

This design submission has been carried out by an On-Construction Domestic Energy Assessor. It has been prepared from plans and specifications and may not reflect the property as constructed.

Assessor name	Mrs Maureen Reynolds (OCDEA)	Assessor number	3582
Client		Last modified	24/08/2016
Address	Detached House Land off 2 Harewood Avenue, Simonstone, Burnley, BB12 7JB		

Dwelling

Development:	N/A	House type:	Detached
Property type:	House		
Built form:	Detached	Year built:	2016
Tariff:	Standard	Assess summer overheating:	Yes
Thermal mass:	Medium	Thermal mass parameter:	250.00
Separated heated conservatory:	No	Degree day region:	W Pennines (Eng)
Sheltered sides:	3	Terrain:	Low Rise U/S

Storeys:		
Name	Area (m²)	Height (m)
Lowest occupied	49.82	2.40
+1	68.36	2.50

Floors

Ref - Name	Type	Construction	Storey Location	Living Area (m ²)	Area (m ²)	U-value (W/m ² K)
Floor 1 - ground floor	Ground	Suspended timber sealed	Lowest occupied	37.77	49.82	0.12
Living area that has no heat loss:	0.00					

Walls

Ref - Name	Type	Construction	Gross Area (m ²)	U-value (W/m ² K)
Wall 1 - External wall	External	Timber	146.17	0.19
Wall 2 - SE garage wall	Sheltered	Timber	23.14	0.18

Roofs

Ref - Name	Construction	Gross Area (m ²)	U-value (W/m ² K)
Roof 1 - Roof 1	Pitched (joists)	68.36	0.13

Openings

Opening Ref: 1 Solid door, N/A, 'Entry door', master: No, linked to: 0

Location:	Wall 1	Source:	From Manufacturer	Orientation:	N/A
Overshading:	N/A	Width (m):	0.90	Height (m):	2.10
Frame:	u-PVC	Transmittance factor:	N/A	U-value (W/m ² K):	1.40

Opening Ref: 2 Window, Double glazed (low-E), 'lounge', master: Yes, linked to: 0

Location:	Wall 1	Source:	From Manufacturer	Orientation:	East
Overshading:	Average / Unknown	Width (m):	1.80	Height (m):	1.20
Frame:	u-PVC	Transmittance factor:	0.63	U-value (W/m ² K):	1.20

Opening Ref: 3 Window, Double glazed (low-E), 'bed', master: No, linked to: 2

Location:	Wall 1	Source:	From Manufacturer	Orientation:	East
Overshading:	Average / Unknown	Width (m):	1.80	Height (m):	1.20
Frame:	u-PVC	Transmittance factor:	0.63	U-value (W/m ² K):	1.20

Opening Ref: 4 Window, Double glazed (low-E), 'en suite', master: No, linked to: 2

Location:	Wall 1	Source:	From Manufacturer	Orientation:	East
Overshading:	Average / Unknown	Width (m):	0.81	Height (m):	1.05
Frame:	u-PVC	Transmittance factor:	0.63	U-value (W/m ² K):	1.20

Opening Ref: 5 Window, Double glazed (low-E), ' bed', master: No, linked to: 2

Location:	Wall 1	Source:	From Manufacturer	Orientation:	East
Overshading:	Average / Unknown	Width (m):	1.80	Height (m):	1.20
Frame:	u-PVC	Transmittance factor:	0.63	U-value (W/m ² K):	1.20

Opening Ref: 6 Window, Double glazed (low-E), ' kitchen', master: No, linked to: 2

Location:	Wall 1	Source:	From Manufacturer	Orientation:	West
Overshading:	Average / Unknown	Width (m):	1.80	Height (m):	0.55
Frame:	u-PVC	Transmittance factor:	0.63	U-value (W/m ² K):	1.20

Opening Ref: 7 Window, Double glazed (low-E), ' dining', master: No, linked to: 2

Location:	Wall 1	Source:	From Manufacturer	Orientation:	West
Overshading:	Average / Unknown	Width (m):	3.15	Height (m):	2.10
Frame:	u-PVC	Transmittance factor:	0.63	U-value (W/m ² K):	1.20

Opening Ref: 8 Window, Double glazed (low-E), ' bed', master: No, linked to: 2

Location:	Wall 1	Source:	From Manufacturer	Orientation:	West
Overshading:	Average / Unknown	Width (m):	1.80	Height (m):	1.20
Frame:	u-PVC	Transmittance factor:	0.63	U-value (W/m ² K):	1.20

Opening Ref: 9 Window, Double glazed (low-E), ' bath', master: No, linked to: 2

Location:	Wall 1	Source:	From Manufacturer	Orientation:	West
Overshading:	Average / Unknown	Width (m):	0.90	Height (m):	1.05
Frame:	u-PVC	Transmittance factor:	0.63	U-value (W/m ² K):	1.20

Opening Ref: 10 Window, Double glazed (low-E), ' bed', master: No, linked to: 2

Location:	Wall 1	Source:	From Manufacturer	Orientation:	West
Overshading:	Average / Unknown	Width (m):	1.80	Height (m):	1.20
Frame:	u-PVC	Transmittance factor:	0.63	U-value (W/m ² K):	1.20

Opening Ref: 11 Solid door, N/A, ' fire door', master: No, linked to: 0

Location:	Wall 2	Source:	From Manufacturer	Orientation:	N/A
Overshading:	N/A	Width (m):	0.90	Height (m):	2.10
Frame:	Wood	Transmittance factor:	N/A	U-value (W/m ² K):	1.70

Thermal Bridging

Ref	Description	Length (m)	Source	ψ (W/m·K)	Result
E1	Steel lintel with perforated steel	17.46	Approved	0.5	8.73
E2	Other lintels (including other steel)	0	Default Value	N/A	0
E3	Sill	15.66	Approved	0.04	0.6264
E4	Jamb	29.9	Approved	0.05	1.495
E5	Ground floor (normal)	24.81	Approved	0.16	3.9696
E19	Ground floor (inverted)	N/A	Default Value	N/A	0
E20	Exposed floor (normal)	3.28	Default Value	0.32	1.0496
E21	Exposed floor (inverted)	6.37	Default Value	0.32	2.0384
E22	Basement floor	N/A	Default Value	N/A	0
E6	Intermediate floor within a dwelling	25.01	Approved	0.07	1.7507
E7	Party floor between dwellings (in b	N/A	Default Value	N/A	0
E8	Balcony within a dwelling, wall ins	N/A	Default Value	N/A	0
E9	Balcony between dwellings, wall ins	N/A	Default Value	N/A	0
E23	Balcony within or between dwellings	N/A	Default Value	N/A	0
E10	Eaves (insulation at ceiling level)	17	Approved	0.06	1.02
E24	Eaves (insulation at ceiling level)	N/A	Default Value	N/A	0
E11	Eaves (insulation at rafter level)	N/A	Default Value	N/A	0

E12 Gable (insulation at ceiling level)	17.32	Approved	0.24	4.1568
E13 Gable (insulation at rafter level)	N/A	Default Value	N/A	0
E14 Flat roof	N/A	Default Value	N/A	0
E15 Flat roof with parapet	N/A	Default Value	N/A	0
E16 Corner (normal)	28.8	Approved	0.09	2.592
E17 Corner (inverted - internal area gr	9.8	Approved	-0.09	-0.882
E18 Party wall between dwellings	N/A	Default Value	N/A	0
E25 Staggered party wall between dwelli	N/A	Default Value	N/A	0
P1 Ground floor	N/A	Default Value	N/A	0
P6 Ground floor (inverted)	N/A	Default Value	N/A	0
P2 Intermediate floor within a dwellin	N/A	Default Value	N/A	0
P3 Intermediate floor between dwelling	N/A	Default Value	N/A	0
P7 Exposed floor (normal)	N/A	Default Value	N/A	0
P8 Exposed floor (inverted)	N/A	Default Value	N/A	0
P4 Roof (insulation at ceiling level)	N/A	Default Value	N/A	0
P5 Roof (insulation at rafter level)	N/A	Default Value	N/A	0
R1 Head	0	Default Value	N/A	0
R2 Sill	0	Default Value	N/A	0
R3 Jamb	0	Default Value	N/A	0
R4 Ridge (vaulted ceiling)	N/A	Default Value	N/A	0
R5 Ridge (inverted)	N/A	Default Value	N/A	0
R6 Flat ceiling	N/A	Default Value	N/A	0
R7 Flat ceiling (inverted)	N/A	Default Value	N/A	0
R8 Roof wall (rafter)	N/A	Default Value	N/A	0
R9 Roof wall (flat ceiling)	N/A	Default Value	N/A	0

Equivalent y value: 0.092

Ventilation

Air permeability entered:	Yes	Seek exemption (<3 dwellings):	No		
Design air permeability rate:	5.00				
Number of...	Open fireplaces	Open flues	Flueless gas fires	Extract fans	Passive vents
	0	1	0	4	0
Mechanical ventilation:	Not present (natural)				

Space heating

Main heating category:	Individual system/s	Number of systems:	1
Secondary heating:	Yes	Smoke control area:	Not Known
Type:	Boiler	Efficiency source:	Product database
Product index:	017614		
Product details:	Potterton Promax Ultra Combi 24 ErP		
Boiler type:	N/A	Fuel:	Mains gas
Condensing:	Yes	Flue type:	Balanced
Fan assisted flue:	Yes		
Combi type:	Instantaneous	Uses electricity:	N/A
Keep hot power rating:	N/A		
System:	Condensing combi with automatic ignition (1998 or later)		
Controls:	Programmer, room thermostat and TRVs		
Interlock:	Yes	Delayed start thermostat:	Yes
Compensation:	Weather or load compensator	Burner control:	On/off
Emitter:	Radiators	Pump in heated space:	Yes
Flow Temp:	Unknown		
Installed 2013 or later:	Yes		

FGHRS: No

Secondary heating:

Efficiency source: Manufacturer declared Fuel: Wood logs
System: Closed room heater
Flue type: Open
Manufacturer description: wood burning stove
Test method: BS EN 13240
HETAS approved: N/A Efficiency: 70.00

Water heating

Type: From main Fuel: Mains gas
Water separately timed: N/A Water use ≤125 litres/person/day: Yes
Heat pump uses immersion: N/A Summer immersion: N/A
Thermal store type: N/A

Store details:

Cylinder volume (litres): N/A
Thermostat: N/A In heated space: N/A
Primary pipework insulated: N/A

WWHRS:

WWHRS: N/A

Renewables

Photovoltaic panels system 1

Installed power peak (kWp): 0.60 Collector orientation: West
Collector tilt: 45° Overshading: None or Very Little < 20%
Connected to: Individual dwelling (not landlord)

Other

Internal lighting

Standard fittings: 0 Low energy fittings: 12 Total fittings: 12

Summer overheating

Thermal mass parameter (TMP): 250.00
User defined air change rate: No Air change rate (ach): N/A
Cross ventilation on most floors: Yes Window ventilation: Fully open half the time
Source of user defined values: N/A
Curtains closed in daylight hours: Yes Fraction curtains closed: 1.00
Blind/curtain type: Dark-coloured curtain or roller blind

Special features (Appendix Q)

No Appendix Q special features present

Cooling details

No space cooling present