address the RAAC impacts and inform the Outline Business Case to inform potential future remedial options.	M	No
Reputational	Failure of a RAAC panel.	This is a health and safety issue. As above, affected tenants should be rehomed. A short-term management strategy should be applied to properties containing RAAC panels until such time as the property is decanted.	L	Yes
	Failure to engage effectively with tenants and owners	Implement communication and engagement plan.	L	Yes
Environment / Climate	Targeting Net Zero	Mitigating climate risks requirements by ensuring consideration is given to targeting net zero requirements within the forthcoming Outline Business Case.	L	Yes

8. OUTCOMES

<u>COUNCIL DELIVERY PLAN 2023-2024</u>	
Impact of Report	
<p>Aberdeen City Council Policy Statement</p> <p><u>Working in Partnership for Aberdeen</u></p>	<p>The issues arising with the occurrence of RAAC in our housing stock requires us to work collaboratively across clusters to ensure the housing stock is safe and meets the varying needs of our citizens. The goal is to ensure that our current housing stock is fit for the future and brought up to the highest standards where possible.</p>
<u>Aberdeen City Local Outcome Improvement Plan 2016-26</u>	
Prosperous Economy Stretch Outcomes	The actions from this report will help mitigate the immediate impact on affected tenants ensuring that they are prioritised for rehoming and are supported financially throughout the process but within the capped limits set by current legislation.
Prosperous People Stretch Outcomes	Taking early intervention action as outlined within this report will help mitigate any negative impact on people's physical and mental wellbeing.
Prosperous Place Stretch Outcomes	A future report will make recommendations on the viability of the affected housing stock along with any wider implication this may have on the place.
Regional and City Strategies	This report is an initial report in a series of reports to mitigate the occurrence of RAAC in Council housing stock at Balnagask. Future reports and actions will take account of the Regional and City Strategies to formulate any recommendations.

9. IMPACT ASSESSMENTS

Assessment	Outcome
Integrated Impact Assessment	New Integrated Impact Assessment has been completed. Refer to Appendix F.
Data Protection Impact Assessment	Not required
Other	None

10. BACKGROUND PAPERS

10.1 None

11. APPENDICES

- 11.1 Appendix A: Property Ownership and Housing Mix.
Appendix B: The Institution of Structural Engineers (IStructE) - Reinforced Autoclaved Aerated Concrete (RAAC) Investigation and Assessment - Further Guidance - April 2023
Appendix C: Reference 157606 - RAAC Inspections - Balnagask Mono-Pitches November 2023
Appendix D: Reference 157606 - Supplementary Report related to the RAAC Inspections - Balnagask Mono-Pitches Update 22 February 2024
Appendix E: Cost Headings
Appendix F: Integrated Impact Assessment IIA Reinforced Autoclaved Aerated Concrete (RAAC) Update at Balnagask.

12. REPORT AUTHOR CONTACT DETAILS

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There are 504 individual addresses in the Balnagask Area of Aberdeen which have been identified as potentially having RAAC panels within their roofs. The 504 addresses are a combination of both houses and flats with mixed ownership across 372 individual building units.

The mix of ownership and property type is as follows;

Property Type	ACC owned Properties	Private Owned Properties
House, 3 Bed	103	86
House, 4 Bed	23	16
House, 7 Bed	1	0
Ground Floor flat, 1 Bed	87	18
First Floor Flat, 1 Bed	85	20
Current Voids (20/02/24)		N/A
Ground Floor flat, 1 Bed	27	
First Floor Flat, 1 Bed	27	
House, 3 Bed	9	
House, 4 Bed	2	
TOTAL	364	140

With regard to the Council Owned properties (as of 20/02/24) there are 201 buildings still to be surveyed, consisting of council houses and first floor flats. No surveys are required within ground floor flats.

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Reinforced Autoclaved Aerated Concrete (RAAC) Investigation and Assessment – Further Guidance

1 Introduction

In 2019, SCOSS published a safety alert 'Failure of Reinforced Autoclaved Aerated Concrete (RAAC) Planks' which identified concerns about the structural safety of this form of construction.

In February 2022, the Institution of Structural Engineers (IStructE) published supporting guidance titled Reinforced Autoclaved Aerated Concrete Panels – Investigation and Assessment. This guidance provided further information for the assessment of RAAC panels.

This report provides further guidance on the critical risk factors associated with RAAC panel construction. It includes a proposed approach to the classification of these risk factors and how these may impact on the proposed remediation and management of RAAC.

This report has been written by members of the IStructE RAAC Study Group to assist with the approach to RAAC assessment amongst the structural engineering community. It is intended to be adopted by structural engineers who will be responsible for quantifying, appraising and providing reasoned assessments of RAAC panel construction on a case-by-case basis using their own engineering judgement.

It is recommended that a reader familiarises themselves with the 2019 SCOSS Alert the previous IStructE report and the references in Section 8.

This report focuses on roof panels but can be used for the assessment of floor panels. The discussion of load bearing or non-load bearing wall panels are not covered in the scope of this report.

The Institution of Structural Engineers and the Study Group which produced this Guide have endeavoured to ensure the accuracy of its contents. However, the guidance and recommendations given should always be reviewed by those using the Guide in light of the facts of their particular case and any specialist advice. Users should also note that the Institution periodically updates its guidance through the publication of new versions (for minor alterations) and new editions (for more substantial revisions) - and should ensure they are referring to the latest iteration. No liability for negligence or otherwise in relation to this Guide and its contents is accepted by the Institution, its servants or agents. Any person using this Guide should pay particular attention to the provisions of this condition.

2 Surveys

2.1

Guidance produced by the IStructE in February 2022 provided advice on the form and scope of surveys to be adopted for RAAC panel installations. This identified the need to survey the panels for:

- Measurement of deflections
- Recording of cracks and defects
- Recording evidence of water leaks
- Hammer tap testing for signs of debonding concrete
- Recordings of panels cut after manufacture
- Recording of any alteration or penetration through panels after construction

Also, recent experience has emphasised the significance of the end bearing and the investigation of the end bearings is now required to assess the structural risks.

RAAC panels present highly individual results when surveyed with adjacent panels often exhibiting varied deflections, cracking, etc. Given this variance in RAAC panel construction it is recommended that all panels are visually assessed.

2.2

Deflection measurement of panels can assist in the assessment of panels performance. The measurement of each panel deflection will allow the greatest level of assessment. However, where this is not possible, measurement of deflection of a representative sample should be undertaken. A minimum recommended sample size should be proportional to the size and scale of the building or structure being assessed but should typically not be less than 10% of the total number of panels.

The panels selected should provide a representative sample including:

- Structural spans
- Panel width and depth (if known)
- Increased loading resulting from roof access
- Loading from a supported plant or machinery
- Different internal environments, for example, any dry, damp or humid areas
- Areas where there could be an accumulation of external load factors including a build-up of water or drifting of snow

The measurement of any panels affected by past or current water leaks would also be of assistance in accessing any detrimental impact of any leaks.

The span of panels should be recorded together with their mid-span deflection.

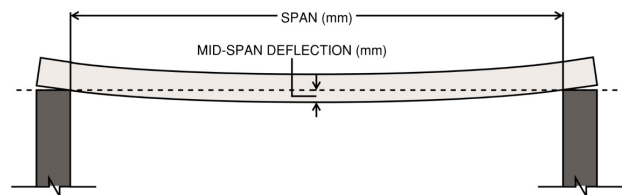


Figure 1 - Deflection schematic (not to scale)

2.3

Non-destructive testing techniques, such as the use of covermeters, provide insight into reinforcement location. However, more expensive radar techniques may not yield reliable test results due to equipment tolerances; particularly when in the presence of foil backed insulation or covering. If used, the specialist survey companies should be consulted to ascertain the tolerances of equipment for given construction forms prior to commissioning surveys.

2.4

The specification of intrusive investigation works for RAAC panels should be carefully considered. Intrusive surveys can be undertaken to record:

- Panel bearing lengths
- Position of transverse anchorage reinforcement at bearings
- Panel thickness
- Reinforcement quantities and diameter

Intrusive investigations will result in damage to panels. The location and extent of the trial areas should be carefully selected by the engineer. Any such investigations should be kept to the minimum size given the disruptive nature of any works that may impact on panel structural capacity. The engineer should assess the condition and capacity of panels ahead of the investigation works and consider the need for temporary propping or support.

Investigations should be undertaken using hand tools with small diameter non-percussive drilling only if needed. Investigations may include localised drilling to estimate depth of bearing, opening using hammer and chisel. All trial holes should be made good with a suitable proprietary repair mortar and all waterproofing or protective finishes made good to prevent further degradation of the panels.

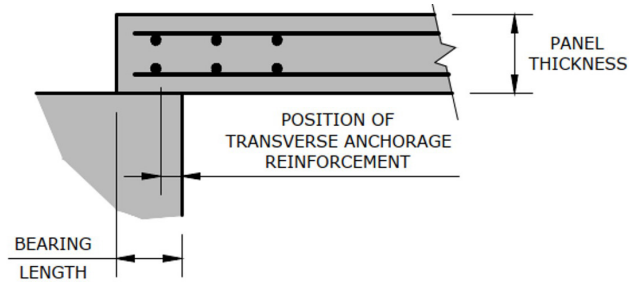


Figure 2 – End bearing configuration

Locations for intrusive investigation should provide a representative sample from around the building or structure. This should include any variation in span or support arrangements. The number of locations selected needs to be sufficient to gain an understanding of the original design intent for the panels and the range of manufacturing or construction installation tolerances.

3 Risk factors

RAAC presents a number of risks associated with the original construction form including the materials used, design intent, manufacturing control and construction / installation control. Further risks are presented through the in-service conditions including uncontrolled modifications, changes in loading regime, poor maintenance and ageing.

These are described below.

3.1 End bearing

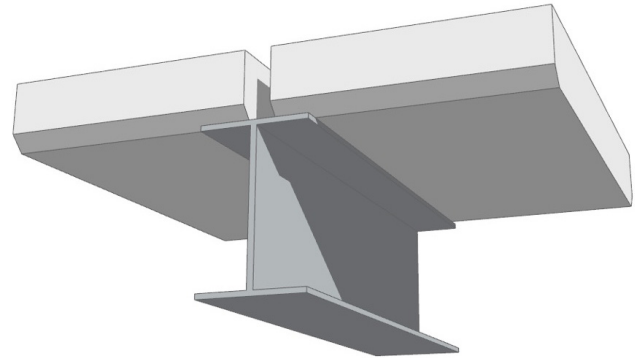
Poor bearing is a significant risk to the integrity of RAAC roof panels.

The codes of practice associated with the design of RAAC from the 1950's to 1980's were CP114 Reinforced Concrete in Buildings and CP116 Structural Use of Precast Concrete. These codes recommended minimum end bearings of only 45mm for roof panels and 60mm for floor panels. In practice, construction tolerances could have resulted in reduced bearing lengths.

To anchor longitudinal reinforcement, RAAC panels require transverse reinforcement over the bearing support. As noted by testing undertaken by the BRE (BRE IP 10/96), absence of transverse reinforcement at the end bearing can substantially impact on panel performance. The inspection of several buildings has identified that with short bearing lengths there is a risk that this critical anchorage reinforcement can be absent over the support face, presenting an increased risk of panel failure.

For this reason, a minimum as built bearing length 75mm is now considered to be necessary. Any bearing less than 75mm would be considered substandard and present an unacceptable risk to panels from shear failure or slippage and remedial actions are recommended.

Narrow or short bearing lengths may be identified through visual inspection; for example, where panels span from either direction onto a narrow steel beam or masonry wall less than 100mm. These shared bearings on narrow beams or supports can therefore present risks of inadequate bearing length.



Sub-standard bearing on 100mm beam

Figure 3 – End bearing condition

However, in many instances visual inspection alone may be inadequate. Numerous examples have been found of panels having short bearing lengths (<75mm) even when supported on wide steel or concrete beams. Therefore, it is recommended that the bearing length is verified. Intrusive surveys are the only effective method for identifying the bearing length and the position of transverse anchorage reinforcement.

3.2 Anchorage reinforcement

RAAC floor and roof panels require transverse reinforcement to anchor the longitudinal reinforcing bars. This is particularly critical at bearings where transverse bars are needed over the supports as discussed in the previous section.

Where transverse anchorage reinforcement is absent the longitudinal bars will have significantly reduced tensile capacity and there is an increased risk of failure. The mode of failure is still being assessed by academic research, however sudden brittle shear failure is considered possible.

It is not possible to ascertain poor anchorage of reinforcement from visual inspection, therefore intrusive survey techniques are required.

3.3 Cut panels

Cut panels can be created from the manufacturing process where longer panels may have been cast and cut down to create shorter panels or where panels were trimmed at the time of the original construction for building services or other small penetrations.

Original construction techniques used narrow steel trimmers or hangers supported by adjacent panels to form openings in roofs. These steel hangers often have narrow bearing support and have been installed some distance from transverse reinforcement. Therefore, cut panels supporting on hangers present inadequate bearing conditions and poorly anchored longitudinal reinforcement.



Figure 4 – Photo of hangers

Depending on the span of the panel being supported these conditions may present high risk of panel failure.

Cut panels can be identified through visual inspection, where supported on hangers or where panels are visibly narrower or shorter than adjacent panels. However, visual inspection is difficult where panels have been cut as part of the manufacturing process and intrusive surveys may be required.

Cut panels should be identified in all instances. The length of the cut panel, support conditions and defects should be noted.

3.4 Cracking

Cracking and spalling can be a visible indicator of excessive deflections, water ingress, mechanical damage or reinforcement corrosion. It is recommended that all visible defects are recorded during a visual inspection. Where applicable, this should be supported by crack measurement and location for assessment and future review.

It is recommended that cracking and spalling is recorded as either major or minor as defined below:

- Major cracking/spalling: defined where a panel exhibits large/deep cracks that may be accompanied by spalling and in some cases exposed reinforcement
- Minor cracking/spalling: defined where a panel that exhibits small cracks on its surface. These are commonly transverse across the panel width and usually expected to be seen at the centre of the panel

Cracking close to the supports (circa within 500mm) is of significant particular concern because it could be representative of shear cracking. Cracking close to a bearing should be recorded and cracks across the full width of a panel are considered more serious than cracks local to the edges

3.5 Builder's works/building modifications

Builders work that was not part of the original construction can result in panels being cut or drilled for new services.

Sometimes new trimming beams may have been installed but the designers of the trimming may not have been aware of the impact of the loss of transverse anchorage reinforcement at the bearing and therefore the support provided to cut panels may be inadequate.

In some instances, small diameter core holes may result in longitudinal or transverse reinforcement being cut or damaged or mechanical damage to the RAAC panels both of which will weaken RAAC panels presenting a risk of failure as with cut-panels or inadequate bearing lengths.

Note: While fixing into RAAC are outside of the scope of this report, care is needed with fixings due to the low strength nature of the AAC and fixings have been known to pull out. Where critical or heavy services are fixed into RAAC these should be checked.

3.6 Water ingress

Prolonged water ingress can impact on RAAC. Water ingress can saturate RAAC panels giving risk to a potential increase in panel weight. Water ingress has also been noted as adversely impacting on the material strength and is likely to lead to unseen corrosion to the reinforcement.

The increase in weight and loss of material strength adversely impacts on the panel strength and load-carrying capacity.

The corrosion of reinforcement will, over time, lead to spalling of the surrounding RAAC panel resulting in falling debris and potential for loss of panel capacity. The corrosion of reinforcement may also impact on the bond between RAAC and embedded reinforcement, which may adversely impact panel strength.

It should be noted that **due to** the open nature of the AAC matrix significant levels of corrosion can occur before spalling of the cover concrete occurs. The corrosion can therefore be well established before there are obvious external signs.

Water penetration is normally evident through visual inspection. It can be noted where a panel is showing signs of staining, salt crystallisation or corrosion/spalling.

Water ingress may also be noted through adjacent elements, such as finishes or masonry where salt crystallisation or staining may also be evident.

Water ingress presents a significant contributing risk. Therefore, any panels with water ingress should be recorded and the significance assessed.

3.7 Deflection measurements

There are several factors that may result in high deflections of RAAC panels. RAAC panels which are exhibiting high deflections may increase the risk of water ponding and increases in loading and / or lead to a change in bearing stresses. Both factors being potential failure risks.

The deflection of RAAC panels can often be noted visually, however measurement is required to ascertain accurate deflection data. The deflection of panels should be recorded and the data should be used to classify the deflection of each panel as follows:

- Deflection equal to panel span/100 or greater
- Deflection between span/100 and span/200
- Deflection between span/200 and span/250
- Deflection equal to panel span/250 or less

The differential deflection between adjacent panels should also be recorded, particularly where this is significant. Deflections exceeding 20mm between panels being considered significant.

3.8 Adverse or changes in loading

Poor roof drainage can result in the build-up of water on flat roofs which can be further exacerbated by vegetation build up. These situations can result in elevated and prolonged loading of panels. Changes in roof level can also lead to drifting of snow and locally increased loading.

Any areas where additional loading associated with a change or use, new suspended or supported building services equipment, changes in ceiling or roof finishes should be considered potential adverse loading.

Changes in loading regime beyond that which the structure was originally intended could overload the panels above the original design load allowances.

Any increase in loading could significantly impact on the RAAC installation, particularly when combined with other risk factors; such as poor bearing or water ingress.

4 Assessment of risk

It is recommended that the surveys information is used to assess a risk classification for the panels/building. The below RAG (Red, Amber, Green) risk rating approach is proposed as set out below.

Red risks have been split into High risk and Critical risk. The application of qualified and experienced engineering judgement is required to assess when a Critical risk

exists. Critical risks may exist where multiple risks exist for example major cracking and adverse loading conditions. The use of the building may also be a factor in the assessment. **Depending on condition Critical risk areas may need immediate action. Final selection and urgency of mitigation measures to be determined in conjunction with the building owner/occupants.**

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.

Table 1 – Risk categories

4.1 Determination of risk

It is recommended that observations of the defects within the panels should be used to categorise the panels in a particular building. The following tables provide guidance on typical RAAC panel defects and the proposed risk category associated with that defect.

The presence of water within RAAC panels is of concern and therefore a panel with observed historic water ingress has an elevated risk level. Therefore, alternative tables are presented below for panels that have been subject to long term water ingress and a separate table for panels which have remained dry.

These tables are non-exhaustive and the matrices approach is an initial recommendation. It is expected that the structural engineer will assess each case individually and use their judgement to aggregate the risks, based on the local conditions to determine an appropriate risk category.

4.1.1 Support condition

Support / bearing condition	Risk category
Bearing investigated and found to lack required transverse reinforcement	Red (critical)
Cut or modified panels, including where cut panels are supported on proprietary hangers	Red (critical)
Bearing <75mm with transverse anchorage reinforcement	Red
>75mm with transverse anchorage reinforcement	Green

Table 2 – Support/bearing risk category

4.1.2 Panel construction

The panel condition is a function of cracking, deflection, and water ingress.

Where water ingress is observed it may be difficult to ascertain the period and therefore the impact that this may have had on the panel strength. Therefore, all water ingress is considered Red / Amber risk.

Risk assessment if water ingress is observed				
Deflection	Major cracking or spalling	Minor cracking/ or spalling within 500mm of support	Minor cracking or spalling away from the supports	No visible defect
Deflection >span/100	Red	Red	Red	Red
Span/100<deflection<span/200	Red	Red	Red	Red
Span/200<deflection<span/250	Red	Red	Amber	Amber
Deflection<span/250	Red	Red	Amber	Amber

Table 3 – Risk category with water ingress

Risk assessment if NO water ingress is observed				
Deflection	Major cracking or spalling	Minor cracking/ or spalling within 500mm of support	Minor cracking or spalling away from the supports	No visible defect
Deflection >span/100	Red	Red	Red	Red
Span/100<deflection<span/200	Red	Red	Amber	Amber
Span/200<deflection<span/250	Red	Amber	Green	Green
Deflection<span/250	Red	Amber	Green	Green

Table 4 – Risk category with NO water ingress

5 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

6 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
- 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:
 - Applied operational loads, for example no-walk zones on RAAC roofs, maintaining roof drainage and removal of ponding water
 - Applied fixed loads, for example, restricting new or removal of existing building services equipment
 - 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.

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References

- P10/96 – Reinforced autoclaved aerated concrete panels designed before 1980, BRE1996
- IP7/02 Reinforced autoclaved aerated concrete panels test results, assessment of design, BRE 2002
- Failure of Reinforced Autoclaved Aerated Concrete (RAAC) Panels SCOSS May 2019
- Precast Concrete Code of Practice CP 116(1965) British Standard Institute
- BS EN 12602 Prefabricated reinforced components of Autoclaved Aerated Concrete

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Aberdeen City Council

**RAAC Inspections
Balnagask Mono-Pitches**

November 2023



CONTROL SHEET

CLIENT: Aberdeen City Council
PROJECT TITLE: RAAC Inspections - Balnagask Mono-Pitched Properties
REPORT TITLE: Intrusive Inspection Report
PROJECT REFERENCE: 157606
DOCUMENT NUMBER: 157606/Report

Original Issue	Issue 1		Name	Signature	Date	
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	Approved by				15/11/2023	
Update Record	Issue	Date	Status	Description	Signature	
	2	16/11/23		Corrections to deflection tables and update to Short-term Management Strategy text	Prepared By	[Redacted]
					Checked	[Redacted]
					Approved	[Redacted]
	3	17/11/23		Updated following ACC commnets	Prepared By	[Redacted]
					Checked	[Redacted]
					Approved	[Redacted]
	4				Prepared By	
					Checked	
					Approved	

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1. Introduction

- 1.1. Fairhurst have been appointed by Aberdeen City Council to carry out intrusive inspections to assess the condition of the Reinforced Autoclaved Aerated Concrete (RAAC) roof panels at the Balnagask mono-pitched type residential properties in Aberdeen.
- 1.2. This report describes the intrusive inspection, our assessment of the condition and our recommendations for any remedial works and / or management strategies for the following example properties:
 - ■ Balnagask Road, Aberdeen
 - ■ Pentland Crescent, Aberdeen

2. Background and Reference Documents

- 2.1. Following the sudden collapse of a flat roof, constructed of RAAC panels, in a school in 2018, the Standing Committee on Structural Safety (SCOSS) issued an alert in May 2019 aimed at building owners, consultants and contractors involved in premises with RAAC panel roofs.
- 2.2. The Institution of Structural Engineers (IStructE) have since issued the following documents, which we have referenced and based our assessment on:
 - 2.2.1. Reinforced Autoclaved Aerated Concrete (RAAC) Panels - Investigation & Assessment - February 2022
 - 2.2.2. Reinforced Autoclaved Aerated Concrete (RAAC) - Investigation and Assessment - Further Guidance - April 2023
- 2.3. RAAC is a lightweight, 'bubbly' form of concrete, commonly used in construction between the 1950s and mid-1990s. It is predominantly found as pre-cast panels in roofs (commonly flat roofs, sometimes pitched).
- 2.4. RAAC panels are typically 600mm wide, although this has been known to vary. Their length will vary, typically up to 6m. They typically have a chamfer along their edge meaning there is a distinctive V-shaped groove at 600mm centres between the panels.

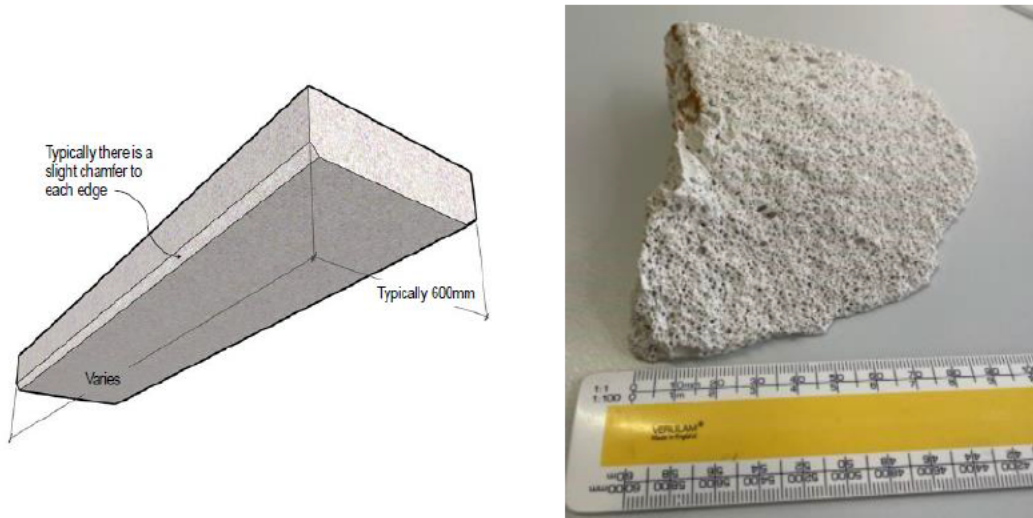


Figure 1: Typical RAAC Construction

3. Existing Construction

- 3.1. Typically, the properties are two-storey buildings of traditional cavity blockwork wall construction with mono-pitched 125mm (5") thick RAAC roof panels spanning front to back, bearing onto external walls and a 114mm thick central concrete brickwork partition. Please see figures 2-5 showing typical existing building construction.
- 3.2. Panels span approx. 3.5m at the rear of the property (typically above the living room and bedroom) and approx. 2.5m at the front of the property (typically above the kitchen and bathroom). These are relatively short spans, as RAAC panels can typically span up to 6m.
- 3.3. The mono-pitched roof construction is typically concealed behind a timber frame and plasterboard ceiling, some of which was retro-fitted (and was removed prior to inspections).
- 3.4. This property type is either split into ground floor and first floor flats, or is a single two-storey houses.

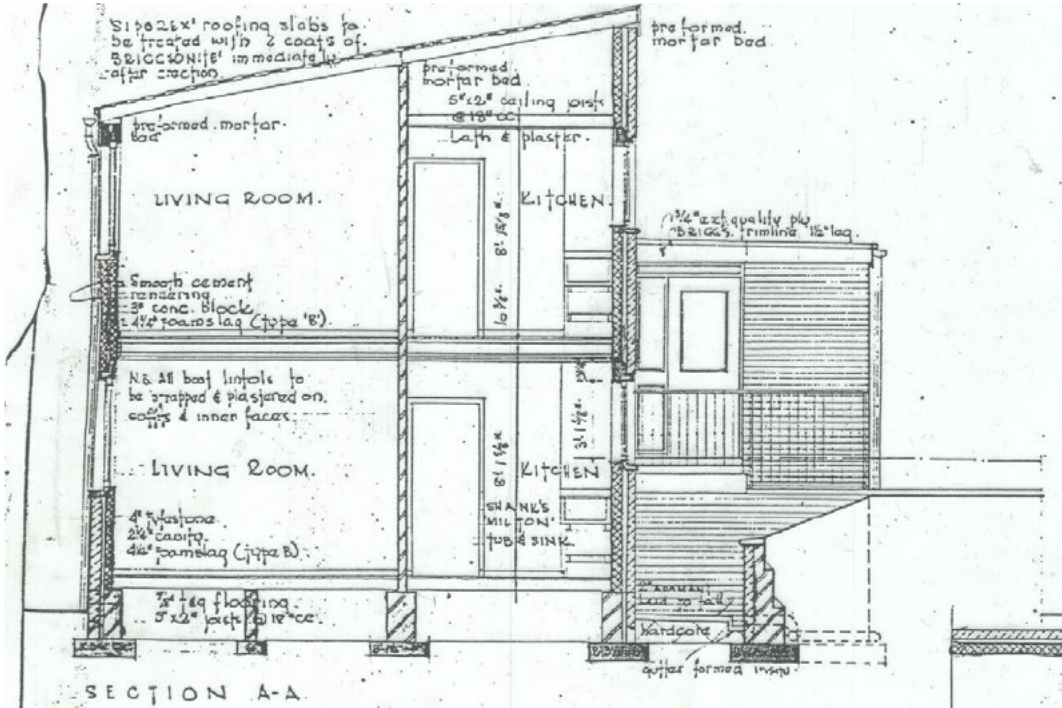


Figure 2: Original section drawing through flatted property

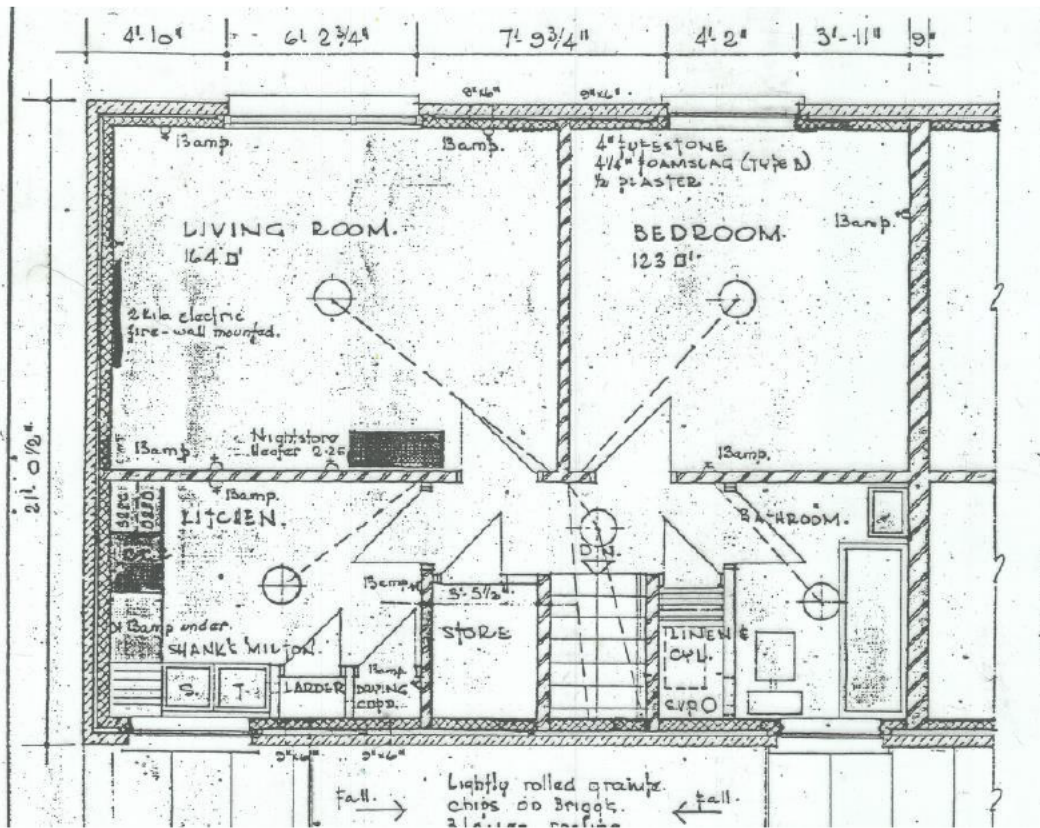


Figure 3: Original floor plan drawing of first floor flat

- 3.5. There are also three variations of roof finishes, as per the photographs and architectural details in figures 6-12, below.



Figure 6: Original 'flat' roof system



Figure 7: Refurbished 'flat' roof system

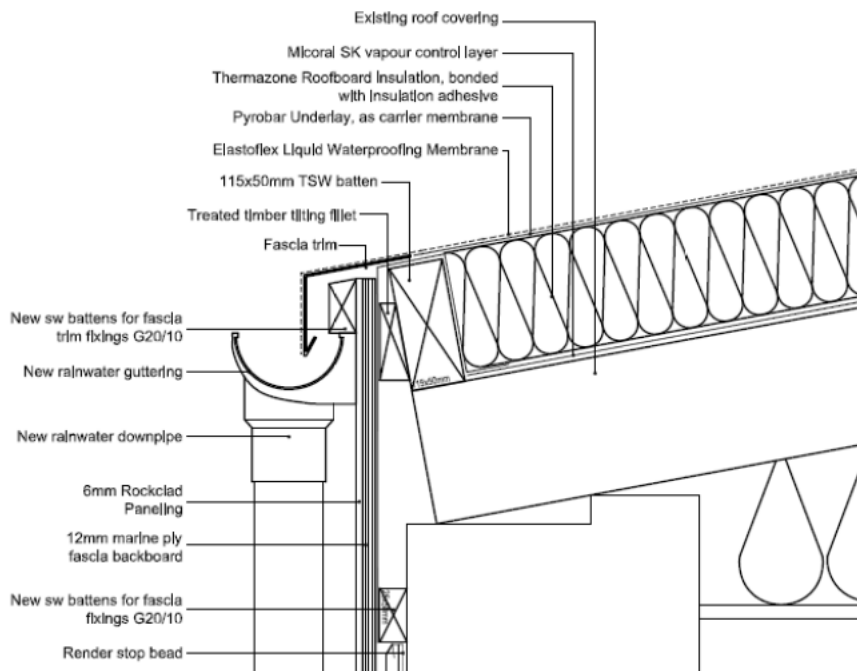


Figure 8: Section detail through eaves of refurbished 'flat' roof system (lower)

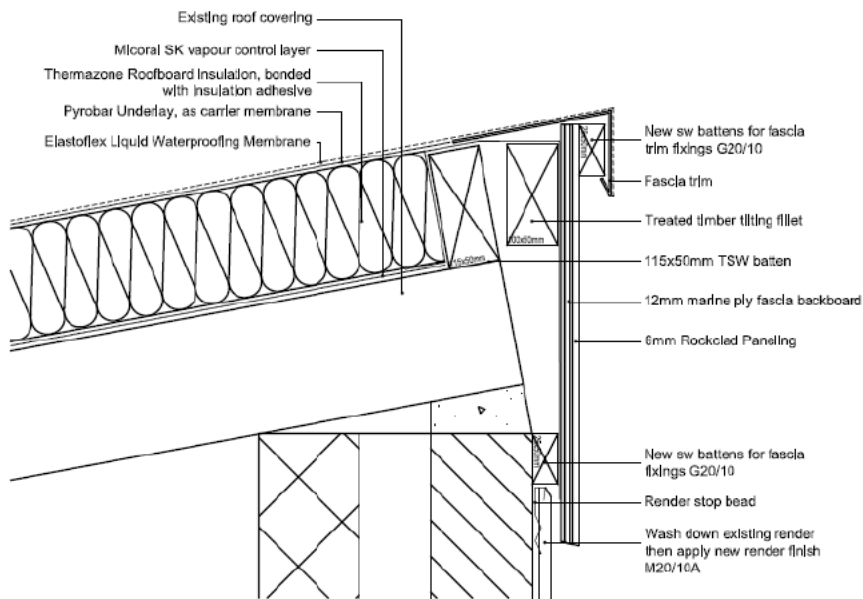


Figure 9: Section detail through eaves of refurbished 'flat' roof system (upper)



Figure 10: Refurbished mansard roof system

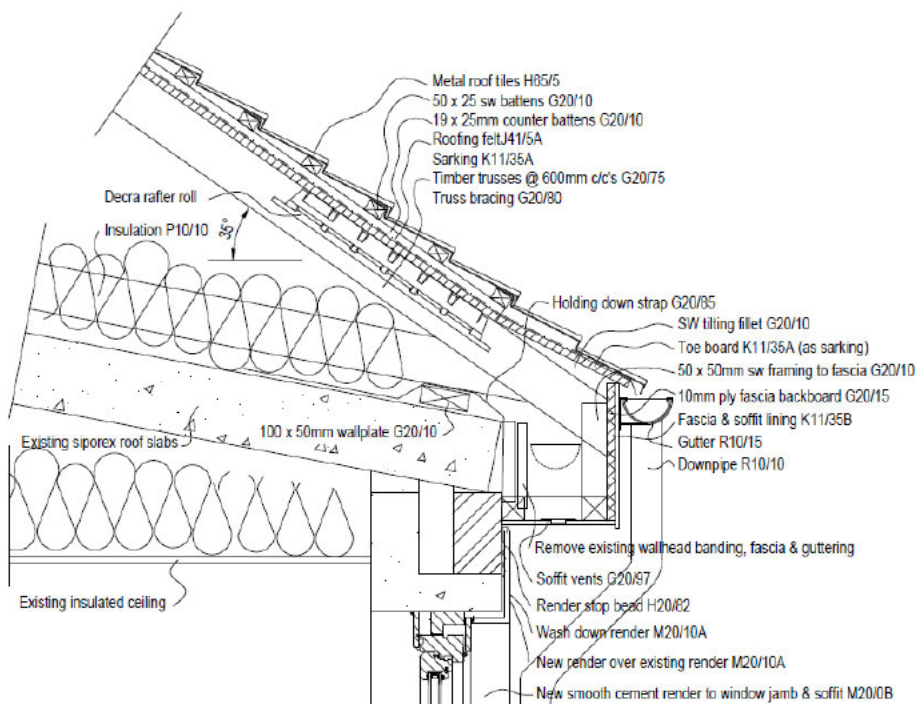


Figure 11: Section detail through eaves of refurbished mansard roof system (lower)

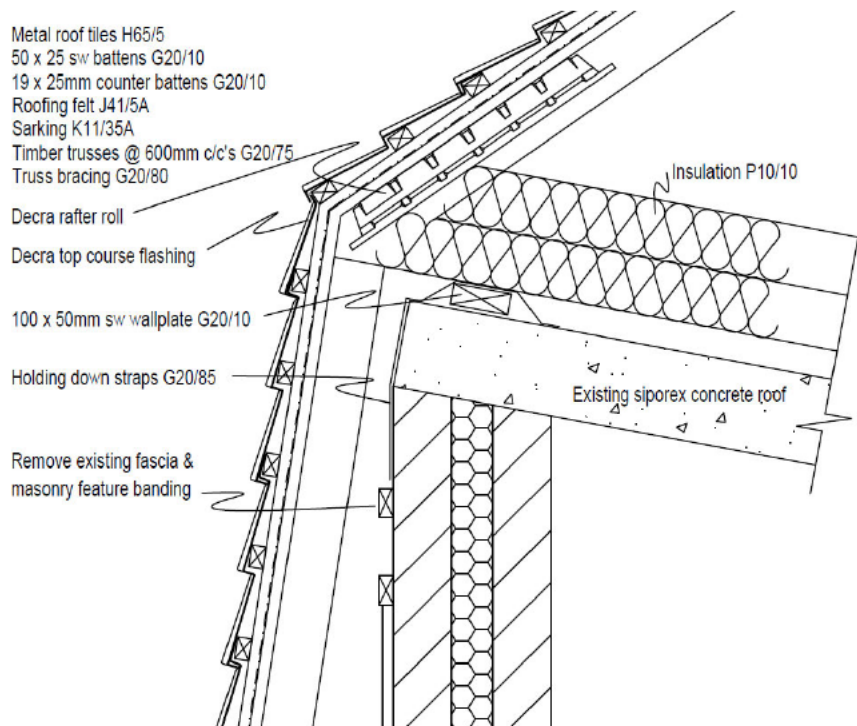


Figure 12: Section detail through eaves of refurbished mansard roof system (upper)

4. Methodology

- 4.1. The intrusive inspection scope and procedure is based on guidance by The Institution of Structural Engineers (IStructE) - Reinforced Autoclaved Aerated Concrete (RAAC) Investigation and Assessment - Further Guidance - April 2023.
- 4.2. Following the IStructE assessment guidance, we are aiming to assess the following risk factors:
 - End bearing;
 - Anchorage reinforcement;
 - Cut panels;
 - Cracking;
 - Builder's works / building modifications;
 - Water ingress;
 - Deflection measurements;
 - Adverse or changes in loading.
- 4.3. The intrusive inspections therefore consisted of the following works:
 - 4.3.1. Prior to undertaking intrusive surveys, Aberdeen City Council providing confirmation that properties are free of asbestos;
 - 4.3.2. Complete removal of plasterboard ceiling finishes, by contractor;
 - 4.3.3. Erection of access tower, by contractor;

- 4.3.4. Installation, by contractor, of 2No. props with timber spreader top and bottom within 600mm of the bearing of each slab to be inspected, prior to commencing (as a precaution, should the bearing be insufficient);
- 4.3.5. Appropriate dust management, by contractor;
- 4.3.6. Record of deflection of the panels, by Fairhurst;
- 4.3.7. Record of defects i.e. cut panels, cracks / spalling, builder's works / building modifications, water ingress, by Fairhurst;
- 4.3.8. Tap test any water damaged areas, by Fairhurst;
- 4.3.9. Ferro-scan to surface of concrete to locate embedded reinforcement, by Fairhurst;
- 4.3.10. Breaking-out of concrete at the bearing, by contractor, at the junction between the panels. Record of bearing length, panel depth and anchorage reinforcement arrangement, by Fairhurst;
- 4.3.11. Breaking out works carried out by contractor using non-percussive drill, hammer, narrow chisel and wire brush;
- 4.3.12. Broken out areas made good by contractor as follows, ensuring separation is retained between the panels, with all products stored and applied in accordance with the manufacturer's written instructions:
 - Bonding primer - Sika MonoTop-1010;
 - Repair mortar - Sika MonoTop-615;
 - Concrete protection - Sika Ferrogard-903+ liquid corrosion inhibitor;

5. Observations

- 5.1. Our intrusive inspection observations are based on the guidance by IStructE - Reinforced Autoclaved Aerated Concrete (RAAC) Investigation and Assessment - Further Guidance - April 2023, and examine the following risk factors:
 - End bearing;
 - Anchorage reinforcement;
 - Cut panels;
 - Cracking;
 - Builder's works / building modifications;
 - Water ingress;
 - Deflection measurements;
 - Adverse or changes in loading;

5.2. Assessment of risk:

5.2.1. The IStructE employs a risk rating approach, as shown below, to assess the risk associated with each inspection factor, with the caveat that the “tables are non-exhaustive and the matrices approach is an initial recommendation. It is expected that the structural engineer will assess each case individually and use their judgement to aggregate the risks, based on the local conditions to determine an appropriate risk category.”

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.

Table 1 – Risk categories

Fig 13: IStructE Table 1 - Risk Categories;

5.3. End bearing:

5.3.1. The IStructE guidance states that although the Codes of Practice from the 1950’s to 1980’s (CP114 & CP116) recommended minimum end bearings of 45mm for roof panels, “a minimum as built bearing length of 75mm is now considered to be necessary. Any bearing less than 75mm would be considered substandard”. They have identified that “with short bearing lengths there is a risk that this critical anchorage reinforcement can be absent over the support face, presenting an increased risk of panel failure.”;

5.4. Anchorage reinforcement:

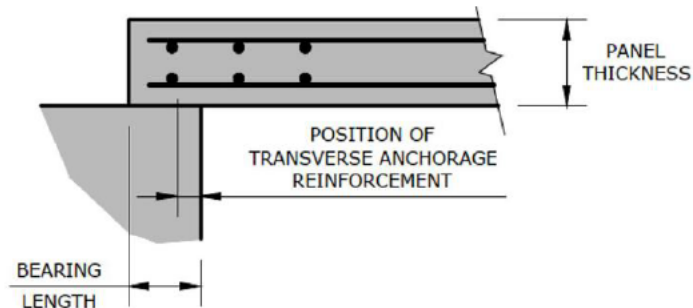


Fig 14: The transverse and longitudinal anchorage reinforcement requirements over supports;

4.1.1 Support condition

Support / bearing condition	Risk category
Bearing investigated and found to lack required transverse reinforcement	Red (critical)
Cut or modified panels, including where cut panels are supported on proprietary hangers	Red (critical)
Bearing <75mm with transverse anchorage reinforcement	Red
>75mm with transverse anchorage reinforcement	Green

Table 2 – Support/bearing risk category

Fig 15: IStructE Table 2 - Support / Bearing Risk Category;

5.4.1. As can be seen from IStructE Table 2, above, the assessment of the risk category that applies depends on the transverse anchorage reinforcement location. The location of which is determined by breaking-out of concrete at the bearing at the junction between two panels. Where transverse anchorage reinforcement is absent, the longitudinal bars will have significantly reduced tensile capacity and there is an increased risk of failure.

5.5. Cut panels:

5.5.1. The IStructE guidance states that cut panels typically “used narrow steel trimmers or hangers supported by adjacent panels to form openings in roofs. These steel hangers often have narrow bearing support and have been installed some distance from transverse reinforcement. Therefore, cut panels supporting on hangers present inadequate bearing conditions and poorly anchored longitudinal reinforcement.”

5.6. Cracking:

5.6.1. The IStructE guidance states that “cracking and spalling can be a visible indicator of excessive deflections, water ingress, mechanical damage or reinforcement corrosion... Cracking close to the supports (circa within 500mm) is of significant particular concern because it could be representative of shear cracking. Cracking close to a bearing should be recorded and cracks across the full width of a panel are considered more serious than cracks local to the edges.”

5.6.2. Cracks are defined as major or minor, as below:

5.6.2.1. Major cracking/spalling: defined where a panel exhibits large/deep cracks that may be accompanied by spalling and in some cases exposed reinforcement;

5.6.2.2. Minor cracking/spalling: defined where a panel that exhibits small cracks on its surface. These are commonly transverse across the panel width and usually expected to be seen at the centre of the panel

5.7. Water ingress:

5.7.1. The IStructE guidance states that “prolonged water ingress can impact on RAAC” due to saturated panels leading to an increase in panel weight, impacting material strength and causing corrosion of the reinforcement leading, over time, to de-bonding and spalling of the surrounding RAAC panel, which may adversely impact panel strength;

5.7.2. The IStructE also states that “due to the open nature of the AAC matrix, significant levels of corrosion can occur before spalling of the cover concrete occurs. The corrosion can therefore be well established before there are obvious external signs.”;

5.8. Deflection measurements

5.8.1. The IStructE guidance states that “RAAC panels which are exhibiting high deflections may increase the risk of water ponding and increases in loading and / or lead to a change in bearing stresses;

5.8.2. The noted deflections are combined with the assessments of the cracks and presence / absence of water ingress, as per tables 3 & 4 below:

4.1.2 Panel construction

The panel condition is a function of cracking, deflection, and water ingress.

Where water ingress is observed it may be difficult to ascertain the period and therefore the impact that this may have had on the panel strength. Therefore, all water ingress is considered Red / Amber risk.

Risk assessment if water ingress is observed				
Deflection	Major cracking or spalling	Minor cracking/ or spalling within 500mm of support	Minor cracking or spalling away from the supports	No visible defect
Deflection >span/100	Red	Red	Red	Red
Span/100<deflection<span/200	Red	Red	Red	Red
Span/200<deflection<span/250	Red	Red	Amber	Amber
Deflection<span/250	Red	Red	Amber	Amber

Table 3 – Risk category with water ingress

Risk assessment if NO water ingress is observed				
Deflection	Major cracking or spalling	Minor cracking/ or spalling within 500mm of support	Minor cracking or spalling away from the supports	No visible defect
Deflection >span/100	Red	Red	Red	Red
Span/100<deflection<span/200	Red	Red	Amber	Amber
Span/200<deflection<span/250	Red	Amber	Green	Green
Deflection<span/250	Red	Amber	Green	Green

Table 4 – Risk category with NO water ingress

Fig 16: IStructE Tables 3&4 - Risk Categories with / without water ingress;

5.9. Adverse or changes in loading:

- 5.9.1. The replacement roofing system with the additional insulation at the refurbished properties are likely experiencing an increase in dead loading;
- 5.9.2. There are no parapets at these properties and therefore snow drift is not a concern;
- 5.9.3. All properties are located within 1.5km of the coastline and therefore present a lower risk of heavy snowfall;
- 5.9.4. RAAC panels at this type of property would have been designed for a snow load of 0.75kN/m², however, current standards require only 0.6kN/m²;

6. Summary of Findings

6.1. Following a review of the survey findings, please see below summary table of our risk factor assessment:

Risk Factors	Assessment
End bearing	External wall supports all exceeded 75mm bearing
	Internal wall supports ranged between 40mm - 60mm bearing, with 1No. panel noted to be as low as 10mm
Anchorage/longitudinal reinforcement	Anchorage reinforcement missing to at least 1No. panel
Cut panels	None
Cracking	Transverse cracking found along full length of panel and within 500mm of the support. Spalling and corrosion of rebar also observed
Builder's works / building modifications	Damaged units from cable conduits and SVPs
Water ingress	Dampness has been noted to underside of panels
Deflection measurements	Lowest measurement span / 133, but with major cracking and spalling
Adverse or changes in loading	Replacement roofing systems with additional insulation

7. Remediation and Mitigation Options Appraisal

- 7.1. Based on the above risk factor assessment, in general, the properties fall into both critical and high risk categories.
- 7.2. Based on the below risk assessment categories provided by the IStructE, these categories require remedial action urgently / as soon as possible.

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.

Table 1 – Risk categories

Fig 17: IStructE Table 1 - Risk Categories;

7.3. We have detailed and reviewed the various options for remedial action and mitigation below, in line with the recommendations outlined by the IStructE:

Option	Scope	Advantages / Disadvantages
Enhanced bearing	Installation of timber/steel runners to both sides of central load-bearing brickwork partition, directly beneath bearing of all panels, fixed into brickwork, to increase the effective bearing length.	<ul style="list-style-type: none"> – Access to occupied properties required; – Potentially requires temporary decant of residents; – Only rectifies issue with bearing length / anchorage reinforcement with no effect on other noted defects; – Ongoing visual inspection regime required to monitor / assess remaining RAAC panels, with future remedial works likely required.
Secondary support structure (positive / passive)	Installation of timber joists below RAAC panels, across whole roof area, either to provide direct support to the panels or create a protective deck should the panels fail.	<ul style="list-style-type: none"> – Access to occupied properties required; – Requires temporary decant of residents; – Likely cost prohibitive.
Partial replacement	Removal of individual panels and replacement with new timber roof structure.	<ul style="list-style-type: none"> – Access to occupied properties required; – Requires temporary decant of residents; – Ongoing visual inspection regime required to monitor / assess remaining RAAC panels, with future replacements likely required.
Complete replacement	Complete removal of all panels and replacement with new timber roof structure.	<ul style="list-style-type: none"> – Complete replacement eliminates hazards posed by RAAC panels and extends life of properties; – Requires temporary decant of residents; – Likely cost prohibitive.
Planned decant	Decant residents to alternative accommodation and demolition of RAAC affected properties.	<ul style="list-style-type: none"> – Most disruptive; – Eliminates hazards posed by RAAC panels.

8. Recommendations

- 8.1. Based on the above risk factor assessment and options appraisal, we recommend thorough re-evaluation of the occupancy condition for the properties identified with RAAC concerns with a particular focus towards rehousing those affected properties as per the IStructE guidance document.
- 8.2. Medium and long-term management strategies can only be applied to Amber (Medium risk) and Green (Low Risk) RAAC panels. Due to prevalence Red (Critical or High risk) panels within the properties sampled and as per IStructE guidance medium long term management strategies can only be applied if remedial works were undertaken to reduce the risk profile of each property back to a category of Amber (Medium risk) and/or Green (Low risk)
- 8.3. Alternative remedial action options are typically either cost prohibitive, potentially equally disruptive, or are only a temporary solution for properties beyond their serviceable life, requiring extensive ongoing monitoring and maintenance.
- 8.4. Priority consideration should be given to first floor flats and 2-storey houses (i.e. those properties directly affected by having RAAC roof panels). This prioritisation would help reduce disruption to the property occupants.
- 8.5. We also recommend the implementation of the below short-term management strategy for properties. These interim measures should be pursued in a manner that ensures the safety and well-being of occupants while minimising disruption.

9. Short-term Management Strategy

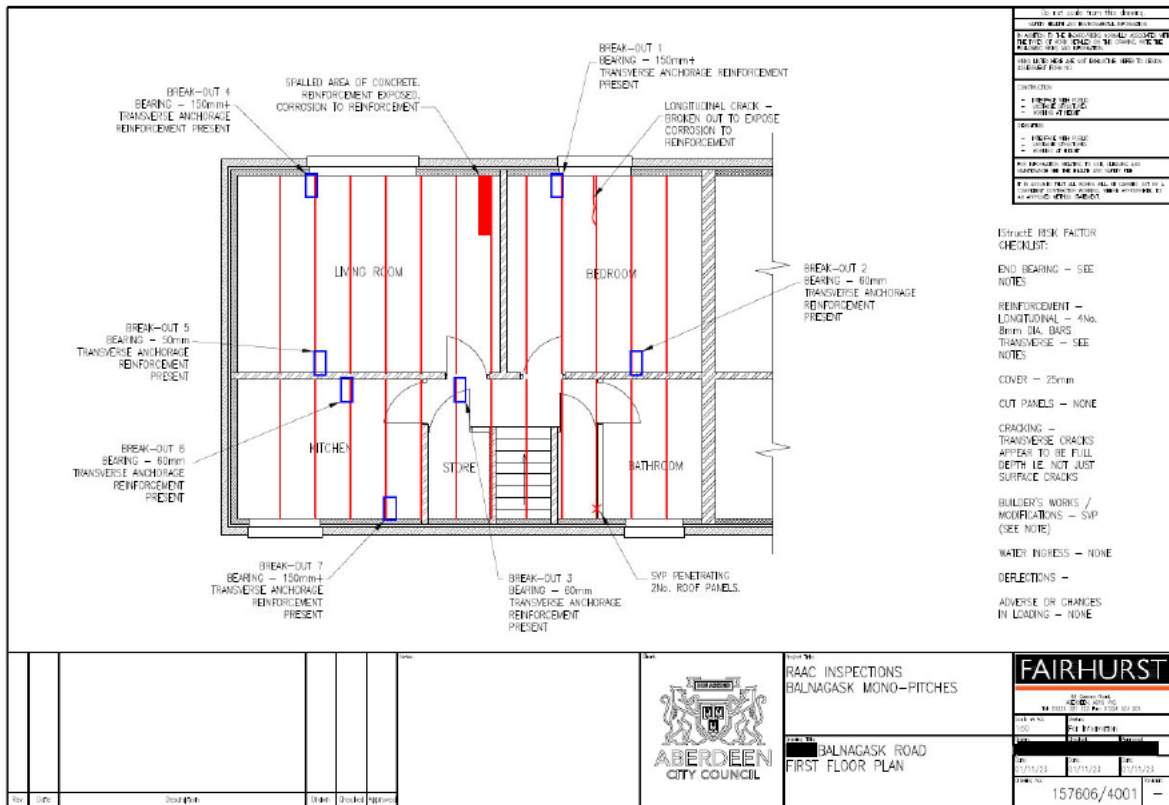
- 9.1. As the RAAC panels will continue to deteriorate over time, the following short-term management strategy should be applied to properties containing RAAC panels until such time as the property is decanted.
- 9.2. Visual inspections of occupied properties should be undertaken to continually monitor and assess the condition of the RAAC panels, consisting of the following:
 - 9.2.1. Asbestos survey of ceiling finishes within each property;
 - 9.2.2. Opening and installation of 3No. ceiling hatches within each property, by contractor. Where required intrusive surveys will be carried out by a non-precussive drill to ascertain the as built bearing of the RAAC panels.
- 9.3. An awareness campaign should be actioned for all owners and occupants, including the following:
 - 9.3.1. Letters / signage indicating the presence of RAAC roof panels within the property, ensuring all owners / occupants / users are aware of the concerns relating to RAAC and providing reassurances that appropriate measures are being undertaken;
 - 9.3.2. No additional loads are to be applied to any RAAC roof panel. Roof to be treated as a fragile roof by requiring access to the roof;

9.3.3. Building owner / occupant to report any changes of condition (water leaks, cracks, debris etc.);

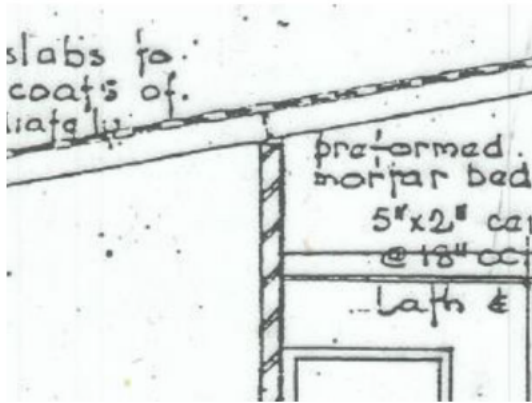
9.3.4. Significant weather events to be monitored by the building owner inc. heavy snowfall, heavy rainfall and storms, at which point, properties still in use should be re-inspected.

10. Balnagask Road, Aberdeen

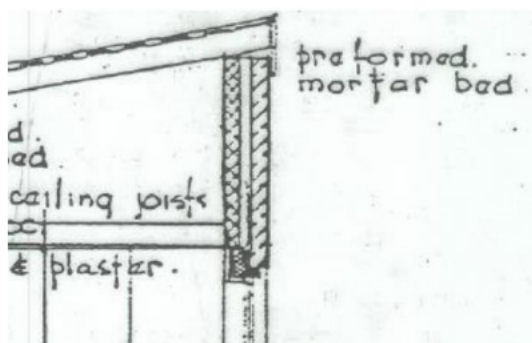
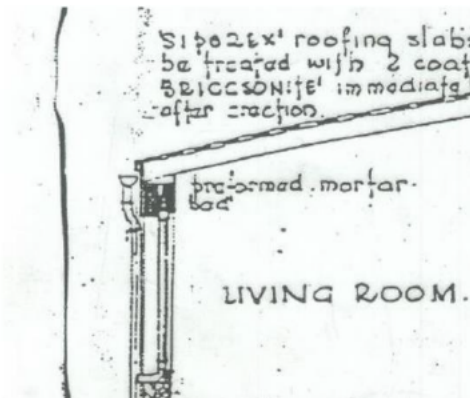
10.1. Fairhurst survey overmark 157606/4001;



10.2. Panel bearings at central load bearing internal brickwork partition are typically 40-60mm i.e. 2no. panels bearing onto 114mm thk brickwork wall (<75mm requirement);



10.3. Panel bearings at front and rear external walls are typically 150mm+ (>75mm requirement);



10.4. The transverse anchorage reinforcement was present over the bearing at all panels inspected;



10.5. We did not identify any cut panels within [REDACTED] Balnagask Road;

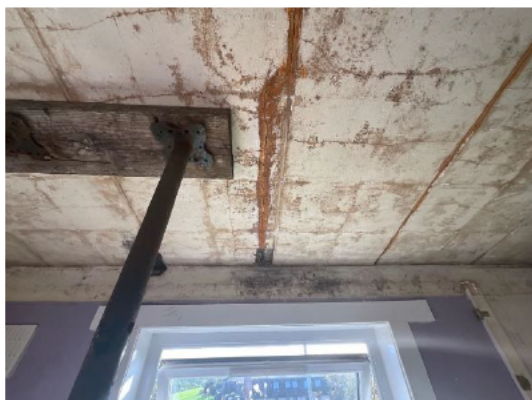
10.6. Consistent transverse cracks along the full length of the panels and close to the bearings were noted throughout [REDACTED] Balnagask Road;



10.7. These transverse cracks typically travel through the full depth of the panels, and therefore should be classed as 'major';



10.8. We also noted several longitudinal cracks to the panels. These are typically combined with spalling of the concrete and corrosion of the longitudinal reinforcement bar;



10.9. SVPs were noted at the property. These are located within a cupboard, penetrate two of the RAAC panels and project from the roof. These are shown on the original drawings, however, the penetrations appear to have been carried out on site, with damage to the panel and reinforcement visible;



10.10. No signs of prolonged water ingress were noted at the property;

10.11. 6No. locations were measured for mid-span deflection. 1No. panel was used as a control as it was supported by the internal brickwork partition along its full length. The deflections of the adjacent panels were measured against this control panel, with results as follows:

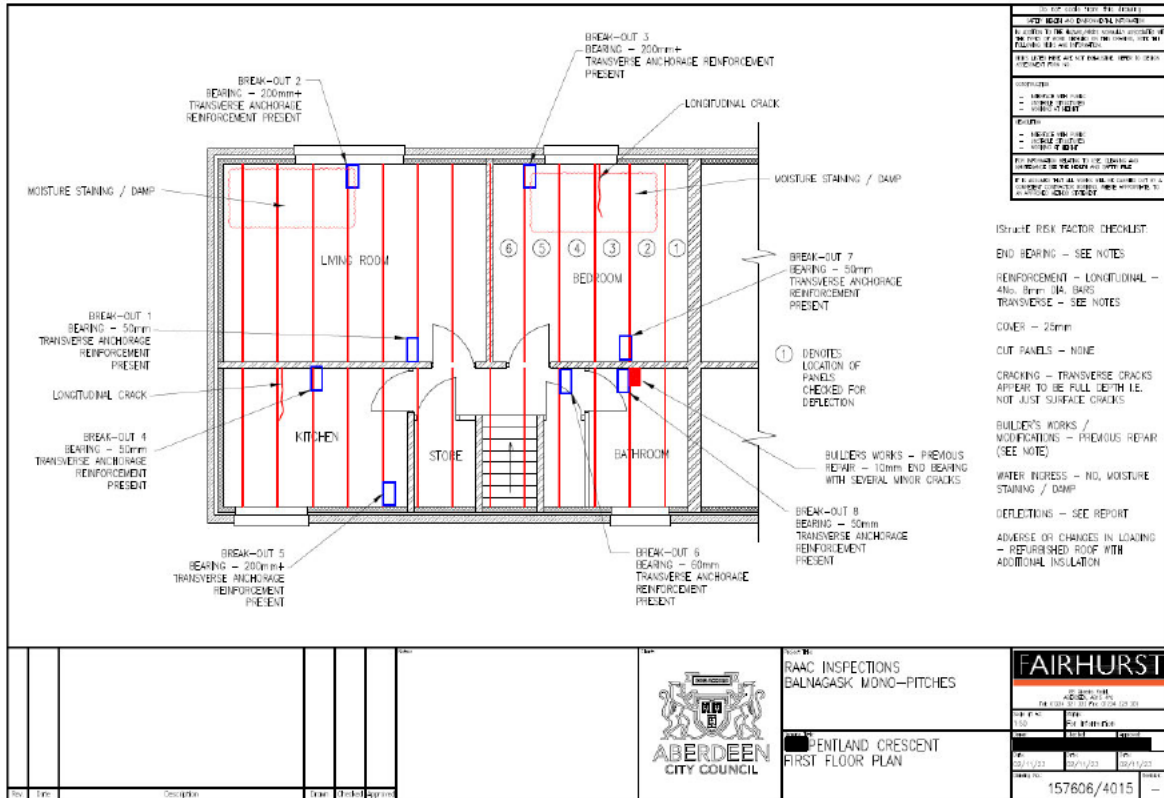
- Mid-span deflection = 0mm (control - full length supported on brick partition)
- Mid-span deflection = 16mm, i.e.: Span/200
- Mid-span deflection = 26mm, i.e.: Span/133
- Mid-span deflection = 15mm, i.e.: Span/213
- Mid-span deflection = 24mm, i.e.: Span/133
- Mid-span deflection = 10mm, i.e.: Span/320

10.12. Following a review of the survey findings, please see below summary table of our risk factor assessment:

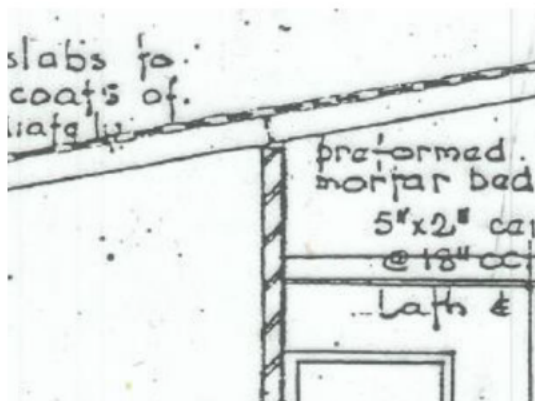
Risk Factors	Assessment
End bearing	External wall support exceeds 75mm bearing
	Internal wall support ranged from 40-60mm bearing
Anchorage reinforcement	Found over the support in all areas inspected
Cut panels	None
Cracking	Transverse cracking found along full length of panel and within 500mm of the support. Spalling also found
Builder's works / building modifications	Cored on site with damage to units
Water ingress	None
Deflection measurements	Range span/133 to span/320 with major cracking with in 500mm of supports and spalling
Adverse or changes in loading	None

11. Pentland Crescent, Aberdeen

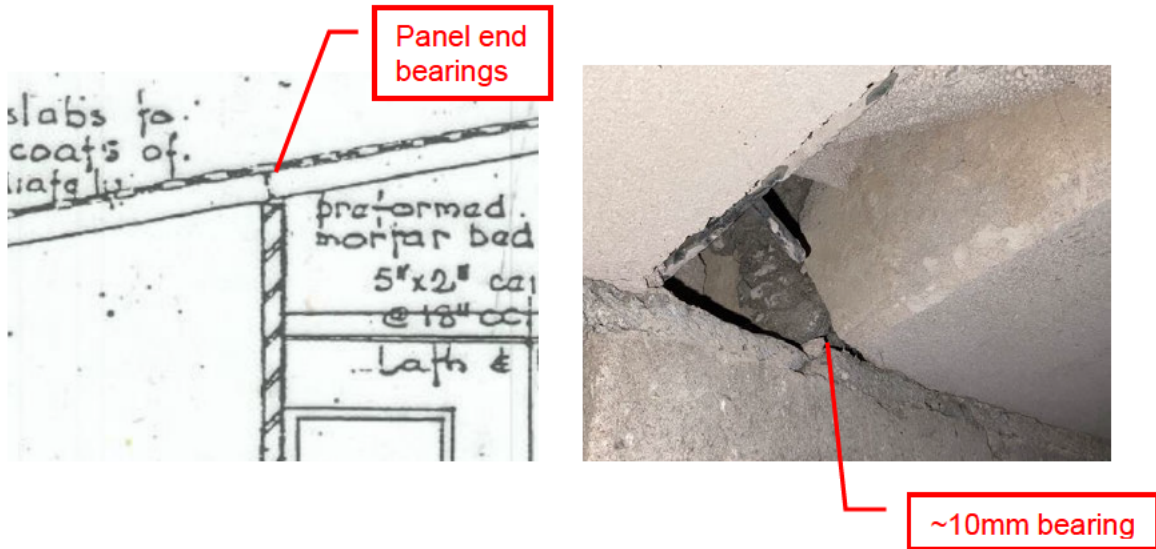
11.1. Fairhurst survey overmark 157606/4015;



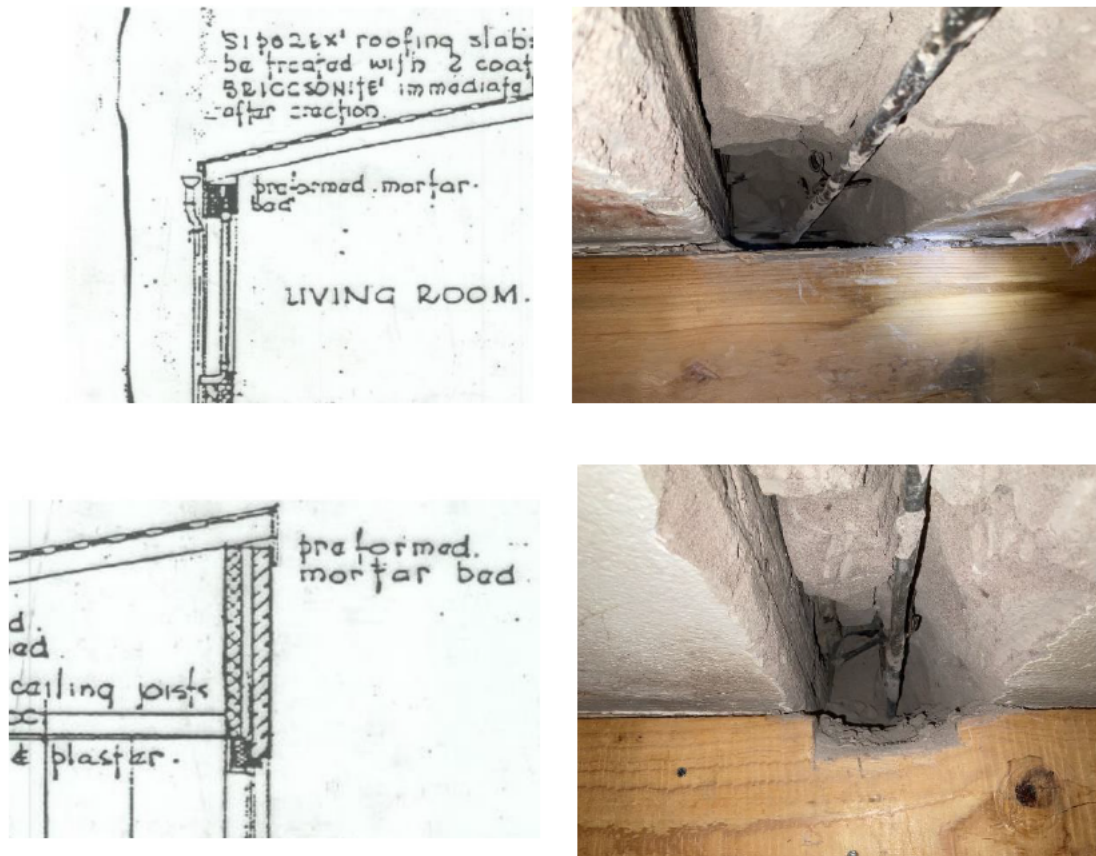
11.2. Panel bearings at central load bearing internal brickwork partition are typically 40-60mm i.e. 2no. panels bearing onto 114mm thick brickwork wall (<75mm requirement);



11.3. 1No. panel was seen to have a bearing at the central load bearing internal brickwork partition of approx. 10mm (<75mm requirement), with the gap between the end-to-end panels filled with poor quality infill mortar and general builder's debris.



11.4. Panel bearings at front and rear external walls are typically 150mm+ (>75mm requirement);



11.5. The transverse anchorage reinforcement was present over the bearing at all other panels inspected;



11.6. We did not identify any cut panels within █ Pentland Crescent;

11.7. Consistent transverse cracks along the full length of the panels and close to the bearings were noted throughout █ Pentland Crescent;



- 11.8. These transverse cracks typically travel through the full depth of the panels, and therefore should be classed as 'major';



- 11.9. We also noted several longitudinal cracks to the panels. These are typically combined with spalling of the concrete and corrosion of the longitudinal reinforcement bar;



- 11.10. SVPs were noted at the property. These are located within a cupboard, penetrate two of the RAAC panels and project from the roof. These are shown on the original drawings, however, the penetrations appear to have been carried out on site, with damage to the panel and reinforcement visible;

- 11.11. No signs of prolonged water ingress were noted at the property, however, there was moisture staining / damp to the underside of the roof panels;

11.12. 4No. locations were measured for mid-span deflection. 1No. panel was used as a control as it was supported by the internal brickwork partition along its full length. The deflections of the adjacent panels were measured against this control panel, with results as follows:

- Mid-span deflection = 0mm (control - full length supported on brick partition)
- Mid-span deflection = 11mm, i.e.: Span/290
- Mid-span deflection = 10mm, i.e.: Span/320
- Mid-span deflection = 8mm, i.e.: Span/400

11.13. Following a review of the survey findings, please see below summary table of our risk factor assessment for ■ Pentland Crescent:

Risk Factors	Assessment
End bearing	External wall supports all exceeded 75mm bearing
	Internal wall supports ranged between 10mm - 60mm bearing
Anchorage/longitudinal reinforcement	Anchorage reinforcement missing to at least 1No. panel
Cut panels	None
Cracking	Transverse cracking found along full length of panel and within 500mm of the support. Spalling and corrosion of rebar also observed
Builder's works / building modifications	Damaged unit
Water ingress	Dampness marks have been noted
Deflection measurements	Range span/290 to span/400 with major cracking with in 500mm of supports
Adverse or changes in loading	Replacement roofing system with additional insulation

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157606

Aberdeen City Council

**RAAC Inspections
Balnagask Mono-Pitches**

Update – 22 February 2024



CONTROL SHEET

CLIENT: Aberdeen City Council
PROJECT TITLE: RAAC Inspections - Balnagask Mono-Pitched Properties
REPORT TITLE: Intrusive Inspection Report - Update February 2024
PROJECT REFERENCE: 157606
DOCUMENT NUMBER: 157606/Report

Original Issue	Issue 1	Name		Signature		Date	
	Prepared by	[REDACTED]		[REDACTED]		05/02/2024	
	Checked by	[REDACTED]		[REDACTED]		05/02/2024	
	Approved by	[REDACTED]		[REDACTED]		05/02/2024	
Update Record	Issue	Date	Status	Description		Signature	
	2				Prepared By		
					Checked		
					Approved		
	3				Prepared By		
					Checked		
					Approved		
	4				Prepared By		
					Checked		
					Approved		

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157606 Aberdeen City Council – RAAC Inspections, Balnagask – Update Report

Further to the issue of our initial Report in November 2023 on the condition of a selected number of properties we provide the following update.

Our initial Report focused on the condition of multiple empty (Void) properties (as listed below) in which we undertook visual and intrusive inspections of the RAAC roof slabs, along with a detailed review of the support conditions for these slabs.

Our inspections were based on guidance from the Institution of Structural Engineers (IStructE).

We examined the following risk factors:-

- End bearing
- Anchorage reinforcement
- Cut Panels
- Cracking
- Builder’s work / building modifications
- Water ingress
- Deflection
- Potential for adverse loading

Whilst our initial Report in November 2023 discusses these aspects in detail the identified primary areas of concern were:-

- Less than 75mm bearing on internal supports
- Excessive cracking of slab panel
- Excessive deflection
- Historic water ingress (prior to roof replacement contracts over the lifetime of the properties)

The Risk Assessment contained in our November 2023 Report, undertaken in accordance with the IStructE Guidance, is detailed below.

Risk Factors	Assessment
End bearing	External wall supports all exceeded 75mm bearing
	Internal wall supports ranged between 40mm - 60mm bearing, with 1No. panel noted to be as low as 10mm – This slab is RED CRITICAL and was propped.
Anchorage/longitudinal reinforcement	Anchorage reinforcement missing to at least 1No. panel
Cut panels	None
Cracking	Transverse cracking found along full length of panel and within 500mm of the support. Spalling and corrosion of rebar also observed
Builder’s works / building modifications	Damaged units from cable conduits and SVPs
Water ingress	Dampness has been noted to underside of panels
Deflection measurements	Up to span / 133, but with major cracking and spalling
Adverse or changes in loading	Replacement roofing systems with additional insulation

Red – High Risk
 Amber – Medium Risk
 Green – Low Risk

Following the issue of our Report in November 2023 a programme of assessing occupied properties has now been commenced (refer to list below). As these properties are occupied and have full ceilings in place, it was necessary to form three access hatches in the ceilings in each property to enable the visual inspection of the general condition of the soffit of the RAAC roof slabs to be undertaken. These hatches also enabled the required intrusive inspection of a selected number of slab bearings at the central support, in order to prove the presence or otherwise of the necessary transverse bearing reinforcement.

Principle Observations from Occupied Property Inspections

End Bearing - By virtue of the fact that the central support wall is only 100mm wide, **none** of the slabs supported on the central wall achieve the required 75mm minimum bearing as required by the IStructE guidance. Notwithstanding the fact that as part of the overall Risk Assessment we have undertaken and proven in all inspection locations (six per property) that transverse bars exist at the end of the slabs along the central 100mm wide wall – **These further inspections maintain and further support the previous RED – High Risk Classification in the Risk Assessment for this element of the properties.** Of approximately 250 slabs inspected to date, one slab within an unoccupied property was found to have a bearing of 10mm. This slab was considered **RED Critical**. Propping was put in place to address this defect. The property can no longer be used in this condition.

Cracking – All of the slabs in the Occupied Property inspections have transverse cracking, similar to the initially inspected void properties – **These further inspections maintain and further support the previous RED – High Risk Classification in the Risk Assessment for this element of the properties.**

Deflection – All of the slabs in the Occupied Property inspections have deflections generally similar to those measured in detail in the Void Property inspections – **These further inspections maintain and further support the previous RED – High Risk Classification in the Risk Assessment for this element of the properties.**

Conclusion & Recommendations

The inspections of occupied properties that have now been undertaken following our initial report have all shown that the condition of the RAAC slabs are similar throughout the development. Given the number of properties now inspected, we have no reason to believe that uninspected properties will show any meaningful improvement on general condition, furthermore, it is likely that where there has been historic water ingress the condition of the RAAC slab and reinforcement will be measurably worse.

Our recommendation remains the same as previously reported, requiring either re-housing or remedial works to be undertaken. Recognising the scale of this task, this action requires to be combined with a Management Strategy and an awareness campaign for occupants, loading restrictions on the roofs and the need to report changes of condition such as water leaks, debris, change in loading, etc.

The Risk Assessment maintains the RED – Critical / High Risk elements as noted and as such **our recommendation remains that the properties should be vacated as soon as possible until such time that the risk is addressed by either mitigating remedial works or reconstruction of the roof structure.**

It is further emphasised that remedial works to address the central support bearings will not improve nor mitigate against the cracking / deflection observed in all RAAC roof slabs.

The roof slabs will not only require the central bearing to be addressed, but also the free-span of all roof slabs will require to be supported by a secondary structure or re-constructed.

<u>Void Property Inspections (ceilings removed)</u>	<u>Occupied Property Inspections (hatches installed)</u>
■ Balnagask Road	■ Farquhar Road
■ Farquhar Road	■ Farquhar Road
■ Farquhar Road	■ Farquhar Road
■ Pentland Crescent	■ Farquhar Road
■ Balnagask Road	■ Farquhar Road
■ Farquhar Road	■ Girdleness Road
■ Farquhar Road	■ Girdleness Road
■ Farquhar Road	■ Girdleness Road
■ Girdleness Road	■ Girdleness Road
■ Girdleness Road	■ Girdleness Road
■ Girdleness Road	■ Balnagask Road
■ Pentland Crescent	■ Lochnagar Road
■ Pentland Crescent	■ Bumbank Terrace
■ Pentland Place	■ North Balnagask Road
■ Pentland Place	■ Pentland Crescent
■ Pentland Road	■ Balnagask Road
■ Pentland Road	■ Farquhar Road
■ Balnagask Road	■ Pentland Crescent
■ Farquhar Road	■ Balnagask Road
■ Farquhar Road	
■ Farquhar Road	
■ Farquhar Road	
■ Girdleness Road	
■ Girdleness Road	
■ Pentland Place	
■ Rockall Place	
■ Lochnagar Road	
■ Lochnagar Road	
■ Farquhar Road	
■ Pentland Place	

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ACC Staffing

The work involved cuts across primarily 3 Clusters; Capital, Corporate Landlord and Early Intervention and Community Empowerment. The clusters have quantified the likely staffing resource to manage the process. Any additional staffing resource will follow the current governance approval process inclusive of the Demand Management Control Board.

Consultants

This is for work carried out by the external professional advisors, which will include but not be limited to, providing professional technical advice, carrying out survey inspections, report preparation and any other professional technical support as and when required.

Contractors

This is for work to facilitate the inspections/surveys which will be carried out by the external Contractors, which will include but not be limited to, managing the construction related works, ensuring overall safety, and any other contractor support as and when required.

Rehoming

The rehoming costs are primarily costs which are likely to accrue from Home Loss and Disturbance payments.

Temporary Accommodation

Temporary accommodations cost may be incurred.

School Transport

School transport may be incurred subject to individual need.

Power Disconnections

These are costs which will be incurred (shutting off power supplies such as electricity/gas) once any property is confirmed to be vacant.

Security

As properties become vacant it will be necessary to ensure they are secure from vandalism and intruders. This could involve security works such as perimeter fencing and boarding up windows and doors or the installation of security screens.

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The purpose of Aberdeen City Council is to protect the people and the place of Aberdeen from harm, enabling them to prosper and supporting them in the event of harm happening.

The purpose of an Integrated Impact Assessment is to evidence that Aberdeen City Council are making decisions in an informed way, and that the impact of decisions made is understood and accepted. The legislation that is considered within this assessment are:

- Section 2 [Equality Act 2010 protected characteristics](#)
- Section 3 [Socio-Economic](#)
- Section 4 [Human Rights](#)
- Section 5 [Children and Young People’s Rights](#)

The term ‘policy’ is used throughout this document and applies to policies, proposals, strategies, provision, criteria, functions, practice, budget savings and activities that includes delivery of our services.

1. About the Policy

1.1 Title

IIA Reinforced Autoclaved Aerated Concrete (RAAC) Update at Balnagask.

1.2 What does this policy seek to achieve?

The proposal identifies the extent and impact of the presence of RAAC panels, within the construction of homes within the Balnagask area of the city (within both Council owned / private owned housing stock). The data indicates that a total of 364 Council addresses and 140 Private addresses – all located within 372 individual buildings have the presence of RAAC panels within their construction. As of 21.02.24 there were 65 void properties, reducing the number of Council households impacted. Of the 140 private addresses, 27 have identified landlords registered to lease the property privately. There is a mixture of housing type as indicated below:

Property Type	ACC Owned Properties	Private Owned Properties
House, 3 Bed	103	86
House, 4 Bed	23	16
House 7 Bed	1	0
Ground Floor Flat, 1 Bed	87	18
First Floor Flat , 1 Bed	85	20

Over the past 5 months the independent structural engineers working alongside Aberdeen City Council have carried out 49 visual and intrusive surveys in void and occupied properties in the Balnagask area. From the sample of properties inspected reports have been provided, the recommendation based on these findings is that any short-term remedial works undertaken will not give suitable medium to long term comfort in relation to the condition of the RAAC panels. It is considered that comprehensive remedial works will be required, and a period of time is necessary to consider and review all options.

We recognise that all the possible options will be incredibly disruptive to Council tenants, therefore in response to the information contained within the reports from the independent structural engineers and whilst considering the risk to tenant welfare and safety it has been

necessary to plan for the **Council** tenants to be permanently rehomed into alternative accommodation.

The following committee recommendations, aligned to the rehoming process, have been included in the report being presented at Urgent Business Committee on 29 February 2024:

- **Note the independent structural engineer reports (refer to Appendix C & D), appended to the Council Report RES/24/086 that recommends a thorough re-evaluation of the occupancy condition for the properties identified with RAAC and instructs the Chief Officer – Early Intervention and Community Empowerment to begin engaging with council tenants impacted to understand their individual needs to enable them to be rehomed through the implementation of a short-term management strategy to facilitate this.**
- **Instructs the Chief Officer – Early Intervention and Community Empowerment to 1) ensure that private owners and tenants who reside within any privately owned properties in the Balnagask area of Aberdeen which have RAAC in their construction, are provided with support and information (at request) to assist them in assessing their housing options, and 2) add existing owner occupiers and private tenants to the proposed ‘RAAC Impact’ housing list should a need for access to council homes be identified through the process of exploring available support and housing options for them in the city.**

The outcome at this stage is to begin engagement with Council tenants to understand their individual needs in order to enable them to be rehomed. Whilst also offering owners and private tenants, the option to meet with a Housing & Support Officer to provide them with support and information to assist them with assessing their housing options in the city.

The next stage, is for Officers to prepare a report which will provide detail on the options and allow for full consideration of the longer-term future of the properties which have RAAC within their construction.

As the process of engagement begins, and the options appraisal progresses, this document will be updated to reflect this developing programme.

1.3 Is this a new or existing policy?

This is a new issue which has arisen following the confirmation that RAAC panels are in-situ within the construction of a number of properties within the Balnagask area of the city.

We recognise that we have an existing allocation policy, and that the principles within it will be used to support the implementation of a short-term management strategy to facilitate the rehoming of impacted residents. We will be creating an additional specific RAAC impact housing list to ensure priority is provided to council tenants residing at identified properties, allowing for their urgent rehoming. The report provides the option for owner occupiers and private tenant to the proposed RAAC impact housing list, should a need for access to council housing be identified through the process. Aligned to the existing allocation policy applicants placed on this list will be offered accommodation based on their current housing need, where stock provision allows, rather than their existing property size and type. All applicants placed on the list will be assessed by need, individual building risk and failing this further prioritised by the length of their current council tenancy.

The allocation will also be driven by the size, type and availability of lettable stock at any given time, and the number of applicants who have met with officers to share their information necessary to allow for placement on the list.

1.4 Is this report going to a committee?
Yes
1.5 Committee name and date:
Urgent Business Committee - 29 February 2024.
1.6 Report no and / or Budget proposal number and / or Business Case reference number:
RES/24/086

Impacts

This section demonstrates the considerations that have been made in relation to the policy - and that the impact of proposals made is understood and accepted.

2: Equality Act 2010 - Protected Characteristics

Aberdeen City Council wants to ensure everyone is treated fairly. This section identifies the [protected characteristics](#) that the policy potentially affects and records the impact and mitigating steps.

2.1 What impact could this policy have on any of the below groups?

Protected Characteristic	What is the impact?				
	Negative			Neutral	Positive
	High	Medium	Low		
Age		√			√
Disability		√			√
Gender Reassignment				√	
Marriage and Civil Partnership				√	
Pregnancy and Maternity		√			√
Race				√	
Religion or Belief				√	
Sex				√	
Sexual Orientation				√	

2.2 In what way will the policy impact people with these protected characteristics?

Due to the existence of RAAC panels within property roofs the proposal advocates that current council tenants are rehomed. Officers recognise the wider impact of moving home, on individuals and families, the disruption to support networks, sense of community, and links to existing education and health services. Throughout the rehoming process Officers will adopt a person/family centred approach, ensuring an understanding of need at the earliest point, and involving the necessary services to support the most appropriate outcome for the individual/family within the scope of available options.

We have not yet engaged with any Council tenants to begin exploring the rehoming process or owner occupiers and private tenants to explore their housing options, and have identified that there are limitations in some of the data that we currently hold to allow for a full assessment of impact at this stage. We recognise that some people may wish to remain within the area, whilst others may wish to move to different areas of the city. We acknowledge that we do not have the level of available stock to offer everyone the option to remain within the South area of the city. We have recognised the importance of people feeling fully supported through this time, and will be providing a single point of contact, a Housing and Support Officer, for each household impacted to support them through this difficult time.

As noted above, further reports will be carried out which will scope and consider potential longer term future options for the properties. When this work is complete it will enable a recommendation to be made on the most appropriate option for the site and wider area.

Age: Families with very young children or elderly family members may find managing the re-housing process difficult and stressful and will be concerned or worried about their needs not being met. There will also be potentially additional impacts related to attending new schools. We are aware that some residents could currently be in housing that is unsuitable for their needs, this process could see them being moved into housing that meets their needs, through moving into ground floor accommodation, sheltered or amenity housing for example.

Disability: People with disabilities may not be in a position to manage the process of moving house and will be concerned or worried about their needs not being met. We also recognise the different forms of disability and understand the need to capture a person and family's needs based on the information they share. We recognise that not every disability is a physical disability, this will be considered when providing the necessary support and housing options. We are aware that some residents could currently be in housing that is unsuitable for their needs, this process could see them being moved into housing that is more suitable for their needs.

Gender Reassignment: We do not envisage this programme having any impact on persons undergoing gender reassignment.

Marriage and Civil Partnership: We do not envisage this programme having any impact relating to marriage and civil partnership.

Pregnancy and Maternity: Persons who are pregnant or with small children will be supported through the process to ensure the impacts of moving home are minimised. We are aware that some residents could currently be in housing that is unsuitable for their needs, this process could see them being moved into housing that is more suitable for their needs.

Race: We do not currently have the necessary data on the race of the individuals who will be relocated. We are aware of the various services in the city that could become involved as necessary to help mitigate against any impact, including translation services to support communication. In line with our current allocation policy race does not impact on the allocation of housing.

Religion or Belief: We do not currently have the necessary data to fully understand the current scope of religion and beliefs held by residents who will be relocated. We recognise that there are a number of churches operating within the Torry Community with different faith denominations. We recognise that some residents living within the area may attend faith based organisations elsewhere in the city.

Sex: As the allocation of the property will be based on a person and families housing need we do not envisage this programme having any negative impact on grounds of a person's sex.

Sexual Orientation: As the allocation of the property will be based on a person and families housing need we do not envisage this programme having any negative impact on grounds of a person's sexual orientation.

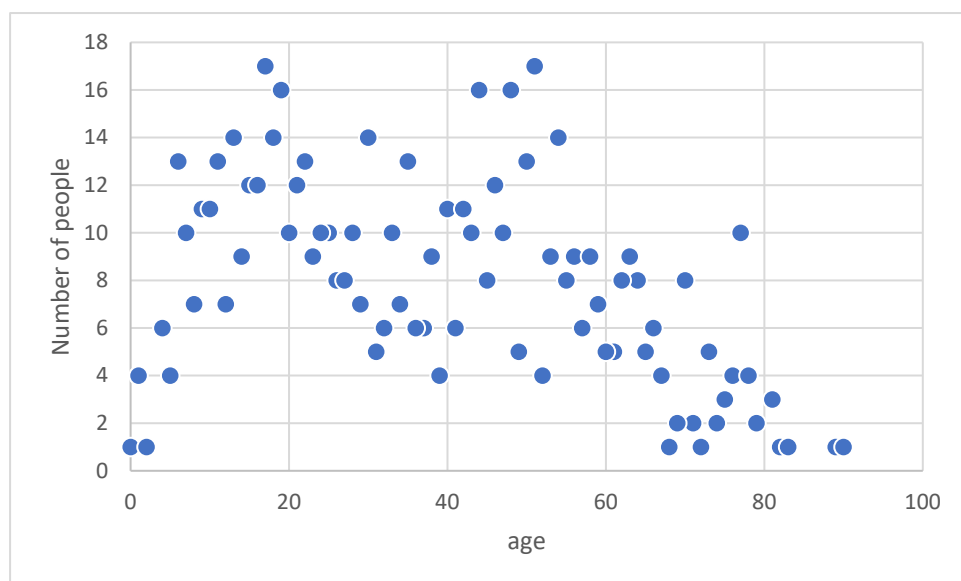
2.3 What considerations have been made in reaching the above assessment?

What internal or external data has been considered? What does this data tell us?

From the education data available we recognise that the highest number of children and young people residing within homes currently attend Tullos Primary School, followed closely by Lochside Academy. We have a smaller number of children and young people attending schools in other areas of the city.

The data held within our housing system indicates that we have a diverse age range currently living within these homes, as would be expected based on the types of property and the length of time that some tenants have lived in their homes. The chart below illustrates this.

Throughout our upcoming engagement with residents we will ensure our discussions focus on all housing options, we have identified properties from our existing stock based the diversity of age range, including sheltered, amenity and mainstream types.



We acknowledge at this early stage that there are limitations regarding some of the data that we hold. Following the outcome of the Urgent Business Committee we have organised individual meetings with all Council tenants impacted by the proposal, to move them from their current accommodation and will arrange meetings with owner occupiers and private tenants at their request. During this process we will invite them to share any updates to their household composition, any disabilities, details about their education, work and support networks to allow us to gain a full understanding of their housing need.

We will work closely with colleagues in social work and education to ensure full support and planning is in place for any person and family who requires additional support.

Throughout this process it is important to recognise that the primary focus continue to be the safety and wellbeing of the residents.

What consultation and engagement and has been undertaken with officers and partner organisations?

Due to the sensitive nature of this proposal, consultation and engagement with partner organisations has not been undertaken. Officers across Housing, Capital, Corporate Landlord and Legal have met on a weekly basis using the information from the independent structural engineers to inform next steps. Senior Officers from Housing, Social Work and Education have also met to discuss and plan for the potential impact and will continue to do so as the process of engagement and relocation progresses.

In addition, we have previously consulted on our full housing allocation policy, which is also based on need and endeavours to ensure that there is no discrimination. Allocations through this process are also based on housing need, and therefore in line with how we currently allocate housing.

Senior Housing Officers have shared their knowledge and experience on how the recommended rehoming approach may impact council tenants. From their direct experience of delivery and previous rehoming exercises and their knowledge of the community and relationships with individuals, impacts have been captured from their perspective.

What consultation and engagement and has been undertaken with people who may be impacted by this policy (e.g. citizens, community groups, or other people/groups)?

Various forms of communication have been utilised so far in the process; website, drop in sessions, letter drops. A 'communication and engagement plan' has been prepared, and will be implemented and followed throughout the whole process.

The following numbers of individuals attended the initial drop in sessions;

- Number of council tenants 19
- Number of owners attending the drop-in sessions 25
- Number of owners not willing to provide details 1

A 'communication and engagement plan' has been prepared, implemented and followed throughout the whole process.

Early actions within the communication action plan will be acted upon quickly, following committee consideration and approval to ensure that those affected are as fully informed as they can be regarding 'next steps'.

Each Council tenant currently living within an identified property will be written to, providing the opportunity to discuss the planned next steps on an individual basis. Each council tenant will be allocated an appointment with a Housing & Support Officer who will become a single point of contact throughout the process, providing a way for tenants to be appropriately supported through this difficult time.

Each owner occupier and private tenant will receive an updated written communication, advising of the most recent findings, providing reassurance of our commitment to update them should there be any changes identified through undertaking the inspection/intrusive survey process.

Officers recognise the importance of engaging with the wider community in Torry, and will seek to meet with the Community Council and Neighbourhood Partnership following the outcome of UBC. Housing, social work and education staff working within the locality will also be briefed. Organisations who may become a point of contact for impacted residents, such as Shelter and Citizens Advice will also receive a written brief, with the option to meet with Officers to discuss the support available for impacted residents, and the reason for the decision

2.4 What mitigations can be put in place?

What mitigations are there against any negative impacts (if applicable)?

Support is being offered and provided to assist with re-homing for council tenants and exploring housing options where required for owner occupiers and private tenants, through the single point of contact of a Housing & Support Officer.

We have identified a range of different property types, to assist in meeting various housing needs that could be identified throughout the engagement.

We have recognised the need for wider services to be involved in the provision of supporting the best outcome for those impacted including colleagues from education and social work.

We have a package of support for council tenants to minimise the disruption caused by moving, including the organising of removals, the offer disconnection/reconnection of white goods and flooring. All properties offered will be decorated.

With mitigations in place, what is the new rating of the negative impact(s)?

High	
Medium	
Low	√
Negative Impact Removed	

3: Socio-Economic Impacts

This section is used to consider the impact of the policy on people who might be **unemployed, single parents**, people with lower **education** or **literacy**, **looked after children**, those with **protected characteristics** as examples.

Use this guide to understand more on socio-economic inequalities: [The Fairer Scotland Duty: Guidance for Public Bodies \(www.gov.scot\)](http://www.gov.scot)

3.1 What impact could this policy have on any of the below groups?

Group	Negative			Neutral	Positive
	High	Medium	Low		
Low income / income poverty – those who cannot afford regular bills, food, clothing payments.		√			
Low and/or no wealth – those who can meet basic living costs but have no savings for unexpected spend or provision for the future		√			
Material deprivation – those who cannot access basic goods and services, unable to repair/replace broken electrical goods, heat their homes or access to leisure or hobbies		√			
Area deprivation – consider where people live and where they work (accessibility and cost of transport)		√			
Socio-economic background – social class, parents' education, employment, income.		√			

3.2 In what way will the policy impact people in these groups?

People and families will be moving from a home and community where they may have been settled for various periods of time.

People may live close to work and so have little or no travel to work costs and moving to another home in a different area will mean more expense.

There is concern over children having to change school and the disruption this will bring to their education or if the change to school does not happen the need to travel further to remain at the same school.

Moving home can incur additional expenses.

People within the area may be linked into local groups, informal support networks which assist with minimising the impact of low income, and deprivation.

3.3 What considerations have been made in reaching the above assessment?

What internal or external data has been considered? What does this data tell us?

Through our process of engagement we will gather information to fully understand the current need. At this time, we have considered the current level of arrears for Council Tenants living within this area, to help inform the above assessment.

We have also considered the information available within the Locality Plan for the South area of the city, which includes data linked to place, people and economy [Final-Aberdeen-City-Locality-South.pdf \(communityplanningaberdeen.org.uk\)](https://communityplanningaberdeen.org.uk/Final-Aberdeen-City-Locality-South.pdf)

What consultation and engagement and has been undertaken with officers and partner organisations?

Consultation at this stage has been limited due to the sensitive nature of this proposal. We have engaged with colleagues from Social Work, Health and Social Care, and Education.

Senior Housing Officers have shared their knowledge and experience on how the recommended rehoming approach may impact council tenants. From their direct experience of delivery and previous rehoming exercises and their knowledge of the community and relationships with individuals, impacts have been captured from their perspective.

What consultation and engagement and has been undertaken with people who may be impacted by this policy? citizens, community groups, or other people/groups impacted by this policy?

Various forms of communication have been utilised so far in the process; Aberdeen City Councils website has been updated, drop in sessions have been held within the Torry community, letters have been delivered to people impacted. A ‘communication and engagement plan’ has been prepared.

One to one engagement is offered to tenant, and owner occupiers and private tenants on request. In addition, communication updates have been issued to ensure residents are informed with regard to the works being undertaken by the Council in relation to properties with RAAC in their construction. It is envisaged that this approach will continue as part of the ongoing communication and engagement plan.

3.4 What mitigations can be put in place?

What mitigations are there against any negative impacts (if applicable)?

A home loss payment and disturbance payment will be paid to Council tenants to reduce the financial impact of moving, in addition there will be some costs that can be met through a disturbance payment, this payment will cover the costs of removals, and flooring of the person/families new permanent tenancy, alongside disconnection/reconnection of white goods. If there is a preference we will organise these tasks to be completed. There may be other specific factors which become applicable following the one to one engagement to understand needs.

Integration into new areas, will be supported through the transition, by the Housing & Support Officer introducing applicants to activities, groups, and community events within the new area of housing.

Continuing to link in with education, health and social work as this situation develops will mitigate against the negative impacts, as they will continue to provide support, as they currently do.

We will work alongside the Financial Inclusion Team to ensure income maximisation, and full benefit entitlement for those impacted by this.

With mitigations in place, what is the new rating of the negative impact(s)?

High	
Medium	
Low	√
Negative Impact Removed	

4: Human Rights Impacts

The Human Rights Act 1998 sets out the fundamental rights and freedoms that everyone in the UK is entitled to. It incorporates the rights set out in the European Convention on Human Rights (ECHR) into domestic British law. The Human Rights Act came into force in the UK in October 2000

The Act sets out our human rights in a series of 'Articles'. Each Article deals with a different right.

Use this guide to understand more about [Human Rights](#).

4.1 What impact could this policy have on Human Rights?

Human Rights Article	Negative	Neutral	Positive
Article 6: Right to a fair trial		√	
Article 7: No punishment without law		√	
Article 8: Right to respect for private and family life, home and correspondence	√		√
Article 9: Freedom of thought, belief and religion		√	
Article 10: Freedom of expression		√	
Article 11: Freedom of assembly and association		√	
Article 12: Right to marry and start a family		√	
Article 14: Protection from discrimination in respect of these rights and freedoms		√	
Article 1 of Protocol 1: Right to peaceful enjoyment of your property	√		
Article 2 of Protocol 1: Right to education	√		√
Article 3 of Protocol 1: Right to participate in free elections		√	

4.2 In what way will the policy impact Human Rights?

Due to the presence of RAAC within the construction of these properties, there is a need to progress engagement with Council tenants to enable them to be rehomed and to offer owner occupiers and private tenants the opportunity to meet with a Housing and Support Officer to discuss their needs and housing options available. The safety and wellbeing of residents is the driving factor for this. Without the option of rehoming there would be a risk to their right to the peaceful enjoyment of their property and may indirectly impact on some of their other rights.

4.3 What mitigations can be put in place?

What mitigations are there against any negative impacts (if applicable)?

The mitigation we are putting in place is to try and restore that right by offering to re-home the tenants and to offer owner occupiers and private tenants the opportunity to meet with a Housing & Support Officers to discuss their needs and housing options available.

Continuing to link in with education, health and social work as this situation develops will mitigate against the negative impacts, as they will continue to provide support, as they currently do.

If mitigations are in place, does this remove the negative impact?

No – negative impact remains

Yes – negative impact reduced

Yes - negative impact removed

√

5: Children and Young People’s Rights Impacts

The United Nations Convention has 54 articles that cover all aspects of a child’s life and set out the civil, political, economic, social and cultural rights that all children everywhere are entitled to. It also explains how adults and governments must work together to make sure all children can enjoy all their rights.

Children’s rights apply to every child/young person under the age of 18 and to adults still eligible to receive a “children’s service” (e.g. care leavers aged 18 – 25 years old).

The Conventions are also known as the “General Principles” and they help to interpret all the other articles and play a fundamental role in realising all the rights in the Convention for all children. They are:

1. Non-discrimination (Article 2)
2. Best interest of the child (Article 3)
3. Right to life survival and development (Article 6)
4. Right to be heard (Article 12)

You can [read the full UN Convention \(pdf\)](#), or [just a summary \(pdf\)](#), to find out more about the rights that are included.

5.1 What impact could this policy have on the rights of Children and Young People?

UNCRC and Optional Protocols	Negative	Neutral	Positive
Article 1: definition of the child		√	
Article 2: non-discrimination		√	
Article 3: best interests of the child	√		√
Article 4: implementation of the convention		√	
Article 5: parental guidance and a child's evolving capacities		√	
Article 6: life, survival and development		√	
Article 7: birth registration, name, nationality, care		√	
Article 8: protection and preservation of identity		√	
Article 9: separation from parents		√	
Article 10: family reunification		√	
Article 11: abduction and non-return of children		√	
Article 12: respect for the views of the child		√	
Article 13: freedom of expression		√	
Article 14: freedom of thought, belief and religion		√	
Article 15: freedom of association		√	
Article 16: right to privacy		√	
Article 17: access to information from the media		√	
Article 18: parental responsibilities and state assistance		√	
Article 19: protection from violence, abuse and neglect		√	
Article 20: children unable to live with their family		√	
Article 21: adoption		√	
Article 22: refugee children		√	
Article 23: children with a disability	√		√
Article 24: health and health services	√		√
Article 25: review of treatment in care		√	
Article 26: social security		√	
Article 27: adequate standard of living			√
Article 28: right to education	√		√

Article 29: goals of education		√	
Article 30: children from minority or indigenous groups	√		
Article 31: leisure, play and culture	√		
Article 32: child labour		√	
Article 33: drug abuse		√	
Article 34: sexual exploitation		√	
Article 35: abduction, sale and trafficking		√	
Article 36: other forms of exploitation		√	
Article 37: inhumane treatment and detention		√	
Article 38: war and armed conflicts		√	
Article 39: recovery from trauma and reintegration		√	
Article 40: juvenile justice		√	
Article 41: respect for higher national standards		√	
Article 42: knowledge of rights		√	
Optional Protocol on a Communications Procedure		√	

5.2 In what way will the policy impact the rights of Children and Young People?

The need to re-home people may mean that the alternative accommodation may be in a different area from Balnagask, and so could be remote from established support groups or friends and family. Losing touch with friends and family can lead to emotional withdrawal and isolation. Moving school can be disruptive to a child's education part way through a school term.

5.3 What mitigations can be put in place?

What mitigations are there against any negative impacts (if applicable)?

Re-homing children, young people and families will ensure that their safety and wellbeing continues to be protected.

Housing and Support Officers will continue to provide support to assist with integration into their new community areas where required. The approach will be person/family centred ensuring an understanding of need at the earliest point and involving the necessary services to support the most appropriate outcome for the family within the scope of available options.

Continuing to link in with education, health and social work as this situation develops will mitigate against the negative impacts, as they will continue to provide support, as they currently do.

There may be other specific factors which become applicable following the one-to-one engagement to understand needs.

If mitigations are in place, does this remove the negative impact?

No – negative impact remains

Yes – negative impact reduced

Yes - negative impact removed

√

6: Sign Off

Any further positive or negative impacts on individuals or groups that have been considered?
The decision to re-home people living in the affected properties in Balnagask will affect all groups in the community, including those of a protected characteristic not identified above specifically as being impacted negatively or otherwise. Re-homing, financial and other support will be available to all council tenants to mitigate the negative impact of this policy.
Overall summary of changes made as a result of impact assessment.
There is understandably a negative impact however it has to be accepted that the safety and wellbeing of residents is the driving factor for this change. Our mitigations actions will help to alleviate this impact.
Outline of how impact of policy will be monitored.
There will be an ongoing commitment to community engagement throughout this process, with one to one discussions. Feedback from these engagements will be used to inform and develop the policy as required.
If there are any remaining negative impacts after mitigation, what is the justification for why this policy should proceed.
While it will be impossible to remove all the negative impacts of this process, the mitigations being established and adopted will mean that the effects will be reduced. Given the importance of continuing to ensure the safety and wellbeing of residents impacted by having RAAC within the construction of their homes, this process is the most proportionate means of achieving this outcome.

Assessment Author	John Wilson/Jacqui McKenzie/Stephen Booth
Date	22 February 2024
Chief Officer	John Wilson/Jacqui McKenzie/Stephen Booth
Date	26 February 2024