

01 Jun 2022  
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For enquiries, please contact:  
Building Resilience Group (#10-01)  
Tel: 1800 3425 222 (1800-DIAL-BCA)  
or use our Online Feedback Form at:  
<https://www.bca.gov.sg/feedbackform/>

## **SUBMISSION OF CIVIL DEFENCE SHELTER PLANS TOGETHER WITH BUILDING PLANS AND STRUCTURAL PLANS**

This Circular is to inform the industry of the revised submission process for Civil Defence ("CD") Shelter Plans in residential projects. From the effective date, relevant aspects (shown in Annex A) of the CD shelter plans will need to be incorporated into the Building Plans ("BP") and Structural ("ST") Plans respectively. Rounds of consultation with industry and feedback sought via industry surveys, focus group discussions with industry stakeholders and discussions with Inter-Agency Coordinating Committee (IACC) were carried out.

### **Background**

2 The submission process for CD shelter plans will be revised to be submitted together with BP and ST plans. With this, there will not be a separate CD shelter plan submission as it will be subsumed under the BP and ST plans. This will help to streamline the submission process as well as reduce the efforts and touch points for both Architects and Engineers, leading to increase productivity and synergy. Please refer to Annex A for the list of architectural and structural drawings required for the CD shelter proposal to be included in the BP and ST submissions respectively.

### **Implementation Date**

3 This will take effect on 01 Jan 2023 and shall apply to **all projects for which the first set of plans is submitted to the Commissioner of Building Control for approval on or after 01 Jan 2023.**

### **Technical Requirements**

4 The process for submitting CD shelter plans together with BP and ST plans will apply for all residential shelter types, namely Household Shelters ("HS") and Storey Shelters ("SS"). The CD shelter plans shall still satisfy the relevant requirements outlined in the respective Technical Requirements of Household Shelters and Technical Requirements of Storey Shelters.

## Changes to Pre-Submission Consultation

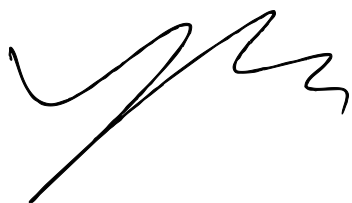
5 Currently, HS/SS pre-submission consultations are submitted to BCA online using the 'Request for Consultation on Civil Defence Shelter Requirements'. On or after the effective date, all HS/SS pre-submission consultations shall be submitted as 'BP Pre-Submission Consultation' applications.

## Clarification

6 We would appreciate it if you could convey the contents of this Circular to the members of your organisation. Should you need any clarification, please contact either Mr. Ong Teck Soon (Tel. 68044425, email: [ong\\_teck\\_soon@bca.gov.sg](mailto:ong_teck_soon@bca.gov.sg)) or Er. Michael Sien (Tel. 68044427, email: [michael\\_sien@bca.gov.sg](mailto:michael_sien@bca.gov.sg)). To help the industry in this transition, BCA has prepared a list of Frequently Asked Questions and checklists for industry to self-check before making a submission - please refer to QR code below.

7 Thank you.

Yours faithfully



K THANABAL  
GROUP DIRECTOR, BUILDING RESILIENCE  
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FAQs and Checklists

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## **ANNEX A**

### **Drawings to be included in each submission**

#### **Building Plan**

For HS & SS drawings in the Building Plan submission, the following drawings are to be submitted:-

- a) Site and location plans showing the locations of HS/SS and the setback distances (and shielding requirements), HS/SS wall thicknesses. Locations and details of shielding wall (structural and non-structural walls) shall be included.
- b) Building layout plans with sections & elevations
- c) Layout and sizes of transfer structures (if any) including their direct supporting columns and walls
- d) Computation of the HS/SS required area and volume, in accordance to the HS/SS technical references
- e) Architectural elevations and sections showing the HS/SS locations and the HS/SS installation fixtures, e.g. blast doors, ventilation sleeves, lighting and electrical fixtures. For SS, locations of blast rescue hatches and cat ladders shall be shown clearly.
- f) Waiver submission letters and drawings, and decision letter from SCDF (if applicable)

#### **Structural Plan**

For HS & SS submission, drawings and calculations are to be submitted. For HS & SS drawings in the Structural Plan submission, the following drawings are to be submitted:-

- a) Structural general arrangements, showing the locations of HS/SS
- b) Structural elevations and sections, showing the steel reinforcement detailing of the HS/SS walls and curtailment around HS/SS installation fixtures, e.g. blast doors, ventilation sleeves. Concrete grade, steel reinforcement grade and lapping/anchorage lengths shall be indicated clearly.
- c) Structural general arrangements, elevations and sections shall be developed based on the Architectural set where the setback distances (and shielding requirements) and HS/SS wall thicknesses are derived. Locations and details of shielding wall (structural and non-structural walls) shall be included.
- d) Details of transfer beam or slab (if applicable)
- e) Footing plans (if footing is integrated with HS/SS slab)
- f) Details of transfer beam or slab (if applicable)
- g) Design calculations comparing moment and shear capacity between cast in-situ HS & precast hollow core HS/SS
- h) Design calculation showing adequacy of shock design provision for cat ladders in SS or handrails on Staircase shelters (if applicable)