

Wood Awards Ireland 2020 winners announced



The winners of Wood Awards Ireland (WAI) 2020 have been announced. The judging panel chaired by Ciaran O'Connor has selected the overall and six category winners as well as awarding commendations for projects that were deemed worthy of acknowledgment. The Wood Awards organisers and judges offer their sincere thanks to all entrants and hope you will enter projects in our 2022 awards.

WAI 2020 received entries from registered architects, engineers, designers, furniture makers, wood workers, restorers and third level colleges carrying out postdoctoral research into wood and wood products. This year we also feature a Third Level Student Wood Awards

Successful entrants feature wood as an inherent medium in their projects. Ciaran O'Connor, State Architect, President RIAI and chairperson of the adjudicating panel summed the judges' requirements:

We seek innovation in design and excellence in execution. WAI like wood itself, is not singular or one dimensional. There are many facets to this inherently sustainable material from solid sections of hardwood and softwood to engineered wood. The awarded schemes explore the intrinsic physical properties of wood while also developing the inherent relationship between form, technology and the brief requirements of the client.

WAI 2020 Overall Winner: Center Parcs Ireland

Center Parcs Ireland was chosen as the overall winner of WAI2020. Completed by John Sisk & Son (Holdings) Ltd with Holder Mathias Architects and Peter Brett Associates. This large-scale leisure project explored wood in all its forms from solid timber to engineered softwood including glulam and cross laminated timber (CLT).



This project has provided a world-class family holiday destination of scale within Ireland, a very real alternative to overseas family breaks. Center Parcs is a newly opened family holiday destination located outside Ballymahon, Co. Longford. The €233 million resort has added an entirely new dimension to Ireland's tourism and leisure market. The resort includes 466 self-catering lodges and 30 apartments. The lodges were designed and built in strict accordance with Irish Building Regulations and are A2 energy rated.

All wood used was Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (PEFC) certified while the imported wood was all in rough sawn format which was then manufactured in an Irish sawmill to achieve several different sizes.

Species used included Norway spruce, European and Siberian larch and western red cedar with Elliotis pine plywood, SafeStrip AntiSlip Decking in softwood (redwood) and hardwood (Bangkirai).



CATEGORY A – LARGE-SCALE PUBLIC BUILDINGS

Winning project: Sandford Park School Architects: O'Donnell + Tuomey Architects.

The new school known as the *Le Peton* building comprises ten classrooms, three meeting rooms, internal and external social spaces and ancillary accommodation. This is a two-storey brick and timber building, with hardwood timber windows and exposed timber trusses and roof joists internally. At the heart of the building is a large social space with forum seating which links the two floors and the external space with views to the playing fields beyond. The character of the social space is defined by the carefully selected materials mainly timber with a concrete structure at first floor. The forum seating is iroko hardwood, with walls lined in birch faced plywood. Large hardwood timber windows above the lockers flood the space with natural light along with higher level windows on the opposite side facing a more south/east direction.



Two large timber trusses with exposed steel connections define the space above with exposed timber joists, working in tandem to support the roof cladding above. An acoustic treatment of wood wool has been inserted between the joists to enhance the atmosphere of the space. A smaller truss is carefully placed on top of each concrete column along the circulation space on the first floor, continuing the language of timber throughout. A high level timber window runs the full length of the building providing natural light into the circulation and social space below.



Highly commended: Global Brain Health Institute, Trinity College Dublin by McCullough Mulvin Architects

The Global Brain Health Institute is a remarkable initiative between Trinity College Dublin and the University of California, San Francisco. McCullough Mulvin's approach to making new facilities for the Institute began with the end users, gaining an understanding of the brief, their work and research into dementia and brain health, and developing this building to make a distinctive place to support this. What captured our imagination is the potential for the project to tell the story of the research; to mirror the operation of the brain. The design intent aimed to unite the functional zones of the office plan into a single architectural language. Externally, new large curtain walling brings natural light deep into the plan of the new facility. Internally, the regular column grid of the plan is transformed by folded timber walls which are carefully positioned to create pockets of space with the office space and circulation areas.

Species: European oak veneer, wall panelling on MDF backing. European oak solid flooring. DRICON fire retardant treated European oak used for the ceiling.



Commended – Davagh Dark Sky Observatory by ARCEN Architects

Davagh Forest boasts one of the 'darkest skies' in Ireland and was chosen as the location for a New Visitor Centre and Dark Skies Observatory by the Mid Ulster District Council (MUDC). The site has subsequently been registered with the International Dark Skies Association (IDA). Strategically located within a small cleared valley, it naturally opens up to the southern skies. The hub is of lightweight construction and includes a pre-fabricated steel frame, timber stud infill and western red cedar cladding on a concrete plinth perched on piles with a perimeter timber deck walkway appearing to float above the existing fern. A sedum green roof provides habitat and food sources for a wide range of native wildlife while seamlessly integrating the building into the surrounding landscape and enhancing the buildings thermal properties, thus reducing energy consumption. Board on board timber cladding was used as a sympathetic and considered material response to allow the building form to sit comfortably in this sensitive site.

Species: Western red cedar

CATEGORY B – SMALL-SCALE PRIVATE BUILDINGS

Winner: Pavilion House by Robert Bourke Architects



The original brief was to renovate and improve an existing 1950s bungalow for a couple who were downsizing from a much larger Victorian house in Co. Wicklow. The bungalow was one of a row of four identical houses on a sloping site in the south Dublin suburbs. Having presented the clients with design options for reconfiguring the original house, their preference was to replace the house with a new structure that would better suit their brief. The new dwelling utilises a large pitched roof profile with terracotta tiles, reflecting the strongest feature of the three neighbouring houses. The triangular site informed the decision to provide additional space to the front of the house. This is achieved by adding a smaller, pitched roof pavilion, which houses a guest bedroom for visiting children and grandchildren. All rooms enjoy a different view of the gardens, which are landscaped in various ways to include an orchard, kitchen garden, lawn, patios, dry garden and wild garden.

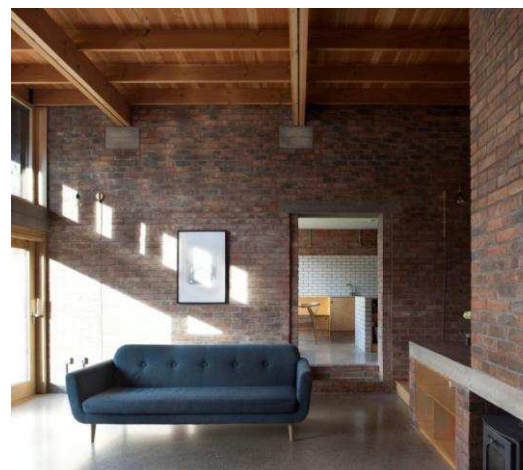


Subtle level changes within the house and gardens follow the contours of the sloping site. Exposed, board-marked concrete is used for the retaining walls of the gardens and the chimney breasts, which are structural elements that support the main roof. A mezzanine living room has a large window overlooking Dublin Bay and views over the ground floor living spaces. The exposed Douglas fir rafters of both roofs are lit by large roof lights, creating a warm and atmospheric sense of enclosure.

The pavilion is expressed as a miniature version of the main house and is connected to the dining area via a glazed corridor. Unlike the main house, with its masonry walls, the pavilion is constructed almost entirely from solid Douglas fir posts and beams. Window frames are concealed behind the posts to create the appearance of an open frame. The corridor forms a threshold between house, garden and pavilion and accommodates the levels changes in between.

Species: Douglas fir, birch plywood and oiled European oak timber flooring

Highly commended: House, coach house, garden by Culligan Architects



A new house and existing coach house are located within the garden of a protected structure to the rear of Prince Edward Terrace Lower, Blackrock, Co. Dublin. The approach to the site was driven by the idea of creating a series of garden spaces to the front, middle and rear of the site.

The house is entered through a timber canopy structure to the front of the house. This is made from Irish grown Douglas fir timber which has been stained black. The living room in the house has an exposed timber roof structure made again from Douglas fir, structural beams, joists and T&G decking boards. Sunlight entering the living room to the rear of the house forms dramatic shadows across the internal brick walls as it passes through the rhythmical vertical Douglas fir timber fins along the clerestory glazing. The use of timber throughout the project creates a comfortable and warm environment within the house. Wood is also a sustainable material with low embodied energy. The house makes the most of its orientation; accoya timber windows and glazed doors are carefully positioned to ensure that the interior spaces reflect the changing lights and seasons.



Highly commended: Farm Manager's House Meadow Court Stud by Lawrence & Long Architects

The organisation of the dwelling is an "upside-down house", with the living quarters above and sleeping quarters below in a part buried floor. External terraces are provided over both levels: at upper ground floor level, the terraces afford panoramic views across the meadows of the farm, while at lower ground floor, the single linear terrace (south-facing) forms an extension of the space of the bedrooms. To embed the building in the site, along its north and the south sides, earth embankments are formed against the building up to upper ground floor terrace level, so depending on one's point of view the building appears either one or two stories in height.

The building is composed of a tectonic frame structure of steel and timber on a stereotomic base of stone. For the timber, both iroko and oak are used with oiled iroko employed externally for its durability and oak internally for its warmth of colour. The finishes applied, maintain the visibility of the wood's natural grain.

For the design of each element specific pragmatic concerns of weathering, assembly and operation were important, but equally important was a person's perceived sensorial engagement with them. This is perhaps most evident in the design of the front entrance to the house. The entrance is composed of two iroko doors – an outer screen door which ties in with the adjoining timber rainscreen cladding and an inner glazed picture frame door – timber lined head and jambs with recessed lighting and a limestone threshold.

Species: European larch, ash and Douglas fir.



Commended: Glenavy: Donnelly Turpin Architects

Glenavy dates from 1870 and was one of the earliest villas constructed on the original Foxrock estate. A protected structure, it is best known as the family home of the artist Beatrice Elvery – Lady Glenavy. The design sought to re-establish a direct relationship between the house and surrounding gardens.

The extensive and varied use of timber evolved during the design process and blends with the diverse mature woodland. The new intervention takes the form of a simple timber box using different timbers internally and externally such as six metre tall vertical charred larch slats while internally Douglas fir is used in exposed floor joists, rafters, wall panelling and joinery.

The light timber palette extends to the bespoke steamed solid Irish ash dining table which forms the sculptural centre-piece in the new dining space while the Douglas fir slats in the kitchen and charred larch create a cohesive language throughout.

Species: European larch, ash and Douglas fir.

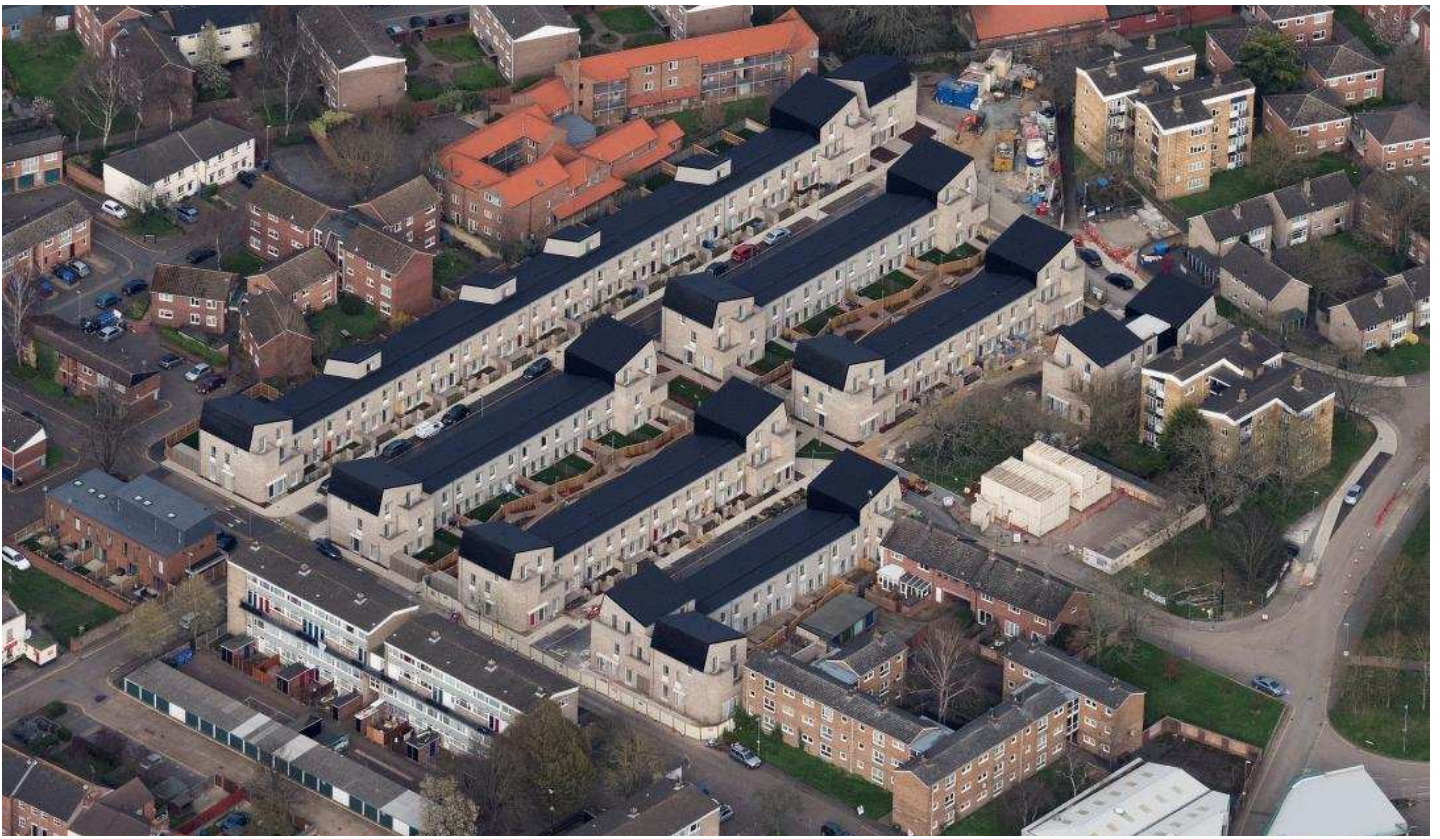
CATEGORY C – INTERNATIONAL

Winning project: Goldsmith Street, Norwich by Cygnum Building Offsite

Goldsmith Street social housing development of 105 ultra-low-energy homes for Norwich City Council, is the first social housing scheme to be shortlisted and win the coveted Stirling Prize in 2019. The prestigious award from RIBA, chaired by Julia Barfield, praised Goldsmith Street as: "A modest masterpiece. It is high-quality architecture in its purest most environmentally and socially-conscious form." With wood at the very heart of the project, the use of timber frame was a critical element in achieving the Passivhaus standard. This exemplary energy performance was achieved using a timber-based build approach, which reduced the development's embodied energy.

The project, through its development has had a positive impact on the people directly involved, and the wider environment. Tenants enjoy the benefits of annual fuel bills as little as £150 (€165), which helps the council's aspirations of tackling the issue of fuel poverty. Goldsmith Street is a development that has pushed the boundaries of design and construction; a social housing development that through its ambitions and challenges, hopes to inspire other city councils and local authorities to follow suit.





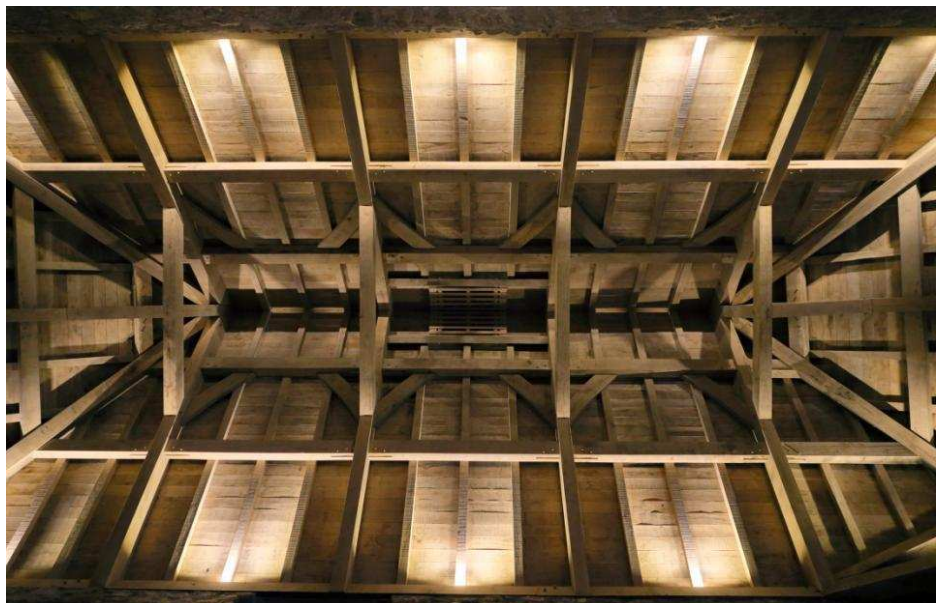
CATEGORY D – RESTORATION-CONSERVATION

Winning project: Carrickfergus Castle, roof Replacement by Coey Architects



Carrickfergus Castle is one of the most complete Norman castles of its type in Ireland and Britain. The project, led by the Historic Environment Division has overseen replacement of the roof to the Great Keep with an historically appropriate open oak truss design. The works are intended to secure the integrity of the roof and allow a programme of further interpretative and conservation work within the castle complex.

Wide engagement with the community was achieved during a symposium hosted with the Castle Studies Group held in Carrickfergus. Following this, in partnership with the local Council, a number of meetings were held with town traders, elected representatives and the public.



The principal trusses of the new roof are constructed from Irish oak felled by Storm Ophelia in 2007 which was then shaped and prepared in Devon. The timber trusses are used 'green' and oak-pegged without the need for nails or other metal fixings to hold them together.

The structure was clad in oak boards and finished with Cumbrian stone slate and associated lead work. The ridges of both hipped roofs are topped with louvered timber ventilation lanterns providing a passively ventilated space beneath, mitigating the need for mechanical ventilation and its associated cost and environmental impact.

The project was delivered at a cost of just over £1m (€1.1) with the construction period running from January 2019 to February 2020.

Species: Irish oak.



Highly commended: Restoration of 1905 yacht Naneen at Kilrush Boatyard, managed by Master Shipwright Stephen Morris

Restoration of the Yacht Naneen, one of a fleet of seven classic, gaff rigged yachts, built in Ireland between 1903 and 1908, has attracted international attention.

Designed by world famous naval architect, Alfred Mylne in 1902, for members of Dublin Bay Sailing Club, the fleet raced in Dublin Bay until 1986 when major structural restoration was required. The fleet was laid up in Arklow until the present project began in 2017 with the formation of The Dublin Bay 21 Footer Classic Yacht Association and the transportation of Naneen to Kilrush.

This is an authentic wooden boat restoration, using Alfred Mylne's original drawings supplemented by construction details provided by naval architect, Paul Spooner. The original two-ton lead ballast keel has been reused together with the original iron tiller and fittings and some greenheart and pitch pine from the original vessel.

Central to the project has been the combination of the traditional skill of the shipwright and the application of the latest technical knowledge in timber conservation and innovative wooden boat construction.

The result clearly illustrates the effectiveness of wood as a structure and as a lightweight skin, capable of withstanding the toughest of marine environments.



The innovative use of laminated beams and frames and epoxy resins have combined to create a stiff, water tight, low maintenance, monocoque hull, without nails or screws, which allows the use of durable two-pack polyurethane finishes. Naneen is the first of the fleet to be restored. Three more vessels are underway at Kilrush Boatyard, led by Stephen Morris, who now employs four trades people and one apprentice.

Species; Iroko, yellow cedar, Douglas fir, African mahogany and Sitka spruce as well as salvaged pitch pine and greenheart.

CATEGORY E – FURNITURE

Winner: Vinculum Series by Alan Meredith



The intention of the Vinculum Series body of work is to create functional surfaces that merge directly into the structure of the given piece. The common thread within the series is the use of steam bent sections of wood. Through the process of reading the properties of the material and exploring its possibilities, new and original forms emerge.

The solid sections of material allow the works to be carved and shaped into more refined compositions, revealing the depth of the material and its tactile qualities. The innovative aspect of the process comes from the research and experimentation that has gone into the steam bending apparatus that allows the ambitious sections of wood to be bent into tight curves. This process involves a steam chamber, oriented strandboard (OSB) templates and a stainless steel strap and clamping mechanism which is specifically tailored to each piece realised.



The process of steaming consists of taking completely unseasoned wood and placing it in a steam chamber for up to three hours. It is then removed, placed in the bending apparatus and quickly bent into shape. It is left overnight and then placed on a drying rack of similar geometry for a number of weeks. The wood then naturally dries very quickly in a warm workshop due to the structural changes the steaming process has caused to the structure of the wood.

This aspect of the process is significant as it means the steaming process allows both form making and wood drying to be one and the same. The need for kiln drying and wood glue is thus reduced significantly to comparable forms made from glulam.

Species: Irish oak and ash.

CATEGORY D – INNOVATION

Winning project: Irish Cross Laminated Timber (CLT) by Timber Engineering Research Group National University of Ireland Galway



Developments in engineered-wood construction products, such as CLT panels, have transformed the building landscape, due to its inherent strength and sustainability credentials. CLT is a multi-layer panel product made of at least three orthogonally bonded layers of timber, which has exceptional rigidity and dimensional stability. CLT is precision manufactured offsite thereby maximising efficiency on all levels improving construction and project delivery time and reducing labour costs.

CLT is now beginning to displace carbon-intensive steel and concrete in demanding structural applications such as multi-storey buildings. In central Europe and Scandinavia, CLT is primarily manufactured from grade C24 European spruce. With forecasts predicting large increases in Irish timber coming to the market over the coming decades, a significant opportunity exists for the Irish wood products sector including the potential use of Irish timber to manufacture CLT.

Researchers at NUI Galway have developed and tested a viable CLT product from Irish-grown Sitka spruce, which meets the structural requirements of current design standards. The development was carried out over a number of phases starting with the identification of processing parameters to ensure integrity of the adhesive bonds in the panel.

Having established adhesive type and pressing parameters compatible with Irish-grown Sitka spruce, the next phase involved the design, manufacture and testing of Irish CLT panels to European standards to establish their strength and stiffness and to establish appropriate values for design. In the final phase of the work, industry standard connection technology for joining the panels was investigated through a laboratory testing programme.

Introduction:

Due to the increasing focus on the use of sustainable construction materials to meet environmental targets, related to energy use and carbon emissions, there has been a resurgence of interest in timber buildings. Developments in engineered-wood construction products, such as cross laminated timber (CLT) panels, have transformed the building landscape, due to its inherent strength and sustainability credentials. CLT is increasingly being used in commercial and residential construction as a replacement for more carbon-intensive materials including multi-storey buildings, such as the recently completed 84 m tall HoHo building in Vienna (Figure 1).

Currently, the only option in Ireland is importation of CLT manufactured in central Europe or Scandinavia. While this may result in a lower carbon footprint than using steel or concrete, a preferred option is to use Irish-grown timber. With forecasts predicting large increases in timber coming to the market in the coming decade due to an ambitious afforestation programme in the 1990s, a significant opportunity exists for the Irish wood products sector including the potential use of Irish timber to manufacture CLT.

Researchers at NUI Galway have developed and tested a viable CLT product from Irish-grown Sitka spruce, which meets the structural requirements of current design standards.



CLT Panel processing parameters:

In Europe, commercial CLT is currently manufactured primarily from Grade C24 Norway spruce. As Irish Sitka spruce is graded as C16, tests were carried out at NUI Galway to identify suitable adhesives and associated pressing parameters to guarantee the integrity of the bond between the different CLT layers [1]. One component polyurethane and two component phenol resorcinol formaldehyde both produced reliable bonds when using specific pressure and press times.



Figure 3: Large scale Irish CLT floor panel being tested to EN 16351 [4]

Irish CLT floor panels:

To establish the load-bearing capacity of Irish Sitka spruce CLT panels, a programme of full-scale bending tests (Figure 3) was carried out for a range of panel spans and thicknesses. The stiffness and strength values exceeded the theoretical values in all cases [2,3]. Characteristic values were established for use in design.

When compared to commercial CLT panels made from C24 timber, the C16 panels required an increase in thickness of less than 12% to achieve the same performance. The testing programme has confirmed the suitability of Irish Sitka spruce as a feedstock for CLT manufacture.



Irish CLT panel connections:

Typically CLT panels are lifted into place and connected using steel brackets in combination with steel fasteners (Figures 4 and 5). As part of the investigation of Irish CLT, typical connections were tested with screws of varying lengths to determine their capacity and to examine their influence on the connection behaviour (Figure 6). An example of the results of a cyclic shear test on a bracket connection is shown in Figure 7. The experimental test results were compared to current design calculations available in Eurocode 5 (EC5) [4]. The results indicated that these typical brackets can be successfully used in connections between Irish Sitka spruce CLT panels [5].



Figure 6: Testing of bracket connection in tension

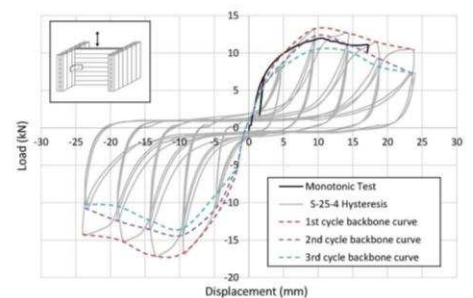


Figure 7: Hysteresis loops of shear test specimen with associated backbone curves and monotonic test curve [5]

This study has established the viability of using grade C16 Irish Sitka spruce to produce structural CLT panels. Suitable adhesives and pressing parameters to achieve bond integrity have been determined. The load capacity of CLT floor systems has been established and characteristic values for design are now available. When compared to commercial CLT panels made from C24 timber, the C16 panels required an increase in thickness of less than 12% to achieve the same performance. Additionally, current steel fastener technology has been shown to be suitable for connections between Irish CLT panels.

Further work is required on upscaling the technology from laboratory scale to full commercial production and the inclusion of finger-joints for large scale panels.



Highly commended: Oak Vessels by Alan Meredith

These sculptural wood-turned vessels are made from locally sourced Irish oak, Ireland's national tree and a material with exceptional qualities, longevity, strength and character.

Turned and hollowed from solid pieces of unseasoned oak, the intention is to create wholesome and strong forms that reveal the qualities and strengths of the oak, which has a strong character and is malleable when steamed. The works are a dialogue between hand and material, a dialogue which aims to create a distilled complexity; visually calm and skilfully executed. Through the sympathetic manipulation of the material one hopes to explore new possibilities and original forms.

The solid oak pieces are turned on the lathe to a thickness of 3mm. This transforms the oak into a flexible and pliable material which once steamed can be manipulated into new and exciting forms. Once the oak dries it becomes soft again and holds its new form. Care is taken to ensure an even wall thickness and to create a balanced and lightweight work.

Species: Irish oak.

Commended: Butter Knives by Chaim Factor, Hill Picket Studios

A set of commonly used table utility tools for use with butter, pat , relish, jams etc. The design brief sets out to enhance the classical 'Paddle' butter knife and secondly to reimagine the design through the perspective of material use, sustainability and manufacturing techniques. A vital consideration of the design research was to investigate added value to a raw material that is locally sourced and openly accessible for low to moderate manufacturing and market requirements.

The knives are presented in white sycamore. The whiteness is achieved by early sawing and then standing the freshly sawn stock in a vertical position before the sugars in the sap create colour in the wood grain.

The handles are presented in Irish oak. The oak components of each knife have been selected from radial sawn stock for maximum stability and then fumed with Ammonium Hydroxide to enrich the colour and heighten the contrast with the white sycamore. The ammonium hydroxide reacts with the tannins in the oak and enhances the medullary rays in the quarter sawn stock.

Commended: East Pavilion by OGU Architects.

Cultural identity can be a divisive issue in Belfast's communities, and tensions are heightened in areas such as the pavilion's location, which have lost prosperity as surrounding factories have closed down. It was important to find cultural common ground shared across communities neighbouring the site. The Belfast Truss used in this pavilion design represents the area's history of manufacturing ingenuity. Many of the city's largest factories had such a roof, including the Belfast Ropeworks which used to face the site. Each element of the structure is designed to evoke memories of the area's industrial structures.

Even though this project references history, it is not a nostalgic look backwards, but an opportunity to draw attention to emerging construction innovation in Northern Ireland, and contribute to the local economy. The design is an assembly of three elements, each crafted in a local factory. Traditional craft skills were combined with innovative technologies in order to create bespoke building components that could be rapidly assembled on site. This was important given the pavilion's public location. Joiners BPJ Group worked from the architects models and detail drawings to produce 1:1 scale prototypes of the trusses and joints between elements using CNC in order to develop the design of each connection. The entire timber roof structure was assembled in the factory to test the fit of each element before being dismantled and transported to site.

The pavilion consists of an accoya structure crafted by the BPJ Group; a corten steel roof manufactured by Fabrite in Lisburn; and concrete footings cast by Moore Concrete Products in Ballymena (using an innovative, sustainable concrete mix). Aiming at the start to draw attention to local innovation, OGU discovered through the process that this inventiveness is dependent on a rich history of craftsmanship in Belfast's workshops and factories.





Commended: Little Tulips of Gold by Emmet Kane

Brief: Chapter One is a Michelin Star Restaurant in Parnell Square in Dublin 1. The design theme in Chapter One is minimalist with modern paintings and sculptures. Head Chef and owner Ross Lewis commissioned Emmet Kane to create sculpture pieces for each table in the restaurant where each piece would be placed on the tables beside the condiments and were to be small enough not to overpower the tables and fit in with the overall design and innovative cuisine of Chapter One.

Design: Several sample pieces were created from oak which were ebonised and gilded with 23c gold leaf and the final form selected was a design Kane had created on a larger scale in a series of pieces entitled "Tulip". A number of challenges had to be overcome to create a smaller scale for the "Little Tulips of Gold" where each piece had to be stable enough to sit on the table and sturdy if handled and admired on busy restaurant tables but yet retain their elegance and refinement to draw in the customer as a focal point on each table. Each piece was turned from Irish green oak and left to dry over a number of weeks and then textured, ebonised using the natural tannin in the oak which reacts with iron oxide, oiled with Danish oil mixed with graphite which gives an almost metal like finish. The inside of each piece is sanded and gilded with 23c gold leaf. To assist stability, each piece is fitted with a rare earth magnet which sits on a 40mm disc of steel. All 24 pieces are similar yet each one has its own unique characteristic.

CATEGORY G: THIRD LEVEL STUDENT WOOD AWARDS

Highly commended: E3 Rocking Chair by Elysia Taylor, Technological University Dublin



Inspired by Thonet's rocking chair No.21, this chair was designed to be an innovative piece that features new methods in manufacturing, advances in woodworking technology and an original piece, designed and manufactured by Elysia Taylor. Thonet's chair was made pre 1950s and since then woodworking techniques have advanced significantly. The aim was to incorporate modern techniques and use them as an inspiration to design and manufacture an innovative rocking chair. The project involved research into the following; prototypes, calculations for the centre of gravity, veneers versus solid timber, adhesives, material choice and formers manufactured on the CNC. "The modern technique I used instead of steam bending was to construct the chair out of veneers. 30 beech veneers were laminated and glued together," says Elysia.

The CNC was used to cut out the formers for bending the components using MDF. In relation to dimensions, a rocking chair should be a personalised piece of furniture and made for an individual. The design of this rocking chair was to create a continuous flow and ease. The long length of veneers allowed the rocker and side of the chair to be one continuous piece. By using one piece, she was able to incorporate multiple curves within one length. She then joined the rails to both sides using traditional dovetail joints.

"In addition to the traditional joints, I incorporated complex angles within every joint," explains Elysia. "This allowed the chair to be tapered in both directions, creating an appealing visual effect to the eye" Using 0.5mm veneer sheets with the combination of the correct adhesive, the rocking chair was structurally achieved and also displayed its strength to carry out its function. The student also expanded her skills by studying upholstery to allow her to upholster on the chair.

Highly commended: Constructive Assembly by Eoghan Smith, University College Dublin.



This thesis is interested in the emergence of different architectural languages in the city – from the spontaneous and informal on the one hand, to the more formal, institutional on the other – and their capacity to foster an inclusive and participatory relationship between the city's architecture and its citizens. "Taking as a point of departure the Irish Citizens Assembly, this thesis imagines a site in the city where public participation in the Irish democratic process is given physical and symbolic status," maintains Eoghan. A new Citizens Assembly Building on the corner of Merrion Square proposes an architecture in which inclusive, deliberative dialogues in the democratic process are facilitated, and celebrated. The Assembly Room is elevated in a timber, tensile structure which draws from the language of temporary festival tents and stadia - buildings where a clear articulation of the assembly of structure becomes representative of the assembly of people.

Each structural member, their jointing, and secondary members such as openable windows and gutters are given a highly expressive character in order to invite curiosity and participation. Beneath, a sunken amphitheatre is carved into the park to form a citizens information centre – a space for dissemination which merges with the landscape of the park. A new public plaza is proposed which claims land from the gated lawn of Leinster House, and connects the entrances of the National Gallery, the Natural History Museum and the new Assembly Building. The building's structure opens out towards the park and the new square to form stages, creating an infrastructure for performance and demonstration.

Commended: Shifting Sands by Nigel Wynne, University College Dublin

The objective of this project is to create *a soft infrastructure to safeguard amenity, through building with nature*. The thesis project 'Shifting sands' looks to understand the site context of Bull Island, Dublin Bay, it's threshold between land and sea and how we can safeguard this UNESCO nature reserve amenity for future generations. The title 'shifting sands' comes from the study of Bull Island and its formation through the initial manmade intervention of North bull wall in 1825, a piece of marine infrastructure to help prevent silting within the shipping channel to Dublin port. The sea wall combined through the natural process of sediment movement called littoral drift, which is caused by the prevailing currents and winds of Dublin Bay, formed Bull island gradually over 200 years.

The key proposal is to create 6 km of soft infrastructure between North Bull Wall and Bull Island. This proposed infrastructure is a dune formation framework, consisting of timber slated walls combined with a timber walkway, to give human passage along the dunes in order to prevent tramping of existing marram grass and disturbing the ecology.

Commended: Dominick Street Housing André Goyvaerts, University College Dublin

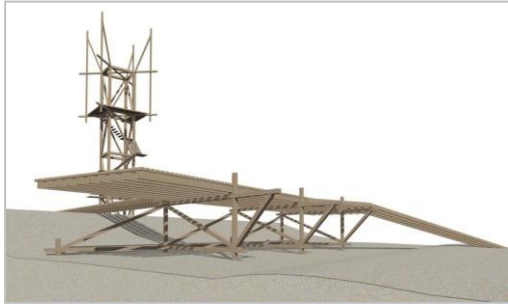
"The "Dominick Street Housing" project was the comprehensive Design Project of Semester 1 during my 4th year in UCD," says André Goyvaerts. In this scheme, there are three residential blocks. Block A, situated at the Dominick Street front, which contains a community centre at ground level that opens onto the multi-usage square. Blocks B and C are situated facing onto Granby Lane. The three blocks comprise a total of 16 residential units, providing 16 bedrooms – single, two and three rooms.

"Structurally, I decided to take an alternative route from my peers, and decided to opt for a timber construction,". says André. "I decided to select a supplier and work from their CLT specifications (LENO® Cross Laminated Timber). I decided to go with this company due to their commitment to sustainability and high-quality timber design. Climate change possesses a profound threat and it is becoming increasingly vital for architects to act upon the materials we use, considering factors such as embodied carbon within our designs to reduce the pollution caused by our industry. Wood, being the only construction material that can store CO₂ then became an attractive choice for me to use in my designs. I utilized CLT throughout the design"

Commended: Methodology for reuse: Circular Economy by Aisling Mulligan University College Dublin

This project aims to explore a possible restructuring of the construction sector towards a model which embraces a circular economy. This model focuses on the use of low embodied energy materials, which can be locally-sourced and use little to no energy in their production, coupled with the reuse of construction waste. When sustainable materials are used in conjunction with a reduction of a structure's operational energy, a huge decrease is seen in harmful emissions..

In this project, a focus is drawn upon a collection of buildings in the vicinity of Tara Street which are due to be demolished. These buildings are used as a starting point for the development of a regional inventory of materials, their constituent parts are categorised and inventorised to allow for their easy identification and reuse, avoiding their move to landfill and extending their useful life. Mass timber elements, in the form of dowel-laminated timber (DLT) panels, have been used to develop a structural system based on a double skin façade. The use of DLT panels is important as it allows for the use of native Irish softwood species. The success of DLT relies on mass softwood elements held together using hardwood dowels. Once in place, the dowels absorb moisture from the softwood and expand causing friction and chemical reactions which hold the panels together, without the need for laminates or adhesives.



Wood Awards IRELAND 2020

Wood Awards Ireland 2020 is organised by the Wood Marketing Federation in association with Forest Industries Ireland (FII) and supported by the Royal Institute of the Architects of Ireland (RIAI) and the Society of Irish Foresters. The awards are part-funded by the Department of Agriculture, Food and the Marine while the International Award is sponsored by Enterprise Ireland.

WAI 2020 JUDGING PANEL AND SUPPORTS:

Ciaran O'Connor, State Architect, President RAI and jury chairperson.
Catherine Crowe, LUCA Architecture
Neil Kerrigan, Enterprise Ireland
Karen McEvoy, Bucholz McEvoy Architects
Simon O'Driscoll, Simon O'Driscoll Furniture
Des O'Toole, Coillte and Forest Industries Ireland

Facilitator: Dr. Sandra O'Connell, RIAI
Project Manager: Donal Magner, Wood Marketing Federation.



Ciaran O'Connor, Chairperson of WAI 2020 (centre) with Dr. Sandra O'Connell, RIAI and Donal Magner, WAI.

PRESENTATION OF AWARDS

The presentation of Wood Awards Ireland 2020 prizes will be decided in January 2021. It is hoped to mark the occasion with a presentation ceremony but this is dependent on Covid-19 restrictions. Should a presentation not be possible, awards and certificates will be delivered to winners.

Please note that a catalogue of winners is being prepared and will feature additional images to those featured in this newsletter along with further details of projects and information on photographers and sponsors.

ACKNOWLEDGEMENTS

We wish to acknowledge the support of Ciaran O'Connor, chairperson of WAI jury and members of the judging panel: Catherine Crowe, Neil Kerrigan, Karen McEvoy, Simon O'Driscoll and Des O'Toole.

Thanks to Dr. Sandra O'Connell, Director of Architecture and Communications and Pat O'Sullivan, Technical Director, Society of Irish Foresters for their support throughout and to Karlo Benic, Facilities coordinator, RIAI for mounting the exhibition of longlisted projects.

Donal Magner
Project Manager
WAI 2020
www.wood.ie

WOOD AWARDS IRELAND SCULPTURES BY MICHAEL WARREN

One of the features of Wood Awards Ireland is the presentation of original sculptures in wood to the competition winners. Since the awards' inception in 2014 these works have been created and made by Michael Warren, Ireland's foremost sculptor. Michael Warren was commissioned by the Wood Marketing Federation, not just because of his international status as a major sculptor but also because wood has been the medium of choice in many of his inspiring works in Ireland and overseas. He received Honorary Membership of RIAI in 2012.



Michael Warren with the Wood Awards Ireland 2020 sculptures, to be presented to the outright winner and category award winners.

FII acknowledges the support of the Department of Agriculture, Food and the Marine, RIAI, Enterprise Ireland and the Society of Irish Foresters.