Grenfell Tower Inquiry Phase 2 report: an update on the Institution's response

The Institution of Structural Engineers summarises its proposed response to the Phase 2 report of the Grenfell Inquiry, following a government request for professional bodies to act on the report's recommendations.

The Grenfell Tower Inquiry Phase 2 report (the report) by Sir Martin Moore-Bick was issued on 4 September 2024 and the UK government promised to respond to its recommendations within six months, by 4 March 2025.

Phase 1 of the Inquiry dealt with the events of 14 June 2017 (the night of the fire) and the subsequent emergency response. It was primarily concerned with establishing the course of events on the day, the causes of the fire and its escalation, and the actions of the managers of the emergency services and local authorities.

Phase 2 dealt with the contributory circumstances and decisions leading up to the fire. Its broad theme was technical, looking into the refurbishment of the tower and its safety management. Having established the contribution of the external cladding to the uncontrolled spread of the fire in Phase 1, the Phase 2 Inquiry examined the culpability of the designers, contractors, suppliers, technical bodies, regulators and government.

The report runs to some 1700 pages. Conclusions on causation and resultant recommendations cover dutyholder competence, roles, ethics, technical guidance, regulation, governance of technical bodies, and government policy on regulation and response to safety issues. It therefore has deep significance to the operations of the Institution at many levels, concluding:

'Safety of people in the built environment depends principally on a combination of three primary elements,

Read the report

The full Phase 2 report of the Grenfell Tower Inquiry, along with an executive summary, is available at www. grenfelltowerinquiry.org.uk/ phase-2-report.

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good design, the choice of suitable materials and sound methods of construction, each of which depends in turn in a large measure on a fourth, the skill, knowledge and experience of those engaged in the construction industry.' (113.3)

This statement resonates with the Institution's aims, as stated in its latest Annual Report': 'to accredit and support a corps of highly qualified structural engineers for the safe, sustainable, effective, and efficient design, construction, adaptation, maintenance and refurbishment of buildings, bridges, and other structures throughout the world.'

The government is looking to industry to be proactive in response to the report. The Ministry of Housing, Communities and Local Government (MHCLG) wrote to the Institution on 18 October 2024, along with all other professional institutions involved in the built environment, to request the Institution's response to the report and to seek confirmation that the Institution had accepted the report's findings and was taking appropriate action. The Institution responded on 5 November 2024. This letter is available on our Building Safety Act (BSA) page (www.istructe.org/resources/buildingsafety-act/).

We have actively supported the industry reforms instigated by the 2018 Hackitt report and the Building Safety Act 2022 following the Grenfell Tower tragedy, as reiterated in The Structural Engineer in October 2024². Following issue of the report, an internal programme was put in place to identify any further actions that the Institution should take in response to the report, have these endorsed by the Institution's Board, instigate those actions and communicate findings to members. The Institution's proposed response will be discussed and decided at the March 2025 Board meeting. It will consider recommendations for how both members and the Institution should operate post-Grenfell.

Implications of the report for members' activities

The report implies designers and, therefore, members should:

- →| have greater competence in structural fire engineering
- → have greater understanding of testing regimes and a more interrogative approach to Building Regulations compliance
- →| have greater awareness of contractual roles and responsibilities
- →) be aware of, and exercise, the appropriate professional standards expected of them.

Competence in structural fire engineering

The report highlights a widespread lack of competence in fire engineering and the need for all those in industry to have a basic understanding of it:

'Other construction professionals and senior members of the fire and rescue services need to have a basic understanding of the principles of fire engineering as they apply to the built environment.' (113.26)

Members may now be expected to have competence in:

- \rightarrow the flammability of materials
- \rightarrow how fire is spread

 \rightarrow how structures perform in fire.

Those working on higher-risk buildings (HRBs) will also need specific knowledge of the spread of fire through cladding.

The Institution has already responded to this need by developing a Continuous Professional Development (CPD) course in fire and structural engineering ('Structural fire engineering and the Building Safety Act'), which has been delivered to two cohorts, and will be delivered twice yearly to broaden members' competence in fire.

We are also updating our two key fire engineering guides, *Introduction to structural fire engineering* and *Guide to the advanced fire safety engineering of structures*, as well as our *Structural aspects of cladding* guide in line with current technical and legislative developments.

Competence in and understanding of testing regimes and Building Regulations

Parts 2 and 3 of the report describe failings on the part of dutyholders with regards to material and product selection:

'They were not familiar with or did

not understand the relevant provisions of the Building Regulations, Approved Document B or industry guidance.' (2.75)

The implication for members is that they need to have a knowledge of product regulations, testing certification and the Building Regulations to understand both the veracity and appropriateness of materials and products in construction. Our Learning and Development department is planning a series of webinars in response.

The report also states that dutyholders had a poor understanding of the legal framework and incorrectly assumed that adoption of Approved Documents implied compliance with the Building Regulations and, therefore, discharge of dutyholders' responsibilities.

The implications for members are that an interrogative approach to Building Regulations compliance must be taken, with members aware of the limitations of statutory guidance and providing justification for their use. A Business Practice Note (BPN) on the subject is planned.

Understanding of contractual roles and responsibilities

The report is highly critical of dutyholders' lack of understanding of their contractual roles and responsibilities on the Grenfell Tower refurbishment project and how this allowed dangerous materials to be adopted:

'The choice of combustible materials for the cladding of Grenfell Tower resulted from a series of errors caused by the incompetence of the organisations and individuals involved in the refurbishment ... They did not properly understand the nature and scope of the obligations they had undertaken, or, if they did, paid scant attention to them. They failed to identify their own responsibilities for important aspects of the design and in each case assumed that someone else was responsible for matters affecting

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fire safety.' (2.74)

Members must be aware of, and exercise, a clear understanding of their contractual and legal duties, particularly with regards to interfaces with other disciplines and the checking and reviewing of specialist designs. We are planning further guidance on this subject.

Business conduct

The report is scathing in its assessment of the behaviours of many dutyholders involved in the selection of combustible cladding at Grenfell, stating that these fell well below standards to be expected of professionals.

'None of those involved in the design of the external wall or the choice of materials acted in accordance with the standards of a reasonably competent person in their position.' (2.75)

- Specific criticisms include: →| failing to complete safety-critical design work
- →| failing to understand design responsibilities
- →| inadequate checking of subcontractor designs
- → | failure to produce sufficient design information
- \rightarrow failure to visit site.

The test applied in the report was not just what the contractual duties of professionals were, but what was reasonably expected of a professional to achieve a safe outcome.

Members must be aware of, and exercise, the appropriate professional standards expected of them. These should be reflected in professional appointments. Members may need to go beyond their contractual duties in the interests of safety. We plan to provide further guidance on this via a BPN.

Implications of the report for the Institution's activities

The report describes the role of independent bodies, such as the Institution, in promoting safety by producing technical guidance and overseeing competence. Its conclusions require consideration by all professional bodies.

Culture and ethics of the industry

While the ethics of neither the Institution nor its members were brought into question in the report, its revelations of unethical and unscrupulous behaviour have resulted

in a sharp focus on the culture and

ethics of the industry that have spread to the professions and the codes of conduct that they espouse. Professional bodies should have standards of conduct for members, which they should enforce, and should have internal systems in place to prevent manipulation. The Institution has such membership standards in place, with a publicly available Code of Conduct³. This is periodically reviewed and the observations of the report will be taken into account in the next review.

Separation of commercial interests from production of technical guidance

Both Part 2: *The path to disaster* (Ch. 3–14) and Part 3: *The testing and marketing of products* (Ch. 15–29) of the report describe the functions of independent industry bodies in preparing guidance and technical information and in performing compliance testing. There are numerous criticisms of such bodies for allowing commercial interests to undermine their independence and integrity, through manipulation, collusion and deception.

Information promoted by the Institution is accepted by industry. This requires us to review existing systems, and strengthen them if necessary, to ensure the integrity of technical guidance production and that publication is not compromised by commercial considerations.

Industry competence

Like the Hackitt report, the Grenfell Inquiry report denounces a lack of competence throughout the construction industry and repeatedly holds up the behaviour and competence of professionals against the standard that should be expected, noting an expectation that standards should be set and enforced by professional bodies. The report states:

'Our investigations have shown that levels of competence in the construction industry are generally low...' (113.12)

and

'The development and maintenance of a statement of professional skills should ultimately be the responsibility of the body that regulates the profession'. (113.27)

The assertion is that a professional body should be responsible for the

THERE IS A STRONG CASE THAT THE MANDATORY ACCREDITATION OF STRUCTURAL ENGINEERS SHOULD ALSO BE ESTABLISHED

competence of its members, should be aware of emerging member competence issues and should address these via the provision of training and setting of competence standards. These aims are at the core of the Institution's activities.

There is an emerging view that CPD standards need to improve within industry, with mandatory CPD for critical safety matters and, possibly, periodic assessment of professionals' ongoing competence.

The Institution already sets CPD targets for members which are subject to audit, with a mandatory minimum requirement for safety content, and also provides CPD to members to promote competence. It is vital that members take steps to keep up to date with safety matters and record this in their CPD return.

Registration and oversight of the profession

The report notes that:

'Designing buildings that are safe in the event of a fire requires particular skill. It is a skill that can be acquired only by specialised education and experience worthy of formal recognition.' (113.24)

As a result, it recommends that 'the profession of fire engineer should be formally recognised and that both the title and the function should be protected by statute' (113.25). It notes that the same argument applies to other safety-critical professions.

The Building Safety Act identifies fire and structure as significant safety risks. There is therefore a strong case that the mandatory accreditation of structural engineers should also be established. This would protect public safety and promote the ongoing competence of those providing structural engineering services. We intend to pursue this with relevant policy-makers in the UK.

Policy position

The introduction to the report notes that its terms were broad. As well as those issues that directly impact the Institution and its members, the report set out a raft of recommendations for governmental, regulatory and industry reform, often radical, covering topics such as:

- →| the creation of an independent Construction Research Body
- → the definition of an HRB
- →| the certification of products and publication of test data
- →) a legal requirement for government to report on the adoption of official recommendations
- →| a legal requirement on building owners to remedy defects.

The Institution is considering the need for formal policy in these areas within its action plan.

More will undoubtedly follow on this subject in the months and years ahead. Our profession has already changed as a result of the Grenfell tragedy and will change further. The report is a clarion call for all built environment professions, including the Institution and our members. It reminds us to remain steadfast in our expert focus on structural safety for the benefit of the public and the built environment. Structural engineers have a crucial role in transforming the culture of the industry. The Institution is committed to supporting members, and all structural engineers, in this journey.

REFERENCES

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