

# SINGAPORE CIVIL DEFENCE FORCE

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

Your Ref. :

Date : 29 May 2014



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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

## FIRE SAFETY REQUIREMENTS FOR INSTALLATION AND MAINTENANCE OF KITCHEN EXHAUST DUCT

SCDF has noticed an increasing trend in fires involving kitchen exhaust duct (KED) over the past few years. This poses fire safety risk to adjoining property(s) and the occupants. We have conducted a detailed study into the causes of these fires and discussed the findings and recommendations to the FSSD Standing Committee on 21 Jan 2014.

2. The Committee agreed to adopt the recommended fire safety requirements for the installation and maintenance of kitchen exhaust duct as shown in Annex A. These fire safety requirements shall take effect from 1 December 2014.
3. Please convey the contents of this circular to members of your Institution/Association/ Board. The circular is also available in CORENET-e-Info: <http://www.corenet.gov.sg/einfo>
4. For any inquiry or clarification, please contact CPT Yam Yeow Kiat at Tel. No. 68481418 or email address [YAM\\_Yeow\\_Kiat@scdf.gov.sg](mailto:YAM_Yeow_Kiat@scdf.gov.sg).



Yours faithfully,

(transmitted via e-mail)

MAJ Tan Chung Yee  
Secretary, SCDF Fire Safety Standing Committee  
Fire Safety and Shelter Department  
for Commissioner  
Singapore Civil Defence Force

Distribution list

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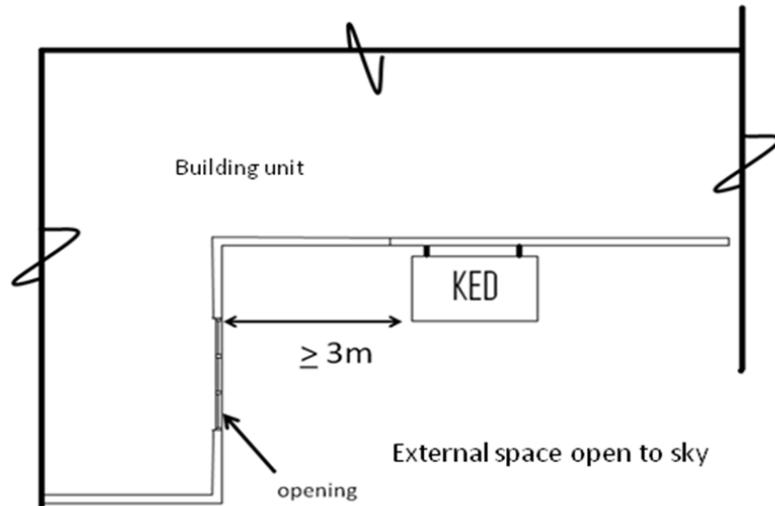
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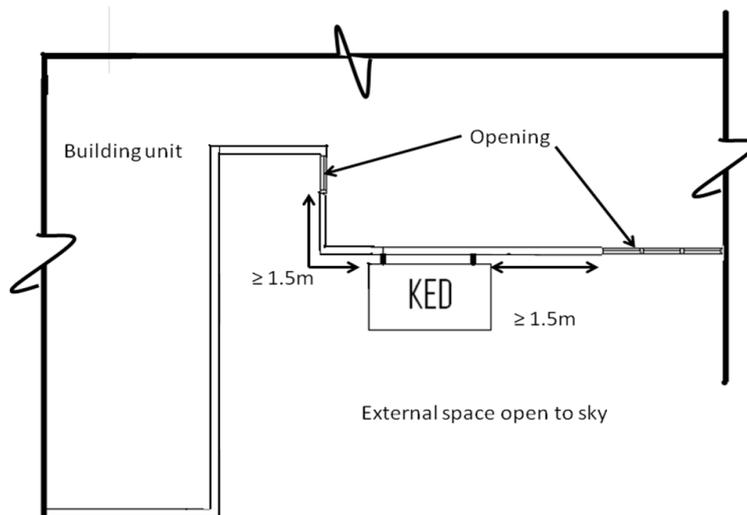
**FIRE SAFETY REQUIREMENTS FOR KITCHEN EXHAUST DUCT**

**INSTALLATION**

a. Kitchen exhaust duct running outside a building shall not be located within 3m from any unprotected openings. This separation distance can be reduced to 1.5m if the unprotected opening is on the same plane as the duct. (see figures 1 and 2 below)

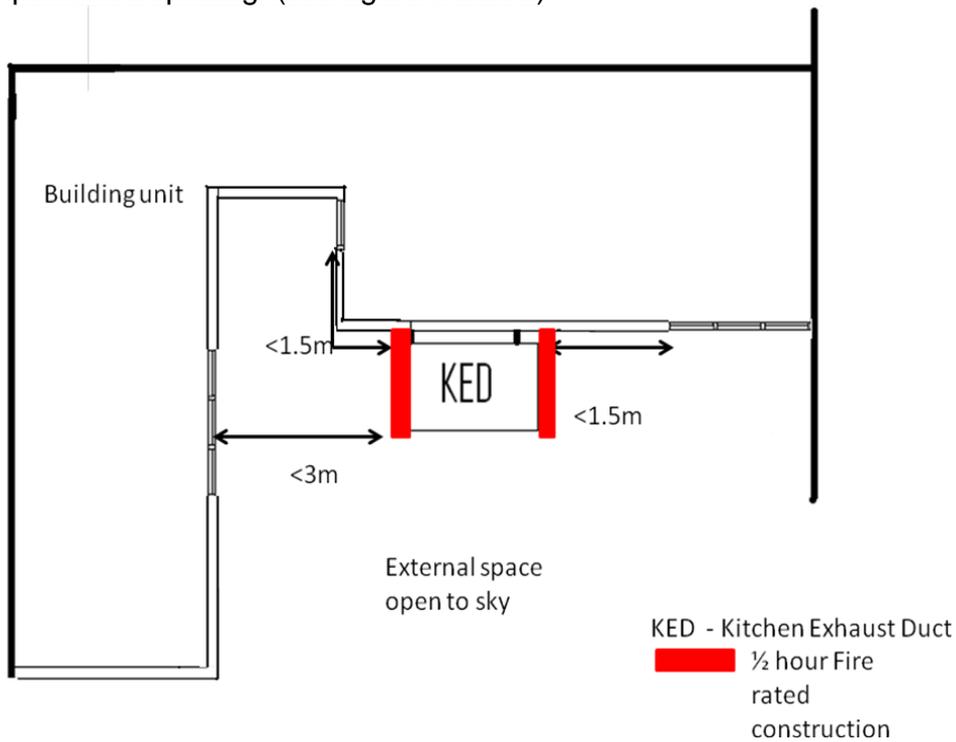


**Fig. 1 (plan view) – Unprotected opening perpendicular to the kitchen exhaust duct**



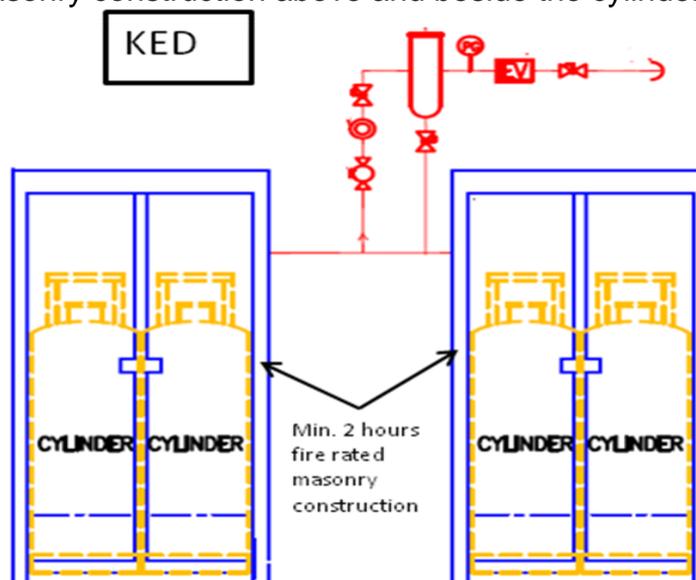
**Fig. 2 (plan view) – Unprotected opening parallel to the kitchen exhaust duct**

b. Where the distances mentioned above cannot be achieved, a fire resistant construction having at least 1/2 hour rating shall be placed between the duct and the unprotected opening. (see figure 3 below)



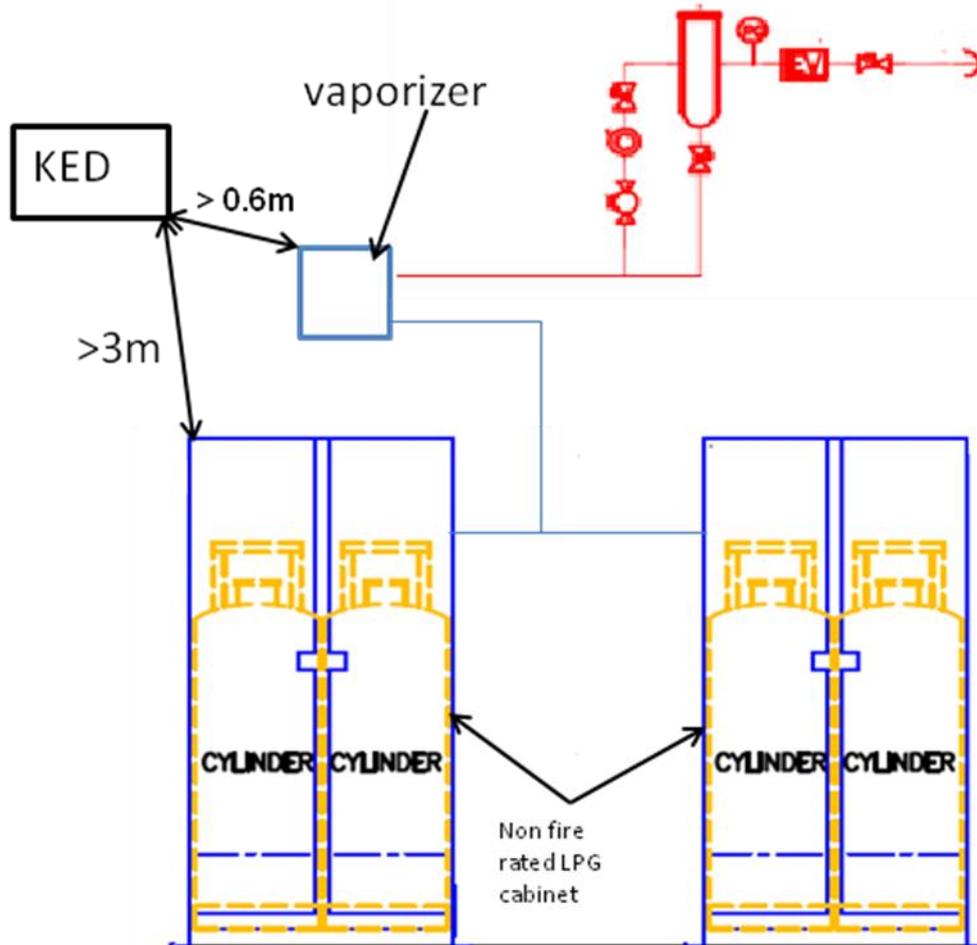
**Fig. 3 (plan view) – Fire resistant construction for kitchen exhaust duct**

c. Non fire-rated kitchen exhaust duct shall not be located above LPG storage cabinet unless they are separated from LPG cylinders by a minimum of 2 hours fire rated masonry construction above and beside the cylinders. (see figure 4 below)



**Fig. 4 (elevation view) – Installation of non fire rated kitchen exhaust duct above a minimum of 2 hours fire rated masonry construction separating cylinders and the duct**

d. The kitchen exhaust duct shall be located at least 3m from any unprotected LPG cylinders. Non fire-rated kitchen exhaust duct shall be located at least 0.6m from the vaporizer or any liquid-phase LPG pipeline. (see figure 5 below)



**Fig. 5 (elevation view) – Installation of kitchen exhaust duct in close proximity to LPG cylinders and vaporizer**

## MAINTENANCE

e. All kitchen exhaust systems shall be properly maintained. The exhaust ducts and kitchen hoods shall be degreased and cleaned at least once every 12 months. The work shall be carried out by a specialist and the records of cleaning and degreasing shall be kept by the owner/operator for verification by relevant authority.