

Project name

Haringey New Annex Green Stage 3+

As designed

Date: Mon Sep 04 10:00:22 2023

Administrative information

Building Details

Address: River Park House, 225 High Rd, London, N22 8HQ

Certifier details

Name: David Richard Kingstone

Telephone number: 07753829637

Address: Buro Happold, 3 Wellington Place, Leeds, LS1 4AP

Certification tool

Calculation engine: Apache

Calculation engine version: 7.0.19

Interface to calculation engine: IES Virtual Environment

Interface to calculation engine version: 7.0.19

BRUKL compliance module version: v6.1.e.0

Foundation area [m²]: 1324.47The 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	4.61
Building CO ₂ emission rate (BER), kgCO ₂ /m ² annum	1.86
Target primary energy rate (TPER), kWh _{PE} /m ² annum	50.65
Building primary energy rate (BPER), kWh _{PE} /m ² annum	19.31
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	0.15	0.26	0000000F:Surf[0]
Floors	0.18	0.11	0.22	0000000F:Surf[1]
Pitched roofs	0.16	-	-	No pitched roofs in building
Flat roofs	0.18	0.11	0.11	00000046:Surf[21]
Windows** and roof windows	1.6	1.3	1.3	00000046:Surf[0]
Rooflights***	2.2	-	-	No roof lights in building
Personnel doors^	1.6	2.02	2.2	000000A3:Surf[0]
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

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	3

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- A6_FCUs

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4	4.34	0	1.4	0.8
Standard value	2.5*	N/A	N/A	2^	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
* 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.					

2- DX (Comms)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4	5.55	-	-	-
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					NO
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

3- Air Curtain

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4	-	0	-	-
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					NO
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

4- A1_Heating single pipe rads

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4	-	0	-	-
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					NO
* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.					

1- AX_DHW Building

	Water heating efficiency	Storage loss factor [kWh/litre per day]
This building	1	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		
00 - Circulation Wing Perimeter E01	-	-	-	-	-	-	-	0.2	-	-	N/A
00 - FM room	-	-	-	-	-	-	-	0.2	-	-	N/A
00 - IT/tech store	-	-	-	-	-	-	-	0.2	-	-	N/A
00 - Office perimeter E03	-	-	-	-	-	-	-	0.2	-	-	N/A
00 - Office perimeter E01	-	-	-	-	-	-	-	0.2	-	-	N/A
00 - Office perimeter E02	-	-	-	-	-	-	-	0.2	-	-	N/A
00 - Office perimeter N01	-	-	-	-	-	-	-	0.2	-	-	N/A
00 - Nursing Room	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Booth 02	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Furniture Storage	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Meeting Room 02	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Meeting Room 03	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Meeting Room Wing 01	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Office Central 01	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Office Central 02	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Office perimeter E01	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Office perimeter N01	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Office perimeter S01	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Office perimeter W01	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Study Room 02	-	-	-	-	-	-	-	0.2	-	-	N/A
02 - Meeting Room 01	-	-	-	-	-	-	-	0.2	-	-	N/A
02 - Office perimeter E01	-	-	-	-	-	-	-	0.2	-	-	N/A
02 - Office perimeter N01	-	-	-	-	-	-	-	0.2	-	-	N/A
02 - Office perimeter W01	-	-	-	-	-	-	-	0.2	-	-	N/A
00 - Office Perimeter S01	-	-	-	-	-	-	-	0.2	-	-	N/A
00 - Meeting Room 02	-	-	-	-	-	-	-	0.2	-	-	N/A
00 - Meeting Room Wing 01	-	-	-	-	-	-	-	0.2	-	-	N/A
00 - Meeting Room Wing W01	-	-	-	-	-	-	-	0.2	-	-	N/A
00 - Office Wing	-	-	-	-	-	-	-	0.2	-	-	N/A
00 - Office 01	-	-	-	-	-	-	-	0.2	-	-	N/A
00 - Meeting Room 03	-	-	-	-	-	-	-	0.2	-	-	N/A
00 - Meeting Room 01	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Meeting Room Wing 07	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Office perimeter S02	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Meeting Room Wing 08	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Meeting Room Wing 06	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Meeting Room Wing 02	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Meeting Room Wing 03	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Meeting Room Wing 04	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Meeting Room Wing 05	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Study Room 01	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Booth 01	-	-	-	-	-	-	-	0.2	-	-	N/A
01 - Meeting Room 01	-	-	-	-	-	-	-	0.2	-	-	N/A

Zone name	SFP [W/(l/s)]										HR efficiency	
ID of system type	A	B	C	D	E	F	G	H	I			
Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1	Zone	Standard	
02 - Office perimeter S01	-	-	-	-	-	-	-	0.2	-	-	N/A	
02 - Office perimeter S01	-	-	-	-	-	-	-	0.2	-	-	N/A	
02 - Study Room	-	-	-	-	-	-	-	0.2	-	-	N/A	
02 - Booth 02	-	-	-	-	-	-	-	0.2	-	-	N/A	
02 - Study Room	-	-	-	-	-	-	-	0.2	-	-	N/A	
02 - Meeting Room 02	-	-	-	-	-	-	-	0.2	-	-	N/A	
02 - Office central 01	-	-	-	-	-	-	-	0.2	-	-	N/A	
02 - Booth 01	-	-	-	-	-	-	-	0.2	-	-	N/A	
02 - Office central 02	-	-	-	-	-	-	-	0.2	-	-	N/A	
02 - Meeting Room 04	-	-	-	-	-	-	-	0.2	-	-	N/A	
02 - Meeting Room 03	-	-	-	-	-	-	-	0.2	-	-	N/A	
00 - Postroom	-	-	-	-	-	-	-	0.2	-	-	N/A	
00 - Security Room	-	-	-	-	-	-	-	0.2	-	-	N/A	

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
00 - Acc. Showers		108	-	-
00 - Circulation 02		112	-	-
00 - Circulation Wing Perimeter E01		112	-	-
00 - Comms Room		156	-	-
00 - Draft Lobby		112	-	-
00 - FM room		114	-	-
00 - IT/tech store		122	-	-
00 - LV room		156	-	-
00 - Office perimeter E03		114	-	-
00 - Office perimeter E01		114	-	-
00 - Office perimeter E02		114	-	-
00 - Office perimeter N01		114	-	-
00 - Plant Space		156	-	-
00 - Protected Lobby 01		112	-	-
00 - Protected Lobby 03		112	-	-
00 - Protected Lobby 05		112	-	-
00 - Showers 01		108	-	-
00 - Showers 02		108	-	-
00 - Showers 03		108	-	-
00 - Showers 04		108	-	-
00 - Showers 05		108	-	-
00 - Showers 06		108	-	-
00 - Showers 07		108	-	-
00 - Showers 08		108	-	-
00 - Stairs 02		147	-	-
00 - Nursing Room		122	-	-

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
01 - Booth 02		122	-	-
01 - Circulation Bridge		112	-	-
01 - Circulation Wing Perimeter E01		112	-	-
01 - Comms Room		156	-	-
01 - cupboard		108	-	-
01 - Acc. WC		108	-	-
01 - Furniture Storage		122	-	-
01 - Meeting Room 02		122	-	-
01 - Meeting Room 03		122	-	-
01 - Meeting Room Wing 01		122	-	-
01 - Office Central 01		114	-	-
01 - Office Central 02		114	-	-
01 - Office perimeter E01		114	-	-
01 - Office perimeter N01		114	-	-
01 - Office perimeter S01		114	-	-
01 - Office perimeter W01		114	-	-
01 - Protected Lobby 01		112	-	-
01 - stairs		147	-	-
01 - stairs		147	-	-
01 - Study Room 02		122	-	-
01 - WC		108	-	-
01 - WC		108	-	-
01 - WC		108	-	-
01 - WC		108	-	-
01 - WC		108	-	-
01 - WC		108	-	-
01 - WC		108	-	-
01 - WC		108	-	-
01 - WC		108	-	-
01 - WC		108	-	-
01 - WC		108	-	-
01 - WC Circulation		112	-	-
02 - Meeting Room 01		122	-	-
02 - Office perimeter E01		114	-	-
02 - Office perimeter N01		114	-	-
02 - Office perimeter W01		114	-	-
02 - stairs 01		147	-	-
02 - stairs 02		147	-	-
02 - store		108	-	-
02 - toilet 01		108	-	-
02 - toilet 02		108	-	-
02 - toilet 03		108	-	-
02 - toilet 04		108	-	-

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
02 - toilet 05		108	-	-
02 - toilet 06		108	-	-
02 - toilet 07		108	-	-
02 - toilet 08		108	-	-
02 - toilet 09		108	-	-
02 - toilet 10		108	-	-
02 - toilet 11		108	-	-
02 - toilet 12		108	-	-
02 - WC lobby 01		112	-	-
03 - escape stair		147	-	-
03 - plant		156	-	-
03 - protected lobby		112	-	-
00 - WC 10		108	-	-
00 - Protected Lobby 02		112	-	-
00 - Office Perimeter S01		114	-	-
00 - Meeting Room 02		122	-	-
00 - Meeting Room Wing 01		122	-	-
00 - Meeting Room Wing W01		122	-	-
00 - Acc. WC 01		108	-	-
00 - WC 11		108	-	-
00 - WC 09		108	-	-
00 - WC 05		108	-	-
00 - WC 04		108	-	-
00 - Acc. WC 02		108	-	-
00 - WC 01		108	-	-
00 - WC 03		108	-	-
00 - WC 02		108	-	-
00 - WC 12		108	-	-
00 - Drying Space		108	-	-
00 - Changing Room Lobby		112	-	-
00 - Protected Lobby 04		112	-	-
00 - Stairs 01		147	-	-
00 - WC lobby 02		112	-	-
00 - Office Wing		114	-	-
00 - Hot Water Tank		156	-	-
00 - Office 01		114	-	-
00 - Meeting Room 03		122	-	-
00 - Meeting Room 01		114	-	-
01 - Meeting Room Wing 07		122	-	-
01 - Office perimeter S02		114	-	-
01 - Meeting Room Wing 08		122	-	-
01 - Meeting Room Wing 06		122	-	-
01 - Meeting Room Wing 02		122	-	-

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
01 - Meeting Room Wing 03		122	-	-
01 - Meeting Room Wing 04		122	-	-
01 - Meeting Room Wing 05		122	-	-
01 - Study Room 01		122	-	-
01 - Booth 01		122	-	-
01 - Protected Lobby 02		112	-	-
01 - Meeting Room 01		122	-	-
02 - Office perimeter S01		114	-	-
02 - Office perimeter S01		114	-	-
02 - Study Room		114	-	-
02 - Booth 02		114	-	-
02 - Study Room		114	-	-
02 - Meeting Room 02		122	-	-
02 - Comms Room		156	-	-
02 - Office central 01		114	-	-
02 - Booth 01		114	-	-
02 - Office central 02		114	-	-
02 - protected lobby 01		112	-	-
02 - protected lobby 02		112	-	-
02 - Meeting Room 04		122	-	-
02 - Meeting Room 03		122	-	-
00 - Postroom		114	-	-
00 - Security Room		114	-	-
00 - Cleaners Cupboard		108	-	-
00 - Lobby 02		112	-	-

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?
00 - Circulation Wing Perimeter E01	NO (-61.6%)	NO
00 - Comms Room	N/A	N/A
00 - FM room	N/A	N/A
00 - IT/tech store	NO (-49%)	NO
00 - Office perimeter E03	NO (-50.4%)	NO
00 - Office perimeter E01	NO (-81.7%)	NO
00 - Office perimeter E02	NO (-84.7%)	NO
00 - Office perimeter N01	NO (-64.4%)	NO
00 - Nursing Room	N/A	N/A
01 - Booth 02	N/A	N/A
01 - Comms Room	N/A	N/A
01 - Furniture Storage	N/A	N/A
01 - Meeting Room 02	NO (-39.5%)	NO
01 - Meeting Room 03	NO (-54.7%)	NO
01 - Meeting Room Wing 01	NO (-95.4%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
01 - Office Central 01	NO (-86.9%)	NO
01 - Office Central 02	NO (-81.8%)	NO
01 - Office perimeter E01	NO (-68.4%)	NO
01 - Office perimeter N01	NO (-79.5%)	NO
01 - Office perimeter S01	NO (-88.5%)	NO
01 - Office perimeter W01	NO (-41.7%)	NO
01 - Study Room 02	N/A	N/A
02 - Meeting Room 01	N/A	N/A
02 - Office perimeter E01	NO (-67.2%)	NO
02 - Office perimeter N01	NO (-69.3%)	NO
02 - Office perimeter W01	NO (-53.2%)	NO
00 - Office Perimeter S01	NO (-36.4%)	NO
00 - Meeting Room 02	N/A	N/A
00 - Meeting Room Wing 01	N/A	N/A
00 - Meeting Room Wing W01	NO (-76.2%)	NO
00 - Office Wing	NO (-54.4%)	NO
00 - Office 01	NO (-82.8%)	NO
00 - Meeting Room 03	NO (-98.6%)	NO
00 - Meeting Room 01	N/A	N/A
01 - Meeting Room Wing 07	NO (-95.4%)	NO
01 - Office perimeter S02	NO (-58.7%)	NO
01 - Meeting Room Wing 08	NO (-94.3%)	NO
01 - Meeting Room Wing 06	NO (-95.2%)	NO
01 - Meeting Room Wing 02	NO (-95.4%)	NO
01 - Meeting Room Wing 03	NO (-95.3%)	NO
01 - Meeting Room Wing 04	NO (-95.2%)	NO
01 - Meeting Room Wing 05	NO (-95.2%)	NO
01 - Study Room 01	N/A	N/A
01 - Booth 01	N/A	N/A
01 - Meeting Room 01	N/A	N/A
02 - Office perimeter S01	NO (-65.3%)	NO
02 - Office perimeter S01	NO (-69.7%)	NO
02 - Study Room	N/A	N/A
02 - Booth 02	N/A	N/A
02 - Study Room	N/A	N/A
02 - Meeting Room 02	N/A	N/A
02 - Comms Room	N/A	N/A
02 - Office central 01	NO (-68.7%)	NO
02 - Booth 01	N/A	N/A
02 - Office central 02	NO (-81%)	NO
02 - Meeting Room 04	N/A	N/A
02 - Meeting Room 03	N/A	N/A
00 - Postroom	N/A	N/A
00 - Security Room	N/A	N/A

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?	NO
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]	4835.7	4835.7
External area [m ²]	6524.5	6524.5
Weather	LON	LON
Infiltration [m ³ /hm ² @ 50Pa]	3	3
Average conductance [W/K]	1836.43	0
Average U-value [W/m ² K]	0.28	0
Alpha value* [%]	24.24	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
100	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
	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
	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	1.73	1.87
Cooling	5.19	5.54
Auxiliary	7.44	8.91
Lighting	10.02	13.1
Hot water	4.82	5.04
Equipment*	52.46	52.46
TOTAL **	29.2	34.46

* 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	16.07	0
Wind turbines	0	0
CHP generators	0	0
Solar thermal systems	0	0
<i>Displaced electricity</i>	<i>16.07</i>	<i>0</i>

Energy & CO₂ Emissions Summary

	Actual	Notional
Heating + cooling demand [MJ/m ²]	82.48	111.12
Primary energy [kWh _{PE} /m ²]	19.31	50.65
Total emissions [kg/m ²]	1.86	4.61

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] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	168.7	0	13.1	0	0.7	3.57	0	4	0	
Notional	119.4	0	11.9	0	0.6	2.78	0	----	----	
[ST] Split or multi-split system, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	0	0	0	0	0	3.73	3.94	4	5.55	
Notional	0	0	0	0	0	2.78	4.63	----	----	
[ST] Other local room heater - fanned, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	47.2	0	4.1	0	0.1	3.2	0	4	0	
Notional	30.7	0	3.1	0	0	2.78	0	----	----	
[ST] Fan coil systems, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
Actual	23.4	82.1	1.9	6.9	8.3	3.37	3.28	4	4.34	
Notional	21.6	123.7	2.2	7.4	10.4	2.78	4.63	----	----	
[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