

Project name

Hillingdon Hospital Modular Ward**As designed****Date:** Tue Oct 06 15:16:14 2020**Administrative information****Building Details****Address:** Address 1, City, Postcode**Certification tool****Calculation engine:** Apache**Calculation engine version:** 7.0.12**Interface to calculation engine:** IES Virtual Environment**Interface to calculation engine version:** 7.0.12**BRUKL compliance check version:** v5.6.a.1**Owner Details****Name:** Name**Telephone number:** Phone**Address:** Street Address, City, Postcode**Certifier details****Name:** Name**Telephone number:** Phone**Address:** Street Address, City, Postcode**Criterion 1: The calculated CO₂ emission rate for the building must not exceed the target****The building does not comply with England Building Regulations Part L 2013**

CO ₂ emission rate from the notional building, kgCO ₂ /m ² .annum	45.3
Target CO ₂ emission rate (TER), kgCO ₂ /m ² .annum	45.3
Building CO ₂ emission rate (BER), kgCO ₂ /m ² .annum	63.1
Are emissions from the building less than or equal to the target?	BER > TER
Are as built details the same as used in the BER calculations?	Separate submission

Criterion 2: The performance of the building fabric and fixed building services should achieve reasonable overall standards of energy efficiency**Values which do not achieve the standards in the Non-Domestic Building Services Compliance Guide and Part L are displayed in red.****Building fabric**

Element	U _a -Limit	U _a -Calc	U _i -Calc	Surface where the maximum value occurs*
Wall**	0.35	0.33	0.33	LF00003A:Surf[2]
Floor	0.25	0.2	0.2	LF00005C:Surf[0]
Roof	0.25	0.24	0.24	LF000032:Surf[1]
Windows***, roof windows, and rooflights	2.2	2.07	2.07	LF00003A:Surf[0]
Personnel doors	2.2	2.2	2.2	LF000049:Surf[0]
Vehicle access & similar large doors	1.5	-	-	No Vehicle access doors in building
High usage entrance doors	3.5	-	-	No High usage entrance doors in building
U _a -Limit = Limiting area-weighted average U-values [W/(m ² K)] U _a -Calc = Calculated area-weighted average U-values [W/(m ² K)] U _i -Calc = Calculated maximum individual element U-values [W/(m ² K)] * There might be more than one surface where the maximum U-value occurs. ** 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. 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	Worst acceptable standard	This building
m ³ /(h.m ²) at 50 Pa	10	5

Building services

The standard values listed below are minimum values for efficiencies and maximum values for SFPs. Refer to the Non-Domestic Building Services Compliance Guide for details.

Whole building lighting automatic monitoring & targeting with alarms for out-of-range values	NO
Whole building electric power factor achieved by power factor correction	<0.9

1- 25 Dedicated SO EF System

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	4.1	0	2.4	-
Standard value	N/A	2.55	N/A	1.6^	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
^ Limiting SFP may be extended by the amounts specified in the Non-Domestic Building Services Compliance Guide if the system includes additional components as listed in the Guide.					

2- 20 DH Radiant Panel AHU01

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	-	0.67	0	0.73
Standard value	N/A	N/A	N/A	N/A	0.5
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO

3- 19 AHU01

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	4.1	0	1.8	0.73
Standard value	N/A	2.55	N/A	1.6^	0.5
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO
^ Limiting SFP may be extended by the amounts specified in the Non-Domestic Building Services Compliance Guide if the system includes additional components as listed in the Guide.					

4- 22 FCU AHU01

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4	4.1	0	1.8	0.73
Standard value	2.5*	3.2	N/A	1.6^	0.5
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. For types <=12 kW output, refer to EN 14825 for limiting standards.					
^ Limiting SFP may be extended by the amounts specified in the Non-Domestic Building Services Compliance Guide if the system includes additional components as listed in the Guide.					

5- 26 Dedicated SO EF System DX

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4	4.1	0	0	-
Standard value	2.5*	3.2	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. For types <=12 kW output, refer to EN 14825 for limiting standards.					

6- 23 DX/01 NV

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4	4.1	0	0	-
Standard value	2.5*	3.2	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. For types <=12 kW output, refer to EN 14825 for limiting standards.					

7- 24 DX/02 NV

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4	4.1	0	0	-
Standard value	2.5*	3.2	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. For types <=12 kW output, refer to EN 14825 for limiting standards.					

8- 28 DH Radiant Panel NV

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	-	0.67	0	-
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

9- 27 DH Dedicated SO EF System

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	-	0.67	0	-
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

10- 7 DX/MVHR/04

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4	4.1	0	1.5	0.87
Standard value	2.5*	3.2	N/A	1.6^	0.5
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. For types <=12 kW output, refer to EN 14825 for limiting standards.					
^ Limiting SFP may be extended by the amounts specified in the Non-Domestic Building Services Compliance Guide if the system includes additional components as listed in the Guide.					

11- 3 DX/MVHR/02

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4	4.1	0	1.3	0.87
Standard value	2.5*	3.2	N/A	1.6^	0.5
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. For types <=12 kW output, refer to EN 14825 for limiting standards.					
^ Limiting SFP may be extended by the amounts specified in the Non-Domestic Building Services Compliance Guide if the system includes additional components as listed in the Guide.					

12- 1 DX/MVHR/01

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4	4.1	0	1.5	0.87
Standard value	2.5*	3.2	N/A	1.6^	0.5
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. For types <=12 kW output, refer to EN 14825 for limiting standards.					
^ Limiting SFP may be extended by the amounts specified in the Non-Domestic Building Services Compliance Guide if the system includes additional components as listed in the Guide.					

13- 5 DX/MVHR/03

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4	4.1	0	1.5	0.87
Standard value	2.5*	3.2	N/A	1.6^	0.5
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. For types <=12 kW output, refer to EN 14825 for limiting standards.					
^ Limiting SFP may be extended by the amounts specified in the Non-Domestic Building Services Compliance Guide if the system includes additional components as listed in the Guide.					

14- 15 DX/MVHR/07

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4	4.1	0	1.5	0.87
Standard value	2.5*	3.2	N/A	1.6^	0.5
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. For types <=12 kW output, refer to EN 14825 for limiting standards.					
^ Limiting SFP may be extended by the amounts specified in the Non-Domestic Building Services Compliance Guide if the system includes additional components as listed in the Guide.					

15- 13 DX/MVHR/06

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4	4	0	1.5	0.87
Standard value	2.5*	3.2	N/A	1.6^	0.5
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. For types <=12 kW output, refer to EN 14825 for limiting standards.					
^ Limiting SFP may be extended by the amounts specified in the Non-Domestic Building Services Compliance Guide if the system includes additional components as listed in the Guide.					

16- 4 DX/MVHR/02/RP

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	-	0.2	0	0.87
Standard value	N/A	N/A	N/A	N/A	0.5
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO

17- 2 DX/MVHR/01/RP

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	-	0.2	0	0.87
Standard value	N/A	N/A	N/A	N/A	0.5
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO

18- 8 DX/MVHR/04/DX

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4.2	4	0	0	0.87
Standard value	2.5*	3.2	N/A	N/A	0.5
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. For types <=12 kW output, refer to EN 14825 for limiting standards.					

19- 12 DX/MVHR/05/RP

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	-	-	0	0.87
Standard value	N/A	N/A	N/A	N/A	0.5
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO

20- 10 DX/MVHR/05

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4	4.1	0	1.5	0.87
Standard value	2.5*	3.2	N/A	1.6^	0.5
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. For types <=12 kW output, refer to EN 14825 for limiting standards.					
^ Limiting SFP may be extended by the amounts specified in the Non-Domestic Building Services Compliance Guide if the system includes additional components as listed in the Guide.					

21- 17 GF DX/01 NV

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4	4.1	0	0	-
Standard value	2.5*	3.2	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. For types <=12 kW output, refer to EN 14825 for limiting standards.					

22- 18 GF DX/02 NV

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4	4.1	0	0	-
Standard value	2.5*	3.2	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. For types <=12 kW output, refer to EN 14825 for limiting standards.					

23- 11 DX/MVHR/05 DX

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4	4.1	0	0	0.87
Standard value	2.5*	3.2	N/A	N/A	0.5
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. For types <=12 kW output, refer to EN 14825 for limiting standards.					

24- 6 DX/MVHR/03/RP

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	-	0.2	0	0.87
Standard value	N/A	N/A	N/A	N/A	0.5
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO

25- 9 DX/MVHR/04/RP

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	-	0.2	0	0.87
Standard value	N/A	N/A	N/A	N/A	0.5
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	-	0.2	0	0.87
Standard value	N/A	N/A	N/A	N/A	0.5
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	-	0.2	0	0.87
Standard value	N/A	N/A	N/A	N/A	0.5
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	4	4.1	0	0	0.73
Standard value	2.5*	3.2	N/A	N/A	0.5
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. For types <=12 kW output, refer to EN 14825 for limiting standards.

"No HWS in project, or hot water is provided by HVAC system"

Local mechanical ventilation, exhaust, and terminal units

ID	System type in Non-domestic Building Services Compliance Guide
A	Local supply or extract ventilation units serving a single area
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 supply and extract ventilation units serving a single room or zone with heating and heat recovery
E	Local supply and extract ventilation system serving a single area with heating and heat recovery
F	Other local ventilation units
G	Fan-assisted terminal VAV unit
H	Fan coil units
I	Zonal extract system where the fan is remote from the zone with grease filter

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	1.9	1.6	0.5	1.1	0.5	1		Zone	Standard
FF Acc WC 12	-	-	-	1.8	-	-	-	-	-	-	-	N/A
FF Circulation 1 7	-	-	-	1.8	-	-	-	-	-	-	-	N/A
FF Clean Utility 3	-	-	-	1.8	-	-	-	-	-	-	-	N/A
FF Cupboard 51	-	-	-	1.8	-	-	-	-	-	-	-	N/A
FF Doctors Office 6	-	-	-	-	-	-	-	0.3	-	-	-	N/A
FF Equipment & Fluid Store 4	-	-	-	1.8	-	-	-	-	-	-	-	N/A
FF Kitchen 2	-	-	-	-	-	-	-	0.3	-	-	-	N/A
FF MDT Room 5	-	-	-	-	-	-	-	0.3	-	-	-	N/A
FF Reception 16	-	-	-	-	-	-	-	0.3	-	-	-	N/A
FF Visitor Waiting 1	-	-	-	-	-	-	-	0.3	-	-	-	N/A
FF Ward Manager 15	-	-	-	-	-	-	-	0.3	-	-	-	N/A
FF WC/Shower 42	-	-	-	1.8	-	-	-	-	-	-	-	N/A

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	1.9	1.6	0.5	1.1	0.5	1		
LGF Assist WC 25	-	-	-	1.5	-	-	-	-	-	-	N/A
LGF Assist WC 28	-	-	-	1.5	-	-	-	-	-	-	N/A
LGF Clean Utility 5	-	-	-	1.5	-	-	-	-	-	-	N/A
LGF Cleaner 12	-	-	-	1.5	-	-	-	-	-	-	N/A
LGF Dirty Utility 11	-	-	-	1.5	-	-	-	-	-	-	N/A
LGF Indipendant WC 15	-	-	-	1.5	-	-	-	-	-	-	N/A
LGF Kitchen 7	-	-	-	1.5	-	-	-	-	-	-	N/A
LGF MDT Room 8	-	-	-	1.5	-	-	-	-	-	-	N/A
LGF SC/Shower 35	-	-	-	1.5	-	-	-	-	-	-	N/A
LGF Staff Room 9	-	-	-	1.5	-	-	-	-	-	-	N/A
LGF WC Shower 24	-	-	-	1.5	-	-	-	-	-	-	N/A
LGF WC/Shower 17	-	-	-	1.5	-	-	-	-	-	-	N/A
LGF WC/Shower 19	-	-	-	1.5	-	-	-	-	-	-	N/A
LGF WC/Shower 30	-	-	-	1.5	-	-	-	-	-	-	N/A
LGF WC/Shower 33	-	-	-	1.5	-	-	-	-	-	-	N/A
LGF WC/Shower 40	-	-	-	1.5	-	-	-	-	-	-	N/A
LGF WC/Sower 38	-	-	-	1.5	-	-	-	-	-	-	N/A
SF 4 Bed Ward 16	-	-	-	1.8	-	-	-	-	-	-	N/A
SF 4 Bed Ward 29	-	-	-	1.8	-	-	-	-	-	-	N/A
SF 4 Bed Ward 34	-	-	-	1.8	-	-	-	-	-	-	N/A
SF 4 Bed Ward 37	-	-	-	1.8	-	-	-	-	-	-	N/A
SF 4 Bed Ward 39	-	-	-	1.8	-	-	-	-	-	-	N/A
SF Assist WC Shower 33	-	-	-	1.8	-	-	-	-	-	-	N/A
SF Assisted WC Shower 28	-	-	-	1.8	-	-	-	-	-	-	N/A
SF Assisted WC Shower 50	-	-	-	1.8	-	-	-	-	-	-	N/A
SF Assisted WC/Shower 26	-	-	-	1.8	-	-	-	-	-	-	N/A
SF Asssit WC Shower 19	-	-	-	1.8	-	-	-	-	-	-	N/A
SF Clean Utility 5	-	-	-	1.8	-	-	-	-	-	-	N/A
SF Clinical Store 20	-	-	-	1.8	-	-	-	-	-	-	N/A
SF Dirty Utility 31	-	-	-	1.8	-	-	-	-	-	-	N/A
SF Disposal Hold 4	-	-	-	1.8	-	-	-	-	-	-	N/A
SF Interview Room 13	-	-	-	1.8	-	-	-	-	-	-	N/A
SF Kitchen 7	-	-	-	-	-	-	-	0.3	-	-	N/A
SF MDT Room 8	-	-	-	-	-	-	-	0.3	-	-	N/A
SF Nurse Station 22	-	-	-	1.8	-	-	-	-	-	-	N/A
SF Reception 1	-	-	-	-	-	-	-	0.3	-	-	N/A
SF Single Bed 18	-	-	-	1.8	-	-	-	-	-	-	N/A
SF Single Bed 23	-	-	-	1.8	-	-	-	-	-	-	N/A
SF Single Bed 25	-	-	-	1.8	-	-	-	-	-	-	N/A
SF Single Bed 27	-	-	-	1.8	-	-	-	-	-	-	N/A
SF Single Bed 32	-	-	-	1.8	-	-	-	-	-	-	N/A
SF Single Bed 49	-	-	-	1.8	-	-	-	-	-	-	N/A
SF Single Bed E/S 24	-	-	-	1.8	-	-	-	-	-	-	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	1.9	1.6	0.5	1.1	0.5	1	Zone	Standard
SF Staff Room 9	-	-	-	-	-	-	-	0.3	-	-	N/A
SF Store 52	-	-	-	1.8	-	-	-	-	-	-	N/A
SF Store 6	-	-	-	1.8	-	-	-	-	-	-	N/A
SF WC Shower 17	-	-	-	1.8	-	-	-	-	-	-	N/A
SF WC Shower 30	-	-	-	1.8	-	-	-	-	-	-	N/A
SF WC Shower 35	-	-	-	1.8	-	-	-	-	-	-	N/A
SF WC Shower 38	-	-	-	1.8	-	-	-	-	-	-	N/A
SF WC Shower 40	-	-	-	1.8	-	-	-	-	-	-	N/A
ST Store 51	-	-	-	1.8	-	-	-	-	-	-	N/A

General lighting and display lighting		Luminous efficacy [lm/W]			General lighting [W]
Zone name		Luminaire	Lamp	Display lamp	
Standard value		60	60	22	
FF 2 Bed Bay ICU 18		-	66	-	308
FF 2 Bed Bay ICU 20		-	66	-	288
FF 2 Bed Bay ICU 34		-	65	-	316
FF 2 Bed Bay ICU 35		-	66	-	311
FF 2 Bed Bay ICU 39		-	65	-	314
FF 2 Bed Bay ICU 41		-	66	-	278
FF Acc WC 12		-	155	-	31
FF Amb WC 13		-	174	-	20
FF Blood Gas Analyser Station 40		120	-	-	13
FF Circulation 1 7		-	77	-	286
FF Circulation 2 17		-	83	-	177
FF Circulation 3 28		-	88	-	97
FF Circulation 4 36		-	81	-	168
FF Clean Utility 21		83	-	-	41
FF Clean Utility 3		78	-	-	40
FF Cleaner 14		108	-	-	31
FF Cupboard 50		1	-	-	8
FF Cupboard 51		1	-	-	6
FF Dirty utility 10		73	-	-	36
FF Dirty Utility 37		74	-	-	38
FF Doctors Office 6		69	-	-	98
FF Drugs Storage 27		75	-	-	69
FF Electrical Cupboard 8		88	-	-	45
FF Equipment & Fluid Store 4		72	-	-	64
FF IT Hub 9		91	-	-	66
FF Kitchen 2		68	-	-	93
FF Lift Stair Lobby 46		-	66	-	323
FF Linen 19		120	-	-	16
FF Linen 38		120	-	-	17
FF Lobby 22		-	114	-	41

General lighting and display lighting		Luminous efficacy [lm/W]			General lighting [W]
Zone name		Luminaire	Lamp	Display lamp	
	Standard value	60	60	22	
FF Lobby 26		-	111	-	41
FF Lobby 30		-	113	-	41
FF Lobby 32		-	110	-	41
FF Lobby 45		-	96	-	56
FF MDT Room 5		66	-	-	111
FF Reception 16		-	118	60	35
FF Single Bed ICU 23		-	74	-	126
FF Single Bed ICU 25		-	76	-	123
FF Single Bed ICU 31		-	74	-	126
FF Single Bed ICU 33		-	76	-	125
FF Staff Base 24		88	-	-	34
FF Staff Base 29		88	-	-	34
FF Stair 44		-	73	-	144
FF Stair Lobby 43		-	97	-	54
FF Testing 11		86	-	-	31
FF Visitor Waiting 1		-	103	60	44
FF Ward Manager 15		83	-	-	68
FF WC/Shower 42		-	106	-	62
LGF 4 Bed Ward 16		-	66	-	176
LGF 4 Bed Ward 23		-	67	-	165
LGF 4 Bed Ward 29		-	67	-	168
LGF 4 Bed Ward 34		-	66	-	179
LGF 4 Bed Ward 37		-	66	-	180
LGF 4 Bed Ward 39		-	67	-	169
LGF Assist WC 25		-	100	-	42
LGF Assist WC 28		-	100	-	44
LGF Circulation 14		-	77	-	322
LGF Circulation 21		-	78	-	279
LGF Circulation 36		-	108	-	40
LGF Clean Utility 5		68	-	-	53
LGF Cleaner 12		91	-	-	40
LGF Clinical Store 20		66	-	-	64
LGF Dirty Utility 11		62	-	-	57
LGF Disposal Hold 4		83	-	-	43
LGF Elec Cup 2		88	-	-	30
LGF Indipendant WC 15		-	107	-	42
LGF Interview Room 13		72	-	-	56
LGF IT Cupboard 3		1	-	-	66
LGF Kitchen 7		63	-	-	101
LGF Lift/Stair 51		-	65	-	314
LGF Linen 31		103	-	-	41
LGF Lobby 42		-	98	-	52
LGF Lobby 43		-	115	-	35

General lighting and display lighting		Luminous efficacy [lm/W]			General lighting [W]
Zone name		Luminaire	Lamp	Display lamp	
	Standard value	60	60	22	
LGF Lobby 52		-	94	-	64
LGF MDT Room 8		66	-	-	109
LGF Nurse Station 22		64	-	-	54
LGF Reception 1		-	95	60	58
LGF SC/Shower 35		-	107	-	59
LGF Single Bed 18		-	81	-	106
LGF Single Bed 25		-	81	-	99
LGF Single Bed 27		-	80	-	101
LGF Single Bed 32		-	80	-	109
LGF Staff Room 9		65	-	-	56
LGF Stair Lobby 41		-	116	-	35
LGF Store 6		119	-	-	22
LGF WC Shower 24		-	112	-	41
LGF WC/Shower 17		-	108	-	44
LGF WC/Shower 19		-	130	-	32
LGF WC/Shower 30		-	111	-	43
LGF WC/Shower 33		-	127	-	34
LGF WC/Shower 40		-	111	-	43
LGF WC/Sower 38		-	107	-	46
SF 4 Bed Ward 16		-	66	-	176
SF 4 Bed Ward 29		-	67	-	170
SF 4 Bed Ward 34		-	66	-	178
SF 4 Bed Ward 37		-	66	-	181
SF 4 Bed Ward 39		-	67	-	170
SF Assist WC Shower 33		-	127	-	44
SF Assisted WC Shower 28		-	126	-	44
SF Assisted WC Shower 50		-	146	-	36
SF Assisted WC/Shower 26		-	129	-	42
SF Asssit WC Shower 19		-	130	-	41
SF Circulation 14		-	77	-	344
SF Circulation 21		-	79	-	289
SF Circulation 36 B		-	99	-	52
SF Circulation 36A		-	92	-	71
SF Clean Utility 5		71	-	-	47
SF Cleaner 12		101	-	-	33
SF Clinical Store 20		67	-	-	64
SF Dirty Utility 11		60	-	-	64
SF Dirty Utility 31		89	-	-	26
SF Disposal Hold 4		87	-	-	39
SF Electrical Cupboard 2		87	-	-	30
SF Interview Room 13		84	-	-	33
SF IT Hub 3		1	-	-	64
SF Kitchen 7		67	-	-	94

General lighting and display lighting		Luminous efficacy [lm/W]			General lighting [W]
Zone name		Luminaire	Lamp	Display lamp	
	Standard value	60	60	22	
SF Lift Stair Lobby 43		-	66	-	325
SF Lobby 45		-	95	-	58
SF MDT Room 8		-	85	-	167
SF Nurse Station 22		65	-	-	52
SF Reception 1		-	95	60	58
SF Single Bed 18		-	81	-	106
SF Single Bed 23		-	88	-	104
SF Single Bed 25		-	81	-	99
SF Single Bed 27		-	80	-	99
SF Single Bed 32		-	80	-	109
SF Single Bed 49		-	89	-	103
SF Single Bed E/S 24		-	144	-	28
SF Staff Female WC 10		-	174	-	21
SF Staff Male WC 15		-	174	-	21
SF Staff Room 9		65	-	-	55
SF Stair 42		-	73	-	144
SF Stair Lobby 41		-	94	-	63
SF Store 52		120	-	-	4
SF Store 6		95	-	-	28
SF WC Shower 17		-	109	-	57
SF WC Shower 30		-	110	-	56
SF WC Shower 35		-	107	-	59
SF WC Shower 38		-	107	-	59
SF WC Shower 40		-	110	-	56
ST Store 51		120	-	-	8
Stair Core		-	71	-	185

Criterion 3: The spaces in the building should have appropriate passive control measures to limit solar gains

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
FF 2 Bed Bay ICU 18	NO (-53.4%)	NO
FF 2 Bed Bay ICU 20	NO (-62.6%)	NO
FF 2 Bed Bay ICU 34	NO (-45.5%)	NO
FF 2 Bed Bay ICU 35	NO (-63.3%)	NO
FF 2 Bed Bay ICU 39	NO (-45.8%)	NO
FF 2 Bed Bay ICU 41	NO (-81.8%)	NO
FF Amb WC 13	N/A	N/A
FF Blood Gas Analyser Station 40	N/A	N/A
FF Circulation 2 17	N/A	N/A
FF Circulation 3 28	N/A	N/A
FF Circulation 4 36	N/A	N/A
FF Clean Utility 21	N/A	N/A
FF Cleaner 14	N/A	N/A
FF Cupboard 50	N/A	N/A

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
FF Dirty utility 10	N/A	N/A
FF Dirty Utility 37	N/A	N/A
FF Doctors Office 6	NO (-92.6%)	NO
FF Drugs Storage 27	N/A	N/A
FF Electrical Cupboard 8	N/A	N/A
FF IT Hub 9	N/A	N/A
FF Kitchen 2	N/A	N/A
FF Linen 19	N/A	N/A
FF Linen 38	N/A	N/A
FF Lobby 22	N/A	N/A
FF Lobby 26	N/A	N/A
FF Lobby 30	N/A	N/A
FF Lobby 32	N/A	N/A
FF MDT Room 5	N/A	N/A
FF Reception 16	N/A	N/A
FF Single Bed ICU 23	NO (-72.9%)	NO
FF Single Bed ICU 25	NO (-62.9%)	NO
FF Single Bed ICU 31	NO (-72.9%)	NO
FF Single Bed ICU 33	NO (-60.8%)	NO
FF Staff Base 24	N/A	N/A
FF Staff Base 29	N/A	N/A
FF Testing 11	N/A	N/A
FF Visitor Waiting 1	NO (-73.3%)	NO
FF Ward Manager 15	N/A	N/A
FF WC/Shower 42	N/A	N/A
LGF 4 Bed Ward 16	NO (-62.9%)	NO
LGF 4 Bed Ward 23	NO (-59.6%)	NO
LGF 4 Bed Ward 29	NO (-46.6%)	NO
LGF 4 Bed Ward 34	NO (-63.3%)	NO
LGF 4 Bed Ward 37	NO (-81.5%)	NO
LGF 4 Bed Ward 39	NO (-45.9%)	NO
LGF Assist WC 25	N/A	N/A
LGF Assist WC 28	N/A	N/A
LGF Clean Utility 5	N/A	N/A
LGF Clinical Store 20	N/A	N/A
LGF Disposal Hold 4	N/A	N/A
LGF Elec Cup 2	N/A	N/A
LGF Interview Room 13	NO (-90%)	NO
LGF IT Cupboard 3	N/A	N/A
LGF Kitchen 7	N/A	N/A
LGF MDT Room 8	NO (-77.5%)	NO
LGF Nurse Station 22	N/A	N/A
LGF Reception 1	N/A	N/A
LGF SC/Shower 35	N/A	N/A
LGF Single Bed 18	NO (-63.8%)	NO
LGF Single Bed 25	NO (-53.3%)	NO
LGF Single Bed 27	NO (-49.9%)	NO
LGF Single Bed 32	NO (-64.7%)	NO
LGF Staff Room 9	NO (-93.1%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
LGF WC Shower 24	N/A	N/A
LGF WC/Shower 17	N/A	N/A
LGF WC/Shower 19	N/A	N/A
LGF WC/Shower 30	N/A	N/A
LGF WC/Shower 33	N/A	N/A
LGF WC/Shower 40	N/A	N/A
LGF WC/Sower 38	N/A	N/A
SF 4 Bed Ward 16	NO (-62.7%)	NO
SF 4 Bed Ward 29	NO (-45.7%)	NO
SF 4 Bed Ward 34	NO (-63.2%)	NO
SF 4 Bed Ward 37	NO (-81.5%)	NO
SF 4 Bed Ward 39	NO (-45.5%)	NO
SF Assist WC Shower 33	N/A	N/A
SF Assisted WC Shower 28	N/A	N/A
SF Assisted WC Shower 50	N/A	N/A
SF Assisted WC/Shower 26	N/A	N/A
SF Asssit WC Shower 19	N/A	N/A
SF Circulation 14	N/A	N/A
SF Circulation 21	N/A	N/A
SF Circulation 36 B	N/A	N/A
SF Circulation 36A	N/A	N/A
SF Clean Utility 5	N/A	N/A
SF Cleaner 12	N/A	N/A
SF Dirty Utility 11	N/A	N/A
SF Electrical Cupboard 2	N/A	N/A
SF Interview Room 13	N/A	N/A
SF IT Hub 3	N/A	N/A
SF Kitchen 7	N/A	N/A
SF MDT Room 8	NO (-81.2%)	NO
SF Nurse Station 22	N/A	N/A
SF Reception 1	NO (-77.5%)	NO
SF Single Bed 18	NO (-63.8%)	NO
SF Single Bed 23	NO (-49.7%)	NO
SF Single Bed 25	NO (-47.2%)	NO
SF Single Bed 27	NO (-46.4%)	NO
SF Single Bed 32	NO (-64.7%)	NO
SF Single Bed 49	NO (-45%)	NO
SF Single Bed E/S 24	N/A	N/A
SF Staff Female WC 10	N/A	N/A
SF Staff Male WC 15	N/A	N/A
SF Staff Room 9	N/A	N/A
SF WC Shower 17	N/A	N/A
SF WC Shower 30	N/A	N/A
SF WC Shower 35	N/A	N/A
SF WC Shower 38	N/A	N/A
SF WC Shower 40	N/A	N/A

Criterion 4: The performance of the building, as built, should be consistent with the calculated BER

Separate submission

Criterion 5: The necessary provisions for enabling energy-efficient operation of the building should be in place

Separate submission

EPBD (Recast): Consideration of 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
Area [m ²]	3089.8	3089.8
External area [m ²]	4307.2	4307.2
Weather	LON	LON
Infiltration [m ³ /hm ² @ 50Pa]	5	3
Average conductance [W/K]	1449.74	1921.77
Average U-value [W/m ² K]	0.34	0.45
Alpha value* [%]	10.06	10

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

Building Use

% Area Building Type

	A1/A2 Retail/Financial and Professional services
	A3/A4/A5 Restaurants and Cafes/Drinking Est./Takeaways
	B1 Offices and Workshop businesses
	B2 to B7 General Industrial and Special Industrial Groups
	B8 Storage or Distribution
	C1 Hotels
99	C2 Residential Institutions: Hospitals and Care Homes
	C2 Residential Institutions: Residential schools
	C2 Residential Institutions: Universities and colleges
	C2A Secure Residential Institutions
	Residential spaces
	D1 Non-residential Institutions: Community/Day Centre
	D1 Non-residential Institutions: Libraries, Museums, and Galleries
	D1 Non-residential Institutions: Education
	D1 Non-residential Institutions: Primary Health Care Building
	D1 Non-residential Institutions: Crown and County Courts
	D2 General Assembly and Leisure, Night Clubs, and Theatres
	Others: Passenger terminals
	Others: Emergency services
1	Others: Miscellaneous 24hr activities
	Others: Car Parks 24 hrs
	Others: Stand alone utility block

Energy Consumption by End Use [kWh/m²]

	Actual	Notional
Heating	47.9	21.64
Cooling	7.45	5.94
Auxiliary	46.61	29.27
Lighting	23.29	23.53
Hot water	57.96	48.81
Equipment*	50.79	50.79
TOTAL **	183.2	129.18

* 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	0
Wind turbines	0	0
CHP generators	0	0
Solar thermal systems	0	0

Energy & CO₂ Emissions Summary

	Actual	Notional
Heating + cooling demand [MJ/m ²]	219.97	165.17
Primary energy* [kWh/m ²]	365.85	265.74
Total emissions [kg/m ²]	63.1	45.3

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

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 SSEEF	Cool SSEER	Heat gen SEFF	Cool gen SEER	
[ST] Central heating using water: radiators, [HS] District heating, [HFT] District Heating, [CFT] Electricity										
Actual	34.1	0	10.6	0	33.5	0.89	0	1	0	
Notional	29.3	0	8.1	0	16	1	0	----	----	
[ST] Central heating using water: radiators, [HS] District heating, [HFT] District Heating, [CFT] Electricity										
Actual	309.8	0	96.5	0	3.5	0.89	0	1	0	
Notional	367.1	0	102	0	2.5	1	0	----	----	
[ST] Split or multi-split system, [HS] Heat pump (electric): air source, [HFT] Electricity, [CFT] Electricity										
Actual	0	60.8	0	5.3	10	3.73	3.2	4	4.5	
Notional	0	87.7	0	6.4	4.8	2.56	3.79	----	----	
[ST] Split or multi-split system, [HS] Heat pump (electric): air source, [HFT] Electricity, [CFT] Electricity										
Actual	0	68.3	0	5.9	0	3.73	3.2	4	4.5	
Notional	0	83.5	0	6.1	0	2.56	3.79	----	----	
[ST] Split or multi-split system, [HS] Heat pump (electric): air source, [HFT] Electricity, [CFT] Electricity										
Actual	0	1268.7	0	110.3	0	3.73	3.2	4	4.5	
Notional	0	1337.7	0	98.1	0	2.56	3.79	----	----	
[ST] Fan coil systems, [HS] Heat pump (electric): air source, [HFT] Electricity, [CFT] Electricity										
Actual	35.9	149.2	2.9	12.5	39.7	3.46	3.31	4	4.5	
Notional	51.5	320	5.6	23.5	41.3	2.56	3.79	----	----	
[ST] Constant volume system (fixed fresh air rate), [HS] District heating, [HFT] District Heating, [CFT] Electricity										
Actual	33.4	115.6	10.7	15.5	35.6	0.87	2.07	1	4.5	
Notional	14.9	146.7	4.2	10.8	26.8	1	3.79	----	----	
[ST] Constant volume system (fixed fresh air rate), [HS] District heating, [HFT] District Heating, [CFT] Electricity										
Actual	464.4	102.2	139.1	15.3	102.8	0.93	1.85	1	4.5	
Notional	50.8	122.2	14.1	9	56.8	1	3.79	----	----	
[ST] Split or multi-split system, [HS] Heat pump (electric): air source, [HFT] Electricity, [CFT] Electricity										
Actual	0	72.5	0	6.3	0	3.73	3.2	4	4.5	
Notional	0	96.2	0	7.1	0	2.56	3.79	----	----	
[ST] Constant volume system (fixed fresh air rate), [HS] Heat pump (electric): air source, [HFT] Electricity, [CFT] Electricity										
Actual	6.2	80.2	0.5	10.2	79.4	3.35	2.18	4	4.5	
Notional	34.5	115.6	3.7	8.5	52.8	2.56	3.79	----	----	
[ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
Actual	0.4	0	0.1	0	26.4	0.8	0	1	0	
Notional	16.6	0	5.4	0	14.2	0.86	0	----	----	
[ST] Constant volume system (fixed fresh air rate), [HS] Heat pump (electric): air source, [HFT] Electricity, [CFT] Electricity										
Actual	9.7	62.7	0.8	7.7	75.5	3.27	2.26	4	4.5	
Notional	50.6	75.3	5.5	5.5	57.6	2.56	3.79	----	----	
[ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
Actual	6.2	0	2.2	0	26.5	0.8	0	1	0	
Notional	33.1	0	10.7	0	14.2	0.86	0	----	----	
[ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
Actual	0.6	0	0.2	0	26.9	0.8	0	1	0	
Notional	20.1	0	6.5	0	14.5	0.86	0	----	----	
[ST] Constant volume system (fixed fresh air rate), [HS] Heat pump (electric): air source, [HFT] Electricity, [CFT] Electricity										
Actual	5.4	55.4	0.4	7	59.3	3.35	2.18	4	4.5	
Notional	43.8	66.4	4.8	4.9	50.7	2.56	3.79	----	----	
[ST] Constant volume system (fixed fresh air rate), [HS] Heat pump (electric): air source, [HFT] Electricity, [CFT] Electricity										
Actual	7.3	53.7	0.6	6.8	59.5	3.35	2.18	4	4.5	
Notional	47.5	63	5.2	4.6	50.8	2.56	3.79	----	----	

HVAC Systems Performance (cont.)										
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] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
	Actual	5.3	0	1.9	0	27.1	0.8	0	1	0
	Notional	30.5	0	9.8	0	14.6	0.86	0	----	----
[ST] Constant volume system (fixed fresh air rate), [HS] Heat pump (electric): air source, [HFT] Electricity, [CFT] Electricity										
	Actual	22.1	95.2	1.8	12.1	37.8	3.35	2.18	4	4.5
	Notional	24.3	178.6	2.6	13.1	24.6	2.56	3.79	----	----
[ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
	Actual	0	0	0	0	10	0.8	0	1	0
	Notional	0	0	0	0	5.7	0.86	0	----	----
[ST] Constant volume system (fixed fresh air rate), [HS] Heat pump (electric): air source, [HFT] Electricity, [CFT] Electricity										
	Actual	1.8	95.2	0.1	12.1	96.3	3.35	2.18	4	4.5
	Notional	45.6	112.8	4.9	8.3	72.2	2.56	3.79	----	----
[ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
	Actual	0	0	0	0	40	0.8	0	1	0
	Notional	24.8	0	8	0	22.8	0.86	0	----	----
[ST] Constant volume system (fixed fresh air rate), [HS] Heat pump (electric): air source, [HFT] Electricity, [CFT] Electricity										
	Actual	6.5	77.2	0.5	9.8	69.2	3.35	2.18	4	4.5
	Notional	86.2	120.3	9.4	8.8	72.8	2.56	3.79	----	----
[ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity										
	Actual	5.4	0	1.9	0	40.1	0.8	0	1	0
	Notional	122.7	0	39.5	0	22.8	0.86	0	----	----
[ST] Split or multi-split system, [HS] Heat pump (electric): air source, [HFT] Electricity, [CFT] Electricity										
	Actual	0	51.9	0	4.5	0	3.73	3.2	4	4.5
	Notional	0	71.2	0	5.2	0	2.56	3.79	----	----
[ST] Split or multi-split system, [HS] Heat pump (electric): air source, [HFT] Electricity, [CFT] Electricity										
	Actual	0	1096.7	0	95.3	0	3.73	3.2	4	4.5
	Notional	0	1134.7	0	83.2	0	2.56	3.79	----	----
[ST] Central heating using water: radiators, [HS] District heating, [HFT] District Heating, [CFT] Electricity										
	Actual	755.1	0	235.1	0	52.4	0.89	0	1	0
	Notional	103	0	28.6	0	25.3	1	0	----	----
[ST] Split or multi-split system, [HS] Heat pump (electric): air source, [HFT] Electricity, [CFT] Electricity										
	Actual	44.5	183	3.3	15.9	14.9	3.73	3.2	4	4.5
	Notional	48.5	360	5.3	26.4	5.3	2.56	3.79	----	----
[ST] Split or multi-split system, [HS] Heat pump (electric): air source, [HFT] Electricity, [CFT] Electricity										
	Actual	0	69.6	0	6.8	8.3	3.91	2.84	4.2	4
	Notional	0	100.7	0	7.4	4.8	2.56	3.79	----	----
[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

Key Features

The Building Control Body is advised to give particular attention to items whose specifications are better than typically expected.

Building fabric

Element	U _{i-Typ}	U _{i-Min}	Surface where the minimum value occurs*
Wall	0.23	0.33	LF00003A:Surf[2]
Floor	0.2	0.2	LF00005C:Surf[0]
Roof	0.15	0.24	LF000032:Surf[1]
Windows, roof windows, and rooflights	1.5	2.07	LF00003A:Surf[0]
Personnel doors	1.5	2.2	LF000049:Surf[0]
Vehicle access & similar large doors	1.5	-	No Vehicle access doors in building
High usage entrance doors	1.5	-	No High usage entrance doors in building
U _{i-Typ} = Typical individual element U-values [W/(m²K)]		U _{i-Min} = Minimum individual element U-values [W/(m²K)]	
* There might be more than one surface where the minimum U-value occurs.			

Air Permeability	Typical value	This building
m³/(h.m²) at 50 Pa	5	5