

A modern interior space featuring teal perforated walls and wooden steps. The walls have a textured, perforated appearance. The floor is dark, and the steps are made of light-colored wood. Several small, cylindrical pendant lights hang from the ceiling. The overall atmosphere is contemporary and minimalist.

**EUROPEAN
COPPER IN
ARCHITECTURE
AWARDS 15**

INTRODUCTION

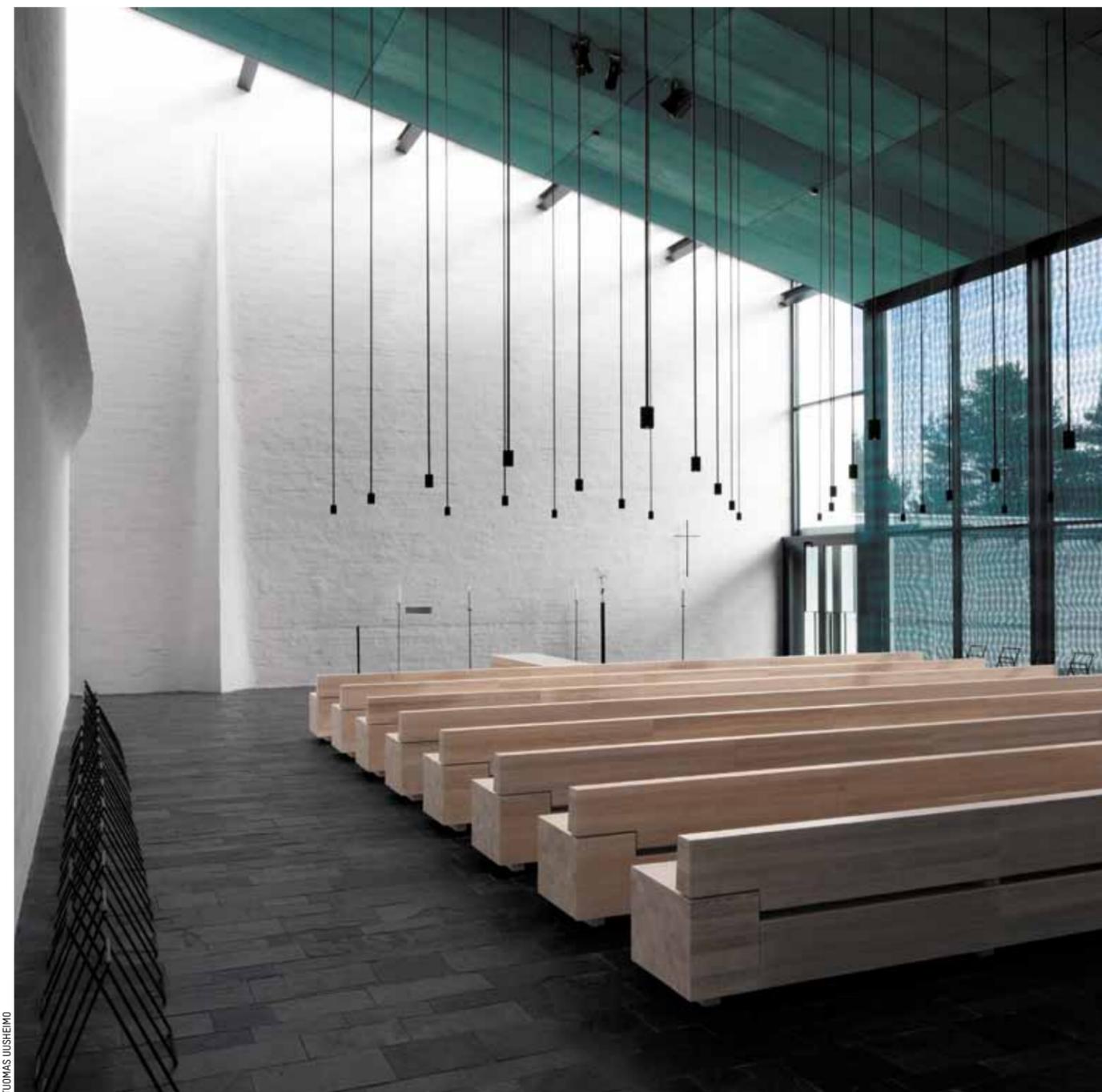
Now in their 15th cycle, the Awards not only recognise the skilful and inventive use of copper in buildings, they are also a highly impressive celebration of the best in contemporary European architecture. With an increase in entries from 47 to 66 this year, the Awards clearly demonstrate the enduring appeal of copper and its various alloys.

This year's judging panel included four architects, all recipients of previous Copper in Architecture Awards: Einar Jarmund, partner in Oslo-based Jarmund/Vignæs; Patrick Genard, who runs his own practice in Barcelona; Pia Salin of Basel-based Zwimpfer Partner Architekten and Keith Williams, principal of Keith Williams Architects. Architectural Review Editor Catherine Slessor chaired the panel and

summarises the judges' comments on each shortlisted project.

Entries were assessed from photographs, drawings and descriptions submitted by their architects. Initially, the judges independently considered each entry before discussing specific projects that could move forward to the next stage. Selected schemes were then openly debated and seven were finally shortlisted, from which the following awards were made after considerable deliberation.

Set in disparate locales from central London to the South Tyrol, the seven shortlisted projects explore the role of copper as an architecturally versatile, as well as an environmentally sustainable, material. To find out more, visit www.copperconcept.org/awards.



TUOMAS LUSHIEMO

WINNER

CHAPEL OF ST. LAWRENCE VANTAA, FINLAND ARCHITECT AVANTO ARKKITEHDIT

This dedicated cemetery chapel aims to reconcile the emotional needs of mourners with the pragmatic demands of funerals. The deceased are brought into the building along a separate route to the cooled, lower level preparation areas. Above, the ground floor plan defines a symbolic route through a series of areas punctuated by intermediate rooms preparing mourners for the next stage, guided by a continuous skylight. This realises the central concept of *polku* or 'path' – man's journey from mortality to eternity.

Separate entrances, each with its own quiet garden, serve two chapels which can be used concurrently. Low, dimly-lit reception areas allow reflection while separate groups of mourners wait for chapels to become available. Stairs lead down to an intimate area where close family can view the open coffin. The chapels terminate the straight routes from the entrances with a symbolic 'final turning point' where mourners bid farewell and leave the deceased toward the unknown, but goes on.

The new building is close to a 15th century church in an area classed as a nationally significant, culturally historic environment. It links disparate elements in the surroundings without appearing as a

singular building mass, leaving the old medieval stone church and bell tower to dominate the village. It also connects with the graveyard, leaving the complex of old buildings with their own boundaries and territories untouched.

The building uses similar materials as the old structures in the area. The mass of the load-bearing solid masonry walls balances changes in temperature and moisture. Lightly plastered and whitewashed walls form a light, tranquil background for the events taking place in the chapel spaces. The partition walls are in-situ cast white concrete and the roof is patinated copper, like the roof of the old church. Many of the ceilings are finished with removable, perforated copper trays. The glazed walls toward the graveyard in the chapels are covered with a patinated copper mesh, which functions as a screen between the outside and the internal spaces of the chapel. The mesh also tempers thermal gain from the sun.

JURY COMMENTS

The jury found this project for a funeral chapel a highly compelling and atmospheric study in the handling of space, light and materials. White walls are counterpointed by roofs and ceilings made of patinated copper. Each panel was patinated by hand, so the copper has exquisitely sensuous colour and texture. Patinated copper mesh panels also screen the glazed walls overlooking an adjoining churchyard. The jury was very impressed by the high level of craft and technical skills involved, and how the material was used to evoke a wonderfully tranquil sense of the numinous, creating an appropriately solemn yet nonetheless uplifting setting for the immemorial rituals of death and parting.



TUOMAS UUSHEIMO



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HAND PATINATION

Pertti Kukkonen

COPPERSMITHS

Jukka Merta

Selki Asema



**WINNER
INTERVIEW**

AVANTO ARKKITEHDIT

Chris Hodson interviewed Avanto Arkkitehdit partner Anu Puustinen at the practice's offices in Helsinki.

CH How did Avanto come into being and how is it developing now?

AP Ville Hara and I set up the partnership in 2004 after winning the cemetery chapel competition the year before. Over the seven years that we have worked together we have been involved with projects of varying scale for public communities, private companies and private customers. We have also been successful in several national and international architectural competitions and have both taught at Helsinki University of Technology.

CH What is at the heart of your approach to architecture?

AP Avanto means 'a hole in the ice for bathing in winter' – a popular hobby in Finland – which symbolises our design philosophy. We want to 'open up' the environment to people with architecture that evokes emotions. For this we need to understand and empathise with those using the space; to make people feel and experience.

CH How was this approach applied to the St. Lawrence Chapel project?

AP We set out to fully understand

both the grieving process of mourners and the practical issues by attending funerals of complete strangers.

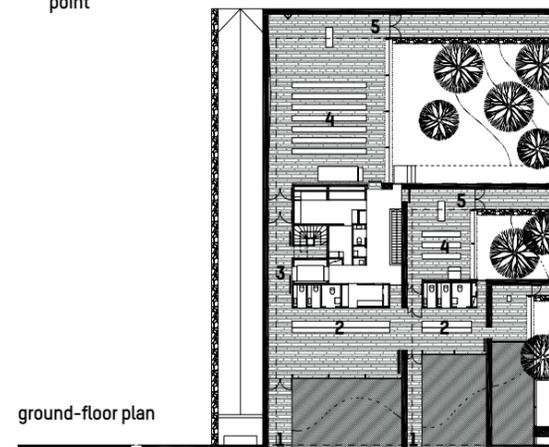
The resulting design aims to help the mourner, offering space for grief. Giving peace and dignity to the funeral ceremony was of primary importance in the planning of the building, and movement from one room to another is highlighted with a change of lighting and spatial characteristics.

CH What role does sustainability play in this particular design and your work in general?

AP We want to create a better environment using architecture as a tool. The starting point for any project is the proviso that a building fits its environment and suits the needs of the occupants on a long-term basis. But we also aim to create architecture that is long-lasting, durable and environmentally friendly. Of course, climate change is taken into consideration and our buildings are well-insulated and use recyclable materials. Certainly, the chapel is built to last with a limited palette of extremely durable materials, including copper used extensively both internally and externally.

We set a goal of a 200-year lifetime and a lifecycle simulator was used during the design to check this.

- 1 entrance
- 2 reception
- 3 stairs
- 4 chapel
- 5 final turning point



ground-floor plan

HIGHLY COMMENDED

VILLA VAUBAN LUXEMBOURG

ARCHITECT

PHILIPPE SCHMIT ARCHITECTS

The historic Villa Vauban is located in Luxembourg's green belt and has hosted the municipal art gallery since 1959. In 2002 Philippe Schmit was commissioned to develop plans for a comprehensive renovation and extension project. This increases exhibition space from 350m² to 1200m² while respecting the site's historic elements: a fortress wall, built by Vauban in 1739, and the villa dating from 1871-73 with its garden and public park from the same period. Essentially, the design aims to create a new balance between buildings and landscape. Integration is achieved by burying half of the new building underground and giving it a dynamic facade of translucent, large sheets of perforated brass, which reflects rather than dominates the park. The new architectural ensemble is clearly identifiable as a public building in its municipal park setting.

The new building gives two levels of exhibition spaces behind the villa, rising up from the foundation of the fortress wall below park level. Openings in the frontage create viewing points to help visitors' spatial orientation and to reveal activities inside the museum to passers-by. The folds of the metal facade and roof surfaces covering the new building give a strong haptic quality and an impression of lightness while

integrating it into the landscape. Internally, exhibition spaces are characterised by hammered concrete surfaces, etched translucent glass facades and oak wooden floors. The bare walls reveal small quartz crystals in the concrete, making them both tactile and light.

Old and new exhibition rooms have been integrated into flexible continuous spaces, with a linking entrance hall forming a transition between the two buildings. Galleries in the new extension have been articulated as superimposed flights of rooms. They are slightly offset along their longitudinal axis, creating setbacks and recesses for various uses including a sculpture gallery, children's workshop, loggia with a view onto the park and a generous staircase leading down to the lower exhibition level. These elements define the choreography of the museum circulation – slowing down the pace and allowing visitors to savour the slowly disappearing park landscape and appreciate details of textures and space within the building.



JURY COMMENTS

The jury was extremely impressed by this new addition to an existing art museum. Though the new parts are conspicuously of their time, they form a sensitively judged counterpoint both to the original historic building and the surrounding parkland landscape. The new extension is wrapped in delicately perforated panels of brass, and the jury especially admired how this metal skin appears to dissolve when viewed at night, changing from an opaque surface to a sensuously glowing, translucent veil. The combination of aesthetic refinement and technical skill made this a stand-out project.

COMMENDED
HOUSE
SEEHEIM, GERMANY
 ARCHITECT
FRITSCH UND SCHLÜTER
ARCHITEKTEN

Located in a lush, green, residential area developed around 1900, the site's prominent hillside position commands impressive, distant views of the Rhine valley. The archetypal form of the gabled house, defined by the development plan, was taken up thematically as a monolithic form that advances beyond the edge of the slope, yet remains in equilibrium.

Contrasting views to the outside have been concentrated and staged with just four large openings across the corners biting into the monolithic form. Vertical 'cut-out' spaces, with full roof glazing over the dining area and stairs, connect the lower and upper floors. Panoramic openings were made as large as possible in order to capture the magnificent views – a key aspect of the site.

A central aim of the design was to create a homogenous appearance for both the roof and external wall planes. Cladding all these surfaces in copper made it possible to realise this monolithic character in the form of an abstract, sharp-edged geometric volume, while also providing a robust, weather-proof skin. The roof and outer wall surfaces are clad with large, pre-oxidised copper panels, contrasting with the white internal surfaces.

Detailing is handled with particular care to ensure that

junctions and transitions are absolutely flush, while maintaining ventilation across the entire back surface area. The sharply defined white 'cuts' into the copper-clad mass form a fluid transition from outside to inside. Long-term performance was also an important driver of material choice and copper as a durable, natural material, contributes to the sustainability of the house.

JURY COMMENTS

The jury responded to the bold geometry of this house, which abstracts the traditional archetype of the gabled, suburban villa. They also admired the way in which the house connected its inhabitants to its surroundings, through a series of glazed cuts in the wall and roof planes. There was evident skill in the way that pre-oxidised panels of copper were used to clad the exterior, creating an elegantly smooth carapace which enhanced the project's inherent sense of formal and material refinement.



C. KRANEBURG

COMMENDED
WEYMOUTH STREET
LONDON, UK
 ARCHITECT
MAKE

This project transforms a relatively undistinguished, six-storey 1960s block in the heart of a conservation area in London into a highly distinctive refurbishment scheme. It increases the residential accommodation and gives the building a striking new identity defined by extensive use of brass.

Respecting its historic context, the original Weymouth Street facade has been retained and refurbished so that it blends virtually seamlessly with the surrounding vernacular. However, brass cladding dramatically caps the building, containing two new levels of penthouses. This cladding then fully envelops the rear elevation, where the building has been extended both horizontally and vertically to provide twelve new luxury apartments, exploding with punched balconies that cantilever out from internal living spaces.

Brass was chosen for its qualities of sustainability and complete recyclability, as well as its distinctive architectural appeal. A key aspect of this is natural oxidation that will cause the brass to weather over time and provide added depth and character to the building. Each panel will patinate differently but this process has been enhanced by varying components in the copper alloy to achieve colours ranging from

a soft, golden yellow at the rear of the building to a russet brown on the new upper levels glimpsed from Weymouth Street. The colours complement the surrounding architectural palette and will gradually tone down to echo the shades of the neighbouring buildings. The new enclosed balconies are a play on the verticality of the surrounding blocks and the pattern of this facade has been repeated within the balcony frames, which are transformed into perforated screens. The Mondrian-like geometry of the balconies animates the facades.

JURY COMMENTS

Wrapped in a skin of brass cladding, this project for a residential development in the heart of London attracted the jury's attention with its imaginative approach to materials, especially how they age and weather. Differences in the proportions of copper and zinc used in the alloy mixtures create a range of different hues, from brown to gold, so the panels will patinate at different rates over time. The jury was also seduced by the perforated balcony frames which filter light and cast a pattern of rippling and flickering shadows around the interiors of the flats.



SHORTLISTED

ALPINE RECOVERY CENTRE SOUTH TYROL, ITALY

ARCHITECT

ALLESWIRDGUT ARCHITEKTUR

With this infrastructure building, its architects have developed a copper-clad aesthetic that reflects a mountainous context, without overpowering its village location. The new building forms a major landmark but maintains a low-key presence at the same time. It appears firmly rooted to the ground and surrounding landscape but still retains an air of lightness. Responding to its position at the entrance to the village tight up against the main road, the building also acknowledges the smaller scale buildings nearby by effectively representing a multiple of them.

The reduction in mass is achieved by exploiting the topography and cutting into the sloping site. Daylighting the building's lower levels might seem a challenge in these circumstances but the design turns it into an opportunity with roof-lighting to the main circulation spine and spectacularly high ceilings. Lightwells are also used for below ground rooms cut into the slope, introducing intimate external spaces. Apart from the glazing, the entire volume is clad in copper, giving a natural, earthy hue and lively surface that harmonises with the surrounding old farmhouses and pine forests. The building becomes a timeless, organic, integral part of its environment.

JURY COMMENTS

Set in an alpine town in Italy's South Tyrol, this project for a civic resource centre impressed the jury with its powerful topographic quality. Long and low slung, it almost becomes part of the landscape, a reassuringly rugged presence in the town. The building's copper cladding

emphasises this connection with its environment. The hue and the texture of the dark copper panels evoke the surrounding farmhouses and forests. The jury admired how an essentially functional building was transformed into a new local landmark through the careful sculpting of form and adept use of materials.



HERTHA HUBRMAUS

SHORTLISTED

CIVIC AND CULTURAL CENTRE BERRIOZAR, SPAIN

ARCHITECT

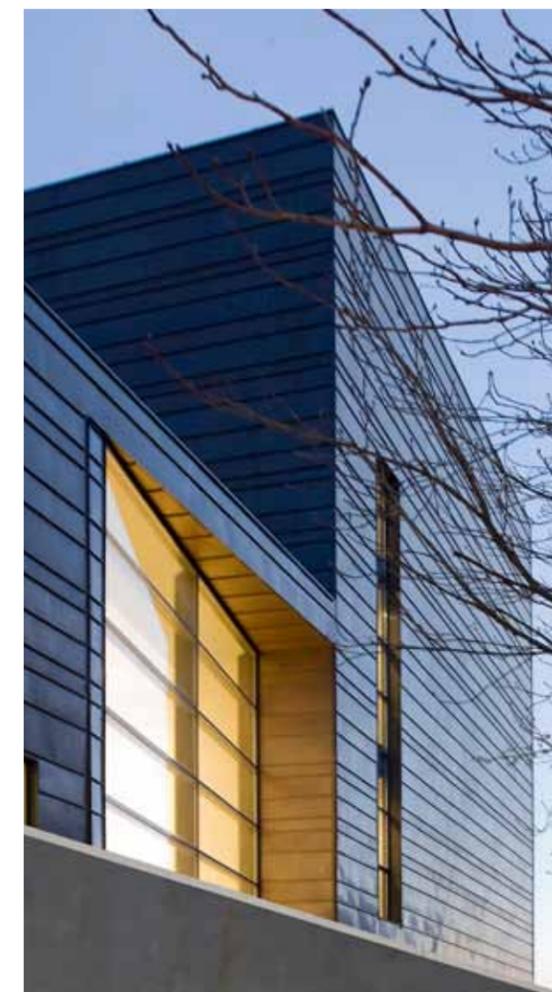
GARCIA RODRIGUEZ ALCOBA

This project aims to bring several basic facilities together at the perimeter of a future square that will shape an important civic meeting place in Berriozar. The building configures the public square and also ensures its own prominence. It is conceived as a single, forthright volume, a building that folds back onto itself, defining voids and volumes, both inside and outside. This is an abstract, timeless sculptural form clad in pre-oxidised copper to appear powerful yet, at the same time, light. The copper bestows a gravitas appropriate to the building's prominent civic role. Inside, white walls and floors capture the light, emphasising the abstract nature of the architecture.

The formal structure consists of a continuous vertical and horizontal prism that configures different areas. The vertical fold, formalized by the tower, and the horizontal fold, where the town hall services and the cultural centre are located, are articulated by voids that connect the different areas, permitting their use as exhibition areas, waiting rooms and halls for public meetings. The voids are completed with a set of courtyards on the first floor, which feed light and ventilation into the rooms while at the same time serving as areas for rest and relaxation.

JURY COMMENTS

This large civic complex, which combines a range of different functions, from town hall to police headquarters, caught the jury's eye as a dignified addition to its townscape. Jury members were particularly impressed by how it articulates a sense of civic life, through a skilful interplay of solid and void, and how it meshes with the wider urban realm, defining and enclosing new public spaces. In this, copper cladding plays a key part. Copper is used in horizontal strips of varying widths to animate and articulate facades with great finesse.



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JUDGES' SPECIAL PRIZE

FREYA'S CABIN **KIELDER WATER, UK** ARCHITECT **STUDIO WEAVE**

Freya's Cabin is part of 'Freya and Robin', a project for two structures on the banks of Kielder Water in Northumberland. The structures provide stopping points for visitors walking or cycling along the lakeside path. The architects considered the dramatic site as a stage set or backdrop against which they could tell a story.

They invented two characters by personifying two sites facing each other across the water and wrote a love story about a flower-loving goddess, Freya, who builds a cabin to entice the object of her affections, Robin, to row across the lake to her. Freya modelled the cabin on her flower press – taking tree branches and pressing them tight together to create an enchanted forest ceiling, then balancing it up high on the tallest, straightest stems she could find. When she saw Robin rowing away, Freya cried tears of gold and wrapped the cabin in them.

The fantasy of the design story is echoed in the cabin's construction. The structure is made from CNC-cut plywood layers held together with glue and tension rods. The plywood is interspersed with clear acrylic sheets which admit light and form the balustrade. The building is supported on a series of brass-clad 'stems' planted into concrete foundations.



Preformed trays of a copper and aluminium alloy are used to clad the cabin. The sheets represent Freya's golden tears and the copper alloy was chosen for its rich, golden colour and durable finish. The sheets are perforated in a tear-like pattern and are fixed to allow movement as the structure breathes with the weather.

JURY COMMENTS

This was one of the more unusual submissions – more an artistic intervention or sculpture, as opposed to a building – but the jury enjoyed the folk tale narrative and decided to award the project a Special Prize. The architects have created a modern folly that chimes beautifully with landscape. The attention to detail in the choice and use of materials was especially lyrical and imaginative. The richness of the metal exterior forms an evocative contrast with the rustic simplicity of the plywood interior.



PETER SHARPE

The European Copper in Architecture Awards programme is part of the European Copper in Architecture Campaign, promoted by Copper Development Association and participating copper fabricators. All the 2011 entries can be viewed on the Copper in Architecture website www.copperconcept.org/awards. The Campaign also publishes Copper Architecture Forum magazine, with additional coverage of the shortlisted and winning projects, which is freely available via the website.

Copper in Architecture
5 Grovelands Business Centre
Boundary Way
Hemel Hempstead
HP2 7TE
United Kingdom

Email: helpline@copperdev.co.uk
www.copperinfo.co.uk/arch
www.copperconcept.org