**PRODUCT BULLETIN**: 015

**TITLE** **England Building Regs – 2022 Part L Update**

**DATE** 13/06/2022

This bulletin is intended to detail the changes within the new Part L Building Regulations, and assess the impact on the existing ACV product range. Please note that these changes are for England only and will not impact projects in Northern Ireland, Wales or Scotland.

The 2021 edition of the Building Regulations 2010 will take effect on 15/06/2022. These regulations will not apply to projects which are already within the process (subject to building notice, full plans application or initial notice submission). Projects falling into this category must start work on the building before 15th June 2023.

**Change of regulations structure**
Previously the Building Regulations were different for new buildings and for existing buildings, and were managed through separate documents: L2A 2013 (new buildings other than dwellings) and L2B 2013 (existing buildings other than dwellings).

From 15/06/2022 both new and existing dwellings will be managed within Volume 2: Buildings other than dwellings. The full document is available online, Section 6 gives the guidance for fixed building services:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1057373/ADL2.pdf

**Why change?**
The overall goal is to reduce our dependence and usage of current energy sources as a part of the wider drive towards a lower carbon environment.

The goals of this set of regulations is to increase building fabric standards, improve the efficiency of building services and encourage adoption of low carbon technologies.

It is worth noting that this regulations update is an interim uplift ahead of the implementation of the new Future Buildings Standard which is currently scheduled for 2025.

**What is the impact for heating and hot water equipment manufacturers?**

The main impact within this regulations update for space heating and hot water equipment manufacturers is the phasing out of less efficient appliances using fossil fuels for heating and the installation of direct oil fired or non-condensing water heaters.

Space Heating Equipment

Changes are summarised in the tables below, the efficiency uplifts are different between new and existing buildings. Efficiencies used within the final Part L calculations are the 100% load and 30% load efficiencies calculated according to BS EN 15502-1:2021 (Gas-fired heating boilers). **The Part L seasonal efficiency is a different calculation to the BS EN 15502 seasonal efficiency so these values do differ.**

It is also worthin noting the following specific guidance:

> **6.22** The recommended minimum standards set out in this section apply only to dedicated water heaters. Central heating boilers which provide space heating and domestic hot water should meet the minimum standards in paragraphs 6.2 to 6.9. Heat pumps which provide domestic hot water should meet the minimum standards in paragraphs 6.44 to 6.46.

Paragraphs 6.2 to 6.9 relate to calculating space heating efficiencies, the HeatMaster will fit into this category and will not need to provide any efficiency data for DHW mode. This means that from a Part L perspective, the HM25C only needs to be evaluated according to heating efficiency.

**HEATING SYSTEMS - NEW BUILDINGS OTHER THAN DWELLINGS**

| Fuel | System | Gross Seasonal Efficiency (GCV) | |
|---|---|---|---|
| | | NDBSCG 2013 table 4 | L Vol.2 2021 table 6.1 |
| NG | Single Boiler ≤ 2MW output | 91% | **93%** |
| | Single Boiler > 2MW output | 86% | **88%** |
| LPG | Single Boiler ≤ 2MW output | 93% | **93%** |
| | Single Boiler > 2MW output | 87% | **88%** |
| Oil | Single Boiler | 84% | **93%** |

**New Published Efficiency Figures**

| HEATING SYSTEMS - EXISTING BUILDINGS OTHER THAN DWELLINGS | | | |
|---|---|---|---|
| Fuel | System | Gross Seasonal Efficiency (GCV) | |
| | | NDBSCG 2013 table 6 | L Vol.2 2021 table 6.2 |
| NG | Single Boiler ≤ 400kW ouput | 84% | 91% |
| | Single Boiler 401kW - 2MW ouput | | 88% |
| LPG | Single Boiler ≤ 2MW ouput | 85% | 93% |
| | Single Boiler > 2MW ouput | | 88% |
| Oil | Single Boiler | 86% | 93% |

New Published Efficiency Figures

Electric space heating systems are assumed to be 100% efficient, therefore there is no minimum efficiency requirement to meet for these products.

Hot Water Heaters

The thermal efficiency referred to within the below table is the gross thermal efficiency calculated according to BS EN 89: 2015 (Gas-fired storage water heaters for the production of domestic hot water).

| DHW SYSTEMS - NEW & EXISTING BUILDINGS OTHER THAN DWELLINGS | | | | |
|---|---|---|---|---|
| Fuel | System | Efficiency (Gross) | | Notes |
| | | NDBSCG 2013 table 28 | L Vol.2 2021 table 6.5 | |
| NG | New, Direct > 30kW | 90% | 91% | Thermal Efficiency |
| | New, Direct ≤ 30kW | 73% | | Thermal Efficiency |
| | Existing, Direct | 73% | | Thermal Efficiency |
| | New & Existing, Indirect | 80% | 91% | Boiler Seasonal Efficiency |
| LPG | New, Direct > 30kW | 92% | 92% | Thermal Efficiency |
| | New, Direct ≤ 30kW | 74% | | Thermal Efficiency |
| | Existing, Direct | 74% | | Thermal Efficiency |
| | New & Existing, Indirect | 81% | 91% | Boiler Seasonal Efficiency |
| Oil | New, Direct | 86% | No option | Thermal Efficiency |
| | Existing, Direct | 75% | | Thermal Efficiency |
| | New & Existing, Indirect | 82% | 91% | Boiler Seasonal Efficiency |

New Published Efficiency Figures

The Building Regulations will now prohibit the installation of a non-condensing gas-fired water heater into either a new building or an existing building, except under very exceptional circumstances as per the below:

**NOTE:**

1. **In exceptional circumstances, where a condensing boiler cannot feasibly be fitted in an existing building (for example, where there is insufficient space for a replacement flue system), a boiler with the following minimum seasonal efficiency may be used:**

**a. 80% for natural gas**
**b. 79% for LPG.**

Permission and sign-off from a Local Authority will be required in order to install a non-condensing water heater using the above exception.

Electric hot water heaters are assumed to be 100% efficient, therefore there is no minimum efficiency requirement to meet for these products.

**What is the impact for ACV products?**

In summary: **the ACV product portfolio is unaffected by these minimum efficiency requirements.**

The HeatMaster N and Delta ranges are not affected as ACV only offer the replacement boiler shells without a burner.

The HM25C (and full HM range) should be evaluated only from a heating efficiency perspective as per section 6.22.

| Model Reference: | Applicable Standard: | Required Efficiency (NG / LPG): | Product Efficiency: |
|---|---|---|---|
| HM25C Evo | EN 15502: Seasonal Efficiency | 91% / 93% | **98.17%** |
| HM25TC Evo | EN 15502: Seasonal Efficiency | 91% / 93% | **98.17%** |
| HM35TC Evo | EN 15502: Seasonal Efficiency | 91% / 93% | **98.17%** |

| | | | |
|---|---|---|---|
| HM45TC Evo | EN 15502: Seasonal Efficiency | 91% / 93% | **98.17%** |
| HM70TC Evo | EN 15502: Seasonal Efficiency | 91% / 93% | **98.04%** |
| HM85TC Evo | EN 15502: Seasonal Efficiency | 91% / 93% | **97.25%** |
| HM120TC Evo | EN 15502: Seasonal Efficiency | 91% / 93% | **97.25%** |
| Prestige 42 Solo | EN 15502: Seasonal Efficiency | 91% / 93% | **97.61%** |
| Prestige 50 Solo | EN 15502: Seasonal Efficiency | 91% / 93% | **97.98%** |
| Prestige 75 Solo | EN 15502: Seasonal Efficiency | 91% / 93% | **97.61%** |
| Prestige 100 Solo | EN 15502: Seasonal Efficiency | 91% / 93% | **97.41%** |
| Prestige 120 Solo | EN 15502: Seasonal Efficiency | 91% / 93% | **97.25%** |
| WM25 Evo | EN 89: Thermal Efficiency | 91% | **97.75%** |
| WM35 Evo | EN 89: Thermal Efficiency | 91% | **97.75%** |
| WM45 Evo | EN 89: Thermal Efficiency | 91% | **97.75%** |
| WM70 Evo | EN 89: Thermal Efficiency | 91% | **97.03%** |
| WM85 Evo | EN 89: Thermal Efficiency | 91% | **97.03%** |
| WM120 Evo | EN 89: Thermal Efficiency | 91% | **97.03%** |

If you have any questions regarding this bulletin, please do not hesitate to contact myself, or a member of the Commercial Product Management team.

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