

CASE STUDY  
BROUGHTY FERRY HOUSE







With thanks to The Voigt Partnership Limited for imagery

### Stone features

The style of construction used in this house has become popular recently. Essentially, the approach was to construct a timber kit building, and to create a dry stone dyke as cladding on the exterior walls. The strong tower-like elevation has a defensive appearance, but leads to a softer core and a living space with a fully glazed frontage overlooking the sea. The designers saw the stone wall element with the portholes in terms of a traditional buttress wall, similar to that which can be seen at Broughty Castle nearby. A gateway in the stone wall leads through the living space to the glass wall frontage, dividing the inside and outside, bounded with rocks to sitting areas on the foreshore looking out to sea and the sailing boats. The glazed front elevation continues to a terrace, with a rockery style wall, giving the impression that the house is part of the shoreline. The timber and glass roof structure sits above this, like a beach hut.

### Special techniques

The exterior stone walls are constructed of guillotined stone. This is a method where natural random stone is cut and then applied to the frame of the building as a cladding material. The stone is prepared off-site and delivered ready to use, eliminating time wasted on site. Lime mortar is used to hold the stone together but only in the core of the wall, which allows the wall surface to retain a traditional drystone appearance.

In terms of sustainability, the stone is sourced locally from Pitairlie Quarry, which is less than 20 miles (32 km) from the site, and given the small pieces involved, some of this material is recycled from the quarrying process.



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# CASE STUDY

## BROUGHTY FERRY HOUSE

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**Name of building**

Broughty Ferry House

**Date completed**

2008

**Building type**

Private Residential

**Location**

Broughty Ferry, Angus

**Architect**

The Voigt Partnership Limited

**Client**

Private owner occupier

**Stone**

Pitairlie sandstone

**Main contractor / stone supplier**

Pert Bruce Construction  
Denfind Quarry, Angus

**Anticipated lifespan of building**

> 75 years

**Background to building**

The client for this project approached the architect with a request to design a house that reflected both its surroundings and the interests of the resident. The one-storey building has a variety of different finishes but is built primarily of timber, glass and stone with a grass roof. The long, low building is designed to take maximum advantage of the seafront location while at the same time minimising disruption to the views of the adjacent neighbours, by having a grass roof. This roof adds an additional layer of insulation to a building that is already extremely well-insulated. The house also has a passive fresh-air ventilation system and underfloor heating.

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**Material Considerations**

A Natural Factory

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