NEAP SURVEY FORM

Name: _____

Address: _____

Eircode | **MPRN**

Assessor / BER reg. no.

Survey Date:

Building Type

Age: Building
☐ Evidence 1 ☐ Evidence 2

Age: Extension 1
☐ No Extension
☐ Evidence 1 ☐ Evidence 2

Age:Extension 2
☐ No Extension
☐ Evidence 1 ☐ Evidence 2

number of storeys ☐

Air Test ?
☐ Default 25
☐ Cert available

Thermal Bridging ?
☐ Default
☐ Data available

Building Type(s)

Type of Rating
☐ new-provisional
☐ new-final building
☐ existing building

Wall construction Main Wall Type 1*

Roof Construction: Main Roof*

Ground Floor Construction: Main Floor*

Wall construction Wall Type 2*

Roof Construction: Roof Type 2*

Ground Floor Construction: Floor Type 2*

Wall construction Wall Type 3*

Roof Construction: Roof Type 3*

Internal Floor Construction: Floor Type 3*

Wall construction Wall Type 4*

Construction: Type *

Construction: Type *

Window Construction: Wall windows 1
Non-Default Data? N ☐ Y ☐
Material Alu ☐ PVC ☐ W ☐
Thermal break N ☐ Y ☐
Low E N ☐ Y ☐
Argon Gas N ☐ Y ☐
Glazing make-up :

Window Construction: Roof windows 1
Non-Default Data? N ☐ Y ☐
Material Alu ☐ PVC ☐ W ☐ None ☐
Thermal break N ☐ Y ☐
Low E N ☐ Y ☐
Argon Gas N ☐ Y ☐
Glazing make-up :

Door Construction: Personnel door(s)*
Door make-up Type 1:
Door make-up Type 2:

Window Construction: Wall windows 2
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 :

Window Construction: Wall windows 2
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 :

Door Construction: Vehicle Access door(s)
Door make-up Type 1:
Door make-up Type 2:

**note:Actual U-value should be calculated and used if the wall /roof /floor construction detail is available on site or through documentation.*
Substantiation supporting the U-value calculation is required. Non default U values should be recorded along with relevant calculation in Assessor's records
Reprint this page as often as required (e.g. Multiple extensions or more than four wall types etc)

HVAC System Heating ONLY

HVAC SYSTEM TYPE 1 - HEATING ONLY

HVAC System
[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)
- ☐ Default
- Non-Default Value = _____

Aux Energy (b)
- ☐ Default
- Non-Default Value = _____ kWh/kWh

Heating System Fuel
- ☐ mains gas
- ☐ biomass
- ☐ LPG
- ☐ waste heat
- ☐ Biogas
- ☐ Anthracite
- ☐ Oil
- ☐ Smokeless Fuel
- ☐ electricity
- ☐ Dual Fuel Appliances
- ☐ Coal
- ☐ **Uses CHP**

Heating Source (Local Heating)
- ☐ Direct OR storage electric heater
- ☐ Room heater (Open fire, stove)
- ☐ Flued Radiant heater
- ☐ Air heater
- ☐ Heat pump Type:
- ☐ Unflued radiant heater

Manufacturer / make / model number
- Boiler/ Heater :
- AHU:
- Other :

ECA/ETL,(ACA) Listed? Yes ☐ No ☐

Heating System Efficiency
- ☐ Default before 1998
- ☐ Default post 1998
- ☐ Open Fire Default
- ☐ Non-Default Value _____

Central Heating Systems [heating by water]
- ☐ Central heating using water: radiators (c)
- ☐ Central heating using water: convectors (b), (c)
- ☐ Central heating using water: floor heating (c)

Aux Energy (b)
- ☐ Default
- _____ kWh/kWh

Variable Speed Pumps? (c)
- ☐ No Const. Speed
- ☐ Yes LTHW

Sensor: P ☐ S ☐ M ☐

HVAC Metering Provision
- ☐ Yes, Submetered
- ☐ No, Submetered
- ☐ Yes, M&T Alarm
- ☐ No, M&T Alarm

Lighting Metering Provision
- ☐ Yes, Submetered
- ☐ No, Submetered
- ☐ Yes, M&T Alarm
- ☐ No, M&T Alarm

Heating Source (Central Heating)
- ☐ LTHW Boiler
- ☐ MTHW boiler
- ☐ HTHW boiler
- ☐ Heat pump air source
- ☐ Heat pump ground / water source
- ☐ District heating

Central Heating Systems [heating by air] (d),(e)
- ☐ Central heating using air distribution

Ventilation is included in this system

Ventilation Heat Recovery (e) or by zone
- ☐ Plate heat exchanger
- ☐ Heat-pipes
- ☐ Thermal wheel
- ☐ Run around coil

Heat Recovery Seasonal Efficiency
- ☐ Default
- ☐ Non Default Value _____

Variable Heat Recovery Efficiency ?
- ☐ Yes
- ☐ No

Specific Fan Power
- ☐ Default
- ☐ SFP: _____ W/l/s

Ductwork Leakage (d)
- ☐ Default
- ☐ Non Default
- Class: _____

AHU Leakage (d)
- ☐ Default
- ☐ Non Default
- Class: _____

System Controls
- ☐ Central Time Control
- ☐ Optimum Start/ Stop Control
- ☐ Local Time Control
- ☐ Local Temperature Control
- ☐ Weather Compensation Control

HVAC SYSTEM TYPE 2 - HEATING ONLY

HVAC System
[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)
- ☐ Default
- Non-Default Value = _____

Aux Energy (b)
- ☐ Default
- Non-Default Value = _____ kWh/kWh

Heating System Fuel
- ☐ mains gas
- ☐ biomass
- ☐ LPG
- ☐ waste heat
- ☐ Biogas
- ☐ Anthracite
- ☐ Oil
- ☐ Smokeless Fuel
- ☐ electricity
- ☐ Dual Fuel Appliances
- ☐ Coal
- ☐ **Uses CHP**

Heating Source (Local Heating)
- ☐ Direct OR storage electric heater
- ☐ Room heater (Open fire, stove)
- ☐ Flued Radiant heater
- ☐ Air heater
- ☐ Heat pump Type:
- ☐ Unflued radiant heater

Manufacturer / make / model number
- Boiler/ Heater :
- AHU:
- Other :

ECA/ETL,(ACA) Listed? Yes ☐ No ☐

Heating System Efficiency
- ☐ Default before 1998
- ☐ Default post 1998
- ☐ Open Fire Default
- ☐ Non-Default Value _____

Central Heating Systems [heating by water]
- ☐ Central heating using water: radiators (c)
- ☐ Central heating using water: convectors (b), (c)
- ☐ Central heating using water: floor heating (c)

Aux Energy (b)
- ☐ Default
- _____ kWh/kWh

Variable Speed Pumps? (c)
- ☐ No Const. Speed
- ☐ Yes LTHW

Sensor: P ☐ S ☐ M ☐

HVAC Metering Provision
- ☐ Yes, Submetered
- ☐ No, Submetered
- ☐ Yes, M&T Alarm
- ☐ No, M&T Alarm

Lighting Metering Provision
- ☐ Yes, Submetered
- ☐ No, Submetered
- ☐ Yes, M&T Alarm
- ☐ No, M&T Alarm

Heating Source (Central Heating)
- ☐ LTHW Boiler
- ☐ MTHW boiler
- ☐ HTHW boiler
- ☐ Heat pump air source
- ☐ Heat pump ground / water source
- ☐ District heating

Central Heating Systems [heating by air] (d),(e)
- ☐ Central heating using air distribution

Ventilation Heat Recovery (e)
- ☐ Plate heat exchanger
- ☐ Heat-pipes
- ☐ Thermal wheel
- ☐ Run around coil

Heat Recovery Seasonal Efficiency
- ☐ Default
- ☐ Non Default Value _____

Variable Heat Recovery Efficiency ?
- ☐ Yes
- ☐ No

Specific Fan Power
- ☐ Default
- ☐ SFP: _____ W/l/s

Ductwork Leakage (d)
- ☐ Default
- ☐ Non Default
- Class: _____

AHU Leakage (d)
- ☐ Default
- ☐ Non Default
- Class: _____

System Controls
- ☐ Central Time Control
- ☐ Optimum Start/ Stop Control
- ☐ Local Time Control
- ☐ Local Temperature Control
- ☐ Weather Compensation Control

Replicate this page as required if there are more than two ***Heating Only*** *HVAC systems.* ***See other worksheet for systems that include cooling.***

HVAC System Heating AND Cooling

HVAC SYSTEM TYPE 3 - HEATING and COOLING

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)
- ☐ Multizone (hot deck/cold deck) [RARE]
- ☐ Induction system [RARE]

Applied in zones tab:

* Ventilaton

** Terminal Unit SFP

Variable Speed Pumps? (c)

- ☐ No Const. Speed
- ☐ Yes LTHW & CHW

Sensor: P ☐ S ☐ M ☐

Ductwork Leakage

- ☐ Default
- ☐ Non Default

Class: _____

AHU Leakage

- ☐ Default
- ☐ Non Default

Class: _____

Heating System Fuel

- ☐ mains gas
- ☐ biomass
- ☐ LPG
- ☐ waste heat
- ☐ Biogas
- ☐ Anthracite
- ☐ Oil
- ☐ Smokeless Fuel
- ☐ electricity
- ☐ Dual Fuel Appliances
- ☐ Coal
- ☐ **Uses CHP**

Heating Source

- ☐ LTHW Boiler
- ☐ MTHW boiler
- ☐ HTHW boiler
- ☐ Heat pump air source
- ☐ Heat pump ground / water source
- ☐ District heating

Manufacturer / make / model number

Boiler :

AHU:

Chiller or Indoor/Outdoor Units

ECA/ETL, (ACA) Listed?

Yes ☐ No ☐

Heating System Efficiency

- ☐ Default before 1998
- ☐ Default post 1998
- ☐ Non-Default Value _____

Cooling System Efficiency

- ☐ EER Default
- ☐ EER Value :
- ☐ SEER Default
- ☐ SEER Value :

HVAC Metering Provision

- ☐ Yes, Submetered
- ☐ Yes, M&T Alarm
- ☐ No, Submetered
- ☐ No, M&T Alarm

Lighting Metering Provision

- ☐ Yes, Submetered
- ☐ Yes, M&T Alarm
- ☐ No, Submetered
- ☐ No, M&T Alarm

Cooling Source

- ☐ Heatpump (electric)
- ☐ Heatpump (gas/ oil)
- ☐ Air cooled chiller
- ☐ Water cooled chiller
- ☐ Remote-condenser chiller

Ventilation Heat Recovery

- ☐ Plate heat exchanger
- ☐ Thermal wheel
- ☐ Heat-pipes
- ☐ Run around coil

Heat Recovery Seasonal Efficiency

- ☐ Default
- ☐ Non Default Value _____

Variable Heat Recovery Efficiency ?

- ☐ Yes
- ☐ No

Specific Fan Power

- ☐ Default
- ☐ SFP:_____W/l/s

System Controls

- ☐ Central Time Control
- ☐ Local Temperature Control
- ☐ Optimum Start/ Stop Control
- ☐ Weather Compensation Control
- ☐ Local Time Control

Mixed Mode Operation

- ☐ Yes
- ☐ No

HVAC SYSTEM TYPE 4 - HEATING and COOLING

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)
- ☐ Multizone (hot deck/cold deck) [RARE]
- ☐ Induction system [RARE]

Applied in zones tab:

* Ventilaton

** Terminal Unit SFP

Variable Speed Pumps? (c)

- ☐ No Const. Speed
- ☐ Yes LTHW & CHW

Sensor: P ☐ S ☐ M ☐

Ductwork Leakage

- ☐ Default
- ☐ Non Default

Class: _____

AHU Leakage

- ☐ Default
- ☐ Non Default

Class: _____

Heating System Fuel

- ☐ mains gas
- ☐ biomass
- ☐ LPG
- ☐ waste heat
- ☐ Biogas
- ☐ Anthracite
- ☐ Oil
- ☐ Smokeless Fuel
- ☐ electricity
- ☐ Dual Fuel Appliances
- ☐ Coal
- ☐ **Uses CHP**

Heating Source

- ☐ LTHW Boiler
- ☐ MTHW boiler
- ☐ HTHW boiler
- ☐ Heat pump air source
- ☐ Heat pump ground / water source
- ☐ District heating

Manufacturer / make / model number

Boiler :

AHU:

Chiller or Indoor/Outdoor Units

ECA/ETL, (ACA) Listed?

Yes ☐ No ☐

Heating System Efficiency

- ☐ Default before 1998
- ☐ Default post 1998
- ☐ Non-Default Value _____

Cooling System Efficiency

- ☐ EER Default
- ☐ EER Value :
- ☐ SEER Default
- ☐ SEER Value :

HVAC Metering Provision

- ☐ Yes, Submetered
- ☐ Yes, M&T Alarm
- ☐ No, Submetered
- ☐ No, M&T Alarm

Lighting Metering Provision

- ☐ Yes, Submetered
- ☐ Yes, M&T Alarm
- ☐ No, Submetered
- ☐ No, M&T Alarm

Cooling Source

- ☐ Heatpump (electric)
- ☐ Heatpump (gas/ oil)
- ☐ Air cooled chiller
- ☐ Water cooled chiller
- ☐ Remote-condenser chiller

Ventilation Heat Recovery

- ☐ Plate heat exchanger
- ☐ Thermal wheel
- ☐ Heat-pipes
- ☐ Run around coil

Heat Recovery Seasonal Efficiency

- ☐ Default
- ☐ Non Default Value _____

Variable Heat Recovery Efficiency ?

- ☐ Yes
- ☐ No

Specific Fan Power

- ☐ Default
- ☐ SFP:_____W/l/s

System Controls

- ☐ Central Time Control
- ☐ Local Temperature Control
- ☐ Optimum Start/ Stop Control
- ☐ Weather Compensation Control
- ☐ Local Time Control

Mixed Mode Operation

- ☐ Yes
- ☐ No

*Replicate this page as required if there are more than two **Heating & Cooling** HVAC systems.* ***See other worksheet for systems that can provide HEATING ONLY.***

Heating system (Hot Water System)

Generator Type

- ☐ Dedicated hot water boiler
- ☐ Stand-alone water heater
- ☐ Instantaneous hot water only
- ☐ Instantaneous combi
- ☐ Heat pump
- ☐ Same as HVAC: _____

HWS System Fuel

- ☐ mains gas
- ☐ LPG
- ☐ Biogas
- ☐ Oil
- ☐ electricity
- ☐ Coal
- ☐ biomass
- ☐ waste heat
- ☐ other:

HWS System Age

- ☐ 1998 or later
- ☐ pre 1998

HWS System Efficiency

- ☐ Default
- ☐ Non Default

Manufacturer / make / model number

Hot Water Cylinder Storage System

- ☐ no access
- **Insulation:** ☐ no insulation ☐ lagging jacket ☐ factory fitted
- ☐ storage losses
- ☐ capacity (litres) or dimensions
- ☐ insulation thickness (mm)
- ☐ MJ/month

Secondary Circulation

- ☐ circulation losses (W/m) _____
- ☐ pump power (kW) _____
- ☐ loop length (m) _____
- ☐ time control on secondary circulation

Solar Water Heating

Collector Parameters

- ☐ none
- ☐ solar water heating present
- ☐ aperture panel area (m^2)
- ☐ orientation
- ☐ tilt °
- ☐ evacuated tube
- ☐ flat plate, glazed
- ☐ Unglazed
- ☐ Non Default

Manufacturer / make / model number

Solar Storage

- ☐ solar storage volume (litres)
- ☐ combined cylinder
- ☐ separate cylinder
- ☐ no insulation
- ☐ lagging jacket
- ☐ factory fitted
- ☐ insulation thickness (mm)

Collector Loop

Heat Transfer Rate of Heat Exchanger

- ☐ no heat exchanger
- ☐ default
- ☐ non default _____

Heat Loss Coeff of all Pipes

- ☐ default
- ☐ non default _____

Photovoltaics

Parameters

- ☐ none
- ☐ Use Peak Power
- ☐ Mono crystalline silicon
- ☐ Multi crystalline silicon
- ☐ Multi layer thin film amorphous silicon
- ☐ Other thin film layers
- ☐ Thin film copper-indium-gallium-diselenide
- ☐ Thin film cadmium-telluride
- ☐ Area m2
- ☐ Orientation
- ☐ Inclination

Overshading

- ☐ None or very little (<20%)
- ☐ Modest (20-60%)
- ☐ Significant (60-80%)
- ☐ Heavy (>80%)

Ventilation Strategy

- ☐ Strongly ventilated or forced ventilated modules
- ☐ Moderately ventilated modules
- ☐ Unventilated modules

Manufacturer / make / model number

Wind Generator

Parameters

- ☐ none
- ☐ turbine present
- ☐ Smooth flat country (no obstacles)
- ☐ Farm land with boundary hedges
- ☐ Suburban or industrial area
- ☐ Urban with average building height > 15m
- ☐ horizontal axis, m
- ☐ height,m
- ☐ Swept Area, m2
- ☐ power,kW

Manufacturer / make / model number

CHP

Parameters

- ☐ none
- ☐ chp present
- ☐ tri generation present

Fuel

- ☐ mains gas
- ☐ LPG
- ☐ Biogas
- ☐ Oil
- ☐ Coal
- ☐ biomass
- ☐ Anthracite
- ☐ Smokeless Fuel
- ☐ Dual Fuel Appliances

Efficiency

- ☐ Heat Efficiency
- ☐ Electrical Efficiency

Heat Supplied

- ☐ Building Space Heat Supplied, %
- ☐ Building Hot Water Supplied, %

Tri Generation

- ☐ Building Cooling Supplied, %
- ☐ Chiller Efficiency

CHP Manufacturer / make / model number

Chiller Manufacturer / make / model number

Any other comments or details on assessment including items observed which affect the rating but not shown elsewhere on survey form/sketches.

Reprint this page if multiple CHP, DHW, Solar, PV or Wind systems present

ZONES: BUILDING SERVICES DETAILS																		
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 zones																			

ZONES: GEOMETRICAL DETAILS

Adjacent spaces: CAS= Conditioned adjoining space; Ext=Exterior, Und=Underground, UAS=Unheated adjoining space, UASPC=UAS - partially conditioned by surrounding spaces
Shading type: None,Ext, or Int Colour = W,P,D or B. Translucency = Opaque, Med, or High. Brise-Soleil: Y or N

Basic zone information							Envelope elements							windows and doors											doors only
Zone name	Description	Building type	Activity#	Area m2	Height m	HVAC system	Element name$	Wall, Roof (Pitch angle)	Orientation NESWH	Adjacent space	Construction name*	Length walls only, (Perimeter)	Area m2	Window name/Door name$	Glazing/door construction name*	Width	Height	Aspect Ratio	Area m2	Frame Type	Window Width/ Gap Width	Gap Gas	Shading type	Transmission factor	Type of door
z-/01					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		0						
							z-/01/f	floor	h	Und			0.00												
							z-/01/c	roof (0)	h	Exterior			0.00												
z0/02					3.5		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	1.67	3.75						
							z0/02/n	wall	n	UAS		4	14.00			0	0		0						
							z0/02/h	floor	h	Und			0.00												
							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		0						
							z0/03/h	floor	h	Und			0.00												
							z0/03/h	roof (0)	h	Exterior			0.00												
z0/04					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						
							z0/04/n	wall	n	UAS - PC						0	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
e	Exterior
s	Same
w	Und
ne	Strongly vent.
se	UAS - PC
sw	UAS
ne	Und
h	