Parkview, Whitchurch, Bristol

Keepmoat

West Midlands

Design Stage

AES Sustainability Consultants Ltd

20 October 2023

	Assessor	Date	E-mail address
Produced By:	Chris MacDougall	27.09.2023	chris.macdougall@aessc.co.uk
Reviewed By:	Andrew McManus	27.09.2023	andrew.mcmanus@aessc.co.uk

Revision	Assessor	Date	Comment
Initial issue	Chris MacDougall	28.09.2023	
Rev 1	Chris MacDougall	02.10.2023	DAP 5.01 to houses
Rev 2	Chris MacDougall	05.10.2023	Update 125mm cavity plots
Rev 3	Chris MacDougall	06.10.2023	Update to include cavity insulation, roof insulation thickness & glazing type
Rev 4	Chris MacDougall	06.10.2023	
Rev 5	Chris MacDougall	17.10.2023	
Rev 6	Chris MacDougall	18.10.2023	
Rev 7	Chris MacDougall	20.10.2023	Updated heating designs for maisonettes

If construction deviates from the specification in any way whatsoever, please check with AES Sustainability Consultants immediately to ensure compliance is still achieved. AES Sustainability Consultants cannot be held responsible for non compliance if the specification that the calculation is based upon is not followed.

AES Sustainability Consultants

Keepmoat West Midlands Parkview, Whitchurch, Bristol Rev 7

20.10.2023 6566

																											Carbon Emissions (Dwelling Emission Rate)			Primary Energy (Dwelling Primary Energy Rate)			Fabric (Dwelling Fabric Energy Efficiency)					
Property Ref	House Type	Property Type	Total Floor Area	Ground Floor U Value	External Wall U Value	Cavity Insulation	Plane Roof U Value	Roof insulation thickness (mm)	Sloping Roof U Value	Double/Triple Glazing	Window U Value	Window Solar Transmission BFRC	Front Door U Value	Y Value	Design Air Pressure	Heating System	Heating Controls	Flow Temperature °C	Heat Distributors	Cylinder Volume (L)	Cylinder Measured Heat Loss (kWh/24hrs)	Insulated primary pipework	Wet Rooms	Ventilation System	Intermittent Fans	Showers in Property (Flow Rate)	DER	TER	DER/TER % Reduction	DPER	TPER	DPER/TPER % Reduction	DFEE	TFEE	DFEE / TFEE % Reduction	Block Compliance (%)	EPC Rating	Heating design comments
4907-AU78-6566-001	GF Maisonette	Maisonette,SemiDetached	69.18	0.16	0.22	125mm superglass superwall 36				Std Double Glazed Spec	1.3	0.41	1.10		4.00	Daikin Europe NV - ERGA04DAV3A + EHBH04D6V	Programmer and at least two room thermostats	45	Radiators only	150	1.29	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	3.86	11.57	66.64	40.55	60.57	33.06	33.56	33.79	0.67		86	Heating designs provided
4907-AU78-6566-002	FF Maisonette	Maisonette,SemiDetached	69.18		0.22	125mm superglass superwall 36	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.40		4.00	Daikin Europe NV - ERGA04DAV3A + EHBH04D6V	Programmer and at least two room thermostats	45	Radiators only	150	1.29	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	3.49	6.95	49.78	36.77	37.18	1.10	26.73	27.06	1.19		87	Heating designs provided
4907-AU78-6566-003	GF Maisonette	Maisonette,SemiDetached	69.18	0.16	0.22	125mm superglass superwall 36				Std Double Glazed Spec	1.3	0.41	1.10		4.00	Daikin Europe NV - ERGA04DAV3A + EHBH04D6V	Programmer and at least two room thermostats	45	Radiators only	150	1.29	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	3.84	11.51	66.64	40.36	60.21	32.96	33.23	33.47	0.70		86	Heating designs provided
4907-AU78-6566-004	FF Maisonette	Maisonette,SemiDetached	69.18		0.22	125mm superglass superwall 36	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.40		4.00	Daikin Europe NV - ERGA04DAV3A + EHBH04D6V	Programmer and at least two room thermostats	45	Radiators only	150	1.29	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	3.47	6.89	49.64	36.62	36.88	0.71	26.46	26.79	1.23		87	Heating designs provided
4907-AU78-6566-005	SF Maisonette	Maisonette,Detached	98.49		0.22	125mm superglass superwall 36	0.10	450mm	0.15	Std Double Glazed Spec	1.3	0.41	1.40		4.00	Daikin Europe NV - ERGA04DAV3A + EHBH04D6V	Programmer and at least two room thermostats	45	Radiators only	150	1.29	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	3.81	11.24	66.10	39.82	58.97	32.47	38.63	39.37	1.90		81	Heating designs provided
4907-AU78-6566-006	Apartment A GF	Flat,MidTerrace	78.84	0.15	0.22	125mm superglass superwall 36				Std Double Glazed Spec	1.3	0.41	1.40		4.00	Daikin Europe NV - ERGA04EVA + EHVH04SU18E6V	Programmer and at least two room thermostats	45	Radiators only	180	1.4	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	3.47	11.48	69.77	36.38	60.88	40.25	28.82	28.57	-0.87	0.92	85	Heating designs provided
4907-AU78-6566-007	Apartment B GF	Flat,EndTerrace	79.02	0.15	0.22	125mm superglass superwall 36				Std Double Glazed Spec	1.3	0.41	1.40		4.00	Daikin Europe NV - ERGA04EVA + EHVH04SU18E6V	Programmer and at least two room thermostats	45	Radiators only	180	1.4	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	3.69	12.29	69.98	38.62	65.17	40.74	32.85	32.52	-1.01		84	Heating designs provided
4907-AU78-6566-008	Apartment C GF	Flat,MidTerrace	49.76	0.16	0.22	125mm superglass superwall 36				Std Double Glazed Spec	1.3	0.41	1.40		4.00	Daikin Europe NV - ERGA04EVA + EHVH04SU18E6V	Programmer and at least two room thermostats	45	Radiators only	180	1.4	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	4.40	15.34	71.32	46.18	82.11	43.75	37.46	35.82	-4.59		85	Heating designs provided
4907-AU78-6566-009	Apartment D GF	Flat,Detached	78.80	0.16	0.22	125mm superglass superwall 36				Std Double Glazed Spec	1.3	0.41	1.40		4.00	Daikin Europe NV - ERGA04EVA + EHVH04SU18E6V	Programmer and at least two room thermostats	45	Radiators only	180	1.4	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	4.01	13.26	69.76	41.97	70.40	40.39	38.72	37.08	-4.40		83	Heating designs provided
4907-AU78-6566-010	Apartment A FF	Flat,MidTerrace	78.84		0.22	125mm superglass superwall 36				Std Double Glazed Spec	1.3	0.41	1.40		4.00	Daikin Europe NV - ERGA04EVA + EHVH04SU18E6V	Programmer and at least two room thermostats	45	Radiators only	180	1.4	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	2.84	9.21	69.16	29.96	48.67	38.44	18.07	17.77	-1.69		88	Heating designs provided
4907-AU78-6566-011	Apartment B FF	Flat,EndTerrace	79.02		0.22	125mm superglass superwall 36				Std Double Glazed Spec	1.3	0.41	1.40		4.00	Daikin Europe NV - ERGA04EVA + EHVH04SU18E6V	Programmer and at least two room thermostats	45	Radiators only	180	1.4	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	3.15	10.19	69.09	33.20	53.90	38.41	23.85	22.68	-5.13		87	Heating designs provided
4907-AU78-6566-012	Apartment E FF	Flat,EndTerrace	78.79		0.22	125mm superglass superwall 36				Std Double Glazed Spec	1.3	0.41	1.40		4.00	Daikin Europe NV - ERGA04EVA + EHVH04SU18E6V	Programmer and at least two room thermostats	45	Radiators only	180	1.4	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	3.41	11.84	71.20	35.80	62.85	43.04	27.72	30.11	7.93		86	Heating designs provided
4907-AU78-6566-013	Apartment F FF	Flat,MidTerrace	78.48		0.22	125mm superglass superwall 36				Std Double Glazed Spec	1.3	0.41	1.40		4.00	Daikin Europe NV - ERGA04EVA + EHVH04SU18E6V	Programmer and at least two room thermostats	45	Radiators only	180	1.4	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	3.42	11.83	71.09	35.95	62.91	42.86	27.52	29.86	7.82		85	Heating designs provided
4907-AU78-6566-014	Apartment A SF	Flat,MidTerrace	78.84		0.22	125mm superglass superwall 36				Std Double Glazed Spec	1.3	0.41	1.40		4.00	Daikin Europe NV - ERGA04EVA + EHVH04SU18E6V	Programmer and at least two room thermostats	45	Radiators only	180	1.4	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	2.84	9.21	69.16	29.96	48.67	38.44	18.07	17.77	-1.69		88	Heating designs provided
4907-AU78-6566-015	Apartment B SF	Flat,EndTerrace	79.02		0.22	125mm superglass superwall 36				Std Double Glazed Spec	1.3	0.41	1.40		4.00	Daikin Europe NV - ERGA04EVA + EHVH04SU18E6V	Programmer and at least two room thermostats	45	Radiators only	180	1.4	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	3.16	10.21	69.05	33.28	54.02	38.39	23.99	22.80	-5.22		87	Heating designs provided
4907-AU78-6566-016	Apartment E SF	Flat,EndTerrace	78.79		0.22	125mm superglass superwall 36				Std Double Glazed Spec	1.3	0.41	1.40		4.00	Daikin Europe NV - ERGA04EVA + EHVH04SU18E6V	Programmer and at least two room thermostats	45	Radiators only	180	1.4	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	3.28	10.76	69.52	34.49	57.07	39.56	25.61	25.11	-2.03		86	Heating designs provided
4907-AU78-6566-017	Apartment F SF	Flat,MidTerrace	78.48		0.22	125mm superglass superwall 36				Std Double Glazed Spec	1.3	0.41	1.40		4.00	Daikin Europe NV - ERGA04EVA + EHVH04SU18E6V	Programmer and at least two room thermostats	45	Radiators only	180	1.4	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	3.07	9.93	69.08	32.43	52.65	38.41	21.59	20.86	-3.49		87	Heating designs provided
4907-AU78-6566-018	Apartment A TF	Flat,MidTerrace	78.84		0.22	125mm superglass superwall 36	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.40		4.00	Daikin Europe NV - ERGA04EVA + EHVH04SU18E6V	Programmer and at least two room thermostats	45	Radiators only	180	1.4	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	3.26	11.36	71.30	34.28	60.26	43.11	25.32	27.63	8.33		86	Heating designs provided
4907-AU78-6566-019	Apartment B TF	Flat,EndTerrace	79.02		0.22	125mm superglass superwall 36	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.40		4.00	Daikin Europe NV - ERGA04EVA + EHVH04SU18E6V	Programmer and at least two room thermostats	45	Radiators only	180	1.4	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	3.53	12.11	70.85	37.10	64.24	42.24	30.10	31.37	4.03		85	Heating designs provided
4907-AU78-6566-020	Apartment E TF	Flat,EndTerrace	78.79		0.22	125mm superglass superwall 36	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.40		4.00	Daikin Europe NV - ERGA04EVA + EHVH04SU18E6V	Programmer and at least two room thermostats	45	Radiators only	180	1.4	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	3.49	11.88	70.62	36.64	63.06	41.90	28.92	29.93	3.38		85	Heating designs provided
4907-AU78-6566-021	Apartment F TF	Flat,MidTerrace	78.48		0.22	125mm superglass superwall 36	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.40		4.00	Daikin Europe NV - ERGA04EVA + EHVH04SU18E6V	Programmer and at least two room thermostats	45	Radiators only	180	1.4	Fully insulated primary pipework	2	MEV Decentralised - Zehnder Group UK Ltd - Unity CV2.1	N/A	8	3.44	11.82	70.90	36.17	62.84	42.45	27.52	29.37	6.31		85	Heating designs provided
4907-AU78-6566-022	Foxhill-Det-AS	House,Detached	94.26	0.17	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	4.05	12.32	67.13	42.15	64.45	34.59	43.39	44.68	2.90		82	Heating designs provided
4907-AU78-6566-023	Foxhill-Det-OPP	House,Detached	94.26	0.17	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	4.03	12.26	67.13	41.99	64.13	34.52	43.11	44.41	2.93		82	Heating designs provided
4907-AU78-6566-024	Carlton-End-AS	House,EndTerrace	79.06	0.16	0.22	125mm superglass superwall 36	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	180	1.39	Fully insulated primary pipework	3	System 1	3	8	3.73	11.37	67.19	39.11	59.40	34.15	35.77	35.80	0.07		85	Heating designs provided
4907-AU78-6566-025	Carlton-Mid-AS	House,MidTerrace	79.06	0.14	0.22	125mm superglass superwall 36	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	180	1.39	Fully insulated primary pipework	3	System 1	3	8	3.33	9.99	66.67	34.97	52.01	32.76	28.19	29.10	3.12		86	Heating designs provided
4907-AU78-6566-026	Carlton-End-OPP	House,EndTerrace	79.06	0.16	0.22	125mm superglass superwall 36	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	180	1.39	Fully insulated primary pipework	3	System 1	3	8	3.71	11.28	67.11	38.87	58.91	34.02	35.33	35.37	0.10		85	Heating designs provided
4907-AU78-6566-027	Carlton-End-AS	House,EndTerrace	79.06	0.16	0.22	125mm superglass superwall 36	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	180	1.39	Fully insulated primary pipework	3	System 1	3	8	3.58	11.48	68.82	37.41	59.96	37.61	35.77	35.80	0.07		86	Heating designs provided
4907-AU78-6566-028	Carlton-Mid-AS	House,MidTerrace	79.06	0.14	0.22	125mm superglass superwall 36	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	180	1.39	Fully insulated primary pipework	3	System 1	3	8	3.33	9.99	66.67	34.97	52.01	32.76	28.19	29.10	3.12		86	Heating designs provided
4907-AU78-6566-029	Carlton-End-OPP	House,EndTerrace	79.06	0.16	0.22	125mm superglass superwall 36	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	180	1.39	Fully insulated primary pipework	3	System 1	3	8	3.71	11.28	67.11	38.87	58.91	34.02	35.33	35.37	0.10		85	Heating designs provided
4907-AU78-6566-030	Foxhill-Det-OPP	House,Detached	94.26	0.17	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.92	11.85	66.92	40.88	61.93	33.98	41.20	42.54	3.13		82	Heating designs provided
4907-AU78-6566-031	Foxhill-Det-AS	House,Detached	94.26	0.17	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.91	11.79	66.84	40.73	61.63	33.91	40.94	42.28	3.16		82	Heating designs provided
4907-AU78-6566-032	Seaton-End-AS	House,EndTerrace	98.97	0.16	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm	0.15	Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	3	System 1	3	8	3.63	11.36	68.05	37.96	59.53	36.23	36.82	36.88	0.16		84	Heating designs provided
4907-AU78-6566-033	Seaton-Mid-OPP	House,MidTerrace	98.97	0.14	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm	0.15	Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	3	System 1	3	8	3.15	9.92	68.25	33.05	51.79	36.18	28.30	29.92	5.43		86	Heating designs provided
4907-AU78-6566-034	Seaton-End-OPP	House,EndTerrace	98.97	0.16	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm	0.15	Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	3	System 1	3	8	3.59	11.29	68.20	37.51	59.13	36.57	35.96	36.52	1.52		84	Heating designs provided
4907-AU78-6566-035	Seaton-End-AS	House,EndTerrace	98.97	0.16	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm	0.15	Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	3	System 1	3	8	3.61	11.36	68.22	37.69	59.53	36.68	36.30	36.87	1.55		84	Heating designs provided
4907-AU78-6566-036	Seaton-Mid-OPP	House,MidTerrace	98.97	0.14	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm	0.15	Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	3	System 1	3	8	3.17	9.92	68.04	33.30	51.79	35.69	28.83	29.92	3.65		86	Heating designs provided
4907-AU78-6566-037	Seaton-End-OPP	House,EndTerrace	98.97	0.16	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm	0.15	Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	3	System 1	3	8	3.59	11.29	68.20	37.51	59.13	36.57	35.96	36.52	1.52		84	Heating designs provided
4907-AU78-6566-038	Henbury-End-OPP	House,SemiDetached	93.90	0.16	0.22	125mm superglass superwall 36	0.08	600mm		Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.50	10.35	66.18	36.62	53.99	32.18	33.43	34.58	3.32		85	Heating designs provided
4907-AU78-6566-039	Carlton-Mid-AS	House,MidTerrace	79.06	0.14	0.22	125mm superglass superwall 36	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	180	1.39	Fully insulated primary pipework	3	System 1	3	8	3.33	9.99	66.67	34.97	52.01	32.76	28.19	29.10	3.12		86	Heating designs provided
4907-AU78-6566-040	Henbury-End-AS	House,SemiDetached	93.90	0.16	0.22	125mm superglass superwall 36	0.08	600mm		Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.49	10.31	66.15	36.51	53.75	32.08	33.24	34.37	3.31		85	Heating designs provided
4907-AU78-6566-041	Seaton-End-OPP	House,EndTerrace	98.97	0.16	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm	0.15	Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	3	System 1	3	8	3.56	11.19	68.19	37.24	58.60	36.45	35.48	36.06	1.60		84	Heating designs provided
4907-AU78-6566-042	Seaton-Mid-OPP	House,MidTerrace	98.97	0.14	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm	0.15	Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	3	System 1	3	8	3.13	9.83	68.16	32.80	51.30	36.06	27.84	29.48	5.56		86	Heating designs provided
4907-AU78-6566-043	Seaton-End-AS	House,EndTerrace	98.97	0.16	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm	0.15	Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	3	System 1	3	8	3.60	11.27	68.06	37.64	59.00	36.21	36.23	36.41	0.48		84	Heating designs provided
4907-AU78-6566-044	Seaton-End-OPP	House,EndTerrace	98.97	0.16	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm	0.15	Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	3	System 1	3	8	3.58	11.19	68.01	37.45	58.60	36.09	35.90	36.06	0.44		84	Heating designs provided
4907-AU78-6566-045	Seaton-Mid-OPP	House,MidTerrace	98.97	0.14	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm	0.15	Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	3	System 1	3	8	3.15	9.83	67.96	33.01	51.30	35.66	28.29	29.48	4.05		86	Heating designs provided
4907-AU78-6566-046	Seaton-End-AS	House,EndTerrace	98.97	0.16	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm	0.15	Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	3	System 1	3	8	3.60	11.27	68.06	37.64	59.00	36.21	36.23	36.41	0.48		84	Heating designs provided
4907-AU78-6566-047	Seaton-End-OPP	House,SemiDetached	98.97	0.16	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm	0.15	Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	3	System 1	3	8	3.58	11.19	68.01	37.45	58.60	36.09	35.90	36.06	0.44		84	Heating designs provided
4907-AU78-6566-048	Seaton-End-AS	House,SemiDetached	98.97	0.16	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm	0.15	Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	3	System 1	3	8	3.60	11.27	68.06	37.64	59.00	36.21	36.23	36.41	0.48		84	Heating designs provided
4907-AU78-6566-049	Henbury-End-OPP	House,SemiDetached	93.90	0.16	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.40	10.45	67.46	35.54	54.51	34.80	34.30	34.58	0.81		85	Heating designs provided
4907-AU78-6566-050	Henbury-Mid-AS	House,MidTerrace	93.90	0.14	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.04	9.31	67.35	31.87	48.40	34.15	28.05	29.16	3.81		87	Heating designs provided
4907-AU78-6566-051	Henbury-Mid-OPP	House,MidTerrace	93.90	0.14	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	2.98	9.31	67.99	31.16	48.40	35.63	28.12	29.16	3.58		87	Heating designs provided
4907-AU78-6566-052	Henbury-End-AS	House,SemiDetached	93.90	0.16	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.39	10.41	67.44	35.42	54.27	34.73	34.09	34.37	0.83		85	Heating designs provided
4907-AU78-6566-053	Carlton-End-OPP	House,EndTerrace	79.06	0.16	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	180	1.39	Fully insulated primary pipework	3	System 1	3	8	3.56	11.48	68.99	37.21	59.96	37.94	35.43	35.80	1.02		86	Heating designs provided
4907-AU78-6566-054	Carlton-Mid-AS	House,MidTerrace	79.06	0.14	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	180	1.39	Fully insulated primary pipework	3	System 1	3	8	3.15	10.09	68.78	33.07	52.55	37.07	27.86	29.10	4.26		87	Heating designs provided
4907-AU78-6566-055	Carlton-Mid-OPP	House,MidTerrace	79.06	0.14	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	180	1.39	Fully insulated primary pipework	3	System 1	3	8	3.15	10.09	68.78	33.07	52.55	37.07	27.86	29.10	4.26		87	Heating designs provided
4907-AU78-6566-056	Carlton-End-AS	House,EndTerrace	79.06	0.16	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	180	1.39	Fully insulated primary pipework	3	System 1	3	8	3.56	11.48	68.99	37.21	59.96	37.94	35.43	35.80	1.02		86	Heating designs provided
4907-AU78-6566-057	Henbury-End-OPP	House,SemiDetached	93.90	0.16	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.40	10.45	67.46	35.54	54.51	34.80	34.30	34.58	0.81		85	Heating designs provided
4907-AU78-6566-058	Henbury-Mid-AS	House,MidTerrace	93.90	0.14	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.04	9.31	67.35	31.87	48.40	34.15	28.05	29.16	3.81		87	Heating designs provided
4907-AU78-6566-059	Henbury-Mid-OPP	House,MidTerrace	93.90	0.14	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.04	9.31	67.35	31.87	48.40	34.15	28.05	29.16	3.81		87	Heating designs provided
4907-AU78-6566-060	Henbury-End-AS	House,SemiDetached	93.90	0.16	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.39	10.41	67.44	35.42	54.27	34.73	34.09	34.37	0.83		85	Heating designs provided
4907-AU78-6566-061	Carlton-Semi-OPP	House,SemiDetached	79.06	0.16	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	180	1.39	Fully insulated primary pipework	3	System 1	3	8	3.56	11.48	68.99	37.21	59.96	37.94	35.43	35.80	1.02		86	Heating designs provided
4907-AU78-6566-062	Carlton-Semi-AS	House,SemiDetached	79.06	0.16	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	180	1.39	Fully insulated primary pipework	3	System 1	3	8	3.53	11.38	68.98	36.97	59.47	37.83	34.99	35.37	1.06		86	Heating designs provided
4907-AU78-6566-063	Foxhill-Det-AS	House,Detached	94.26	0.17	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.85	11.94	67.76	40.04	62.44	35.88	42.28	42.54	0.61		84	Heating designs provided
4907-AU78-6566-064	Carlton-End-OPP	House,EndTerrace	79.06	0.16	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	180	1.39	Fully insulated primary pipework	3	System 1	3	8	3.53	11.38	68.98	36.97	59.47	37.83	34.99	35.37	1.06		86	Heating designs provided
4907-AU78-6566-065	Carlton-Mid-AS	House,MidTerrace	79.06	0.14	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	180	1.39	Fully insulated primary pipework	3	System 1	3	8	3.15	10.09	68.78	33.07	52.55	37.07	27.86	29.10	4.26		87	Heating designs provided
4907-AU78-6566-066	Carlton-Mid-OPP	House,MidTerrace	79.06	0.14	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	180	1.39	Fully insulated primary pipework	3	System 1	3	8	3.15	10.09	68.78	33.07	52.55	37.07	27.86	29.10	4.26		87	Heating designs provided
4907-AU78-6566-067	Carlton-End-AS	House,EndTerrace	79.06	0.16	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	180	1.39	Fully insulated primary pipework	3	System 1	3	8	3.56	11.48	68.99	37.21	59.96	37.94	35.43	35.80	1.02		86	Heating designs provided
4907-AU78-6566-068	Henbury-End-OPP	House,SemiDetached	93.90	0.16	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.39	10.41	67.44	35.42	54.27	34.73	34.09	34.37	0.83		85	Heating designs provided
4907-AU78-6566-069	Henbury-Mid-AS	House,MidTerrace	93.90	0.14	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.04	9.31	67.35	31.87	48.40	34.15	28.05	29.16	3.81		87	Heating designs provided
4907-AU78-6566-070	Henbury-End-AS	House,SemiDetached	93.90	0.16	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.40	10.45	67.46	35.54	54.51	34.80	34.30	34.58	0.81		85	Heating designs provided
4907-AU78-6566-071	Henbury-End-OPP	House,SemiDetached	93.90	0.16	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.36	10.54	68.12	35.16	54.98	36.05	33.72	34.99	3.61		86	Heating designs provided
4907-AU78-6566-072	Henbury-Mid-AS	House,MidTerrace	93.90	0.14	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.05	9.44	67.69	31.96	49.08	34.89	28.21	29.75	5.15		87	Heating designs provided
4907-AU78-6566-073	Henbury-Mid-OPP	House,MidTerrace	93.90	0.14	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.05	9.44	67.69	31.96	49.08	34.89	28.21	29.75	5.15		87	Heating designs provided
4907-AU78-6566-074	Henbury-End-AS	House,SemiDetached	93.90	0.16	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.31	10.58	68.71	34.57	55.22	37.39	34.01	35.20	3.38		86	Heating designs provided
4907-AU78-6566-075	Henbury-End-OPP	House,SemiDetached	93.90	0.16	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.36	10.54	68.12	35.16	54.98	36.05	33.72	34.99	3.61		86	Heating designs provided
4907-AU78-6566-076	Henbury-Mid-AS	House,MidTerrace	93.90	0.14	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.05	9.44	67.69	31.96	49.08	34.89	28.21	29.75	5.15		87	Heating designs provided
4907-AU78-6566-077	Henbury-Mid-OPP	House,MidTerrace	93.90	0.14	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.05	9.44	67.69	31.96	49.08	34.89	28.21	29.75	5.15		87	Heating designs provided
4907-AU78-6566-078	Henbury-End-AS	House,SemiDetached	93.90	0.16	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.38	10.58	68.05	35.28	55.22	36.11	33.94	35.20	3.58		86	Heating designs provided
4907-AU78-6566-079	Dartmouth-Semi-OPP	House,SemiDetached	121.59	0.16	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA06EV3	Time and temperature zone control by arrangement	45	Radiators only	250	2.1	Fully insulated primary pipework	4	System 1	4	8	3.84	10.41	63.11	40.22	54.41	26.08	35.38	35.55	0.49		82	Heating designs provided
4907-AU78-6566-080	Dartmouth-Semi-AS	House,SemiDetached	121.59	0.16	0.20	38mm Gyproc Thermaline PIR	0.08	600mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA06EV3	Time and temperature zone control by arrangement	45	Radiators only	250	2.1	Fully insulated primary pipework	4	System 1	4	8	3.88	10.56	63.26	40.63	55.25	26.47	36.10	36.26	0.44		82	Heating designs provided
4907-AU78-6566-081	Seaton-End-OPP	House,SemiDetached	98.97	0.16	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm	0.15	Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	3	System 1	3	8	3.58	11.19	68.01	37.45	58.60	36.09	35.90	36.06	0.44		84	Heating designs provided
4907-AU78-6566-082	Seaton-End-AS	House,SemiDetached	98.97	0.16	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm	0.15	Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	3	System 1	3	8	3.60	11.27	68.06	37.64	59.00	36.21	36.23	36.41	0.48		84	Heating designs provided
4907-AU78-6566-083	Dartmouth-End-OPP	House,EndTerrace	121.59	0.16	0.22	125mm superglass superwall 36	0.08	600mm		Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA06EV3	Time and temperature zone control by arrangement	45	Radiators only	250	2.1	Fully insulated primary pipework	4	System 1	4	8	3.99	10.42	61.71	41.92	54.49	23.06	34.70	36.02	3.66		81	Heating designs provided
4907-AU78-6566-084	Dartmouth-Mid-AS	House,MidTerrace	121.59	0.14	0.22	125mm superglass superwall 36	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA06EV3	Time and temperature zone control by arrangement	45	Radiators only	250	2.1	Fully insulated primary pipework	4	System 1	4	8	3.64	9.07	59.87	38.33	47.26	18.89	28.99	29.52	1.79		83	Heating designs provided
4907-AU78-6566-085	Dartmouth-Mid-OPP	House,MidTerrace	121.59	0.14	0.22	125mm superglass superwall 36	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA06EV3	Time and temperature zone control by arrangement	45	Radiators only	250	2.1	Fully insulated primary pipework	4	System 1	4	8	3.64	9.07	59.87	38.33	47.26	18.89	28.99	29.52	1.79		83	Heating designs provided
4907-AU78-6566-086	Dartmouth-End-AS	House,EndTerrace	121.59	0.16	0.22	125mm superglass superwall 36	0.08	600mm		Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA06EV3	Time and temperature zone control by arrangement	45	Radiators only	250	2.1	Fully insulated primary pipework	4	System 1	4	8	3.99	10.42	61.71	41.92	54.49	23.06	34.70	36.02	3.66		81	Heating designs provided
4907-AU78-6566-087	Dartmouth-End-OPP	House,EndTerrace	121.59	0.16	0.22	125mm superglass superwall 36	0.08	600mm		Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA06EV3	Time and temperature zone control by arrangement	45	Radiators only	250	2.1	Fully insulated primary pipework	4	System 1	4	8	3.99	10.42	61.71	41.92	54.49	23.06	34.70	36.02	3.66		81	Heating designs provided
4907-AU78-6566-088	Dartmouth-Mid-AS	House,MidTerrace	121.59	0.14	0.22	125mm superglass superwall 36	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA06EV3	Time and temperature zone control by arrangement	45	Radiators only	250	2.1	Fully insulated primary pipework	4	System 1	4	8	3.64	9.07	59.87	38.33	47.26	18.89	28.99	29.52	1.79		83	Heating designs provided
4907-AU78-6566-089	Dartmouth-Mid-OPP	House,MidTerrace	121.59	0.14	0.22	125mm superglass superwall 36	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA06EV3	Time and temperature zone control by arrangement	45	Radiators only	250	2.1	Fully insulated primary pipework	4	System 1	4	8	3.64	9.07	59.87	38.33	47.26	18.89	28.99	29.52	1.79		83	Heating designs provided
4907-AU78-6566-090	Dartmouth-End-AS	House,EndTerrace	121.59	0.16	0.22	125mm superglass superwall 36	0.08	600mm		Triple Glazed	1	0.38	1.10		5.01	Daikin Europe NV - EDLA06EV3	Time and temperature zone control by arrangement	45	Radiators only	250	2.1	Fully insulated primary pipework	4	System 1	4	8	3.99	10.42	61.71	41.92	54.49	23.06	34.70	36.02	3.66		81	Heating designs provided
4907-AU78-6566-091	Foxhill-Det-AS	House,Detached	94.26	0.17	0.18	90mm cellotex with 10mm residual cavity	0.10	450mm		Std Double Glazed Spec	1.3	0.41	1.10		5.01	Daikin Europe NV - EDLA04EV3	Time and temperature zone control by arrangement	45	Radiators only	210	1.5	Fully insulated primary pipework	4	System 1	4	8	3.94	11.96	67.06	41.07	62.51	34.30	41.48	43.04	3.62		82	Heating designs provided

AES Sustainability Consultants

U VALUES

Element	Description	U Value Achieved
External Wall - Full Fill	12.5mm Plasterboard on dabs, 100mm AAC Block (0.015 W/mK), 90mm Celotex Thermaclass 21 (0.021 W/mK), 10mm Low-E Cavity, 102.5mm Brick Outer	0.18 W/m^{2}K
External Wall - Full Fill	12.5mm Plasterboard on dabs, 100mm AAC Block (0.015 W/mK), 125mm Superglass 36 (0.036 W/mK), 102.5mm Brick Outer	0.22 W/m^{2}K
External Wall - Full Fill	12.5mm Plasterboard, 25mm Gyproc Thermaline PIR (0.022 W/mK) on dabs, 100mm AAC Block (0.015 W/mK), 100mm Superglass 36 (0.036 W/mK),102.5mm Brick Outer	0.20 W/m^{2}K
External Wall - Full Fill - Apartments	12.5mm Plasterboard on dabs, 100mm AAC Block (0.015 W/mK), 90mm Celotex Thermaclass 21 (0.021 W/mK), 10mm Low-E Cavity, 102.5mm Brick Outer	0.18 W/m^{2}K
External Wall - Dormer Cheek	Prefabricated with a performance no greater than:	0.35 W/m^{2}K
External wall - Gable Spandrel Panel	SIG Roofspace or similar. Prefabricated to achieve no greater than:	0.31 W/m^{2}K
Wall to Corridor / Stairwell	12.5mm Plasterboard on dabs, 100mm Block (0.43 W/mK), 100mm insulation (0.036 W/mK), 100mm Block (0.43 W/mK), 12.5mm Plasterboard	0.25 / 0.22 W/m^{2}K
Ground Floor - Beam & Block	100mm Block (0.51 W/mK), 160mm Insulation (0.036 W/mK), 65mm Screed	0.14 - 0.17 W/m^{2}K
Exposed Floor - E-FC-4	12.5mm Plasterboard, 130mm Insulation (0.037 W/mK), 150mm Concrete Plank, 69mm Screed	0.25 W/m^{2}K
Exposed Floor - E-FC-4 (Plot 13)	12.5mm Plasterboard, 100mm Insulation (0.019 W/mK), 150mm Concrete Plank, 69mm Screed	0.17 W/m^{2}K
External Roof - Plane	12.5mm Plasterboard, 100mm Mineral Wool (λ=0.044 W/mK), 350-450mm Mineral Wool Quilt Cross-laid	0.08 - 0.10 W/m^{2}K
External Roof - Sloping	Prefabricated Casette by Roofspace or similar - to achieve a value no greater than:	0.15 W/m^{2}K
External Roof - Bay Roof	Prefabricated with a performance no greater than:	0.25 W/m^{2}K
External Roof - Dormer	Prefabricated with a performance no greater than:	0.21 W/m^{2}K

PSI VALUES (Plots 1-48, 71-78, 81-91)

Junction with External Wall	Junction Detail	Specification	Junction reference
E2	Other lintels (including other steel lintels)	Recognised Construction Details	E2 - RCD E2-04 (Corridor)
E2	Other lintels (including other steel lintels)	Keystone Calculation	E2 - Hi-therm
E3	Sill	Recognised Construction Details	E3 - RCD E3-01
E4	Jamb	Recognised Construction Details	E4 - RCD E4-01
E5	Suspended beam and block floor - Insulation above slab	Recognised Construction Details	E5 - RCD E5-02
E6	Intermediate timber floor within a dwelling	Recognised Construction Details	E6 - RCD E6-01
E6	Intermediate timber floor within a dwelling	**ASSUMED**	**E6 - ASSUMED (Spandrel)**
E7	Intermediate Floor between dwellings (in a block of flats)	Recognised Construction Details	E7 - RCD E7-01
E9	Balcony between dwellings, wall insulation continuous	Default	Default
E10	Eaves (insulation at Ceiling Level)	Recognised Construction Details	E10 - RCD E10-01
E11	Eaves (insulation at Rafter Level)	Recognised Construction Details	E11 - RCD E11-01
E12	Gable (insulation at Ceiling Level)	Recognised Construction Details	E12 - RCD E12-01
E13	Gable (insulation at Rafter Level)	Recognised Construction Details	E13 - RCD E13-01
E14	Flat roof	Default	Default
E16	Corner (normal)	Recognised Construction Details	E16 - RCD E16-01
E17	Corner (inverted - Internal area greater than External area)	Recognised Construction Details	E17 - RCD E17-01
E18	Party Wall between dwellings	Recognised Construction Details	E18 - RCD E18-01
E24	Eaves (insulation at ceiling level - inverted)	Default	Default
E25	Staggered party wall between Dwellings	Recognised Construction Details	E25 - RCD E25-02
Junction with Roof	**Junction Detail**	**Specification**	**Junction reference**
R1	Head of roof window	Calculated	R1 - IG-R01-FLAT Dormer
R2	Sill of roof window	Default	Default
R3	Jamb of roof window	Calculated	R3 - IG-R03-DORMER
R4	Ridge (vaulted ceiling)	Calculated	R4 - Calculated
R7	Flat ceiling (inverted)	Calculated	R7 - Calculated
R9	Roof to wall (flat ceiling)	Calculated	R9 - IG-R09-FLAT Dormer
Junction with Party Wall	**Junction Detail**	**Specification**	**Junction reference**
P1	Ground Floor	Recognised Construction Details	P1 - RCD MPW-P1-03
P2	Intermediate Floor within a dwelling	Default	Default
P3	Intermediate Floor between dwellings (in a block of flats)	Default	Default
P4	Roof (Insulation at Ceiling Level)	Recognised Construction Details	P4 - RCD MPW P4-01
P5	Roof (Insulation at Rafter Level)	Recognised Construction Details	P5 - RCD P5-01

PSI VALUES (Plots 49-70, 79,80)

Junction with External Wall	Junction Detail	Specification	Junction reference	
E2	Other lintels (including other steel lintels)	IG Calculation	E2 - IG Calculation	0.105
E3	Sill	AES Calculation	E3 - AES Calculation	0.041
E4	Jamb	AES Calculation	E4 - AES Calculation	0.016
E5	Suspended beam and block floor - Insulation above slab	AES Calculation	E5 - AES Calculation	0.041
E6	Intermediate timber floor within a dwelling	AES Calculation	E6 - AES Calculation	0.034
E10	Eaves (insulation at Ceiling Level)	AES Calculation	E10 - AES Calculation	0.065
E12	Gable (insulation at Ceiling Level)	AES Calculation	E12 - AES Calculation	0.052
E14	Flat roof	Default	Default	
E16	Corner (normal)	AES Calculation	E16 - AES Calculation	0.035
E17	Corner (inverted - Internal area greater than External area)	AES Calculation	E17 - AES Calculation	-0.079
E18	Party Wall between dwellings	AES Calculation	E18 - AES Calculation	0.038
E24	Eaves (insulation at ceiling level - inverted)	Default	Default	
Junction with Party Wall	**Junction Detail**	**Specification**	**Junction reference**	
P1	Ground Floor	AES Calculation	P1 - AES Calculation	0.057
P2	Intermediate Floor within a dwelling	Default	Default	
P4	Roof (Insulation at Ceiling Level)	AES Calculation	P4 - AES Calculation	0.04

PARTY WALLS

Party Wall Detail	Plots specified
E-WM-23	All attached plots

PARTY FLOORS

Party Floor Detail	Plots specified
E-FC-4/5	Maisonettes & Apartments

All Party Wall thermal bypasses have been assumed to be fully filled and sealed. As per Part L1a 2013 regulations 'Where outside air is able to flow into the party wall cavity a cold zone is created which results in heat flux through the wall sections on either side.'

'The air movements involved can be significant and, if no steps are taken to restrict flows, the resulting heat losses can be large.'

'Fully filling the cavity may have implications for the sound transmission through party walls. Developers who follow this route must satisfy the BCB that the requirements of Part E will be satisfied, either by adopting a full fill detail under the Robust Details Scheme, or through specific site testing.'

Additional Aspects

- Standard Electricity Tariff assumed
- No Secondary Heating
- Low Energy Lighting with all internal light fittings achieving a minimum efficacy of 75 lumens/W
- Showers to achieve flow rates no greater than 8ltrs/min **(ASSUMED)**

If construction deviates from the specification above in any way whatsoever, please check with AES Sustainability Consultants immediately to ensure compliance is still achieved. AES Sustainability Consultants cannot be held responsible for non compliance if the specification that the calculation is based upon is not followed.

Working in partnership to ensure the smooth delivery of your test results and EPCs

We aim to make the process of delivering your air tests, sound tests and EPCs easy and hassle free. To ensure that this service runs as efficiently as possible, please follow the information below:

14 days before plots due to be completed:

Contact **Stewart Boyce** on **01884 210329** or **07712 304040** or email **testing@aessc.co.uk** to book in air leakage and / or sound testing.

Provide the following details at the time of booking:

- Development name / phase number
- Location
- Sat Nav postcode
- Plot number/s requiring testing
- Site contact name and number in case of queries

What happens next:

The air test / sound test results will be uploaded by the AES Compliance & Testing representative overnight to the Admin Team. Assuming that all the necessary 'Built to Spec' confirmations have been provided to AES in good time by the Technical Manager, the Admin Team will assign the EPCs to a member of the AES team for completion.

Once these have been lodged, the test certificate(s) and EPC(s) will be issued to the relevant Technical Manager (and others by request), normally within 24 hours of the test results being received.

If you have CML booked at a specific time and you require the test certificate(s) and EPC(s)

DO YOU HAVE PLOTS ON SITE THAT NEED TO COMPLY WITH CfSH, HQM or BREEAM?

Please speak to Stewart or the Admin Team to find out what the specific requirements are for your

Air Permeability Pre-Test Checklist

Location / item to be checked before air testing is carried out:	Checked?
Dry lining carried out in accordance with manufacturers recommendations - perimeter bead of adhesive and continuous bead around service entry.	
Skirting / floor / plaster junctions to walls - decorators caulk or mastic to prevent air movement from floor void.	
Recessed ceiling spotlights - use either sealed fitting or propriety covers.	
Loft hatch - check draught seal and hatch for distortion, especially for pre-formed plastic units.	
Service entries (oil, gas, water and electric) - check sealing at entry points particularly where leakage could occur from external meter cabinets.	
Perimeter of external door frames.	
Perimeter of window openings.	
Soil and vent pipe boxing taken into ceiling void - ensure seal where boxing exits living spaces.	
Gaps around sockets, light switches, room stats etc., particularly where external walls are dry lined.	
Pipes and cables passing through ceiling - mastic or foam seal around thoroughly.	
Waste and service pipe penetrations - hot and cold-water storage vessels.	
All extract fans - ensure sealed where duct penetrates external wall / ceiling lining.	
TV / satellite cable, security, fire alarm installations - penetrations and entry point.	
Tumble dryer vents.	
Gaps around wall mounted heaters / boiler flues / condensate drain.	
All plumbing should be fully installed and all traps filled with water in basins, baths, showers and WCs. Bath panels should be fully sealed with mastic.	

2x 240v mains electrical sockets within 15m of the fan set up made available – our engineers do not carry generators.	
Please note:	
Whilst we would prefer not to have other trades within the building during the test, people can stay in the building but they will not be able to leave whilst the test is in progress.	
Please have a competent member of staff available on the test day to modify and / or seal any further areas that we identify as requiring remedial work.	
If we arrive on site and are delayed due to the plot/s not being prepared adequately, or the items on this checklist have not been completed prior to our arrival, we reserve the right to cancel the test/s and charge an aborted visit fee.	

Sound Pre-Test Checklist

Location / item to be checked before sound testing is carried out:	Checked?
Rooms available in pairs either vertically separated by the party floor, or horizontally separated by the party wall.	
Rooms unfurnished.	
Wall and ceiling surfaces complete and skimmed.	
Skirting boards, architraves and covings fitted.	
Windows fully fitted and closable with working trickle vents.	
Internal doors hung.	
External doors fully fitted with threshold and perimeter seals.	
Kitchen units in place.	
Electrical sockets, light fittings and switches in place.	
Down-lighters fully fitted.	
Smoke alarms silenced for the duration of testing.	
Please note:	
2x 240v mains electrical sockets within 15m of the test equipment up made available.	
We will use our discretion to select rooms for testing unless specific arrangements have been made with the building control officer.	
All trades should be suspended for the duration of the testing (about 2 to 3 hours for a typical set of tests), or workmen sent to another part of the site where their work will not affect the test area.	
Soft floor coverings, such as carpets and underlays, are not permitted for impact sound testing and should therefore NOT be fitted at the time of testing.	

If construction deviates from the specification above in any way whatsoever, please check with AES Sustainability Consultants immediately to ensure compliance is still achieved. AES Sustainability Consultants cannot be held responsible for non compliance if the specification that the calculation is based upon is not followed.