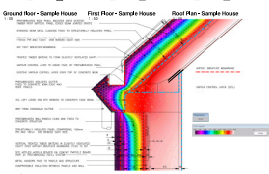
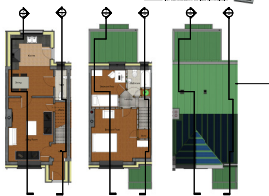
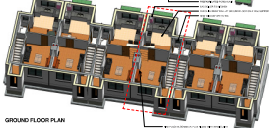
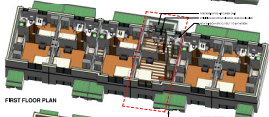
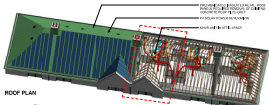


DUBLIN SCHOOL OF ARCHITECTURE DIGITAL ANALYSIS FOR ENERGY RETROFIT nZEB RESIDENTIAL RETROFIT PROJECT



Room	Area (m²)	Volume (m³)	U-value (W/m²K)	Heat Loss (kWh/yr)
Living Room	25.0	45.0	0.18	1200
Bedroom	15.0	27.0	0.18	700
Bathroom	8.0	14.4	0.18	350
Kitchen	10.0	18.0	0.18	450
Hallway	5.0	9.0	0.18	225
Staircase	3.0	5.4	0.18	135
W.C.	4.0	7.2	0.18	180
Ensuite	6.0	10.8	0.18	270
Garage	20.0	36.0	0.18	900
Roof	100.0	180.0	0.18	3240
Walls	100.0	180.0	0.18	3240
Floors	100.0	180.0	0.18	3240
Windows	100.0	180.0	0.18	3240
Doors	100.0	180.0	0.18	3240
Rooflights	100.0	180.0	0.18	3240
External Walls	100.0	180.0	0.18	3240
External Windows	100.0	180.0	0.18	3240
External Doors	100.0	180.0	0.18	3240
External Rooflights	100.0	180.0	0.18	3240
External Walls	100.0	180.0	0.18	3240
External Windows	100.0	180.0	0.18	3240
External Doors	100.0	180.0	0.18	3240
External Rooflights	100.0	180.0	0.18	3240



Parameter	Value
U-value (W/m²K)	0.18
g-value	0.76
Lighting (W/m²)	10.0
Heating (W/m²)	15.0
Cooling (W/m²)	5.0
Hot Water (W/m²)	10.0
Renewable Energy (W/m²)	20.0
Energy Demand (kWh/m²/yr)	10000
Energy Supply (kWh/m²/yr)	12000
Energy Balance (kWh/m²/yr)	2000

