Managing safetycritical elements: more rigour, less risk when inspecting work on site

Simon Pitchers introduces a new, free guide explaining how to identify safety-critical elements and how they should be managed during construction.

A Guide to Managing Safety-Critical Elements in Building Construction is a new publication from the CIOB and RIBA, authored by a chartered structural engineer, which can be read in around 10 minutes.

Of special interest to IStructE members, the guide describes required 'quasi-independent' scrutiny, which, because of their in-depth knowledge, designers of safety-critical elements (e.g. IStructE members) are particularly suited to execute. A contractor's own design team in a design-and-build project and a specialist supplier's designer are both deemed to be sufficiently independent to provide such services. A more appropriate term for such inspection could be 'autonomous scrutiny'.

Many professionals fear that when they visit site, they may unwittingly attract some liability for almost any deficiency that may be present – whether or not they see it. In the guide, as the design develops, the design team sets out exactly what scrutiny is to be provided to the safety-critical elements that they identify.

This includes the number and purpose of inspections to be focused on each safety-critical element and the evidence to be collected (e.g. inspection reports,

photographs, videos, marked-up drawings, manufacturer's instructions, details of personnel involved, product delivery slips, package labels, test results).

'Scrutineers' therefore have a clearly defined scope of services as opposed to the frequently encountered, but much riskier, generalised requirement for 'site monitoring'.

The guide avoids shifting responsibility away from the contractor and onto those carrying out inspections. It explains the contractor's responsibilities – in particular, to provide the right level of supervision – to see that all safety-critical elements are constructed correctly.

Scrutineers will not 'sign off' elements. They simply report on their inspections, using reasonable skill and care to identify compliant and non-compliant parts of the elements inspected, adding valuable evidence to the golden thread.

New legislation in the UK requires, prior to construction, details of how the principal contractor will ensure compliance with building regulations. Adopting the guide will go a long way towards satisfying that requirement. Only as the design phase progresses can the scope of the required scrutiny be known, so at that stage, fees for the scrutineering work

KEY POINTS

- → The guide is a free download, the body of which you can read in about 10 minutes.
- → It explains how to identify safetycritical elements.
- → It facilitates the provision of scrutiny on site by designers – for a fee – and with less risk than a requirement for 'periodic monitoring'.
- → Its adoption is a way to satisfy parts of the new Building Safety Act.
- → It contains practical examples and a case study.

should be agreed. The lessons learned from defects in Scottish schools and the Grenfell fire highlight the commercial and safety benefits of effective scrutiny.

The guide covers much more than the inspection of safety-critical elements. It describes an approach that will change the culture of the industry from the site workforce up, being complementary to the Building Safety Act, which will effect culture change more from the top down. It also contains examples and a case study, helping with its practical implementation.

Members are encouraged to download the guide and draw it to the attention of colleagues, clients and insurers, who may all help to encourage its use.

Simon Pitchers BSc (Hons), CEng, FIStructE is author of the guide, a consulting engineer, a director of a construction management company, and a former member of the IStructE Council and Executive Board, now focusing on post-Grenfell culture change.



Get the guide

A Guide to Managing Safety-Critical Elements in Building Construction is available as a free download from www.ciobacademy.org/product/aguide-to-managing-safety-critical-elements-in-building-construction/.



SCAN ME