ECO3: Deemed Scores Survey[1]

- Questions 1-9 and the measure POPT section (found at the bottom of page 1) are mandatory. Questions 10-19 must be completed for the relevant measure type, and may be completed by a different operative at survey or post-installation stage.
- **Annex 1 should be completed as a minimum for measures where the POPT is less than 67%.**
- **If you wish to challenge a monitoring fail you will need to provide the exact POPT and your calculations.**
- Additional pages should be appended if there is not enough space in the fields provided.
- All photographic evidence in relation to a measure must be appropriate and in line with GDPR[2] and Data Protection Act 2018 requirements.
- The information and details recorded here must be true and accurate. If issues arise that raise doubts around the accuracy of the evidence and information provided, measures will be investigated and may be rejected. Any fraudulent activity, including misrepresenting details of the property, may also be reported to law enforcement agencies.

Question	Response					
1. Date of survey:						
2. Assessor/Operative:	Name: Company name: Tel: Email:					
3. Name of customer:						
4. Address of installation:						
5. Post code:						
6. Property type:	House	Bungalow	Flat	Maisonette	Single park home	Double park home
If House/bungalow:	*Detached*	*Semi*	*Mid terrace*		*End terrace*	
If Flat/maisonette:	*≤2 external walls*		*≥3 external walls*			
7. Bedrooms:	1	2	3	4	5	6+
8. Tenure	Owner occupier		Private tenant		Social housing tenant	

[1] Please note you may be required to provide photographic evidence alongside this document. Photographic evidence in relation to a measure must be appropriate and in line with GDPR and Data Protection Act 2018 requirements.
[2] The General Data Protection Regulation (Regulation EU 2016/679).

Question	Response

9. What is the pre-main heating source[3]?

Gas boiler	Electric storage heaters	Oil boiler	LPG boiler	Solid fossil fuel boiler	Electric boiler
Gas room heaters	Solid fuel room heaters	Electric room heaters	Gas fire with back boiler	Gas back boiler to radiators	

If other, specify the heating source and what deemed scores proxy is being used?

Please circle relevant POPT for measure/s being installed (where any measure is <67% complete annex 1)

Cavity Wall Insulation □ 0.027 □ 0.033 □ 0.04 □ Unknown	<67%	≥67%	Loft Insulation □ ≤100mm □ >100mm	<67%	≥67%
Cavity with partial-fill insulation	<67%	≥67%	Heating Controls (including smart thermostats and TTZC)	100%	N/A
Boiler □ *Broken* □ *Upgrade* □ *Repair*	<67%	≥67%	Electric Storage Heaters Fan □ *Broken* □ *Upgrade* □ *Repair*	<67%	≥67%
Electric Storage Heaters HHR □ *Broken* □ *Upgrade* □ *Repair*	<67%	≥67%	External Wall Insulation	<67%	≥67%
First Time Central Heating[4]	100%	N/A	Room-in-roof Insulation *Residual area insulated[5]?* □ *Yes* □ *No* □ *N/A*	<67%	≥67%
Internal Wall Insulation	<67%	≥67%	Floor insulation: □ *Solid*	<67%	≥67%
EWI / IWI Hybrid Wall Insulation	<67%	≥67%	Floor insulation: □ *Suspended*	<67%	≥67%
Flat Roof Insulation	<67%	≥67%	Draught Proofing	<67%	≥67%
Party Cavity Wall Insulation	<67%	≥67%	Other (Please specify)	<67%	≥67%

Solar PV measures only[6]					
kWp		Inclination		Orientation	
OI Factor[7]		%	POPT[7]		%

[3] For heating measures, this should be the heating source that you are replacing.
[4] Please complete annex 3 to confirm the FTCH pre-conditions have been met
[5] Tick 'Yes' if the Residual area is required to be insulated. Tick 'No' if the residual area is already insulated. Tick 'N/A' if there is no residual area present.
[6] PV can only be installed if the main heat source is electric.
[7] Please see annex 2 for instructions on calculating the orientation and inclination factor (OI) and POPT.

Heating measures only		
10. Main wall construction type	☐ ≥ 50% cavity wall	☐ ≥ 50% solid wall
11. Are there a full set of functioning pre-existing heating controls?	☐ Yes ☐ No If applicable, please record fault(s) _____ _____	
12. What working heating controls currently exist? (Tick all that apply)		
☐ Room Thermostat ☐ Programmer ☐ Smart Thermostat	☐ TRV Please record the existing number of radiators ____ Please record the existing number of TRV's ____	
13. What heating measure(s) is or are being installed? (Tick all that apply)		
☐ Broken boiler **repair** (no pre-existing heating controls)	☐ Broken boiler **repair** (pre-existing heating controls)	
☐ Broken boiler **replace** (no pre-existing heating controls)	☐ Broken boiler **replace** (pre-existing heating controls)	
☐ Inefficient/broken boiler (Please specify accompanying insulation measure below) _____		
☐ Heating controls (including smart thermostats and TTZC)	☐ First time central heating	
☐ Weather compensation	☐ Load compensation	

Pre-existing ESH: (please record number)	Slimline[8]		Fan assisted		High heat retention	
Number of ESH being installed: (please record number)			Broken Fan assisted		Broken High heat retention	
			Upgrade Fan assisted		Upgrade High heat retention	
Inefficient/broken ESH (Please specify accompanying insulation measure below) _____			Fan assisted: _____		High heat retention: _____	
ESH repair (please record number)			Fan assisted		High heat retention	

Boiler/FTCH post-heating fuel	☐ Gas ☐ LPG ☐ DHS ☐ ASHP ☐ GSHP ☐ Biomass ☐ Fuel cell mCHP ☐ Oil[9]

[8] If unable to categorise the pre-existing ESH, if the responsiveness is <0.2, please record as 'slimline'.

[9] Oil boilers can only be installed where a broken boiler is being replaced.

EWI/IWI measures and Solid wall alternative measures	
14. Approximate construction year or age band, & reasoning:	
15. Please state predominate solid wall construction type e.g solid brick, timber frame or system build[10]:	
16. What percentage of total wall area does this wall type consist of?	%

Cavity wall insulation measures	
17. Approximate construction year or age band, & reasoning:	
18. Are you extracting any failed cavity wall insulation?	Yes[11] / No / N/A
19. Are the walls already partially insulated?[12]	Yes / No / Unknown

[10] Although most system build properties meet the definition of solid wall, some have external walls of a standard cavity construction and require a cavity wall insulation measure. The construction type of the external walls of a system build property should therefore be assessed prior to insulating the property.

[11] A report from a chartered surveyor or other suitably qualified professional will be required to validate the failed cavity wall material and evidence provided that no existing guarantee is in place

[12] If the pre-existing insulation meets relevant standards, any additional insulation will not be an eligible CWI measure.

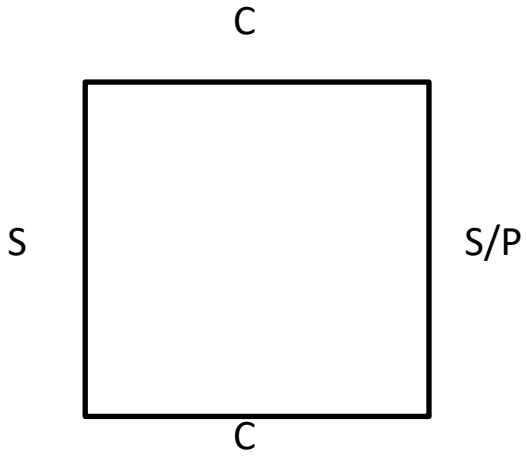
Draw a basic sketch plan on the next page showing the rooms and walls

Basic sketch plan instructions for all measure types	
Room Key[13]: BR# = Bedrooms; LR = Living Room; K = Kitchen; D = Dining Room; BTH = Bathroom. **Wall Type key:** _____ Cavity/non cavity*; Adjacent to unheated space/corridor XXXXX Doors should only be included where the measure being scored is a high performance external door and windows should only be included where the measure is window glazing.	
Sketch plan instructions by measure type	
Heating Measures	**Roof, wall and floor measures**
HS# = heating system/boiler (HS1 = main heating source) RAD = Radiator with no existing TRV RADT = Radiator with existing TRV RS = Room stat ST = Smart thermostat RH = Room heater ESH = Storage heater UFH = Under floor heating ≥**67% POPT:** For **boiler** ≥67% POPT or FTCH, please complete a basic sketch including locations of heat emitters (no full dimensions). If multiple boilers are located in a property, please sketch location of these. **<67% POPT**: For heating jobs where <67% POPT is being claimed, and for **all ESH jobs**, please show the heating sources, heat emitters such as radiators or storage heater locations using the key above. **Provide full dimensions to the plan so that the POPT calculations can be clearly calculated.**	The location of pre-main heat source(s) should be clearly recorded on the sketch using the key in the 'heating measures' column. ≥**67% POPT:** For measures ≥67% POPT, please complete a basic sketch (no full dimensions) showing any different roof types using the following key: PR = Pitched roof FR = Flat roof RIR = Room in roof RES = RIRI Residual Loft Area UFI = Under floor insulation (specify solid or suspended) **The wall type should be completed using the wall type key and sketch instructions.** **<67% POPT:** For roof and floor insulation jobs where <67% POPT is being claimed, if known, please add details of different types of wall or roof. **Provide full dimensions to the plan so that the POPT calculations can be clearly calculated. This should include wall height for wall insulation measures.**

*Where the wall types is 100% cavity or 100% non-cavity, e.g solid, timber or system build, please indicate this using the tick box on top of the floor plan overleaf. Where the wall type is mixed, please tick the relevant

[13] For multi storey premises, please record floor position, ie basement, ground floor, room-in-roof adjacent to the relevant sketch.

boxes on the floor plan and clearly indicate the construction of each wall by adding C for cavity or S for non-cavity. Please also indicate where a party wall is present using the letter P alongside the wall type. Simple example provided. For multi storey premises, please record floor position, ie basement, ground floor, room-in-roof adjacent to the relevant sketch.



NOT TO SCALE	Wall type: □ 100% cavity □ 100% solid/timber/system □ Mixed	

I confirm that, to the best of my knowledge, the information provided on this form has been recorded on site and is accurate.

Assessor/Operative signature: Date: _ _ /_ _ /_ _ _ _

ANNEX 1 – POPT Calculations (mandatory where POPT is less than <67%)

Please enter the exact POPT to the nearest whole number.

Heating measures only	
Heating measure POPT[14]	**%**

Roof insulation measures only

Enter areas with a different roof type (or where a different roof insulation measure/depth is being installed) as extensions. For RIRI, the total residual loft area should be included in the RIR area recorded below. For further information on scoring a RIRI measure please see chapter 6 of ECO3 Guidance.

Property section (main loft, extension etc)	**Roof type Flat/pitched /RIR**	**Roof area (M^2)**	**M^2 and type of insulation to be installed[15]**							
			≤ 100mm		> 100mm		FRI		RIRI	
			≤ 100mm		> 100mm		FRI		RIRI	
			≤ 100mm		> 100mm		FRI		RIRI	
			≤ 100mm		> 100mm		FRI		RIRI	
			≤ 100mm		> 100mm		FRI		RIRI	
Total roof area[16]		A	≤ 100mm	B	> 100mm	C	FRI	D	RIRI	E

≤ 100mm POPT	B/A= **%**	**FRI POPT**	D/A= **%**
> 100mm POPT	C/A= **%**	**Pecentage of RIRI measure installed[17]**	F **%**
		RIRI POPT	(E x F)/A= **%**

[14] Heating calculations should be retained to support any POPT calculations.
[15] For RIRI, 'E' refers to the floor area of the RIR + the residual area, not the amount of insulation installed. The elements of the RIR that have been insulated should be recorded in the RIRI checklist to calculate the POMI.
[16] For RIRI measures, the total roof area is the footprint area and not all the elements of the RIRI measure.
[17] For RIRI, percentage of the measure installed should be calculated in the RIRI checklist and recorded here.

IWI / EWI / CWI measures only

Enter each different type of wall area as an extension. Wall area must include all heat loss wall areas (including areas already insulated and areas that cannot be insulated).

Property section (eg, main property, extension, front walls etc)	Wall construction E.g. Cavity / cob / solid stone / solid brick / system / timber / park home	Wall area M² (excl windows and doors)	M² of insulation to be installed			
			CWI		IWI/EWI	
			CWI		IWI/EWI	
			CWI		IWI/EWI	
			CWI		IWI/EWI	
			CWI		IWI/EWI	
	Total wall areas	A	CWI	B	IWI/EWI	C
		Total wall areas	IWI/EWI (type 2)			D

CWI POPT	**B/A= %**	**IWI/EWI POPT (type 2)**	**D/A= %**
IWI/EWI POPT	**C/A= %**		

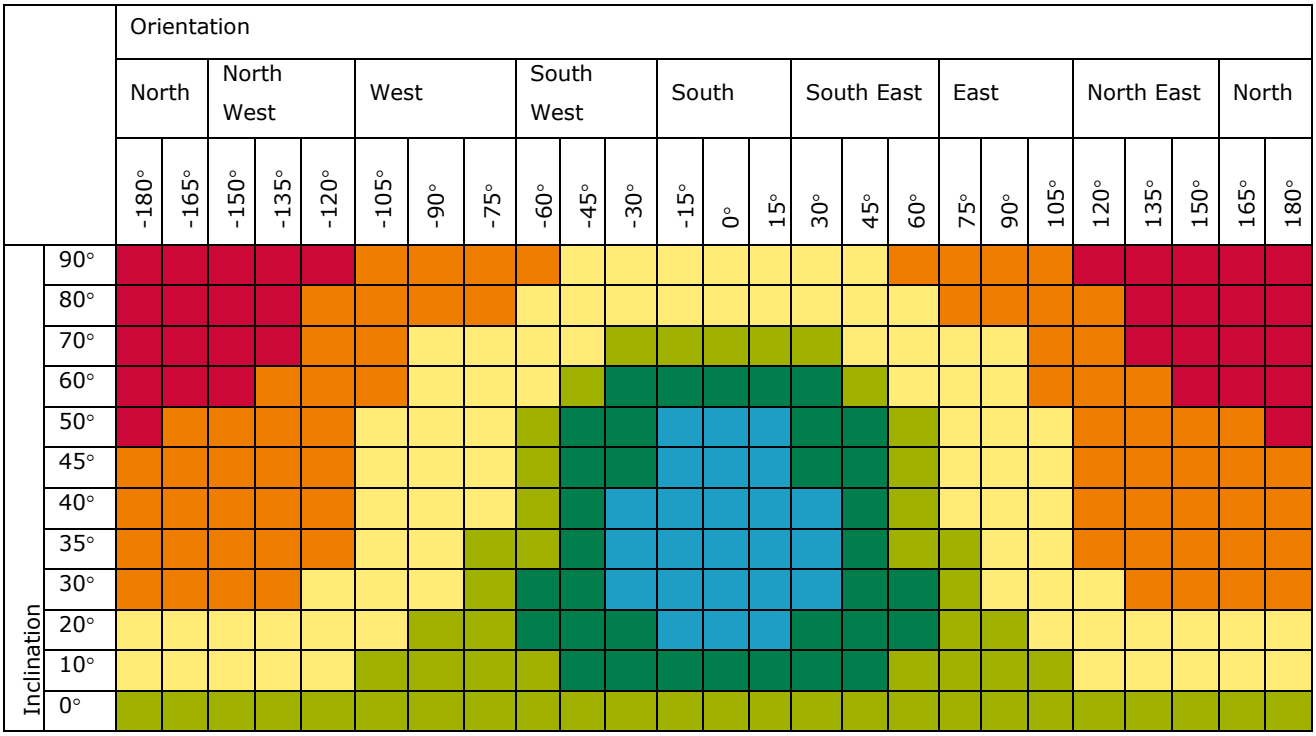
PWI measures only

Property section (eg, main property, extension, front walls etc)	Wall construction e.g. cavity	Wall area m² (excl doors)	M² of insulation to be installed
PWI POPT **B / A = %**	**Total wall areas**	A	B

Solid Floor insulation measures only				
Property section (main property, extension etc)	**Floor construction e.g. solid concrete**		**Area M^2**	**M^2 of insulation to be installed**
Solid Floor Insulation POPT	**B/A=** **%**	**Total floor area**	A	B

Under Floor insulation measures only				
Property section (main property, extension etc)	**Floor construction e.g. suspended timber**		**Area M^2**	**M^2 of insulation to be installed**
Under Floor Insulation POPT	**B/A=** **%**	**Total floor area**	A	B

ANNEX 2 – Solar PV Orientation/Inclination factor and POPT Calculation



Key:	
Band colour	**OI factor (%)**
	35
	55
	74
	86
	93
	100

POPT for Solar PV is calculated using the formula below:

Solar PV POPT = Installed Capacity / 2.5 (kWp) x OI Factor (%)

Where:

- *Installed capacity* is the capacity of the system installed in kWp.
- *OI Factor* is the average % energy yield or power generation as determined using Table 24 of the ECO3 Delivery Guidance.

As the average treatable area approach does not apply, the score to be notified is calculated simply by multiplying the published score by POPT.

Where a split array is installed, the POPT for each array should be calculated separately, and summed to give the total POPT.