

National Housing Maintenance Forum  
Case Study: PAS 2030: 2017

## **PAS 2030: 2017 SPECIFICATION FOR THE INSTALLATION OF ENERGY EFFICIENCY MEASURES IN BUILDINGS**

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The comprehensively revised PAS 2030: 2017 *Specification for the Installation of Energy Efficiency Measures (EEM) in Buildings* will apply to all ECO-funded installations from July 2017. The original standard, in the light of several failed installations, had been criticised as 'not fit for purpose'. PAS 2030 was revised with funding from the Department of Business Enterprise, Innovation and Skills (BEIS) and support from the BSI Retrofit Standards Task Group as well as representatives from across the retrofit industry.

It will also be incorporated into the framework of retrofit standards being developed as part of the implementation of the *Each Home Counts* (Bonfield) review, which will apply to all publicly-funded retrofit work.

PAS 2030: 2017 has three significant new features.

- 1 There is now a requirement for installers to work to a design, for every project: installation work may not proceed unless a design has been prepared. The practice of proceeding directly from assessment of a dwelling to installation, without a design, is no longer compliant. Designs must be site-specific and based on adequate assessments of the dwellings to which they apply; they may be prepared by installers or by third parties, but either way they must be documented. PAS 2030: 2017 provides guidance on the required scope of designs, and installers must check that designs are adequate and refer them back to the designer if not.
- 2 Designs and installations must have a 'whole dwelling' focus and take account of interactions between proposed energy efficiency measures and those that are already installed, will be installed at the same time, or may be installed later. Both physical interactions (junctions, etc.) and technical interactions (e.g. the effect of insulation on heating demand, or the effect of air permeability on ventilation) must be considered. A 'measures interaction matrix' (see Figure 1) is provided to assist the identification of interactions. Construction details are required for the corners, junctions and edges of building elements, to ensure that thermal bridging is minimised and the integrity of any air-tightness barrier is maintained.
- 3 When any insulation measure is proposed, the existing ventilation system (if any) must be assessed, and if necessary the ventilation must be upgraded. Guidance is provided about appropriate standards of ventilation. All dwellings that are insulated in any way (or which have new windows or draught-proofing installed) must have at least intermittent extract ventilation in 'wet rooms' (i.e. kitchens and bathrooms) and air inlets (e.g. trickle ventilators) in all other rooms. Dwellings for which multiple insulation measures are proposed (potentially reducing air permeability below 5 m<sup>3</sup>/m<sup>2</sup>hr @ 50 Pa), and dwellings where there is evidence of condensation or mould, must have continuous extract ventilation from wet rooms and air inlets in all other rooms.

PAS 2030: 2017 is available from BSI online, with accompanying online guidance.