

Project name

Silletts Funeral Services - Notional**As designed****Date:** Wed Jul 23 09:21:43 2025**Administrative information****Building Details****Address:** Silletts Funeral Services, Radcliffe, Bury,
Manchester, M26 2TQ**Certifier details****Name:** David Barsted**Telephone number:** 01625 315040**Address:** Suite F6.3b, Adelphi Mill, Grimshaw Lane,,
Bollington, SK10 5JB**Certification tool****Calculation engine:** SBEM**Calculation engine version:** v6.1.e.2**Interface to calculation engine:** Virtual Environment**Interface to calculation engine version:** v7.0.28**BRUKL compliance module version:** v6.1.e.1**Foundation area [m²]:** 360.6**The CO₂ emission and primary energy rates of the building must not exceed the targets****The building does not comply with England Building Regulations Part L 2021**

Target CO ₂ emission rate (TER), kgCO ₂ /m ² annum	11.43
Building CO ₂ emission rate (BER), kgCO ₂ /m ² annum	29.08
Target primary energy rate (TPER), kWh _{PE} /m ² annum	57.46
Building primary energy rate (BPER), kWh _{PE} /m ² annum	164.87
Do the building's emission and primary energy rates exceed the targets?	BER > TER BPER > TPER

The performance of the building fabric and fixed building services should achieve reasonable overall standards of energy efficiency

Fabric element	U _{a-Limit}	U _{a-Calc}	U _{i-Calc}	First surface with maximum value
Walls*	0.26	0.39	0.6	FF000002_W-1
Floors	0.18	0.67	0.9	FF000002_F
Pitched roofs	0.16	0.15	0.15	FF00000D_C
Flat roofs	0.18	0.15	0.15	FF000002_C
Windows** and roof windows	1.6	1.4	1.4	FF000003_W-1_O0
Rooflights***	2.2	2.21	2.21	FF00000B_C_O0
Personnel doors^	1.6	1.4	1.4	FF000009_W4_O0
Vehicle access & similar large doors	1.3	-	-	No external vehicle access doors
High usage entrance doors	3	-	-	No external high usage entrance doors

U_{a-Limit} = Limiting area-weighted average U-values [W/(m²K)]U_{i-Calc} = Calculated maximum individual element U-values [W/(m²K)]U_{a-Calc} = Calculated area-weighted average U-values [W/(m²K)]

* Automatic U-value check by the tool does not apply to curtain walls whose limiting standard is similar to that for windows.

** Display windows and similar glazing are excluded from the U-value check.

*** Values for rooflights refer to the horizontal position.

^ For fire doors, limiting U-value is 1.8 W/m²K

NB: Neither roof ventilators (inc. smoke vents) nor swimming pool basins are modelled or checked against the limiting standards by the tool.

Air permeability	Limiting standard	This building
m ³ /(h.m ²) at 50 Pa	8	13

Building services

For details on the standard values listed below, system-specific guidance, and additional regulatory requirements, refer to the Approved Documents.

Whole building lighting automatic monitoring & targeting with alarms for out-of-range values	YES
Whole building electric power factor achieved by power factor correction	<0.9

1- Existing Gas Boiler

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	0.89	-	-	-	-
Standard value	0.93*	N/A	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
* Standard shown is for gas single boiler systems <=2 MW output and overall for multi-boiler systems. For single boiler systems >2 MW or any individual boiler in a multi-boiler system, limiting efficiency is 0.88.					

1- SYST0000-DHW

	Water heating efficiency	Storage loss factor [kWh/litre per day]
This building	Hot water provided by HVAC system	0.006
Standard value	N/A	N/A

"No zones in project where local mechanical ventilation, exhaust, or terminal unit is applicable"

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m²]
	Standard value	95	80	0.3
GF: Mortuary		120	-	-
GF: Cold Store 1		120	-	-
GF: Chapel 1		120	-	-
GF: WC		120	-	-
GF: Cold Store 2		120	-	-
GF: Lounge Consult 1		120	-	-
GF: Lounge Consult 2		120	-	-
GF: Lobby		120	-	-
GF: Brew		120	-	-
GF: WC		120	-	-
GF: Circ		120	-	-
GF: Chapel 4		120	-	-
GF: Chapel 3		120	-	-
GF: Chapel 2		120	-	-
GF: Store		120	-	-
FF: Staff Room		120	-	-
FF: Staff Room		120	-	-
FF: WC		120	-	-
FF: Store		120	-	-
FF: Changing Room		120	-	-
GF: Function Room		120	-	-
GF: Office		120	-	-
GF: Reception		120	-	-
FF		120	-	-

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m ²]
	Standard value	95	80	0.3
GF: Extension Circ		120	-	-
GF: Chapel 6		120	-	-
GF: Chapel 5		120	-	-
GF: Coffin Store Workshop		120	-	-

The spaces in the building should have appropriate passive control measures to limit solar gains in summer

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
GF: Mortuary	N/A	N/A
GF: Cold Store 1	N/A	N/A
GF: Chapel 1	NO (-83.4%)	NO
GF: Cold Store 2	N/A	N/A
GF: Lounge Consult 1	NO (-11.2%)	NO
GF: Lounge Consult 2	NO (-72%)	NO
GF: Chapel 4	NO (-58.3%)	NO
GF: Chapel 3	NO (-58.5%)	NO
GF: Chapel 2	NO (-59.2%)	NO
FF: Staff Room	N/A	N/A
FF: Staff Room	N/A	N/A
FF: Changing Room	N/A	N/A
GF: Function Room	NO (-82.9%)	NO
GF: Office	NO (-80.1%)	NO
GF: Chapel 6	NO (-80.3%)	NO
GF: Chapel 5	NO (-59%)	NO
GF: Coffin Store Workshop	NO (-79.4%)	NO

Regulation 25A: Consideration of high efficiency alternative energy systems

Were alternative energy systems considered and analysed as part of the design process?	YES
Is evidence of such assessment available as a separate submission?	YES
Are any such measures included in the proposed design?	YES

Technical Data Sheet (Actual vs. Notional Building)

Building Global Parameters

	Actual	Notional
Floor area [m ²]	721.2	721.2
External area [m ²]	1940.3	1940.3
Weather	MAN	MAN
Infiltration [m ³ /hm ² @ 50Pa]	13	3
Average conductance [W/K]	861.24	550.14
Average U-value [W/m ² K]	0.44	0.28
Alpha value* [%]	19.01	28.51

* Percentage of the building's average heat transfer coefficient which is due to thermal bridging

Building Use

% Area	Building Type
	Retail/Financial and Professional Services
	Restaurants and Cafes/Drinking Establishments/Takeaways
59	Offices and Workshop Businesses
	General Industrial and Special Industrial Groups
	Storage or Distribution
	Hotels
	Residential Institutions: Hospitals and Care Homes
	Residential Institutions: Residential Schools
	Residential Institutions: Universities and Colleges
	Secure Residential Institutions
	Residential Spaces
	Non-residential Institutions: Community/Day Centre
25	Non-residential Institutions: Libraries, Museums, and Galleries
	Non-residential Institutions: Education
	Non-residential Institutions: Primary Health Care Building
	Non-residential Institutions: Crown and County Courts
16	General Assembly and Leisure, Night Clubs, and Theatres
	Others: Passenger Terminals
	Others: Emergency Services
	Others: Miscellaneous 24hr Activities
	Others: Car Parks 24 hrs
	Others: Stand Alone Utility Block

Energy Consumption by End Use [kWh/m²]

	Actual	Notional
Heating	127.44	56.84
Cooling	0	0
Auxiliary	2.33	1.11
Lighting	9.3	8.25
Hot water	3.36	2.14
Equipment*	17.63	17.63
TOTAL **	142.43	68.34

* Energy used by equipment does not count towards the total for consumption or calculating emissions.

** Total is net of any electrical energy displaced by CHP generators, if applicable.

Energy Production by Technology [kWh/m²]

	Actual	Notional
Photovoltaic systems	0	15.94
Wind turbines	0	0
CHP generators	0	0
Solar thermal systems	0	0
<i>Displaced electricity</i>	<i>0</i>	<i>15.94</i>

Energy & CO₂ Emissions Summary

	Actual	Notional
Heating + cooling demand [MJ/m ²]	387.13	210.38
Primary energy [kWh _{PE} /m ²]	164.87	57.46
Total emissions [kg/m ²]	29.08	11.43

HVAC Systems Performance									
System Type	Heat dem MJ/m2	Cool dem MJ/m2	Heat con kWh/m2	Cool con kWh/m2	Aux con kWh/m2	Heat SSEFF	Cool SSEER	Heat gen SEFF	Cool gen SEER
[ST] Central heating using water: radiators, [HS] LTHW boiler, [HFT] Natural Gas, [CFT] Electricity									
Actual	364.3	22.9	127.4	0	2.3	0.79	0	0.89	0
Notional	176	34.4	56.8	0	1.1	0.86	0	----	----

Key to terms

- Heat dem [MJ/m2] = Heating energy demand
- Cool dem [MJ/m2] = Cooling energy demand
- Heat con [kWh/m2] = Heating energy consumption
- Cool con [kWh/m2] = Cooling energy consumption
- Aux con [kWh/m2] = Auxiliary energy consumption
- Heat SSEFF = Heating system seasonal efficiency (for notional building, value depends on activity glazing class)
- Cool SSEER = Cooling system seasonal energy efficiency ratio
- Heat gen SSEFF = Heating generator seasonal efficiency
- Cool gen SSEER = Cooling generator seasonal energy efficiency ratio
- ST = System type
- HS = Heat source
- HFT = Heating fuel type
- CFT = Cooling fuel type