

## Part 1:

# The standard for improvement

*The performance standards for a 'Beyond Decent Homes' property consist of an overall performance target, under which there are four discrete categories which specify detailed improvements.*

The focus of the Standard is primarily on demand reduction, as this offers the most cost effective opportunities for improvement, and the greatest benefits to both tenant and landlord.

A mix of measures can be used to meet the standard, adapted to the specific conditions and requirements of each property, and the replacement schedule for building elements. This approach is demonstrated by the case study evidence base.

### Overall aim:

*All homes should achieve a minimum performance standard of a 42% reduction in carbon emissions by 2016, and an 80% reduction by 2025. For space heating, domestic hot water and fixed lighting this equates to Energy Performance Certificate Rating C (SAP 75) by 2016 and B (SAP 85) and 2025. Household small power use should also be reduced on the same pro-rata basis.*



### Category 1:

## Building fabric performance

**Aim:** *All homes will achieve a fabric performance of EPC B (SAP 85), with investment sequenced to contribute to this overall objective and minimise the opportunity costs associated with on-site works and access.*

### Target specification:

Walls	0.20-0.35 W/m <sup>2</sup> K *	External insulation system (where permitted)
Windows	0.7-1.3 W/m <sup>2</sup> K	Coated/gas filled double and triple glazed units
Doors	1.20 W/m <sup>2</sup> K	Super insulation
Roof	0.10 W/m <sup>2</sup> K	Super insulation
Floor	0.30 W/m <sup>2</sup> K	Insulation layer (access permitting)
Heat Loss Parameter	1.50 W/m <sup>2</sup> K	Overall fabric performance

In some instances the visual impact of measures will need to be weighed against heritage and townscape considerations. The need to keep internal insulation thickness to a minimum means that it is not as effective. However, the performance of one element can be offset by a higher performance on another element as long as the overall target SAP is achieved and the wall element does not fall below 0.7W/(m<sup>2</sup>K) (equivalent to a 50-60mm filled cavity) and the window below 1.3 W/(m<sup>2</sup>K).

\* The lower u-value would apply to houses, which have a greater external wall area.



### Category 2: Fit-out

**Aim:** All homes will incorporate fittings that improve the energy efficiency of domestic hot water use and fixed lighting, and all households will have access to an affordable means of upgrading to A+ rated appliances.

#### Minimum specification:

- Spray taps, flow restrictors, low flow showers and washing machine hot-fill plumbing as part of scheduled kitchen and bathroom replacements;
- Zoned thermostats with timers in order to provide full control of heating systems;
- A+ rated appliances offered to tenants as part of schedule kitchen replacements;
- Energy saving light bulbs provided as standard during electrical rewiring by landlords to include advanced lighting such as LEDs as they become available;



### Category 3: Energy supply

**Aim:** All homes will be provided with an affordable and low carbon source of heat, where possible from renewable energy in order to decouple households energy bills from fossil fuel price rises.

#### Minimum specification:

- At least 25% of a households heat to be supplied from an affordable and low carbon source;
- The heating should be fully controllable and billed based on the actual heating used by the tenant.



### Category 4: Monitoring & awareness

**Aim:** All households will be provided with an induction into how to get the most from their home, monitor their energy use, and identify where in their home they use energy.

#### Minimum specification:

- Provision of a tenant handbook providing clear information on all energy using aspects of the home;
- Accessible and user friendly metering and/or monitoring to enable tenants to track their energy use on a daily, weekly or monthly basis;