



Summary Document

Project Name: 4 Bed Detached Dwelling
Client: Stoves Online

The SAP assessments have been completed using the following elements within the dwellings.

ELEMENT	TARGET	DESCRIPTION
External Wall	0.25 U-VALUE W/M ² K	102.5 mm Brick, 100mm Dritherm 32, 100mm Block, Dot n Dabs, 12.5mm Board, 3mm, Skim
Plane Roof	0.09 U-VALUE W/M ² K	500mm Earthwool Loft Roll 44 between and over Joists, 12.5mm Board, 3mm Skim
Ground Floor	0.16 U-VALUE W/M ² K	100mm Concrete, 150mm Kooltherm K3 Floorboard, 50mm Screed
Fixed Glazing	1.4 U-VALUE W/M ² K	
Door	1.4 U-VALUE W/M ² K	
Oil Combi Boiler	Worcester Greenstar 27 CDi	The controls for the heating system should include Time and temperature zone control with Radiators and delay start thermostats.
Secondary Heating	Opus Aria	Wood Logs, 81% efficiency
Secondary Heating	Klover Soft 80	Wood Pellets, 84.18% efficiency

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Lighting	100% low energy lighting within the dwelling.	All external lighting to be low energy lamps or have motion sensor control
Design Air Permeability Rate	4.0m ³ /(h.m ²)	An air permeability test will be required at completion of the building work. It is important that the builder acknowledges that an air permeability test will be required and that poor detailing and workmanship on site will cause excessive air leakage and failure of the test.

Comparison Table:

The following table shows Compliance is achieved because the Dwelling Emission Rating (DER) is lower than the Target Emission Rating (TER) and because the Dwelling Fabric Energy Efficiency (DFEE) is also lower than the Target Fabric Energy Efficiency (TFEE).

	(DER)	(TER)	(DFEE)	(TFEE)	Result
	KgCO ₂ /m ² .annum	KgCO ₂ /m ² .annum	kWh/m ² /yr	kWh/m ² /yr	
Oil Combi Boiler No secondary heating	18.30	17.42	49.75	56.00	FAIL
Opus Aria	17.24	17.42	49.75	56.00	PASS
Klover Soft 80	17.34	17.42	49.75	56.00	PASS

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