



### *European Steel Design Awards 2019*

Steel is recognized for its high potential in terms of strength, durability, design flexibility, adaptability, recyclability and reusability. Today's steel structures allow the best adaptation to modern life and renovation of historical elements of our landscape, being in cities or countryside. Steel is also the perfect material for reaching a circular economy while leaving the necessary room for creativity in design.

**The European Steel Design Awards** are given by the European Convention for Constructional Steelwork (ECCS) every two years to encourage the creative and outstanding use of steel in architecture. The awards are dedicated to the owners, the architects, the engineers, the general contractors and the steelwork contractors.

**ECCS** is the European Association of Steelwork Contractors, the unique platform gathering steel producers, contractors, researchers and academics. ECCS is a federation of 18 national associations of steelwork contractors.

The Professional and International Jury counted with:

**Lasse Kilvaer**, Norway, Chairman of AC4 Architectural Awards Committee and Chairman of the Jury Meeting;

**Vincent de Ville de Goyet**, Belgium, Engineer, Design office Greisch;

**Philippe Samyn**, Belgium, Architect, Samyn and Partners;

**Georg Pendl**, Austria, President ACE, Architects' Council for Europe;

**Aris Chatzidakis**, Greece, President of the European Council for Civil Engineers;

**Véronique Dehan**, Belgium, Secretary General ECCS.



From left to right: Vincent de Ville de Goyet (Greisch), Aris Chatzidakis (ECCE), Véronique Dehan (ECCS), Philippe Samyn (Samyn&Partners), Bernhard Hauke (ECCS), Lasse Kilvaer (NSA), Georg Pendl (ACE).

The European Steel Design Awards of Merit and Excellence have been selected among the finalists, which were chosen from the initial nominees, out of 28 projects submitted in total.

*The finalists for the 2019 European Steel Design Awards are:  
(by country alphabetical order)*

### **Austria: The New ÖAMTC Headquarters, Vienna**

The building is laid out in the form of a rim with five "spokes" and consists of the ring facade, the storey car park, the hangar and the heliport and the atrium staircases made of steel. The 230 m long and nearly 17 m high ring facade forms the connecting element that extends from spoke to spoke used as evacuation and noise reduction.



**Owner:**

Austrian Automobile, Motorcycle and Touring Club

**Engineer:**

Unger Stahlbau Ges.m.b.H.

**Architect:**

Pichler & Traupmann Architekten GmbH

**General Contractor:**

Bauunternehmung GRANIT Gesellschaft m.b.H.

**Steelwork contractor:**

Unger Stahlbau Ges.m.b.H.



Photo credit: Loïc Laridant / ECCS

From left to right: Bernhard Hauke, Chairman Promotional Management Board, Yener Gur'es, ECCS President, representatives of Unger Stahlbau Ges.m.b.H. (Klanatsky Rainer, Unger Matthias, Polster Gerald), Christine Lenouy, ECCS Vice-President and Milan Veljkovic, Technical Management Board Chairman.

## **Czech Republic: Replacement bridge over the Dam Hracholusky**

The object of the project was the reconstruction of the bridge at km 1,429 of national onetrack between Pňovany and Bezdrúžice. The uniqueness of this project lies in the way of replacement of the three fields of the old bridge. It wasn't possible to do assembly by traditional way (using a crane or pull-out). Therefore it has been selected rotated joining with the related-consuming static calculations.

**Owner:**

SŽDC s.o.

**Engineer:**

SMP Praha a.s.

**Architect:**

TOP CON SERVIS s.r.o.

Czech Technical University in Prague, Faculty of Civil Engineering, Department of Steel and Timber structures

**General Contractor:**

associations of companies MCE Slany s.r.o.

SMP Praha a.s.

**Steelwork contractor:**

MCE Slany s.r.o.



Photo credit: Loïc Laridant / ECCS

From left to right: Bernhard Hauke, Chairman Promotional Management Board, Yener Gur'es, ECCS President, representatives of Czech Team (Chorovsky Igor from MCE, Rehacek Jaroslav from MCE, Popsimov Petr from MSP, Freudl Jan from MSP, Vrabec Milan from MSP, Nozicka Martin from MSP, Zakovec Petr from SZDC, Kejval Stanislav from SZDC, Nejezchleba Mojmir from SZDC), Christine Lenouy, ECCS Vice-President and Milan Veljkovic, Technical Management Board Chairman.

## Denmark: K.B. Hallen, Copenhagen

Structural concept: Hall with circular arches, simply supported at anchored direct foundations. The building is stabilized longitudinally by the roof slab and longitudinal walls. Upper floor around the hall. Basement under most of the building.



Owner:

Kjøbenhavns Boldklub

Engineer:

Ramboll Denmark

Architect:

Christensen & Co. Arkitekter

General Contractor:

Einar Kornerup

Steelwork contractor:

Give Stålspær



Photo credit: Loïc Laridant / ECCS

From left to right: Bernhard Hauke, Chairman Promotional Management Board, Yener Gur'es, ECCS President, representatives of the Danish Project Team (Eigenbrod Henrik, Holmstrøm Niels-Christian, Lyng-Svendsen Michael, Rune Gad, Hjort Christian, Larsen Torben), Christine Lenouy, ECCS Vice-President and Milan Veljkovic, Technical Management Board Chairman.

## **Finland: Oodi Central Library, Helsinki**

The building is an architectural vision of complex 3D surfaces and large obstruction free open spaces, that has been successfully delivered to a stringently defined budget of EUR98m and opening date of the eve of the day of independence.



Owner: Helsinki City  
Engineer: Ramboll Finland  
Architect: ALA Architects  
General Contractor: YIT Rakennus Oy  
Steelwork contractor: Normek Oy



Photo credit: Loïc Laridant / ECCS

From left to right: Bernhard Hauke, Chairman Promotional Management Board, Christine Lenouy, ECCS Vice-President, Finnish representatives Hans Exner from Ramboll Denmark, Tapio Aho from Ramboll Finland, Pasi Parkinen from Normek Oy, Simon De Neumann from Ramboll Finland, Yener Gur'es, ECCS President and Milan Veljkovic, Technical Management Board Chairman.

## **France: Simonne-Mathieu Tennis Court, Roland Garros**

Taking its inspiration from these hothouses made of glass and cast iron so characteristic of the nineteenth century, the new tennis court will be partly below ground level, surrounded by a terraced concrete platform, surmounted by a steel structure, and wrapped around with botanical greenhouses designed to meet the highest technical specifications.

**Owner:**

Fédération Française de Tennis.

**Engineer:**

Marc Mimram Ingénierie

**Architect:**

Marc Mimram Architecture & Associés

**General Contractor:**

Vinci

**Steelwork contractor:**

Viry - Fayat Metal



Photo credit: Loïc Laridant / ECCS

From left to right: Christine Lenouy, ECCS Vice-President, Bernhard Hauke, ECCS Promotional Management Board Chairman, Marie Colne, Chef de Projet Viry/Fayat Métal, Jean-Pierre Tahay, Director Pôle Constructions Architecturales Fayat Métal, Martin Fougères de Lavergnolle from Marc Mimram Architecture Ingénierie, Alain Fischer, Secrétaire Général FFT, Bernard Giudicelli, Président Fédération Française de Tennis, Marc Mimram, Architecte, Yener Gur'és, ECCS President, Milan Veljkovic, Chairman ECCS Technical Management Board.

## **Germany: Adidas Arena, Herzogenaurach**

The adidas Arena – World of Sports complex in Herzogenaurach, Germany, consists of a ground floor embedded in the landscape and a three-storey 143 x 118 m superstructure that seems to hover above it. This impression is enhanced by six large continuous light wells and slim pillars arranged with irregular spaces between them. Access is provided by two means, i.e., at the centre of the building, a structural core which is very slender in one direction and a wide sculptural foyer staircase.



Owner:

adidas AG

Engineer:

Werner Sobek Stuttgart AG with  
stahl + verbundbau GmbH and  
Züblin Stahlbau GmbH

Architect:

Behnisch Architekten

General Contractor:

Ed.Züblin AG

Steelwork contractor:

ARGE WoS Stahlbau  
Züblin Stahlbau GmbH  
stahl+verbundbau GmbH



Photo credit: Loïc Laridant / ECCS

From left to right: Bernhard Hauke, Chairman of Promotional Management Board, Christine Lenouy, ECCS Vice-President, Norbert Sauerborn and Oliver Brandt from Stahl+verbundbau, Yener Gur'es, ECCS President, Milan Veljkovic, Chairman ECCS Technical Management Board.

## **Norway: PAN Treetop Houses, Gjesasen**

The architecture of the PAN Treetop Cabins combines lookout towers for spotting forest fires with A-framed lodges common to North America in particular. Firmly anchored in the bedrock, the cabins are reached via spiral staircases on their sides. Their triangular shape has enabled the creation of a space which is both atmospherically narrow and monumentally high. The materials were selected to create both a natural feel and differentiation from the surrounding wilderness: unlike most summer cabins, PAN Treetop Cabins are made from metal rather than wood.

**Owner:**

Christine Mowinckel and Kristian Rostad.

**Engineer:**

Finn-Erik Nilsen

**Architect:**

Espen Surnevik

**General Contractor:**

ARMEC AS

**Steelwork contractor:**

ARMEC AS



Photo credit: Loïc Laridant / ECCS

From left to right : Bernhard Hauke, Chairman Promotional Management Board, Yener Gur'es, ECCS President, Nordbye Unni, Christine Mowinckel, Owner with Kristian Rostad, Finn-Erik Nilsen, Jørn Rismoen, Espen Surnevik, Christine Lenouy, ECCS Vice-President, Milan Veljkovic, Technical Management Board Chairman.



## **Portugal: Hippodrome de Longchamp, Paris**

This new building is integrated on the rehabilitation of Longchamps Hippodrome and it consists on a new tribune with capacity of 10.000 places and in terms of utilization it includes a restaurant, five reception halls, 5 bars and spaces for the press and race control.

The architectural design is based on transparent plans allowing fans to be in permanent contact with all the environment.



Owner:

France Galop

Engineer:

Jaillet Rouby

Architect:

Dominique Perrault Architecture

General Contractor:

Bouygues OPB

Steelwork contractor:

Bysteel



Photo credit: Loïc Laridant / ECCS

From left to right: Bernhard Hauke, Chairman ECCS Promotional Management Board, Christine Lenouy, ECCS Vice-President, Ricardo Portela, Industrial Director Bysteel, Jean Philippe Deprez, Jaillet Rouby, Nuno Neves, Design Director Bysteel, Jorge Carneiro, Comercial Director Bysteel, Rodrigo Araujo, CEO Bysteel, Yener Gur'es, ECCS President, Milan Vejkovic, Chairman Technical Management Board.

## Sweden: Kristallen, Kiruna

The Swedish town of Kiruna, 95 miles north of the Arctic Circle, sits atop the largest iron ore mine on the planet. The mine birthed Kiruna – And now, it threatens to erase it. A century of mining operations has begun to destabilize the earth around Kiruna. The ground is breaking, splitting into deep rifts and falling into sinkholes – Within the century, these rifts threaten to swallow the town. In response to this threat, mining firm Luossavaara-Kiirunavaara (LKAB) has proposed a direct solution: Move Kiruna three kilometers east.

Owner:

LKAB

Engineer:

WSP Sweden

Architect:

Henning Larsen Architects

General Contractor:

PEAB

Steelwork contractor:

Ruuki Construction



Photo credit: Loïc Laridant / ECCS

From left to right: Bernhard Hauke, Chairman ECCS Promotional Management Board, Christine Lenouy, ECCS Vice-President, Peer Jeppesen, Henning Larsen Architects, Jirky Saarima, Ruukki, André Simoes, WSP, Jakob Levander, WSP, Stefan Holmblad, LKAB, Jesper Lindgren, WSP, Victoria Aidanpää, LKAB, Yener Gur'es, ECCS President, Milan Veljkovic, Chairman Technical Management Board.

## Switzerland: Jet d'eau Movable Footbridge, Geneva

The Jet d'Eau esplanade is a new public space that leads walkers to the base of Geneva's most emblematic landmark, the Jet d'Eau. A local-solid-oak pontoon stretches over approximately 200 m connecting the bank of Lake Geneva to the Jet d'Eau.

The esplanade's central piece is a movable footbridge whose design aims to reconcile the passage of boats and pedestrians. Throughout the day, while the Jet d'Eau is turned on, the footbridge remains at rest and horizontal; pedestrians and people with mobility impairments can thus enjoy the walk along the promenade.



Owner:

Handicap Architecture Urbanisme (HAU Genève)

Engineer:

Ingeni SA

Architect:

MID Architecture

General Contractor:

/

Steelwork contractor:

Stephan SA



Photo credit: Loïc Laridant / ECCS

From left to right: Bernhard Hauke, Chairman Promotional Management Board, Christine Lenouy, Etienne Bouleau, Ingeni, Robin Vuarnoz, Jérôme Pochat, Gabriele Guscetti, ECCS Vice-President, Yener Gur'es, ECCS President, Milan Veljkovic, Chairman Technical Management Board.

## The Netherlands: Station E-line, Den Haag

The steel 'bridge', with a total length of 323 m, is divided into ten spans of different lengths. The width of the bridge varies from 10.5 m at the furthest end to 16.5 m in the station. Seen from the side, the bridge is a closed undiluted steel box girder with an elegant cross-section made of rolled steel sheet. The entire structure rests slidingly on round steel pillars with a diameter of 2 m and a height of up to 10 m. The station at the end of the bridge is surrounded by a 90 m long steel and glass roof.

### Owner:

ProRail, Gemeente Den Haag

### Engineer:

Movares, Royal Haskoning DHV, Knippers Helbig, BAM Infraconsult, Ney & Partners

### Architect:

Zwarts & Jansma Architects, Amsterdam

### General Contractor:

BAM Infra, Gouda

### Steelwork contractor:

Jos van den Bersselaar Constructie, Smulders



Photo credit: Loïc Laridant / ECCS

From left to right: Bernhard Hauke, Chairman Promotional Management Board, Christine Lenouy, ECCS Vice-President, Yener Gur'es, ECCS President, Milan Veljkovic, Chairman Technical Management Board.

## **Turkey: Sveti Stephan Bulgarian Church Restoration, Istanbul**

The structure of building consists of steel moment resisting frames manufactured by using cast-iron sections, sheets and forged iron which were connected to each other through bolts and nuts, rivets or welds. Initial works of foundation started in 1859 for the historical church. It was manufactured and delivered by Waagner Company located at Vienne, Austria in 1895 and the construction of structures was completed in 1896, and opened in 1898. The first renovation was made in 1946.



### Owner:

Bulgarian Orthodox Churches Foundation

### Project Investor:

Istanbul Metropolitan Municipality

### Engineer:

Kuram Mühendislik/Teori Mühendislik Ltd

### Architect:

Halil Onur Mimarlik Ofisi

### General Contractor:

Taşyapı İnşaat Sanayi ve Ticaret Co. Inc.

### Steelwork contractor:

Şanlıbayrak Çelik Konstruksiyon İnşaat  
San.ve Tic. Ltd



Photo credit: Loïc Laridant / ECCS

From left to right: Bernhard Hauke, Chairman Promotional Management Board, Christine Lenouy, ECCS Vice-President, Yener Gur'es, ECCS President, Milan Veljkovic, Chairman Technical Management Board.

## **WINNERS, The Awards of EXCELLENCE**

### **Laudati**

ECCS Steel Design Awards 2019

Winners, *Award of Excellence 2019*

This year, the Jury has decided that the Award of Excellence will be shared by two very different projects. One is small, playful, and precise, the other is an important and beautiful contribution to the public life of a European capital. Both are of outstanding quality in architecture, structure and construction, and worthy winners of the 2019 ECCS Steel Design Award of Excellence.

### **Oodi Central Library**

Location: Helsinki, Finland

Fabrication: Normek Oy

Structural engineering firm: Ramboll Finland

Architect: ALA architects

General contractor: YIT Rakennus oy

Project owner: City of Helsinki

The Oodi Central Library is the new Central Library of Helsinki. It appears as a concert hall for books, providing elegant landscapes for reading, recording music, modern fabrication, a café and a film theater. As in earlier projects by the Architects, the design offers a bold, symphonic gesture which becomes a governing force in the functioning of the building. In this case, the move is a hoisting and angling of the wooden front, opening it up and inviting the public to look in and enter. The building itself works as a 108 meter span bridge, carried by two 1000 tonnes arches and a supporting load bearing steel structure, to create an open, column free inside view. Clad in timber and glass, the structural system is hidden, but it is a necessary precondition and recognizable to initiate of building technique.

Oodi Central Library will remain a jewel of the Finnish capital, and an outstanding example of steel construction.

### **PAN Treetop Houses**

Location: Finnskogen, Norway

Fabrication: Armec as

Structural engineering firm: Finn-Erik Nilsen

Architect: Espen Surnevik

General contractor: Armec as

Project owner: Christine Mowinchel, Kristian Rostad

PAN Treetop Houses is a playful, imaginative project, contrasting a strict, modern micro-house dwelling with the deep, surrounding woodland. The stilted huts are inspired by forest fire lookout towers, A-framed lodges, and a Moomins' house, and perhaps, more eerily, they channel Baba Yaga's chicken leg cabin as well. The lightness of the loadbearing structure would not be possible in another material.

The huts are linked to the free-standing spiral staircase by a light bridge, offering an entrance high above ground, but no real outside space to occupy. As such you can imagine running away to the forest, and then again *from* the forest, and into a microcosm of urbanity. PAN Treetop Houses are beguiling examples of architecture's combination of irrational, societal desires, and rational, technical execution.

The 40 m<sup>2</sup> cabins are minimal and professionally executed. They are created with consistently high-quality engineering, architectural work, and steelwork, and exquisite detailing. The cabins are an example of how interesting architecture can create interest in a destination, by their appearance, and by the new way they frame and inhabit their environment.

PAN Treetop Houses is a unique project with character, and an outstanding example of steel construction.



The Metallic plaques, diplomas and silver trophy for the Merit and Excellence Awards.

Contact: Véronique Dehan, Secretary General of ECCS, [eccs@steelconstruct.com](mailto:eccs@steelconstruct.com)