## 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

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









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CC

CEO, BCA
CEO, URA
CEO, HDB
CEO, JTC
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Honorary Secretary, SPM FSSD Standing Committee









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

buildings)

Habitable Height		Aboveground Carpark							
		Criteria for The Largest Compartment			Ventilation	Smoke Purging	Automatic	Fire Alarm	
Building	Carpark	Area	Cubicle Extent	No. of Storey	[Meeting Cl. 3.2.8(C)]	System	Sprinkler	Auto	Manual
≤ 24m	≤ 24m	$\leq$ 4,000 m <sup>2</sup>	$\leq$ 15,000 m <sup>3</sup>	≤ 3 storey	NR	NR	$NR^2$	NR <sup>1</sup>	NR
		$> 4,000 \text{ m}^2$ $\leq 5000 \text{ m}^2$	NA	NA	Comply	NR	NR <sup>2</sup>	$\mathbb{R}^3$	NR <sup>3</sup>
					Not comply	NR	R	NR	NR
		NA	> 15,000 m <sup>3</sup>	NA	Comply	NR	NR <sup>2</sup>	$\mathbb{R}^3$	NR <sup>3</sup>
					Not comply	NR	R	NR	NR
		NA	NA	> 3 storey	Comply	NR	NR <sup>2</sup>	$\mathbb{R}^3$	NR <sup>3</sup>
					Not comply	R	R	NR	NR
		> 5,000 m <sup>2</sup>	NA	NA	Comply	NR	NR <sup>2</sup>	$\mathbb{R}^3$	NR <sup>3</sup>
					Not comply	R	R	NR	NR
> 24m	≤ 24m	NA	NA	NA	Comply	NR	R	NR	NR
					Not comply	R <sup>4</sup>	R	NR	NR
> 24m	> 24m	NA	NA	NA	Comply	NR	R	NR	NR
					Not comply	R	R	NR	NR

NA - not applicable NR - not required R - required

<sup>&</sup>lt;sup>1</sup> For building exceeding 4 storey, automatic alarm system shall be provided
<sup>2</sup> Sprinkler shall be extended to the carpark if the building where the carpark is located is protected with automatic sprinkler system

<sup>&</sup>lt;sup>3</sup> For Purpose Group II buildings, only manual fire alarm system shall be provided to the car parking area subject to Table 6.3A

<sup>&</sup>lt;sup>4</sup> 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