

Specification Summary

New Build

J O S T E C
BUILDING REGULATIONS COMPLIANCE SERVICES

Project Address: 23577 – Prospect Street Proposed Flat 3, at 3 Prospect Street, Caversham, Reading, RG4 8JB	
Thermal Mass Parameter (TMP)	Calculated
Orientation (When stood facing out of the front door)	NE
Dwelling designed to achieve a water use < 125 L/person/day	Yes

General Construction	Calculated U-Value (W/m²K)
Party Floor – N/A	N/A
External Wall 1 – Fulfil Cavity 102.5mm Outer Brick, 150mm Dritherm 32, 100mm Celcon Solar (k: 0.011 W/mK), Plasterboard on Dabs, Skim finish.	0.17
External Wall 2 – Timber Frame External Finish, 12mm Plywood, 90mm Celotex GA4000 between 100x50 Timber Studs @400cc, 50mm Celotex to face, Plasterboard Dabs, Skim finish.	0.18
Party Wall Construction – Cavity with effective edge sealing applied.	0.00
Roof 1 – Dormer Sloping Roof Slate Tiles, 25mm Batten Cavity, Sarking Felt, 150mm Celotex GA4000 between 150x47 timber rafters @400cc, 65+12.5mm Celotex PL4000 under rafters, 1x12.5mm Soundboard & Skim	0.12
Roof 2 – Warm Flat Roof Single Ply Membrane, 200mm Celotex GA4000 over 22mm Timber Firings, 150mm Celotex GA4000 between 200x47 timber Rafter Cavity @400cc, 65+12.5mm Celotex PL4000 Insulated Plasterboard, 1x12.5mm Soundboard & Skim	0.06
Roof 3 – Warm Pitched Roof Slate Tiles, 25mm Batten Cavity, Sarking Felt, 150mm Celotex GA4000 between 150x47 timber rafters @400cc, 65+12.5mm Celotex PL4000 under rafters, 1x12.5mm Soundboard & Skim	0.12

Openings	g-value	U-value
Windows – Double Glazed, Argon Filled, Low-E	0.74	1.38
Rooflights – Double Glazed, Argon Filled, Low-E	0.74	1.38
Doors – Door to Corridor	NA	N/A

*Window U-value – This value must reflect the 'whole' window rather than just the centre pane

Heating and Ventilation	Specification
Main Heating System 1 – 100% Heat	Electric Combi Boiler via radiators ECA Arceus 15Kw
Main Heating System 2 – 0% Heat	Dimplex EDL200UK-630
Secondary Heating System	N/A
Water Heating	From main heating system 2 201L cylinder – Standing loss: 1.61 kWh/day
Heating Controls	Time & Temperature Zone Control
Ventilation	Natural, extractor fans to wet rooms

Other	Specification
Lighting	LED 5W >80lm/w
Air Tightness and Infiltration	< 5.00 m ³ /m ² h
Renewables	EDEL HW ASHP – see Main Heating System 2
Summer Overheating (Part O)	Failed - See below. Recommended Dynamic Assessment (TM59)

Part O

		Approved Document O - Simplified Method Report Created in the Elmhurst Overheating tool - For use in England only	
Dwelling overall result		Fail	

SAP

SAP Rating:	77 C	CO2 Emission:	0.37 t/yr	DER:	6.07 kgCO ₂ /yr/m ²	TER:	13.37 kgCO ₂ /yr/m ²	% DER<TER:	54.60%
Compliance:	See BREL	DPER:	62.55 kWh/m ² /yr	TPER:	70.57 kWh/m ² /yr	DPER<TPER:	11.36%	DfEE:	35.8 kWh/m ² /yr
TFEE:	36.6 kWh/m ² /yr	DfEE<TFEE:	2.18%						

Thermal Bridging

	Junction details	Source Type	Psi (W/mK)	Length (m)	Result	Reference
External wall	E2 Other lintels (including other steel lintels)	Independently assessed	0.023	4.97	0.11	RCD
External wall	E3 Sill	Independently assessed	0.024	3.35	0.08	RCD
External wall	E4 Jamb	Independently assessed	0.019	14.84	0.28	RCD
External wall	E7 Party floor between dwellings (in blocks of flats)	Independently assessed	0.036	28.21	1.02	RCD
External wall	E10 Eaves (insulation at ceiling level)	Independently assessed	0.051	13.65	0.70	RCD
External wall	E24 Eaves (insulation at ceiling level - inverted)	Independently assessed	0.107	1.99	0.21	Knauf
External wall	E11 Eaves (insulation at rafter level)	Independently assessed	0.018	9.27	0.17	RCD
External wall	E12 Gable (insulation at ceiling level)	Independently assessed	0.029	1.96	0.06	RCD
External wall	E13 Gable (insulation at rafter level)	Independently assessed	0.034	3.84	0.13	RCD
External wall	E16 Corner (normal)	Independently assessed	0.037	3.34	0.12	RCD
External wall	E18 Party wall between dwellings	Independently assessed	0.041	7.25	0.30	RCD
Party wall	P3 Party wall - Intermediate floor between dwellings (in blocks of flats)	Table K1 - Default	0.000	8.82	0.00	
Party wall	P4 Party wall - Roof (insulation at ceiling level)	Independently assessed	0.017	14.97	0.25	RCD 1/2
Party wall	P5 Party wall - Roof (insulation at rafter level)	Independently assessed	0.018	3.85	0.07	RCD 1/2
External roof	R1 Head of roof window	Independently assessed	0.061	1.20	0.07	Unilin
External roof	R2 Sill of roof window	Independently assessed	0.060	1.20	0.07	Unilin
External roof	R3 Jamb of roof window	Independently assessed	0.056	2.40	0.13	Unilin
External roof	R4 Ridge (vaulted ceiling)	Table K1 - Default	0.120	9.22	1.11	
External roof	R7 Flat ceiling (inverted)	Table K1 - Default	0.120	21.00	2.52	
External roof	R9 Roof to wall (flat ceiling)	Table K1 - Default	0.320	21.27	6.81	

Total: 176.60 W/mK:
Y-Value: 0.08 W/m²K:

Declaration	
As the responsible person for the above-named site, we confirm the above details have been implemented in line with the named construction detail references. I confirm that, to the best of my knowledge, the above as built specification has been implemented on site and understand that any deviation from this can affect the calculations.	
Name	
Signed	
Date	