

Places for Everyone (PfE)**JP-S2: Carbon and Energy Statement****Net Zero**

The proposed dwelling would endeavour to reduce space heating demands of 20kW/m² and 20% in hot-water demand. The requirement for 40% of solar panels of ground floor area where viable can be achieved. The proposed area of solar panels is 30.6 m²; which is 48% of the ground floor area, therefore exceeding the requirement.

A. Making the most efficient use of land, buildings and natural resources including site layout and building design.

The proposed dwelling utilises a dormant infill site within a residential context and adopts a similar footprint and building form. The topography lends itself to allow for a home that is accessible and adaptable.

B. Taking account of the energy hierarchy by considering Levels 1-4**Level 1 - Reduce the need for energy**

Increased levels of insulation are to be incorporated within the proposed dwelling. All windows will have operable window openings to allow use of natural ventilation. The heating system will incorporate zoning and heating controls to allow for selected area heating.

Level 2 - Using energy more efficiently

Increased levels of insulation are to be incorporated within the proposed dwelling. All doors and 'A' rated windows with higher glazing performance and better draught-stripping will also provide a greater degree of air-tightness.

The heating system will incorporate zoning and heating controls to allow for selected area heating.

Chimney balloons to be installed to reduce heat loss through chimney voids.

Level 3 - Supplying energy efficiently

Given the single dwelling proposed location connection to low carbon heat network is not a feasible option in this instance.

Level 4 - Use low carbon and renewable energy

Air Source heat-pump is incorporated as part of the heating system along with a far higher level of solar panels than requirements.

C. Directing development away from flood risk areas, reducing overall risk from flooding within the National Park and areas outside it, upstream and downstream.

The site is located in Zone 1 and therefore has a low flood risk. Also the nature of the proposed changes and modest rear extension will not affect the flood risk.

SuDs drainage would be adopted for external surface drainage areas.

D. Achieving the highest possible standards of carbon reduction in all developments.

The proposed development utilises an infill site. Also, the design incorporates higher amount of solar panels and utilises an ASHP system which will all contribute positively in carbon reduction.

E. Achieving the highest possible standards of water efficiency in all development.

As all sanitary-ware and taps will be replaced these will be more water-saving than the existing fittings. Rainwater could be collected and utilised for toilet flushing.

Gutters and downpipes would be sized to allow for an increased level of rainfall to take account of climate change impact.

JP - H3: Type, Size and Design of New Housing

The dwelling has been designed to nationally described space standards.

The requirement under the NSS for a 2 bed roomed, 4 person, 2 storey should be 79m² with 2m² of storage space. The proposed dwelling measures 83.5 m² including 2.0m² of storage space (located on the ground floor).

The proposed dwelling has been designed to comply with the National Space Standards, as summarised below:

	National Space Standard (m ²)	Bedroom 1	Bedroom 2	Ground Floor
Double Bedroom	11.5	11.5	11.6	
Living Space				14.7
Kitchen Space				12.7
Study				9.5
Storage				2.0

Note that the proposed dwelling includes a Study to allow for working-from-home.

Accessible and adaptable in accordance with Part M4 (2)

The proposed dwelling has been designed as far as practicable to be an accessible and adaptable dwelling. The main aspects incorporated within the design are:

Level access into the property with 900mm wide approach with all external doors allowing for clear opening width of min 850mm.

Car parking bay would be gently sloping with a 1:80 gradient, in addition it could be 3300mm wide along the majority of its length.

A canopy over the main entrance measuring 600mm x 1300mm is incorporated and there would be motion detector lighting at the entranceway.

On the ground floor the doorway leading into the main space has a nib of 300mm at the door reveal. Also, step free access is provided to the whole of the ground floor with min 900mm wide circulation space.

There would be a min of 1200mm clear in front of kitchen units. The cill level to the living room windows have been set to be 850mm.

The stairs leading to the first floor are 850mm wide.

Bedrooms are sized to allow for 750mm space clear both sides of bed and 750mm clear access from windows and doors. The main bathroom has been designed as a shower-room with level access to the shower tray and allow for 1100mm x 700mm clear space in front of the WC and washbasin.

JP - H4: Density of New Housing

Following the guidance of the table in policy JP-H4 the site would be designated under 'All other locations' which has a requirement for 35 dwellings per hectare, in addition page 149 category A stipulates 35-70 dwellings per hectare.

The external gross footprint of the proposed dwelling of 61.35 sqm divided by the site area of 152.3 sqm (0.015 hectare) equates to 40.28% coverage of the site and therefore would meet with the density requirement for a Type A site. This is also evident when viewed in the context of adjacent plots which are have been developed to a much lower density.