## SINGAPORE CIVIL DEFENCE FORCE

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

Your Ref :

Date : 10 Aug 2012



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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,

## USE OF SMOKE DETECTORS OR MANUAL CALL POINT FOR ACTIVATION OF MECHANICAL VENTILATION SYSTEM IN CAR PARK

The design of the ductless jet fan system is currently based on a set of requirements issued in a circular dated 25 Nov 2008.

2. As stipulated in Clause 3.3.1 of the requirements, the jet fans system is activated by the sprinkler system serving the car park level and any other areas located within the same level or by the activation of the manual call point. As the car park space is divided into virtual smoke control zones, the activation of the jet fans system can be confined to the smoke control zone on fire and all its adjacent zones. For purpose of activating the fans in the designated group of smoke control zones i.e. fire and its adjacent zones, the sprinkler control zone can be designed to correspond with that of the smoke control zone.

3. As an alternative form of fans activation, SCDF has no objection to the use of smoke detectors to activate the jet fans system on the following conditions:

- (i) The detectors are positioned at the effective mid-range of the jet fan profile and
- (ii) In-duct smoke detector is located at the start point of the exhaust duct.
- (iii) Jet fans system is only operated upon activation of 2 smoke detectors. This is to minimize any false alarm.









4. SCDF has also reviewed the requirement for jet fans system to be activated for an entire car park development by manual call points. As it may not be practical to do so for a very large car park, SCDF will not impose it as a mandatory requirement. However, the jet fans system shall still be operable at the Fire Command Centre (FCC) via an override switch as stipulated in Clause 3.3.1 of the FSR 3: 2008 guidelines i.e. "A fireman cut off and activation (override) switch shall be provided at the Fire Command Centre."

5. This circular takes immediate effect. Please 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.

6. For any inquiry or clarification, please contact Maj Chong Kim Yuan at Tel: 68481476 or email: Chong\_Kim\_Yuan@scdf.gov.sg.

Yours faithfully,

(transmitted via e-mail)

MAJ Lee Kok Chuen Secretary, FSSD Standing Committee *for* Commissioner Singapore Civil Defence Force

cc All members of FSSD Standing Committee President, REDAS President, IFE President, SISV CEO, BCA CEO, URA CEO, URA CEO, HDB CEO, PSA CEO, JTC CE, LTA CE, TUV SUD PSB – (Attn: Ms Emily Mok/ Mr Lau Keong Ong) CE, SPRING Singapore – (Attn: Mr Kenneth Lim) President, FSMAS Honorary Secretary, SPM