

Value Statement for Higher Risker Building Competency Register for structural engineers

Summary statement

Clients and duty holders must provide proof to the Building Safety Regulator (BSR) that those they commission to design and construct their building developments within England are sufficiently competent. The Higher Risk Building (HRB) Competency Register for structural engineers provides independent verification to duty holders/clients that demonstrate compliance with this legal burden.

What is the purpose of the HRB Competency Register?

The register has been developed jointly by the Institution of Structural Engineers (IStructE) and the Institution of Civil Engineers (ICE), and is endorsed by the Engineering Council. The register is to act as a measure of proof of competence of those working in the field of structural engineering. This is based on their knowledge, skills, experience, and behaviours in working on HRBs.

Registrants will be granted the protected title of Chartered Engineer (HRB), Incorporated Engineer (HRB), or Engineering Technician (HRB) depending on their grade of membership to either the ICE or IStructE. This title is not permanent as it must be renewed every 5 years.

Registrants receive a certificate from the Engineering Council that acts as documentary proof of their status as someone who has demonstrated their competence via an independent review by their peers to design HRBs. This certificate is expected to be attached to competence statements issued to the BSR and others who need to know, by structural engineers, as part of supporting evidence.

Why do structural engineers have to prove their competence to work on HRB projects?

Construction professionals working within the built environment industry in England are legally obliged to prove their competence, as described in Section 11F of the Building Regulations 2010 (as amended). This covers all forms of buildings that are subject to building regulations, not just those classified as higher risk buildings (HRB). However, HRBs have unique aspects that differentiate them from other buildings.

The Building Safety Act identifies certain 'higher risk' buildings which are subject to a stricter regime. These are the 'HRBs'. Currently these relate to buildings that are at least 18m tall, or has at least 7-stories, and contains a minimum of two residential units. In addition to this, care homes and hospitals, regardless of form or size, are deemed to be HRBs during the design and construction phases only.

The rationale for selecting these specific buildings is that residential properties contain spaces which are used and maintained by the occupant with no oversight or control relating to fire risk, which can then give rise to a structural safety risk.

A way of illustrating this is to consider why a hotel is not an HRB. Hotels have a lot in common with residential buildings as those occupying them are sleeping overnight. They then consume

food on the property and may use other facilities within it such as a gym and/or swimming pool. The primary point to note here is that all the spaces the occupants use are constantly monitored and maintained by staff. Hotels typically have multiple escape routes, clear signage and enhanced fire detection and alarm systems. The same cannot be said for an HRB, which has discrete residential units within it that are maintained and operated by the occupants.

Care homes and hospitals are also regarded as HRBs. This is more to do with the nature of the occupants of these buildings. It is necessary that these buildings are designed and constructed to the more regulated regime of HRBs. However, once occupied they cease to be HRBs, as defined, as they are rigorously controlled and maintained under other legislation.

Because of the greater risks to life in an HRB should an incident occur, there is a need for a more rigorous process to demonstrate that the structural engineers designing and assessing these buildings are adequately competent. This includes, but is not limited to, how risks are assessed and mitigated, and an understanding of combined structural and fire risks. Structural engineers also need to demonstrate that they understand the limitations of their own competence. This is particularly relevant for HRBs where novel methods of construction, not well covered by codes and guidance, are common, and thus where structural engineers need to be aware of the risks and undertake appropriate measures to mitigate them.

Membership of the HRB register thus demonstrates to duty holders, contractors, and other members of the design team, at least in part, that the registrant is a structural engineer who has the relevant competence to design and/or assess HRBs. They know this because to be on the register the structural engineer has had to undergo a robust peer review process that was undertaken independently by their peers.

Why be on the register?

Whether it be a 15-storey mixed use commercial/residential building or a 3-acre hospital complex, HRBs must be designed based on the principle that the safety of the occupants and those in and around these buildings can be demonstrated in a regulated manner. Competent structural engineers who have experience in working on HRBs know this, and that is why the HRB competency register exists. It demonstrates to others, at least in part, that the registrant is indeed a competent structural engineer who has the relevant knowledge, skills, experience, and behaviours when working on HRBs.

Thus, the HRB competency register for structural engineers:

- Provides independent verification of competency and expertise which will satisfy the Building Safety Regulator
- Is an independent verification of competency via a recognised and robust peer reviewed based procedure that will encourage duty holders/clients to commission registrants
- Is relevant on significant non-HRB projects which are also 'high risk' even though not formally HRBs
- Helps to raise standards across the built environment industry
- Provides personal achievement on the part of the registrant