

Traditional Buildings, Energy Efficiency and the Net-Zero Challenge

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We can't demolish our way to net-zero



Nor should we want to – these buildings are our heritage...



And are also versatile, adaptable and
long lasting



1822 – Bank
1873 – Hospital
1928 – Library
1970's Offices
2009 - Hotel



If traditional buildings are going to meet government targets we need to know...

- What measures can be taken to improve thermal performance?
- Who will design and install these measures?
- How will the success of these measures be measured?
- How will measures be paid for?

A lot of work has gone into identifying methods and materials for walls, floors, roofs and windows etc



Category A listed vernacular building



Category B listed detached lodge



Who will design and install measures?



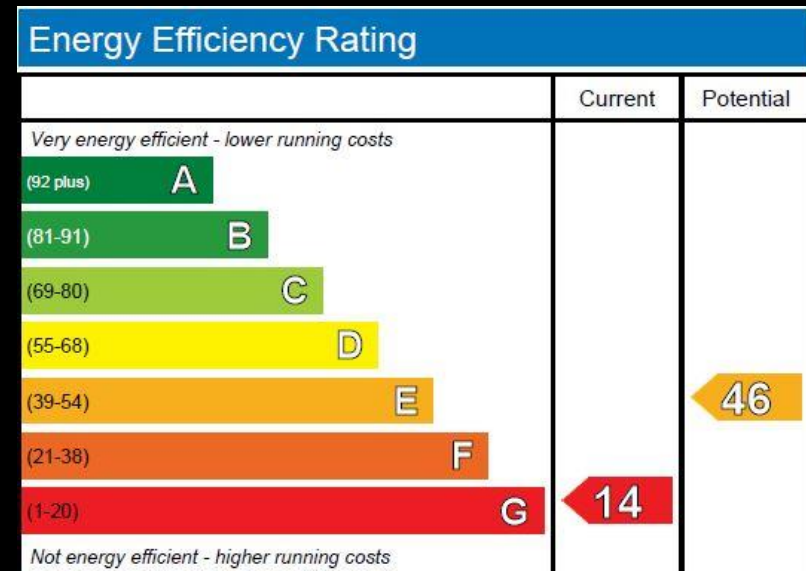
Training and education of designers and installers beginning to pick up pace



- HES delivering the Level 3 Award
- 29 people completed it so far
- Scottish Government Skills matrix an important development
- PAS 2035 roles
- A lot still to be done

How will success be measured?

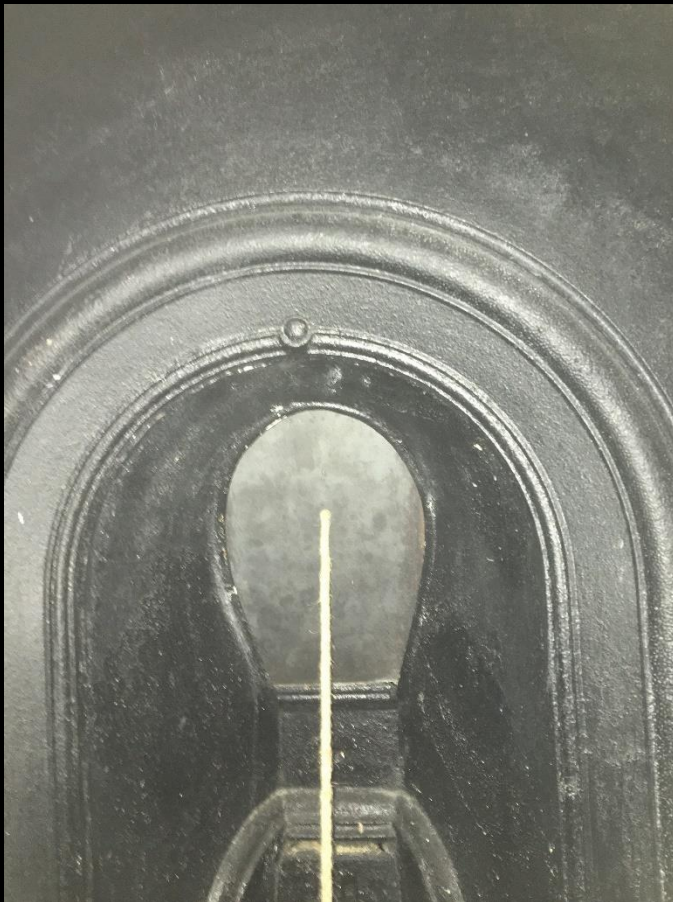
- EPC's will be the method of measuring the success of measures
- Government targets are based around EPC bands, likely to be a band C at point of sale or rental, with the trajectory being toward band B
- Some deficiencies in RdSAP will be addressed in the revised version
- What effect will decarbonising heat have?



Lessons learned from EPC Process

- A more detailed survey can give a better rating
- Accurate measurement can give a better rating
- Record all retrofit work that is done in sufficient detail to be recorded on EPC
- Unexpected factors such as infrared heating panel can cost SAP points which can be the difference between a C and a D
- Do we need to pay more for a more accurate survey?

Baffle in the
fireplace
– 1 SAP point



Removal of
secondary heating
– 5 SAP points



How will measures be paid for?

- Still questions around exemptions, both technical and financial
- Work to Holyrood Park Lodge: Floor insulation £7400, Walls £8400, Roof £3000,, insulating doors £800, windows £7400 Total: £27,000
- What support will be available is likewise still unclear

Inform, challenge and inspire?

- We broadly know what we need to do in terms of measures, but...
- We need more people to design and carry out the work.
- We know how success will be measured...
- Costs, funding and exemptions remains to be clarified but...

It can be done!

