



Key plan to viewpoint



Artist's impression of the proposed approach to the house through the landscape from the public right of way to the north

7.4 Atmosphere and Character

The character of the proposal is rooted in the particular qualities of the High Weald landscape — its enclosure, softness and seasonal change. Unlike more open agricultural terrains, this is a landscape defined by hedgerows, woodland edges and contained fields, where buildings sit quietly within a larger pattern rather than standing apart from it.

The house has been conceived to reinforce this sense of enclosure. Arranged as a cluster of volumes around a courtyard, it creates a series of sheltered external and internal spaces that mediate between domestic life and the wider landscape. The courtyard acts as the centre of the house, offering a protected, calm environment, while views outward are framed and selective rather than expansive.

Materially, the building draws from the muted tones and textures of the surrounding farmstead structures — timber, clay tiles and lime-based finishes — allowing it to sit comfortably within its setting. These materials are expressed in a simple and consistent manner, reinforcing the clarity of the form and avoiding unnecessary visual complexity.

The atmosphere of the house is intended to be quiet and grounded. Internally, spaces are defined by light, proportion and a close relationship to the garden and courtyard. Externally, the building is partially absorbed into the landscape through planting, meadow and orchard, so that over time it becomes less an object and more part of the field pattern.

The proposal is also shaped by the clients’ relationship to the land. The house is not conceived as a retreat from its surroundings, but as a place of engagement — supporting daily interaction with the garden, orchard and wider farm. This is reflected in the organisation of spaces and the direct connection between interior rooms and external working and growing areas.

Together, these elements establish an architecture that is restrained, domestic in scale and closely tied to its setting — a contemporary interpretation of the farmstead that is both rooted in place and responsive to the life it will support.



Sussex Barn, T. B. Mills, 1940–1970



Proposed north elevation



Development sketch of open courtyard



Development model



Key plan to viewpoint



Artist's impression of the proposed approach to the house through the landscape from the southern garden

7.5 Interiors

The interior is formed directly from the construction of the building. The timber frame and hemp-based infill are expressed internally, providing structure, surface and atmosphere without the need for applied finishes.

Walls are finished in lime-based plaster or left exposed where appropriate, allowing the texture of the hemp to remain visible. This gives the interior a soft, matte quality and a consistent material language throughout.

The building is read internally as a series of connected volumes rather than a single open space. Rooms are defined by structure, openings and changes in light, rather than partitions alone. Movement through the house follows a sequence from more enclosed spaces to more open, outward-facing rooms.

Openings are set deep within the wall thickness, creating places to sit, pause and look out. These moments reinforce the relationship between inside and landscape, while also giving weight to the construction.



Interior reference



Interior reference

Timber is used consistently for structure, joinery and openings. This provides a clear and legible framework to the interior and allows the building to be understood through how it is made. The ceiling structure is expressed where possible, giving rhythm and direction to the spaces.

The courtyard plays a central role in the internal experience. It brings light into the centre of the plan and provides a constant visual reference point, allowing movement through the house to remain oriented and connected.

Materials are left close to their natural state. This reduces the need for additional finishes and allows the building to age through use rather than through replacement. Surfaces are durable, repairable and intended to be lived with over time.

The result is an interior that is calm, robust and grounded – shaped by use, light and material rather than by applied decoration.



Key plan



Development collage of proposed interior



Key plan



Development collage of proposed interior



Development collage of proposed interior



Development collage of proposed interior

7.6 Low Embodied Energy Design

The approach to embodied energy begins with reduction. The most effective way to lower carbon is to build less, build simply, and use materials that require minimal processing. The design therefore prioritises clarity of form, efficient spans, and a limited palette of robust materials. Complexity is avoided where it does not add value.

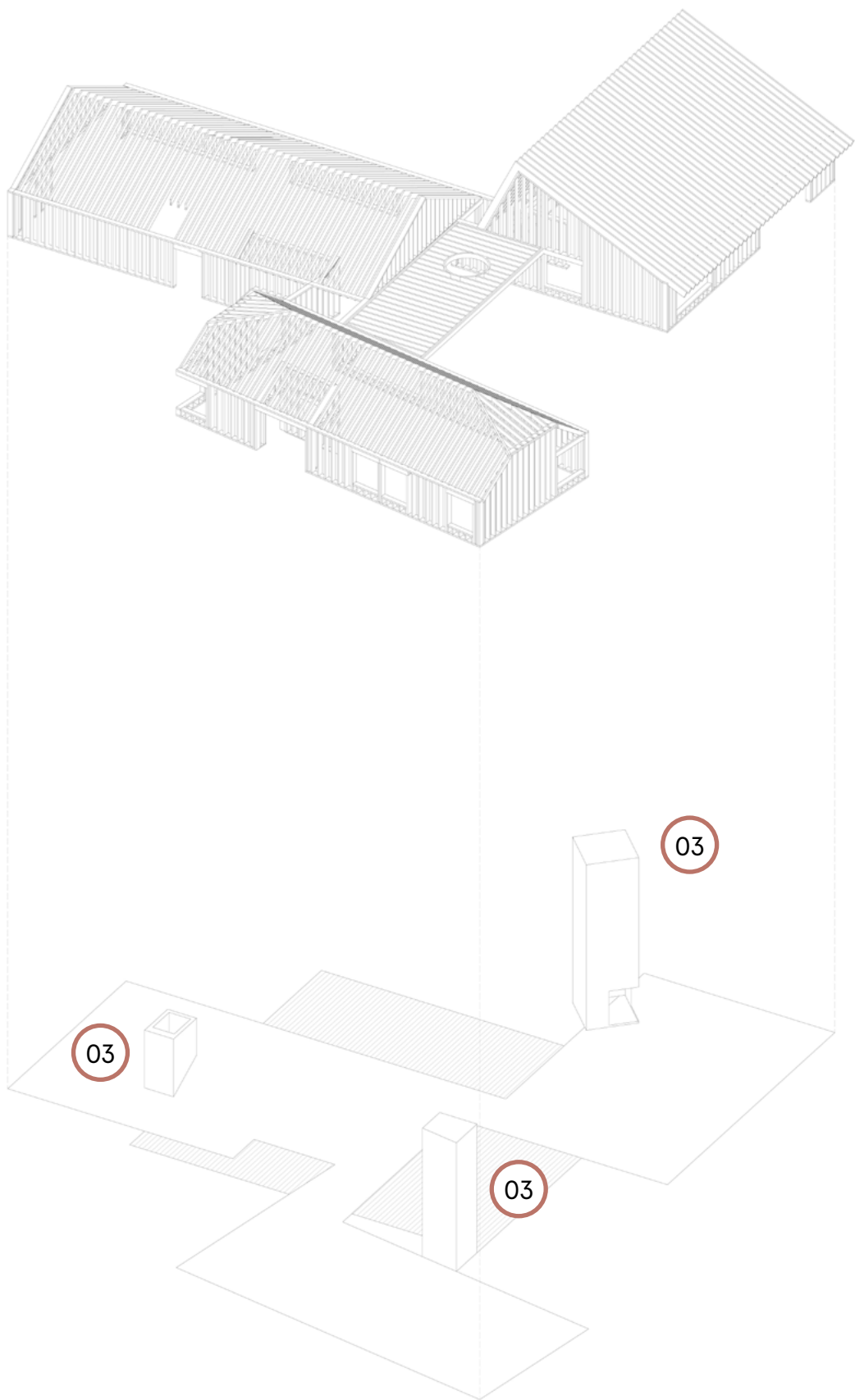
Materials are selected on the basis of three consistent criteria: low embodied carbon, local availability, and longevity. Preference is given to bio-based and mineral materials that store carbon, require little industrial processing, and can return safely to the ground at end of life. Wherever possible, materials are sourced from within the UK or near Europe to reduce transport impact.

The structure follows a straightforward and efficient logic. Spans are controlled, junctions are simplified, and repetition is used where possible. This reduces material use and avoids unnecessary layers or composite systems that are difficult to separate later.

The building is also designed with its future in mind. A regular structural grid allows for adaptation over time. Key service routes are rationalised and accessible. Materials are left exposed where appropriate, avoiding applied finishes and enabling repair, reuse or replacement without waste.



Aerial photograph of Freshfield Lane brickworks with waste brick storage pile



Exploded isometric projection denoting timber structure and cast brick-waste chimneys

In this proposal, these principles are applied through a timber primary structure, hempcrete wall construction, and natural internal finishes. The use of timber and hemp-based materials locks carbon into the building fabric. Clay plasters and timber linings avoid high-energy finishes and remain breathable and repairable.

External materials are similarly restrained. Timber shingles, sourced from Cockhaise Farm, are used as a durable, low-energy cladding that can weather naturally and be replaced incrementally. Chimneys are formed using reclaimed brick, reusing an existing material stream from the local brickworks (Freshfield Lane) and reducing the need for new fired products.

Taken together, the strategy reduces embodied carbon at each stage: less material overall, simpler construction, lower-impact materials, and a building that can adapt and endure. The aim is not to offset impact, but to minimise it through the architecture itself.

- 01 Timber shingle
- 02 Timber framed window
- 03 Cast brick waste chimney
- 04 Timber framed sliding doors

Key to main image



Artist's impression of the proposed approach to the house through the landscape from the southern garden

7.7 Low Operational Energy Design

The building is designed to minimise energy demand through its form, orientation and construction before relying on systems. The approach prioritises passive performance, creating a stable internal environment and reducing the need for mechanical intervention.

The arrangement of the building allows careful control of solar gain. Openings are proportioned in response to orientation, with increased glazing to the south to capture winter sun, and more limited openings to the north, east and west to reduce unwanted heat loss and summer gain. Glazing is paired with external shading and deep reveals to control solar exposure through the year.

Natural ventilation is integral to the layout. Openable windows are positioned to enable cross ventilation across all primary spaces, with high-level openings allowing warm air to escape and support night cooling during summer months.

The building envelope is designed as a continuous, high-performance construction. Target U-values are low across all elements, with walls, floors and roof designed to significantly reduce heat loss. Triple glazed windows are used throughout, set within the insulated envelope to maintain continuity of performance.

Airtightness is a key part of the strategy, with a target of less than 1 m³/h·m² @50Pa. This is supported by careful detailing of junctions and a clear airtightness line within the construction. Thermal bridging is minimised through consistent build-ups and simplified junctions.

Ventilation is provided through a whole-house mechanical ventilation system with heat recovery, achieving high efficiency while maintaining good indoor air quality. The system is integrated within the plan, with short, direct duct routes and a centrally located unit to reduce energy loss and simplify installation.

Development sketch exploring plan arrangement



Heating and hot water are provided through a fossil fuel-free system. The reduced energy demand of the building allows a low-capacity system to be used, supported by thermal storage and controlled set points to manage energy use efficiently.

On-site renewable energy generation is maximised through roof-mounted photovoltaic panels, with the intention that annual energy demand is offset by on-site production. Provision is made for battery storage to allow generated energy to be retained and used effectively.

Additional measures include electric vehicle charging with load management, allowing demand to be balanced with on-site generation.

The environmental performance of the building is inherent to its architecture. Form, orientation and construction are resolved together to reduce energy demand at source, with systems used only to support this baseline performance. This approach produces a building that is not only low-energy in use, but fundamentally efficient by design, demonstrating a level of integration and clarity appropriate to the ambitions of the proposal.



Development sketch exploring section arrangement

7.8 Material Culture

The building is conceived as a simple, low-carbon construction where structure, insulation and finish are closely aligned. The aim is to reduce layers and let the material build-up do the work – structurally, thermally and atmospherically.

A prefabricated timber frame forms the primary structure, infilled with cast hemp-based construction. This creates a continuous envelope in which structure and insulation are combined, reducing reliance on additional finishes and allowing the building to be read clearly in section and in use.

The wall build-up is thick and breathable. Airtightness is controlled through a defined internal line, while outer layers remain vapour open, allowing the building to regulate moisture naturally and remain robust over time.

Externally, the building is wrapped in timber shingle cladding to both walls and roof, forming a continuous outer skin. This approach draws from the material language of the High Weald, where hung tile façades and shingle roofs unify simple volumes. In local precedents, clay tiles are often hung across elevations alongside brick, timber framing and stone, with roofs typically formed in plain clay tile or Horsham stone.



Reference image for contemporary timber shingle cladding



Local references for hung clay tiles



Here, that logic is reinterpreted through timber. Timber shingles are proposed as a continuous external rainscreen to walls and roof, creating a coherent weathering envelope across the principal volumes. Where feasible, suitable timber arising from the management of Cockhaise Farm and the wider site will be used, supplemented as necessary by matching locally sourced timber. The intention is not to rely upon the site to provide the entire cladding supply, but to allow the material strategy to remain closely connected to the stewardship of the land. This significantly reduces transport and embodied carbon, while establishing a direct relationship between the building and its immediate landscape.

The use of site-sourced timber also anchors the project in a specific place and moment. The building is not simply finished in timber, but made from it in a literal sense. As the shingles weather and silver over time, the building will settle further into its setting, taking on a tone consistent with the surrounding vegetation and agricultural structures.

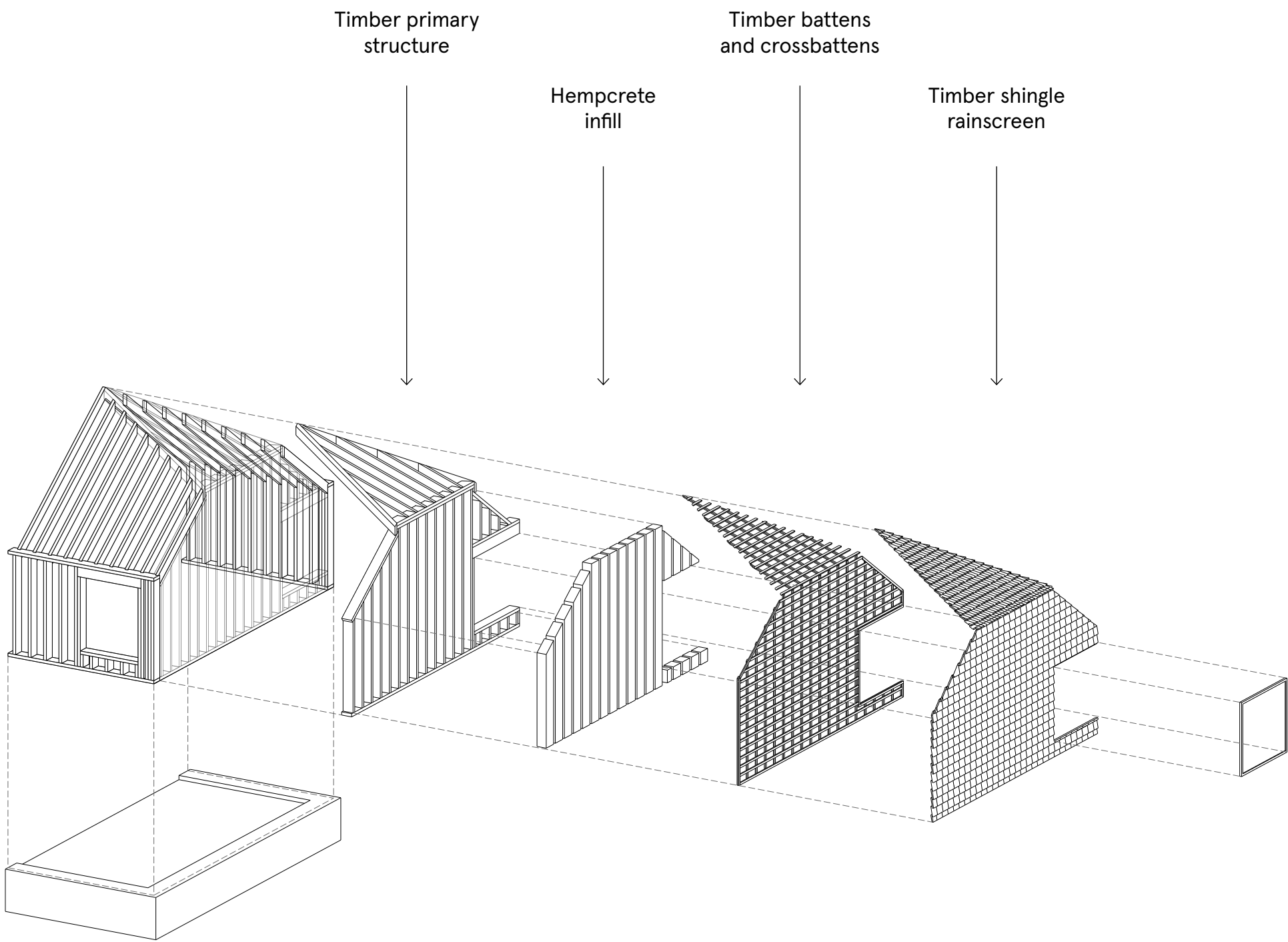
This approach avoids applied decoration. Character emerges instead from construction – from the repetition of the shingles, the depth of reveals, and the alignment of openings within a clear structural rhythm. The result is a building that reads as a single, coherent object, grounded in its setting and in the way it is made.

The palette is deliberately limited. This allows the building to weather evenly and avoids unnecessary complexity in construction.

The result is a building that is simple to make, low in embodied carbon, and able to age well – where material, construction and form are closely aligned.



Timber cut from and currently stored on site



Exploded isometric drawing denoting material build-up to house