COPPER IN ARCHITECTURE
The COPPER IN ARCHITECTURE initiative is part of the European Copper in Architecture Campaign and organises annual Awards in two different but complementary areas.

ARCHITECTURAL DESIGN - incorporating copper roofing, cladding or other elements, designed by architects and students based in the British Isles, covering:

- the best recently completed buildings
- discretionary awards for un-built projects
- special student prize for outstanding projects
- discretionary awards for architectural innovation.

CRAFTSMANSHIP - exceptional workmanship on recently completed buildings with copper roofs, cladding and other external elements in the British Isles – irrespective of their architectural styles.

ARCHITECTURAL DESIGN – AWARDS 11

The Awards continue to grow in stature, attracting a diversity of projects ranging from critically acclaimed landmark buildings to more modest - but nonetheless architecturally significant - schemes.

This year, 37 submitted projects have been assessed from photographs and drawings by 3 judges from the panel of 7 architects. Built projects were reduced to a shortlist of 7 before 3 final awards were made, together with 2 other awards each for innovation and architectural student design.

THE CRAFTSMANSHIP JUDGES

KEAN POWER
Roofing Technical Advisor to Copper Development Association

MARTIN JAMES
Editorial Consultant to ‘Roofing Cladding and Insulation’

TOM SKINNER
Copper Roofing Consultant

PATRICK CRAWFORD
Caroe and Partners Chartered Architects

THE 2003
ARCHITECTURAL JUDGES

(Please note: judges from left to right in the photo)

PIERRE LONG
de Blacam and Meagher Architects
(2002 winners)

STAS LOUCA
Glas Architects+Designers
(previous winners)

LAURENCE BAIN
Bain and Bevington

CRAFTSMANSHIP –
THE JOHN SMITH AWARDS 11

The John Smith Awards for Craftsmanship recognise exceptional workmanship on recently completed buildings with copper roofs, cladding and other external elements – irrespective of their architectural styles. From a total of over 50 projects, 4 were short-listed and inspected in detail, and 3 awards made.
**Architectural Design – Winner**

**Brewery Square, Clerkenwell, London**

Architect: Hamilton Associates Architects  
Copper Contractor: Brodericks/CGL Systems  
Main Contractor and Client: Berkeley Homes (North East London)

Brewery Square is a development on the site of the old Allied Brewery and consists of four residential blocks, each sitting over ground floor retail units. The five storey block facing onto St John Street is clad with pre-patinated rainscreen panels, all based on a 600mm module and full storey-height. The copper cladding is punctuated at irregular intervals by full-height windows and fully glazed boxes cantilever out from the building over the street below.

The architect judges chose this project for its dramatic massing combined with a rigorous elevational treatment. The architects have been successful in their aims of creating a new landmark for Clerkenwell and of generating the impression of a copper-clad industrial building with glass boxes driving through from within. The building is thoroughly modern but respects its context, particularly the adjacent ‘listed’ brick Brewery building.
ARCHITECTURAL DESIGN – HIGHLY COMMENDED

**Plymouth Theatre Royal**

_Architect:_ Ian Ritchie Architects  
**Copper Contractors:** Lockerwire Weavers/Rubb TM  
**Main Contractor:** Bluestone plc  
**Client:** Plymouth Theatre Royal

The TR2 building, as it has become known, is designed to support the simultaneous construction and rehearsal of two full-scale drama, opera, music or dance productions. Different uses generate form, plan and section of the three main building elements: Workshop and Office spine; Assembly and Painting Studio; three separate Rehearsal ‘pods’ wrapped in woven bronze wire.

The architect judges were impressed by the considered approach to what could easily have become simply a utilitarian building and by the inspired response to the riverside setting. The architects’ comparison of the bronze-clad pods to boxes washed up on the beach is convincing and the potential for materials to change chameleon-like over time in the coastal environment particularly exciting.

ARCHITECTURAL DESIGN – COMMENDED

**Frances Gardner House, University College London**

_Architect:_ Feilden Clegg Bradley Architects  
**Copper Contractor:** NDM  
**Main Contractor:** Norwest Holst Construction  
**Owner:** University College London

Adjoining the Bloomsbury Conservation Area, this eight storey Hall of Residence forms part of a courtyard development recalling the local pattern of urban blocks around semi-private yards. Above ground floor level, the block is clad entirely in pre-oxidised copper in long horizontal strips broken up by fenestration. Copper was chosen for its environmental and physical properties - including light weight, enabling savings on supporting structure.

The architect judges selected this project for its tough aesthetic, largely defined by the copper clad elevations. The building succeeds in being uncompromisingly distinctive while, at the same time, linking its older, tall neighbours on one side to smaller scale housing on the other.
ARCHITECTURAL INNOVATION – WINNER

The three rehearsal pods of the Plymouth Theatre Royal TR2 building are encased with a tactile quilted curtain of bronze mesh cladding with continuous glazing below. This most unusual construction is achieved using 1m wide full-height mesh panels over three layers of geotextile mat, compressed between mesh and supporting wall, to maintain tension and avoid ‘flapping’, with stainless steel fixings and base gutters. The mesh is phosphor bronze, with about 95% copper, in a ‘Plain-Dutch’ weave of 0.4mm dia. warp wires and 0.3mm dia. weft wires.

With this Award, the judges recognised a brave but considered use of materials to achieve particular architectural aims. The thoroughness and attention to detail in developing such a tactile cladding system were also most impressive.

ARCHITECTURAL INNOVATION – COMMENDED

Architect: San Martin y Pascal Architects
Owner: Codelco

This corporate HQ for a copper mining company in northern Chile is arranged in three similar five storey blocks around a courtyard. Its desert location demands solar shading which is provided by a copper mesh skin positioned some 3m away from roofs and external facades on a steel structure to maintain ventilation. Expanded-metal copper sheets were developed with slots angled to oppose the 60° average solar altitude, maximizing shading during the hottest hours while maintaining 55% transparency.

A deceptively simple concept, the use of expanded copper sheet tailored exactly to optimise protection in a specific, challenging location impressed the judges. Special quality of light into, and shaded views from the building via the copper screen, were also anticipated.
ARCHITECTURAL STUDENT DESIGN – WINNER

Designer: Oliver Flindall
(Kingston University School of Architecture)

The project is a construction industry Guild HQ building for a site in King’s Cross, London, intended as a forum and meeting place. Initially, a conceptual piece was developed juxtaposing concrete with a dot pattern micro-texture and copper with the same pattern used for dimples and perforations to allow light through. The piece was then digitally manipulated to explore its potential and relationship to the site. The resulting building design makes constant reference to the material concept, including elevational treatments and enlarged as circular rooflights. In particular, the conceptual piece directly inspired the ‘information corridor’ with perforated copper providing a dappled canopy animating the space throughout the day.

ARCHITECTURAL STUDENT DESIGN – COMMENDED

Designer: Dianna Ingram
(Scott Sutherland School, The Robert Gordon University, Aberdeen)

The project involves the conservation and re-use as a research centre of a listed water mill in a sensitive rural setting in Aberdeenshire. A new copper roof follows the overall pitch of the existing but introduces glazing to allow natural light without direct sunlight into the exhibition space below. This roof form is seen as analogous to trees with cascading branches and light filtering through.

The judges chose this project for its inspired material concept and the thoroughness of the development of this at each stage. The end result is an impressive, well-structured building on a difficult site, constantly referencing and re-interpreting the original concept in exciting ways as part of its architecture.
CRAFTSMANSHIP – WINNER

THE QUEEN’S GALLERY, BUCKINGHAM PALACE

Copper and Bronze Contractors: Chris Topp & Co/Zinc Counters/Mundy Roofing
Architect: John Simpson & Partners
Main Contractor: Wates Construction
Owner: HM Royal Household

Built to mark the Golden Jubilee of Her Majesty The Queen in 2002 the new Gallery is a major centre for the visual arts in the heart of London, provided with the most up-to-date museological services for the conservation and display of works of art of all kinds. The new entrance portico is roofed in copper sheet with pressed copper and cast bronze embellishments. The double height entrance hall has a part-glazed roof with copper ‘fish-scale’ panels and is also decorated with pressed copper glazing bar cappings.

The judges considered the workmanship throughout this building to be exceptional. Beautifully made pre-finished embellishments and decorative elements have been elegantly integrated with the on-site copper roofing work - all carefully interpreting the architect's intentions.

CRAFTSMANSHIP – HIGHLY COMMENDED & COMMENDED

BBC ‘HOME FRONT IN THE GARDEN’

Copper Contractor: Richardson Roofing Company
Designer: Diarmuid Gavin, BBC
Main Contractor: BBC
Owner: Mr & Mrs William Dean

This sculptural garden shelter for a private London house forms a crab-shaped copper cocoon – and presented real challenges for the contractor with its multi-curved shape. All seams have been carefully aligned to meet at the top and standing seams details vary to ensure a neat appearance.

The judges recognised the expertise needed to set out this complex shape and the attention to detail that makes the design work so well. The standard of craftsmanship on site is first class – particularly bearing in mind that only four days were allowed for work to be completed.

68 KING WILLIAM STREET, LONDON

Copper Contractor: T & P Lead Roofing
Architect: Elsworth Sykes Architecture
Main Contractor: Try Construction
Client: LR (King William Street)

This dome in a prominent location facing London Bridge is a demonstration of traditional copper craftsmanship at its best. Complex panel shapes, particularly around circular windows and to the small cupola dome have been beautifully set-out and executed with a deceptive simplicity.
Entries are now invited for the 2004 Awards, with the following categories:

- Architectural Design – Built Projects
- Architectural Design – Un-built Projects
- Architectural Student Design Award
- Architectural Innovation
- Craftsmanship

Application forms and full details of the 2004 Awards are available from:

COPPER IN ARCHITECTURE
5 Grovelands Business Centre
Boundary Way
Hemel Hempstead
HP2 7TE

Tel: 01442 275700
Fax: 01442 275716
E-mail: helpline@copperdev.co.uk

or visit ‘AWARDS’ on the COPPER IN ARCHITECTURE website: www.cda.org.uk/arch