

Frequently Asked Questions (FAQs):-

1. What are the types of Civil Defence Shelter plans affected?

Combined BP/CD and ST/CS submissions apply to projects with household or/and storey shelters. No change to the submission requirement for public and transit shelters.

2. Are there any changes in QP's certification for BP and ST Plan?

Yes, the revised certification with changes are as shown below. These changes are required as CD and CS plans are to be jointly submitted with BP and ST plans respectively.

BP Plan Certification	ST Plan Certification
<p>I, _____, the Qualified Person for Architectural Works appointed under section 8(1)(a) of the Building Control Act, hereby certify, subject to any waiver / modification granted under Section 6A of the Building Control Act (Cap 29), that :</p> <p>(a) the preparation of these building / civil defence shelter plans (and design calculations) are in accordance with the Building Control Regulations; and</p> <p>(b) The buildings / building works / civil defence shelter works shown on these plans are designed in accordance with the provisions of the Building Control Regulations / Shelter Technical Requirements and the acceptable solutions in the Approved Document.</p> <p>_____ Qualified Person for Architectural Works' Stamp & Signature</p>	<p>1. I, _____, the Qualified Person for Structural Works appointed under section 8(1)(a) of the Building Control Act, hereby submit the detailed structural / civil defence shelter plans and design calculations prepared by me and certify that they have been prepared in accordance with the provisions of the Building Control Regulations, the Building Control Act and any other written law pertaining to buildings and construction for the time being in force;</p> <p>2. The civil defence shelter works shown on these plans are designed in accordance with the shelter technical requirements;</p> <p>3. I further certify that these detailed structural/ civil defence shelter plans and design calculations are in reference to Project Ref. No : _____.</p> <p>4. Total number of structural/ civil defence shelter plans submitted : __ and total number of pages of design calculations in this book :</p> <p>_____ Qualified Person for Structural Works' Stamp & Signature</p>

3. Are there any changes in BP and ST Plan Reference Numbers?

No, there are no changes. Reference numbering is the same as current practice. E.g. A1234-00001-2021-BP01 & A1234-00001-2021-ST01.

4. Is BCA issuing a joint Notice of Approval (NOA) and Written Direction (WD) for the Project?

Yes, NOA for BP would cover both Architectural & Civil Defence Plans. Similarly, NOA for ST would cover both Structural & Civil Defence (Structural) Plans. The same principle will apply to Written Direction for the Project.

5. Is there any change to the amendment plan requirement and fee to be incurred for shelter building and shelter structural submissions?

Similar to BPs and ST Plan submissions, amendment plan fees will be collected for any design change or building works that depart or deviate from approved CD and CS plans.

The QP is advised to consult BCA if the QP needs clarification on the submission of amendment plans.

6. If setback distance is insufficient, can I provide shielding wall on the side of HS wall where there is no HS door?

Provision of shielding walls for the HS wall without HS door in lieu of setback distance is acceptable in HS Technical Reference. Please refer to cl.2.4.5 of HS Technical Reference for details.

However, it is not permitted in the TR, as shielding walls are allowed only for HS wall without blast door. QP shall ensure that the HS orientation and the minimum setback distances are compliant with the requirements.

7. What are the common non-compliances encountered during CD Shelter submissions that QP must avoid?

For household shelter (HS) submissions, the following are common non-compliances:-

- a) HS setback distances, non-shelter (NS) design and shielding wall requirements not complied with
- b) Incorrect provision of voids (numbers of M&E penetrations more than the allowable numbers and/or areas) within HS setback distance
- c) Incorrect ventilation sleeve locations and insufficient wall reinforcement and link retailing provision

For storey shelter (SS) submissions, the following are common non-compliances:-

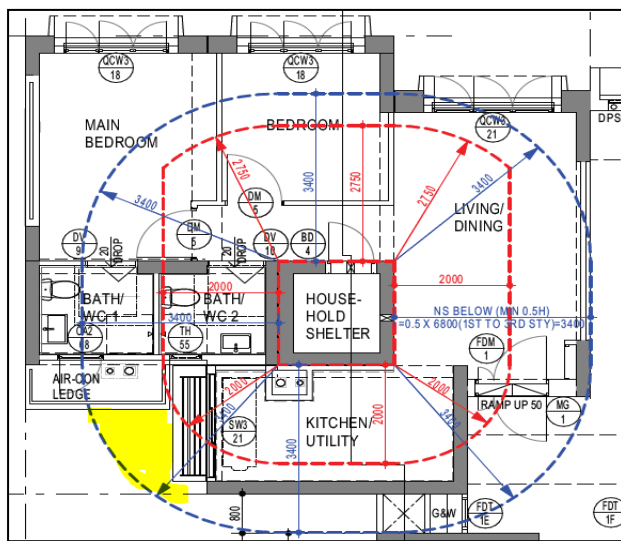
- d) SS/NS wall thickness and clear heights not according to Table 2.3.1 of TR SS
- e) SS setback distance not complied with
- f) Incorrect application of downhang beam/trellis to make up for shortfall in SS setback distance
- g) Incorrect provision of voids within SS setback distance

- h) Non-compliance of 200mm RC shielding in front of entrance SS door
- i) For staircase storey shelters, incorrect provision of shelter space in the staircase for occupants of a particular storey
- j) For staircase storey shelters, SS/NS walls not continuous to foundation

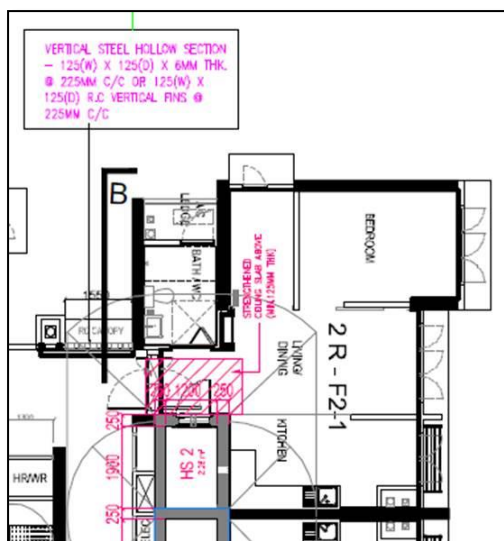
QPs are reminded to refer and comply with the relevant clauses listed in the latest Technical References for both HS and SS.

Some illustrated examples of non-compliances are highlighted as below:

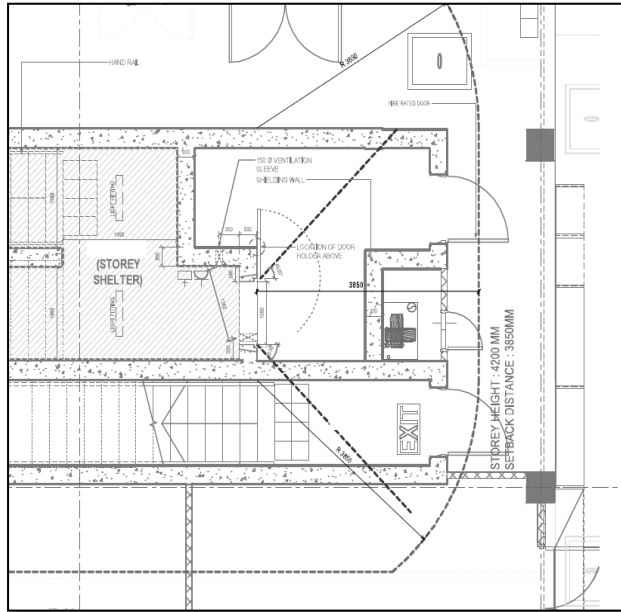
Example 1: Open space (shaded in yellow) is included as part of NS wall setback distance



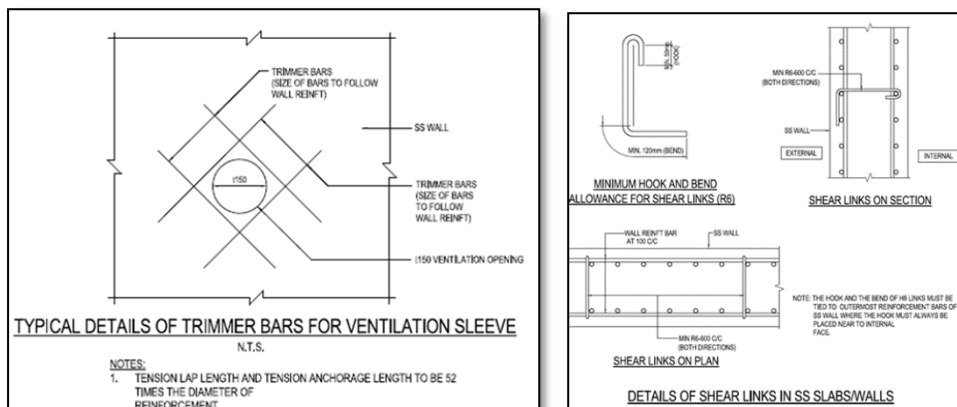
Example 2: Providing shielding wall (steel hollow section) in front of HS wall with HS door within HS setback distance



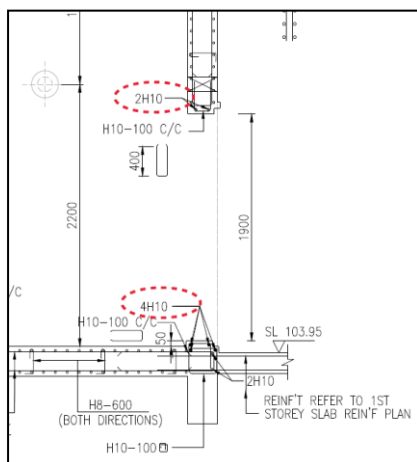
Example 3: Provision of non-continuous shielding wall in front of SS door



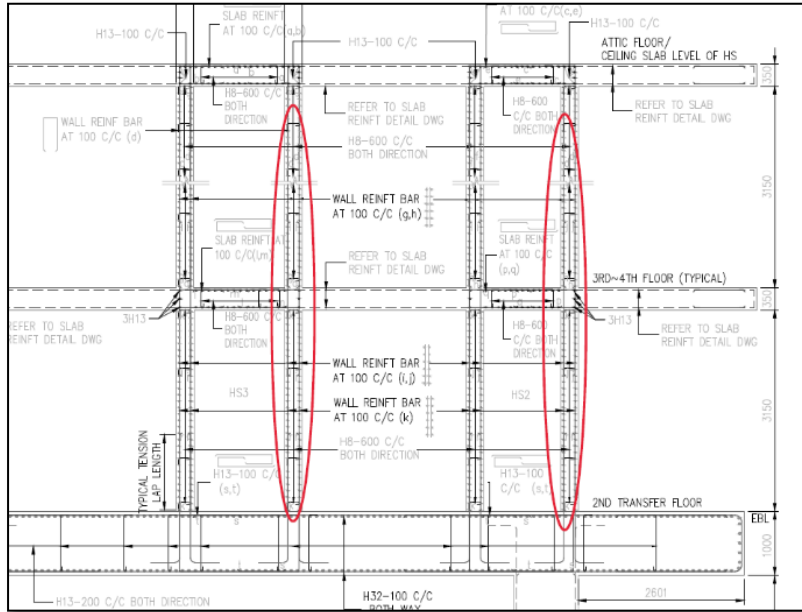
Example 4: Wrong size of ventilation trimmer details and shear link



Example 5: Insufficient wall reinforcement at HS door location



Example 6: Shear link with hook is not placed near to the internal face of shelter



Example 7: Insufficient rebars- Outer mesh is D10 instead of D13

