



# RAAC Guidance and Support

# Reinforced Autoclaved Aerated Concrete (RAAC)

## What is RAAC?

RAAC is a lightweight and porous type of concrete and was commonly used in the construction of buildings including schools, hospitals, hotels, theatres, housing and any kind of public or private sector building developed or extended to from the 1950s to the mid-1990s

RAAC panels are most commonly discovered on flat roofs, but they can also be located in pitched roofs, floors, or walls.

## Identifying RAAC panels

RAAC panels have distinct characteristics and can be easily identified if a building structure is not covered by finishes or decor, such as ceilings. However, it's essential to exercise caution: if your inspection requires accessing areas behind ceilings or finishes, please consult guidance on managing asbestos and the building's asbestos register beforehand. Care should also be taken not to damage the panels when removing finishes.

RAAC panels can be light-grey or white in appearance, with the underside of the panels appearing smooth. The inside of the planks will appear bubbly and, unlike traditional concrete, will not contain visible stones (aggregate) in the panels.

When looking directly at the structure, RAAC may be present if you can see one or more of the following:

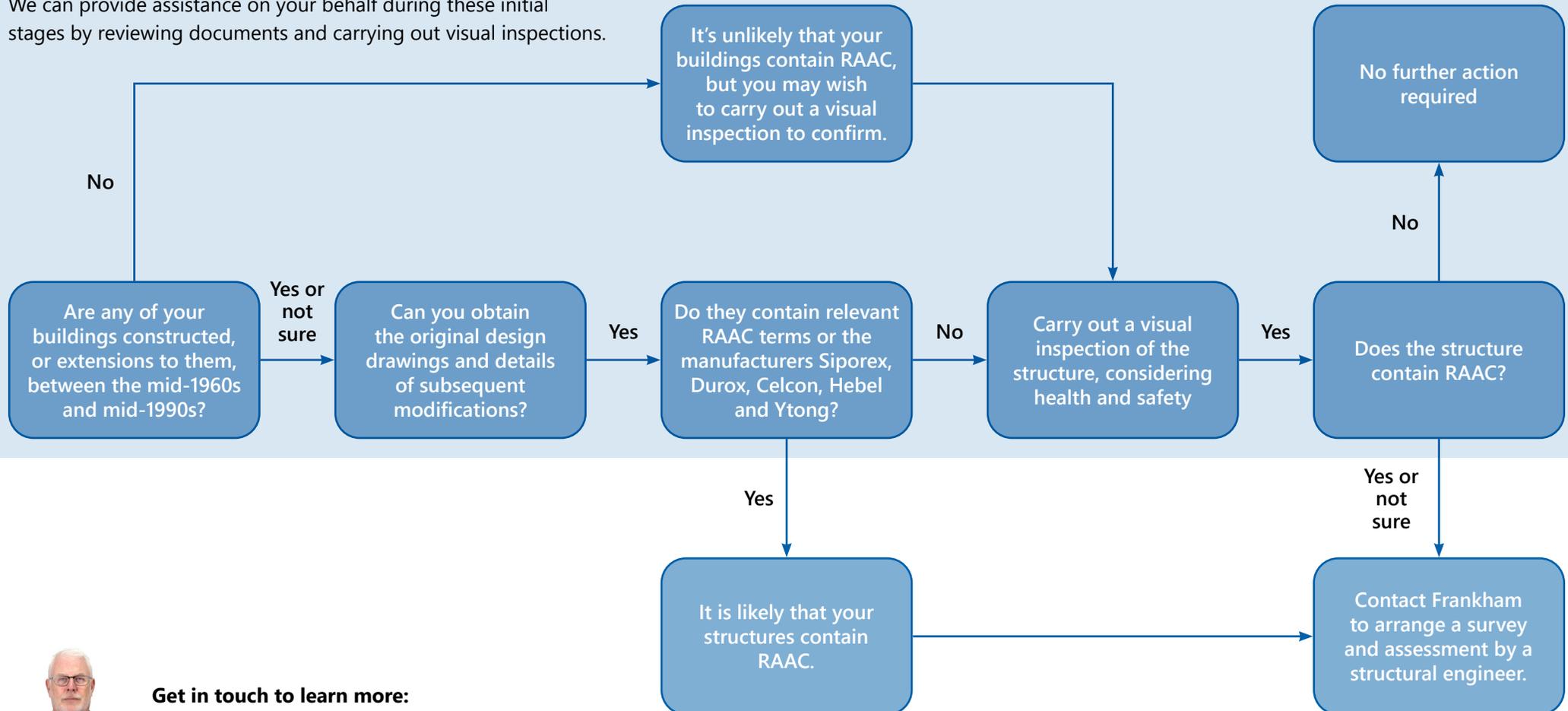
- 600mm wide concrete panels (typically)
- Distinctive V-shaped grooves at regularly spacing (normally 600mm in a floor, wall or ceiling)
- Floors, walls or ceilings that are white or light-grey (where they have not been painted)
- Drawings of your buildings that refer to RAAC or mention any of the following manufacturers Siporex, Durox, Celcon, Hebel and Ytong



# Identifying RAAC in your buildings

**At Frankham, our experts will liaise with you and coordinate site visits to conduct thorough surveys and assessments, identifying Reinforced Autoclaved Aerated Concrete (RAAC) within your buildings.**

We can provide assistance on your behalf during these initial stages by reviewing documents and carrying out visual inspections.



**Get in touch to learn more:**

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# Managing the Outcome

## Comprehensive Reporting

We will provide you with a detailed report that identifies the presence of Reinforced Autoclaved Aerated Concrete (RAAC) within your building. This report not only confirms the existence of RAAC but also identifies specific locations and assesses the level of risk, all in accordance with the standards set by IStructE and other relevant guidance.

## Expert Advice on Temporary Measures

When the risk assessment indicates an immediate need for action, our team can provide assistance in designing temporary measures. We can also guide you through the administrative process and help you appoint qualified contractors. These temporary solutions may permit the continued use of your property while we work on finalising permanent measures designed by our team.

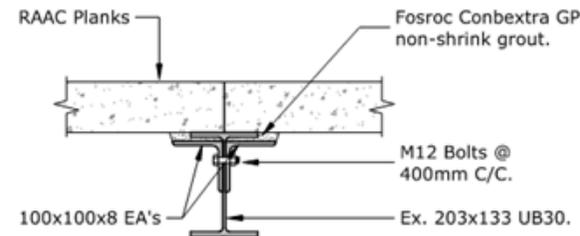
## Design and Specification of Strengthening or Replacement Structure

Every building with RAAC issues is unique and will have its own individual challenges. Therefore, a standard single fix cannot be defined for all the situations we encounter. From our detailed investigations and design, we will provide you with the best solution.

## Additional Services

In addition to structural solutions, we can assist in the procurement and management of suitable contractors. We can also provide details into new or replacement finishes, manage the diversion of electrical services and handle asbestos management. Each service is carried out by one of our specialist disciplines.

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



# How you can appoint us

**Our experts have been working with building owners, including Schools, Hospital Trusts, Local Councils, Commercial Properties and Government Premises alongside their FM contractors, to assess the safety of RAAC construction.**

The Building Research Establishment (BRE) Information Paper IP10/96 highlights the concerns with RAAC roof planks and advises that they should be inspected and assessed by a Structural Engineer. That's where we come in. At Frankham, our Structural Engineers understand how sensitive these surveys can be, and we always plan our investigations with minimal disruption to normal activities. Our Engineers produce surveys and reports that align with the new guidance and will categorise your risk with coherent advice on the need for remediation or other action.

Our experts will liaise with you directly and arrange to visit your sites, undertaking carefully planned investigations to determine the structural safety risk and advise on any remedial actions required at every step.

You can trust our expertise to ensure your estates management teams have confidence in allowing safe use of their assets.

*“We had over 110 nationwide government buildings of various age and size that needed to be urgently assessed with respect to risk from failure of RAAC roofs. The Frankham Consultancy Group Structural Engineering team were reactive to our needs, and we were able to complete the surveys safely, issuing reports in short time all to the satisfaction of our client.”*

*Gareth Blore  
Programme Director  
Mitie*

## **Appointing us directly through frameworks**

We are on a number of local authority and social housing provider frameworks and have arrangements in place for short notice instructions to undertake our services.

### **Braintree District Council**

Construction Consultancy Framework

### **Central Housing Investment Consortium**

Consultancy Services Framework 2021

### **Fusion 21**

Consultants Framework

### **London Borough of Hammersmith and Fulham**

Consultancy Services Framework

### **NHS Shared Business Services**

NHS SBS Healthcare Planning, Construction Consultancy and Ancillary

# FRANKHAM GROUP

## About us

The Frankham Group provides a full range of design, consultancy and engineering services to the built environment. The company exists to improve the surroundings in which we all live and work.

We deliver a truly integrated capability, offering all professional disciplines and a range of specialist services from within. Using directly employed staff allows us to take a holistic view of all the elements of each individual service, and their impact on every stakeholder of every project.

**INVESTORS IN PEOPLE®**  
We invest in people Gold

# Frankham Group



## Surveying and Project Management



## Engineering



## Compliance



## Design and Planning

### Architecture

Architecture  
Forensic Architecture  
Landscape Architecture  
Master Planning

### Area Measurement

Area Referencing  
BIM Ready Surveys  
Measured Building Surveys  
Land Surveys  
Laser Scanning  
Site Investigations  
Topographical Surveys  
Underground Services

### Building Services Engineering

Mechanical & Electrical Engineering  
Lift Engineering  
Low Carbon Consultancy  
BREEAM

### Building Surveying

Building Surveying  
Clerk of Works  
Employer's Agent  
Party Wall  
Project Management  
Quantity Surveying

### Civil and Structural Engineering

Structural Engineering  
Structural Surveys and Small Works  
Below Ground Drainage  
External Works

### Fire Engineering

Drawings Reviews  
External Wall Surveys  
Fire Safety Site Inspector  
Fire Strategies  
Site Inspections

### Infrastructure Engineering

Rail and Infrastructure  
Maritime  
Highways and Land

### Planning and Development

Development Consultancy  
Development Due Diligence  
Disposal Advice  
Full Options Appraisal  
Listed Building Consent  
Site Acquisition  
Town Planning

### Risk Management

Asbestos Management  
CDM/Principal Designer  
Fire Management  
Gas & Electricity Management  
Health & Safety  
Strategic Risk Management  
Type 1-3 Fire Risk Assessments  
Type 4 Surveys  
Water Management



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# Putting People First

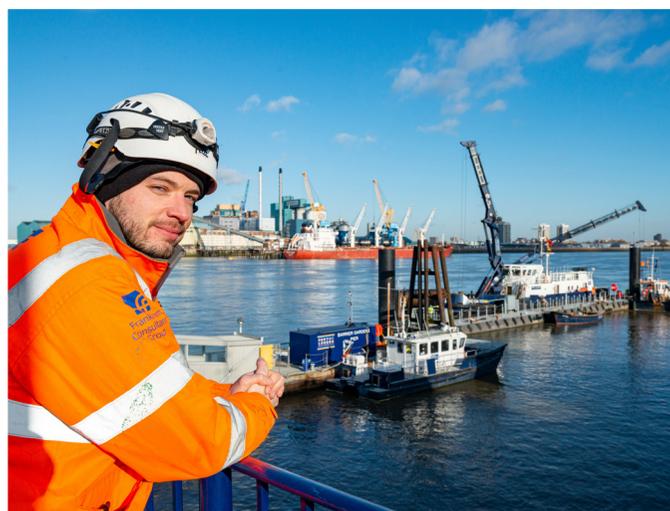
People are the heart of our business. Our entire approach is built around improving lives – the lives of the people we work for, the people we work with and the people who work for us.

Communication is key within Frankham and we always strive to make a difference. We work in project teams to combine the diverse skills of the specialists throughout our organisation. This allows everyone to contribute and introduce innovative thinking to projects at both a practical and a strategic level.

By having such a diverse range of specialist skills working together in one organisation, we deliver solutions that improve and enhance the day-to-day lives of thousands of people across the UK.

Vision, commitment, capability and experience, combined with a focus on delivering tangible human benefits, is what sets us apart.

We take measures to reduce the environmental impact of buildings and promote sustainability. Frankham is committed to creating communities that are socially, economically and environmentally sustainable to meet the needs of the present and future generations.



# BRINGING IDEAS TO LIFE

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