

Full and Part Load Efficiency plus Seasonal Efficiency Data of MHS Boilers

The information contained in this data sheet may be of assistance to heating system designers when considering the suitability of Commercial Boiler Plant for heating and hot water service systems in compliance with The Building Regulations 2000, Approved Documents L2A and L2B 2006 Editions.

The above mentioned Approved Documents state that reasonable provision for the performance of heating and hot water systems would be the use of heat-raising appliances with an efficiency not less than that recommended for their type in the Non-domestic Heating, Cooling and Ventilation Compliance Guide.

The efficiencies of the MHS Boiler Products listed here are calculated using the formula contained in the Compliance Guide (detailed below), and reference must be made to the Compliance Guide for guidance on the control systems that may also be required to meet the minimum requirements for the type of appliance and heat distribution system to be employed.

Attention is drawn to the need to refer to the relevant ADL and the Non-Domestic Heating, Cooling and Ventilation Compliance Guide.

These documents may be downloaded from the web site of The Department for Communities and Local Government.

The Non-Domestic Heating, Cooling and Ventilation Compliance Guide states that:

Seasonal Boiler Efficiency for single boilers and multiple boiler systems using identical boilers is calculated using the following formula: $0.81\eta_{30\%} + 0.19\eta_{100\%}$

(Equation 26 in Compliance Guide)

The Boiler Efficiencies, measured at 100% load and at 30%, are used as the basis for calculating the Boiler Seasonal Efficiency as in the Equation above.

It is possible that Heating Efficiency Credits may be necessary with certain boiler models in order to meet the required "Effective Heat Generating Seasonal Efficiency" for replacement boilers in existing buildings, ** symbols in the following lists will indicate where this is the case.

See Non-Domestic Heating, Cooling and Ventilation Compliance Guide - Tables 1 to 7 for details of Required Efficiencies, Minimum Controls Packages and Heating Efficiency Credits.

Boiler Model	Max Heat Output kW	Fuel Type	Gross Efficiency @ Full Load	Gross Efficiency @ 30% of Full Load	Gross Seasonal Efficiency %	Utilisation	
						New Build	Exist'g Build
Ultramax WM							
45	42.5	Nat Gas	87.93	97.39	95.59	✓	✓
65	65	Nat Gas	87.84	97.30	95.49	✓	✓
85	85	Nat Gas	87.57	96.94	95.15	✓	✓
100	96.3	Nat Gas	87.57	96.94	95.15	✓	✓
120	120	Nat Gas	87.57	96.94	95.15	✓	✓
45	42.5	LPG	89.88	99.35	97.71	✓	✓
65	65	LPG	89.79	99.46	97.63	✓	✓
85	85	LPG	89.52	99.09	97.27	✓	✓
100	96.3	LPG	89.52	99.09	97.27	✓	✓
120	120	LPG	89.52	99.09	97.27	✓	✓
Ultramax PB							
65	65	Nat Gas	87.80	97.30	95.49	✓	✓
85	85	Nat Gas	87.50	96.94	95.15	✓	✓
100	96.3	Nat Gas	87.50	96.94	95.15	✓	✓
120	120	Nat Gas	87.50	96.94	95.15	✓	✓
65	65	LPG	89.79	99.46	97.63	✓	✓
85	85	LPG	89.52	99.09	97.27	✓	✓
100	96.3	LPG	89.52	99.09	97.27	✓	✓
120	120	LPG	89.52	99.09	97.27	✓	✓
Ultramax							
73	73	Nat Gas	84.94	96.17	94.03	✓	✓
90	90	Nat Gas	84.94	96.17	94.03	✓	✓
115	115	Nat Gas	84.94	96.17	94.03	✓	✓
146	146	Nat Gas	84.94	96.17	94.03	✓	✓
192	192	Nat Gas	84.94	96.17	94.03	✓	✓
241	241	Nat Gas	85.03	96.35	94.19	✓	✓
287	287	Nat Gas	85.03	96.35	94.19	✓	✓
73	73	LPG	86.83	98.31	96.13	✓	✓
90	90	LPG	86.83	98.31	96.13	✓	✓
115	115	LPG	86.83	98.31	96.13	✓	✓
146	146	LPG	86.83	98.31	96.13	✓	✓
192	192	LPG	86.83	98.31	96.13	✓	✓
241	241	LPG	86.92	98.49	96.29	✓	✓
287	287	LPG	86.92	98.49	96.29	✓	✓
318	318	Nat Gas	84.84	93.93	92.20	✓	✓
378	378	Nat Gas	84.84	93.93	92.20	✓	✓
443	443	Nat Gas	84.84	93.93	92.20	✓	✓
508	508	Nat Gas	84.84	93.93	92.20	✓	✓
559	559	Nat Gas	84.84	93.93	92.20	✓	✓
624	624	Nat Gas	84.84	93.93	92.20	✓	✓
730	730	Nat Gas	84.84	93.93	92.20	✓	✓
826	826	Nat Gas	84.84	93.93	92.20	✓	✓
923	923	Nat Gas	84.84	93.93	92.20	✓	✓
1018	1018	Nat Gas	84.84	93.93	92.20	✓	✓
318	318	LPG	86.72	96.02	94.26	✓	✓

Boiler Model	Max Heat Output KW	Fuel Type	Gross Efficiency @ Full Load	Gross Efficiency @ 30% of Full Load	Gross Seasonal Efficiency %	Utilisation	
						New Build	Exist'g Build
Ultramax							
378	378	LPG	86.72	96.02	94.26	✓	✓
443	443	LPG	86.72	96.02	94.26	✓	✓
508	508	LPG	86.72	96.02	94.26	✓	✓
559	559	LPG	86.72	96.02	94.26	✓	✓
624	624	LPG	86.72	96.02	94.26	✓	✓
730	730	LPG	86.72	96.02	94.26	✓	✓
826	826	LPG	86.72	96.02	94.26	✓	✓
923	923	LPG	86.72	96.02	94.26	✓	✓
1018	1018	LPG	86.72	96.02	94.26	✓	✓
Ultramax R600							
R601	150.7	Nat Gas	88.28	97.65	95.86	✓	✓
R602	201.6	Nat Gas	88.28	97.65	95.86	✓	✓
R603	251.4	Nat Gas	88.28	97.65	95.86	✓	✓
R604	302.3	Nat Gas	88.28	97.65	95.86	✓	✓
R605	403.1	Nat Gas	88.28	97.65	95.86	✓	✓
R606	503.9	Nat Gas	88.28	97.65	95.86	✓	✓
R607	571.5	Nat Gas	88.28	97.65	95.86	✓	✓
R601	150.7	LPG	90.23	99.80	97.97	✓	✓
R602	201.6	LPG	90.23	99.80	97.97	✓	✓
R603	251.4	LPG	90.23	99.80	97.97	✓	✓
R604	302.3	LPG	90.23	99.80	97.97	✓	✓
R605	403.1	LPG	90.23	99.80	97.97	✓	✓
R606	503.9	LPG	90.23	99.80	97.97	✓	✓
R607	571.5	LPG	90.23	99.80	97.97	✓	✓
Strata 2							
120	119.7	Nat Gas	88.08	97.88	96.01	✓	✓
120	119.7	LPG	90.04	100.06	98.15	✓	✓
Strata Streamline							
16H	15.8	Nat Gas	87.48	98.02	96.01	✓	✓
31H	30.9	Nat Gas	87.21	97.93	95.89	✓	✓
31S	30.9	Nat Gas	87.21	97.93	95.89	✓	✓
47H	47	Nat Gas	87.03	97.75	95.71	✓	✓
47S	47	Nat Gas	87.03	97.75	95.71	✓	✓
75H	74.6	Nat Gas	87.30	96.22	94.52	✓	✓
16H	15.8	LPG	89.42	100.19	98.14	✓	✓
31H	30.9	LPG	89.14	100.10	98.01	✓	✓
31S	30.9	LPG	89.14	100.10	98.01	✓	✓
47H	47	LPG	88.96	99.91	97.83	✓	✓
47S	47	LPG	88.96	99.91	97.83	✓	✓
75H	74.6	LPG	89.23	98.35	96.61	✓	✓

Boiler Model	Max Heat Output kW	Fuel Type	Gross Efficiency @ Full Load	Gross Efficiency @ 30% of Full Load	Gross Seasonal Efficiency %	Utilisation	
						New Build	Exist'g Build
Streamline FS							
150	155	Nat Gas	86.48	98.20	96.99	✓	✓
225	225	Nat Gas	85.67	98.37	95.95	✓	✓
150	155	LPG	88.40	100.38	98.10	✓	✓
225	225	LPG	87.57	100.56	98.09	✓	✓
Regency 4							
123	122.8	Nat Gas	84.49	82.08	82.53	***	✓**
138	137.9	Nat Gas	81.47	81.86	81.78	***	✓**
152	152.8	Nat Gas	83.50	81.86	82.17	***	✓**
169	169.7	Nat Gas	83.57	82.09	82.37	***	✓**
186	186.7	Nat Gas	83.65	82.50	82.71	***	✓**
203	203.6	Nat Gas	83.45	82.13	82.38	***	✓**
220	220.3	Nat Gas	83.42	82.24	82.46	***	✓**
237	237.8	Nat Gas	83.30	82.00	82.24	***	✓**
255	255.2	Nat Gas	83.25	82.21	82.40	***	✓**
272	272.4	Nat Gas	83.18	82.15	82.34	***	✓**
Regency AK							
AK2-9	130.2	Nat Gas	82.08	82.62	82.51	***	✓**
AK2-10	146.5	Nat Gas	82.08	82.62	82.51	***	✓**
AK2-11	162.8	Nat Gas	82.08	82.62	82.51	***	✓**
AK-12	179	Nat Gas	82.08	82.62	82.51	***	✓**
AK-13	195.3	Nat Gas	82.08	82.62	82.51	***	✓**
AK-14	211.6	Nat Gas	82.08	82.62	82.51	***	✓**
AK-15	227.9	Nat Gas	82.08	82.62	82.51	***	✓**
AK-16	244.2	Nat Gas	82.08	82.62	82.51	***	✓**
AK-17	260.5	Nat Gas	82.08	82.62	82.51	***	✓**
AK2-9	130.2	LPG	83.90	84.45	84.34	***	✓**
AK2-10	146.5	LPG	83.90	84.45	84.34	***	✓**
AK2-11	162.8	LPG	83.90	84.45	84.34	***	✓**
AK-12	179	LPG	83.90	84.45	84.34	***	✓**
AK-13	195.3	LPG	83.90	84.45	84.34	***	✓**
AK-14	211.6	LPG	83.90	84.45	84.34	***	✓**
AK-15	227.9	LPG	83.90	84.45	84.34	***	✓**
AK-16	244.2	LPG	83.90	84.45	84.34	***	✓**
AK-17	260.5	LPG	83.90	84.45	84.34	***	✓**

Boiler Model	Max Heat Output kW	Fuel Type	Gross Efficiency @ Full Load	Gross Efficiency @ 30% of Full Load	Gross Seasonal Efficiency %	Utilisation	
						New Build	Exist'g Build
Alpha Jetstream							
MD4	105	Nat Gas	82.32	83.04	82.90	***	✓**
MD5	144	Nat Gas	82.32	83.04	82.90	***	✓**
MD6	184	Nat Gas	82.32	83.04	82.90	***	✓**
MD7	223	Nat Gas	82.32	83.04	82.90	***	✓**
MD8	262	Nat Gas	82.32	83.04	82.90	***	✓**
MD9	300	Nat Gas	82.32	83.04	82.90	***	✓**
MD4	105	Oil	85.60	86.35	86.20	✓	✓
MD5	144	Oil	85.60	86.35	86.20	✓	✓
MD6	184	Oil	85.60	86.35	86.20	✓	✓
MD7	223	Oil	85.60	86.35	86.20	✓	✓
MD8	262	Oil	85.60	86.35	86.20	✓	✓
MD9	300	Oil	85.60	86.35	86.20	✓	✓
MK8	320	Nat Gas	82.47	83.34	83.17	***	✓**
MK9	378	Nat Gas	82.47	83.34	83.17	***	✓**
MK10	436	Nat Gas	82.47	83.34	83.17	***	✓**
MK11	494	Nat Gas	82.47	83.34	83.17	***	✓**
MK12	552	Nat Gas	82.47	83.34	83.17	***	✓**
MK13	611	Nat Gas	82.47	83.34	83.17	***	✓**
MK14	669	Nat Gas	82.47	83.34	83.17	***	✓**
MK15	727	Nat Gas	82.47	83.34	83.17	***	✓**
MK16	785	Nat Gas	82.47	83.34	83.17	***	✓**
MK17	843	Nat Gas	82.47	83.34	83.17	***	✓**
MK18	901	Nat Gas	82.47	83.34	83.17	***	✓**
MK19	959	Nat Gas	82.47	83.34	83.17	***	✓**
MK20	1017	Nat Gas	82.47	83.34	83.17	***	✓**
MK8	320	Oil	85.76	86.66	86.48	✓	✓
MK9	378	Oil	85.76	86.66	86.48	✓	✓
MK10	436	Oil	85.76	86.66	86.48	✓	✓
MK11	494	Oil	85.76	86.66	86.48	✓	✓
MK12	552	Oil	85.76	86.66	86.48	✓	✓
MK13	611	Oil	85.76	86.66	86.48	✓	✓
MK14	669	Oil	85.76	86.66	86.48	✓	✓
MK15	727	Oil	85.76	86.66	86.48	✓	✓
MK16	785	Oil	85.76	86.66	86.48	✓	✓
MK17	843	Oil	85.76	86.66	86.48	✓	✓
MK18	901	Oil	85.76	86.66	86.48	✓	✓
MK19	959	Oil	85.76	86.66	86.48	✓	✓
MK20	1017	Oil	85.76	86.66	86.48	✓	✓

Boiler Model	Max Heat Output kW	Fuel Type	Gross Efficiency @ Full Load	Gross Efficiency @ 30% of Full Load	Gross Seasonal Efficiency %	Utilisation	
						New Build	Exist'g Build
CPA							
50	58.1	Nat Gas	77.93	81.52	80.83	***	✓**
70	81.4	Nat Gas	77.93	81.52	80.83	***	✓**
100	116.3	Nat Gas	77.93	81.52	80.83	***	✓**
130	151.2	Nat Gas	77.93	81.52	80.83	***	✓**
160	186	Nat Gas	77.93	81.52	80.83	***	✓**
200	232.6	Nat Gas	77.93	81.52	80.83	***	✓**
250	290.7	Nat Gas	77.93	81.52	80.83	***	✓**
300	348.8	Nat Gas	77.93	81.52	80.83	***	✓**
350	407	Nat Gas	77.93	81.52	80.83	***	✓**
400	465.1	Nat Gas	77.93	81.52	80.83	***	✓**
500	581.4	Nat Gas	77.93	81.52	80.83	***	✓**
600	697.7	Nat Gas	77.93	81.52	80.83	***	✓**
700	814	Nat Gas	77.93	81.52	80.83	***	✓**
800	930.2	Nat Gas	77.93	81.52	80.83	***	✓**
900	1046.5	Nat Gas	77.93	81.52	80.83	***	✓**
1100	1279.1	Nat Gas	77.93	81.52	80.83	***	✓**
1300	1511.6	Nat Gas	77.93	81.52	80.83	***	✓**
1500	1744.2	Nat Gas	77.93	81.52	80.83	***	✓**
50	58.1	Oil	81.40	84.22	83.68	***	✓**
70	81.4	Oil	81.40	84.22	83.68	***	✓**
100	116.3	Oil	81.40	84.22	83.68	***	✓**
130	151.2	Oil	81.40	84.22	83.68	***	✓**
160	186	Oil	81.40	84.22	83.68	***	✓**
200	232.6	Oil	81.40	84.22	83.68	***	✓**
250	290.7	Oil	81.40	84.22	83.68	***	✓**
300	348.8	Oil	81.40	84.22	83.68	***	✓**
350	407	Oil	81.40	84.22	83.68	***	✓**
400	465.1	Oil	81.40	84.22	83.68	***	✓**
500	581.4	Oil	81.40	84.22	83.68	***	✓**
600	697.7	Oil	81.40	84.22	83.68	***	✓**
700	814	Oil	81.40	84.22	83.68	***	✓**
800	930.2	Oil	81.40	84.22	83.68	***	✓**
900	1046.5	Oil	81.40	84.22	83.68	***	✓**
1100	1279.1	Oil	81.40	84.22	83.68	***	✓**
1300	1511.6	Oil	81.40	84.22	83.68	***	✓**
1500	1744.2	Oil	81.40	84.22	83.68	***	✓**

Boiler Model	Max Heat Output kW	Fuel Type	Gross Efficiency @ Full Load	Gross Efficiency @ 30% of Full Load	Gross Seasonal Efficiency %	Utilisation	
						New Build	Exist'g Build
Ecomax							
70	70	Nat Gas	82.71	81.18	81.47	***	✓**
80	80	Nat Gas	82.71	81.18	81.47	***	✓**
90	90	Nat Gas	82.71	81.18	81.47	***	✓**
100	100	Nat Gas	82.71	81.18	81.47	***	✓**
120	120	Nat Gas	82.71	81.18	81.47	***	✓**
150	150	Nat Gas	82.71	81.18	81.47	***	✓**
200	200	Nat Gas	82.71	81.27	81.54	***	✓**
250	250	Nat Gas	82.71	81.27	81.54	***	✓**
300	300	Nat Gas	82.71	81.27	81.54	***	✓**
350	350	Nat Gas	82.71	81.27	81.54	***	✓**
420	420	Nat Gas	82.80	81.27	81.56	***	✓**
510	510	Nat Gas	83.16	81.27	81.62	***	✓**
630	630	Nat Gas	83.16	81.27	81.62	***	✓**
750	750	Nat Gas	83.16	81.27	81.62	***	✓**
870	870	Nat Gas	83.16	81.27	81.62	***	✓**
970	970	Nat Gas	83.16	81.27	81.62	***	✓**
1030	1030	Nat Gas	83.16	81.27	81.62	***	✓**
1200	1200	Nat Gas	83.16	81.27	81.62	***	✓**
1300	1300	Nat Gas	83.16	81.27	81.62	***	✓**
1400	1400	Nat Gas	83.16	81.27	81.62	***	✓**
1600	1600	Nat Gas	83.16	81.27	81.62	***	✓**
1800	1800	Nat Gas	83.16	81.27	81.62	***	✓**
2000	2000	Nat Gas	83.16	81.27	81.62	***	✓**
2400	2400	Nat Gas	83.16	81.27	81.62	***	✓**
3000	300	Nat Gas	83.16	81.27	81.62	***	✓**
3500	3500	Nat Gas	83.16	81.27	81.62	***	✓**
70	70	Oil	85.62	84.03	84.34	✓	✓**
80	80	Oil	85.62	84.03	84.34	✓	✓**
90	90	Oil	85.62	84.03	84.34	✓	✓**
100	100	Oil	85.62	84.03	84.34	✓	✓**
120	120	Oil	85.62	84.03	84.34	✓	✓**
150	150	Oil	85.62	84.03	84.34	✓	✓**
200	200	Oil	85.62	84.13	84.41	✓	✓**
250	250	Oil	85.62	84.13	84.41	✓	✓**
300	300	Oil	85.62	84.13	84.41	✓	✓**
350	350	Oil	85.62	84.13	84.41	✓	✓**
420	420	Oil	85.71	84.13	84.43	✓	✓**

Boiler Model	Max Heat Output kW	Fuel Type	Gross Efficiency @ Full Load	Gross Efficiency @ 30% of Full Load	Gross Seasonal Efficiency %	Utilisation	
						New Build	Exist'g Build
Ecomax							
510	510	Oil	86.08	84.13	84.49	✓	✓**
630	630	Oil	86.08	84.13	84.49	✓	✓**
750	750	Oil	86.08	84.13	84.49	✓	✓**
870	870	Oil	86.08	84.13	84.49	✓	✓**
970	970	Oil	86.08	84.13	84.49	✓	✓**
1030	1030	Oil	86.08	84.13	84.49	✓	✓**
1200	1200	Oil	86.08	84.13	84.49	✓	✓**
1300	1300	Oil	86.08	84.13	84.49	✓	✓**
1400	1400	Oil	86.08	84.13	84.49	✓	✓**
1600	1600	Oil	86.08	84.13	84.49	✓	✓**
1800	1800	Oil	86.08	84.13	84.49	✓	✓**
2000	2000	Oil	86.08	84.13	84.49	✓	✓**
2400	2400	Oil	86.08	84.13	84.49	✓	✓**
3000	3000	Oil	86.08	84.13	84.49	✓	✓**
3500	3500	Oil	86.08	84.13	84.49	✓	✓**
Duomax							
140	140	Nat Gas	82.71	81.18	81.47	***	✓**
160	160	Nat Gas	82.71	81.18	81.47	***	✓**
180	180	Nat Gas	82.71	81.18	81.47	***	✓**
200	200	Nat Gas	82.71	81.18	81.47	***	✓**
240	240	Nat Gas	82.71	81.18	81.47	***	✓**
300	300	Nat Gas	82.71	81.18	81.47	***	✓**
400	400	Nat Gas	82.71	81.26	81.53	***	✓**
500	500	Nat Gas	82.71	81.26	81.53	***	✓**
600	600	Nat Gas	82.71	81.26	81.53	***	✓**
700	700	Nat Gas	82.71	81.26	81.53	***	✓**
140	140	Oil	85.62	84.03	84.34	✓	✓**
160	160	Oil	85.62	84.03	84.34	✓	✓**
180	180	Oil	85.62	84.03	84.34	✓	✓**
200	200	Oil	85.62	84.03	84.34	✓	✓**
240	240	Oil	85.62	84.03	84.34	✓	✓**
300	300	Oil	85.62	84.03	84.34	✓	✓**
400	400	Oil	85.62	84.12	84.40	✓	✓**
500	500	Oil	85.62	84.12	84.40	✓	✓**
600	600	Oil	85.62	84.12	84.40	✓	✓**
700	700	Oil	85.62	84.12	84.40	✓	✓**
Duomax P							
140	140	Nat Gas	82.71	81.18	81.47	***	✓**
160	160	Nat Gas	82.71	81.18	81.47	***	✓**
180	180	Nat Gas	82.71	81.18	81.47	***	✓**
200	200	Nat Gas	82.71	81.18	81.47	***	✓**
240	240	Nat Gas	82.71	81.18	81.47	***	✓**
300	300	Nat Gas	82.71	81.18	81.47	***	✓**
400	400	Nat Gas	82.71	81.26	81.53	***	✓**

Boiler Model	Max Heat Output kW	Fuel Type	Gross Efficiency @ Full Load	Gross Efficiency @ 30% of Full Load	Gross Seasonal Efficiency %	Utilisation	
						New Build	Exist'g Build
Duomax P							
500	500	Nat Gas	82.71	81.26	81.53	***	✓**
600	600	Nat Gas	82.71	81.26	81.53	***	✓**
700	700	Nat Gas	82.71	81.26	81.53	***	✓**
840	840	Nat Gas	82.79	81.26	81.55	***	✓**
1020	1020	Nat Gas	83.16	81.26	81.62	***	✓**
1260	1260	Nat Gas	83.16	81.26	81.62	***	✓**
1500	1500	Nat Gas	83.16	81.26	81.62	***	✓**
1740	1740	Nat Gas	83.16	81.26	81.62	***	✓**
1940	1940	Nat Gas	83.16	81.26	81.62	***	✓**
2060	2060	Nat Gas	83.16	81.26	81.62	***	✓**
2400	2400	Nat Gas	83.16	81.26	81.62	***	✓**
2600	2600	Nat Gas	83.16	81.26	81.62	***	✓**
140	140	Oil	85.62	84.03	84.34	✓	✓**
160	160	Oil	85.62	84.03	84.34	✓	✓**
180	180	Oil	85.62	84.03	84.34	✓	✓**
200	200	Oil	85.62	84.03	84.34	✓	✓**
240	240	Oil	85.62	84.03	84.34	✓	✓**
300	300	Oil	85.62	84.03	84.34	✓	✓**
400	400	Oil	85.62	84.12	84.40	✓	✓**
500	500	Oil	85.62	84.12	84.40	✓	✓**
600	600	Oil	85.62	84.12	84.40	✓	✓**
700	700	Oil	85.62	84.12	84.40	✓	✓**
840	840	Oil	85.70	84.12	84.42	✓	✓**
1020	1020	Oil	86.08	84.12	84.49	✓	✓**
1260	1260	Oil	86.08	84.12	84.49	✓	✓**
1500	1500	Oil	86.08	84.12	84.49	✓	✓**
1740	1740	Oil	86.08	84.12	84.49	✓	✓**
1940	1940	Oil	86.08	84.12	84.49	✓	✓**
2060	2060	Oil	86.08	84.12	84.49	✓	✓**
2400	2400	Oil	86.08	84.12	84.49	✓	✓**
2600	2600	Oil	86.08	84.12	84.49	✓	✓**

** Heating Efficiency Credits are necessary to meet the minimum Effective Heat Generating Seasonal Efficiency; See the Non-Domestic Heating, Cooling and Ventilation Compliance Guide.

*** Meets the minimum efficiency requirement for a individual boiler within a Multiple-boiler system in a new build situation, but the overall required efficiency of the Multi-boiler installation must not be less than 84% (0.84), and would require a mix of boiler types to achieve the final efficiency requirement; e.g. a combination of condensing and non-condensing appliances - See the "Three Step Method" in Section 2 of the Non-Domestic Heating, Cooling and Ventilation Compliance Guide.

To convert "Gross" figures to "Net" multiply by 1.11.

To convert "Net" figures to "Gross" multiply by 0.901.

The Non-Domestic Heating, Cooling and Ventilation Compliance Guide may be viewed/downloaded from the Department for Communities and Local Government (DCLG) web site:

http://www.planningportal.gov.uk/uploads/br/BR_PDF_PTL_NONDOMHEAT.pdf