

Reinforced Autoclaved Aerated Concrete (RAAC)

Purpose of Report

For decision.

Summary

This report updates the Board on the issues facing local authorities in relation to making buildings with Reinforced Autoclaved Aerated Concrete (RAAC) safe, and seeks the Board's agreement to a range of actions to support local authorities in their work to identify and remediate RAAC.

LGA Plan Theme: Championing climate change and local environments

Recommendation(s)

That the Board agree the actions set out in paragraph 25.

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Reinforced Autoclaved Aerated Concrete (RAAC)

Background

1. As members of the Board will recall from their last meeting Reinforced Autoclaved Aerated Concrete (RAAC) is a lightweight, aerated ('bubbly') concrete that was commonly used from the 1950s until the mid-1990s, though there have been cases dating back to the 1930s and some into the 1990s.
2. It was predominantly used in precast panels, which are primarily found in flat-roof construction, but have been found less frequently in pitched-roofs, walls, and floors. It is also found more commonly in buildings with large open spaces.
3. The risks associated with RAAC have been known since the 1990s, when the Building Research Establishment (BRE) published an information paper on issues identified with RAAC planks. While recommending that roofs incorporating RAAC planks should be inspected, BRE advised there was no evidence to suggest RAAC posed a safety hazard.
4. This view changed following the sudden collapse in Kent of a flat roof made of RAAC planks in the summer of 2018, and the subsequent reporting of a number of other school roof collapses. Where before it had been assumed deterioration in RAAC planks could be identified through visual inspection, these incidents have suggested that RAAC planks can collapse with little or no warning.
5. After being made aware of the roof collapse in Kent the LGA and Department for Education (DfE) contacted school owners in December 2018 to draw attention to the incident. The LGA then undertook a programme of work to raise awareness of RAAC among building owners.
6. After the collapse of the school roof in Kent the Standing Committee on Structural Safety (SCOSS) has been gathering information on incidents involving RAAC, and the Institute of Structural Engineers (IStructE) issued guidance on identifying and remediating RAAC planks in March 2022, which was updated in April 2023.
7. Until August 2023 DfE's advice to school responsible bodies was to follow the IStructE guidance. This advice changed due to three incidents over the summer involving the collapse of RAAC structures without prior warning: two in a school setting and one in a commercial setting.
8. On inspection of some of the settings DfE officials took the view that under the IStructE guidance the RAAC planks which collapsed would have been categorised as non-critical and therefore not requiring the immediate closure of the room or building where they were situated.
9. This has led to a shift in DfE's risk management approach whereby any incident of RAAC in a state-funded education setting (community, voluntary-controlled, foundation schools and maintained nursery schools) must be taken out of use until appropriate mitigations are put in place.
10. Since the DfE announcement there has been nationwide activity to identify RAAC in the public estate, and local authorities have continued or implemented programmes to check

buildings they own which were either constructed or altered in the timeframe RAAC was most extensively used outside of the schools estate.

RAAC in the local authority estate

11. Following the DfE change in guidance the LGA has been working with local authorities, government departments and construction industry bodies to understand the extent of RAAC in public buildings local government has responsibility for, and what support local authorities need to identify, remediate or mitigate RAAC. A relatively stable picture of the extent RAAC is present in local authority buildings is now starting to emerge:
 - 11.1. **Schools:** As of 14 September 2023, 174 schools and colleges had been identified with cases of RAAC. Of these 148 settings were providing face to face learning for all pupils, 23 had put hybrid arrangements in place and 1 had moved to remote learning. This information was based on responsible bodies having submitted responses to DfE's survey for 98.6 per cent of schools with blocks built in the target era. This suggests just over 210 schools have yet to return their survey returns. Our understanding in the early part of 2023 was that around 150 schools at that stage had been identified as having RAAC. On this basis it seems unlikely that the number of schools found to have RAAC will change significantly.
 - 11.2. **Social housing:** Although there have been a number of suggestions reported in the media that there was widespread use of RAAC in housing, we are only aware of a small number of cases where it is present in social housing. This position has not changed significantly since the end of August, even though the Regulator of Social Housing wrote to social landlords urging them to check their buildings on 7 September. Preliminary research into the companies that manufactured RAAC also suggests it was not marketed for use in housing, and was unlikely to be used by construction firms due to cost. We will however keep this position under review, as there have been suggestions that RAAC might have been present in offices which have subsequently been converted to residential buildings, so it is possible there may be instances of RAAC found in housing although this is unlikely to be widespread.
 - 11.3. **Cultural and leisure assets:** Fewer than 20 cultural and sporting venues across Great Britain have been identified with RAAC, the majority of which had been found before the change in DfE's guidance at the end of August and had plans already in place to remediate the RAAC. Theatres appear to be more affected than other venues.
 - 11.4. **Fire and Rescue Service assets:** Fire and Rescue Services (FRSs) are working hard to provide the Home Office with a comprehensive overview of the extent to which the England's FRS estate is affected by this issue. Fire headline figures are returned to the Home Office daily and as of 21 September, show that 25 per cent of FRSs have confirmed no RAAC within their estate, whilst 75 per cent of FRS need to undergo more intrusive investigation to determine the method and materials used in construction.

Issues

12. While the extent of RAAC in local authority buildings is not as widespread as first feared, and where it has been found mitigation measures are being put in place, there remain a number of issues for local authorities around the management of RAAC going forward.
13. **Funding:** At its most recent meeting the LGA's Children and Young People Board considered the impact of RAAC on councils' schools and education budgets. The Board noted that DfE has committed to provide schools with RAAC with the capital and revenue funding to cover all mitigation works and any other associated costs. Members highlighted however there are wider costs implications for councils as a result of DfE's announcement:
 - 13.1. Some councils with schools with RAAC in their areas are reporting there remain some grey areas around what costs are recoverable from DfE. While DfE have indicated costs councils incurred assisting non-maintained schools (for example around school transport, school meals and staffing) would in principle be refunded it is not clear what will actually be covered.
 - 13.2. In some instances precautionary measures were put in place while schools were checked to see if they had RAAC present and it was then confirmed they did not. Again councils report it is not certain that they will recover these costs.
 - 13.3. It is not yet clear what the implications of funding RAAC related mitigations and remediation work will have on wider education capital budgets.
14. There also continues to be significant uncertainty around the funding of remediation and related activity outside of the education estate and what costs councils will be incurring to remediate RAAC.
15. **Guidance:** The Institute of Structural Engineers are presently reviewing [their guidance](#) in light of the three incidents that prompted a change of approach by the DfE. This review process is expected to be completed shortly. For the moment government departments are keen to stress that the Institute of Structural Engineers' guidance should be considered technically sound.
16. In response to the change in approach from the DfE, the LGA is currently producing an advice note for local authorities which sets out the guidance from the Institute of Structural Engineers and from government on identifying and managing cases of RAAC, including key background information, risk profiles. This advice note will be published on the LGA's website in due course.
17. The LGA also sits on and represents the local government sector in the Office for Government Property's (OGP) RAAC Working Group. This is the cross-Whitehall group established to coordinate the approach across government departments to identifying and remediating RAAC, as well as creating a collective understanding and approach to RAAC across the public sector estate. In addition the LGA has been invited to participate in the Construction Leadership Council RAAC Industry Response Group which brings together leading organisations and individuals in the construction sector and academia to

coordinate activity, share knowledge and experience and make recommendations to government.

18. Local authorities have raised a number of questions on which it would be helpful to have further guidance from government:
 - 18.1. In particular they have asked for clarity over the approach to be taken where RAAC is suspected as being present or is confirmed as being present, given the current differences between the advice from DfE and that in the Institute's guidance.
 - 18.2. DfE's guidance for responsible bodies with confirmed RAAC does not apply to independent schools, out of school settings and maintained nurseries. It is not clear why this is the case, and the exclusion of some education settings from the advice has been highlighted as an issue by some councils. Clarity on what advice should be given to the education settings currently excluded from the DfE guidance would be of assistance to councils.
 - 18.3. They have also asked what approach should be taken to commissioned services. Should for example care homes or children's homes be asked to confirm that they do not have RAAC present? If they are asked this question and RAAC is found then it is possible residents would have to be moved from the premises, and found alternative accommodation.
 - 18.4. If the Institute of Structural Engineer's guidance remains unchanged there are likely to be instances outside of schools and education establishments where RAAC is identified but stays in situ. However there is little evidence about how quickly RAAC can deteriorate in a UK context, and therefore how frequently it should be reinspected to ensure it will not collapse. In the absence of any advice on this local authority surveyors and engineers will have to make assessments based on their own experience and judgement.
19. The LGA has been approached by a number of companies offering products which they assert provide an easy means of remediating RAAC or less intrusive and time consuming methods for assessing the state of RAAC planks. Our understanding from the technical experts is due to a range of issues associated with the manufacture of RAAC, how it was used in construction and its maintenance means there is not yet an alternative method to intrusive surveys to check RAAC (although other methods are being investigated) and no alternatives to either replacing it or propping it up. Again clarity on technical approaches to identifying and remediating RAAC is likely to be of assistance to councils.
20. **Supply of appropriately qualified surveyors:** The DfE currently requires surveyors or structural engineers to have 1-year of experience on RAAC-related projects to be considered 'appropriately qualified' to confirm an incident of RAAC. Prior to the Department's announcement, there was already concern within the sector about the supply of these surveyors. In light of recent developments, the LGA has highlighted concerns that the substantial increase in demand for engineers and surveyors will now drastically outstrip the supply, leading to backlogs and hindering the ability for local

authorities to take quick and decisive action on RAAC. There are also businesses offering support and training on RAAC who have little experience or expertise.

21. Fire-fighting and RAAC: Fire Services Management Committee discussed RAAC earlier this month and a number of issues were raised by the National Fire Chiefs Council (NFCC):

21.1. FRSs can provide crucial support with fire protection and prevention considerations in buildings containing RAAC, for example through effective targeted messaging and support measures for vulnerable occupants. There are several considerations in the case of schools:

21.1.1. The need to review their fire risk assessment to ensure the means of escape are satisfactory for the parts of the premises that remain in use.

21.1.2. Schools that are taking on pupils from other RAAC-affected schools will also need to review their fire risk assessment. With a higher number of pupils, and potentially different occupancy characteristics, these schools will need to ensure the fire safety measures and arrangements remain suitable.

21.1.3. Schools should undertake fire drills early in the school term; it will be important to consider vulnerable groups within this planning.

21.1.4. Any buildings that have been decanted and will remain vacant due to structural safety issues will need to be adequately secured to prevent the risk of arson.

21.2. Given the operational implications of conducting firefighting operations where there is a risk of sudden full or partial structural collapse NFCC has requested the Government produce a list of all buildings where RAAC is present or suspected and to share this with NFCC to enable a more targeted approach for FRS support and interventions to RAAC-related safety issues across the built environment.

21.3. The NFCC also pointed out that there has been little research into how RAAC behaves in a fire and whether using water may trigger a structural collapse.

22. Data collection: DfE continues to collect data from schools, but councils have raised the importance of being told when non-maintained schools are found to have RAAC. DfE's approach remains that of informing the school first, so it can inform parents before telling the local authority.

23. Outside of the education estate central government departments are required to submit data on cases of RAAC in their own estates to the OGP using a uniform template. This data set could provide the basis of the list of buildings with RAAC the NFCC have requested. It is not clear at this stage what information will be passed on by government departments like the Department for Culture, Media and Sport of buildings they are aware of in their area of responsibility rather than in their direct control.

24. Private sector buildings: The focus so far has been on public sector buildings with RAAC, but we know it is present in commercial settings and it is likely to be found in other private sector settings. It may also be present in assets transferred from the public sector into the private or voluntary sector, including through asset transfers to the local community. There is a need to encourage building owners in the private sector to assess

whether any buildings they own have RAAC present. This may be best achieved through the Health and Safety Executive which has responsibility for health and safety at work as well as building safety through its role as the Building Safety Regulator, though councils could also raise awareness locally among businesses and building owners.

Proposal

25. To address these issues for the local government sector, the Board is asked to agree the following actions:

- 25.1. The LGA continues to lobby DfE for confirmation that all revenue and capital costs incurred by councils related to RAAC identification, remediation and mitigation of schools and other educational settings in their area (in particular in non-maintained schools) will be covered, and this includes costs even where RAAC is subsequently not found to be present.
- 25.2. As part of its ongoing work around the schools' capital programme the Children and Young People Board lobbies to ensure capital funding of RAAC remediation and mitigation does not impact on the wider schools maintenance and repair programmes.
- 25.3. LGA officers gather information on costs incurred by councils in identifying, remediating or mitigating RAAC in settings outside of the education estate.
- 25.4. The LGA lobbies the relevant government departments to provide guidance in relation to the points set out in paragraphs 18.1-18.3 and in paragraph 19.
- 25.5. Fire Services Management Committee lobbies for Fire and Rescue Services to be provided with lists of buildings where RAAC is present.
- 25.6. Fire Services Management Committee work with the National Fire Chiefs Council to provide guidance for local authorities on reviewing their fire risk assessments where there are buildings with RAAC, or where there is increased use of buildings due to the closure of buildings with RAAC, and to publicise this guidance to LGA member authorities.
- 25.7. The LGA lobbies for government to assist councils in procuring engineers and surveyors with the right skills and expertise to advise on RAAC identification, remediation and mitigation.
- 25.8. The LGA lobbies for the commissioning of additional research covering how often RAAC in situ should be checked, and on how RAAC is impacted by fire and fire fighting techniques.
- 25.9. The LGA publishes the advice note it has drafted LGA once it is ready, and officers then seek to identify good practice from the sector in addressing RAAC safety issues and share that with local authorities.

Implications for Wales

26. The Welsh government has been working in Wales to identify and remediate RAAC since 2019, when SCOSS issued their alert and the WLGA notified Welsh local authorities about RAAC following the SCOSS alert in 2020. There has been a programme of work in Wales to identify RAAC in the public estate, but following the DfE decision at the end of August to change their approach the Welsh government has commissioned further surveys of public buildings in Wales.

Financial Implications

27. The costs of remediating RAAC will vary for building owners depending on the extent of its use, but in some cases these will be substantial. The NHS has allocated £698 million between 2021 and 2025 to remediate and put in fail safe measures. It is not currently clear what the costs of remediating RAAC outside of the school estate might cost local authorities, and we are in the process of gathering information on this.

28. There are no financial implications for the LGA arising from the activity set out in paragraph 25, although there may need to be a reprioritisation of some resources within the LGA to assist with its delivery.

Equalities implications

29. Given the range and type of buildings identified with RAAC, and what appears to be a very limited presence in social housing and other residential settings, it does not appear at this stage there are any particular equalities implications arising from the presence of RAAC.

Next steps

30. Subject to members' agreement officers take forward the actions set out in paragraph 25.