

Pebble Walk – Energy Statement

House Type Performance Summary

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1.0 Executive Summary

This document displays the typical performance of house types which are intended to be used within the site Pebble Walk, which is being developed by Barratt Southampton division. Specifically this document details the performance of Design Emissions Rate (DER) against Target Emissions Rate (TER), as well as the Design Fabric Energy Efficiency (DFEE) against Target Fabric Energy Efficiency (TFEE).

It should be noted that the exact performance of the house type may vary depending on the orientation of the building, and the amount of sheltered sides the dwelling has.

All the house types pass basic compliance, and in the case of the 3-storey units (Ambersham/Maldon) do so under Multiple Compliance, in which the performance of the dwellings within a block are averaged out.

2.0 Table of Housetype Performances

Housetype	Format	TER	DER	%	Result	TFEE	DFEE	%	Result	Notes	Updated
Alverton	End-Terrace FOG	23.06	22.29	-3.34%	Pass	68.2	63.6	-6.74%	Pass		06/11/2019
Ambersham	Top, Middle & Ground Flat	19.37	19.24	-0.67%	Pass	48.1	46.4	-3.53%	Pass	Multiple Compliance	13/11/2019
Chester	Detached	18.31	17.36	-5.19%	Pass	55	50	-9.09%	Pass		06/11/2019
HT1	Maisonette GF	17.91	16.56	-7.54%	Pass	42.4	37.8	-10.85%	Pass		06/11/2019
HT2	Maisonette FF	18.24	16.68	-8.55%	Pass	47.4	42	-11.39%	Pass		06/11/2019
Kenley	Mid-Terrace	18.8	17.37	-7.61%	Pass	46.2	39.8	-13.85%	Pass		06/11/2019
Kenley	Semi-Det/End-Terrace	20.56	19.47	-5.30%	Pass	55.8	50	-10.39%	Pass		06/11/2019
Kingsley	Detached	18.18	17.28	-4.95%	Pass	56.4	50.9	-9.75%	Pass		06/11/2019
Kingsville	Semi-Detached	16.85	16.26	-3.50%	Pass	49.9	46.6	-6.61%	Pass		06/11/2019
Maidstone	Semi-Detached	18.6	17.65	-5.11%	Pass	51.6	46.2	-10.47%	Pass		06/11/2019
Maldon	Top, Middle & Ground Flat	19.37	19.24	-0.67%	Pass	48.1	46.4	-3.53%	Pass	Multiple Compliance	13/11/2019
Moresby	Detached	20.03	19	-5.14%	Pass	60.8	54.8	-9.87%	Pass		06/11/2019
Moresby	Semi-Detached	20.03	19.24	-3.94%	Pass	60.7	55.3	-8.90%	Pass		06/11/2019
Type 51	Mid-Terrace	17.39	15.81	-9.09%	Pass	44.1	37.7	-14.51%	Pass		06/11/2019
Type 51	Semi-Detached	18.76	17.46	-6.93%	Pass	51.8	45.8	-11.58%	Pass		06/11/2019
Type 52	Mid-Terrace	16.63	15.02	-9.68%	Pass	42.5	35.9	-15.53%	Pass		06/11/2019
Type 52	Semi-Det/End-Terrace	17.91	16.62	-7.20%	Pass	49.8	44	-11.65%	Pass		06/11/2019
Type 54	Semi-Detached	16.92	15.79	-6.68%	Pass	49.3	44.2	-10.34%	Pass		06/11/2019
Type 55	Semi-Det/End-Terrace	18.67	17.49	-6.32%	Pass	56	50.7	-9.46%	Pass		06/11/2019

3.0 Specification

Part L 2013 Specification Summary - BDW Group Housing

Pebble Walk		Tel: 01582 544250
Element	Description	Performance
Roofs		
Horizontal Ceiling	Insulated with 400mm Mineral Wool (K-value 0.044)	0.11W/m ² K
Sloping Ceiling	100mm PUR between rafters and 55mm PUR beneath rafters - plasterboard finish.	0.16W/m ² K
Sloping Ceiling	Smartroof System to achieve max. U Value of	0.16W/m ² K
Flat Roof	Insulated to achieve	0.17W/m ² K
Walls		
External Cavity Walls	Brick, Min 100mm Cavity with 50mm Alreflex Platinum, 100mm Block (K-value 0.11), P/B on Dabs	0.27W/m ² K
External Cavity Walls Large Format Block	Brick, Min 100mm Cavity with 50mm Alreflex Platinum, 100mm Large Format Block (K-value 0.17), P/B on Dabs	0.28W/m ² K
Smartroof Gable End Panels	2 x 47mm Panel System insulated with Mineral Wool (K Value 0.044) plus 50mm Alreflex Platinum	0.22W/m ² K
Dormer	Insulated to achieve	0.30W/m ² K
Solid Wall to Garage	150mm Block (K-Value 0.11), 50mm Thermaline Super	0.30W/m ² K (Shelter factor added in SAP)
Party Walls	Fully Filled & Sealed at Edges	0W/m ² K
Floors		
Beam & Block Ground Floor or	150mm Thermal Economics Platinum Ground Floor Insulation	
Concrete Exposed Floor (FOGs)	Gyvlon screed, 35mm Soundbar, 22mm Chipboard, 220mm Timber I-Beam @ 600mm Centres insulated with 200mm Mineral Wool (K-value 0.044), 15mm Plasterboard	0.18W/m ² K (incl. shelter factor)
Timber Floor over Garage (if included within design - Barratt)	22mm Chipboard, 240mm Timber I-Beam @ 600mm Centres insulated with 200mm Mineral Wool (K-value 0.044), 15mm Plasterboard	0.20W/m ² K (Shelter factor added in SAP)
Timber Floor over Garage (if included within design - DWH)	22mm Chipboard, 300mm Timber I-Beam @ 600mm Centres insulated with 200mm Mineral Wool (K-value 0.044), 15mm Plasterboard	0.20W/m ² K (Shelter factor added in SAP)
Windows		
uPVC double glazed	0.71	1.41W/m ² K
Roof lights		
Keylight	0.76 - Thermal Keylite Window	1.50W/m ² K
	0.71 - Thero Plus Keylite Window	

Doors		
Barratt	Arts & Crafts Range - Front & Rear Doors 1.70W/m2K	
	Classic Range - Front 1.00W/m2K and Rear 1.70W/m2K	
David Wilson	Front Doors Unglazed - 1.10W/m2K (Huron) / Front Doors Glazed - 1.10W/m2K (Erie) or 1.20W/m2K (Ullswater)	
David Wilson	Rear Doors - 1.50W/m2K (Michigan)	
Heating		
Condensing boiler	In accordance with Barratt Standard Heating Designs using Ideal Boilers	
Combi boiler	In accordance with Barratt Standard Heating Designs using Ideal Boilers	
Primary Pipework fully insulated		
Secondary Heating		
None provided		
Heating Controls		
All Designs	Full Zone Controls, Boiler Interlock & Delayed Start Thermostat	
Hot Water Provision		
Range Tribune XE Cylinders - Size in accordance with Barratt Group Standard Designs		
Heat loss figures	120 – 1.087kW/24Hr 150 – 1.16kW/24Hr 180 – 1.27kW/24Hr 210 – 1.37kW/24Hr 250 – 1.64kW/24Hr 300 – 1.74kW/24Hr	
Electricity Tariff		
Standard flat rate		
Emitter		
Radiators		
Internal Lighting		
100% Low Energy Internal Lighting (In accordance with Domestic Building Services Compliance Guide - Table 40)		
Ventilation		
Extract Fans	Standard intermittent extract fans to wet rooms	
Other		
Thermal Bridging	Standard Barratt details to be followed and assessed using Celcon Thermal Bridging information	
Hi therm lintels	Some plots to have Hi therm lintels. Refer to plot schedule.	
Air Pressure Test	Target 5.01 unless listed on plot schedule - Every Plot to be Tested	
WWHR		
Recoup Pipe Plus HE System (A,B,C) - Design dependant upon house type		