Local Government and Communities Committee

Building Regulations in Scotland

Submission from Arup Fire

The following is provided in response to the call launched by the Scottish Parliaments Local Government and Communities (LGC) Committee, to provide written evidence of the Building Regulations in Scotland.

The information provided below follows the general format of the published survey questionnaire.

The comments provided below represent the views and experience of Ove Arup and Partners Limited Fire Engineering team, from our Fire Safety Engineering project experiences undertaken in Scotland.

Call for Evidence on Building Regulations in Scotland

Question: At present, all building standards verification work in Scotland is carried out by local authorities. Should other organisations be authorised to undertake building standards verification work?

From experience it is our view that responsibility for the verification of Building Standards in Scotland should remain with Local Authorities, and that other independent organisations should not be authorised for such verification work.

On specific challenging matters, for example those that fall out-with the technical capabilities of the Local Authority, either as part of a design or construction arrangement, it would be appropriate then that a suitably qualified and competent professional be appointed on behalf of the Local Authority to undertake such verification work. In such instances, it is with the Local Authority where ultimate responsibility should reside.

To achieve better quality, safer buildings, then responsibility for verification of Building Standards must be shared and distributed by a collective of competent parties who have a vested interest (not commercial gain), and who are led by the Local Authority/Building Standards Division and, where appropriate, recognised certified professional industry bodies.

Question: The Committee has heard concerns that some new build properties, despite receiving a completion certificate, have subsequently been found not to meet building standards requirements.

Should procedural regulations specify a minimum requirement for the inspection of building works, to ensure compliance with building standards?
From our first-hand experience on projects (both during construction and post completion) that this is absolutely essential for the successful delivery of safe buildings in Scotland. Construction standards we have seen can fall significantly below the level of detail required, where contractors are not aware of the importance of certain key aspects of the build.

Certified, competent professionals undertaking such inspections (of their own area of specialism), where the Local Authority do not/cannot is essential on all projects.

It is our understanding that the fees paid to the Local Authority Building Regulation verifiers are not distributed reasonably to the relevant departments undertaking verification work. We believe that this is part of the reason why in some cases there are limited local authority verifier resources and limitations placed on time they can spend on project. We would encourage that fees paid to Local Authority verifiers are distributed within that department to enable the necessary growth and development of personnel within the verifier’s team.

Question: Are there any other issues about the operation of the Scottish building standards system which you wish to bring to the attention of the Committee?

Arup Fire recently contributed to the Brian Meecham independent report, which was instructed by the Scottish Building Standards Division. The review by Meecham focused on the verification of Fire Engineering in Scotland. Provided below is an extract from the Meecham review, capturing Arup Fire comments relating to Competency and Application, which are of relevance here.

Local authorities need to be open to new ideas and have the competencies to review fire-engineered solutions:

- Consistent and clear methodologies for fire engineered designs need to be created. This needs to be centralised for consistency and the central authority would deal with large or complex projects.
- Early engagement must be ensured and formalised between authority approvers and the design team via a fire engineering brief, describing the main challenges and proposed approaches.

A consistent approach must be adopted across all localities:

- We feel that the geographic variations across the different approval councils create difficulties for the project and lead to extensive times to obtain building approval.
- The role of the Fire Service in the approval process is not clearly defined.

A holistic approach must be adopted for the whole duration of the project, from inception to management of the occupied building:

- Meeting with local authorities and the Scottish Fire and rescue Service at early stage is an aspect that works well.
• Requiring separate individual view applications (or derogations) for each clause is an active barrier to a holistic approach.
• There is no regulatory requirement regarding the fire engineering strategy information provided to the building owner.
• A consistent process must be implemented to ensure that buildings are constructed in accordance with the design. This could be done via inspections or by creating a statutory requirement for specific building types.

The guidance documents need to be improved:

• Consideration should be given to include requirements/recommendations beyond the strict life safety purpose. For example, guidance documents can also include property protection, environment and duties to society recommendations.
• The NDTH could be better developed to take account fire engineered solutions. For example, illustrate Technical Handbooks, including more elaborate commentary (similar to NFPA 101 Handbook, and International Building Code Handbook).
• A clear status for the use of British standards, particularly BS 9999 and BS 9991, in Scottish projects.

The peer review system is not working well:

• We have experience via our peer review of other fire engineers work that not all fire engineered designs are undertaken by qualified fire engineers.
• The criteria to select a third party reviewer and the brief they receive is not clear.
• We recommend the creation of an approved framework of third party independent reviewers.
• The Fire Service should not be used as third party/peer review verifiers as it leads to a conflict of interest.
• An expert review panel with fire engineers working in Scotland could potentially be helpful and form part of a centralised BCO Fire Engineering Department.

The competency and number of fire engineers should be more adequate:

• Not all fire engineered designs proposed for approval in Scotland are reviewed and supervised by qualified and competent Fire Engineers.
• We consider that in the UK a qualified Fire Engineer is a member of the Institution of Fire Engineers, chartered and achieved through Engineering Council.
• Qualified engineers must have the appropriate background and experience in the type of fire engineering undertaken.
• We do not believe there are enough fire engineers in Scotland, whether in the approval process, in the design or review stages, and particularly for peer review and enforcement. Far too few of them are qualified enough for the projects.
• All fire engineers should be chartered or working towards chartership with the Institution of Fire Engineers, as it is the most appropriate body to define fire engineering.
• A fire engineered solution must be approved by a chartered fire engineer.
We trust the information provided is of use and benefit and we would gladly welcome
the opportunity to discuss this subject and the above in more detail, should this be of
value.