Panel of Judges for SSSS Steel Design Awards 2009

Professor S.L. Chan
President, Hong Kong Steel Construction Institute
Hong Kong Polytechnic University

Professor Richard Liew
Past President, SSSS
National University of Singapore

Mr Tan Tian Chong
President, SSSS
Director, BCA

Assoc. Professor Chiew Sing Ping
Past President, SSSS
Nanyang Technological University

Mr Lim Soon Heng
Past President
Singapore Structural Steel Society

Mr Anthony Tan
Chair, Steel Design Awards 2009
BlueScope Lysaght Singapore Pte Ltd
Factors considered by the judges

- fitness for purpose
- innovation
- buildability
- technical difficulty
- visual success
- constructional quality
- Sustainability development & cost-effectiveness
Awards

Steel Design Award & Commendation
Merit Award

Categories

- Community, Residential or Institutional Structures category
- Sports, Bridges and Healthcare or Other Structures category
- Industrial and Commercial Structures category
Commendation Merit Award
for Community, Residential or Institutional Structures category
Commendation Merit Award
for Community, Residential or Institutional Structures category

Winner: Boon Lay Extension Steel Roof

Judges comments: The innovative steel lattice frame was well thought of by the steel designer and posed a challenge on the design analysis to develop this light structural roof for a public building.
Commendations Merit Award
for Community, Residential or Institutional Structures category

Winner: Boon Lay Extension
Steel Roof

Submitted by
Land Transport Authority
Commendations Merit Award
for Community, Residential or Institutional Structures category

**Boon Lay Extension Steel Roof**

Client: Land Transport Authority

Structural Engineer: Land Transport Authority

Architect: Land Transport Authority

Contractor: Sato Kogyo-Great Earth Joint Venture

Steel Fabricator: WY Steel Construction Pte Ltd

Other: Vibration isolator specialist – Trelleborg Hercules Pte Ltd
Commendations Merit Award

Community, Residential or Institutional Structures category

Winner: Outdoor Theatre at The Esplanade – Theatres by the Bay

Judges comments: The expression of lightness and form has been clearly demonstrated at the Outdoor Theatre at The Esplanade. This project scores high in visual effect.
Commendations Merit Award
Community, Residential or Institutional Structures category

Outdoor Theatre at The Esplanade – Theatres by the Bay

Submitted by
Yongnam Engineering & Construction (Pte) Ltd
Commendations Merit Award
Community, Residential or Institutional Structures category

Outdoor Theatre at The Esplanade – Theatres by the Bay

Client: The Esplanade Co Ltd
Architect: DP Architects Pte Ltd
Main Contractor: Quek & Quek Civil Engineering Pte Ltd
Subcontractor: Taiyo Birdair Asia Pte Ltd
Structural Engineer: CPG Consultants Pte Ltd
Steel Fabricator: Yongnam Engineering & Construction (Pte) Ltd
Commendations Merit Award
Community, Residential or Institutional Structures category

Winner: Dubai Light Rail Project

Judges comments
The steel fabricator’s ability to tackle the elegant large span curved steel structure of unconventional layout and joint configuration was a great challenge to achieve.
Commendations Merit Award
Community, Residential or Institutional Structures category

Dubai Light Rail Project

Submitted by
Yongnam Engineering & Construction (Pte) Ltd
Commendations Merit Award
Community, Residential or Institutional Structures category

**Dubai Light Rail Project**

Client: Government of Dubai Roads and Transport Authority
Architect: Aedas Architect
Contractor: JT Metro JV
Structural Engineer: WS Atkins & Partners Overseas
Steel Fabricator: Yongnam Engineering & Construction (Pte) Ltd
Commendations Merit Award

Industrial and Commercial Structures category

Winner: AA to 78 Shenton Way

Judges comments
The project has added a wing to the existing building and rationalised the space between the new and the old. The critical success factor was the effective site operations, erection planning and installation of the transfer trusses in the tight site space and with due consideration to the occupants of surrounding existing buildings.
Commendations Merit Award
Industrial and Commercial Structures category

AA to 78 Shenton Way

Submitted by
Yongnam Engineering & Construction (Pte) Ltd
Commendations Merit Award
Industrial and Commercial Structures category

AA to 78 Shenton Way

Client: Shenton Singapore Holdings Pte Ltd
Architect: Forum Architects
Contractor: Shimizu Corporation
Structural Engineer: TY Lin International Pte Ltd
Steel Fabricator: Yongnam Engineering & Construction (Pte) Ltd
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for Sports, Bridges and Healthcare or Other Structures category
Winner: The Henderson Waves

Judges comments
The design is intended to create an organic relationship between the landscape, bridge and user, with the bridge being set out on a wave form to merge into the natural environment. This project is an excellent example of how Structural Engineers transform Architect’s dreams into a structural reality. Innovative erection techniques were used to overcome the challenges in lifting the structure in high elevation with minimal disruption to the traffic below.
Winner for Sports, Bridges and Healthcare or Other Structures category

The Henderson Waves

- Central Arch Member
- Mid Height Member
- Curved Ribs
- Central Spine Member
- Edge Member
Winner for Sports, Bridges and Healthcare or Other Structures category

The Henderson Waves
Winner for Sports, Bridges and Healthcare or Other Structures category

The Henderson Waves

Submitted by
RSP Architects Planners & Engineers
Winner for Sports, Bridges and Healthcare or Other Structures category

The Henderson Waves

Client: Urban Redevelopment Authority (URA), Singapore

Architect: RSP Architects Planners & Engineers (Pte) Ltd in collaboration with IJP Corporation Ltd, UK

Contractor: Evan Lim & Co Pte Ltd

Structural Engineer: RSP Architects Planners & Engineers (Pte) Ltd; Adam Kara Taylor Consulting Civil and Structural Engineers, Uk

Steel Fabricator: TTJ Design & Engineering Pte Ltd

Other (specialist sub-contractors): Acviron Acoustic Pte Ltd
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for Community, Residential or Institutional Structures category
SSSS Steel Design Award 2009
Winner for Community, Residential or Institutional Structures category

Main Roof, Terminal 3, Changi Airport

Judges comments
The project was of massive scale, the steel fabricator used automation techniques in the fabrication of box beams and innovative erection procedures to install the massive trusses with minimum resources.
Winner for Community, Residential or Institutional Structures category

Main Roof, Terminal 3, Changi Airport
Winner for Community, Residential or Institutional Structures category

Main Roof, Terminal 3, Changi Airport
Winner for Community, Residential or Institutional Structures category

Main Roof, Terminal 3, Changi Airport

Submitted by

TTJ Design & Engineering Pte Ltd
Main Roof, Terminal 3, Changi Airport

Winner for Community, Residential or Institutional Structures category

Client: Civil Aviation Authority of Singapore
Architect: CPG Consultants
Contractor: Shimizu Corporation
Structural Engineer: CPG Consultants
Steel Fabricator: TTJ Design & Engineering Pte Ltd/ MTTJ Engineering Sdn Bhd
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for Industrial and Commercial Structures category
SSSS Steel Design Award for Industrial and Commercial Structures category

Winners: ION Orchard

Judges comments
High profile and visibility. 75m span across MRT station poses structural challenge that require complex engineering solutions. The structural engineers, client, architect and contractor have worked well as a team to produce a massive large span structure of excellent quality.
Winner for Industrial and Commercial Structures category

ION Orchard
Winner for Industrial and Commercial Structures category

ION Orchard
Winner for Industrial and Commercial Structures category

ION Orchard

Submitted by
Yongnam Engineering & Construction (Pte) Ltd
Winner for Industrial and Commercial Structures category

ION Orchard

Client: Orchard Turn Residential Development Pte Ltd/Orchard Turn Investment Pte Ltd

Architect: RSP Architects Planners & Engineers (Pte) Ltd

Contractor: Penta Ocean Construction Co. Ltd

Structural Engineer: RSP Architects Planners & Engineers (Pte) Ltd

Steel Fabricator: Yongnam Engineering & Construction (Pte) Ltd

Other: Main Contractor’s PE - Parsons Brinckerhoff Pte Ltd