

MLDC Lampwick Energy Statement

PROJECT REF	MLLW-AME-XX-XX-RP-A-0008
DATE	9 th July 2021
REVISION	C01
AUTHOR	J Bailey



CARBONCONSULTANTS



Contents

Contents	2
1.0 Introduction	3
2.0 Input Data	3
2.1 Fabric Data	3
2.2 Building Services Input Data	4
2.3 Air Permeability	4
3.0 Results	4
3.1 SAP Calculations	4
3.2 Compliance – Building Regulations	5
3.3 Compliance – Manchester City Council Core Strategy	5
4.0 Appendices	5
Appendix A	6
Appendix B	7

1.0 Introduction

This report has been compiled to demonstrate how compliance with SAP 2012 has been achieved.

The content of the report includes; the input data used (including fabric data, building services data and air permeability), impact on internal partitioning and the results (for both block compliance and individual apartments).

All SAP calculations have been carried out by Eco-Cert.

2.0 Input Data

The strategy for the reduction of carbon emissions was to adopt a fabric first approach to energy efficiency, then making use of high-efficiency fixed services to meet the required targets. This section details the specification for the installation (for both fabric and fixed services) which comprises the input data used within the calculations.

2.1 Fabric Data

The fabric data used within the build is listed below, which has been confirmed by Sisk Ltd and their various sub-contractors.

- Flat Roof U-Value = 0.11 W/m²K
- Sawtooth Roof U-Value = 0.11 W/m²K
- Ceiling to sawtooth void
U-Value (sheltered) = 0.1 W/m²K
- Ceiling to sawtooth void
U-Value (cos corrected) = 0.17 W/m²K
- External Wall U-Value = 0.14 W/m²K
- Wall to sawtooth void
U-Value (sheltered) = 0.1 W/m²K
- Bin Store/Chute Wall U-Value = 0.22 W/m²K
- Lift Shaft Wall U-Value = 0.22 W/m²K
- Ground Floor U-Value = 0.22 W/m²K

- Exposed Soffit/Floor U-Value = 0.11 W/m²K
- Windows (whole unit) U-Value = 1.2 W/m²K
- Windows G-Value = 0.54

Party Wall U-Value (Apt to Apt) = 0.0 W/m²K

Party Wall U-Value (Apt to corridor) = 0.0 W/m²K

2.2 Building Services Input Data

The following information has been inputted in to the calculations based on the as-installed equipment.

- MVHR
 - Envirovent EnergiSava 250 (FAI & EXH ductwork insulated)
 - Envirovent EnergiSava 300 (FAI & EXH ductwork insulated) for Duplex
- Hot Water Cylinders
 - OSO Direct Hot Water Cylinders
 - 1 Bed -120 Litre, losses of 0.96kWhr/day
 - 2 Bed -150 Litre, losses of 1.13kWhr/day
 - 3 Bed -210 Litre, losses of 1.34kWhr/day
- Heating
 - Electric panel heaters c/w appliance programmer and thermostats
- Lighting
 - Low energy lighting

2.3 Air Permeability

Each apartment/duplex was air tested and to specified requirement of 3.0 m³/(h.m²) @ 50 Pa. For results please refer to the air test certificates by Energy360

3.0 Results

3.1 SAP Calculations

As eluded to earlier in the report, each of the 213 dwelling have been tested under SAP 2012 for Building Regulations 2013 compliance, using the above input data in line with the Final Construction/As-fitted drawings for the relevant parties. The building is then assessed under a block compliance worksheet (incorporating the emission from each dwelling) to demonstrate compliance.

The blocks have also been assessed under SAP 2009 (Building Regulations 2010) to demonstrate the 15% improvement of the DER against the TER; required to comply with the target set out in the 'Manchester City Council Core Strategy Development Plan'.

3.2 Compliance – Building Regulations

The development has been assessed under Building Regulations 2013 (SAP 2012). The Building demonstrates a pass in the Energy (DER) and fabric (DFEE) criteria as shown below.

Improvement DER/TER (2012) = 7.16%

Improvement DFEE/TFEE (2012) = 19.5%

The block compliance sheets can be found in Appendix A.

3.3 Compliance – Manchester City Council Core Strategy

The development has also been assessed under Building Regulations 2010 (SAP 2009). The development demonstrates compliance with the 15% improvement target to meet the planning conditions as detailed below:-

MLDC Lampwick = 21.43%

The block compliance sheet can be found in Appendix B.

4.0 Appendices

Appendix A

As-Built SAP 2012 Calculation Block Compliance Sheets

Appendix B

AS-Built SAP 2009 Calculation Block Compliance Sheet

Appendix A

As-Built SAP 2012 Calculation Block Compliance Sheets



Block Compliance WorkSheet: Block

User Details

Assessor Name: James Mcglashan **Stroma Number:** STRO000976
Software Name: Stroma FSAP **Software Version:** Version: 1.0.5.41

Calculation Details

Dwelling	DER	TER	DFEE	TFEE	TFA
Apt 001	19.5	20.98	28.9	35.5	93.59
Apt 002	22.87	24.85	29.4	35.5	51.83
Apt 003	30.46	30.66	43	51.3	45.24
Apt 004	27.85	27.83	43.7	54.2	77.13
Apt 005	27.25	28.64	38.1	47.8	50.51
Apt 006	24.69	25.97	36.8	46.4	71.17
Apt 007	27.65	27.91	41.8	52.9	71.17
Apt 008	22.76	24.07	31.2	40	71.17
Apt 009	23.33	24.64	33	41.9	71.17
Apt 010	23.25	25.52	30.1	37.1	50.51
Apt 011	24.22	25.56	30.8	37.2	50.51
Apt 012	17.26	19.61	24.7	31	93.59
Apt 013	19.17	22.27	20.8	26.8	51.83
Apt 014	23.63	26.38	29.1	36.9	45.24
Apt 015	19.42	22.3	27.4	35.8	77.13
Apt 016	20.32	23.31	23.1	29.9	50.51
Apt 017	18.08	20.82	22.4	29.3	71.17
Apt 018	18.79	22.19	24.8	33.8	71.17
Apt 019	17.7	19.96	19.9	26.1	71.17
Apt 020	16.97	18.65	17.3	21.6	71.17
Apt 021	18.91	20.87	16.8	20.9	50.51
Apt 022	18.8	20.88	16.7	21	50.51
Apt 023	17.75	19.61	24.9	31	93.59
Apt 024	19.77	22.27	21.3	26.8	51.83
Apt 025	21.77	24.1	24	29.1	45.24
Apt 026	20.19	22.3	27.8	35.8	77.13

Block Compliance WorkSheet: BlockCont...



Dwelling	DER	TER	DFEE	TFEE	TFA
Apt 027	20.07	23.31	23	29.9	50.51
Apt 028	18.19	20.82	22.5	29.3	71.17
Apt 029	19.51	22.26	25.4	34.1	71.17
Apt 030	17.74	19.96	19.9	26.1	71.17
Apt 031	16.91	18.65	17.2	21.6	71.17
Apt 032	18.7	20.87	16.6	20.9	50.51
Apt 033	19	20.88	16.9	21	50.51
Apt 034	23.03	25.06	36.9	49.1	93.59
Apt 035	19.81	22.27	21.3	26.8	51.83
Apt 036	23.46	26.38	29	36.9	45.24
Apt 037	19.9	22.3	27.7	35.8	77.13
Apt 038	20.11	23.31	23	29.9	50.51
Apt 039 Duplex 1	21.51	22.53	39.6	49.3	138.48
Apt 040 Duplex 3	22.53	24.31	41.3	54.1	132.24
Apt 041	17.76	19.96	19.9	26.1	71.17
Apt 042	16.95	18.65	17.2	21.6	71.17
Apt 043	18.73	20.87	16.6	20.9	50.51
Apt 044	18.98	20.88	16.9	21	50.51
Apt 045	20.35	23.27	23.6	30	51.83
Apt 046	25.03	26.78	31.5	39.6	45.24
Apt 047	20.1	22.3	27.8	35.8	77.13
Apt 048 Duplex 4	22.89	23.94	37.3	47.3	99.59
Apt 049	26.84	28.11	40.3	53.6	71.17
Apt 050	24.66	25.92	36.8	46.2	71.17
Apt 051	18.68	20.87	16.5	20.9	50.51
Apt 052	18.69	20.88	16.6	21	50.51
Apt 053	21.16	23.67	25.5	32.8	51.83
Apt 054	22.35	24.44	24.2	30.1	45.24
Apt 055 Duplex 2	25.5	25.65	46.2	59.2	133.61
Apt 056	20.1	22.57	21.1	27	50.51

Block Compliance WorkSheet: BlockCont...

Dwelling	DER	TER	DFEE	TFEE	TFA
Apt 057	27.69	29.57	39.2	52.4	51.83
Apt 058	22.5	24.44	24.4	30.1	45.24
Apt 059	20.16	22.57	21.2	27	50.51
Apt 060	31.53	29.56	50.2	53	56.72
Apt 061	29.19	26.31	48.7	50.1	80.82
Apt 062	30.33	27.78	50.3	52.5	71.17
Apt 063	30.64	27.78	50.4	52.5	71.17
Apt 064	21.38	24.19	28.3	32.5	50.51
Apt 065	30.49	27.78	50.3	52.5	71.17
Apt 066	30.57	27.78	50.4	52.5	71.17
Apt 067	30.04	27.06	49.1	50	71.17
Apt 068	22.03	21.99	33.1	38.9	93.59
Apt 069	24.52	26.31	33.7	40.8	52.94
Apt 070	22.86	25.07	28.4	35.5	50.51
Apt 071	25.21	25.47	36.9	44.7	71.17
Apt 072	24.82	25.47	36.7	44.7	71.17
Apt 073	27.44	28.14	38	46.1	50.51
Apt 074	24.97	25.47	36.8	44.7	71.17
Apt 075	25.16	25.47	36.9	44.7	71.17
Apt 076	24.66	25.5	36.7	44.8	71.17
Apt 077	28.55	28.31	44.1	54.2	71.17
Apt 078	25.55	25.36	37	44.4	71.17
Apt 079	18.57	19.91	21.8	25.9	71.17
Apt 080	16.93	18.65	17.2	21.6	71.17
Apt 081	17.04	18.65	17.3	21.6	71.17
Apt 082	18.88	20.87	16.8	20.9	50.51
Apt 083	17.18	18.65	17.5	21.6	71.17
Apt 084	17.12	18.65	17.4	21.6	71.17
Apt 085	18.07	19.56	22.5	27.4	80.82
Apt 086	21.25	23.55	24.7	30.7	50.51

Block Compliance WorkSheet: BlockCont...

Dwelling	DER	TER	DFEE	TFEE	TFA
Apt 087	17.44	19.45	24.4	30.4	93.59
Apt 088	20.14	23.16	23.5	30.2	52.94
Apt 089	18.97	20.88	16.9	21	50.51
Apt 090	18.48	20.82	23.2	29.3	71.17
Apt 091	18.67	20.82	23.3	29.3	71.17
Apt 092	20.56	23.31	23.7	29.9	50.51
Apt 093	18.78	20.82	23.4	29.3	71.17
Apt 094	18.68	20.82	23.3	29.3	71.17
Apt 095	18.8	20.85	23.4	29.3	71.17
Apt 096	19.98	22.26	26.7	34.1	71.17
Apt 097	18.31	20.03	21.2	26.3	71.17
Apt 098	18.48	19.91	21.7	25.9	71.17
Apt 099	17.18	18.65	17.5	21.6	71.17
Apt 100	17.09	18.65	17.4	21.6	71.17
Apt 101	18.8	20.87	16.7	20.9	50.51
Apt 102	17.12	18.65	17.4	21.6	71.17
Apt 103	17.03	18.65	17.3	21.6	71.17
Apt 104	18.1	19.56	22.6	27.4	80.82
Apt 105	21.74	23.55	25	30.7	50.51
Apt 106	17.86	19.45	24.6	30.4	93.59
Apt 107	20.57	23.16	23.8	30.2	52.94
Apt 108	18.96	20.88	16.9	21	50.51
Apt 109	18.52	20.82	23.2	29.3	71.17
Apt 110	18.62	20.82	23.2	29.3	71.17
Apt 111	20.51	23.31	23.7	29.9	50.51
Apt 112	18.6	20.82	23.2	29.3	71.17
Apt 113	18.21	20.82	23	29.3	71.17
Apt 114	18.72	20.85	23.4	29.3	71.17
Apt 115	20.26	22.26	26.8	34.1	71.17
Apt 116	18.42	20.03	21.3	26.3	71.17

Block Compliance WorkSheet: BlockCont...

Dwelling	DER	TER	DFEE	TFEE	TFA
Apt 117	18.49	19.91	21.7	25.9	71.17
Apt 118	17.13	18.65	17.4	21.6	71.17
Apt 119	16.81	18.65	17.1	21.6	71.17
Apt 120	18.93	20.87	16.8	20.9	50.51
Apt 121	17.04	18.65	17.3	21.6	71.17
Apt 122	16.97	18.65	17.2	21.6	71.17
Apt 123	17.79	19.56	22.4	27.4	80.82
Apt 124	21.29	23.55	24.7	30.7	50.51
Apt 125	23.67	24.9	36.8	48.5	93.59
Apt 126	20.35	23.16	23.7	30.2	52.94
Apt 127	18.97	20.88	16.9	21	50.51
Apt 128	18.39	20.82	23.1	29.3	71.17
Apt 129	21.76	23.16	30.2	37.1	71.17
Apt 130	20.31	23.31	23.5	29.9	50.51
Apt 131	18.31	20.82	23	29.3	71.17
Apt 132	18.6	20.82	23.2	29.3	71.17
Apt 133	18.7	20.85	23.4	29.3	71.17
Apt 134	19.78	22.26	26.5	34.1	71.17
Apt 135	18.12	20.03	21.1	26.3	71.17
Apt 136	18.5	19.91	21.7	25.9	71.17
Apt 137	17.06	18.65	17.4	21.6	71.17
Apt 138	17.01	18.65	17.3	21.6	71.17
Apt 139	19.25	21.09	16.8	20.9	50.51
Apt 140	17.14	18.65	17.4	21.6	71.17
Apt 141	17.06	18.65	17.4	21.6	71.17
Apt 142	17.84	19.56	22.4	27.4	80.82
Apt 143	21.55	23.55	24.9	30.7	50.51
Apt 144	20.31	21.54	26.9	32.6	71.75
Apt 145	18.94	20.88	16.9	21	50.51
Apt 146	18.63	20.82	23.3	29.3	71.17

Block Compliance WorkSheet: BlockCont...



Dwelling	DER	TER	DFEE	TFEE	TFA
Apt 147	18.68	20.82	23.3	29.3	71.17
Apt 148	20.75	23.31	23.8	29.9	50.51
Apt 149	18.68	20.82	23.3	29.3	71.17
Apt 150	18.55	20.82	23.2	29.3	71.17
Apt 151	18.69	20.85	23.4	29.3	71.17
Apt 152	19.96	22.26	26.6	34.1	71.17
Apt 153	18.25	20.03	21.2	26.3	71.17
Apt 154	18.57	19.91	21.8	25.9	71.17
Apt 155	17.13	18.65	17.4	21.6	71.17
Apt 156	17.19	18.65	17.5	21.6	71.17
Apt 157	19.01	20.87	16.9	20.9	50.51
Apt 158	16.93	18.65	17.2	21.6	71.17
Apt 159	17.12	18.65	17.4	21.6	71.17
Apt 160	17.88	19.56	22.4	27.4	80.82
Apt 161	21.59	23.55	24.9	30.7	50.51
Apt 162	20.85	21.75	28.2	34.3	71.75
Apt 163	19.12	20.97	17.5	21.3	50.51
Apt 164	18.13	20.82	22.9	29.3	71.17
Apt 165	18.25	20.82	23	29.3	71.17
Apt 166	20.95	23.43	24.5	30.3	50.51
Apt 167	18.54	20.82	23.2	29.3	71.17
Apt 168	18.73	20.82	23.3	29.3	71.17
Apt 169	18.58	20.85	23.3	29.3	71.17
Apt 170	20.06	22.26	26.7	34.1	71.17
Apt 171	18.35	20.03	21.2	26.3	71.17
Apt 172	18.6	19.91	21.8	25.9	71.17
Apt 173	17.18	18.65	17.5	21.6	71.17
Apt 174	17.13	18.65	17.4	21.6	71.17
Apt 175	19.06	20.96	17.4	21.3	50.51
Apt 176	17.07	18.65	17.4	21.6	71.17

Block Compliance WorkSheet: BlockCont...



Dwelling	DER	TER	DFEE	TFEE	TFA
Apt 177	17.1	18.65	17.4	21.6	71.17
Apt 178	17.74	19.56	22.3	27.4	80.82
Apt 179	21.71	23.55	25	30.7	50.51
Apt 180	20.34	21.54	26.9	32.6	71.75
Apt 181	18.91	20.88	16.8	21	50.51
Apt 182	18.54	20.82	23.2	29.3	71.17
Apt 183	18.54	20.82	23.2	29.3	71.17
Apt 184	20.73	23.31	23.8	29.9	50.51
Apt 185	25.17	25.92	37.1	46.2	71.17
Apt 186	25.25	25.92	37.1	46.2	71.17
Apt 187	25.16	25.94	37.1	46.3	71.17
Apt 188	26.63	28.11	40.2	53.6	71.17
Apt 189	27.07	28.24	40.9	54	71.17
Apt 190	24.31	25.45	34.8	44.6	71.17
Apt 191	25.4	25.92	37.2	46.2	71.17
Apt 192	21.76	23.57	30.1	38.4	71.17
Apt 193	18.97	20.87	16.9	20.9	50.51
Apt 194	16.98	18.65	17.3	21.6	71.17
Apt 195	17	18.65	17.3	21.6	71.17
Apt 196	17.9	19.56	22.4	27.4	80.82
Apt 197	21.43	23.55	24.8	30.7	50.51
Apt 198	20.61	21.71	27.9	34.2	71.75
Apt 199	18.99	20.88	16.9	21	50.51
Apt 200	18.62	20.82	23.2	29.3	71.17
Apt 201	20.24	22.26	26.8	34.1	71.17
Apt 202	18.02	19.91	20.5	25.9	71.17
Apt 203	17.15	18.65	17.4	21.6	71.17
Apt 204	17.97	19.56	22.5	27.4	80.82
Apt 205	21.64	23.55	24.9	30.7	50.51
Apt 206	27.88	28.06	42.5	55	71.75

Block Compliance WorkSheet: BlockCont...



Dwelling	DER	TER	DFEE	TFEE	TFA
Apt 207	22.75	23.72	27.5	31	50.51
Apt 208	25.48	25.92	37.2	46.2	71.17
Apt 209	27.01	28.11	40.4	53.6	71.17
Apt 210	26.67	28.11	40.2	53.6	71.17
Apt 211	25.38	25.92	37.2	46.2	71.17
Apt 212	24.5	25.66	36.4	47.8	80.82
Apt 213	28.01	29.83	38.6	51.9	50.51

Calculation Summary

Total Floor Area	14270.40
Average TER	22.22
Average DER	20.63
Average DFEE	26.46
Average TFEE	32.87
Compliance	Pass
% Improvement DER TER	7.16
% Improvement DFEE TFEE	19.5

Appendix B

As-Built SAP 2009 Calculation Block Compliance Sheet



Block Compliance WorkSheet: 2009

User Details

Assessor Name: James Mcglashan **Stroma Number:** STRO000976
Software Name: Stroma FSAP **Software Version:** Version: 1.5.1.6

Calculation Details

Dwelling	DER	TER	TFA
Apt 001	18.91	22.69	93.59
Apt 002	22.48	26.25	51.83
Apt 003	29.93	31.66	45.24
Apt 004	27.12	30.52	77.13
Apt 005	26.79	31.62	50.51
Apt 006	24.03	28.19	71.17
Apt 007	26.95	30.16	71.17
Apt 008	22.16	30.26	71.17
Apt 009	22.7	28.19	71.17
Apt 010	22.82	31.62	50.51
Apt 011	23.82	31.63	50.51
Apt 012	16.7	22.69	93.59
Apt 013	18.88	26.25	51.83
Apt 014	23.24	31.66	45.24
Apt 015	18.85	24.99	77.13
Apt 016	20.02	26.1	50.51
Apt 017	17.57	22.71	71.17
Apt 018	18.24	24.67	71.17
Apt 019	17.19	24.77	71.17
Apt 020	16.5	22.71	71.17
Apt 021	18.65	26.1	50.51
Apt 022	18.54	26.12	50.51
Apt 023	17.2	22.69	93.59
Apt 024	19.48	26.25	51.83
Apt 025	21.45	27.18	45.24
Apt 026	19.63	24.99	77.13

Block Compliance WorkSheet: 2009Cont...

Dwelling	DER	TER	TFA
Apt 027	19.77	26.1	50.51
Apt 028	17.68	22.71	71.17
Apt 029	18.97	24.67	71.17
Apt 030	17.23	24.77	71.17
Apt 031	16.43	22.71	71.17
Apt 032	18.44	26.1	50.51
Apt 033	18.73	26.12	50.51
Apt 034	22.34	26.81	93.59
Apt 035	19.53	26.25	51.83
Apt 036	23.06	31.66	45.24
Apt 037	19.33	24.99	77.13
Apt 038	19.81	26.1	50.51
Apt 039 Duplex 1	21.11	22.34	138.48
Apt 040 Duplex 3	22.1	25.18	132.24
Apt 041	17.25	24.77	71.17
Apt 042	16.48	22.71	71.17
Apt 043	18.47	26.1	50.51
Apt 044	18.71	26.12	50.51
Apt 045	20.01	28.53	51.83
Apt 046	24.62	31.66	45.24
Apt 047	19.54	24.99	77.13
Apt 048 Duplex 4	22.51	24.64	99.59
Apt 049	26.16	28.79	71.17
Apt 050	23.99	26.81	71.17
Apt 051	18.42	26.1	50.51
Apt 052	18.43	26.12	50.51
Apt 053	20.79	28.53	51.83
Apt 054	21.99	31.66	45.24
Apt 055 Duplex 2	25.04	26.56	133.61
Apt 056	19.77	28.98	50.51

Block Compliance WorkSheet: 2009Cont...

Dwelling	DER	TER	TFA
Apt 057	27.19	32.71	51.83
Apt 058	22.15	31.66	45.24
Apt 059	19.84	28.98	50.51
Apt 060	30.98	37.61	56.72
Apt 061	28.39	33.64	80.82
Apt 062	29.48	30.9	71.17
Apt 063	29.8	30.9	71.17
Apt 064	20.97	28.81	50.51
Apt 065	29.64	30.9	71.17
Apt 066	29.72	30.9	71.17
Apt 067	29.22	33.34	71.17
Apt 068	21.41	22.69	93.59
Apt 069	24.08	27.4	52.94
Apt 070	22.46	31.63	50.51
Apt 071	24.57	28.19	71.17
Apt 072	24.16	28.19	71.17
Apt 073	26.99	31.62	50.51
Apt 074	24.31	28.19	71.17
Apt 075	24.52	28.19	71.17
Apt 076	23.99	28.24	71.17
Apt 077	27.82	30.16	71.17
Apt 078	24.9	30.16	71.17
Apt 079	18.05	24.68	71.17
Apt 080	16.45	22.71	71.17
Apt 081	16.57	22.71	71.17
Apt 082	18.62	26.1	50.51
Apt 083	16.7	22.71	71.17
Apt 084	16.65	22.71	71.17
Apt 085	17.55	24.81	80.82
Apt 086	20.89	29.87	50.51

Block Compliance WorkSheet: 2009Cont...

Dwelling	DER	TER	TFA
Apt 087	16.9	22.69	93.59
Apt 088	19.82	27.4	52.94
Apt 089	18.71	26.12	50.51
Apt 090	17.97	22.71	71.17
Apt 091	18.16	22.71	71.17
Apt 092	20.25	26.1	50.51
Apt 093	18.27	22.71	71.17
Apt 094	18.17	22.71	71.17
Apt 095	18.29	22.76	71.17
Apt 096	19.43	24.67	71.17
Apt 097	17.79	24.67	71.17
Apt 098	17.95	24.68	71.17
Apt 099	16.71	22.71	71.17
Apt 100	16.61	22.71	71.17
Apt 101	18.54	26.1	50.51
Apt 102	16.65	22.71	71.17
Apt 103	16.55	22.71	71.17
Apt 104	17.59	24.81	80.82
Apt 105	21.4	29.87	50.51
Apt 106	17.33	22.69	93.59
Apt 107	20.26	27.4	52.94
Apt 108	18.7	26.12	50.51
Apt 109	18.01	22.71	71.17
Apt 110	18.12	22.71	71.17
Apt 111	20.2	26.1	50.51
Apt 112	18.1	22.71	71.17
Apt 113	17.69	22.71	71.17
Apt 114	18.21	22.76	71.17
Apt 115	19.72	24.67	71.17
Apt 116	17.9	24.67	71.17

Block Compliance WorkSheet: 2009Cont...

Dwelling	DER	TER	TFA
Apt 117	17.96	24.68	71.17
Apt 118	16.66	22.71	71.17
Apt 119	16.34	22.71	71.17
Apt 120	18.67	26.1	50.51
Apt 121	16.57	22.71	71.17
Apt 122	16.49	22.71	71.17
Apt 123	17.26	24.81	80.82
Apt 124	20.93	29.87	50.51
Apt 125	23.02	26.81	93.59
Apt 126	20.03	27.4	52.94
Apt 127	18.71	26.12	50.51
Apt 128	17.87	22.71	71.17
Apt 129	21.18	22.71	71.17
Apt 130	20	26.1	50.51
Apt 131	17.8	22.71	71.17
Apt 132	18.1	22.71	71.17
Apt 133	18.19	22.76	71.17
Apt 134	19.22	24.67	71.17
Apt 135	17.6	24.67	71.17
Apt 136	17.97	24.68	71.17
Apt 137	16.59	22.71	71.17
Apt 138	16.54	22.71	71.17
Apt 139	18.99	26.1	50.51
Apt 140	16.66	22.71	71.17
Apt 141	16.58	22.71	71.17
Apt 142	17.32	24.81	80.82
Apt 143	21.2	29.87	50.51
Apt 144	19.74	24.56	71.75
Apt 145	18.68	26.12	50.51
Apt 146	18.13	22.71	71.17

Block Compliance WorkSheet: 2009Cont...

Dwelling	DER	TER	TFA
Apt 147	18.17	22.71	71.17
Apt 148	20.45	26.1	50.51
Apt 149	18.17	22.71	71.17
Apt 150	18.04	22.71	71.17
Apt 151	18.18	22.76	71.17
Apt 152	19.41	24.67	71.17
Apt 153	17.73	24.67	71.17
Apt 154	18.05	24.68	71.17
Apt 155	16.65	22.71	71.17
Apt 156	16.72	22.71	71.17
Apt 157	18.74	26.1	50.51
Apt 158	16.45	22.71	71.17
Apt 159	16.64	22.71	71.17
Apt 160	17.36	24.81	80.82
Apt 161	21.24	29.87	50.51
Apt 162	20.27	24.56	71.75
Apt 163	18.84	26.12	50.51
Apt 164	17.61	22.71	71.17
Apt 165	17.73	22.71	71.17
Apt 166	20.64	26.1	50.51
Apt 167	18.03	22.71	71.17
Apt 168	18.22	22.71	71.17
Apt 169	18.07	22.76	71.17
Apt 170	19.51	24.67	71.17
Apt 171	17.83	24.67	71.17
Apt 172	18.07	24.68	71.17
Apt 173	16.7	22.71	71.17
Apt 174	16.65	22.71	71.17
Apt 175	18.79	26.1	50.51
Apt 176	16.59	22.71	71.17

Block Compliance WorkSheet: 2009Cont...

Dwelling	DER	TER	TFA
Apt 177	16.62	22.71	71.17
Apt 178	17.21	24.81	80.82
Apt 179	21.36	29.87	50.51
Apt 180	19.77	24.56	71.75
Apt 181	18.65	26.12	50.51
Apt 182	18.03	22.71	71.17
Apt 183	18.03	22.71	71.17
Apt 184	20.43	26.1	50.51
Apt 185	24.52	26.81	71.17
Apt 186	24.6	26.81	71.17
Apt 187	24.51	26.87	71.17
Apt 188	25.94	28.79	71.17
Apt 189	26.38	28.79	71.17
Apt 190	23.67	28.8	71.17
Apt 191	24.76	26.81	71.17
Apt 192	21.18	26.81	71.17
Apt 193	18.7	26.1	50.51
Apt 194	16.5	22.71	71.17
Apt 195	16.52	22.71	71.17
Apt 196	17.38	24.81	80.82
Apt 197	21.07	29.87	50.51
Apt 198	20.02	24.56	71.75
Apt 199	18.73	26.12	50.51
Apt 200	18.12	22.71	71.17
Apt 201	19.7	24.67	71.17
Apt 202	17.51	24.67	71.17
Apt 203	16.68	22.71	71.17
Apt 204	17.45	24.81	80.82
Apt 205	21.29	29.87	50.51
Apt 206	27.17	28.62	71.75

Block Compliance WorkSheet: 2009Cont...

Dwelling	DER	TER	TFA
Apt 207	22.37	30.24	50.51
Apt 208	24.83	26.81	71.17
Apt 209	26.33	28.79	71.17
Apt 210	25.98	28.79	71.17
Apt 211	24.73	26.81	71.17
Apt 212	23.86	28.98	80.82
Apt 213	27.54	34.04	50.51

Calculation Summary

Total Floor Area	14270.40
Average TER	25.62
Average DER	20.13
Compliance	Pass
% Improvement	21.43