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President, Singapore Institute of Architects (SIA)  
President, Institution of Engineers, Singapore (IES)  
President, Association of Consulting Engineers, Singapore (ACES)  
President, Real Estates Development Association of Singapore (REDAS)  
Registrar, Board of Architects (BOA)  
Registrar, Professional Engineers Board (PEB)

Dear Sir/Mdm,

#### **PERMITTED AND NOT PERMITTED WORKS FOR HS – AN UPDATE**

A household shelter (HS) has hardened walls, floor, ceiling and a specially designed door. They must not be hacked or drilled in order to maintain the protection integrity of the shelter. Certain finishes and fixtures are not permitted as they are not easily removable and may become hazards to shelter occupants during an emergency. The specific details of permitted and not permitted works for HS are spelt out in Chapter 7 of the document “Technical Requirements for Household Shelters 2001”.

2 This circular contains an update of the list of permitted and not permitted works for HS, and shall supersede the contents of Chapter 7 of “Technical Requirements for Household Shelters 2001”, with immediate effect.

3 We would appreciate it if you could disseminate the contents of this circular to members of your Institution or Association.

4 Please contact me at 68481470 or Maj Ng Shu Heng at 68481406, should you require further clarifications.

Yours faithfully,

CPT Yoong Eng Chee  
for Commissioner  
Singapore Civil Defence Force

cc

Members of FSSD Standing Committee

President, SISV

CEO, HDB  
Attn: Mr Lau Joo Ming

CEO, URA

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Director (Special Functions)  
Senior Manager (CDSD)  
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## **PERMITTED AND NOT PERMITTED WORKS FOR HOUSEHOLD SHELTERS (HS)**

### **GENERAL**

Any repair or alteration or renovation works, which are likely to weaken or damage any structural elements of the HS or NS, are not permitted.

### **PERMITTED WORKS IN HS**

- 1 Laying of floor tiles bonded to wet cement mortar. The total thickness of floor finishes and screed is not to exceed 50mm.
- 2 Laying of vinyl or linoleum flooring.
- 3 Laying of floor skirting tiles (up to a maximum of 100mm high) by bonding them with wet cement mortar to HS walls.
- 4 Applying splatterdash or equivalent to the external face of HS walls only to provide rough surface for feature wall panels or wall tiles installation.
- 5 Painting of walls, ceiling or door. In the case of HS door, owner shall not cover or paint over the HS door notice, locking bolts or door seal. The old paint coat on door and door frame is to be removed prior to repainting to avoid increase paint thickness resulting in difficulty in closing and opening of the door. The new paint coat must be dried up completely before closing the door as wet or damp paint will cause the door/ rubber gasket to stick onto the door frame resulting in difficulty in opening the door.
- 6 Painting on only the exterior face of the 6mm fragmentation stainless steel plate of the ventilation sleeves.
- 7 Fixing of removable screws with non-metallic inserts not exceeding 50mm deep for fixtures and equipment e.g. pictures, posters, cabinets or shelves etc. Such fixtures that are installed inside the HS will have to be removed by the owners within 48 hours upon notification. There is no restriction to the diameter of the non-metallic insert as long as it does not exceed 50mm in length. It is the owner's responsibility to ensure that the strength of the insert is adequately provided for the intended purpose.
- 8 Removal of the fragmentation plates covering the ventilation openings shall be carried out subject to the following conditions:
  - a The plates (after removal) shall be securely mounted with removable screws on non-metallic inserts not exceeding 50mm deep on one of the internal face of HS walls.

- b After the removal of plates, the bolts and nuts shall be installed back to their original positions on the ventilation sleeves.
  - c Closing or covering up of ventilation openings by removable aesthetic or architectural finishes is allowed, provided that at least 25% of the total area of the two openings shall be left uncovered for ventilation purposes during peacetime.
- 9 Power driven nails are allowed only on external face of the HS walls to facilitate flexibility in mounting of features/ fixtures by owners.

### **Not Permitted Works in HS**

- 1 Laying of wall tiles or spray of rock tone finish, cement sand finish and gypsum plastering on the internal faces of HS walls.
- 2 Laying of floor tiles using adhesive materials.
- 3 Laying of 2nd layer of tiles on floor or skirting tiles.
- 4 Installation of cornices within the HS.
- 5 Installation works with fixings using power driven nails into the internal HS walls.
- 6 Tampering with, removing or covering up of the HS door notice. The HS door notice provides important information to the occupants on the use of the HS.
- 7 Indiscriminate hacking and drilling of the HS walls, floor slab and ceiling slab, other than drilling into HS walls and ceiling slab to affix removable screws on inserts, provided the depth of the insert shall not exceed 50mm.
- 8 Hacking to both internal and external face of the household shelter walls to form key for tiling.
- 9 Hacking or indiscriminate drilling on external face of HS wall for mounting of feature wall panels or wall tiles installation.
- 10 Modifying, changing, removing or tampering of HS door.
- 11 Modifying, altering or tampering with any part of the ventilation openings, plates and the mounting devices such as bolts and nuts.
- 12 Painting to the interior face of the 6mm fragmentation stainless steel plate of the ventilation sleeves, the ventilation sleeves, "O" ring rubber gaskets and the four or eight numbers of stainless steel bolts which hold the steel plate to the sleeves.