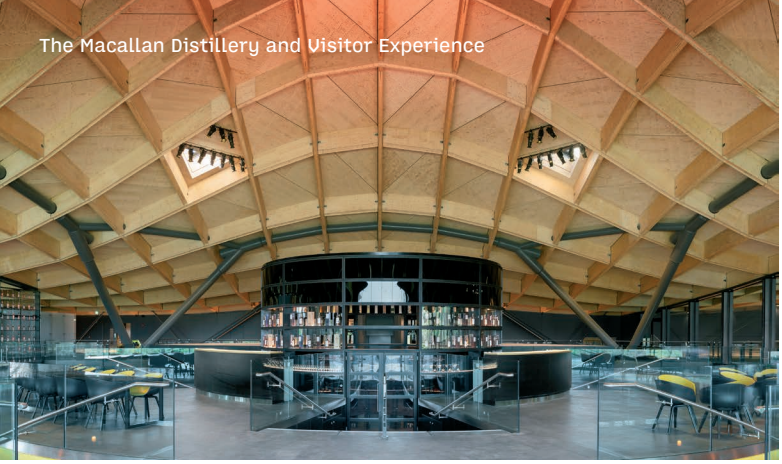
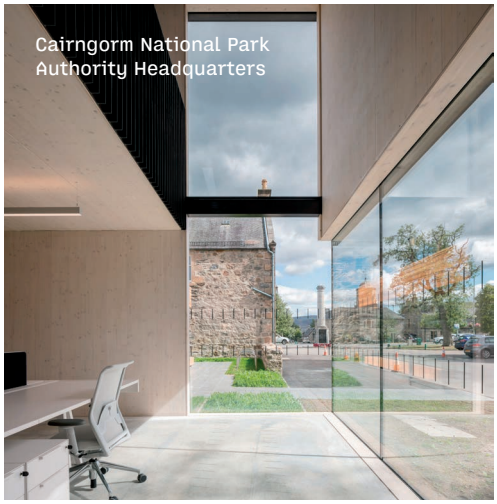
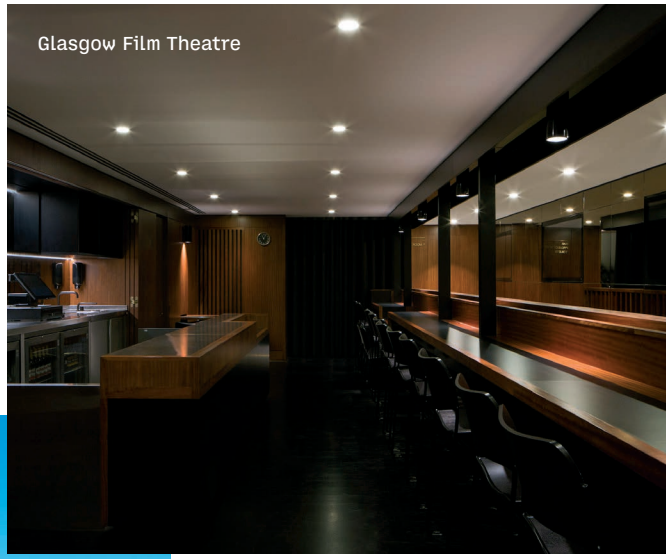
THE BEST USE OF TIMBER AWARDS

2019


The Macallan Distillery and Visitor Experience


Cairngorm National Park Authority Headquarters


The New Steading


Glasgow Film Theatre


22 Observatory Road


The Macallan Distillery and Visitor Experience

THE BEST USE OF TIMBER AWARDS 2019

Climate change is one of the biggest issues facing Scotland and the world today. The materials we choose and how we design our buildings have a significant impact on responding to a changing climate and helps us reduce carbon emissions.

Using locally sourced and sustainably grown timber is a key part in tackling the climate emergency. It helps us move to a circular economy which eliminates waste and achieves the continual use of resources.

The annual Best Use of Timber Awards recognise innovative and creative use of timber in buildings in Scotland. Part of the annual RIAS Awards scheme, the award is sponsored by Scottish Forestry and Wood for Good.

The awards demonstrate the potential of home-grown timber, as well as showing how different species of timber can create a range of inspiring spaces.

The projects range from small to large and from domestic to commercial – all showcasing the benefit of timber in new architecture in Scotland.

Technical competence is of course paramount and the design and detail of how the timber is used is as much a part of the assessment criteria as the imagination and overall architectural excellence. The shortlisted and winning projects in the 2019 awards demonstrate this fully.

JUDGES
Professor John Cole CBE Hon FRIAS (Chair)
Joanna van Heyningen OBE RIBA
van Henyningen and Haward Architects
(representing Royal Institute of British Architects)
Catriona Hill RIAS (CH Architecture)
Peter McCaughey, WAVEparticle
Jon Stevenson, Director, Wood for Good

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MACALLAN

THE MACALLAN DISTILLERY AND VISITOR EXPERIENCE
Rogers Stirk Harbour + Partners

Overall Winner

Project:	The Macallan Distillery and Visitor Experience
Location:	Craigellachie, Aberlour
Date Completed:	May 2018
Building Type:	Distillery and Visitor Centre
Architect:	Rogers Stirk Harbour + Partners
Client:	Edrington
Contract Value:	£140 Million
Main Contractor:	Robertson Construction Group
Timber Supplier:	Wiehag
Photographer:	Joas Souza / Mark Power

The Macallan Distillery and Visitor Experience was designed to deliver a unique 'home of the brand', welcoming visitors and revealing the production processes involved in whisky making. The aim was also to respond as sensitively as possible to its rural setting, the 18th-century Easter Elchies manor estate in Speyside that has been responsible for creating whisky since 1824.

Cut into the naturally sloping contours of the site, the design makes direct references to ancient Scottish earthworks with its 207 metres long undulating living meadow roof, along with wider landscaping, that not only synchronises with the surrounding landscape but also serves to provide an authentic and atmospheric journey for the visitor.

Internally, a series of circular production 'cells' are arranged in a linear format with an open-plan layout revealing all stages of the distillery process at once. These cells, and the new visitor centre, are reflected above the building forming the peaks or domes of the gently undulating roof.

The utilisation of material to maximise its capacity was key to the engineering strategy. In what is one of the most challenging timber structures built in the UK, the downstand composite Glulam beams that form the roof are placed where their lightness and bending capacity can be demonstrated. In areas of additional shear stress, Laminated Veneer Lumber (LVL) beams, facetted on a 3 x 3 m waffle grid structure, have been mobilised to assist. The domes of the timber grillage sit on a steel tension ring, which in turn is supported by inclined steel columns that bear the resulting thrusts into the concrete shear walls and thus into the ground. By separating the roof from the earth, lateral pressures are relieved, allowing the roof to 'float' above.

Constructed over a six-month period, the new building not only provides a facility capable of increased production, but one that will allow for easy expansion in years to come. The project is also considered to be an exceptional example of production and logistics using offsite construction, bringing together architect, engineer and manufacturer, working collaboratively, to solve all the issues required to bring such an ambitious concept to reality.


Blackford Pond

22 OBSERVATORY ROAD
Zone Architects

Project:	22 Observatory Road
Location:	Edinburgh
Date Completed:	January 2018
Building Type:	Residential
Architect:	David Jamieson – Zone Architects
Client:	Ms Julia Bouvy
Main Contractor:	John Dennis Ltd
Timber Supplier:	CLT – Egoin Siberian Larch – Russwood
Photographer:	C Humphreys

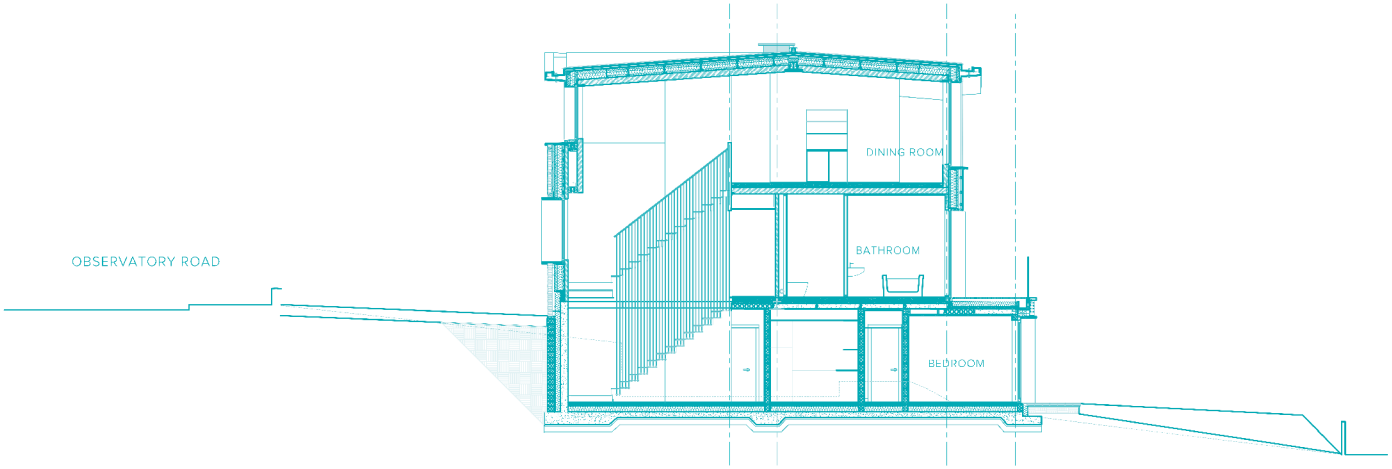
ZONE Architects worked with owner/developer Julia Bouvy and her family to help realise her ambition to build a family home on a spectacular site towards the top of Edinburgh's Blackford Hill, enjoying panoramic views over the city.

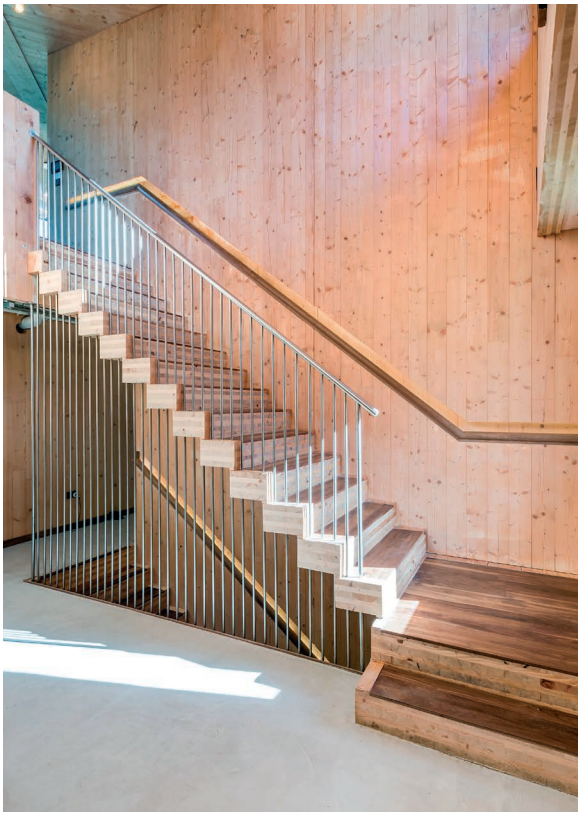
Replacing a tired and inward looking bungalow, the decision was made to use timber in the construction of the new house as far as possible in order to reduce its carbon footprint. The three-storey house - featuring living spaces to the top floor, bedroom accommodation on the middle floor and the lower level occupied by a separate granny flat - was built using a Cross Laminated Timber (CLT) primary structure. This CLT shell was designed and installed by Spanish company Egoin and erected in a week.

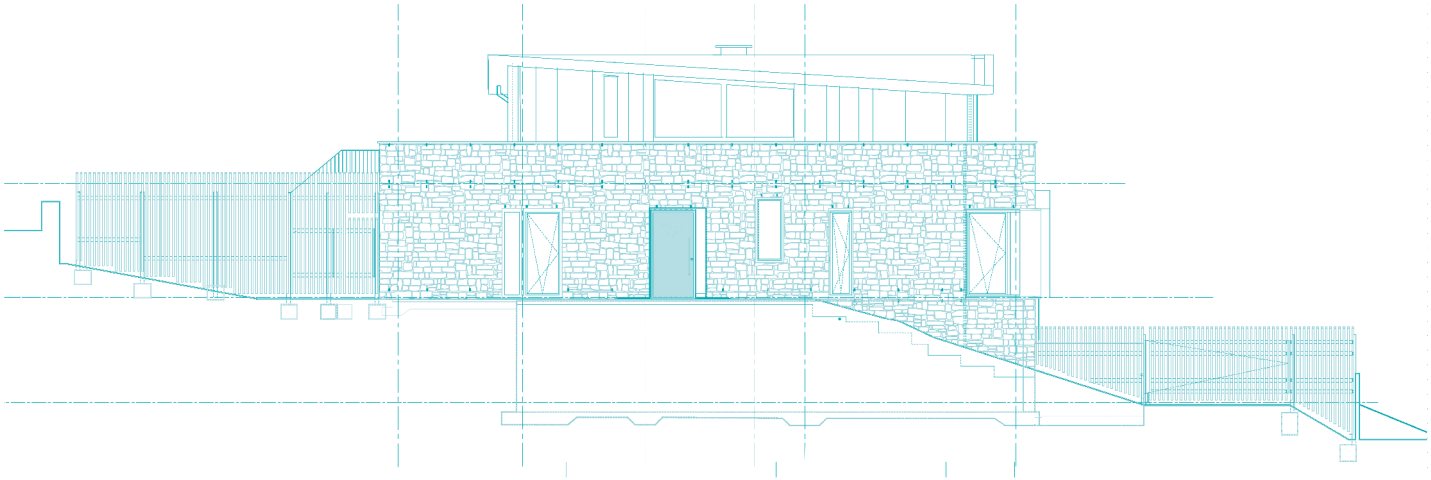
The zero-carbon building was designed to passive house standards with 0.1 u-values, incorporating very high levels of airtightness combined with mechanical ventilation heat recovery, solar hot water and photovoltaic power. Internally the slabs of timber have been deliberately left uncovered in order to create a natural ambience to the interiors as well as showing off the structural capabilities of the timber. The ambition was also to make the air quality in the house as healthy as possible using natural materials, and as a result the potential for toxins has been minimised by the use of natural additive-free wood fibre insulation which was chosen to wrap the cross laminated timber structure, creating a breathable outer wall construction.

22 Observatory Road references the 1894 Observatory Tower at the top of Blackford Hill, with its sandstone base safeguarding the mechanics of the copper-clad telescope covers, in that the house is sandstone clad to the street's route up the hill, effectively protecting a series of timber and zinc clad inner areas which contain the intricately connected interior spaces. Elsewhere the main cladding material used is Siberian Larch, detailed with a deep rib effect and vertical cantilever to form the balcony balustrade.

The project demonstrates that the rigorous process of decision-making that was employed throughout the design and build ensured that the most ecological choices were made.







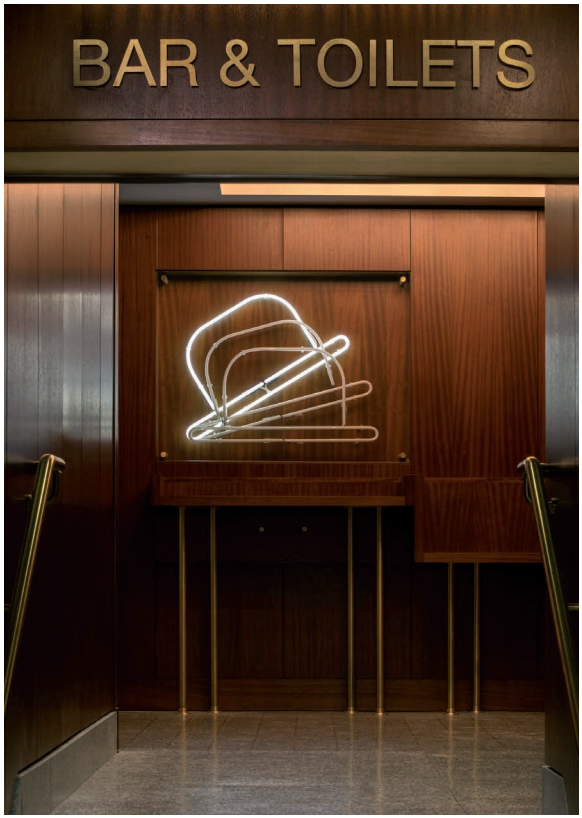

M THEATRE
BARS
PROJECT ROOM
IFTS
TOILETS
CHURCHILL
BLACK BRITAIN
BAR & TOILETS
CINEMA 1
BAR
PROJECT ROOM

GLASGOW FILM THEATRE
McGinlay Bell Ltd

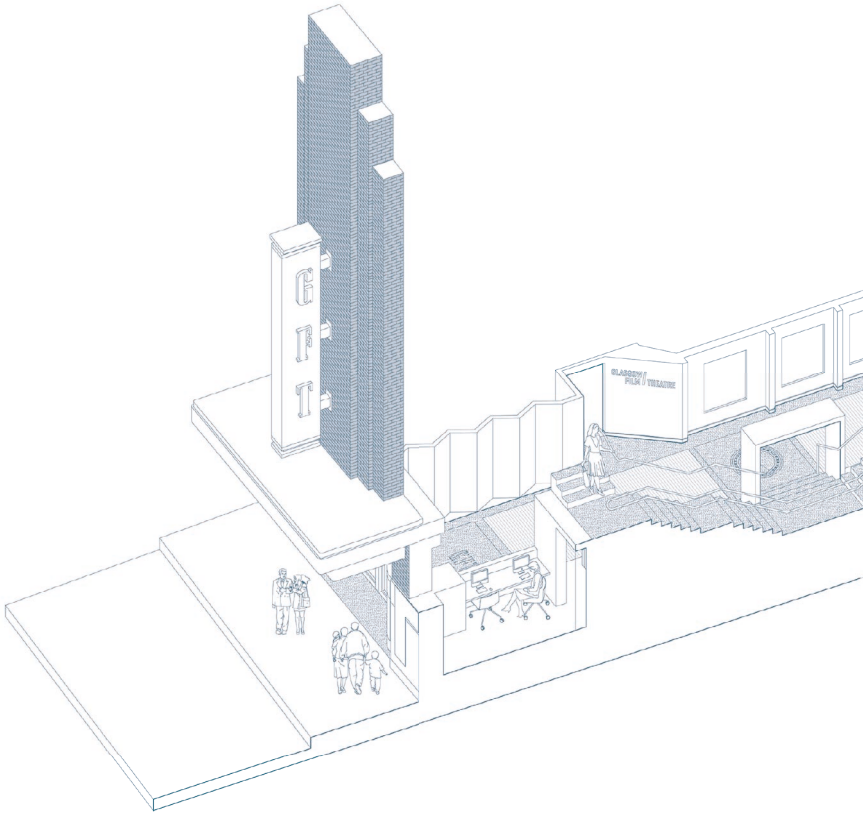
Project:	Glasgow Film Theatre
Location:	Glasgow
Date Completed:	March 2017
Building Type:	Cinema
Architect:	Brian McGinlay – McGinlay Bell Ltd
Client:	The Glasgow Film Theatre
Contract Value:	£1.6 Million
Main Contractor:	Thomas Johnstone Ltd
Timber Supplier:	Veneers by SPA Laminates
Photographer:	Dapple Photography

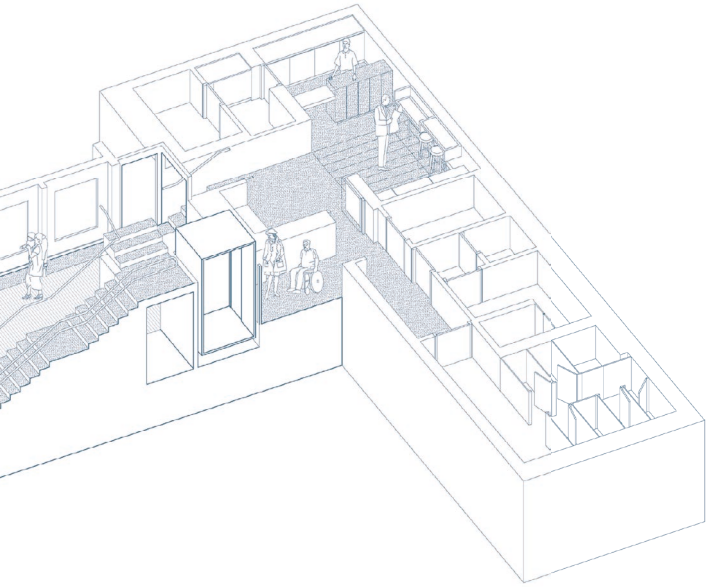
The Glasgow Film Theatre, formerly known as the Cosmo Cinema, was Scotland's first art house cinema. Since opening in 1939 it has become a well-loved and treasured landmark within the city, exemplifying the heyday of cinema design. Its Art Deco period interior has subsequently acquired heritage value for its creative timber applications.

In 2011, the GFT embarked on a phased journey to deliver a masterplan vision for a significant refurbishment to the category B-listed building. Following completion of the first phase in 2013, which included a new entrance box office facility and new sixty seat digital auditorium space, the recent completion stage by McGinlay Bell focused on the full refurbishment and alteration to both the public and private areas throughout the cinema building, encompassing approximately 350 square metres in area.



"With all its challenges the project allowed for great opportunity to exploit design ideas in material selection, bespoke joinery, and the making of new architectural interiors respecting what has gone before while delivering something new but familiar."
—McGinlay Bell





The principal aspiration for the project was to sensitively and seamlessly insert the new interior elements and surfaces, while respecting and reflecting the cinema's former glory.

McGinlay Bell's approach looked to traditional carpentry and wood making in order to formally establish ornament and decoration by carefully composed application of natural materials. Taking cues from the cinema's history a researched palette of timber materials resulted in the specification of sustainably sourced Iroko, profiled hardwood timber mouldings, and intricate curved profile forms.

Layers of circulation space have been defined and separated by use of timber whether connected or organised by interlocking spaces or open rooms.

Key to the success of the new interiors was the expertise by specialist contractor Thomas Johnstone, who was able to bring workshop precision and controlled craftsmanship to the project. Innovative methods of jointing and off-site fabrication also allowed for greater control and quality.

Delivery of the client's ambition for quality and a sense of timelessness but equally good levels of robustness necessary for a well-used public space required the completion stage of the GFT masterplan to be managed, during the building's 'day to day' operations.

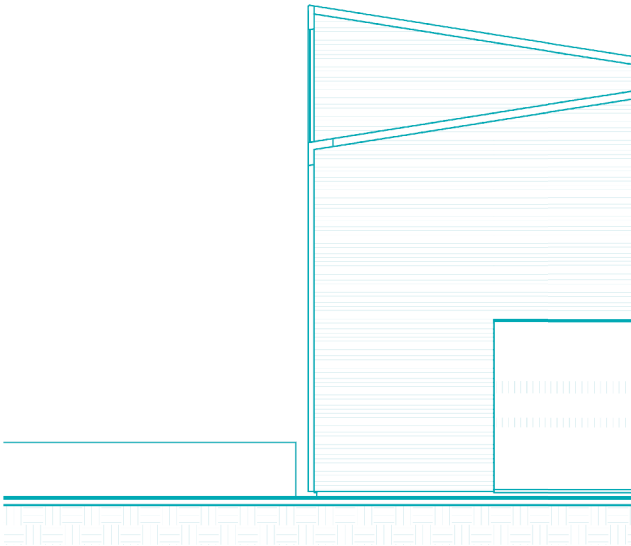
CAIRNGORM NATIONAL PARK AUTHORITY HEADQUARTERS
Moxon Architects

Project:	Cairngorm National Park Authority Headquarters
Location:	Grantown-on-Spey
Date Completed:	August 2018
Building Type:	Business / Public
Architect:	Ben Addy – Moxon Architects
Client:	Seafield Estate
Main Contractor:	AW Laing
Timber Supplier:	CLT supplied by Eurban, European Larch supplied by Russwood
Photographer:	Simon Kennedy

The new Cairngorms National Park Authority (CNPA) Headquarters, located within the Grantown-on-Spey Conservation Area, provides office and meeting accommodation for around 30 staff along with a new entrance and reception area that presents a welcoming public face.

Occupying an area immediately to the rear and connecting through to the pre-existing Category B Listed building at 14 The Square, the new L-shaped building respects its predecessor in terms of its low profile to the street edge. However it also simultaneously enlivens and provides a strong presence to the south end of its Church Avenue location.

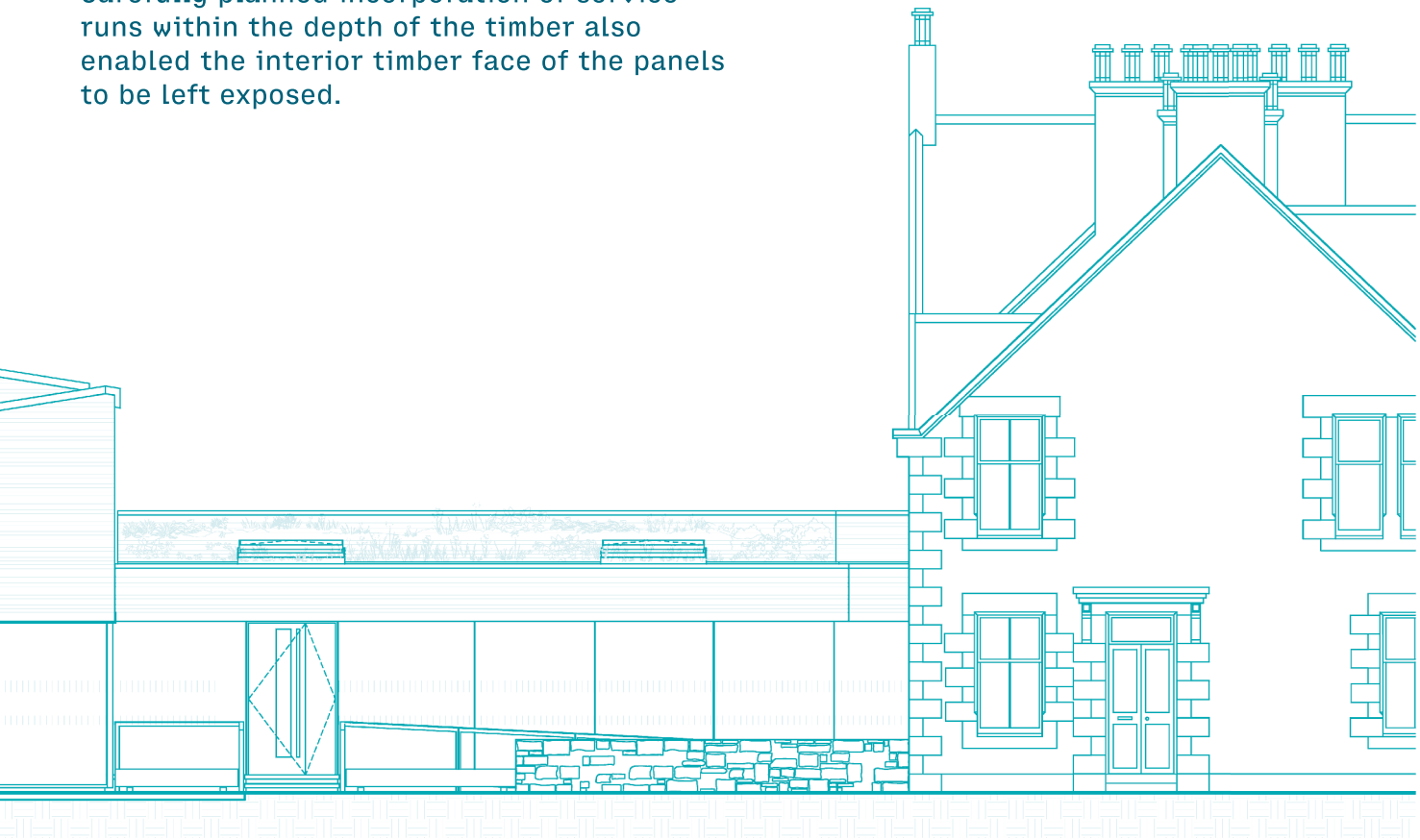
The building structure is formed entirely from Cross Laminated Timber (CLT), machined according to the Building Information Modelling (BIM) model provided to the contractors by the architect. This use of mass timber allowed the construction programme to be considerably shortened.



Externally the walls are clad in slow-grown, untreated European Larch, with the roof formed in zinc. Over time both materials will develop a patina resulting in a similar muted tone, complementing the stonework of the original building and the reused stone of the low wall to Church Avenue. The extension also features large areas of glazing to the west as well as significant glazed elements to the otherwise 'solid' elevations to the north and south.

The use of CLT was crucial in achieving contrasting 'solid and void' areas without relying too heavily on structural steelwork. Carefully planned incorporation of service runs within the depth of the timber also enabled the interior timber face of the panels to be left exposed.

A carbon assessment of the new CLT built headquarters has shown a reduction in emissions versus a reinforced concrete frame, to the sum of 166 tonnes CO_2 equivalent, which will offset the operational carbon emissions of the building for a period of 47 years.



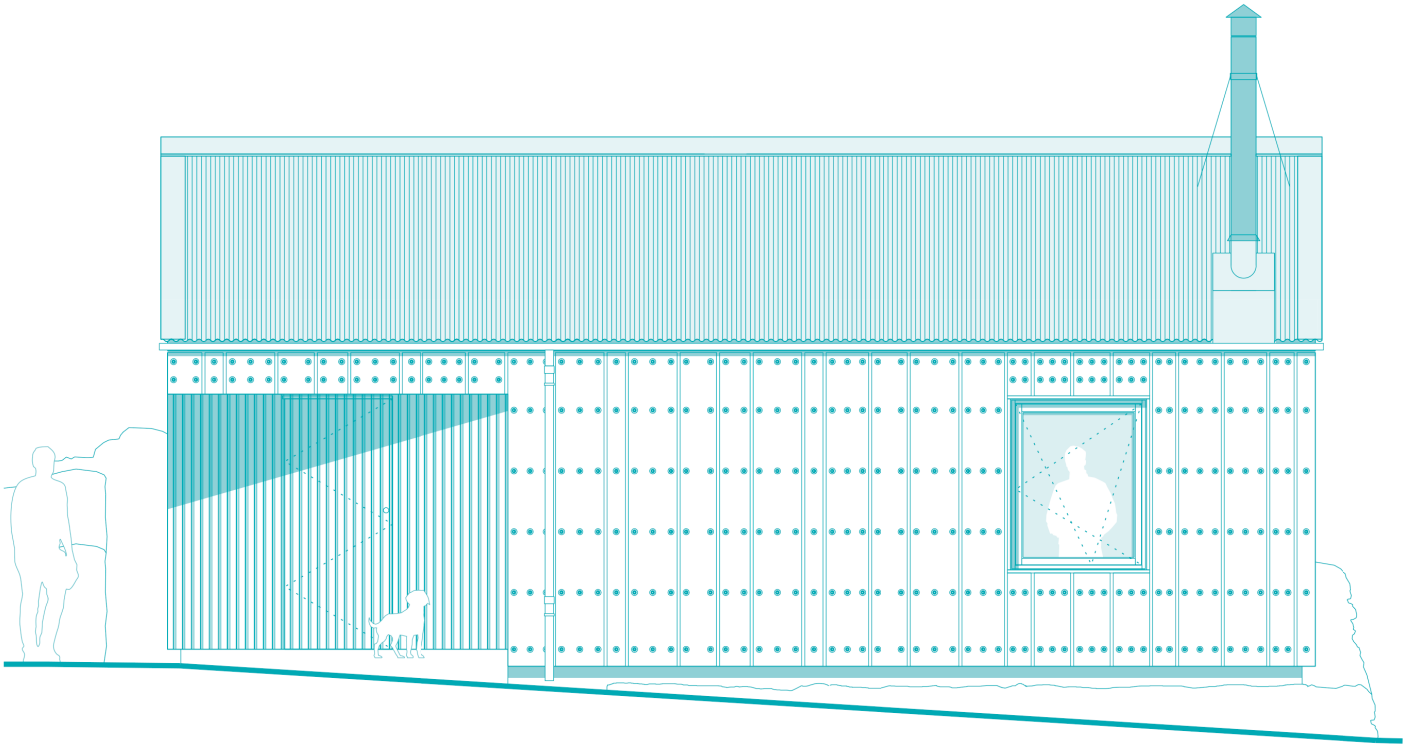
THE NEW STEADING
Ian O'Brien Studio

Project:	The New Steading
Location:	Perthshire
Date Completed:	January 2019
Building Type:	Private residence
Architect:	Ian O'Brien Studio
Main Contractor:	Kilgour Construction Ltd
Timber Supplier:	Timber Frame – Rob Roy Homes
Photographer:	Keith Hunter

The New Steading in rural Perthshire by Ian O'Brien Studio is the latest addition to a farm that has been in the current family for nearly a century.

The main idea was to create an annex to support the main farm building, a former shepherd's cottage, which has provided a base and continuing link with the landscape for this branch of the family since the 1980s when the house was refurbished for use as a holiday home. Having extended the main cottage as far as possible to house three generations of the extended family, the decision was made to create a further satellite building providing flexible daytime accommodation.

The main requirement of the brief was for a new light-filled living room that would be able to take full advantage of the views out to the surrounding landscape. The decision was taken to tuck the New Steading within the walls of a ruined stone farm building and set it at the floor level of an adjacent shed to allow for a potential future connection to be created should any further expansion be required.



The New Steading, which also includes a shower room, was constructed via a bespoke, pre-fabricated timber frame from a local manufacturer, chosen to speed up assembly time and provide a wind and watertight structure in this remote location as quickly as possible. Externally the house is clad in Oak cut from the clients' own trees.

The Oak, which will silver over time to complement the dark grey sandstone of the enclosing stone walls and the adjacent shepherd's cottage, has a rough, saw-cut finish and is arranged vertically in a board-on-board configuration to maximise texture and shadow. Carefully set out stainless steel movement fixings, add a further layer of detail to the elevations. Galvanised steel gable flashings tucked in behind the cladding provide crisp verge details.

Laminated timber and posts were combined with hidden steel beams to achieve the cantilever for the corner window as well as providing an open ceiling vault free of ties in the main room to meet the brief.

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RIAS
The Royal Incorporation of Architects in Scotland

Wood for Good

Front and Back Cover: The Macallan Distillery and Visitor Experience
Rogers Stirk Harbour + Partners

Find out more
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