



# BCA AWARDS 2017

Recognising Excellence in the Built Environment

Building and Construction  Authority

We shape a **safe**, **high quality**, **sustainable** and **friendly** built environment.

# BCA Construction Productivity Awards

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The BCA Construction Productivity Award (CPA) recognise outstanding industry firms for going the extra mile to achieve construction productivity improvements and promote higher productivity in the industry.

**There are two award categories:**

- CPA – Advocates
- CPA – Projects

# BCA Construction Productivity Awards

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## **CPA – Advocates**

The CPA – Advocates recognises outstanding developers, consultants, builders and subcontractors for their achievements in improving productivity at the firm level. Developers, consultants and builders are recognised for the adoption of designs, construction methods, processes and/or technologies that have significant productivity impact on their projects.

## **CPA – Advocates has four sub-categories:**

- i) Developer
- ii) Consultant
- iii) Builder (Open)
- iv) Builder (Prime)

## **Assessment Criteria**

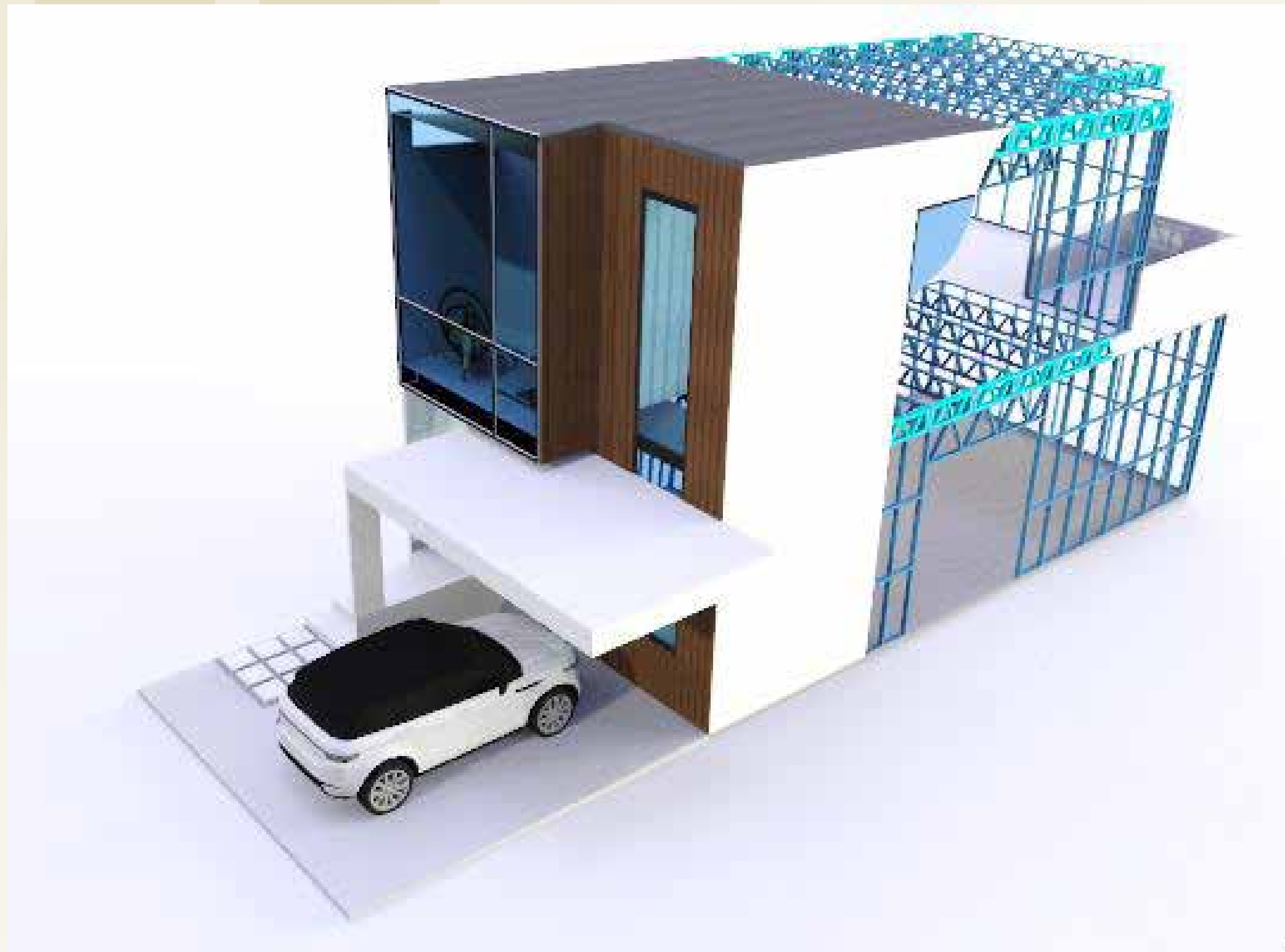
1. Buildable design score
2. Constructability score
3. Productivity performance (physical and value-added productivity)
4. Productivity initiatives

# Lightrus Pte Ltd

## Builder (Prime) Category

## BCA CONSTRUCTION PRODUCTIVITY AWARD – ADVOCATES

## MERIT



Developed the Lightrus Prefab System (based on proven Light Gauge Steel (LGS) technology)

Lightrus is a construction technology firm that specialises in the use of Light Gauge Steel (LGS) for the construction of buildings.

### KEY PRODUCTIVITY INITIATIVES

- LGS can be adopted as prefabricated structural systems in low-rise buildings such as landed houses, shop houses and town houses.
- Lightrus Prefab System enables connections to be made through the use of cold joints such as rivets, self-drilling screws or anchor bolts. This simplicity of using only battery drills and power drills for connections effectively improved site productivity.
- 3D modelling was also adopted to aid in visualising the construction designs. Through the adoption of 3D modelling, Lightrus was better able to enhance communication of construction plans and designs with the various project stakeholders. Design clashes between architectural, structural and M&E were easily identified, communicated and rectified.

## **About Construction Productivity Awards**

The Construction Productivity Awards (CPA) recognise outstanding industry firms for going the extra mile to achieve construction productivity improvements and promote higher productivity in the industry.

### **There are two award categories:**

- CPA – Advocates
- CPA – Projects

### **CPA – Advocates**

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- i) Developer
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### **Assessment Criteria**

1. Buildable design score
2. Constructability score
3. Productivity performance (physical and value-added productivity)
4. Productivity initiatives

### **CPA – Projects**

The CPA – Projects is awarded to project teams that have demonstrated productivity in their projects from the design to the end of construction. The award aims to:

- Encourage designers to come up with labour-efficient designs;
- Encourage the adoption of labour-efficient construction methods; and
- Recognise project teams for their excellent project planning and coordination in enhancing productivity.

The award has nine sub-categories:

- Residential Landed Buildings
- Residential Non-landed Buildings (for projects with Gross Floor Area of less than 25,000m<sup>2</sup>)
- Residential Non-landed Buildings (for projects with Gross Floor Area of more than or equal to 25,000m<sup>2</sup>)
- Commercial and Office Buildings
- Institutional Buildings
- Industrial Buildings
- Mixed Development Buildings
- Additions & Alterations / Upgrading Buildings
- Civil Engineering Projects

**Assessment Criteria**

Building projects are assessed based on their buildable design score, constructability score, simplicity of construction, integration of design and construction, and aesthetics.

Civil engineering projects are assessed based on design for ease of construction, the use of construction technology, site management, integration of design and construction, and the adoption of innovative designs and products.

National Archives of Singapore

## Builder (Prime) Category



Developed the Lightrus Prefab System (based on proven Light Gauge Steel (LGS) technology)



Adopted the use of 3D models that can be incorporated into BIM during the design stage

### Lightrus Pte Ltd (Merit)

Lightrus is a construction technology firm that specialises in the use of Light Gauge Steel (LGS) for the construction of buildings

#### Key Productivity Initiatives:

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Design clashes between architectural, structural and M&E were easily identified, communicated and rectified.