



READY
TO
BATTLE



HKIBIM BIM Automation Arena 2025

Question for Master Challenge Category



The Background



The HKIBIM is going to create a 15th Anniversary Memorial Hall cum the Hall of Fame for the winners in this event in the Metaverse.

The Institute would like to invite the applicants in the Master Challenge category to design the building facade with cladding/ curtain wall, PV panels, vertical greenery and feature lighting for the hall.

The Institute would adopt the design of the winner of this category, if the winner is willing to authorize the Institute to do so.

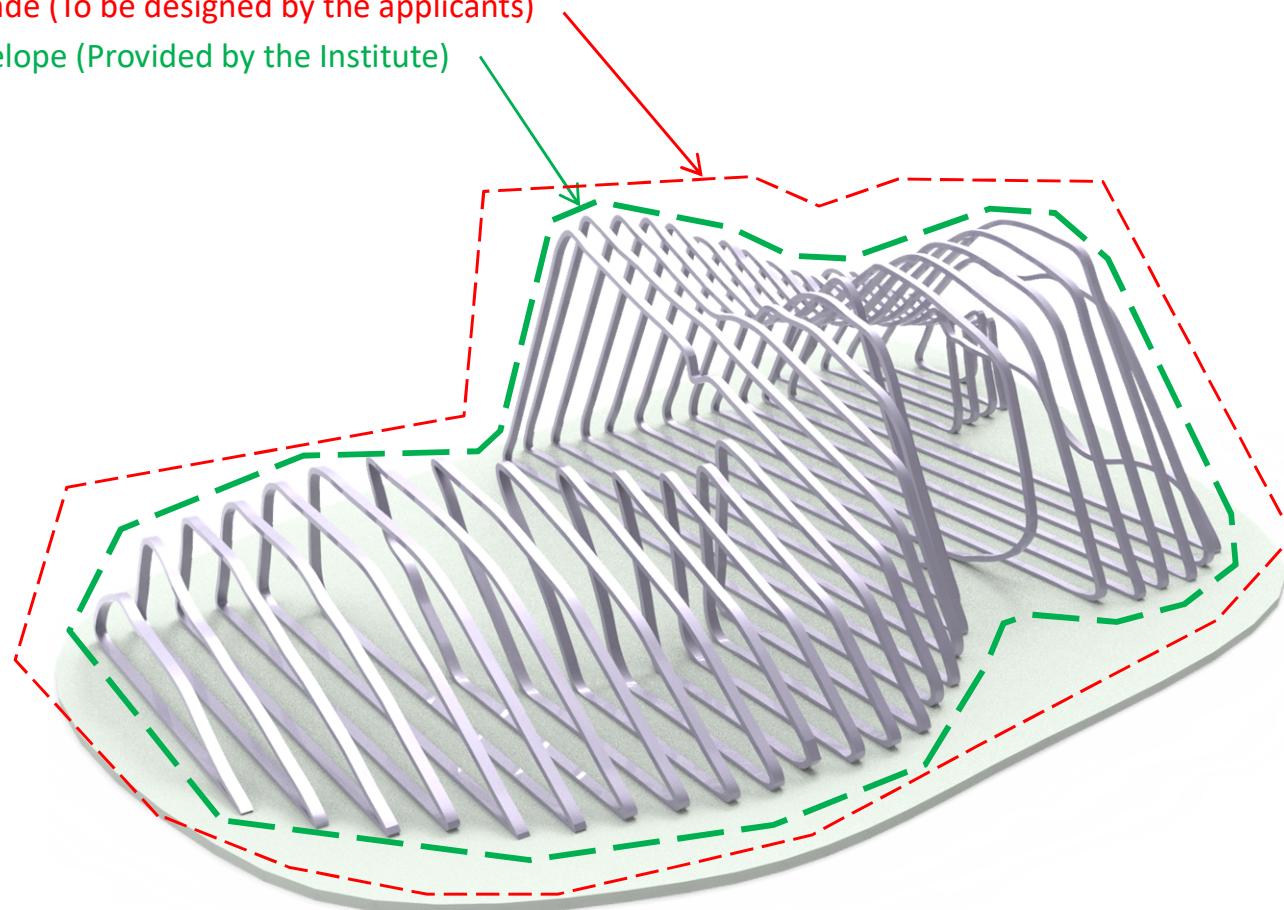




The Design Intent

Building Facade (To be designed by the applicants)

Internal Envelope (Provided by the Institute)

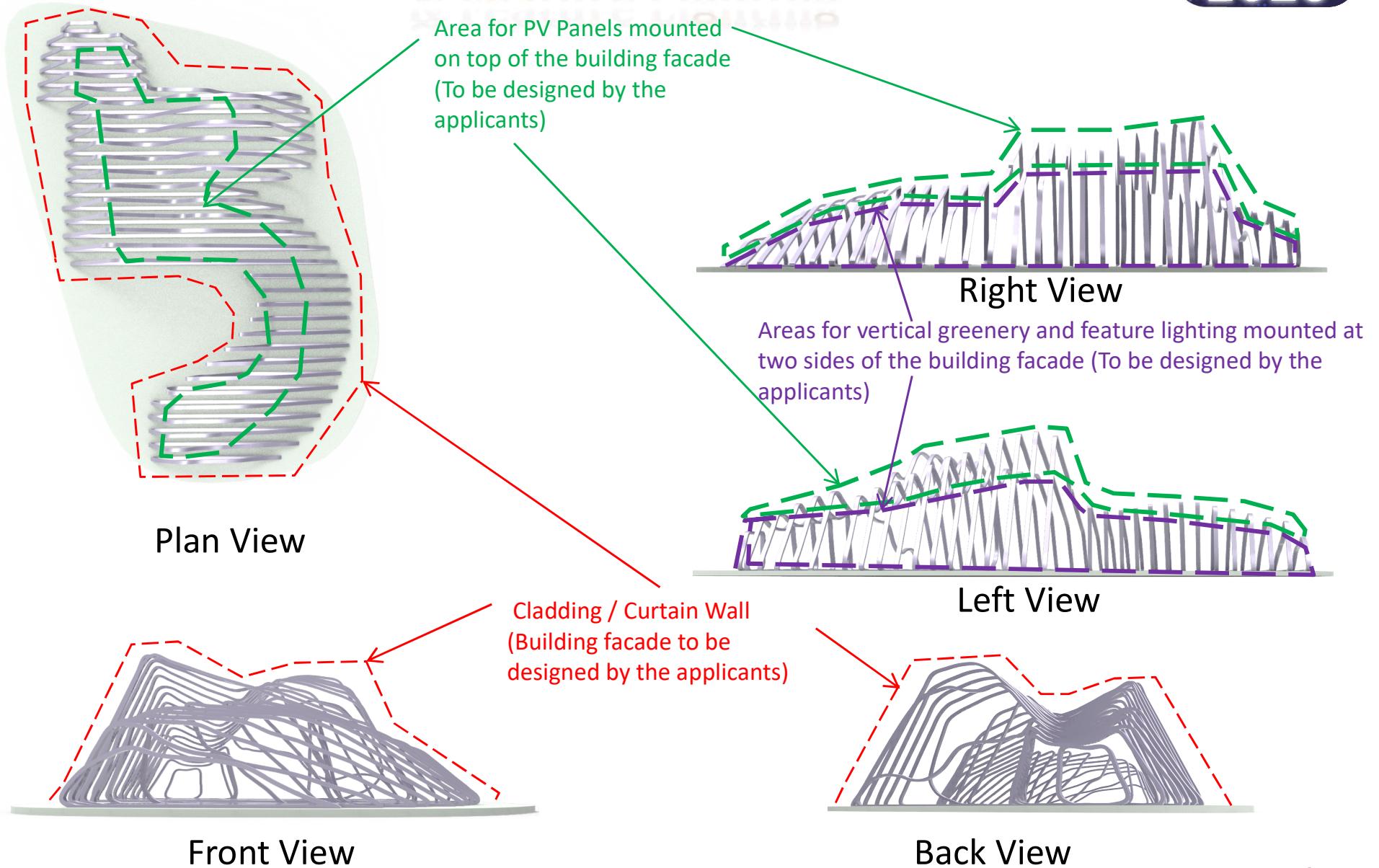


Download link for this design intent model in dxf and Ifc formats

https://drive.google.com/file/d/1pdkM1LfpxThFaV3U7Z_xgKnFCQtw93E/view?usp=drive_link



The Design Intent of the Cladding/ Curtain Wall, PV Panels, Vertical Greenery & Feature Lighting





The Submission



A. Parametric Modelling

- Design and create a BIM model for the **building facade** which should include **at least one** of the following components:
 - Cladding / Curtain Wall;
 - PV panels;
 - Feature lighting;
 - Vertical greenery.
- The final BIM model should include the **Internal Envelope**.

B. Automatic Element Generation

- In each of the components, applicants are required to optimise the design of the components by maximising the repeatability of the shapes/ sizes/ types of the components mentioned in Item A.



The Submission



C. Automatic Drawing Generation

- Produce drawings with clear annotations to show the optimisation of the component design;
- Automatic tagging and systematic element numbering.

D. Data Interoperability (openBIM)

- Demonstrate that the graphical data and essential non-graphical data are interoperable with other software compatible with openBIM workflows.

E. Demo Video for Item A to D

- Submit a **video clip** demonstrating the end-to-end automation process (no time limit) on or before **15th February 2025**, after the challenge question has been issued by the Organiser in early January 2025.



The Finalist's Presentation



1. The Battle Day: **Early March 2025**

2. The BIM Legendary Championship^{1, 2}: **28 March 2025**

Notes:

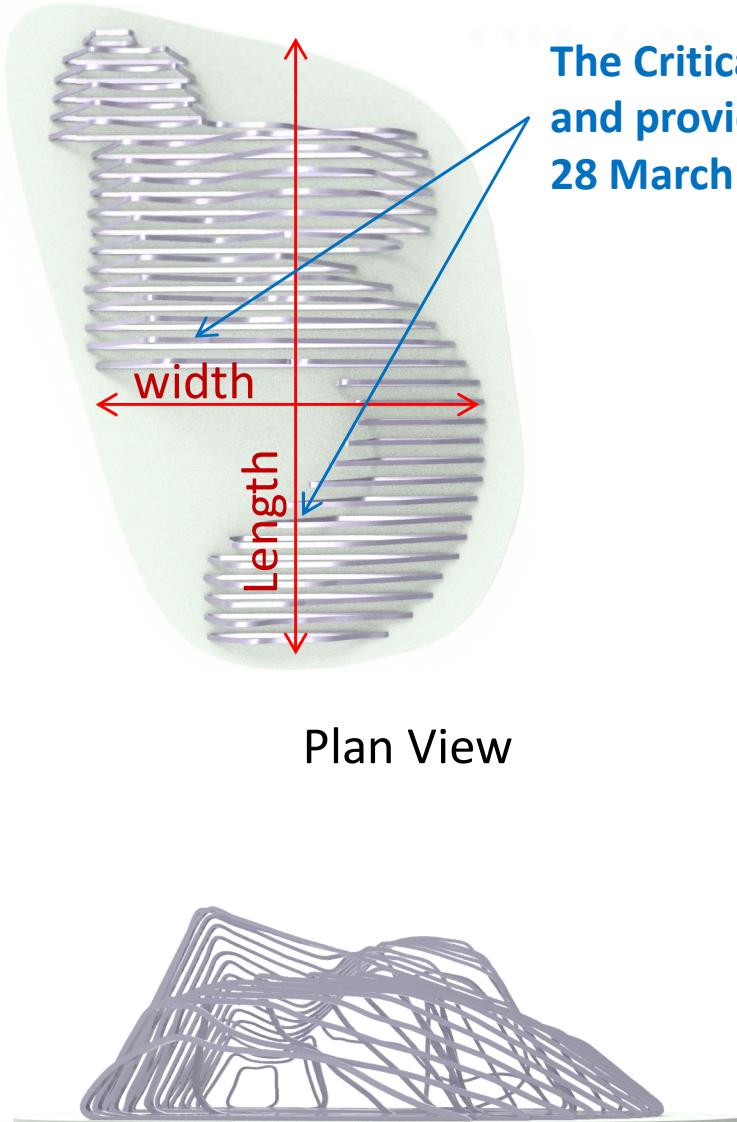
- 1 The finalists should adopt the **critical dimensions** of the Internal Envelope including as the **width, height** and **length** which will be adjusted and released to the finalists within **one week** before 28 March 2025.

- 2 Each finalist will be required to install their solution and software on a **Virtual Machine (VM)** for the presentation, with a user account will be provided by an event sponsor. Details of how to set up the VM will be announced in due course.

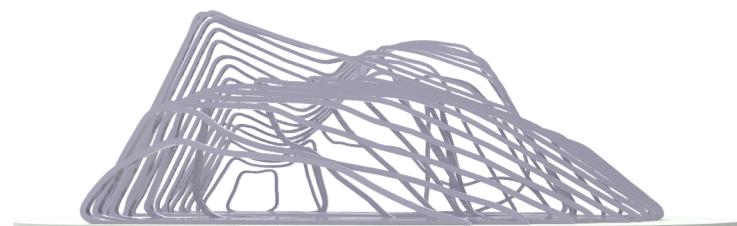


BIM Legendary Championship

on 28 March 2025

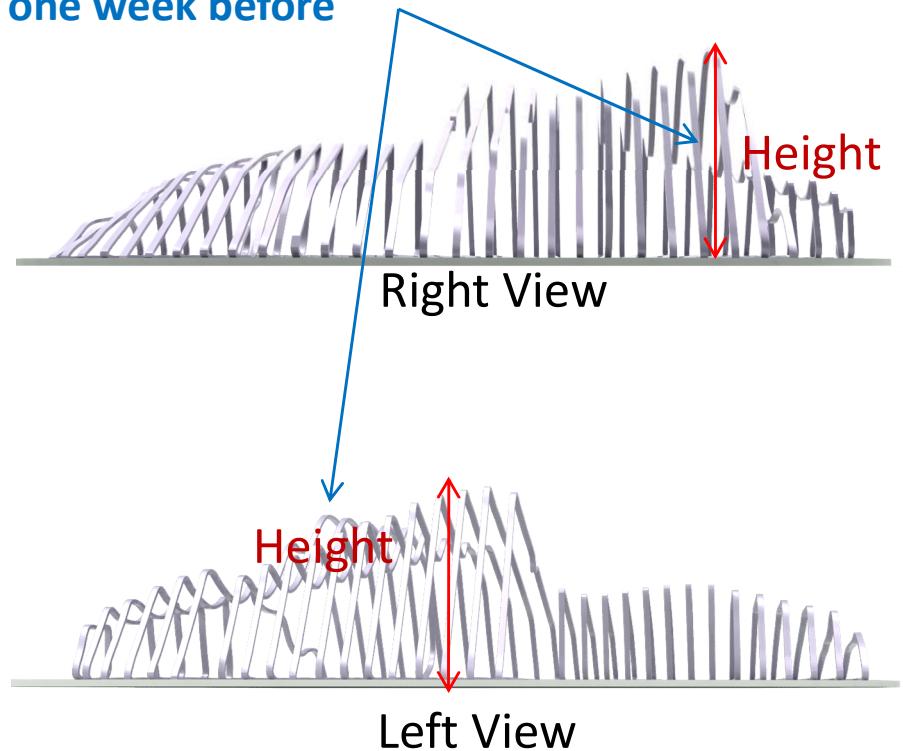


Plan View



Front View

The Critical dimensions to be adjusted
and provided within one week before
28 March 2025



Back View



Assessment Criteria



1. Aesthetic appearance (30%)

- Landmark and Harmony (i.e. the design blends in with the theme of the 15th anniversary of HKIBIM.)

2. Design optimization (35%)

- Modularisation and Sustainability (i.e. demonstrate reduction of waste and energy.)

3. Process Automation (20%)

- Modelling and Drawing Generation (i.e. demonstrate enhancement of efficiency and productivity.)

4. openBIM (15%)

- Data interoperability (i.e. demonstrate that the design model and data can be read by other openBIM software.)

Notes:

1. Bonus Marks will be given to HKIBIM Member(s) in a project team – 5%
2. Bonus Marks will be given if the applicant is willing to share their workable solutions through HKIBIM Apps Store and to the public – 10%