		NEAP SURVEY	FORM										
Name:				ľ	Assessor	/ BER reg. r	10.						
Address:			Survey Date:										
Eircode		MPRN		ŀ	Building Type								
Age: Building Evidence 1 Evidence 2	No E	Extension 1 Extension ence 1 Evidence 2	Age:Exten No Extensi Evidence 1	on									
Air Test ?		mal Bridging ? Default Data available	Building T	ӯҏҽ	e(s)		Type of Rating new-provisional new-final building existing building						
Wall construction Main Wall Type	1*	Roof Construction: Main Ro	oof*		G	round Floor	Construction: Main	Floor*					
							Construction Floor						
Wall construction Wall Type 2*		Roof Construction: Roof Ty	pe 2*		G	round Floor	Construction: Floor	Type 2*					
Wall construction Wall Type 3*		Roof Construction: Roof Ty	pe 3*	Ir	Internal Floor Construction: Floor Type 3*								
		Constructions	. *										
Wall construction Wall Type 4*		Construction: Typ	e *		Construction: Type *								
Window Construction: Wall windows 1	1	Window Construction: Roof win			D	oor Constru	ction: Personnel do	or(s)*					
Non-Default Data? N Y Material Alu PVC W Thermal break N Y Low E N Y		Non-Default Data? N Material Alu PVC Thermal break N Y Low E N Y	Y∐ ₩ □ №		Door make-up Type 1:								
Argon Gas N Y H		Argon Gas N 🗍 Y Glazing make-up :	<u> </u>			Door make-u	ир Туре 2:						
Window Construction: Wall windows 2		Window Construction: Wall wine	dows 2		D	oor Constru	ction: Vehicle Acces	s door(s)					
Non-Default Data? N Y Material Alu PVC W Thermal break N Y Low E N Y Gas Air / Other A O Glazing make-up :			v W D D		Door make-up Type 1: Door make-up Type 2:								
*note:Actual U-value should be calculated	and use	d if the wall /roof /floor construction	detail is availal	ble	on site or	through docu	imentation.						
Substantiation supporting the U-value calc Reprint this page as often as required (e.g	ulation is	required. Non default U values sho	ould be recorde					ecords					

HVAC System Heating ONLY					
	HVAC SYSTEM TYPE 1 - HEATING ONLY				
HVAC System	Heating System Fuel	Heating Source (Local Heating)			
[Ventilation can be applied in a zone if required]	mains gas biomass	Direct OR storage electric heater			
Local Heating Systems (heat source in zone)	LPG waste heat	Room heater (Open fire, stove)			
Other local room heater - fanned (b)	Biogas Anthracite	Flued Radiant heater			
Other local room heater - unfanned	Oil Smokeless Fuel	Air heater			
Unflued radiant heater (a)	electricity Dual Fuel Appliances	Heat pump Type:			
Flued radiant heater (a)	Coal Uses CHP	Unflued radiant heater			
Multiburner radiant heaters (a)	Manufacturer / make / model number	ECA/ETL,(ACA) Listed?			
Flued forced-convection air heaters	Boiler/ Heater :	Yes No			
Unflued forced-convection air heaters	AHU:				
Radiant Efficiency (a) Aux Energy (b)	Other :				
Default Default	Heating System Efficiency				
Non-Default Value Non-Default Value =		pen Fire Default			
= kWh/kWh		on-Default Value			
Central Heating Systems [heating by water]	HVAC Metering Provision	Heating Source (Central Heating)			
Central heating using water: radiators (c)	Yes, Submetered Yes, M&T Alarm				
Central heating using water: convectors (b), (c)	No, Submetered No, M&T Alarm				
Central heating using water: floor heating (c)					
	Lighting Metering Provision	Heat pump air source			
Aux Energy (b) Variable Speed Pumps? (c)	Yes, Submetered Yes, M&T Alarm	Heat pump ground / water source			
Default No Const. Speed	No, Submetered No, M&T Alarm	District heating			
kWh/kWh Yes LTHW	Ventilation Heat Recovery (e) or by zone	Heat Recovery Seasonal Efficiency			
	Plate heat exchanger Thermal when				
Central Heating Systems [heating by air] (d),(e)	Heat-pipes				
Central heating using air distribution		Decific Fan Power			
Ventilation is included in this system	∏Yes □	Default			
Ductwork Leakage (d) AHU Leakage (d)		SFP: W/I/s			
Default	System Controls				
Non Default Non Default	Central Time Control	I Temperature Control			
Class: Class:	Optimum Start/ Stop Control	ther Compensation Control			
	Local Time Control				
	HVAC SYSTEM TYPE 2 - HEATING ONLY				
HVAC System	HVAC SYSTEM TYPE 2 - HEATING ONLY Heating System Fuel	Heating Source (Local Heating)			
HVAC System [Ventilation can be applied in a zone if required]		Heating Source (Local Heating)			
	Heating System Fuel				
[Ventilation can be applied in a zone if required]	Heating System Fuel	Direct OR storage electric heater			
[Ventilation can be applied in a zone if required] Local Heating Systems (heat source in zone)	Heating System Fuel         mains gas       biomass         LPG       waste heat	Direct OR storage electric heater			
[Ventilation can be applied in a zone if required] Local Heating Systems (heat source in zone) Other local room heater - fanned (b)	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite	Direct OR storage electric heater Room heater (Open fire, stove) Flued Radiant heater			
[Ventilation can be applied in a zone if required] Local Heating Systems (heat source in zone) Other local room heater - fanned (b) Other local room heater - unfanned	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel	Direct OR storage electric heater Room heater (Open fire, stove) Flued Radiant heater Air heater			
[Ventilation can be applied in a zone if required] Local Heating Systems (heat source in zone) Other local room heater - fanned (b) Other local room heater - unfanned Unflued radiant heater (a) Flued radiant heater (a)	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP	Direct OR storage electric heater Room heater (Open fire, stove) Flued Radiant heater Air heater Heat pump Type: Unflued radiant heater			
[Ventilation can be applied in a zone if required] Local Heating Systems (heat source in zone) Other local room heater - fanned (b) Other local room heater - unfanned Unflued radiant heater (a) Flued radiant heater (a) Multiburner radiant heaters (a)	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number	Direct OR storage electric heater Room heater (Open fire, stove) Flued Radiant heater Air heater Heat pump Type: Unflued radiant heater ECA/ETL,(ACA) Listed?			
[Ventilation can be applied in a zone if required] Local Heating Systems (heat source in zone) Other local room heater - fanned (b) Other local room heater - unfanned Unflued radiant heater (a) Flued radiant heater (a) Multiburner radiant heaters (a) Flued forced-convection air heaters	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :	Direct OR storage electric heater Room heater (Open fire, stove) Flued Radiant heater Air heater Heat pump Type: Unflued radiant heater ECA/ETL,(ACA) Listed? Yes No			
[Ventilation can be applied in a zone if required] Local Heating Systems (heat source in zone) Other local room heater - fanned (b) Other local room heater - unfanned Unflued radiant heater (a) Flued radiant heater (a) Flued radiant heater (a) Unflued forced-convection air heaters Unflued forced-convection air heaters	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:	Direct OR storage electric heater Room heater (Open fire, stove) Flued Radiant heater Air heater Heat pump Type: Unflued radiant heater ECA/ETL,(ACA) Listed?			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Multiburner radiant beater (a)	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :	Direct OR storage electric heater Room heater (Open fire, stove) Flued Radiant heater Air heater Heat pump Type: Unflued radiant heater ECA/ETL,(ACA) Listed? Yes No			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Dunflued forced-convection air heaters         Default       Default	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :         Heating System Efficiency	Direct OR storage electric heater Room heater (Open fire, stove) Flued Radiant heater Air heater Heat pump Type: Unflued radiant heater ECA/ETL.(ACA) Listed? Yes No			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Radiant Efficiency (a)         Aux Energy (b)         Default         Non-Default Value	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :         Heating System Efficiency         Default before 1998         Op	Direct OR storage electric heater Room heater (Open fire, stove) Flued Radiant heater Air heater Heat pump Type: Unflued radiant heater ECA/ETL,(ACA) Listed? Yes No N			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Radiant Efficiency (a)         Aux Energy (b)         Default         Non-Default Value         Non-Default Value         =         =	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :         Heating System Efficiency         Default before 1998       Op         Default post 1998       No	Direct OR storage electric heater Room heater (Open fire, stove) Flued Radiant heater Air heater Heat pump Type: Unflued radiant heater ECA/ETL,(ACA) Listed? Yes No Yes No Default Value			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Radiant Efficiency (a)       Aux Energy (b)         Default       Default         Non-Default Value       Non-Default Value =         =	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :         Heating System Efficiency         Default before 1998       Op         Default post 1998       No         HVAC Metering Provision	Direct OR storage electric heater Room heater (Open fire, stove) Flued Radiant heater Air heater Heat pump Type: Unflued radiant heater ECA/ETL,(ACA) Listed? Yes No Yes No Heating Source (Central Heating)			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Radiant Efficiency (a)       Aux Energy (b)         Default       Default         Non-Default Value       Non-Default Value =         =	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :         Heating System Efficiency         Default before 1998       Op         Default post 1998       No         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm	Direct OR storage electric heater Room heater (Open fire, stove) Flued Radiant heater Heat pump Type: Unflued radiant heater ECA/ETL,(ACA) Listed? Yes No Yes No Heating Source (Central Heating) LTHW Boiler			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Radiant Efficiency (a)       Aux Energy (b)         Default       Default         Non-Default Value       Non-Default Value =         =	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :         Heating System Efficiency         Default before 1998       Op         Default post 1998       No         HVAC Metering Provision	Direct OR storage electric heater Room heater (Open fire, stove) Flued Radiant heater Air heater Heat pump Type: Unflued radiant heater ECA/ETL,(ACA) Listed? Yes No Yes No Heating Source (Central Heating) LTHW Boiler MTHW boiler			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Radiant Efficiency (a)       Aux Energy (b)         Default       Default         Non-Default Value       Non-Default Value =         =	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :         Heating System Efficiency         Default before 1998       Op         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm	Direct OR storage electric heater Room heater (Open fire, stove) Flued Radiant heater Air heater Heat pump Type: Unflued radiant heater ECA/ETL,(ACA) Listed? Yes No Yes No Heating Source (Central Heating) Heating Source (Central Heating) HTHW Boiler HTHW boiler HTHW boiler			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Radiant Efficiency (a)       Aux Energy (b)         Default       Default         Non-Default Value       Non-Default Value =         =	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :         Heating System Efficiency         Default before 1998       Op         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm	Direct OR storage electric heater Room heater (Open fire, stove) Flued Radiant heater Air heater Heat pump Type: Unflued radiant heater ECA/ETL,(ACA) Listed? Yes No Yes No Heating Source (Central Heating) Heating Source (Central Heating) HTHW boiler HTHW boiler Hat pump air source			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Radiant Efficiency (a)       Aux Energy (b)         Default       Default         Non-Default Value       Non-Default Value =         =	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :         Heating System Efficiency         Default before 1998       Op         Default post 1998       No         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm         Yes, Submetered       Yes, M&T Alarm	Direct OR storage electric heater Room heater (Open fire, stove) Flued Radiant heater Air heater Heat pump Type: Unflued radiant heater ECA/ETL,(ACA) Listed? Yes No Yes No Heating Source (Central Heating) Heating Source (Central Heating) HTHW boiler HTHW boiler Hat pump air source Heat pump ground / water source			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Radiant Efficiency (a)       Aux Energy (b)         Default       Default         Non-Default Value       Non-Default Value =         =	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :         Heating System Efficiency         Default before 1998       Op         Default post 1998       No         Yes, Submetered       Yes, M&T Alarm         No, Submetered       Yes, M&T Alarm         Yes, Submetered       Yes, M&T Alarm         Yes, Submetered       Yes, M&T Alarm	Direct OR storage electric heater Room heater (Open fire, stove) Flued Radiant heater Air heater Heat pump Type: Unflued radiant heater ECA/ETL,(ACA) Listed? Yes No Yes No Heating Source (Central Heating) Heating Source (Central Heating) HTHW boiler HTHW boiler Heat pump air source Heat pump ground / water source District heating			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Radiant Efficiency (a)       Aux Energy (b)         Default       Default         Non-Default Value       Non-Default Value =         =	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :         Heating System Efficiency         Default before 1998       Op         Default post 1998       No         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm         No, Submetered       Yes, M&T Alarm         No, Submetered       Yes, M&T Alarm         Ventilation Heat Recovery (e)	Direct OR storage electric heater Room heater (Open fire, stove) Flued Radiant heater Air heater Heat pump Type: Unflued radiant heater ECA/ETL,(ACA) Listed? Yes No Yes No Heating Source (Central Heating) Heating Source (Central Heating) HTHW boiler HTHW boiler Hat pump air source District heating Heat Recovery Seasonal Efficiency			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Multiburner radiant meaters (a)         Default         Default         Non-Default Value         Non-Default Value         Central Heating Systems [heating by water]         Central heating using water: convectors (b), (c)         Central heating using water: floor heating (c)         Aux Energy (b)       Variable Speed Pumps? (c)         Default       No Const. Speed         Multik KWh/kWh       Yes LTHW	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :         Heating System Efficiency         Default before 1998       Op         Default post 1998       No         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm         No, Submetered       Yes, M&T Alarm         No, Submetered       Yes, M&T Alarm         Ventilation Heat Recovery (e)       Plate heat exchanger	Direct OR storage electric heater   Room heater (Open fire, stove)   Flued Radiant heater   Air heater   Heat pump   Type:   Unflued radiant heater   ECA/ETL.(ACA) Listed?   Yes   Yes   No   pen Fire Default   on-Default Value   Heating Source (Central Heating)   LTHW Boiler   MTHW boiler   Heat pump air source   Heat pump ground / water source   District heating   Heat Recovery Seasonal Efficiency el			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Radiant Efficiency (a)       Aux Energy (b)         Default       Default         Non-Default Value       Non-Default Value =         =	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :         Heating System Efficiency         Default before 1998       Or         Default post 1998       No         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm         No, Submetered       Yes, M&T Alarm         No, Submetered       Yes, M&T Alarm         Ventilation Heat Recovery (e)       Plate heat exchanger         Plate heat exchanger       Thermal whee	Direct OR storage electric heater   Room heater (Open fire, stove)   Flued Radiant heater   Air heater   Heat pump   Type:   Unflued radiant heater   ECA/ETL.(ACA) Listed?   Yes   Yes   No   pen Fire Default   on-Default Value   Heating Source (Central Heating)   LTHW Boiler   MTHW boiler   Heat pump air source   Heat pump ground / water source   District heating   Heat Recovery Seasonal Efficiency el   Default   point			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Radiant Efficiency (a)       Aux Energy (b)         Default       Default         Non-Default Value       Non-Default Value =         =	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :         Heating System Efficiency         Default before 1998       Or         Default post 1998       No         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm         No, Submetered       Yes, M&T Alarm         No, Submetered       Yes, M&T Alarm         Ventilation Heat Recovery (e)       Plate heat exchanger         Plate heat exchanger       Thermal whee         Heat-pipes       Run around c         Variable Heat Recovery Efficiency ?       Sp	Direct OR storage electric heater   Room heater (Open fire, stove)   Flued Radiant heater   Air heater   Heat pump   Type:   Unflued radiant heater   ECA/ETL.(ACA) Listed?   Yes   Yes   No   pen Fire Default   on-Default Value   Heating Source (Central Heating)   LTHW Boiler   MTHW boiler   Heat pump air source   Heat pump air source   Heat pump ground / water source   District heating   Heat Recovery Seasonal Efficiency el   Default   coli   Pendific Fan Power			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Radiant Efficiency (a)       Aux Energy (b)         Default       Default         Non-Default Value       Non-Default Value =         =	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :         Heating System Efficiency         Default before 1998       Or         Default post 1998       No         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm         No, Submetered       Yes, M&T Alarm         No, Submetered       Yes, M&T Alarm         Ventilation Heat Recovery (e)       Plate heat exchanger         Plate heat exchanger       Thermal whee         Heat-pipes       Run around c         Variable Heat Recovery Efficiency ?       Sp	Direct OR storage electric heater   Room heater (Open fire, stove)   Flued Radiant heater   Air heater   Heat pump   Type:   Unflued radiant heater   ECA/ETL,(ACA) Listed?   Yes   Yes   No   pen Fire Default   on-Default Value   Heating Source (Central Heating)   LTHW Boiler   MTHW boiler   Heat pump air source   Heat pump ground / water source   District heating   Heat Recovery Seasonal Efficiency el   Default   point			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Radiant Efficiency (a)       Aux Energy (b)         Default       Default         Non-Default Value       Non-Default Value =         =	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :         Heating System Efficiency         Default before 1998         Default post 1998         No, Submetered         Yes, Submetered         Yes, Submetered         Yes, Submetered         Yes, Submetered         Piste heat exchanger         Plate heat exchanger         Plate heat exchanger         Plate heat Recovery Efficiency?         Splate Heat Recovery Efficiency?	Direct OR storage electric heater   Room heater (Open fire, stove)   Flued Radiant heater   Air heater   Heat pump   Type:   Unflued radiant heater   ECA/ETL,(ACA) Listed?   Yes   Yes   No   pen Fire Default   on-Default Value   Heating Source (Central Heating)   LTHW Boiler   HTHW boiler   Heat pump air source   Heat pump air source   District heating   Heat Recovery Seasonal Efficiency el   Default   coil   Non Default Value			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Radiant Efficiency (a)       Aux Energy (b)         Default       Default         Non-Default Value       Non-Default Value =         =      kWh/kWh         Central Heating Systems [heating by water]         Central heating using water: radiators (c)         Central heating using water: floor heating (c)         Aux Energy (b)       Variable Speed Pumps? (c)         Default       No Const. Speed	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :         Heating System Efficiency         Default before 1998         Opefault post 1998         No, Submetered         Yes, Submetered         Yes, Submetered         Yes, Submetered         No, Submetered         No, Submetered         Pate heat exchanger         Plate heat exchanger         Plate heat Recovery (e)         Plate heat Recovery Efficiency?         Yes         No         No         System Controls	Direct OR storage electric heater   Room heater (Open fire, stove)   Flued Radiant heater   Air heater   Heat pump   Type:   Unflued radiant heater   ECA/ETL,(ACA) Listed?   Yes   Yes   No   pen Fire Default   on-Default Value   Heating Source (Central Heating)   LTHW Boiler   HTHW boiler   Heat pump air source   Heat pump air source   District heating   Heat Recovery Seasonal Efficiency el   Default   coil   Non Default Value			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Multiburner radiant heaters (a)         Default         Default         Non-Default Value         Non-Default Value         Non-Default Value         Central Heating Systems [heating by water]         Central heating using water: radiators (c)         Central heating using water: floor heating (c)         Aux Energy (b)       Variable Speed Pumps? (c)         Default       No Const. Speed        KWh/kWh       Yes LTHW         Sensor: P       S       M         Central Heating Systems [heating by air] (d),(e)       Central heating using air distribution         Ductwork Leakage (d)       AHU Leakage (d)         Default       Default	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :         Heating System Efficiency         Default before 1998         Opfault post 1998         No, Submetered         Yes, Submetered         Yes, Submetered         Yes, Submetered         Yes, Submetered         Mo, M&T Alarm         Ventilation Heat Recovery (e)         Plate heat exchanger         Heat-pipes         Run around of         Variable Heat Recovery Efficiency ?         Yes         No         System Controls         Central Time Control	Direct OR storage electric heater Room heater (Open fire, stove) Flued Radiant heater Air heater Heat pump Type: Unflued radiant heater ECA/ETL.(ACA) Listed? Yes No Heating Source (Central Heating) Heating Source (Central Heating) HTHW boiler HTHW boiler HTHW boiler Heat pump air source District heating Heat Recovery Seasonal Efficiency el Default coli Default SFP:W//s			
[Ventilation can be applied in a zone if required]         Local Heating Systems (heat source in zone)         Other local room heater - fanned (b)         Other local room heater - unfanned         Unflued radiant heater (a)         Flued radiant heater (a)         Multiburner radiant heaters (a)         Flued forced-convection air heaters         Unflued forced-convection air heaters         Radiant Efficiency (a)       Aux Energy (b)         Default       Default         Non-Default Value       Non-Default Value =         =	Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler/ Heater :         AHU:         Other :         Heating System Efficiency         Default before 1998         Opfault post 1998         No, Submetered         Yes, Submetered         Yes, Submetered         Yes, Submetered         Yes, Submetered         Mo, M&T Alarm         Ventilation Heat Recovery (e)         Plate heat exchanger         Heat-pipes         Run around of         Variable Heat Recovery Efficiency ?         Yes         No         System Controls         Central Time Control	Direct OR storage electric heater   Room heater (Open fire, stove)   Flued Radiant heater   Air heater   Heat pump   Type:   Unflued radiant heater   ECA/ETL,(ACA) Listed?   Yes   Yes   Yes   No   pen Fire Default   bon-Default Value   Heating Source (Central Heating)   LTHW Boiler   HTHW boiler   Heat pump air source   Heat pump air source   District heating   Heat Recovery Seasonal Efficiency el   Default   scoil   Non Default Value   Default Scoific Fan Power Default SFP:			

HVAC System Heating AND Cooling						
	AC SYSTEM TYPE 3 - HEATING and COOLING					
HVAC System	Heating System Fuel	Heating Source				
Local Cooling System (Cooling coil in zone)	LPG waste heat					
Split or mulit-split system *	Biogas Anthracite					
Single Room Cooling system *	Oil Smokeless Fuel	Heat pump air source				
		Heat pump ground / water source				
Water Loop Heatpump [RARE]	Coal Uses CHP	District heating				
	Manufacturer / make / model number	ECA/ETL,				
Central Cooling System (Cooling coil on AHU)	Boiler :	(ACA) Listed?				
Constant volume system (fixed fresh air rate)	AHU:	Yes No				
Constant volume system (variable fresh air rate)	Chiller or Indoor/Outdoor Units					
Terminal reheat (constant volume)	Heating System Efficiency	Cooling System Efficiency				
Dual duct (constant volume)	Default before 1998	EER Default SEER Default				
Chilled ceilings or passive chilled beams	Default post 1998	EER Value : SEER Value :				
Active chilled beams	Non-Default Value					
Single-duct VAV	HVAC Metering Provision	Cooling Source				
Dual-duct VAV	Yes, Submetered Yes, M&T Alarm	Heatpump (electric)				
Indoor packaged cabinet (VAV)	No, Submetered No, M&T Alarm	Heatpump (gas/ oil)				
Multizone (hot deck/cold deck) [RARE]	Lighting Metering Provision	Air cooled chiller				
Induction system [RARE]	Yes, Submetered Yes, M&T Alarm	Water cooled chiller				
	No, Submetered No, M&T Alarm	Remote-condenser chiller				
Applied in zones tab: Variable Speed Pumps? (c)	Ventilation Heat Recovery	Heat Recovery Seasonal Efficiency				
* Ventilaton	Plate heat exchanger Thermal whe					
** Terminal Unit SFP	Heat-pipes Run around c					
Sensor: P S M		Decific Fan Power				
Ductwork Leakage AHU Leakage	System Controls	SFP:W/l/s Mixed Mode Operation				
Non Default Non Default		al Temperature Control Yes				
Class: Class:		ther Compensation Control				
	I I local Time Control					
HV						
HVAC System	Local Time Control AC SYSTEM TYPE 4 - HEATING and COOLING Heating System Fuel	Heating Source				
	AC SYSTEM TYPE 4 - HEATING and COOLING	Heating Source				
	AC SYSTEM TYPE 4 - HEATING and COOLING Heating System Fuel					
HVAC System	AC SYSTEM TYPE 4 - HEATING and COOLING Heating System Fuel mains gas biomass	LTHW Boiler				
HVAC System Local Cooling System (Cooling coil in zone)	AC SYSTEM TYPE 4 - HEATING and COOLING Heating System Fuel mains gas biomass LPG waste heat	LTHW Boiler				
HVAC System Local Cooling System (Cooling coil in zone) Split or mulit-split system *	AC SYSTEM TYPE 4 - HEATING and COOLING Heating System Fuel mains gas biomass LPG waste heat Biogas Anthracite	LTHW Boiler MTHW boiler HTHW boiler				
HVAC System  Local Cooling System (Cooling coil in zone)  Split or mulit-split system *  Single Room Cooling system *  Fan Coil Units **	AC SYSTEM TYPE 4 - HEATING and COOLING Heating System Fuel mains gas biomass LPG waste heat Biogas Anthracite Oil Smokeless Fuel electricity Dual Fuel Appliances	LTHW Boiler MTHW boiler HTHW boiler Heat pump air source Heat pump ground / water source				
HVAC System  Local Cooling System (Cooling coil in zone)  Split or mulit-split system *  Single Room Cooling system *  Fan Coil Units **	AC SYSTEM TYPE 4 - HEATING and COOLING Heating System Fuel mains gas biomass LPG waste heat Biogas Anthracite Oil Smokeless Fuel electricity Dual Fuel Appliances Coal Uses CHP	LTHW Boiler MTHW boiler HTHW boiler Heat pump air source Heat pump ground / water source District heating				
HVAC System  Local Cooling System (Cooling coil in zone)  Split or mulit-split system *  Single Room Cooling system *  Fan Coil Units **  Water Loop Heatpump [RARE]	AC SYSTEM TYPE 4 - HEATING and COOLING Heating System Fuel mains gas biomass LPG waste heat Biogas Anthracite Oil Smokeless Fuel electricity Dual Fuel Appliances Coal Uses CHP Manufacturer / make / model number	LTHW Boiler MTHW boiler HTHW boiler Heat pump air source Heat pump ground / water source District heating ECA/ETL,				
HVAC System  Local Cooling System (Cooling coil in zone)  Split or mulit-split system *  Single Room Cooling system *  Fan Coil Units ** Water Loop Heatpump [RARE]  Central Cooling System (Cooling coil on AHU)	AC SYSTEM TYPE 4 - HEATING and COOLING Heating System Fuel mains gas LPG Waste heat Gil Oil Gil Gil Gil Gil Gil Gil Gil Gil Gil G	LTHW Boiler MTHW boiler HTHW boiler Heat pump air source Heat pump ground / water source District heating ECA/ETL, (ACA) Listed?				
HVAC System  Local Cooling System (Cooling coil in zone)  Split or mulit-split system *  Single Room Cooling system *  Fan Coil Units ** Water Loop Heatpump [RARE]  Central Cooling System (Cooling coil on AHU)  Constant volume system (fixed fresh air rate)	AC SYSTEM TYPE 4 - HEATING and COOLING Heating System Fuel mains gas LPG Waste heat Gil	LTHW Boiler MTHW boiler HTHW boiler Heat pump air source Heat pump ground / water source District heating ECA/ETL,				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)	AC SYSTEM TYPE 4 - HEATING and COOLING Heating System Fuel mains gas biomass LPG waste heat Biogas Anthracite Oil Smokeless Fuel electricity Dual Fuel Appliances Coal Uses CHP Manufacturer / make / model number Boiler : AHU: Chiller or Indoor/Outdoor Units	LTHW Boiler MTHW boiler HTHW boiler Heat pump air source District heating ECA/ETL, (ACA) Listed? Yes No				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)         Terminal reheat (constant volume)	AC SYSTEM TYPE 4 - HEATING and COOLING Heating System Fuel mains gas biomass LPG waste heat Biogas Anthracite Oil Smokeless Fuel electricity Dual Fuel Appliances Coal Uses CHP Manufacturer / make / model number Boiler : AHU: Chiller or Indoor/Outdoor Units Heating System Efficiency	LTHW Boiler MTHW boiler HTHW boiler Heat pump air source District heating ECA/ETL, (ACA) Listed? Yes No Cooling System Efficiency				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)         Terminal reheat (constant volume)         Dual duct (constant volume)	AC SYSTEM TYPE 4 - HEATING and COOLING Heating System Fuel mains gas biomass LPG waste heat Biogas Anthracite Oil Smokeless Fuel electricity Dual Fuel Appliances Coal Uses CHP Manufacturer / make / model number Boiler : AHU: Chiller or Indoor/Outdoor Units Heating System Efficiency Default before 1998	LTHW Boiler  MTHW boiler HTHW boiler Heat pump air source District heating  ECA/ETL, (ACA) Listed? Yes No Cooling System Efficiency EER Default SEER Default SEER Default				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)         Terminal reheat (constant volume)         Dual duct (constant volume)         Chilled ceilings or passive chilled beams	AC SYSTEM TYPE 4 - HEATING and COOLING Heating System Fuel mains gas LPG Waste heat Gigas Anthracite Gil	LTHW Boiler MTHW boiler HTHW boiler Heat pump air source District heating ECA/ETL, (ACA) Listed? Yes No Cooling System Efficiency				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)         Terminal reheat (constant volume)         Dual duct (constant volume)         Chilled ceilings or passive chilled beams         Active chilled beams	AC SYSTEM TYPE 4 - HEATING and COOLING Heating System Fuel mains gas LPG Waste heat Gigas Anthracite Gil	LTHW Boiler  MTHW boiler HTHW boiler Heat pump air source District heating				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)         Terminal reheat (constant volume)         Dual duct (constant volume)         Chilled ceilings or passive chilled beams         Active chilled beams         Single-duct VAV	AC SYSTEM TYPE 4 - HEATING and COOLING Heating System Fuel mains gas biomass LPG waste heat Biogas Anthracite Oil Smokeless Fuel electricity Dual Fuel Appliances Coal Uses CHP Manufacturer / make / model number Boiler : AHU: Chiller or Indoor/Outdoor Units Heating System Efficiency Default before 1998 Default post 1998 Non-Default Value HVAC Metering Provision	LTHW Boiler  MTHW boiler Heat pump air source Heat pump ground / water source District heating				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)         Terminal reheat (constant volume)         Dual duct (constant volume)         Chilled ceilings or passive chilled beams         Active chilled beams         Single-duct VAV         Dual-duct VAV	AC SYSTEM TYPE 4 - HEATING and COOLING Heating System Fuel mains gas biomass LPG waste heat Biogas Anthracite Oil Smokeless Fuel electricity Dual Fuel Appliances Coal Uses CHP Manufacturer / make / model number Boiler : AHU: Chiller or Indoor/Outdoor Units Heating System Efficiency Default before 1998 Default post 1998 Default post 1998 Non-Default Value HVAC Metering Provision Yes, Submetered Yes, M&T Alarm	LTHW Boiler MTHW boiler Heat pump air source Heat pump ground / water source District heating  ECA/ETL, (ACA) Listed? Yes No Yes No EI Cooling System Efficiency EER Default EER Value :  Cooling Source Heatpump (electric)				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)         Terminal reheat (constant volume)         Dual duct (constant volume)         Chilled ceilings or passive chilled beams         Active chilled beams         Single-duct VAV         Dual-duct VAV         Indoor packaged cabinet (VAV)	AC SYSTEM TYPE 4 - HEATING and COOLING Heating System Fuel mains gas biomass LPG waste heat Biogas Anthracite Oil Smokeless Fuel electricity Dual Fuel Appliances Coal Uses CHP Manufacturer / make / model number Boiler : AHU: Chiller or Indoor/Outdoor Units Heating System Efficiency Default before 1998 Default post 1998 Default post 1998 Non-Default Value HVAC Metering Provision Yes, Submetered Yes, M&T Alarm No, Submetered No, M&T Alarm	LTHW Boiler MTHW boiler Heat pump air source Heat pump ground / water source District heating ECA/ETL, (ACA) Listed? Yes No Yes No ECA/ETL, (ACA) Listed? Ye				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)         Dual duct (constant volume)         Dual duct (constant volume)         Chilled ceilings or passive chilled beams         Active chilled beams         Single-duct VAV         Dual-duct VAV         Multizone (hot deck/cold deck) [RARE]	AC SYSTEM TYPE 4 - HEATING and COOLING Heating System Fuel mains gas biomass LPG waste heat Biogas Anthracite Oil Smokeless Fuel electricity Dual Fuel Appliances Coal Uses CHP Manufacturer / make / model number Boiler : AHU: Chiller or Indoor/Outdoor Units Heating System Efficiency Default before 1998 Default post 1998 Default post 1998 Default Value HVAC Metering Provision Yes, Submetered Yes, M&T Alarm No, Submetered No, M&T Alarm Lighting Metering Provision	LTHW Boiler MTHW boiler Heat pump air source Heat pump ground / water source District heating  ECA/ETL, (ACA) Listed? Yes No Yes No E EER Default EER Default EER Value : SEER Default EER Value : SEER Value :				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)         Terminal reheat (constant volume)         Dual duct (constant volume)         Chilled ceilings or passive chilled beams         Active chilled beams         Single-duct VAV         Dual-duct VAV         Indoor packaged cabinet (VAV)	AC SYSTEM TYPE 4 - HEATING and COOLING         Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler :       AHU:         Chiller or Indoor/Outdoor Units         Heating System Efficiency         Default before 1998         Default post 1998         Non-Default Value         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm         Lighting Metering Provision       Yes, M&T Alarm	LTHW Boiler  MTHW boiler Heat pump air source Heat pump ground / water source District heating				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)         Dual duct (constant volume)         Dual duct (constant volume)         Chilled ceilings or passive chilled beams         Active chilled beams         Single-duct VAV         Dual-duct VAV         Indoor packaged cabinet (VAV)         Multizone (hot deck/cold deck) [RARE]         Induction system [RARE]	AC SYSTEM TYPE 4 - HEATING and COOLING         Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler :       AHU:         Chiller or Indoor/Outdoor Units         Heating System Efficiency         Default before 1998         Default post 1998         Non-Default Value         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm         No, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm	LTHW Boiler MTHW boiler Heat pump air source Heat pump ground / water source District heating ECA/ETL, (ACA) Listed? Yes No Yes No Cooling System Efficiency EER Default EER Value : SEER Default EER Value : SEER Value : Cooling Source Heatpump (electric) Heatpump (gas/ oil) Air cooled chiller Water cooled chiller Remote-condenser chiller				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)         Dual duct (constant volume)         Dual duct (constant volume)         Chilled ceilings or passive chilled beams         Active chilled beams         Single-duct VAV         Dual-duct VAV         Indoor packaged cabinet (VAV)         Multizone (hot deck/cold deck) [RARE]         Induction system [RARE]	AC SYSTEM TYPE 4 - HEATING and COOLING         Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler :         AHU:         Chiller or Indoor/Outdoor Units         Heating System Efficiency         Default before 1998         Default post 1998         Non-Default Value         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm         No, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm         Vertilation Heat Recovery       Entition Heat Recovery	LTHW Boiler  MTHW boiler Heat pump air source Heat pump ground / water source District heating				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)         Dual duct (constant volume)         Dual duct (constant volume)         Chilled ceilings or passive chilled beams         Active chilled beams         Single-duct VAV         Dual-duct VAV         Indoor packaged cabinet (VAV)         Multizone (hot deck/cold deck) [RARE]         Induction system [RARE]	AC SYSTEM TYPE 4 - HEATING and COOLING         Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler :       AHU:         Chiller or Indoor/Outdoor Units         Heating System Efficiency         Default before 1998         Default post 1998         Non-Default Value         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm         Ves, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm         Ves, Submetered       No, M&T Alarm         No, Submetered       No, M&T Alarm         No, Submetered       No, M&T Alarm	LTHW Boiler         MTHW boiler         HTHW boiler         Heat pump air source         District heating         ECA/ETL,         (ACA) Listed?         Yes         No         Image: Cooling System Efficiency         EER Default         SEER Default         EER Value :         SEER Value :         Cooling Source         Heatpump (electric)         Heatpump (gas/ oil)         Air cooled chiller         Water cooled chiller         Remote-condenser chiller         Heat Recovery Seasonal Efficiency         el       Default				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)         Constant volume system (variable fresh air rate)         Dual duct (constant volume)         Dual duct (constant volume)         Chilled ceilings or passive chilled beams         Active chilled beams         Single-duct VAV         Dual-duct VAV         Indoor packaged cabinet (VAV)         Multizone (hot deck/cold deck) [RARE]         Induction system [RARE]         Applied in zones tab:       Variable Speed Pumps? (c)         * Ventilaton       No Const. Speed	AC SYSTEM TYPE 4 - HEATING and COOLING         Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler :       AHU:         Chiller or Indoor/Outdoor Units         Heating System Efficiency         Default before 1998         Default post 1998         Non-Default Value         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm         No, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm         Vertilation Heat Recovery       Plate heat exchanger         Thermal whe       Heat-pipes	LTHW Boiler         MTHW boiler         HTHW boiler         Heat pump air source         District heating         ECA/ETL,         (ACA) Listed?         Yes         No         Image: Cooling System Efficiency         EER Default         SEER Default         EER Value :         SEER Value :         Cooling Source         Heatpump (electric)         Heatpump (gas/ oil)         Air cooled chiller         Water cooled chiller         Remote-condenser chiller         Heat Recovery Seasonal Efficiency         el       Default				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)         Constant volume system (variable fresh air rate)         Dual duct (constant volume)         Dual duct (constant volume)         Chilled ceilings or passive chilled beams         Active chilled beams         Single-duct VAV         Dual-duct VAV         Indoor packaged cabinet (VAV)         Multizone (hot deck/cold deck) [RARE]         Induction system [RARE]         Applied in zones tab:       Variable Speed Pumps? (c)         * Ventilaton       No Const. Speed         ** Terminal Unit SFP       Yes LTHW & CHW	AC SYSTEM TYPE 4 - HEATING and COOLING         Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler :       AHU:         Chiller or Indoor/Outdoor Units         Heating System Efficiency         Default before 1998         Default post 1998         Non-Default Value         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm         No, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm      <	LTHW Boiler   MTHW boiler   HTHW boiler   Heat pump air source   District heating   ECA/ETL,   (ACA) Listed?   Yes   Yes   No   I   EER Default   SEER Value :   SEER Value :   Cooling Source   Heatpump (electric)   Heatpump (gas/ oil)   Air cooled chiller   Water cooled chiller   Remote-condenser chiller   Heat Recovery Seasonal Efficiency   el   Default   coil				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)         Constant volume system (variable fresh air rate)         Dual duct (constant volume)         Dual duct (constant volume)         Chilled ceilings or passive chilled beams         Active chilled beams         Single-duct VAV         Dual-duct VAV         Indoor packaged cabinet (VAV)         Multizone (hot deck/cold deck) [RARE]         Induction system [RARE]         Applied in zones tab:       Variable Speed Pumps? (c)         * Ventilaton       No Const. Speed         ** Terminal Unit SFP       Yes LTHW & CHW	AC SYSTEM TYPE 4 - HEATING and COOLING         Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler :       AHU:         Chiller or Indoor/Outdoor Units         Heating System Efficiency         Default before 1998         Default post 1998         Non-Default Value         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm         No, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm      <	LTHW Boiler  MTHW boiler Heat pump air source Heat pump ground / water source District heating				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)         Constant volume system (variable fresh air rate)         Dual duct (constant volume)         Dual duct (constant volume)         Chilled ceilings or passive chilled beams         Active chilled beams         Single-duct VAV         Dual-duct VAV         Indoor packaged cabinet (VAV)         Multizone (hot deck/cold deck) [RARE]         Induction system [RARE]         Applied in zones tab:       Variable Speed Pumps? (c)         * Ventilaton       No Const. Speed         ** Terminal Unit SFP       Yes LTHW & CHW	AC SYSTEM TYPE 4 - HEATING and COOLING         Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler :       AHU:         Chiller or Indoor/Outdoor Units         Heating System Efficiency         Default before 1998         Default post 1998         Non-Default Value         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm         No, Submetered       Run around of         Vertilation Heat Recovery       Plate heat exchanger         Plate heat exchanger       Thermal whe         Heat-pipes       Run around of         Variable Heat Recovery Efficiency ?	LTHW Boiler MTHW boiler Heat pump air source Heat pump ground / water source District heating ECA/ETL, (ACA) Listed? Yes No Ves No Cooling System Efficiency EER Default SEER Default SEER Value : Cooling Source Heatpump (electric) Heatpump (gas/ oil) Air cooled chiller Water cooled chiller Heat Recovery Seasonal Efficiency el Default Double Seasonal Efficiency el Default				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)         Dual duct (constant volume)         Dual duct (constant volume)         Chilled ceilings or passive chilled beams         Active chilled beams         Single-duct VAV         Dual-duct VAV         Indoor packaged cabinet (VAV)         Multizone (hot deck/cold deck) [RARE]         Induction system [RARE]         Applied in zones tab:       Variable Speed Pumps? (c)         * Ventilaton       No Const. Speed         ** Terminal Unit SFP       Yes LTHW & CHW         Sensor:       P       S         Mut       Mut	AC SYSTEM TYPE 4 - HEATING and COOLING         Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler :       AHU:         Chiller or Indoor/Outdoor Units         Heating System Efficiency         Default before 1998         Default post 1998         Non-Default Value         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm         Ventilation Heat Recovery       Plate heat exchanger         Plate heat exchanger       Thermal whe         Heat-pipes       Run around of         Variable Heat Recovery Efficiency ?       St         No       No	LTHW Boiler         MTHW boiler         HTHW boiler         Heat pump air source         District heating         ECA/ETL,         (ACA) Listed?         Yes         No         Image: Cooling System Efficiency         EER Default         SEER Default         EER Value :         SEER Value :         SEER Value :         Kooling Source         Heatpump (electric)         Heatpump (gas/ oil)         Air cooled chiller         Water cooled chiller         Heat Recovery Seasonal Efficiency         el         Default         cooling         Mon Default Value         SEFP:         W//s				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)         Dual duct (constant volume)         Dual duct (constant volume)         Chilled ceilings or passive chilled beams         Active chilled beams         Single-duct VAV         Dual-duct VAV         Indoor packaged cabinet (VAV)         Multizone (hot deck/cold deck) [RARE]         Induction system [RARE]         Applied in zones tab:       Variable Speed Pumps? (c)         * Ventilaton       No Const. Speed         ** Terminal Unit SFP       Yes LTHW & CHW         Sensor:       P       S         Mutexwork Leakage       Default	AC SYSTEM TYPE 4 - HEATING and COOLING         Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler :       AHU:         Chiller or Indoor/Outdoor Units         Heating System Efficiency         Default before 1998         Default post 1998         Non-Default Value         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm         Vertilation Heat Recovery       Plate heat exchanger         Plate heat exchanger       Thermal whe         Heat-pipes       Run around of         Variable Heat Recovery Efficiency ?       Si         Yes       No         Central Time Control       Location	LTHW Boiler   MTHW boiler   HEat pump air source   Heat pump ground / water source   District heating   ECA/ETL,   (ACA) Listed?   Yes   Yes   No   I   EER Default   EER Value :   SEER Value :   EER Value :   Beatpump (electric)   Heatpump (gas/ oil)   Air cooled chiller   Water cooled chiller   Water cooled chiller   Default   cooling Source				
HVAC System         Local Cooling System (Cooling coil in zone)         Split or mulit-split system *         Single Room Cooling system *         Fan Coil Units **         Water Loop Heatpump [RARE]         Central Cooling System (Cooling coil on AHU)         Constant volume system (fixed fresh air rate)         Constant volume system (variable fresh air rate)         Dual duct (constant volume)         Dual duct (constant volume)         Chilled ceilings or passive chilled beams         Active chilled beams         Single-duct VAV         Dual-duct VAV         Indoor packaged cabinet (VAV)         Multizone (hot deck/cold deck) [RARE]         Induction system [RARE]         Applied in zones tab:       Variable Speed Pumps? (c)         * Ventilaton       No Const. Speed         ** Terminal Unit SFP       Yes LTHW & CHW         Sensor: P       S         Muter Chault       Default         Default       Default	AC SYSTEM TYPE 4 - HEATING and COOLING         Heating System Fuel         mains gas       biomass         LPG       waste heat         Biogas       Anthracite         Oil       Smokeless Fuel         electricity       Dual Fuel Appliances         Coal       Uses CHP         Manufacturer / make / model number         Boiler :       AHU:         Chiller or Indoor/Outdoor Units         Heating System Efficiency         Default before 1998         Default post 1998         Non-Default Value         HVAC Metering Provision         Yes, Submetered       Yes, M&T Alarm         No, Submetered       No, M&T Alarm         Vertilation Heat Recovery       Plate heat exchanger         Plate heat exchanger       Thermal whe         Heat-pipes       Run around of         Variable Heat Recovery Efficiency ?       Si         Yes       No         Central Time Control       Location	□       LTHW Boiler         □       MTHW boiler         □       Heat pump air source         □       Heat pump ground / water source         □       District heating         ECA/ETL,       (ACA) Listed?         Yes       No         □       □         Cooling System Efficiency       □         EER Default       SEER Default         EER Value :       □         Cooling Source       Heatpump (electric)         □       Heatpump (gas/ oil)         △ Air cooled chiller       Water cooled chiller         Water cooled chiller       Heat Recovery Seasonal Efficiency         el       □ Default         cooling       Non Default Value         cooling       Non Default Value         cooling       W//s				

Heating system (Hot Water System)							
Generator Type	HWS System Fuel		HWS System	n Age	HWS System Efficiency		
Dedicated hot water boiler	mains gas	biomass	🗌 1998 or la	Default			
Stand-alone water heater	LPG	waste heat	pre 1998		Non Default		
Instantaneous hot water only	Biogas	other:	Manufacturer	/ make / m	odel number		
Instantaneous combi	Oil Oil						
Heat pump	electricity						
Same as HVAC:	Coal						
Hot Water Cylinder Storage Syste	m				Secondary Circulation		
no access Insulation:	no insulation	_	storage lo	sses	circulation losses (W/m)		
capacity (litres)	lagging jacket	insulation			pump power (kW)		
or dimensions	factory fitted	thickness (mm)	M	J/month	loop length (m)		
					time control on secondary circulation		
	Solar W	ater Heating	9				
Collector Parameters			_		Manufacturer / make / model number		
none	aperture	orientation	evacua	ated tube			
solar water heating present	panel area (m <sup>2</sup> )		flat pla	te, glazed			
		tilt °	Unglaz	zed			
			Non D	efault			
Solar Storage				Collector I	Loop		
	bined cylinder 🔲 no ins	ulation	insulation	Heat Transfer F	Rate of Heat Exchanger Heat Loss Coeff of all Pipes		
volume (litres) sepa	arate cylinder 🛛 laggin	g jacket	thickness	🗌 no he	eat exchanger 🛛 🗌 default		
	factor	y fitted	(mm)	defau	ult non default		
				non o	default		
	Photovo	oltaics					
Parameters	1 1101011				Manufacturer / make / model number		
none	Orie	entation O	vershading				
Use Peak Power			one or very little	(<20%)			
Mono crystalline silicon		М	odest (20-60%)				
Multi crystalline silicon	Incli	ination Si	gnificant (60-80	%)			
Multi layer thin film amorphous			eavy (>80%)	,			
Other thin film layers		ation Strategy	,				
Thin film copper-indium-gallium	n-diselenide Strong	ly ventilated or fo	rced ventilated i	modules			
Thin film cadmium-telluride		ately ventilated m					
	=	tilated modules	loudies				
Area m2		liated modules					
					1		
	Wind Ge	enerator					
Parameters Smo	oth flat country (no obstacles)	h	orizontal	boight m	Manufacturer / make / model number		
	,			height,m			
	a land with boundary hedges		kis, m	]			
	urban or industrial area	1 1	wept	power,kW			
	n with average building height > 1	5mAI	rea, m2				
	СНР						
Parameters Fuel		Efficiency		Supplied	Tri Generation		
	ns gas biomass		eat ficional	Building			
Chp present			ficiency		Ipplied, % Supplied, %		
tri generation present Biog			ectrical	Building			
	Dual Fuel Applian		ficiency	water S	Supplied, % Efficiency		
CHP Manufacturer / make / model	Inumber		Chill	ier Manufac	cturer / make / model number		
Any other comments or details on ass	essment including items of	served which affe	ect the rating but	not snown e	isewhere on survey form/sketches.		

ZONES: BUIL	DING SERVICES DE																		
Zone name	Description	Building type	SBEM Activity	Area m2	Height m	Which HVAC system*?	Zonal ventilation? Y / N	Zonal Mechanical exhaust? Y / N	Ventilation part of HVAC? Y / N	DHW generator name	DHW deadleg length m	Lighting: What information	Total W lumens/W lamp type	Display high eff.lamps	Lighting controls Manual or Auto M / A	Switching or Dimming S / D	Back sensor Y/N?	Occupancy sensing	Photoelectric (daylight) sensor
z0/00	Example tea area in office	Office	Generic Office Area	9	3.1	Heating only	N	N	N	DHW 1	0	Visual Survey	T-8 standard	N/A	A	S	N	Y	N
Copy Format	Above for other zon	les																	

ZONES: GEOMETR	RICAL DETAILS			Adjacent spaces	: CAS= Conditione	ed adjoining space; Ext= olour = W,P,D or B.	Exterior, Und=Unde Translucency = On	arground, UAS= aque Med or H	Unheated adjo	oining space, L lei: Y or N	JASPC=UAS - p	artially conditioned by	/ surroundin	g spaces											
Basic zone informat Zone name	ion Description	Building type	Activity#	Area m2	Height m	HVAC system	Envelope elemen Element name\$	Wall, Roof	Orientation	Adjacent	Construction	Length walls	Area m2	Windows and Window	Glazing/door					Frame Type	Window	Gap Gas	Shading type	e Transmissio	doors only Type of door
								(Pitch angle)	NESWH	space	name*	only, (Perimeter)		name/Door name\$	construction name*	Width	Height	Aspect Ratio	Area m2		Width/ Gap Width			factor	
z-/01					5	3	z-/01/s	wall	s	Exterior		3	9.	00 z-/01/s/g		2	1	0.50	2						
							z-/01/w	wall	w	Exterior		2	6.	00 z-/01/w/g		1.5	2.5	1.67	3.75						
							z-/01/n	wall	n	UAS - PC						0	0	1	0						
							z-/01/f	<b>6</b>					0.												
							2-/01/1	floor	h	Und															
							z-/01/c	roof (0)	h	Exterior			0.	00											
z0/02					3.5	5	z0/02/s	wall	s	Exterior		3	10.	50 z0/02/s/g		2	1	0.50	2						
							z0/02/w	wall	w	Exterior		3	10.	50 z0/02/w/g		1.5	2.5	i 1.67	3.75						
							z0/02/n	wall	n	UAS		4	14.	00		0	0	1	0						
							z0/02/h	floor	h	Und				00											
							20/02/11	100	n	Und			0.												
							z0/02/h	roof (0)	h	Exterior			0.	00											
z0/03					:	3	z0/03/s	wall	s	Exterior		3	9.	00 z0/03/s/g		2	1	0.50	2						
							z0/03/w	wall	w	Exterior		3	9.	00 z0/03/w/g		1.5	2.5	1.67	3.75						
							z0/03/n	wall	n	Same		3				0	0	1	0						
							z0/03/h	floor	h	Und			0.	00											
							z0/03/h	roof (0)	h	Exterior			0.	00											
z0/04					3	3	z0/04/s	wall	s	Exterior		0	0.	00 z0/04/s/g		2	1	0.50	2						
							z0/04/w	wall	w	Exterior		0	0.	00 z0/04/w/g		1.5	2.5	1.67	3.75						
							*0/04/n	well		UAS - PC															
							z0/04/n	wall	n	UAS - PC						0			0						
							z0/04/h	floor	h	Und			0.	00											
							z0/04/h	roof (0)	h	Exterior			0.	00											

Copy the above format for any further zones; Copy lines in each zone for additional elements. Zones can be merged prior to entry on survey form (subject to SBEM rules). Survey Form Version 2.0....Q3 2019

n	CAS
е	Exterior
s	Same
w	Und
ne	Strongly vent.
se	UAS - PC
sw	UAS
ne	Und
h	