

This design draft submission provides evidence towards compliance with Part L of the Building Regulations, in accordance with Appendix A of AD L1A. It has been carried out using Approved SAP software. It has been prepared from plans and specifications and may not reflect the 'as built' property. This report covers only items included within the SAP and is not a complete report of regulations compliance.

Assessor name	Mr Philip French	Assessor number	687
Client		Last modified	29/03/2013
Address	Flat 4, 210 Kingston Road, Teddington, TW11 9JF		

Check	Evidence	Produced by	OK?																		
<b>Criterion 1: predicted carbon dioxide emission from proposed dwelling does not exceed the target</b>																					
TER (kg CO <sub>2</sub> /m <sup>2</sup> .a)	Fuel = Mains gas Fuel factor = 1.00 TER = 15.18	Authorised SAP Assessor																			
DER for dwelling as designed (kg CO <sub>2</sub> /m <sup>2</sup> .a)	DER = -6.08	Authorised SAP Assessor																			
Are emissions from dwelling as designed less than or equal to the target?	DER -6.08 < TER 15.18	Authorised SAP Assessor	Passed																		
<b>Criterion 2: the performance of the building fabric and the heating, hot water and fixed lighting systems should be no worse than the design limits</b>																					
<b>Fabric U-values</b>																					
Are all U-values better than the design limits in Table 2?	<table border="1"> <thead> <tr> <th>Element</th> <th colspan="2">Weighted average Highest</th> </tr> </thead> <tbody> <tr> <td>Wall</td> <td>0.16 (max 0.30)</td> <td>0.16 (max 0.70)</td> </tr> <tr> <td>Party wall</td> <td>0.00 (max 0.20)</td> <td>N/A</td> </tr> <tr> <td>Floor</td> <td colspan="2">(no floor)</td> </tr> <tr> <td>Roof</td> <td colspan="2">(no roof)</td> </tr> <tr> <td>Openings</td> <td>1.20 (max 2.00)</td> <td>1.20 (max 3.30)</td> </tr> </tbody> </table>	Element	Weighted average Highest		Wall	0.16 (max 0.30)	0.16 (max 0.70)	Party wall	0.00 (max 0.20)	N/A	Floor	(no floor)		Roof	(no roof)		Openings	1.20 (max 2.00)	1.20 (max 3.30)	Authorised SAP Assessor	Passed
Element	Weighted average Highest																				
Wall	0.16 (max 0.30)	0.16 (max 0.70)																			
Party wall	0.00 (max 0.20)	N/A																			
Floor	(no floor)																				
Roof	(no roof)																				
Openings	1.20 (max 2.00)	1.20 (max 3.30)																			
<b>Thermal bridging</b>																					
How has the loss from thermal bridges been calculated?	Thermal bridging calculated from linear thermal transmittances for each junction	Authorised SAP Assessor																			
<b>Heating and hot water systems</b>																					
Does the efficiency of the heating systems meet the minimum value set out in the Domestic Heating Compliance Guide?	Main heating system: Mains gas, Combi boiler from database Fontecal Corolla 30 A Efficiency = 90.00% - SEDBUK 2009 Minimum = 88.00%  Secondary heating system: None	Authorised SAP Assessor	Passed																		
Does the insulation of the hot water cylinder meet the standards set out in the Domestic Heating Compliance Guide?	No hot water cylinder	Authorised SAP Assessor																			
Do controls meet the minimum controls provision set out in the Domestic Heating Compliance Guide?	Space heating control: Programmer, room thermostat and TRVs  Hot water control: No hot water cylinder Boiler interlock (main system 1)	Authorised SAP Assessor	Passed																		

Check	Evidence	Produced by	OK?
<b>Fixed internal lighting</b>			
Does fixed internal lighting comply with paragraphs 42 to 44?	Schedule of installed fixed internal lighting Standard lights = 0 Low energy lights = 8  Percentage of low energy lights = 100 % Minimum = 75 %	Authorised SAP Assessor	Passed
<b>Criterion 3: the dwelling has appropriate passive control measures to limit solar gains</b>			
Does the dwelling have a strong tendency to high summertime temperatures?	Overheating risk (June) = Not significant Overheating risk (July) = Medium Overheating risk (August) = Medium Region = Thames Thermal mass parameter = 100.00 Ventilation rate in hot weather = 3.00 ach Blinds/curtains = Light-coloured curtain or roller blind	Authorised SAP Assessor	Passed
<b>Criterion 4: the performance of the dwelling, as designed, is consistent with the DER</b>			
Design air permeability (m <sup>3</sup> /(h.m <sup>2</sup> ) at 50Pa)	Design air permeability = 3.00 Max air permeability = 10.00	Authorised SAP Assessor	Passed
Mechanical ventilation system Specific fan power (SFP)	Not applicable	Authorised SAP Assessor	
Have the key features of the design been included (or bettered) in practice?	The following walls/wall have a U-value less than 0.2W/m <sup>2</sup> K: • Wall 1 (0.16) • Wall 2 (0.00) The following openings have a U-value less than 1.5W/m <sup>2</sup> K: • Window reference 1 (1.20) • Window reference 2 (1.20) • Window reference 3 (1.20) • Window reference 4 (1.20) • Window reference 5 (1.20) • Window reference 6 (1.20) Design air permeability of 3 m <sup>3</sup> /(h.m <sup>2</sup> ) is less than 5 m <sup>3</sup> /(h.m <sup>2</sup> ) at 50 Pa Use of the following low carbon or renewable technologies: • Photovoltaic array	Authorised SAP Assessor	