BREAC.HOUSE

MacGabhann Architects

The site was originally host to a 1980s bungalow which was acquired by our client, who planned to convert it into a modern hospitality retreat. The overriding goal was to deliver a contemporary design solution that was both visually arresting but also at one with the stunning Donegal landscape. We also wanted to use the best quality local materials and tradespeople, wherever possible, maximising the use of sustainable sources for heating and water. The building is heated primarily by an air-to-water heat source pump.

Preserving the original building and the materials using this was one of the many ways we were thinking sustainably. We first set about reconfiguring the layout of the existing building, reorganising the kitchen, dining and patio spaces to face the south-west and the bedrooms to face south-east, both with sweeping views over Sheephaven Bay and the Derryveagh Mountains. All of the windows are triple-glazed to retain as much heat as possible. We wanted large windows to the south to increase solar gain, and smaller windows to the north to minimise heat loss. When 'siting' the building, we were actively conscious of the environmental outcomes and the potential benefits of designing for sustainability.

In extending and elongating the building, we created a gently sloping roof, which is reminiscent of the nearby table top Mount Muckish, thus embedding and linking the building to the surrounding landscape. Timber features prominently throughout the building. We drew inspiration from Scandinavian architecture where the interior spaces are typically clad in warm materials, hence the oak internal cladding in Breac.House. The colour palette was inspired by Liam McCormick's churches of Burt, Glenties and Creeslough.

The house was clad externally in black timber for a multitude of reasons. Aesthetically speaking, the black colour helps the building to disappear into the heather-clad hill behind. Thinking in terms of sustainability, a black object sitting in the sun will passively absorb more heat; and, finally, we wanted to add a substantial amount of external insulation to the existing house, which we decided to clad in timber.

Donegal sees some of the highest rainfall and, as a result of this, the gargoyle is a common feature in most of our projects. We were inspired by architect Liam McCormick, who also celebrated the rain with gargoyles on his Donegal churches. The rain drains from the long sloping roof through a gargoyle and into a rainwater collection tank. The collected rainwater can then be used in bathrooms and in the garden.

We believe that this project is indicative of sustainable living through design. Many of these design elements cost nothing to implement. Through these core, simple design elements we strive to create a more sustainable way of living for our clients.

> images from top I-r

- $\label{eq:constraint} \textbf{1.} \ \textbf{Breac.House is a sustainably-designed, modern}$
- retreat within the stunning Donegal landscape 2. The house was clad in back timber
- The house was clad in back timber
 Large windows to the south increase solar gain and connect with the landscape







images from top I-r
 4,6,7. Interior finishes include oak and other natural materials, inspired by Scandinavian Design
 5. Triple glazed windows with deep shelves





Ground Floor Plan

Architects | MacGabhann Architects Structural Engineers | Carr & Company Civil Engineers Services Engineers | Burke Morrison Main Contractor | Joseph McMenamin & Sons Ltd. Location | Horn Head, Dunfanaghy, Co. Donegal Project Size | 393.3m² Duration | 13 months

Photography | Al Higgins