

Annex B – Summary of Skilled Builder and BIM Competitions

1. Telescopic Handler Operations



- Competitors are required to maneuver the telescopic handler in accordance to the circuit drawing provided and perform predetermined operations smoothly and safely. Competitors will be expected to transport items such as beams and barrels while tackling challenging courses.
- Competitors will have to demonstrate the following skills:
 1. Smooth maneuvering of telescopic handler
 2. Efficient handling of handler in tight or difficult positions
 3. Familiarity of telescopic handler lifting controls
 4. Fast and safe operation of telescopic handler
- The top 2 operators will be awarded champion and runner- up respectively. The competition will test them in all elements of skills involved in telescopic handler operations.

2. System Formwork Installation



- The 4-men teams are expected to be able to comprehend drawings, effectively plan their time, demonstrate competence with tools, observe safety and keep work stations clean and tidy. Participants will be judged on their understanding of the drawings and producing quality system formwork while adhering to a strict timeframe
- Competitors will have to demonstrate the following skills:
 1. Measuring and marking out
 2. Planning and setting out work
 3. Working from detailed drawings to erect formwork
 4. Working with a range of materials and tools
 5. Erect with both vertical and horizontal forms
- The top 2 teams will be awarded champion and runner -up respectively. The competition will test them in all elements of skills involved in system formwork erection.

3. Drywall Installation



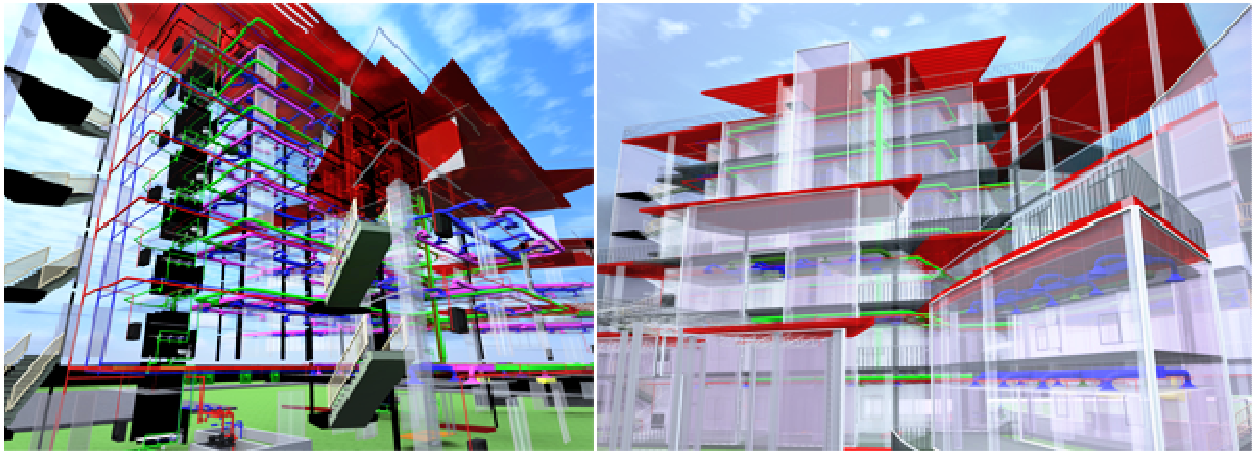
- The 3-men teams will compete in a specific drywall project designed to challenge the team's ability to interpret drawings, measure accurately, install simple M&E services, effectively plan their time, demonstrate competence with tools and use appropriate materials to produce accurate and neat work outputs while adhering to strict timeframe. Participants are to demonstrate observance of safety and good housekeeping habits.
- Competitors will have to demonstrate the following skills:
 1. Measuring and marking out
 2. Planning and setting out work
 3. Working from detailed drawings
 4. Working with a range of drywall materials and tools
- The top 2 teams will be awarded champion and runner- up respectively. The competition will test them in all elements of skills involved in drywall partition and services installation.

4. Crane Operations



- Using the crane operations simulator, competitors are required to complete a series of tasks in a given scenario provided. The scenario will include both simple and complicated maneuvers commonly performed during lifting and will be designed to fully utilise all aspects of crane controls. Completed projects will be assessed by an automated system.
- Competitors will have to demonstrate the following skills:
 1. Ability to lift and hoist load in a safe and stable manner
 2. Perform lifting for the installation of precast panel or structural steel
 3. Observe proper safety procedure
 4. Ability to follow signals given by the virtual signal man
 5. Ability to complete operations within the given time
- The top 2 operators will be awarded champion and runner -up respectively. The competition will test them in all elements of skills involved in crane operations.

5. Building Information Modelling (BIM)



- Teams of two to three persons from the same category will participate in the 2-day Open BIM Competition (total of 24-hours at the BCA Academy). Staff of industry firms or school students and lecturers can form teams to participate. Industry practitioners can also form teams with the school students.
 1. Architecture
 2. C&S Engineering
 3. M&E Engineering
 4. Construction, QS and FM
 5. Student
- Competitors will have to demonstrate the following:
 1. Ability to demonstrate the capability of BIM and as many of its benefits as possible within the stipulated time (e.g. conceptual design, modelling, documentation, simulation/analysis, walkthrough, quantity take-off, clash detection etc)
 2. Creative and innovative use of BIM for better sustainable or buildable design
 3. Presentation style that shows team work and effort
 4. Interoperability across various software platforms (e.g. Modelling to simulation/rendering)