Energy and Carbon Proforma
Non-residential

Major development *(+1,000m^2)*

Version 1.0

GMCA GREATER MANCHESTER COMBINED AUTHORITY

Project Name: Maybrook House

Application ref:

Date: 22.05.2026

		Ref. name	New construction (L06	Whole building (refurbishme
		Area (m^2 GIA)	2126	7873
		Target values	**Building 1**	**Building 2**
Minimise energy demand	**Space heating demand (kWh/m^{2}GIA/yr)**	***≤ 15***	36.2	23.12
	Space cooling demand (kWh/m^{2}GIA/yr)	***≤ 15***	5.85	1.16
	Calculation methodology used to calculate space heating demand and confirmation that this covers all homes/blocks	*Predictive energy model*	TM54 model	Compliance model
	Form factor per building	*≤ 2*	1.3	0.96
	Average external wall U-value (W/m^{2}K)	*≤ 0.15*	0.18	0.26
	Average window U-value (W/m^{2}K)	*≤ 1 (triple)*	1.2	1.5
	Air permeability rate (m^3/h/m^2 @ 50 Pa)	*≤ 1*	5	5
Maximise energy efficiency	**BREEAM Ene 01 rating**	***Excellent***	0.801 EPRnc	N/A
	Energy use intensity (kWh/m^{2}GIA/yr)	-	143.7	150
	Calculation methodology used to calculate energy use intensity and confirmation that this covers all homes/blocks	*Predictive energy model*	TM54 model	Compliance model
Use renewable energy	**PV footprint area (% of ground floor space)**	**-**	3.80%	3.80%
	Annual renewable energy generation (kWh/m^2 building footprint/yr)	-	4.8	4.8
	Renewable energy balance (%)	-	2.24	0.58
	Total energy used (kWh/yr)	-	305606	1180950
	Total energy generated on-site (kWh/yr)	-	6831	6831
Use low carbon energy	**Fossil fuel free (yes/no)**	***Yes***	Yes	Yes
	Heat source	*Electric*	Electric	Electric
	Low Carbon Heat Appraisal completed	*Yes*	Yes	Yes
	Heat network suitability	-	No	No
	Exemption requested	-	No	No
	Efficiency of heating system (SCOP)	*≥ 3.5*	2.88	2.88

	Carbon content of heat (gCO_2/kWh)	*≤ 100*	136	136
Reduce overheating risk	**Has CIBSE TM52 been used to calculate overheating and does the building pass?**	***Yes***	Yes	Yes
	What percentage of spaces are cooled? (% of GIA)	-	74%	65.80%
	Has a CIBSE TM52 assessment been carried out using DSY2 and DSY3 weather files? Have any additional passive measures been included as a result?	*Yes*	Yes	Yes
Minimise embodied carbon	**Upfront embodied carbon ($kgCO_2e/m^2GIA$)**	**-**		
	List top three materials with the highest upfront embodied carbon emissions ($kgCO_2e/m^2GIA$): Material 1	-	TBA	TBA
	Material 2	-	TBA	TBA
	Material 3		TBA	TBA
	Lifecycle embodied carbon ($kgCO_2e/m^2GIA$) - *for large major developments only*	-	TBA	TBA
Offsets	**Offset contribution (£)**	**-**	NA	NA