

Project name

TYM - Be Green

As designed

Date: Thu Oct 06 15:04:12 2022

Administrative information

Building Details

Address: Address 1, City, Postcode

Certifier details

Name: Name

Telephone number: Phone

Address: Street Address, City, Postcode

Certification tool

Calculation engine: Apache

Calculation engine version: 7.0.15

Interface to calculation engine: IES Virtual Environment

Interface to calculation engine version: 7.0.15

BRUKL compliance check version: v6.1.b.0

Foundation area [m²]: 103.02The CO₂ emission and primary energy rates of the building must not exceed the targets

Target CO ₂ emission rate (TER), kgCO ₂ /m ² annum	4.09
Building CO ₂ emission rate (BER), kgCO ₂ /m ² annum	-3.18
Target primary energy rate (TPER), kWh/m ² annum	43.11
Building primary energy rate (BPER), kWh/m ² annum	-39.39
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	0.13	0.13	01000024:Surf[1]
Floors	0.18	0.08	0.08	01000024:Surf[0]
Pitched roofs	0.16	0.1	0.1	FF000009:Surf[0]
Flat roofs	0.18	0.1	0.1	RM000009:Surf[0]
Windows** and roof windows	1.6	1	1	01000024:Surf[2]
Rooflights***	2.2	-	-	No roof lights in building
Personnel doors [^]	1.6	1	1	01000024:Surf[8]
Vehicle access & similar large doors	1.3	-	-	No Vehicle access doors in building
High usage entrance doors	3	-	-	No High usage entrance doors in building

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

N.B.: 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	1

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	>0.95

1- Be Green - VRV Cooling

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	3.35	6	0	-	0.8
Standard value	2.5*	5	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

2- Be Green - AHU (Camping Block)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	3.74	-	0.09	1.33	0.8
Standard value	2.5*	N/A	N/A	1.9^	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					
^ Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.					

3- Be Green - LTHW Rad + Nat. Vent

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	3.74	-	0.5	-	-
Standard value	2.5*	N/A	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

4- Be Green - Electric Heating

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	-	-	-	-
Standard value	N/A	N/A	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO

5- Be Green - UF + Natural Vent

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	3.74	-	0.48	-	-
Standard value	2.5*	N/A	N/A	N/A	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

6- Be Green - AHU (Main Building)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	3.74	-	0	1.8	0.8
Standard value	2.5*	N/A	N/A	1.9^	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					
^ Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.					

1- Be Green - DHW (CB)

	Water heating efficiency	Storage loss factor [kWh/litre per day]
This building	3.74	0.005
Standard value	1	N/A

2- Be Green - DHW (MB)

	Water heating efficiency	Storage loss factor [kWh/litre per day]
This building	3.74	0.005
Standard value	1	N/A

3- Be Green - DHW (RB1)

	Water heating efficiency	Storage loss factor [kWh/litre per day]
This building	3.74	0.005
Standard value	1	N/A

4- Be Green - DHW (RB2)

	Water heating efficiency	Storage loss factor [kWh/litre per day]
This building	3.74	0.005
Standard value	1	N/A

5- Be Green - DHW (RB3)

	Water heating efficiency	Storage loss factor [kWh/litre per day]
This building	3.74	0.005
Standard value	1	N/A

Zone-level mechanical ventilation, exhaust, and terminal units

ID	System type in the Approved Documents
A	Local supply or extract ventilation units
B	Zonal supply system where the fan is remote from the zone
C	Zonal extract system where the fan is remote from the zone
D	Zonal balanced supply and extract ventilation system
E	Local balanced supply and extract ventilation units
F	Other local ventilation units
G	Fan assisted terminal variable air volume units
H	Fan coil units
I	Kitchen extract with the fan remote from the zone and a grease filter

NB: Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.

Zone name	SFP [W/(l/s)]										HR efficiency	
	ID of system type	A	B	C	D	E	F	G	H	I	Zone	Standard
	Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1		
RB1_003a Acc WC		-	-	0.4	-	-	-	-	-	-	-	N/A
RB1_004a WC		-	-	0.4	-	-	-	-	-	-	-	N/A
RB1_005a WC		-	-	0.4	-	-	-	-	-	-	-	N/A
RB1_006a WC		-	-	0.4	-	-	-	-	-	-	-	N/A
RB1_007a WC		-	-	0.4	-	-	-	-	-	-	-	N/A
RB1_008a WC		-	-	0.4	-	-	-	-	-	-	-	N/A
RB1_009a WC		-	-	0.4	-	-	-	-	-	-	-	N/A
RB1_010a WC		-	-	0.4	-	-	-	-	-	-	-	N/A

Zone name	SFP [W/(l/s)]										HR efficiency	
	ID of system type											
	Standard value	A	B	C	D	E	F	G	H	I	Zone	Standard
RB1_011a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB1_012a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB1_013a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB2_003a Acc WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB2_004a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB2_005a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB2_006a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB2_007a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB2_008a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB2_009a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB2_010a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB2_011a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB2_012a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB2_013a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB3_003a Acc WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB3_004a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB3_005a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB3_006a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB3_007a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB3_008a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB3_009a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB3_010a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB3_011a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB3_012a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A
RB3_013a WC	-	-	0.4	-	-	-	-	-	-	-	-	N/A

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
CB_018 Classroom / Social		110	-	-
CB_033 WC		110	-	-
CB_034 WC		110	-	-
CB_036 WC		110	-	-
CB_043 WC		110	-	-
CB_044 WC		110	-	-
CB_046 Shower		110	-	-
CB_047 Shower		110	-	-
CB_059 Urinal		110	-	-
CB_061 WC		110	-	-
CB_062 WC		110	-	-
CB_063 WC		110	-	-
CB_064 Drying Storage		110	-	-
CB_065 Plantroom		110	-	-

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
CB_066 Acc. Shower/WC		110	-	-
CB_067 Acc. Shower/WC		110	-	-
CB_068 Shower		110	-	-
CB_069 Shower		110	-	-
CB_070 Shower		110	-	-
CB_071 Shower		110	-	-
CB_072 Shower		110	-	-
CB_073 Shower		110	-	-
CB_074 Shower		110	-	-
CB_075 Shower		110	-	-
CB_076 Clnrs		110	-	-
CB_078 Circulation		110	-	-
CB_079 WC		110	-	-
CB_080 WC		110	-	-
CB_081 Circulation		110	-	-
FF_017m Hallway		110	-	-
FF_017n Overnight Bedroom		110	-	-
FF_017o Bed 01		110	-	-
FF_017p Bed 01		110	-	-
FF_017q Bed 03 (Acc.)		110	-	-
FF_017r Adapt. Bathroom		110	-	-
FF_017s Store		110	-	-
FF_017t Ensuite		110	-	-
FF_017v Living Area		110	-	-
FF_017w Store		110	-	-
FF_105 Internal Plant		110	-	-
FF_105a Plant Lobby		110	-	-
GF_001 Entrance Lobby		110	15	9
GF_003 Cln. Store		110	-	-
GF_004 Acc. WC		110	-	-
GF_005 General Office		110	-	-
GF_007 Circulation		110	-	-
GF_008 First Aid		110	-	-
GF_010 Flexible Meeting/Learning Room		110	-	-
GF_012 Office		110	-	-
GF_013 Staff Lobby		110	-	-
GF_014 Staff Shower & WC		110	-	-
GF_015 Staff Shower & WC		110	-	-
GF_016 Staff Room		110	-	-
GF_017 WCs		110	-	-
GF_017c Server Room		110	-	-
GF_017d Lobby		110	-	-
GF_018 Main Hall		110	-	-

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_019 Kitchen + Servery		110	-	-
GF_019a Staff WC		110	-	-
GF_019b Staff Changing		110	-	-
GF_019c Walk-in Fridge		110	-	-
GF_019d Walk-in Freezer		110	-	-
GF_019e Dry Store		110	-	-
GF_019f Cln. Store		110	-	-
GF_019g Office		110	-	-
GF_020 Lobby		110	-	-
GF_020a WC		110	-	-
GF_020b WC		110	-	-
GF_021 Showers 1		110	-	-
GF_022 Single Gender Change		110	-	-
GF_023 Changing 1		110	-	-
GF_024 Acc. WC + Shower		110	-	-
GF_025 Showers 2		110	-	-
GF_026 Single Gender Change		110	-	-
GF_027 Changing 2		110	-	-
GF_028 WCs		110	-	-
LG_L01 Lobby		110	-	-
LG_L02 WCs		110	-	-
LG_L03 Acc. WC + Shower		110	-	-
LG_L04 Changing		110	-	-
LG_L05 Showers 1		110	-	-
LG_L06 Single Gender Change		110	-	-
LG_L07 Changing 2		110	-	-
LG_L08 Showers 2		110	-	-
LG_L09 Single Gender Change		110	-	-
LG_L010 Drying Store		110	-	-
RB1_001 Lobby		110	-	-
RB1_002 Social & Learning		110	-	-
RB1_003 Acc Dormitory		110	-	-
RB1_003a Acc WC		110	-	-
RB1_004 Guardian Dormitory		110	-	-
RB1_004a WC		110	-	-
RB1_005 Dormitory		110	-	-
RB1_005a WC		110	-	-
RB1_006 Dormitory		110	-	-
RB1_006a WC		110	-	-
RB1_007 Dormitory		110	-	-
RB1_007a WC		110	-	-
RB1_008 Guardian Dormitory		110	-	-
RB1_008a WC		110	-	-

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
RB1_009 Dormitory		110	-	-
RB1_009a WC		110	-	-
RB1_010 Dormitory		110	-	-
RB1_010a WC		110	-	-
RB1_011 Dormitory		110	-	-
RB1_011a WC		110	-	-
RB1_012 Dormitory		110	-	-
RB1_012a WC		110	-	-
RB1_013 Guardian Dormitory		110	-	-
RB1_013a WC		110	-	-
RB1_014 Circulation		110	-	-
RB1_015 Store		110	-	-
RB1_016 Store		110	-	-
RB1_017 Plant		110	-	-
RB2_001 Lobby		110	-	-
RB2_002 Social & Learning		110	-	-
RB2_003 Acc Dormitory		110	-	-
RB2_003a Acc WC		110	-	-
RB2_004 Guardian Dormitory		110	-	-
RB2_004a WC		110	-	-
RB2_005 Dormitory		110	-	-
RB2_005a WC		110	-	-
RB2_006 Dormitory		110	-	-
RB2_006a WC		110	-	-
RB2_007 Dormitory		110	-	-
RB2_007a WC		110	-	-
RB2_008 Guardian Dormitory		110	-	-
RB2_008a WC		110	-	-
RB2_009 Dormitory		110	-	-
RB2_009a WC		110	-	-
RB2_010 Dormitory		110	-	-
RB2_010a WC		110	-	-
RB2_011 Dormitory		110	-	-
RB2_011a WC		110	-	-
RB2_012 Dormitory		110	-	-
RB2_012a WC		110	-	-
RB2_013 Guardian Dormitory		110	-	-
RB2_013a WC		110	-	-
RB2_014 Circulation		110	-	-
RB2_015 Store		110	-	-
RB2_016 Store		110	-	-
RB2_017 Plant		110	-	-
RB3_001 Lobby		110	-	-

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
RB3_002 Social & Learning		110	-	-
RB3_003 Acc Dormitory		110	-	-
RB3_003a Acc WC		110	-	-
RB3_004 Guardian Dormitory		110	-	-
RB3_004a WC		110	-	-
RB3_005 Dormitory		110	-	-
RB3_005a WC		110	-	-
RB3_006 Dormitory		110	-	-
RB3_006a WC		110	-	-
RB3_007 Dormitory		110	-	-
RB3_007a WC		110	-	-
RB3_008 Guardian Dormitory		110	-	-
RB3_008a WC		110	-	-
RB3_009 Dormitory		110	-	-
RB3_009a WC		110	-	-
RB3_010 Dormitory		110	-	-
RB3_010a WC		110	-	-
RB3_011 Dormitory		110	-	-
RB3_011a WC		110	-	-
RB3_012 Dormitory		110	-	-
RB3_012a WC		110	-	-
RB3_013 Guardian Dormitory		110	-	-
RB3_013a WC		110	-	-
RB3_014 Circulation		110	-	-
RB3_015 Store		110	-	-
RB3_016 Store		110	-	-
RB3_017 Plant		110	-	-
GF_006 Staff Accom. Access		110	-	-
FF_Circulation		110	-	-

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?
CB_018 Classroom / Social	NO (-61.5%)	NO
FF_017n Overnight Bedroom	NO (-52.5%)	NO
FF_017o Bed 01	NO (-61.2%)	NO
FF_017p Bed 01	NO (-63.8%)	NO
FF_017q Bed 03 (Acc.)	NO (-83.5%)	NO
FF_017v Living Area	NO (-68.1%)	NO
GF_001 Entrance Lobby	NO (-18.7%)	NO
GF_005 General Office	NO (-14.3%)	NO
GF_008 First Aid	NO (-100%)	NO
GF_010 Flexible Meeting/Learning Room	NO (-42.9%)	NO
GF_012 Office	N/A	N/A

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
GF_016 Staff Room	NO (-42%)	NO
GF_017c Server Room	N/A	N/A
GF_018 Main Hall	NO (-27.9%)	NO
GF_019g Office	N/A	N/A
RB1_002 Social & Learning	NO (-57.9%)	NO
RB1_003 Acc Dormitory	NO (-74.1%)	NO
RB1_004 Guardian Dormitory	NO (-62.4%)	NO
RB1_005 Dormitory	NO (-62.4%)	NO
RB1_006 Dormitory	NO (-61.6%)	NO
RB1_007 Dormitory	NO (-83.4%)	NO
RB1_008 Guardian Dormitory	NO (-89.2%)	NO
RB1_009 Dormitory	NO (-74.5%)	NO
RB1_010 Dormitory	NO (-73.7%)	NO
RB1_011 Dormitory	NO (-73.3%)	NO
RB1_012 Dormitory	NO (-73.1%)	NO
RB1_013 Guardian Dormitory	NO (-72.9%)	NO
RB2_002 Social & Learning	NO (-59.5%)	NO
RB2_003 Acc Dormitory	NO (-85.2%)	NO
RB2_004 Guardian Dormitory	NO (-74.2%)	NO
RB2_005 Dormitory	NO (-73.5%)	NO
RB2_006 Dormitory	NO (-73.5%)	NO
RB2_007 Dormitory	NO (-88.7%)	NO
RB2_008 Guardian Dormitory	NO (-81.8%)	NO
RB2_009 Dormitory	NO (-58.5%)	NO
RB2_010 Dormitory	NO (-58.5%)	NO
RB2_011 Dormitory	NO (-58.7%)	NO
RB2_012 Dormitory	NO (-58.5%)	NO
RB2_013 Guardian Dormitory	NO (-58.6%)	NO
RB3_002 Social & Learning	NO (-69.6%)	NO
RB3_003 Acc Dormitory	NO (-76.4%)	NO
RB3_004 Guardian Dormitory	NO (-66.6%)	NO
RB3_005 Dormitory	NO (-66.1%)	NO
RB3_006 Dormitory	NO (-66.3%)	NO
RB3_007 Dormitory	NO (-86.9%)	NO
RB3_008 Guardian Dormitory	NO (-81%)	NO
RB3_009 Dormitory	NO (-56.2%)	NO
RB3_010 Dormitory	NO (-56.5%)	NO
RB3_011 Dormitory	NO (-56.1%)	NO
RB3_012 Dormitory	NO (-56.1%)	NO
RB3_013 Guardian Dormitory	NO (-56.6%)	NO

Regulation 25A: Consideration of high efficiency alternative energy systems

Were alternative energy systems considered and analysed as part of the design process?	NO
Is evidence of such assessment available as a separate submission?	NO
Are any such measures included in the proposed design?	NO

Technical Data Sheet (Actual vs. Notional Building)

Building Global Parameters

	Actual	Notional
Floor area [m ²]	1956.6	1956.6
External area [m ²]	5204.7	5204.7
Weather	LON	LON
Infiltration [m ³ /hm ² @ 50Pa]	1	3
Average conductance [W/K]	887.32	1461.93
Average U-value [W/m ² K]	0.17	0.28
Alpha value* [%]	26.06	10

* 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
	Offices and Workshop Businesses
	General Industrial and Special Industrial Groups
	Storage or Distribution
	Hotels
1	Residential Institutions: Hospitals and Care Homes
91	Residential Institutions: Residential Schools
	Residential Institutions: Universities and Colleges
	Secure Residential Institutions
	Residential Spaces
	Non-residential Institutions: Community/Day Centre
	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
8	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	6.44	12.86
Cooling	1.2	0.39
Auxiliary	3.97	3.97
Lighting	5.99	7.65
Hot water	1.86	3.85
Equipment*	46.71	46.71
TOTAL**	19.46	28.71

* 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	46.76	0
Wind turbines	0	0
CHP generators	0	0
Solar thermal systems	3.87	0
<i>Displaced electricity</i>	<i>46.76</i>	<i>0</i>

Energy & CO₂ Emissions Summary

	Actual	Notional
Heating + cooling demand [MJ/m ²]	99.88	135.16
Primary energy [kWh/m ²]	-39.39	43.11
Total emissions [kg/m ²]	-3.18	4.09

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: floor heating, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	85.9	0	6.8	0	3.3	3.51	0	3.74	0	
Notional	133	0	13.3	0	0.6	2.78	0	----	----	
[ST] Central heating using air distribution, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	99.3	0	7.5	0	10.6	3.66	0	3.74	0	
Notional	148.5	0	14.8	0	5.5	2.78	0	----	----	
[ST] Split or multi-split system, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	106.9	96.8	9	6	0	3.29	4.48	3.35	6	
Notional	156	32.4	15.6	1.9	0	2.78	4.63	----	----	
[ST] Central heating using air distribution, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	41.9	0	3.4	0	13.2	3.45	0	3.74	0	
Notional	108.1	0	10.8	0	9.7	2.78	0	----	----	
[ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
Actual	0	0	0	0	0	1	0	1	0	
Notional	0	0	0	0	0	1.41	0	----	----	
[ST] Central heating using water: radiators, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	65.9	0	5.2	0	2.5	3.51	0	3.74	0	
Notional	6.7	0	0.7	0	0.9	2.78	0	----	----	
[ST] No Heating or Cooling										
Actual	0	0	0	0	0	0	0	0	0	
Notional	0	0	0	0	0	0	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