



## Elmhurst's Response to Scottish Building Regulations: Review of Energy Standards 'Call for Evidence'

### Improve the quality of compliance reports issued at design stage

Elmhurst suggests that the Scottish Government look to improve the standard of reports used to demonstrate compliance with Section 6, issued at 'design stage'. We believe that such compliance reports, that are required before building commences, should only be undertaken by accredited energy assessors under the control of an EPBD Approved Organisation, in the same way as the current requirements for individuals who wish to produce EPCs. Assessments should be submitted to the Approved Organisation and be subject to independent quality control activities.

Currently reports used for demonstrating compliance with Section 6 of the standards can be produced by an individual who has access to approved SAP or SBEM software, but has not undertaken any formal training, or is subject to any quality audits. Elmhurst has experience of these assessments being completed by unqualified individuals whose errors, intended and unintended, only come to light when the building is completed. In some cases the qualified, accredited energy assessor whose job it is to produce the EPC, has to advise the developer that the dwelling/building is not compliant with Section 6 standards due to the errors inherent in the compliance reports issued by an unqualified individual. This is not helpful for all the stakeholders in the industry.

### Reducing the 'performance gap'

It is widely considered within the industry that there is a 'performance gap' between what is produced at the 'asbuilt' stage from paperwork, and the actual dwelling/building constructed. There are many reasons for this and the Scottish government may like to consider ways in which key features of the SAP/SBEM assessment are validated on site before the final compliance reports and EPC are issued. For example the heating system, which usually has the largest effect on the energy efficiency rating, could be verified by an individual who visits site as part of their role e.g. an air tightness tester. Alternatively this could be done by requiring the energy assessor themselves to visit site on completion of construction to verify all the details used in the compliance reports and EPC. Thus getting somebody to take responsibility for the paperwork (compliance report and EPC) created to be based on the actual dwelling/building constructed.



## Regulatory Compliance

The Scottish government should consider ways of ensuring that the Building Standards process ensures that it strictly applies the rule that an EPC is required before a building is signed off.

The Scottish government should create more publicity surrounding the need for building standards to be correctly enforced throughout the build process e.g. site visits to be used to verify the 'as designed' calculations and finally a visit to ensure the completed dwelling is as per 'as built' calculations.

As previously stated, a solution is to enable accredited SAP/SBEM Assessors to verify the Compliance Report before creating the EPC.

## Design Consequences following the change to 2015 building standards

We have consulted with our members who produce compliance reports for Section 6 of the standards in regards to what areas they have focussed on to achieve compliance following the uplift in standards introduced in 2015. In regards to the building envelope, feedback we received included; insulation levels within walls, roofs and floors have increased, air tightness test scores have decreased, and a greater emphasis is placed on reducing the heat loss through building junctions.

In regards to building services our members stated that generally oil or electric powered systems are used, with a move towards electric ground and air source heat pumps. An alternative is the use of biomass boilers which achieve very low CO<sub>2</sub> emission rates thus making compliance much simpler.

Due to the tightening of the notional building used for standard 6.1, the use of renewable energy has also increased, usually photovoltaic panels are recommended to aid compliance with the standards.

## Domestic Conversions:

The Scottish government should consider ways ensuring that a SAP based EPC is required before a converted building is signed off.

It is quite usual for a domestic energy assessors to be asked to undertake a RdSAP assessment on a converted building to produce an EPC. This effectively gives the homeowner/tenant an inaccurate EPC for the property. Please note this EPC will use conservative defaults and as such will make the home appear worse than is likely. It would make sense to undertake a SAP calculation during the conversion process so that a more accurate EPC can be created.

