

SINGAPORE CIVIL DEFENCE FORCE

Your Ref :

Our Ref : A7/14/17

Date : 2 Aug 99



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**ANNEX 4**

Dear Sir,

**SIA's SUGGESTIONS ON TECHNICAL REQUIREMENTS FOR HOUSEHOLD SHELTERS**

I refer to your facsimile transmittal dated 15 Jul 99 in which you indicated the following suggestions from SIA :

- a Clause 2.2.1 of the technical requirements called for different setback ranged from 2.0m to 2.7m if household shelter is between 2.5m to 4.0 high.

Suggestion

For good class condominium whereby the floor area is rather small, but floor height between 3.0m to 4.0m setback of household shelter is critical to the design.

Can the department consider waiver so that only minimum 2.0m setback to be provided if floor height is between 2.5m to 4.0m. The introduction of double slabs had been considered but it will affect buildability to the buildings as well as G.F.A.

- b For HS extended into the kitchen and yard area of the neighboring unit. The HS is treated like any structural member (say a huge column) the public is not allow to damage it.

2 We thank you for the suggestions. Our comments are as follows :

- a Clause 2.2.1 of the technical requirements stipulates a minimum setback distance ranging from 2.0m to 2.7m (depending on the HS clear height) for one of the HS wall (termed as the reference wall). The setback distances for the other 3 walls are to be at least 4.0m regardless of the clear height of the HS (i.e. up to 4.0m). The protection of the HS comes from a combination of setback distance and thickness of wall. The higher the HS, the setback distance and the thickness of the reference HS wall had to be increased to achieve an equivalent level of protection. For the

non-reference wall, the minimum setback distance of 4m is intended for HS of clear height between 2.5m to 2.65m. However, for HS clear height greater than 2.65m and up to 4.0m, the minimum 4m setback distance requirement was assessed to be acceptable.

In the light of the above, we are unable to agree to an across-the-board reduction of setback distance for the HS reference wall for clear height of HS greater than 2.65m and up to 4m. However, reduction of setback distance is allowed only on a controlled case-by-case basis (eg. with adequate shielding by other building elements in front of the HS walls) to ensure that the protection level of the HS is not degraded.

- b In view of the low probability of repeated and indiscriminate drilling/hacking over the life span of dwelling units and considering that any control measures, if implemented, would incur additional costs and/or reduce usable space, CDSB/BCA have decided to accept SIA's suggestion that no additional requirements would be imposed.

3 Regards.

Yours faithfully



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OIC Shelter Development  
for Director Civil Defence Shelter Bureau  
HQ Singapore Civil Defence Force

cc Manager  
Civil Defence Shelter Engineering Dept, BCA  
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