

Our Ref: APPBCA-2025-14

Building Plan & Management Group

01 September 2025

**See Distribution List**

Dear Sir/Madam

**SUBMISSION OF LIGHTNING PROTECTION SYSTEM PLANS**

**Objective**

1. This circular is to inform the industry about the upcoming implementation of the following:
  - a) Lightning Protection System (LPS) plan submission in accordance with the amended Building Control (BC) Regulations; and
  - b) Submission of the Certificate of Supervision of Lightning Protection System (CSC03).

**Background**

2. The current BC Regulations mandates the provision of LPS. To enhance design coordination upstream and minimise downstream rectification nearing project completion causing delay in obtaining Temporary Occupation Permit (TOP), the amended BC Regulations will now require the submission of LPS plan(s) to the Commissioner of Building Control ("CBC") as part of Building Plan (BP) submission.

## **Key Duties of Relevant Stakeholders**

### **I. Developer & Builder**

3. The key duties of developers and builders are:
  - a) Appoint a professional engineer registered under the Professional Engineers Act 1991 in the branch of electrical engineering to prepare the LPS plan(s) (“PE(Design)”); and
  - b) Appoint a professional engineer registered under the Professional Engineers Act 1991 in the branch of electrical engineering to supervise the installation of the LPS and related building works (“LPS building works”) (“PE(Supervision)”).

*Note:*

- a) *Where no such engineer has been appointed by the Developer, the Builder is required to appoint an appropriate professional engineer for the LPS works;*
  - b) *The professional engineer for preparation of plans and supervision of the works can be the same person.*
4. For maintenance and inspection of LPS, the building owner is advised to follow the recommendations stipulated in the Singapore Standard SS555 Part 3 Protection Against Lightning. For LPS Class III, visual inspection should be carried out at least once every 2 years and comprehensive inspection every 4 years. However, due to climatic changes that may occur over time, more frequent visual inspections are encouraged to ensure the LPS remains in good working condition.

### **II. Professional Engineers**

5. Key duties of PE(Design) are:
  - a) Prepare LPS plan(s); and
  - b) Ensure the LPS building works are designed in accordance with SS555– Singapore Standard for Protection Against Lightning.
6. Key Duties of PE(Supervision) are:
  - a) Supervision of the LPS building works to ensure the LPS building works are carried out in accordance with the approved plans; and
  - b) Ensure the LPS building works are installed in accordance with SS555– Singapore Standard for Protection Against Lightning Part 1, Part 2 and Part 3.

### **Implementation Date**

7. To ensure that industry has sufficient time to familiarise with the LPS plan submission requirements, implementation will be phased out. At a start, with effect from **1 April 2026**, where developers are required to obtain CBC's approval of plans for the proposed building works and no planning permission has been submitted at Design Gateway **before 1 April 2026**, developers of proposed developments with gross floor area of 30,000m<sup>2</sup> or larger must obtain CBC's approval of LPS plans (where applicable) before carrying out the LPS building works.

*Note: Where URA's Planning Permission is applicable, development applications submitted to URA before 1 April 2026 that result in a grant of Provisional Permission (PP) or Design Gateway (DG) clearance will not be subjected to the new regulatory requirements.*

### **BIM and IFC-SG Requirement**

8. LPS plans can be submitted in lightweight 2D BIM format. Project teams interested in 3D submissions can consult BCA on the format of IFC-SG prepared as per the CORENET X COP.

### **Insignificant Building Works**

9. LPS plan submission is not required for LPS building works involving one to one replacement or reinstatement of any LPS, or any repairs to any existing LPS, where these LPS building works are carried out on its own or together with other building works that do not require plan approval by the CBC.

### **Acceptable Solution**

10. The LPS must be capable of protecting the building against lightning strike and protecting the occupants of that building from being exposed to any lightning current that is discharged through the building. The requirement is deemed to be satisfied if the LPS :
  - a) is designed and installed in accordance with Part 1, Part 2 and Part 3 of SS555– Singapore Standard for Protection Against Lightning; and
  - b) is of a minimum level of Class III lightning protection system as described under SS 555 – Singapore Standard for Protection Against Lightning.

**Submission of New Certificate of Supervision of Lightning Protection System (CSC03) during application of TOP/CSC**

11. Where developers of LPS building works are required to obtain CBC's approval of LPS plans, the PE(Supervision) for these LPS building works would be required to submit the new Form BPD\_CSC03 [Ver 2.0 2025 CX] "Certificate of Supervision of Lightning Protection System" in respect of the LPS building works during application for TOP/CSC. The PE(Supervision) shall be required to maintain at the premise on which the building works are carried out records of Earth Resistance & Continuity Test for the Lightning Protection System.

**For Clarification**

12. We would appreciate if you could disseminate the contents of this circular to your members.
13. Should you need any clarification, please use the online feedback form (<https://www.bca.gov.sg/feedbackform/>). Frequently Asked Questions, LPS Plan Submission Checklist and FORM BPD\_CSC03 [Ver 2.0 2025 CX] can be downloaded from the QR codes listed under Annex B.

Yours faithfully



VIVIEN FOO  
DIRECTOR  
BUILDING PLAN AND POLICY DEPARTMENT  
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for COMMISSIONER OF BUILDING CONTROL

## **ANNEX A**

### **PARTICULARS TO BE SHOWN ON LPS PLANS**

The lightning protection system plans must specify the class of lightning protection system and where applicable, consist of or contain the following:

- (a) a site plan
- (b) the roof plan of the building containing or showing —
  - (i) the air-termination system; and
  - (ii) the location of the down conductors
- (c) one or more elevation plans containing or showing —
  - (i) the zones of lightning protection provided by the air-termination network for the open roof spaces and the sides of the building; and
  - (ii) the location of the down conductors
- (d) the floor plan of each storey where the earth electrodes are located;
- (e) one or more plans containing or showing —
  - (i) the details and the location of the points where there is equipotential bonding between the air-termination system, down-conductor system and earth-termination system; and
  - (ii) the details and the location of the points where there is equipotential bonding of the lightning protection system to electrically conductive parts of the building (except mechanical and electrical services)
- (f) such other details or plans as the Commissioner of Building Control may require.

ANNEX B

QR Codes

 <a href="https://go.gov.sg/lps-plan-checklist">https://go.gov.sg/lps-plan-checklist</a>	 <a href="https://go.gov.sg/formcsc03version2-2025">https://go.gov.sg/formcsc03version2-2025</a>
LPS Plan Submission Checklist	FORM BPD_CSC03 [Ver 2.0 2025 CX]

 <a href="https://go.gov.sg/faqlpsplansubmission">https://go.gov.sg/faqlpsplansubmission</a>
FAQ On LPS Plan Submission

## **ANNEX C**

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