Contemporary House Designs

Edge Architects 08451 656 258

Method
After an initial meeting with the client and David Reid Homes® to discuss the aspirations and requirements for the house design, a site visit including the surrounding area was undertaken. At an early stage, numerous design directions were developed in response to the location, site and the brief. An initial design was used as the main development vehicle and Edge built on that fundamental ethos.

Further Design Development
We took the nestling idea as a starting point, integrating the following design considerations: Better framing of views from entrance. Break down the massing of the form. Include elements to create some indoor/ outdoor spaces. Consider the environmental impact of the dwelling more carefully. Work with the site more to let the building integrate with the slope. Create a more domestic feeling to the look of the dwelling, whilst retaining a high design quality. Give the site and the views far more prominence than the building.

Methodology
After taking on board the comments from David Reid Homes® and the previous stages, the scheme was developed, predominantly focusing on creating a more powerful link between the site location, the fields and overall building massing.

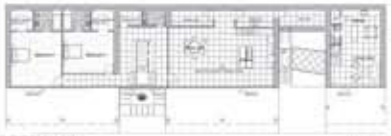
Development of Massing Ideas
The concept of digging the building into the slope to maximise views and increase thermal mass / performance was a major driver. Also the concept of strips of landscaping that terminate the roof structure and draw on the imagery of the ploughed fields in the landscape. The interior has been substantially re-planned to provide better internal access and clear separation between the two blocks if / when required.

Structure, M&E & Fabric
The house is dug into the sloping site and constructed of reinforced concrete to the lower walls on the northern, eastern and western ends to create an extremely high thermal mass. An environmentally concious 'lime-crete' type ground floor slab offers a more breathable solution compared to typical concrete.
Large amounts of very high-performance, argon-filled, double glazing system on the south façade are utilised to maximum solar gain. Solar gain creates a "stack effect" within the widened double glazed system that drives in effect a thermal wheel through the building. Remote controlled solar shading to the south façade aids cooling and comfort. Steel frame main structure set on the concrete lower levels offers flexibility to the first floor and partition locations. Lightweight framed construction throughout the first floor and partitions greatly help the "thermal wheel" idea.

Landscape Design
The large green roof with planting visible from entrance aids insulation and context. Planting is cultivated to develop sustainable rare breeds on the the slope. All ecologically sound and natural, local, renewable and recycled materials will be sourced and specified where applicable and environmentally friendly products and technologies incorporated where possible to deliver inherently low energy solutions both in the construction and in use.

PROPOSED REAR ELEVATION (WEST)

UPPER FLOOR PLAN



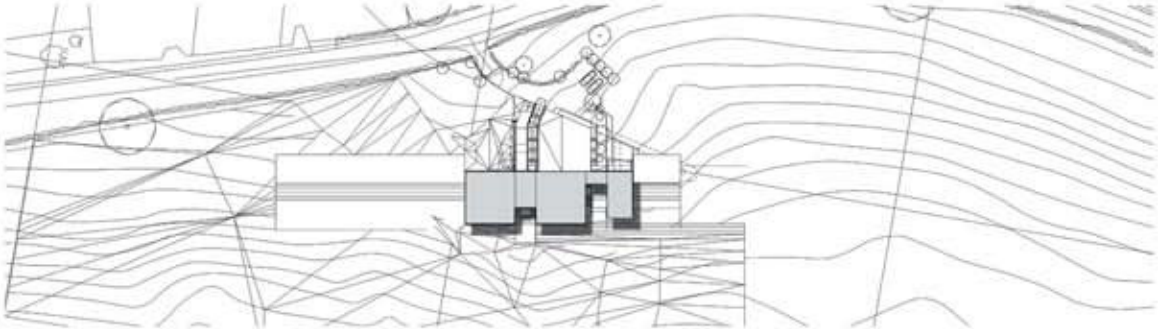
LOWER FLOOR PLAN

SECTION THRU BEDROOMS

SECTION THRU ENTRANCE

THRU ENTRANCE STEPS

SECTION THRU LIVING AREAS & KITCHEN



SITE PLAN

RIBA Chartered Practice

EDGE ARCHITECTS