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

Dear Sir/Mdm,

AMENDMENT TO FIRE CODE - REVISION TO VENTILATION, SMOKE PURGING AND SPRINKLER REQUIREMENTS FOR ABOVEGROUND MULTI-STOREY CARPARKS

Please be informed that revision has been made to the provision of ventilation, smoke purging and sprinkler for aboveground multi-storey carparks. The revised requirements are summarised in the table in Annex A. The car parking areas mentioned in the table shall include the driveways, ramps, loading and unloading areas, pick-up point, etc.

2. Kindly convey the contents of this circular to members of your Institution/Association/Board. The circular is available in CORENET-e-Info: http://www.corenet.gov.sg/einfo.

3. For any inquiry or clarification, please contact LTC Choh Choon Jin at Tel: 68481454 or email: Choh_Choon_jin@scdf.gov.sg.

Yours faithfully,

(transmitted via e-mail)
MAJ Tan Chung Yee
Secretary, FSSD Standing Committee
Fire Safety and Shelter Department
for Commissioner
Singapore Civil Defence Force
SINGAPORE CIVIL DEFENCE FORCE

Our Ref. : CD/FSSD/12/02/03/01

Your Ref : 

Date : 12 Dec 2013

HQ Singapore Civil Defence Force
91 Ubi Avenue 4
Singapore 408827
Tel : 68481457
Fax : 68481489

cc

CEO, BCA
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CEO, HDB
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President, SISV
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President, SCAL
Honorary Secretary, SPM
FSSD Standing Committee
### Annex A

**Ventilation, Smoke Purging System & Automatic Sprinkler System Requirements for Aboveground Carparks (standalone or within buildings)**

<table>
<thead>
<tr>
<th>Habitable Height</th>
<th>Criteria for The Largest Compartment</th>
<th>Aboveground Carpark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Building Carpark</td>
<td>Ventilation</td>
</tr>
<tr>
<td></td>
<td>Area Cubicle Extent No. of Storey</td>
<td>[Meeting Cl. 3.2.8(C)]</td>
</tr>
<tr>
<td>≤ 24m ≤ 24m</td>
<td>≤ 4,000 m² ≤ 15,000 m³ ≤ 3 storey</td>
<td>NR NR NR</td>
</tr>
<tr>
<td></td>
<td>&gt; 4,000 m² ≤ 5000 m² NA NA</td>
<td>Comply NR NR² NR³</td>
</tr>
<tr>
<td></td>
<td>NA &gt; 15,000 m³ NA</td>
<td>Comply NR NR² NR³</td>
</tr>
<tr>
<td></td>
<td>NA NA &gt; 3 storey</td>
<td>Comply NR NR² NR³</td>
</tr>
<tr>
<td></td>
<td>&gt; 5,000 m² NA NA</td>
<td>Comply NR NR² NR³</td>
</tr>
<tr>
<td>&gt; 24m ≤ 24m</td>
<td>NA NA NA</td>
<td>Comply NR NR² NR³</td>
</tr>
<tr>
<td>&gt; 24m &gt; 24m</td>
<td>NA NA NA</td>
<td>Comply NR NR² NR³</td>
</tr>
</tbody>
</table>

- **NA** - not applicable
- **NR** - not required
- **R** - required

1. For building exceeding 4 storey, automatic alarm system shall be provided.
2. Sprinkler shall be extended to the carpark if the building where the carpark is located is protected with automatic sprinkler system.
3. For Purpose Group II buildings, only manual fire alarm system shall be provided to the car parking area subject to Table 6.3A.
4. Smoke purging system is not required if the carpark area exceeds 4000 sqm but not exceeding 5000 sqm, regardless of the size of the cubical extent.