

# DEAP for NEW-FINAL and EXISTING HOMES SURVEY FORM

Property address:

Case Study 2

2 The Park, Co. Dublin

Assessor name / BER reg. no.

Survey Date:

02.09.2019

Eircode

MPRN

0

Number of storeys

2

Number of bedrooms

2

Number of extensions

0

**Dwelling Type**

detached house

semi detached house

end of terrace

mid terrace

ground floor apartment

mid floor apartment

top-floor apartment

basement apartment

maisonette

*Pick dwelling type that is closest to actual dwelling type*

Age: Dwelling	Age: Extension 1	Age: Extension 2
<input type="checkbox"/> pre 1900	<input type="checkbox"/> pre 1900	<input type="checkbox"/> pre 1900
<input type="checkbox"/> 1900 - 1929	<input type="checkbox"/> 1900 - 1929	<input type="checkbox"/> 1900 - 1929
<input type="checkbox"/> 1930 - 1949	<input type="checkbox"/> 1930 - 1949	<input type="checkbox"/> 1930 - 1949
<input checked="" type="checkbox"/> 1950 - 1966	<input type="checkbox"/> 1950 - 1966	<input type="checkbox"/> 1950 - 1966
<input type="checkbox"/> 1967 - 1977	<input type="checkbox"/> 1967 - 1977	<input type="checkbox"/> 1967 - 1977
<input type="checkbox"/> 1978 - 1982	<input type="checkbox"/> 1978 - 1982	<input type="checkbox"/> 1978 - 1982
<input type="checkbox"/> 1983 - 1993	<input type="checkbox"/> 1983 - 1993	<input type="checkbox"/> 1983 - 1993
<input type="checkbox"/> 1994 - 1999	<input type="checkbox"/> 1994 - 1999	<input type="checkbox"/> 1994 - 1999
<input type="checkbox"/> 2000 - 2004	<input type="checkbox"/> 2000 - 2004	<input type="checkbox"/> 2000 - 2004
<input type="checkbox"/> 2005 - 2009	<input type="checkbox"/> 2005 - 2009	<input type="checkbox"/> 2005 - 2009
<input type="checkbox"/> 2010 onwards	<input type="checkbox"/> 2010 onwards	<input type="checkbox"/> 2010 onwards

**Type of Rating**

new-final dwelling

existing dwelling

**Purpose of Rating**

new: owner occupation

sale

private letting

social housing letting

grant support

major renovation

other

**Wall construction Main Wall\***

stone wall thickness (mm) 350

solid brick is wall semi exposed?

cavity

**Wall Insulation**

solid concrete as built bead

hollow block cavity fill EPS

timber frame external min fibre

other/unknown internal dense

insulation thickness if observable(mm) 100

**Roof Construction: Main Dwelling\***

pitched - insulation btw joists

pitched - insulation in rafters

flat - insulation integral

room in roof

no heat loss roof

other

**Roof insulation**

thickness (mm) 300

fibre

warmcell

EPS

dense

unknown

Main Attic

**Ground Floor Construction: Main Dwelling\***

solid no heat loss ground floor

suspended: sealed unsealed

above unheated basement

heated basement

other

**Floor Insulation**

thickness (mm)

(only if any observed)

EPS

min fibre

none

unknown

dense

**Wall construction Wall Type 2\***

no wall type 2 wall thickness (mm)

stone is wall semi exposed?

solid brick

cavity

**Wall Insulation**

solid concrete as built bead

hollow block cavity fill EPS

timber frame external min fibre

other/unknown internal dense

insulation thickness if observable(mm)

**Roof Construction: Roof Type 2\***

no heat loss roof type 2

pitched - insulation btw joists

pitched - insulation in rafters

flat - insulation integral

room in roof

other

**Roof insulation**

thickness (mm)

fibre

warmcell

EPS

dense

unknown

**Ground Floor Construction: Floor Type 2\***

no heat loss extension floor type 2

solid

suspended: sealed unsealed

above unheated basement

other

**Floor Insulation**

thickness (mm)

(only if any observed)

EPS

min fibre

none

unknown

dense

**Wall construction Wall Type 3\***

no wall type 3 wall thickness (mm)

stone is wall semi exposed?

solid brick

cavity

**Wall Insulation**

solid concrete as built bead

hollow block cavity fill EPS

timber frame external min fibre

other/unknown internal dense

insulation thickness if observable(mm)

**Roof Construction: Roof Type 3\***

no heat loss roof type 3

pitched - insulation btw joists

pitched - insulation in rafters

flat - insulation integral

room in roof

other

**Roof insulation**

thickness (mm)

fibre

warmcell

EPS

dense

unknown

P/b + 50mm insulation (λ=0.022) to underside of rafters + 100mm fibre between rafters

**Ground Floor Construction: Floor Type 3\***

no heat loss extension floor type 3

solid

suspended: sealed unsealed

above unheated basement

other

**Floor Insulation**

thickness (mm)

(only if any observed)

EPS

min fibre

none

unknown

dense

**Wall construction Wall Type 4\***

no wall type 4 wall thickness (mm)

stone is wall semi exposed?

solid brick

cavity

**Wall Insulation**

solid concrete as built bead

hollow block cavity fill EPS

timber frame external min fibre

other/unknown internal dense

insulation thickness if observable(mm)

**Roof Construction: Roof Type 4\***

no heat loss roof type 4

pitched - insulation btw joists

pitched - insulation in rafters

flat - insulation integral

room in roof

other

**Roof insulation**

thickness (mm)

fibre

warmcell

EPS

dense

unknown

**Heat Loss Upper Floors (Floor Type 4\*)**

no heat loss upper floor

partially heated below

exposed semi exposed

**Floor Insulation**

thickness (mm)

(only if any observed)

EPS

min fibre

none

unknown

dense

*\*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.*

**Total Floor Areas, Heat Loss Floor Areas, Gross Heat Loss Wall Areas, Gross Heat Loss Roof Areas, Storey Heights\* (internal dimensions only)**

	Storey height (m)	Total floor area (m <sup>2</sup> )	Heatloss Floor 1 Area (m <sup>2</sup> )	Heatloss Floor 2 Area (m <sup>2</sup> )	Heatloss Floor 3 Area (m <sup>2</sup> )	Heatloss Floor 4 Area (m <sup>2</sup> )	Heatloss Perimeter (m)	Heatloss Wall 1 Area (m <sup>2</sup> )	Heatloss Wall 2 Area (m <sup>2</sup> )	Heatloss Wall 3 Area (m <sup>2</sup> )	Heatloss Wall 4 Area (m <sup>2</sup> )	Heatloss Roof 1 Area (m <sup>2</sup> )	Heatloss Roof 2 Area (m <sup>2</sup> )	Heatloss Roof 3 Area (m <sup>2</sup> )	Heatloss Roof 4 Area (m <sup>2</sup> )
Ground / Lowest Floor	2.46	30.44													
First / Next Floor	2.63	30.44													
Second / Next Floor															
Third / Next Floor															
Basement															

living area (m <sup>2</sup> )	room in roof area (m <sup>2</sup> )	perimeter/total ground floor (P/A) ratio			% draughtstripping	Lighting design known (yes/no)? If yes, keep Wattage / Lumens proof on file.	n	Thermal mass			
8.75		F type#1	F type#2	F type#3	100%			external wall	light	med	heavy
							<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
							<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
							<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
							<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		

**Room by Room record (use more than 1 row for a room if required)**

Overall thermal mass

OPENING DATA										ROOM DATA						
Room	Opening	opening dimensions (W x H or m <sup>2</sup> )	Glazing details	Frame	Gap	over shading	direction	Wall / roof type	# of openable windows/ doors / attic hatches?	# windows/ doors/ hatches with draughtstripping	Chimney or Flueless	Open Flues	Fans / vents	Rads with or w/o TRVs?	Number of fixed lights	What type of fixed lights? Use more than 1 row if needed.
Hall	1	0.88 x 2.1	Solid Door	-	-	-	-	1	1	1	-	-	-	1 TRV	1	1 CFL
Living	2	1.80 x 1.48	Double, argon	PVC	20	Ave	SE	1	2	2	-	1	-	1 TRV	3	3 CFL
K/D	3	0.84 x 1.14	Double, argon	PVC	20	Ave	NW	1	2	2	-	-	DCV	1 TRV	6	6 LED
	4	1.76 x 2.18	Double, argon	PVC	20	Ave	NW	1	1	1						
Landing		attic hatch							1	1	-	-	-	-	1	1 CFL
Bathroom	5	0.46 x 1.13	Double, argon	PVC	20	Ave	NW	1	1	1	-	-	DCV	1	4	4 HLW
Bed 2	6	1.56 x 1.13	Double, argon	PVC	20	Ave	NW	1	2	2	-	-	-	1 TRV	1	1 CFL
Bed 1	7	1.56 x 1.15	Double, argon	PVC	20	Ave	SE	1	2	2	-	-	-	1 TRV	1	1 CFL
Attic															1	1 CFL
TOTALS									12	12		1	2 DCV Ex	5/6	18	18

\* Gross areas have to be converted to net heat loss areas when entered into DEAP program by subtracting door and window areas from each wall type

**Ventilation Factors**

draught lobby on main entrance       natural ventilation

pressure test results available       positive input ventilation from loft

If yes, enter adjusted result (ac/h)       positive input ventilation from outside

Is there uninsulated ducting on MVHR system outside dwelling envelope?       whole house extract ventilation

balanced whole-house mech. ventilation without heat recovery

balanced whole-house mechanical ventilation with heat recovery

exhaust air heat pump (EAHP)       air flow rate for EAHP (m<sup>3</sup>/h)

DEAP manual contains guidance on using non default SFP and efficiency for mechanical ventilation units as well as identifying the air flow rate in EAHPs.

Mech. ventilation system details if available (e.g. model&number, along with # of rooms from which air is extracted and use of flexible/rigid ducting)

**Lighting summary** (total number of each bulb type from room by room record)

#Linear fluorescent:  8      #CFL lamps:

#LED:  6      #Halogen LV:  4      #Incandescent/unknown:

Aereco V4A Premium

**Space heating system (general information)**

Primary Heating System	Secondary Heating System	Primary Heating Fuel	Secondary Heating Fuel
<input checked="" type="checkbox"/> radiator system	<input type="checkbox"/> no secondary system	<input type="checkbox"/> mains gas	<input type="checkbox"/> no secondary system
<input type="checkbox"/> storage heaters	<input type="checkbox"/> radiator system	<input type="checkbox"/> bulk LPG	<input type="checkbox"/> mains gas
<input type="checkbox"/> underfloor	<input type="checkbox"/> storage heaters	<input type="checkbox"/> bottled LPG	<input type="checkbox"/> bulk LPG
<input type="checkbox"/> warm air	<input type="checkbox"/> underfloor	<input checked="" type="checkbox"/> heating oil	<input checked="" type="checkbox"/> smokeless
<input type="checkbox"/> room heaters only	<input type="checkbox"/> warm air	<input type="checkbox"/> electricity	<input type="checkbox"/> peat briquettes
<input type="checkbox"/> community	<input checked="" type="checkbox"/> room heaters only	<input type="checkbox"/> heat from CHP	<input type="checkbox"/> sod peat
<input type="checkbox"/> fan coil radiators	<input type="checkbox"/> fan coil radiators	<input type="checkbox"/> bioethanol	<input type="checkbox"/> wood pellets
<input type="checkbox"/> other (describe briefly):	<input type="checkbox"/> other (describe briefly):	<input type="checkbox"/> other:	<input type="checkbox"/> wood chips
		<input type="checkbox"/> biodiesel	<input type="checkbox"/> bioethanol
			<input type="checkbox"/> biodiesel

Gas / Oil / LPG Boilers	Solid Fuel Boilers	Comments on heating system
<input checked="" type="checkbox"/> primary <input type="checkbox"/> secondary	<input type="checkbox"/> primary <input type="checkbox"/> secondary	
<b>Boiler type</b>	<input type="checkbox"/> open fire + back boiler	
<input type="checkbox"/> standard	<input type="checkbox"/> closed room heater + back boiler	
<input type="checkbox"/> combi	grate: rectangular <input type="checkbox"/> trapezium <input type="checkbox"/> independent oven <input type="checkbox"/>	
<input checked="" type="checkbox"/> condensing	<input type="checkbox"/> manual feed boiler	
<input type="checkbox"/> back boiler	<input type="checkbox"/> auto feed boiler	
<input type="checkbox"/> CPSU	MF / AF boiler in heated space? <input type="checkbox"/>	
<input type="checkbox"/> range cooker	Manufacturer / make / model number	
<input type="checkbox"/> single burner		
<input type="checkbox"/> twin burner		
Manufacturer / make / model number		

Electric Boilers	Gas Room Heaters
<input type="checkbox"/> primary <input type="checkbox"/> secondary	<input type="checkbox"/> primary <input type="checkbox"/> secondary
<input type="checkbox"/> direct acting	<input type="checkbox"/> pre 1980
<input type="checkbox"/> dry core	<input type="checkbox"/> coal effect - sealed flue
<input type="checkbox"/> dry core / water storage in heated space	<input type="checkbox"/> coal effect - open to chimney
	<input type="checkbox"/> flueless
	<input type="checkbox"/> condensing
	<input type="checkbox"/> back boiler (no rads)
	<input type="checkbox"/> other (none of above)

Electric Storage Heaters	Oil Room Heaters
<input type="checkbox"/> primary <input type="checkbox"/> secondary	<input type="checkbox"/> primary <input type="checkbox"/> secondary
<input type="checkbox"/> modern / slimline	<input type="checkbox"/> room heater / range
<input type="checkbox"/> convector	Age <input type="checkbox"/> pre 2000
<input type="checkbox"/> integrated storage / direct acting (inc. room stat)	<input type="checkbox"/> room heater/range with boiler (no rads) <input type="checkbox"/> 2000 or later
<b>Control options</b>	<b>Solid Fuel Room Heaters</b> <input type="checkbox"/> primary <input checked="" type="checkbox"/> secondary
<input type="checkbox"/> manual charge control	<input type="checkbox"/> open fire in grate
<input type="checkbox"/> automatic / weather dependent	<input type="checkbox"/> open fire with backboiler (no rads)
<input type="checkbox"/> Celect-type	<input checked="" type="checkbox"/> closed room heater
	<input type="checkbox"/> closed room heater with backboiler (no rads)

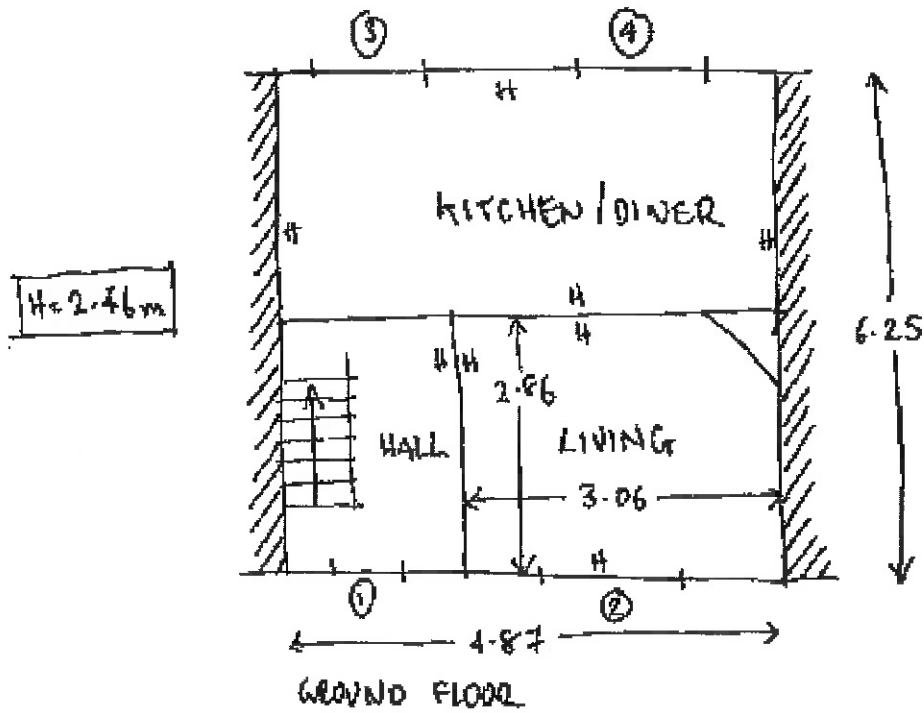
Warm Air Systems	Heat Pumps	Electric Room Heaters
<input type="checkbox"/> primary <input type="checkbox"/> secondary	<input type="checkbox"/> primary <input type="checkbox"/> secondary	<input type="checkbox"/> primary <input type="checkbox"/> secondary
<b>Ducted or Stub Ducted</b>	<input type="checkbox"/> air-to-air	<input type="checkbox"/> panel, convector, or radiant heater
<input type="checkbox"/> on - off	<input type="checkbox"/> ground-to-air	<input type="checkbox"/> fan heater
<input type="checkbox"/> modulating	<input type="checkbox"/> water-to-air	
<b>Age</b>	<input type="checkbox"/> air-to-water	
<input type="checkbox"/> 1998 or later	<input type="checkbox"/> ground-to-water	
<input type="checkbox"/> pre 1998	<input type="checkbox"/> water-to-water	
<b>Other types</b>	<input type="checkbox"/> gas-fired - ground / water	
<input type="checkbox"/> Room heater with in floor ducts	<input type="checkbox"/> gas-fired, air source	
<input type="checkbox"/> Electric electricaire	heat pump includes auxiliary electric heater <input type="checkbox"/>	

Secondary heating make / manufacturer/model number	Individual CHP?
Stanley Oisín SF NB Stove	<input type="checkbox"/>
	<input type="checkbox"/> % heat from CHP
	CHP efficiencies
	<input type="checkbox"/> Electrical %
	<input type="checkbox"/> Thermal %
	Fuel

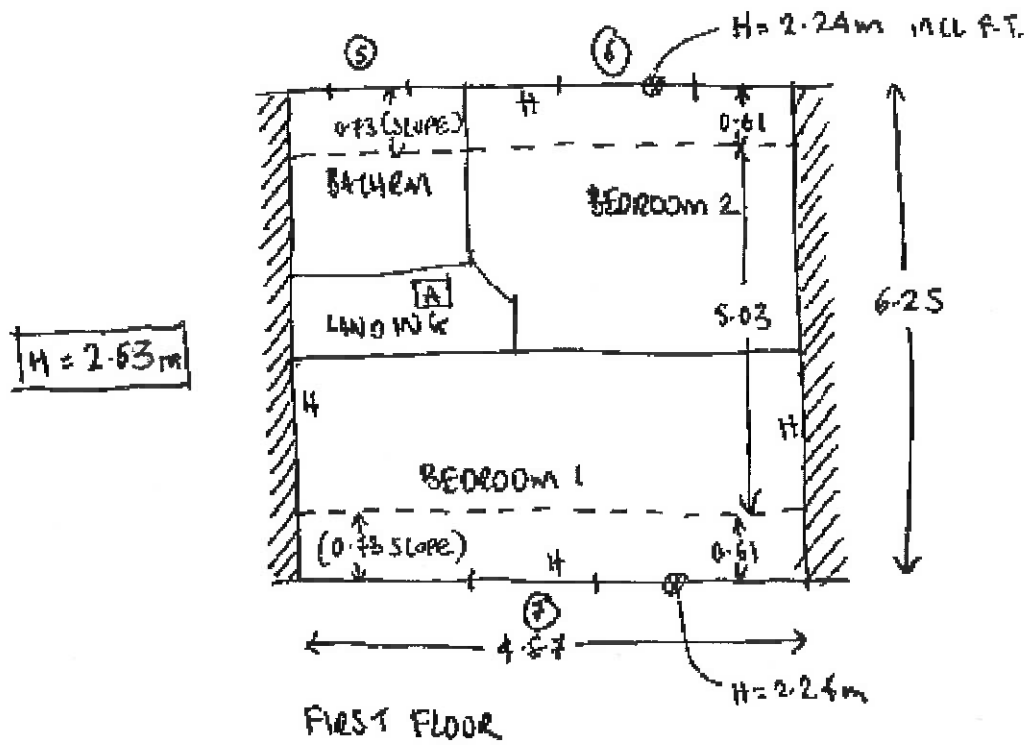
### Heating system (Domestic Hot Water)

<b>Primary Hot Water System</b>		<b>Solar Water Heating System</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																																					
<input checked="" type="checkbox"/> from primary heating system <input type="checkbox"/> gas instant: single point <input type="checkbox"/> backboiler / kitchen range <input type="checkbox"/> electric immersion <input type="checkbox"/> gas instant: multi point <input type="checkbox"/> gas <input type="checkbox"/> oil <input type="checkbox"/> SF <input type="checkbox"/> electric instantaneous <input type="checkbox"/> gas circulator pre 1998 <input type="checkbox"/> gas circulator 1998 or later If instantaneous combi boiler: <input type="checkbox"/> keep hot facility controlled by <input type="checkbox"/> timeclock <input type="checkbox"/> no timeclock If storage combi: store volume <input type="checkbox"/> <55 litres <input type="checkbox"/> >= 55 litres		<input type="checkbox"/> evacuated tube <input type="checkbox"/> flat plate, glazed <input type="checkbox"/> Flat plate unglazed <input type="checkbox"/> solar collector area (m <sup>2</sup> ) <input type="checkbox"/> area is "gross" area <input type="checkbox"/> area is "aperture area" overshadowing: <input type="checkbox"/> very little (<20%) <input type="checkbox"/> modest (20-60%) <input type="checkbox"/> significant (61-80%) <input type="checkbox"/> heavy (>80%)																																					
<b>Hot Water Cylinder, Insulation and Controls</b> <input checked="" type="checkbox"/> cylinder <input type="checkbox"/> combi <input type="checkbox"/> CPSU <input type="checkbox"/> thermal store <input type="checkbox"/> no access <b>Insulation:</b> <input type="checkbox"/> no insulation    primary pipework insulated <input type="checkbox"/> <b>Controls:</b> <input type="checkbox"/> 95 capacity (litres) <input type="checkbox"/> lagging jacket <input type="checkbox"/> 30 insulation    cylinder thermostat <input checked="" type="checkbox"/> or dimensions <input checked="" type="checkbox"/> factory fitted <input type="checkbox"/> 30 thickness (mm)    independent timer <input checked="" type="checkbox"/> <i>Cylinder volume/dimensions does not include insulation thickness</i> storage is outdoors <input type="checkbox"/>		dedicated solar storage volume (litres) <input type="text"/> contained within combined cylinder <input type="checkbox"/> contained within separate cylinder <input type="checkbox"/> orientation <input type="text"/> tilt ° <input type="text"/> Solar panel make and model: <input type="text"/>																																					
<b>Supplementary Summer Hot Water</b>																																							
<input checked="" type="checkbox"/> not applicable <input type="checkbox"/> electric heater present for supplementary hot water heating* <i>*only if space heating and water heating cannot be separated and main water heating isn't electric. See DEAP manual</i>																																							
<b>Comments on water heating system</b>		<b>Showers and baths</b>																																					
		<input checked="" type="checkbox"/> Bath in dwelling (y/n)? <input type="checkbox"/> Is water use target (hot and cold) 125 l/p/d (y/n)?																																					
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Shower #</th> <th style="width: 15%;">Is flow rate known? (y/n)</th> <th style="width: 25%;">Shower type: Electric/ Unvented/ Vented/ Vented+pump</th> <th style="width: 15%;">Flow restrictor? (y/n)</th> <th style="width: 15%;">Flow rate (if known)?</th> <th style="width: 20%;">WWHR efficiency and utilisation factor</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>n</td> <td>Vented + pump</td> <td>n</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Shower #	Is flow rate known? (y/n)	Shower type: Electric/ Unvented/ Vented/ Vented+pump	Flow restrictor? (y/n)	Flow rate (if known)?	WWHR efficiency and utilisation factor	1	n	Vented + pump	n			2						3						4						5					
Shower #	Is flow rate known? (y/n)	Shower type: Electric/ Unvented/ Vented/ Vented+pump	Flow restrictor? (y/n)	Flow rate (if known)?	WWHR efficiency and utilisation factor																																		
1	n	Vented + pump	n																																				
2																																							
3																																							
4																																							
5																																							
<b>Heating system (Controls)</b>																																							
<b>Heating Controls (tick all that apply)</b>		<b>Underfloor heating (UFH)</b>																																					
<input type="checkbox"/> no controls <input checked="" type="checkbox"/> programmer / timeclock <input checked="" type="checkbox"/> room thermostat number <input type="text" value="2"/> <input checked="" type="checkbox"/> TRV's % rads with TRVs <input type="text" value="83"/> <input type="checkbox"/> bypass <input type="checkbox"/> load compensator <input type="checkbox"/> weather compensator <input checked="" type="checkbox"/> full zone control <input type="checkbox"/> boiler energy management system <input type="checkbox"/> delay start thermostat <input checked="" type="checkbox"/> boiler interlock <input type="checkbox"/> appliance thermostat <input type="checkbox"/> appliance timeclock		<input type="checkbox"/> in insulated timber floor <input type="checkbox"/> whole house UFH <input type="checkbox"/> in screed <input type="checkbox"/> Partial UFH including living area <input type="checkbox"/> in concrete <input type="checkbox"/> Partial UFH not including living area																																					
		<b>Pumps</b>																																					
		<input type="text" value="1"/> How many central heating pumps for space heating? Central heating pump(s) outdoors <input type="checkbox"/> <input type="text" value="1"/> How many oil boiler fuel pumps? Oil fuel pump(s) outdoors <input checked="" type="checkbox"/> <input type="text"/> How many gas boiler flue fans?																																					
<b>Comments on Heating Controls</b>																																							
<b>Group Heating</b>																																							
<b>Distribution Loss Factor and charge method</b>		<b>Heating system #1</b>																																					
<input type="checkbox"/> pre 1991 full flow mid-high temp: not pre-insulated <input type="checkbox"/> pre 1991 full flow low temp: pre-insulated <input type="checkbox"/> 1991 or later variable flow mid temp: pre-insulated <input type="checkbox"/> 1991 or later variable flow low temp: pre-insulated See DEAP C1.1 for dist. loss factor derivation method consumption charged: flat rate <input type="checkbox"/> linked to use <input type="checkbox"/>		<input type="text"/> efficiency % <input type="text"/> proportion of group heating % Fuel type of heating system <input type="text"/> Make and model of heating system <input type="text"/>																																					
		<b>Heating system #2</b>																																					
		<input type="text"/> efficiency % <input type="text"/> proportion of group heating % Fuel type of heating system <input type="text"/> Make and model of heating system <input type="text"/>																																					
		<b>CHP / Waste Heat</b>																																					
		<input type="text"/> % heat from CHP (or power station) <input type="checkbox"/> power station <input type="checkbox"/> CHP CHP efficiencies <input type="text"/> Electrical % <input type="text"/> Thermal % Fuel <input type="text"/>																																					
<b>Any other comments or details on assessment including items observed which affect the rating but not shown elsewhere on survey form/sketches.</b>																																							

DEAP 4.2 Training  
 Case Study 2  
 Existing Dwelling Assessment



GROUND FLOOR



FIRST FLOOR