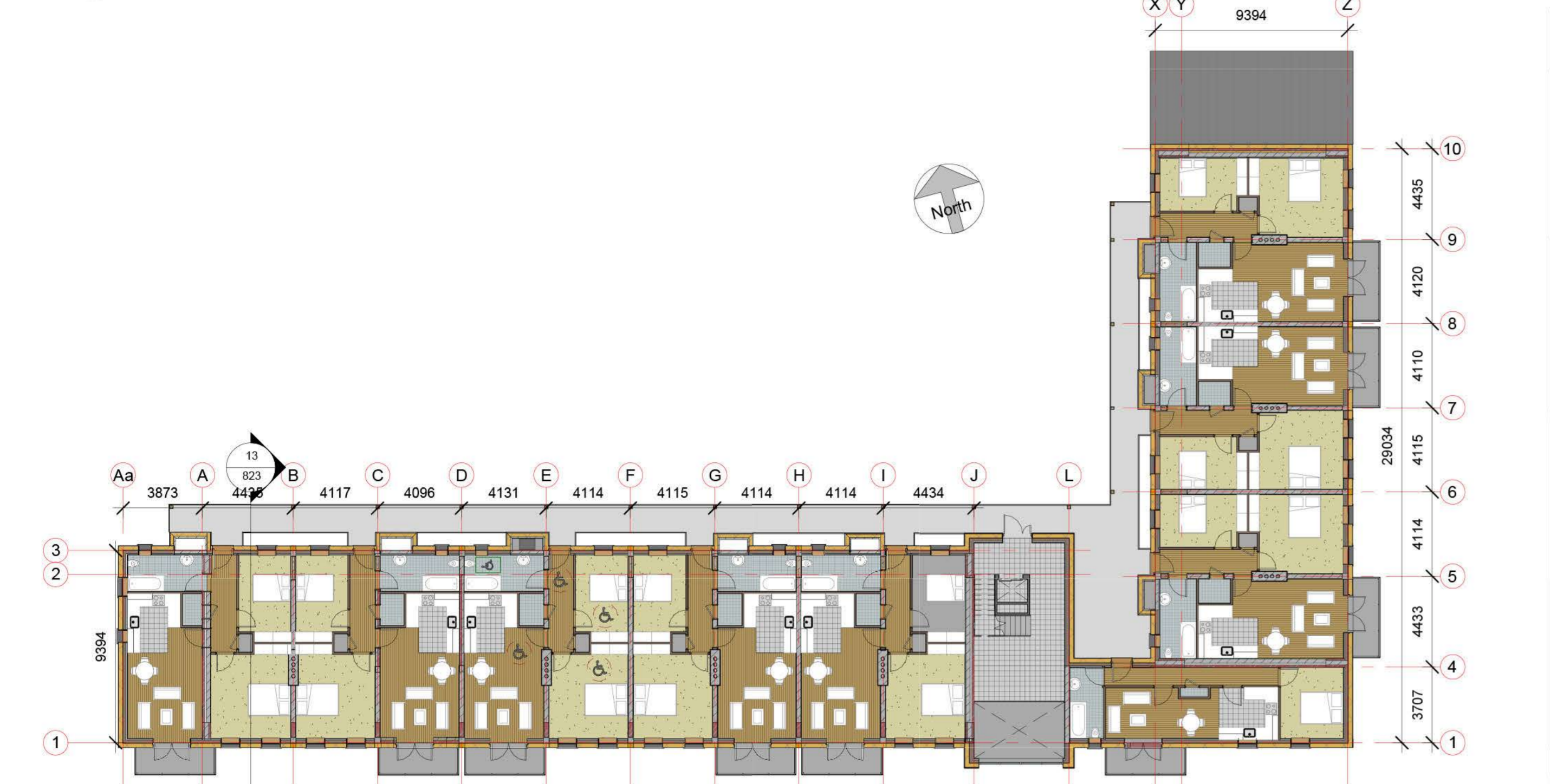




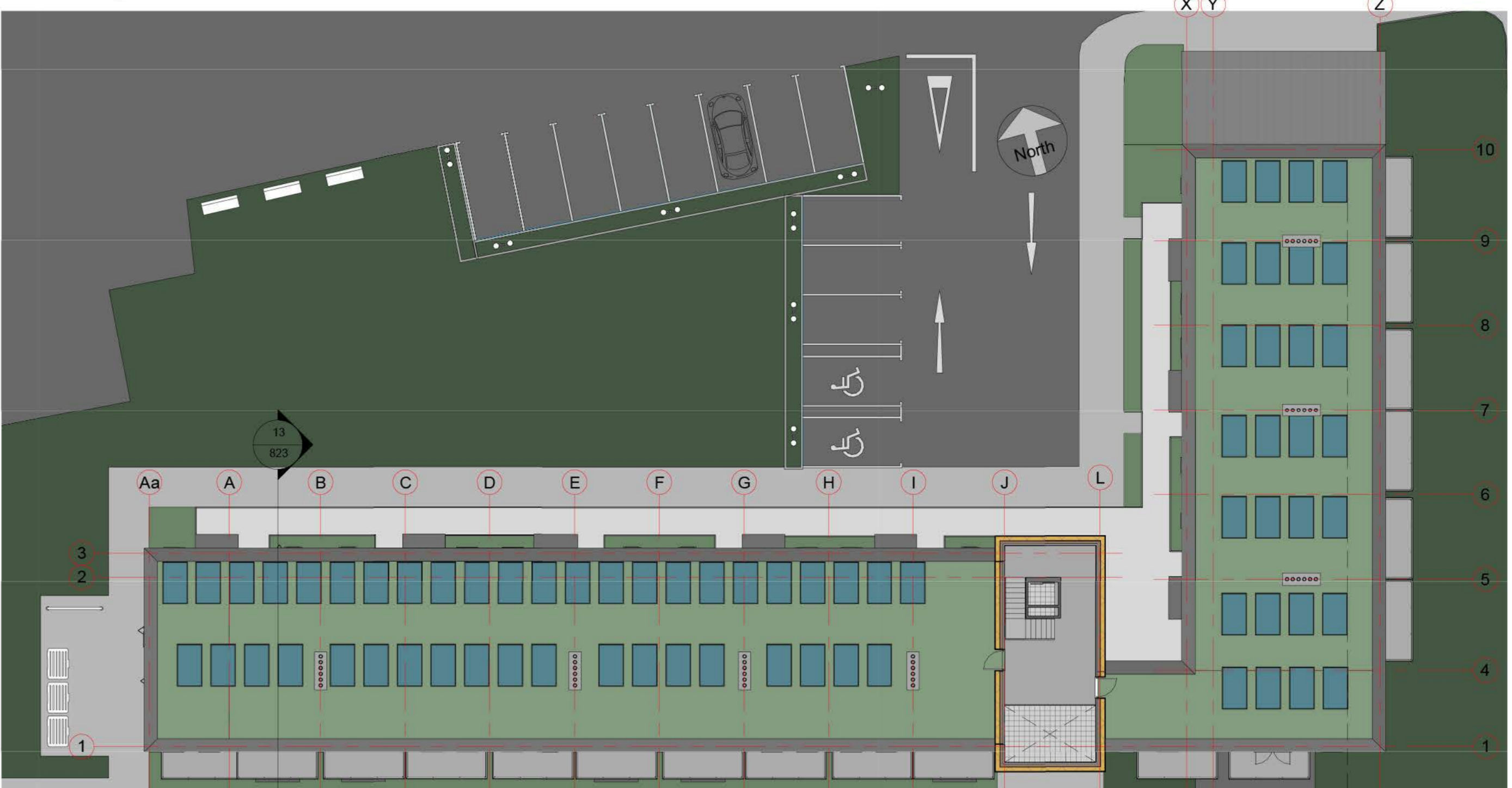
1 Ground Floor Plan
1: 200



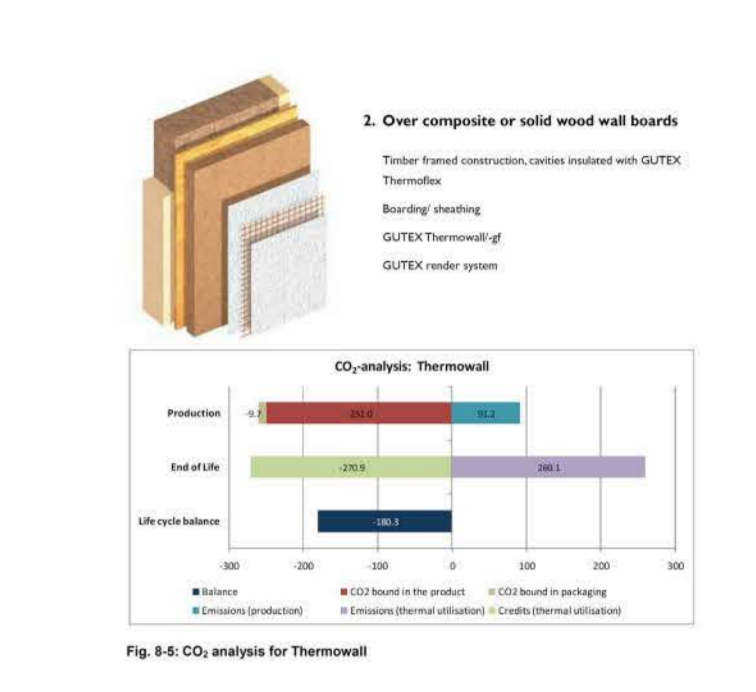
3 Second & Fourth Floor Plan
1: 200



2 First & Third Floor Plan
1: 200



4 Proposed Roof Plan
1: 200



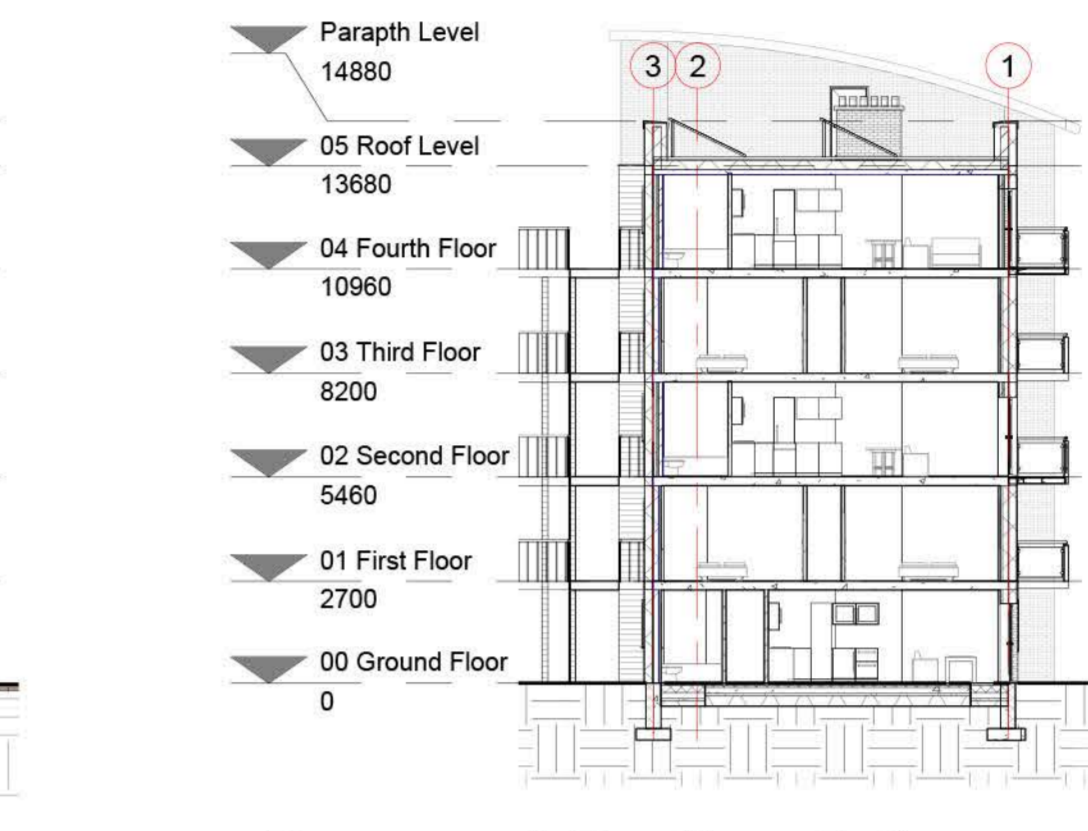
17 Gutux Build-up
1: 100



5 South Elevation
1: 200



6 West Elevation
1: 200



13 Proposed Section A-A
1: 200



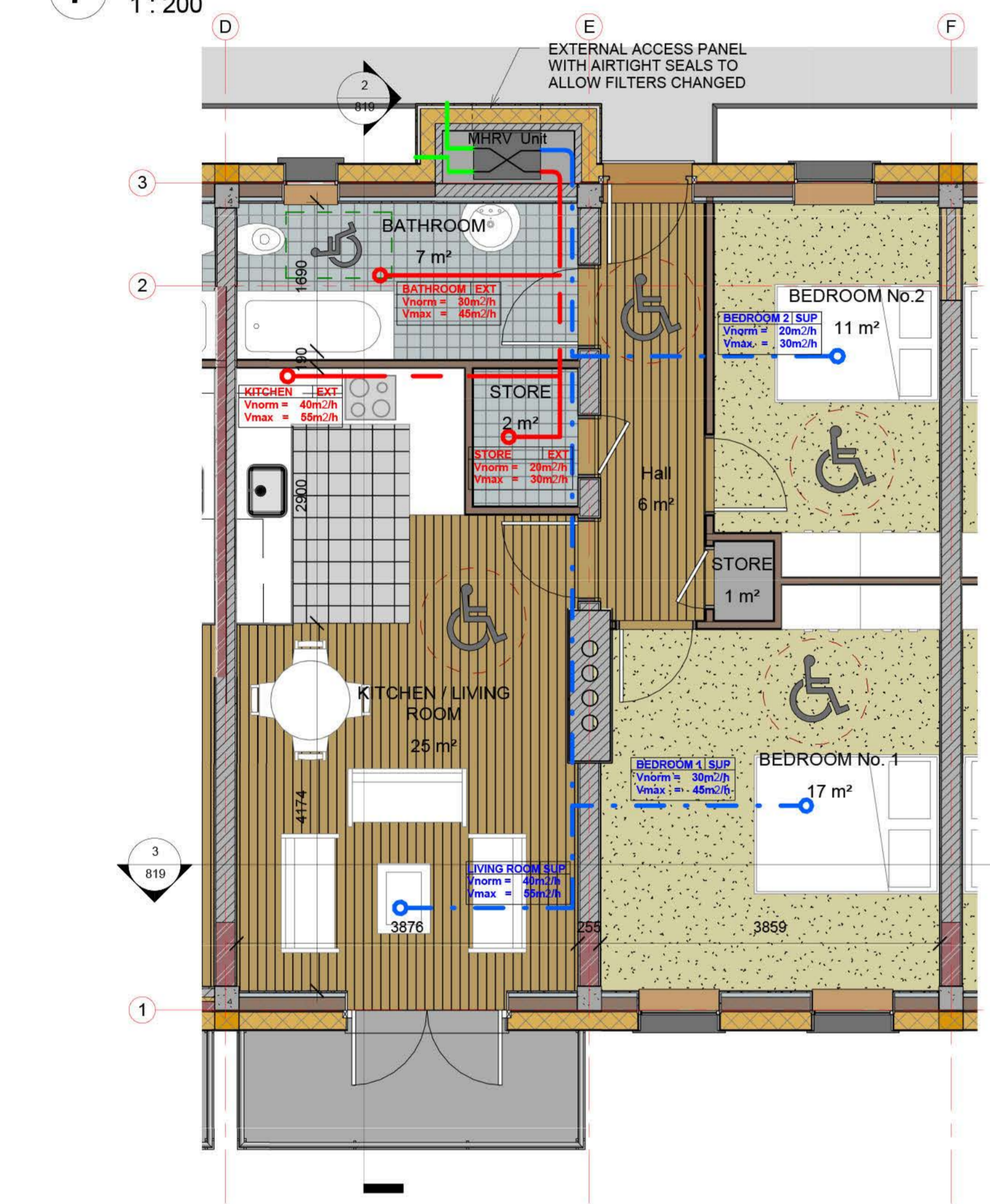
19 Existing Street View
1: 1



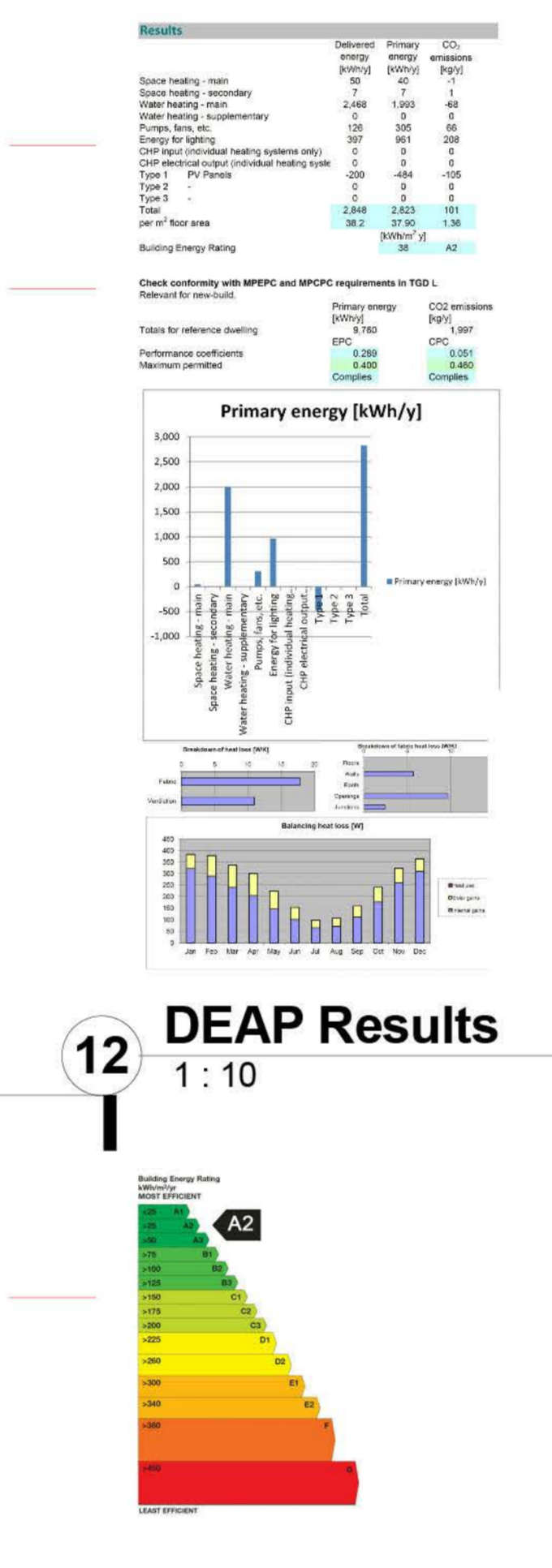
7 East Elevation
1: 200



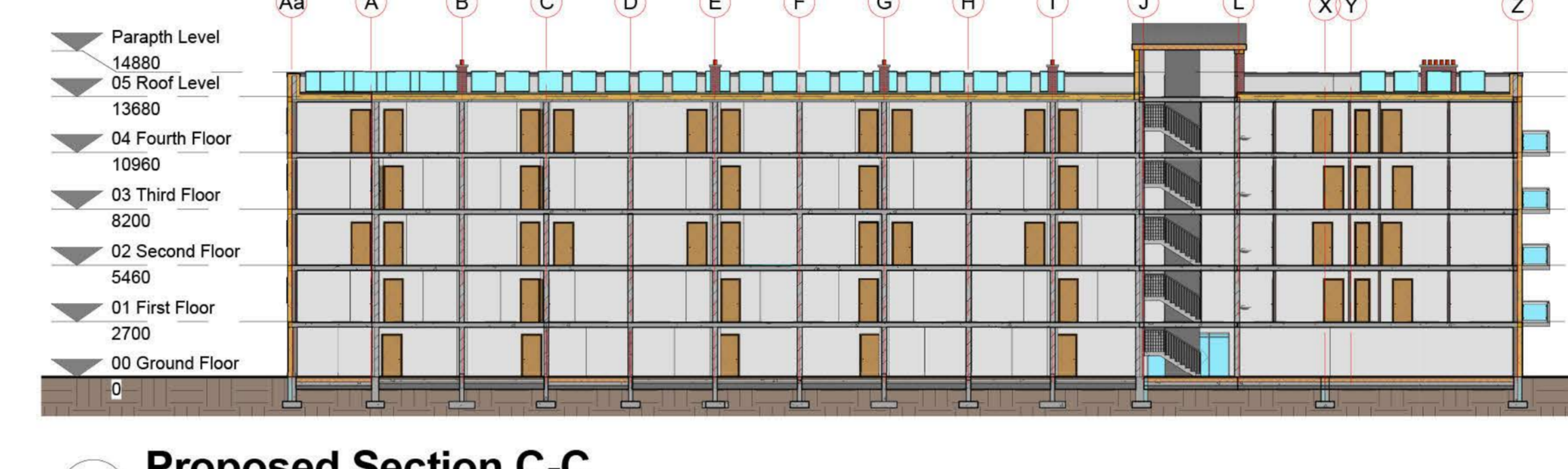
8 North Elevation
1: 200



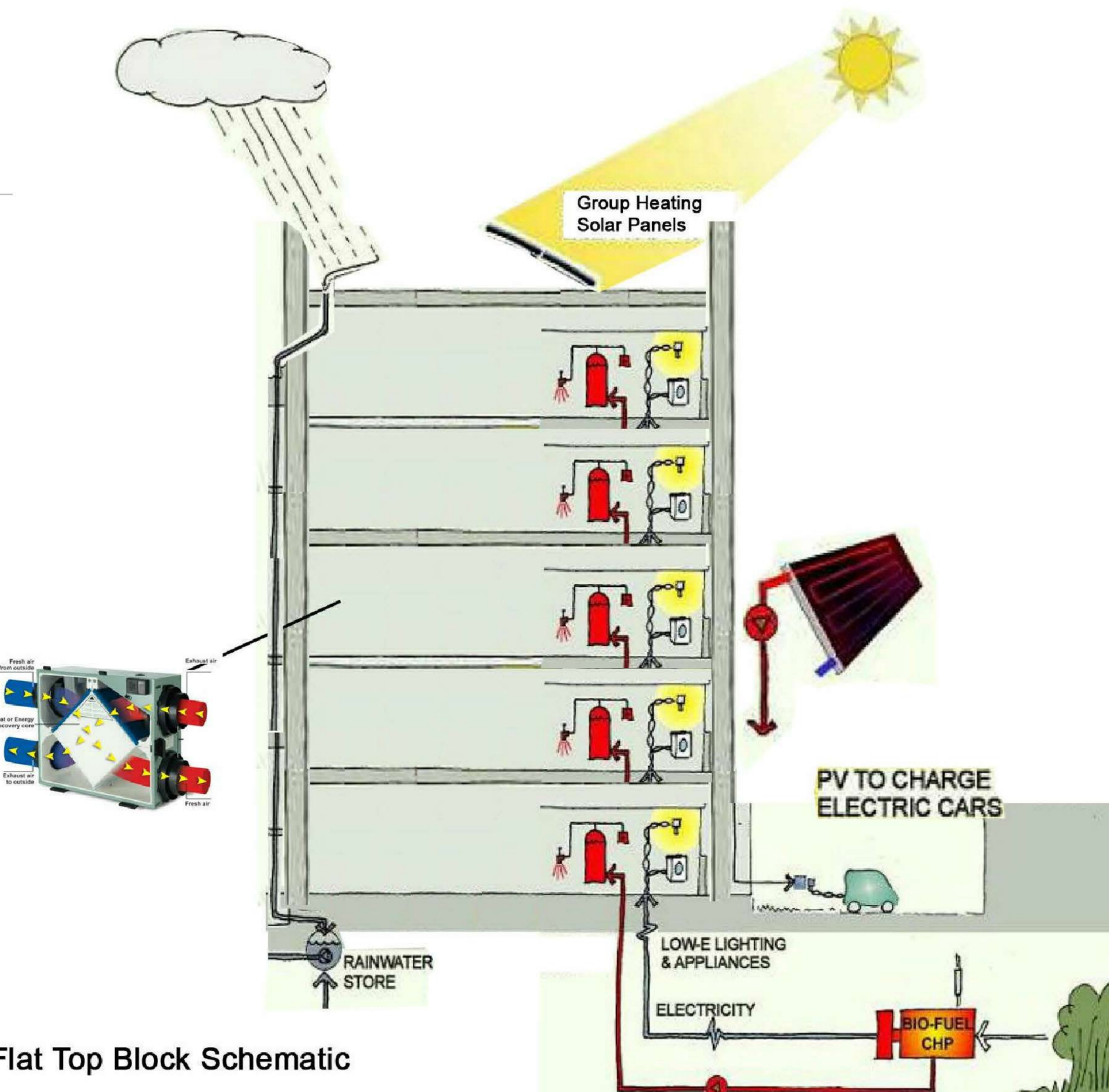
9 Typical Apartment Layout
1: 50



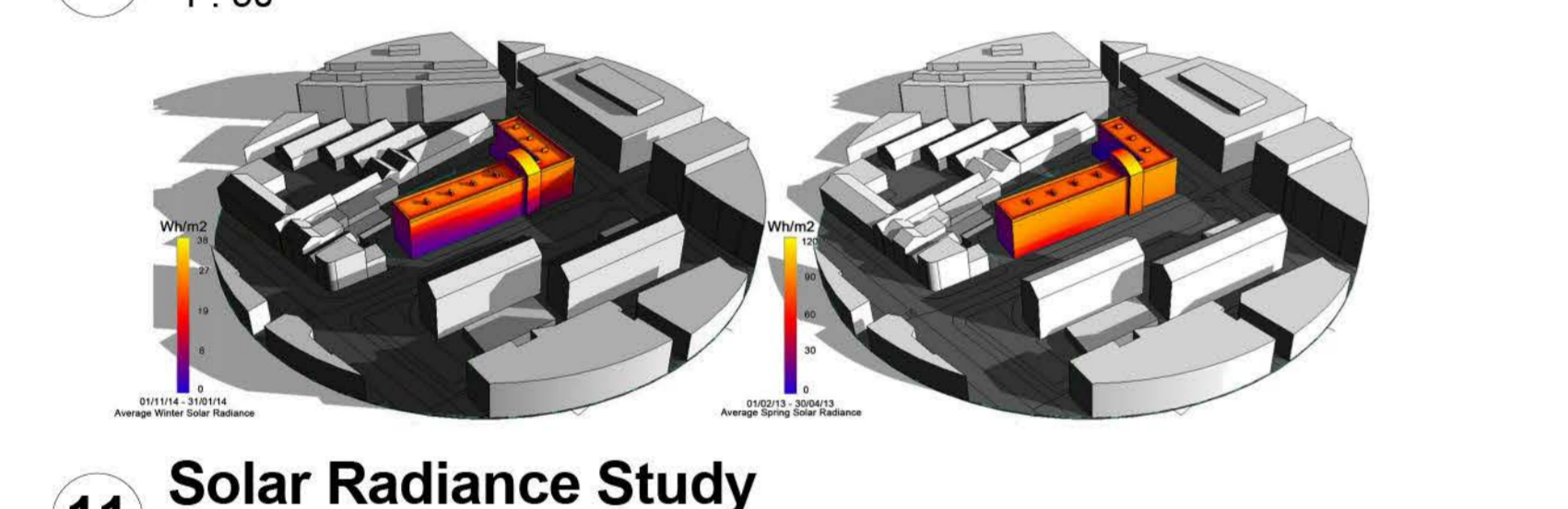
12 DEAP Results
1: 10



18 Proposed Section C-C
1: 250



Flat Top Block Schematic

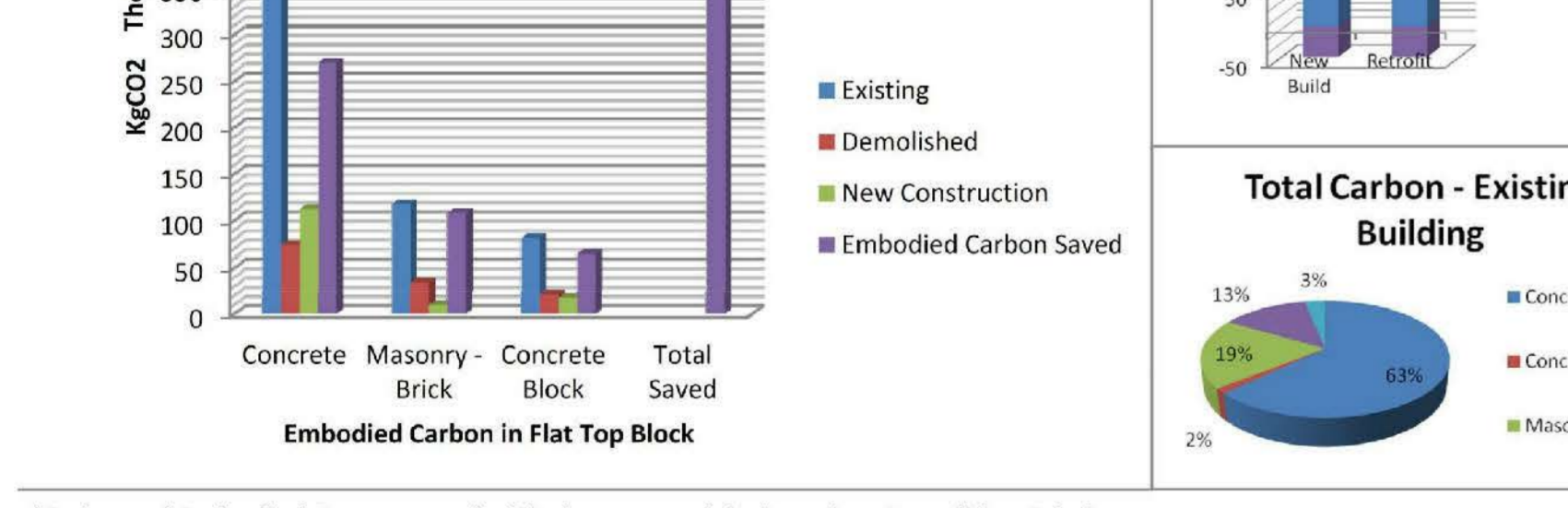


11 Solar Radiance Study
1: 2000

Carbon Schedule 1 - Existing in Flat Top Block					
Material	Volume* (m³)	Carbon CO2/kg**	Mass Kgt/m³	Material Mass Kgs	Embodied Carbon kgCO2/kg
Concrete	997.76	0.159	2400	2394624	380.715
Concrete Screed	31.15	0.159	2400	51700	8.223
Masonry - Brick	287.25	0.24	1700	488325	117.58
Concrete Block	762.39	0.073	1450	1105465.5	80.699
Plaster	144.65	0.12	1120	162008	19.441
Grand total	2223.5	0.12	1200	4,202,143	656,767

Carbon Schedule 2 - Demolitions in Flat Top Block					
Material	Volume* (m³)	Carbon CO2/kg**	Mass Kgt/m³	Material Mass Kgs	Total Embodied Carbon kgCO2/kg
Concrete	391.36	0.159	2400	450264	73.023
Concrete Screed	1.82	0.159	2400	4368	695
Masonry - Brick	83.58	0.24	1700	142086	34.101
Concrete Block	197.13	0.073	1450	285839	20.866
Plaster	51.18	0.12	1120	68999	8.220
Grand total	535.05	0.12	1120	690,056	136,904

Carbon Schedule 3 - New Construction in Flat Top Block					
Material	Volume* (m³)	Carbon CO2/kg**	Mass Kgt/m³	Material Mass Kgs	Total Embodied Carbon kgCO2/kg
Concrete	292.81	0.159	2400	702,264	111,660
Masonry - Brick	22.78	0.24	1700	38,726	9,294
Concrete Block	360.82	0.073	1450	523,189	17,023
Scrub Wood Fibre	958.93	-0.183	250	239,733	-45,871
Hemp Insulation	140.85	-0.133	30	4,226	-562
Plaster	24.05	0.12	1120	26,936	3,282
Grand total	1600.04	0.07	1,245,073	96,776	



Embodied Carbon Saved*					
Material	Existing kgCO2/kg	Demolished kgCO2/kg	New kgCO2/kg	Retained/ Saved %	Total Embodied Carbon Saved kgCO2/kg
Concrete	380,715	73,023	111,660	81	269,085
Masonry - Brick	117,58	34,101	9,294	71	107,904
Concrete Block	80,699	20,866	17,023	74	43,676
Total Saved					440,665

*Estimated Embodied Energy saved with these materials, based on Retrofitting Existing building as opposed to building a new complex of a similar size, floor area and scale

16 Justification for Retrofit
1: 3

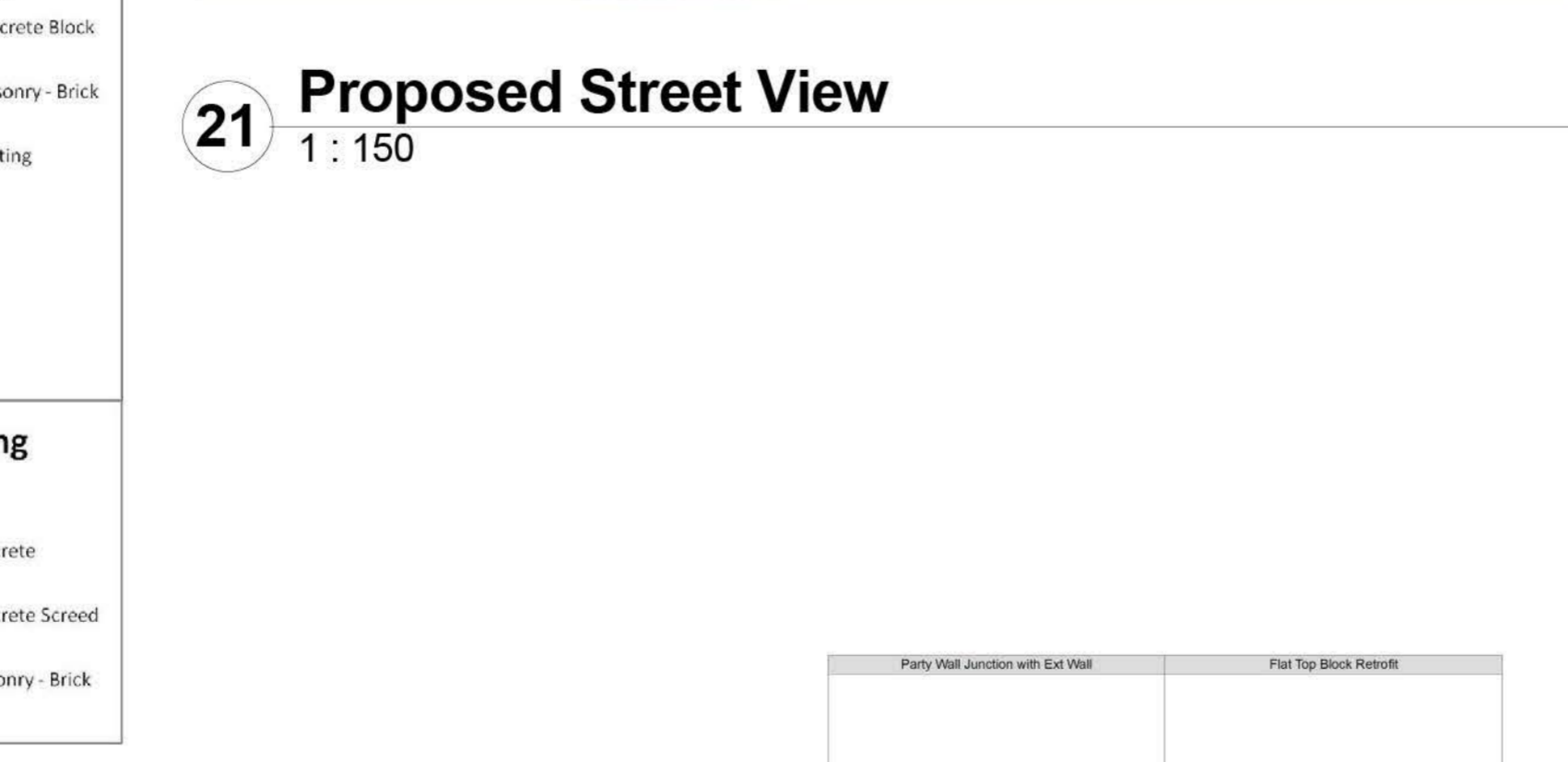
PG Cert DAER	Flat Top Block Retrofit U-Values	PG Cert DAER	Flat Top Block Retrofit U-Values	PG Cert DAER	Flat Top Block Retrofit U-Values
External wall	0.18	External wall	0.18	External wall	0.18
Roof	0.15	Roof	0.15	Roof	0.15
Window	1.0	Window	1.0	Window	1.0
Door	1.0	Door	1.0	Door	1.0

32 Design U-Values
1: 10

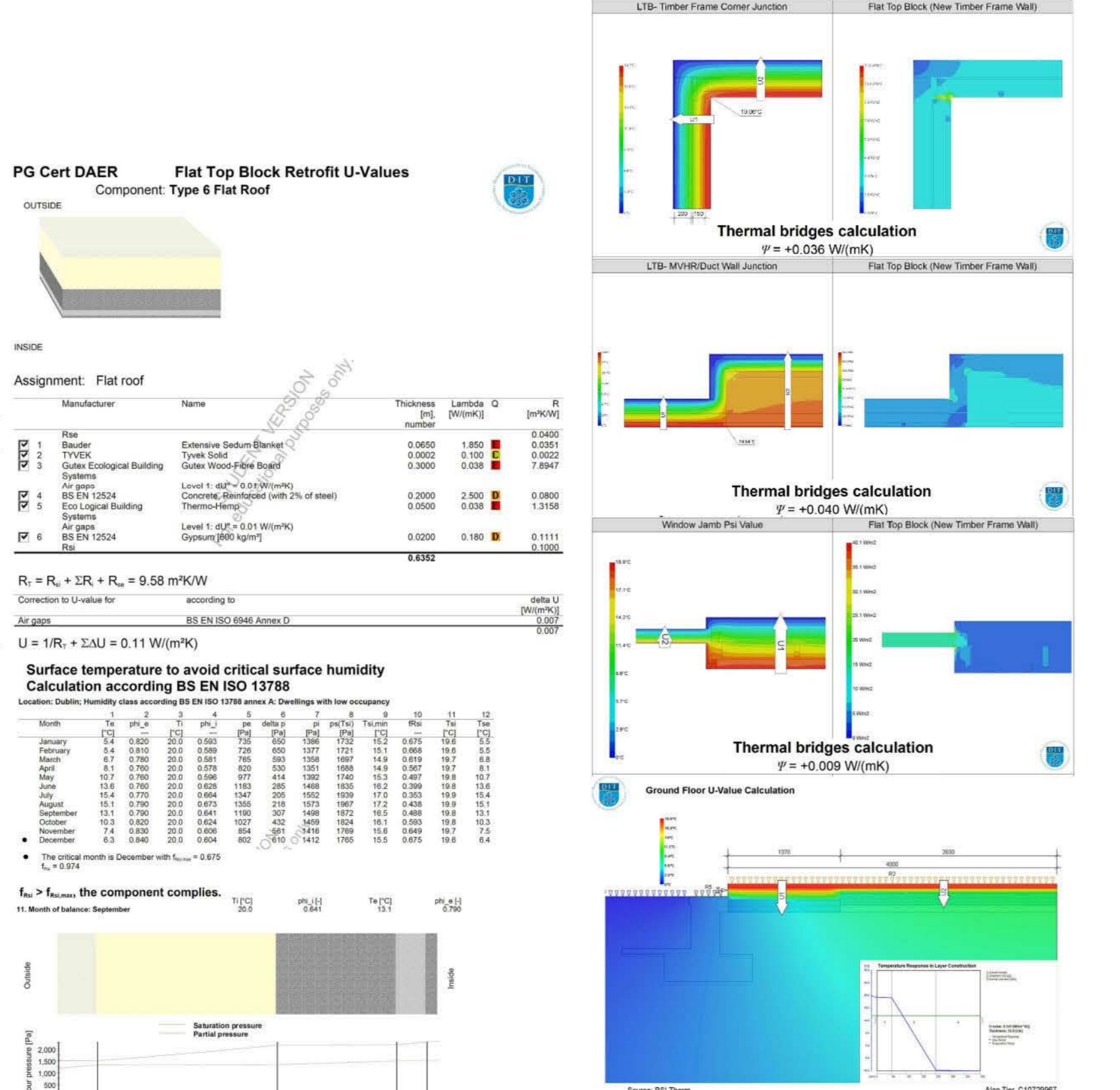
Component	U-value
External wall	0.18
Roof	0.15
Window	1.0
Door	1.0



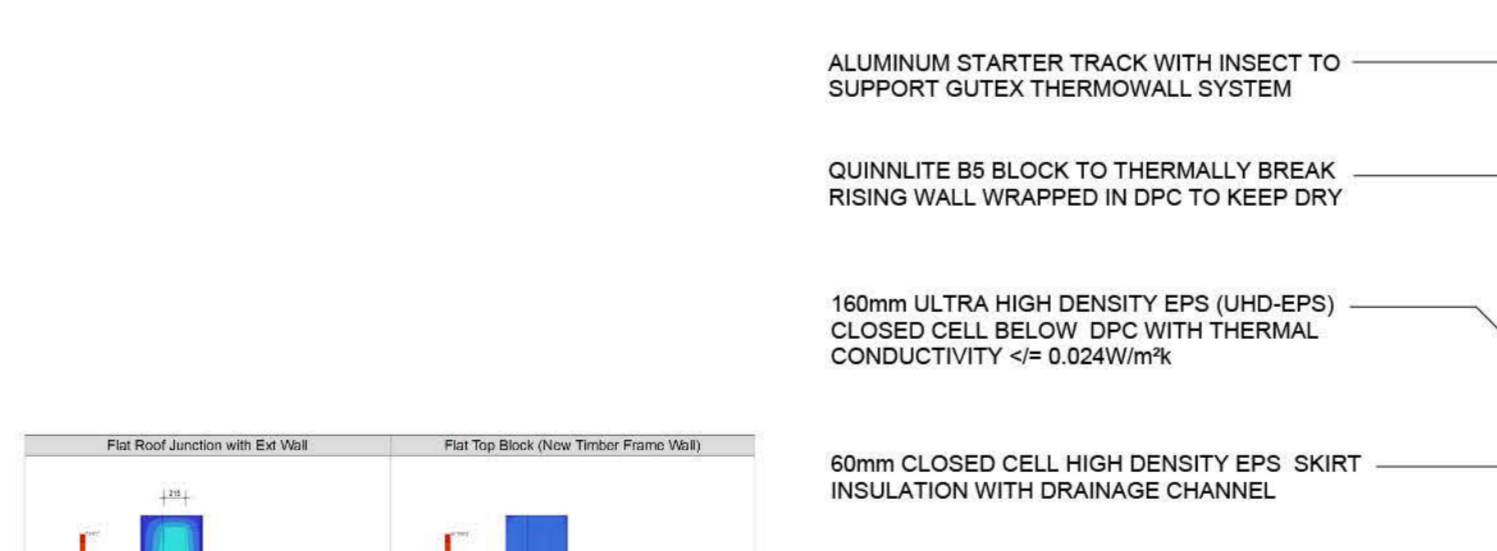
21 Proposed Street View
1: 150



15 PSI Therm Results
1: 7



15 PSI Therm Results
1: 7



10 1:5 Details
1: 5

