

Concept Precedents - Glass Corridor

When looking at precedent studies, the link between the old and the new parts of the design was pivotal in our understanding to how the spaces were going to interact with one another. We wanted to create a transparent threshold where the history of the existing property meets modernity. The proposed design employs clear glass walls that offer unobstructed views from the old parts of the existing building into the new extension. By using glass as the primary material, the corridor visually dissolves boundaries and allows natural light to flood the interior, blurring the distinction between the two architectural sections.

The form of the corridor is minimalistic, with a simple, linear layout that allows it to fade into the background, highlighting the surrounding architecture. The use of slender metal or timber framing ensures that the structure does not overpower the existing building, enhancing the sense of transition.



Examples of Glass Corridors

Material/ Form Precedents

In addition, when looking at more precedent examples, our client particularly liked the aesthetic created by introducing a metal cladding system, paired with the contrast and softness of a timber cladding that is currently present of the existing building. The metal cladding gives the extension a bold, modern appearance and provides a high level of durability.

This material and form approach is similar to other modernist buildings that aim to merge bold, industrial materials with natural elements. Examples of this kind of design can be found in contemporary architecture, particularly in structures that priorities sustainability and integration with the natural environment. The stilts elevate the building, reminiscent of mid-century modern homes built on stilts, which were designed to interact with the surrounding landscape in a respectful and minimal way. Overall, this combination of materials and forms would provide a highly distinctive and striking architectural solution, balancing durability, modernity, and natural beauty.

PROFILE



Use of metal cladding for the facade







Proposed Scheme on Stilts - Maximise Views

Site Levels

Through the new proposal being on stilts it preserves the natural topography and avoids the excavation of the ground. Furthermore, it is a more sustainable approach, as it reduces the environmental impact to the ground in comparison to a traditional foundation design.

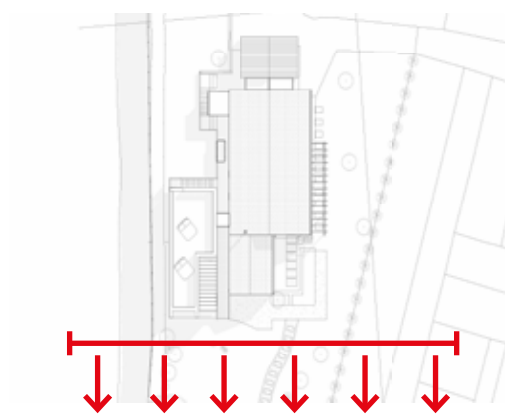
From the existing site level to height of the stilts at the highest point, it increases by 770mm off the ground. At the lowest point where the topography increases the most it is 410mm.

Architecturally, designing the new proposed extension on stilts provides a sleek, contemporary look, offering a dynamic contrast to the existing ground-level dwelling. The open space underneath will be incorporated into the design, creating a light and airy feel.

In addition, since the structure is raised above ground level, there is less risk of water pooling around the foundation helping to improve drainage and potential water-related damage to the structure.

The overall height of the new extension does not exceed the main gable ridge line of the existing building, ensuring that the extension remains subservient to the host dwelling.

PROFILE



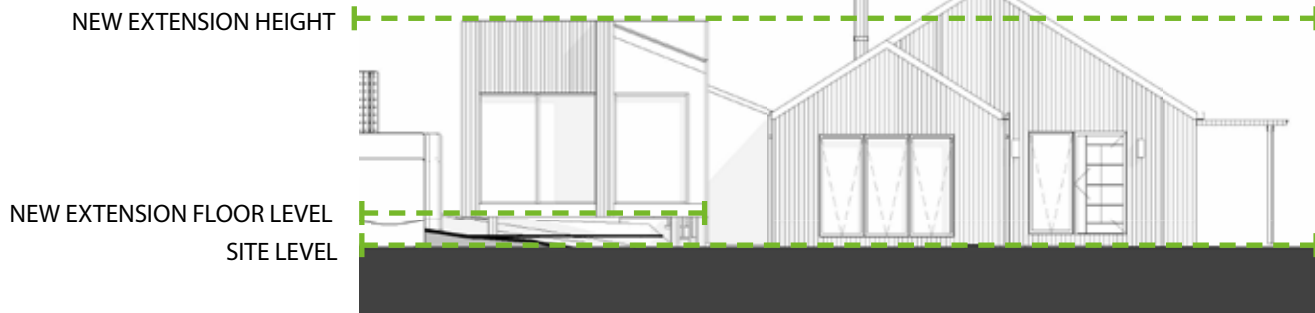
Indicates views out towards the Channel



Views out towards the English Channel



Views out towards the English Channel from the location of the extension



Front Elevation



Front Elevation including dimensions

Throughout the design process we have followed and referenced the relevant standards from different parts of the building regulations. These have been crucial in our understanding of fire safety and the minimum requirements needed for the proposal to function properly.

ONLINE VERSION

 HM Government

The Building Regulations 2010

Protection from falling, collision and impact

K

APPROVED DOCUMENT

K1 Stairs, ladders and ramps

K2 Protection from falling

K3 Vehicle barriers and loading bays

K4 Protection against impact with glazing

K5 Additional provisions for glazing in buildings other than dwellings

K6 Protection against impact from and trapping by doors

2013 edition – for use in England*

ONLINE VERSION

ONLINE VERSION

 HM Government

The Building Regulations 2010

Fire safety

B

APPROVED DOCUMENT

Volume 1: Dwellings

Requirement B1: Means of warning and escape

Requirement B2: Internal fire spread (linings)

Requirement B3: Internal fire spread (structure)

Requirement B4: External fire spread

Requirement B5: Access and facilities for the fire service

Regulations: 6(3), 7(2) and 38

2019 edition incorporating 2020 and 2022 amendments – for use in England

ONLINE VERSION

ONLINE VERSION

 HM Government

The Building Regulations 2010

Access to and use of buildings

M

APPROVED DOCUMENT

Volume 1: Dwellings

M4(1) Category 1: Visitable dwellings

M4(2) Category 2: Accessible and adaptable dwellings

M4(3) Category 3: Wheelchair user dwellings

2015 edition incorporating 2016 amendments – for use in England*

ONLINE VERSION

Information taken from the Nationally described space standards which illustrates our understanding of the minimum requirements for each room/dwelling.

Technical requirements

10. The standard requires that:
- a. the dwelling provides at least the gross internal floor area and built-in storage area set out in Table 1 below
 - b. a dwelling with 2 or more bedspaces has at least 1 double (or twin) bedroom
 - c. in order to provide 1 bedspace, a single bedroom has a floor area of at least 7.5m² and is at least 2.15m wide
 - d. in order to provide 2 bedspaces, a double (or twin bedroom) has a floor area of at least 11.5m²
 - e. 1 double (or twin bedroom) is at least 2.75m wide and every other double (or twin) bedroom is at least 2.55m wide
 - f. any area with a headroom of less than 1.5m is not counted within the Gross Internal Area unless used solely for storage (if the area under the stairs is to be used for storage, assume a general floor area of 1m² within the Gross Internal Area)
 - g. any other area that is used solely for storage and has a headroom of 900-1500mm (such as under eaves) is counted at 50% of its floor area, and any area lower than 900mm is not counted at all
 - h. a built-in wardrobe counts towards the Gross Internal Area and bedroom floor area requirements, but should not reduce the effective width of the room below the minimum widths set out above. The built-in area in excess of 0.72m² in a double bedroom and 0.36m² in a single bedroom counts towards the built-in storage requirement
 - i. the minimum floor to ceiling height is 2.3m for at least 75% of the Gross Internal Area

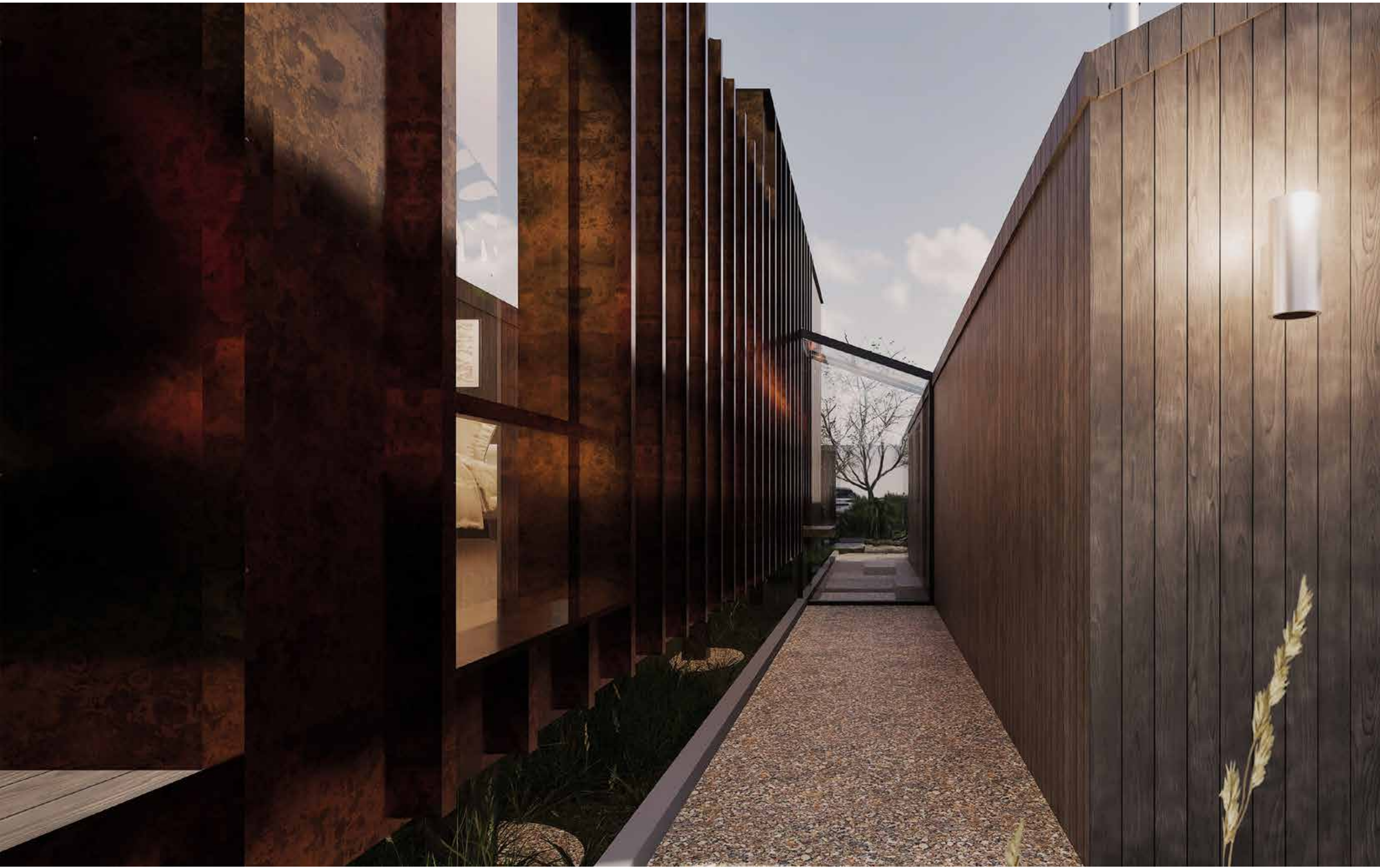


Technical housing standards – nationally described space standard

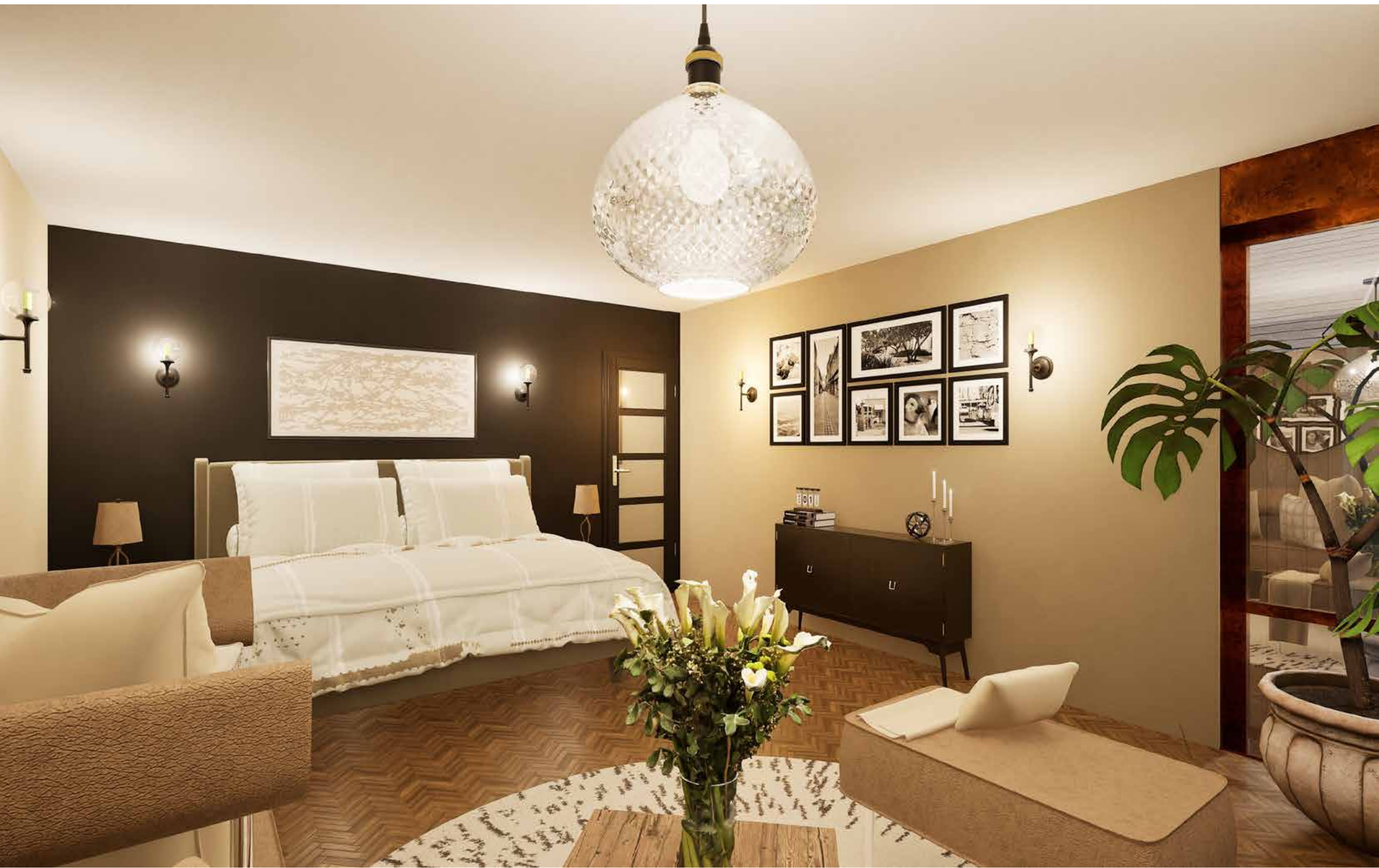
March 2015
Department for Communities and Local Government

Table 1. Minimum gross internal floor areas and storage (m²)

Number of bedrooms (b)	Number of bed spaces (persons)	1 storey dwellings	2 storey dwellings	3 storey dwellings	Built-in storage
1b	1p	39 (37) *			1.0
1b	2p	50	58		1.5
2b	3p	61	70		2.0
2b	4p	70	79		2.0
3b	4p	74	84	90	2.5
3b	5p	86	93	99	2.5
3b	6p	95	102	108	2.5
4b	5p	90	97	103	3.0
4b	6p	99	106	112	3.0
4b	7p	108	115	121	3.0
4b	8p	117	124	130	3.0
5b	6p	103	110	116	3.5
5b	7p	112	119	125	3.5
5b	8p	121	128	134	3.5
6b	7p	116	123	129	4.0
6b	8p	125	132	138	4.0











Proposed Materials

The existing building features incredibly robust materials that offer a rich depth of colour and texture. We wish to integrate some of the existing features within the new proposal. In doing so it enhances their significance within the project and establishes a clear signpost of the evolving journey of the building between the new and the old. We have summarised below our approach to the use of complimentary materials, whilst reacting sensitively to the AONB, and using materials that are within keeping with the surrounding area.

Metal Cladding

For the design we are proposing a metal cladding for the exterior finish to contrast the timber cladding on the adjacent existing building. The metal cladding offers a sleek, modern aesthetic while also serving as a durable, weather-resistant barrier.

Timber Cladding

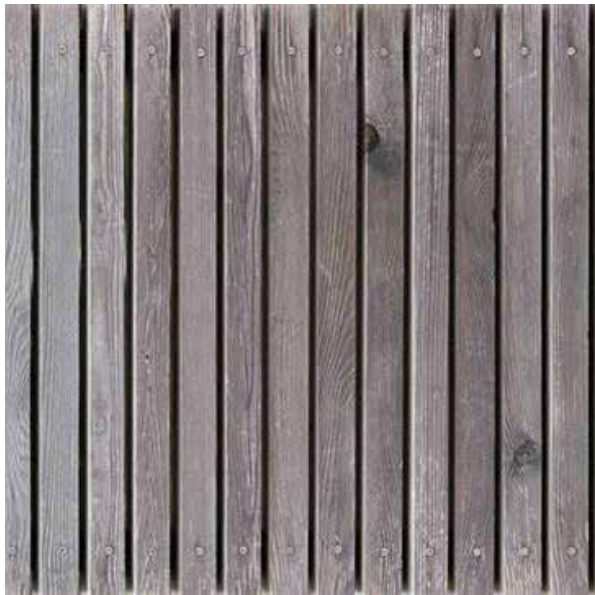
We are proposing timber cladding partially over half the principle elevation to mimic the material on the existing building. It also appears around the rear of the design in order to limit the cost of using a more expensive material. The timber cladding offers both an aesthetic and practical appeal, providing a natural and warm aesthetic that blends with the metal cladding.

Dark Render

We propose to use a dark render finish along the West elevation in order to keep maintenance down on that side to a minimum as there is limited accessibility, as well as maintain an aesthetically sympathetic palette of materials on the less-visible elevations.

Dark framed Upvc windows and doors

For the windows and doors, we are proposing a dark upvc to match the existing building. These style of frames provide a striking contrast to the lightness of the surrounding walls, which lend a contemporary feel to the overall appearance.



Examples of similar materials

Modern methods of construction allow building to be constructed in such a way as to minimise waste and reduce embodied energy. An example of this would be off site factory production of component parts or specific units of the building. Deployment of this type of construction can range from a base unit being made, to the construction of entire walls, floors, roofs and even entire rooms. These can then be transported to the destination for assembly. This is something the client is interested in exploring for the new extension structure as it will be more efficient in terms of cost and overall energy use.

Being produced in a controlled environment with the same materials allows for speed and consistency as well as quality and precision of the final outcome design.

There are a range of methods of Construction some of them include:

Precast Panels

Where floors and wall units are made off site and transported to be erected on site to form a solid structure which can be ideal for new builds and developments where repetitive units are made.

More examples include:

- Off site Timber Frame construction
- Precast Foundations
- Twin wall Technology



Factory Construction Offsite



Precast Panels



Units constructed offsite and craned into place

To respond to the growing need to switch to green energy, but to also make the building as efficient as possible to help reduce energy consumption we have proposed some of the following ideas to incorporate within the design.

The proposal is intended to provide the listed renewable energy sources. These low carbon technologies will be integrated within the project to not disturb the qualities of the site and proposal.

Low E, high efficient glass

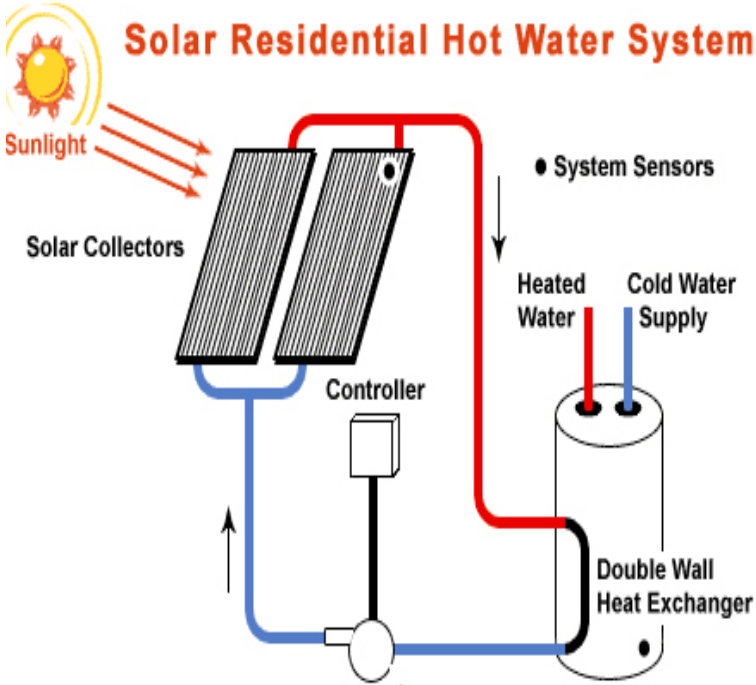
We will aim to use low E high efficient glass to help block infrared light from penetrating the glass from the outside. Using this type of glass helps to keep in heating/ cooling energy making them much more efficient.

Additional features we have looked to incorporate include:

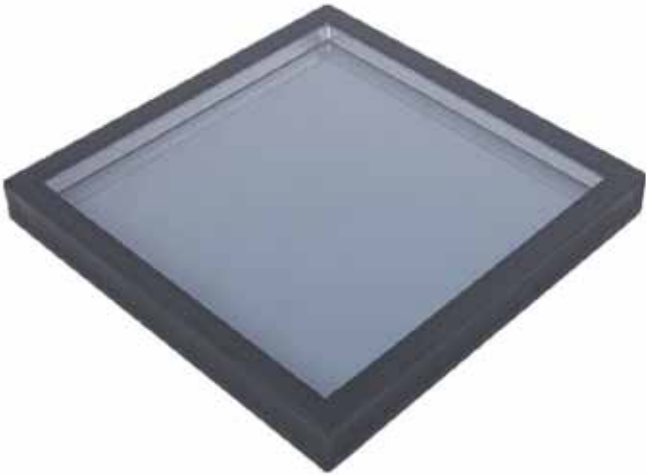
- Ground source heat pumps
- Air source heat pumps
- High insulated walls and floors
- Solar hot water
- Automatic openings and reliable closing of doors
- High levels of air tightness within walls and window openings



Air Source Heat Pumps



Solar hot water



Low E high efficient glass



High Insulated Walls