

## GENERIC SPEC FOR DOMESTIC JOBS - (For guidelines only)

- The Glazing in the buildings should be upgraded from Standard double glazing to **Double Glazed Units, Low e glass, and 16mm air gap. Minimum U-Value (Including frame) 1.80 W/m<sup>2</sup>K**
- **SLOPE ROOF - 0.20 W/m<sup>2</sup>K**
- **FLOOR - 0.22 W/m<sup>2</sup>K**
- **HORIZONTAL CEILING - 0.16 W/m<sup>2</sup>K**
- **WALLS - 0.30 W/m<sup>2</sup>K**

Ø **HEAT SOURCE** - Gas/Oil condensing boiler - **HIGHLY RECOMMENDED**, such as by Warmflow engineering, Lisburn for example. Minimum efficiency is 86%, 90% + is advisable.

Ø **IF A HOUSE IS ABOVE 150M2 Floor Area** - The Heating Controls must be “Full zone control” meaning “must be capable of independent programming of heating times and temperatures of 2 or more zones. This involves separate plumbing circuits, either with their own programmers or separate channels in the same programmer. (By contrast TRV’s will only provide independent temperature control) (Fine for houses below this size)

Ø There must be Low energy light fittings - 1 in 4, OR 1 per 25m<sup>2</sup> floor area, whatever is greater

Ø If a secondary heat source is specified as a fire in an open grate, using wood/coal as a fuel source is advantageous. This must be HETAS Approved (which is the guidance on fitting of solid fuel burning appliances - downloaded from [www.hetas.co.uk](http://www.hetas.co.uk)) Also room sealed gas/wood heaters such as pot bellied stoves can have a good effect on the SAP.

**Chimneys** - Contrary to some schools of thought you still **CAN** specify chimneys and open fires, although limiting this to 1 or 2 per dwelling is advisable. It does bring the Carbon Emissions up, but not by a substantial amount

**Airtightness testing is now mandatory and a note on the drawing such as the attached document should be used;**

Aiming for an air permeability in “As Designed” SAP of **10m<sup>3</sup>/hr/m<sup>2</sup> is advisable** (never go below 8) - Although these figures are fairly easily achieved onsite - (To use an analogy of a 20 pence piece sized hole in every m<sup>2</sup> of building envelope (walls, floor, roof) would give you an idea of how leaky 10m<sup>3</sup>/hr/m<sup>2</sup> is - This should not be hard to achieve, and as already said it comes down to decent workmanship, We would highly recommend getting a clause on all drawings saying that there should be continual site meetings with all trades/services involved, to have specific attention to airtightness.

Solar Water Heating, Geothermal Heat Pumps, Photovoltaic cells, Wind Turbines are all highly advisable but usually will not feature in 80% of Calculations we receive.

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