Summary of Decisions of the Structural Engineering Committee SEC Meeting 1/2025 held on 11.3.2025

Case 2/2025

Issue: In-principle acceptance of Modular Integrated Construction (MiC)

Recommendation: To accept the modified confinement arrangement for:

- (a) confined boundary element of walls, and
- (b) walls with vertical compression rebars exceeding 2%.

without following the prescriptive requirements stipulated in Clause 9.9.3.2 and Clause 9.6.4 respectively of the Code of Practice for Structural Use of Concrete 2013 (2020 Edition) (Concrete Code).

Decision:

Having noted the background of the design approach, construction sequence, quality control, site supervision and the testing proposals, the members endorsed the recommendations on a case-by-case basis subject to the following conditions:

(1) The following site supervision requirements shall be enhanced:

RSF Stream:

• RSE Stream:	
Role	Proposed Frequency Level
RSE	Monthly
Т3	 Minimum two times per week and 100% inspection of the followings: (1) Internal surface of precast wall panels. (2) Installation of chain of Links 2. (3) Installation of vertical lapping bars and measurement of the top level of the bars before concreting. (4) Concreting the cast in-situ portion of sandwich wall. (5) Visual inspection tubes and ultrasonic pulse echo tests after concreting.

• RC Stream:

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Role	Proposed Frequency Level
AS	Monthly
Т3	Minimum two times per week
T1	Full time (no enhancement)

- (2) A method statement for the installation works shall be submitted to the satisfaction of BD before installing the full-scale mockup. The mockup samples, including the cast in-situ portion of the sandwich wall, shall adopt the same configuration, details, and concrete mix as the actual production. Additionally, a performance report for the full-scale mockup, incorporating all inspection and test reports, shall be submitted to the satisfaction of BD before commencing on-site installation of MiC modules.
- (3) A detailed method statement for the trial panel with structural tests shall be submitted to BD before the trial commences. The test results should be submitted to BD's satisfaction before the consent application for the on-site installation of MiC modules is made.
- (4) The quality control and assurance measures suggested in the SEC paper should be implemented.