AtkinsRéalis

Aberdeen City Council - RAAC Mitigation Options

Health & Safety Summary

AtkinsRéalis Health & Safety Services have conducted a review of the proposed options for mitigating the risk from RAAC within the housing at Balnagask, Aberdeen. This review consisted of; an appraisal of existing available information provided by Aberdeen City Council, a review of the 4 main options, discussions with Fairhurst (Structural Engineers) on potential methodology, and consideration of the potential health and safety risks and implications of each option. A summary of the main considerations is outlined below.

Option 1- Increase the end bearings of the RAAC

- A Refurbishment & Demolition Survey should be undertaken in each property before the work begins.

Option 2 – Install a New Timber Support Structure below the RAAC

- A Refurbishment & Demolition Survey should be undertaken in each property before the work begins.
- A perimeter scaffold would be required, if the roof covering was being repaired, to provide safe access and fall prevention.
- Support structure needs to be completed, before accessing the roof to undertake the roof works

Option 3 – Remove the RAAC and Replace with a New Timber Roof Structure

- A Refurbishment & Demolition Survey should be undertaken in each property before the work begins.
- A perimeter scaffolding and internal crash-deck would be required, the internal crash deck would be a scaffold structure which would require to be designed to also temporarily support the wall heads following the removal of the RAAC, spreading measures on the existing floors would also be required.

- A safe system of work (SSOW) would need to be drawn up, depending upon the principal contractors preferred method of removal, including the following precautions:
  - Saw cutting the RAAC panels, with minimum vibration to release them safely from their beds.
  - Design and install a temporary reinforcement structure to allow the RAAC panels to be safely lifted by a crane
  - Carefully remove any electrical conduit and cables from the joints in the RAAC
  - Temporary prevention of access to any adjacent remaining RAAC (private owner)
  - The crane will require the road to be closed, in many of the locations, and temporary local diversions/traffic management would need set up to maintain access to occupied properties
  - No crane oversailing of remaining occupied properties, could be difficult to achieve in some locations as the narrower secondary roads are unlikely to be wide enough for a suitable crane and a larger crane would need to deploy from the nearest wide enough road.

Option 4 – Demolition and Rebuild

- A Refurbishment & Demolition Survey should be undertaken in each property, and any asbestos containing materials removed prior to demolition.
- The delineation of the construction site will require to consider any remaining occupation and the need to maintain safe access and egress to these properties for vehicles and pedestrians, including in some cases bus routes. This would also be the case for any phased re-occupation.