Building Regulation Requirements & Replacing Old Boilers.

It is not always necessary to replace an old boiler with a condensing boiler; below is a summary of the requirements.

Referenced document: *"Guide to the Condensing Boiler Installation Assessment Procedure for Dwellings"*

Classification - "Easy" installations:

A condensing boiler should be installed where installation is "not difficult". Typically, installations would be adjacent to external walls with low or high level horizontal flues.

Classification - "Difficult" installations

The assessment procedure "*is to be used in cases where it is expected to be impractical or too costly to install a condensing boiler*"; the object of the assessment being to establish the lowest cost option. (ref. Guide section 1, Introduction, paragraph 3)

There are a number of ways to overcome these "difficult" installations; the objective of the assessment procedure is to ***allow for the extra costs of installing a condensing boiler*** and compare them with **typical fuel savings over the lifetime of the boiler** (ref. Guide section 2 last paragraph).

The assessment is based on a scoring system; if a total score of 1000 points or more is accrued either a condensing or non condensing boiler can be installed.

Whatever the score, the boiler does not have to be fitted in the position shown on the assessment form, which will have been chosen for "***least cost" without regard for householder preference***. The householder can decide what's best for them.

Typical examples for a semi detached or detached property:

	Boiler location is classified as "difficult" i.e. it is not near an external wall			
	In a house (Typically, **more** than 2 mtrs. top of boiler to the attic ceiling)		**In a Bungalow** (Typically, **less** than 2 mtrs. top of boiler to the attic ceiling)	
	Boiler in existing location	Relocate boiler to different room	Boiler in existing location	Relocate boiler to a different room
Semi detached or detached property: (note. for a flat allow 830, a mid terrace property allow 790)	760	760	760	760
Condensate pump or soak away required	100		100	
Flue: more than 2 mtrs top of boiler to attic ceiling	350			
New boiler located in a different room		350		350
Total score:	1210	1110	860	1110

The exemption form has a number of questions, specifically; the additional costs of installing a condensing boiler are accounted for as followings:

1. Question 9: Points for "property type and fuel type" i.e. 760 points for an oil boiler in a semi/detached house.
2. Question 10: 350 points if the new boiler is located in a different room from the existing boiler.
3. Question11: 350 points if the flue is extended longer than 2mtrs from the top of the boiler to attic ceiling. (i.e. allows for the additional cost of installing a lined/ insulated chimney flue)
4. Question 12: 100 points if a condense drain pump or soak away is required.

Appendix A: Assessment form

L1 ASSESSING WHERE NON-CONDENSING BOILERS COMPLY

CALCULATION AND DECLARATION FORM

This form may be used to show that a non-condensing boiler is reasonable provision for the purposes of complying with Part L of the Building Regulations.

1	Full address of property assessed:	_____
		_____
		_____
	Postcode:	_____
2	Dwelling type (tick one only)	Flat ☐ Mid-terraced ☐ End-terraced ☐ Semi-detached ☐ Detached ☐
3	Existing boiler fuel (tick one only)	Natural gas ☐ LPG ☐ Oil ☐ Solid fuel ☐ None ☐
4	New boiler fuel (tick one only)	Natural gas ☐ LPG ☐ Oil ☐
5	Existing boiler type (tick one only)	Wall mounted ☐ Back boiler ☐ Floor standing ☐ None ☐
6	Existing boiler position (tick one only)	Kitchen ☐ Utility room ☐ Garage ☐ Living room ☐ Bedroom ☐ Other ☐ None ☐
7	In the lowest cost option is the new boiler positioned in a different room from the existing boiler position?	Yes ☐ No ☐ Inapplicable (no existing boiler) ☐
8	If YES to section 7, state new boiler position	Kitchen ☐ Utility room ☐ Garage ☐ Living room ☐ Bedroom ☐ Other:
9	Determine points for property type and new boiler fuel from the Table on the reverse of this form and insert in box A	Box A
10	New boiler position in a different room from the existing boiler? (see 7) If YES inset 350 in box B	Box B
11	Extended flue (longer than 2m) necessary? If YES insert 200 for gas boilers, or 350 for oil boilers, in box C	Box C
12	Condensate pump or soakaway necessary? If YES inset 100 in box D	Box D
13	ASSESSMENT SCORE	TOTAL of points in boxes A + B + C + D — Box T

14 Declaration (tick one box only)

Box W	I declare that the boiler to be installed is oil fired and will be installed before 1st April 2007, OR
Box X	I declare that the boiler is being replaced under the original manufacturer's or installer's guarantee, within 3 years of the original installation date, OR
Box Y	I declare that there are no feasible condensing boiler installation options (as defined by the assessment procedure) because
	_____
	_____
	_____
Box Z	I declare that I have considered all feasible boiler installation options in the property above, and the option defined in boxes A to D produces the lowest total T.

Signed _____ Date _____

Name (in capitals) _____ Status (agent or installer) _____

Competent person scheme _____ Competent person r egistration number _____

Notice to householder:

1. Where Box W has been ticked, a non-condensing oil boiler may be installed before 01 April 2007.
2. Where box X is ticked, a like-for-like replacement boiler is reasonable.
3. Where Box Y has been ticked or box Z has been ticked and the assessment score in section 13 exceeds 1000, this document may be used as evidence that installation of a condensing boiler has been assessed as impractical or uneconomic. **Nevertheless you may choose to exceed the Building regulations requirement** if a suitable installation option can be found. Condensing boilers are more efficient and therefore save on fuel costs and cause less harm to the environment. You may be eligible for a grant that defrays some of the additional costs – contact your local energy efficiency advice centre, or the energy efficiency helpline of your gas or electricity supplier (phone number on back of bill).
4. You should retain this form. It may be required when you sell your home.

Points for property type and fuel

Building type	Natural gas	LPG	Oil
Flat	710	660	830
Mid-terrace	640	580	790
Others (end-terrace semi-detached, or detached)	590	520	760

Reproduced from Appendix G of Approved Document Part L1 of the Building Regulations.

Points for consideration:

1. There seems to be an increasing trend towards installing external condensing oil fired boilers, perhaps to get around the "difficulties" of installing a boiler internally; however is this in the best interests of the home owner?

   Perhaps a quirk of the Building Regulations, with the emphasis on the installation of condensing boilers, there's no points / penalty incurred when installing a boiler externally; where heat loss from a boiler is lost to atmosphere rather than the structure of the building, keeping an airing cupboard warm!

2. It shouldn't be forgotten that the biggest gain for condensing boilers is in the gas fired sector with non condensing gas boiler efficiencies as low as 65/75%. The efficiency of oil fired non condensing boilers has historically been high; in region of 85/90% for the past 15 years.