

In Collaboration With



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**Date: Monday, 1 September 2025**

For enquiries, please contact:

Building Engineering Group (#10-01)

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Or use our Online Feedback Form at:

<https://www.bca.gov.sg/feedbackform/>

Dear Sir/Madam

#### **REVISED SINGAPORE STANDARDS –**

- (A) SS EN 206:2014(2024) + A1:2024 Concrete – Specification, performance, production and conformity**
- (B) SS 544-1:2024 Concrete – Complementary Singapore Standard to SS EN 206 – Part 1: Method of specifying and guidance for the specifier**
- (C) SS 544-2:2024 Concrete – Complementary Singapore Standard to SS EN 206 – Part 2: Specification for constituent materials and concrete**

#### **Objective**

This circular is to inform the industry of the publication of the revised Singapore Standards – SS EN 206:2014(2024)+A1:2024, SS 544-1:2024, SS 544-2:2024 and the key provisions to note.

#### **Background**

2 The SS 544-1 and 2 are complementary Singapore Standards to SS EN 206. SS 544 contains additional Singapore provisions to be used in conjunction with SS EN 206. Together they form a complete package for the specification, production and conformity of concrete. The key provisions that we wish to highlight are described in the ensuing paragraphs.

#### **Use of 100 mm Cubes**

3 It should be noted that SS 544-1 permits the use of 100 mm cubes and the conformity criteria for 100 mm cube specimens are the same as those for 150 mm cubes. There is significant environmental benefit in terms of material and transport impact to using the smaller specimens. Hence, the adoption of 100 mm cubes for conformity and identity testing is recommended. More details are given in the National Foreword and clause A.10 of SS 544-1.

### **Digital Monitoring and Measurement**

4 SS 544-1 now gives guidance on digital monitoring and measurement of fresh concrete properties. This monitoring and measurement system refers to that installed on the delivery vehicle. Therefore, project teams are encouraged to utilise this provision, if they find it suitable for their projects.

### **Initial Testing**

5 We wish to bring your attention to clauses 9.5 and A.1 of SS EN 206 on initial testing. Initial test (or trial mix as is previously known) shall be performed for a new concrete or concrete family to check and ensure the concrete composition meets the specified requirements of the concrete in the fresh and hardened states. However, where the producer or specifier can demonstrate an adequate concrete composition, based on data from previous tests and long-term experience, this may be considered as an alternative to initial tests.

### **Use of Carbon Dioxide Utilisation and Granite Fines in Concrete**

6 In the specification of constituent materials and concrete for use in Singapore, reference should be made to Annexes ZA to ZF of SS 544-2. These guidelines are provisions for use in Singapore and these same provisions are also reflected in the respective material standards<sup>1</sup>. These provisions relate to circumstances which are typical for Singapore such as climatic conditions (testing temperatures) for concrete, aggregates, cement and admixture.

7 However, arising from industry request, two new annexes were introduced to provide guidance on carbon utilisation in concrete and use of granite fines. More details can be found in the following annexes of the standard –

- (i) Annex ZE – Singapore guidelines on carbon dioxide utilisation in concrete
- (ii) Annex ZF – Singapore guidelines on granite fines

### **Encouragement for Adoption**

8 We encourage project teams to adopt these standards and the relevant provisions for improved sustainability and efficiency in the local concrete construction practice. If in doubt, project teams and their QPs can pre-consult BCA on the adoption of these provisions for their projects.

### **For Clarification**

9 We would appreciate it if you could bring the content of this circular to the attention of your members. Should you need clarification on this matter, you may call our hotline at 1800 342 5222, or use our Online Feedback Form at: <https://www.bca.gov.sg/feedbackform/>.

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<sup>1</sup> SS EN 206 Concrete – Specification, performance, production and conformity  
SS EN 12620 Aggregates for concrete  
SS EN 197-1 Cement – Part 1: Composition, specifications and conformity criteria for common cements  
SS EN 934-2 Admixtures for concrete, mortar and grout – Part 2: Concrete admixtures – Definitions, requirements, conformity, marking and labelling

Yours faithfully



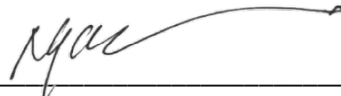
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