

## Objectives

The Ministry of Housing, Communities & Local Government have now completed their consultation phase on the proposed updates to Building Regulations Part L for new build dwellings

Services Design Solution have been busy compiling a response to the proposed changes..... The future looks bright

### Transitional Arrangements

We agreed that smaller schemes should not be subject to transitional changes in Building Regulation requirements. However, larger schemes with appropriate phasing plans should follow the updated regulations.

### Standard Assessment Procedure

The Standard Assessment Procedure (SAP 10) is due to be released in parallel with the Part L 2020 updates. The table below summarises a high level comparison between the current (2013) and proposed (2020) regulations for a typical detached dwelling.

| Part L Year | SAP  | Option          | DER   | TER   | % Diff  | SAP Rating | Environmental rating |
|-------------|------|-----------------|-------|-------|---------|------------|----------------------|
| 2013        | 2012 | Heat Pump       | 21.5  | 21.72 | 1.01%   | 73C        | 76C                  |
|             |      | Direct Electric | 38.75 | 21.6  | -79.04% | 55D        | 59D                  |
|             |      | Gas Boiler      | 24.4  | 14.57 | -67.47% | 74C        | 73C                  |
| 2020        | 10   | Heat Pump       | 12.95 | 20.81 | 37.77%  | 68D        | 88B                  |
|             |      | Direct Electric | 20.3  | 20.69 | 1.88%   | 47E        | 81C                  |
|             |      | Gas Boiler      | 18.97 | 13.83 | -37.17% | 72C        | 79C                  |

- ◆ Significant improvement in carbon dioxide emissions (CO<sub>2</sub>) for systems using electric
- ◆ Whilst gas improves in SAP 10, there is still a failure in overall emissions compliance. Direct electric passes for the same!
- ◆ The SAP Rating (running cost) is worse in SAP 10 – The price of electricity is ever increasing!

## Headlines

### Part L

A big change is due to the fuel emission factors and the governments agenda leans towards an uplift to the Part L 2013 Building Regulation requirements of a 31% improvement in 2020 and 75-80% by 2025

- ◆ Uplift to Part L 2013 Building Regulation requirements in 2020, to either a 20% or 31% improvement in CO<sub>2</sub>
- ◆ A move to an all-electric heating and hot water supply with greater emphasis on heat pump technologies proposed
- ◆ The proposal shows that electricity is now cleaner through the supply of green energy (wind, photovoltaic panels etc) and more favourable over gas supply
- ◆ Move to primary energy being the principal performance metric and CO<sub>2</sub> as the secondary metric
- ◆ Introduction of an in use affordability assessment procedure
- ◆ Removal of the Fabric Energy Efficiency (FEE) Target and Approved Construction Details
- ◆ Updates to the Conventions for U-value Calculations BR443
- ◆ Minimum fabric performance improvements
- ◆ Minimum building service performance improvements
- ◆ Home User Guide

### Air Tightness

Greater emphasis on air tightness testing in all new build dwellings

- ◆ Limit to the credit given in SAP for energy savings from airtightness for naturally ventilated dwellings
- ◆ Air testing required to all new build dwellings
- ◆ Pulse test should be introduced into statutory guidance as an alternative airtightness testing method alongside the blower door test

### Build Quality

A proposed move towards improving build quality and site testing

- ◆ Build quality guidance and checklist
- ◆ Introduction of photographic evidence as a requirement for producing the as-built energy assessment for new dwellings
- ◆ Additional requirements in providing data to both Building Control and the homeowner

### Reservations:

- ◆ National grid capabilities
- ◆ Energy prices and home owner running costs
- ◆ Transitional arrangements
- ◆ Overheating risks
- ◆ Technology lead agenda
- ◆ Data behind in use energy consumption and building user behaviour
- ◆ Removal of the Fabric Energy Efficiency target

*What is the Government's agenda on improving the national grid to cope with 'an all-electric' economy?*