Building Regulations (Amendment) 2010
Part L Compliance
Seasonal Efficiency

Hamworthy

Heating *at work.*

GAS AND OIL FIRED BOILER SERIES	MELBURY HE SERIES POWER FLAME STANDARD

Part L REQUIREMENT	SEASONAL EFFICIENCIES (Gross) %			
	New Buildings		Existing Buildings	
	The seasonal efficiency of a single boiler within a multi-boiler heating system should not be less than	The seasonal efficiency of a single or multi-boiler heating system should not be less than	The seasonal efficiency of a single boiler as a stand alone or within a multi-boiler heating system should not be less than	The effective heat generating seasonal efficiency of a single or multi-boiler heating system should not be less than
Minimum Seasonal Efficiency **Natural Gas**	82	86	82	84
Minimum Seasonal Efficiency **LPG Propane**	82	87	81	85
Minimum Seasonal Efficiency **Oil**	82	84	84	86

The above figures have been extracted from sections 2.5 and 2.6 of the Non-Domestic Heating, Cooling and Ventilation Compliance Guide (N-DHCVCG) to Approved Documents L2A and L2B.
The figures below are relevant for Hi/Lo and modulating burners.

BOILER MODEL	SEASONAL EFFICIENCIES (Gross) %		
	Natural Gas	Oil	LPG
Melbury HE 530	85.00	88.49	85.00
Melbury HE 580	85.41	88.69	85.41
Melbury HE 630	85.25	88.60	85.25
Melbury HE 700	85.63	88.76	85.63
Melbury HE 800	85.42	88.70	85.42
Melbury HE 895	85.82	88.82	85.82
Melbury HE 1150	85.70	88.76	85.70
Melbury HE 1300	85.49	88.70	85.49
Melbury HE 1650	85.26	88.68	85.26
Melbury HE 1900	85.49	88.70	85.49
Melbury HE 2500	85.76	88.75	85.76
Melbury HE 3000	85.33	88.61	85.33
Melbury HE 3800	85.46	88.37	85.46
Melbury HE 4500	85.55	88.37	85.55
Melbury HE 5400	85.67	88.43	85.67
Melbury HE 6300	85.63	88.46	85.63
Melbury HE 7400	85.65	88.48	85.65
Melbury HE 8600	85.77	88.53	85.77
Melbury HE 10000	85.99	88.61	85.99

All models of Melbury HE Series boilers can be installed in both New and Existing Buildings when firing on oil but they do not meet the requirements for new build when firing on natural gas or LPG propane. However, all systems for both new and existing buildings should be installed with the minimum controls package detailed in the N-DHCVCG. See overleaf for basic information on control packages. For existing buildings, Heating Efficiency Credits may be used to improve the building energy rating.

Signed

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NEW BUILDINGS : Minimum controls package for new boilers or multi-boiler systems (depending on boiler plant or combined boiler plant outputs)		
Boiler plant output	**Minimum controls package**	**Minimum controls package contents**
<100kW	A	• Timing and temperature demand control which should be zone-specific where the building floor area is greater than 150m^2 • Weather compensation except where a constant temperature is required.
100kW to 500kW	B	• Control package A above PLUS: • Optimal start/stop control is required with night set-back OR frost protection outside occupied periods • Boiler with 2 stage high/low firing facility or multiple boilers should be installed to provide efficient part-load performance. For multiple boilers, sequence control should be provided AND boilers, by design or application, should have limited heat loss from non-firing modules, for example by using isolation valves or dampers. For boilers with low standing losses isolation valves and dampers would not be required. Individual boilers, by desiign or application, should have limited heat loss, for example by using isolation valves or dampers
>500kW – individual boilers	C	• Controls packages A and B above PLUS: • The burner controls should be fully modulating for gas-fired boilers or multi-stage for oil-fired boilers

EXISTING BUILDINGS : Minimum controls package for replacement boilers	
Minimum controls package	**Suitable controls**
Zone controls	Zone control is required only for buildings where the floor area is greater than 150m^2. As a minimum, on/off control (eg. through an isolation valve for unoccupied zones) should be provided. This is achieved by default for a building of floor area 150m^2 or less/
Demand controls	Room thermostat which controls through a diverter valve with constant boiler flow water temperature. This method of control is not suitable for condensing boilers
Time controls	Time clock

EXISTING BUILDINGS : Heating Efficiency Credits (HECs) for measures applicable to boiler replacement					
Measure		**HECs % points**	**Measure**		**HECs % points**
A	Boiler oversize ≤ 20%	2	**F ii)**	Weather (inside/outside temperature) compensation system that is direct acting	2
B	Multiple boilers	1	**F iii)**	Addition of TRV or temperature zone control to F i) or F ii) above to ensure full building temperature control	1
C	Sequential control of multiple-boiler systems	1	**G i)**	Optimised start	1.5
D	Monitoring and targeting	1	**G ii)**	Optimised stop	0.5
E i)	Thermostatic radiator valves (TRV) alone. Would also apply to fanned convector systems	1	**G iii)**	Optimised start/stop	2
E ii)	Weather (inside/outside temperature) compensation system using a mixing valve	1.5	**H**	Full zoned time control	1
E iii)	Addition of TRV or temperature zone control to E ii) above to ensure full building temperature control	1	**I**	Full building management system (BMS)	4
F i)	A 'room' thermostat or sensor that controls boiler water temperature in relation to heat load	0.5	**J**	Decentralised heating systems	1

The above tables are extracted from the Non-Domestic Heating, Cooling and Ventilation Complliance Guide for initial information only. The full text of the appropriate section should be read to ensure these tables are used correctly, particularly the Heating Efficiency Credits table which contains Comments/Definitions on each item. The Guide can be downloaded from www.planningportal.gov.uk/uploads/br/non-domestic_building_compliance_guide_2010.pdf