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AIRPORT EMERGENCY SERVICE

FIRE SAFETY CIRCULAR

To All Airport Partners in CAG buildings

CHANGE FROM SS CP 55:1991 TO SS 578:2012 – USE AND MAINTENANCE OF PORTABLE FIRE EXTINGUISHERS

This circular aims to clarify the changes in the use and maintenance of portable fire extinguishers regarding the Fire Safety Circular 04/2013 dated 25 February 2013.

2. AES would like to remind all Changi Airport buildings owners / tenant to effect the changes as to comply with the requirements. The main changes affecting all buildings in Singapore have been summarised in Annex A.
3. This circular supercedes the earlier circular 04/2013 dated 25 February 2013.
4. For more information, please contact the AES Fire Prevention Section at 65412535 or refer to the fire safety manual at the following hyperlink:

<http://www.changiairportgroup.com/cag/html/our-services/airportemergency-services/fire-safety>.

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Annex A – Changes to the Use and Maintenance of Portable Fire Extinguishers based on SS CP 578 : Use and maintenance of Portable Fire Extinguishers

<div style="text-align: center; border: 1px solid black; padding: 5px; background-color: #FFD700; color: black; font-weight: bold;">Classification of fires</div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px; background-color: #ADD8E6; text-align: center; width: 45%;">SS CP 55</div> <div style="border: 1px solid black; padding: 5px; background-color: #ADD8E6; text-align: center; width: 45%;">SS 578</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 48%; background-color: #ADD8E6; padding: 5px;"> <ul style="list-style-type: none"> • Class A – Ordinary combustible materials • Class B – Flammable liquids • Class C – Live electrical equipment • Class D – Combustible metals </div> <div style="width: 48%; background-color: #ADD8E6; padding: 5px;"> <ul style="list-style-type: none"> • Class A – Ordinary combustible materials • Class B – Flammable liquids • Class C – Flammable gases • Class D – Combustible metals • Class F – Cooking media </div> </div>	<p><u>i) New Fire Classification</u></p> <p>There has been a change in the fire classification whereby Class C fires now involve flammable gases and Class F fires now involve cooking media.</p>	<p><u>Action by Building Owner and Occupants</u></p> <p>All relevant agencies in CAG buildings shall brief their staff on the new fire classifications.</p>
<div style="text-align: center; border: 1px solid black; padding: 5px; background-color: #FFD700; color: black; font-weight: bold;">Distribution of fire extinguishers</div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px; background-color: #ADD8E6; text-align: center; width: 45%;">SS CP 55</div> <div style="border: 1px solid black; padding: 5px; background-color: #ADD8E6; text-align: center; width: 45%;">SS 578</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 48%; background-color: #ADD8E6; padding: 5px;"> <ul style="list-style-type: none"> • Table 1 gives minimum sizes for use on the various classification of occupancy hazards – ranging in size from 3A to 55A • Low hazard: 1A covered 40 m2 • Medium hazard: 1A – 20 m2 • High hazard: 1A – 15 m2 • Class B fires – min extinguisher size – 8B with max travel distance 3 m </div> <div style="width: 48%; background-color: #ADD8E6; padding: 5px;"> <ul style="list-style-type: none"> • Table 1 – removed • Low hazard: min 13A • Medium hazard: min 21A • High hazard: min 34A • Max travel distance – 15 m for all occupancy hazard • A unit of ‘A’ can cover 15 m2 regardless of hazard rating • Class B fires – min extinguisher size – 21B with max travel distance 5 m </div> </div>	<p><u>ii) New Distribution of Fire Extinguishers</u></p> <p>With effect from 1 May 2013, the distribution of the fire extinguishers shall be determined by the building owners and occupants engaged Qualified Person.</p>	<p><u>Action by Building Owner and Occupants</u></p> <p>All relevant agencies in CAG buildings shall brief their staff on the new distribution of fire extinguishers. Most areas in Changi Airport are low hazard (no storage of flammable liquids in Changi Airport premises, unless approval is sought from AES Fire Safety Unit).</p>



Figure L.1 — Class F pictogram

ii) Class F fire extinguishers

With effect from 1 May 2013, the distribution of the fire extinguishers shall be determined by the building owners and occupants engaged Qualified Person.

Action by Building Owner and Occupants

All food and beverages outlets in CAG buildings shall install Class F rated fire extinguishers in their premises by **1 May 2013**. At

At least one 75F rated fire extinguisher to be installed within 7 metres reach in the kitchen from the open flame cooking / deep frying activities or as per recommendation by Qualified Person.



iii) Fire extinguishers for electrical fires

With effect from 1 May 2013, only selected fire extinguishers may be used on electrical fires.

Action by Building Owner and Occupants

CAG FM and all tenants in CAG buildings shall install appropriately labeled fire extinguishers for use on electrical fires. Fire extinguishers installed before 1 May 2013 can be replaced at the next maintenance date.



iv) Ban on use of halon fire extinguishers

With immediate effect, halon fire extinguishers shall not be used in CAG buildings.

Action by Building Owner and Occupants

CAG FM and all tenants in CAG buildings shall replace halon fire extinguishers with wet chemical or clean agent fire extinguishers if halon fire extinguishers are still in use.

Installation of fire extinguishers

SS CP 55

• Extinguishers to be installed such that the carrying handle is not more than 1.5 metres above the floor

SS 578

- Gross weight < 4 kg installed such that carrying handle is not more than 1.2 m above the floor
- Gross weight > 4 kg installed such that carrying handle is not more than 1 m above the floor

v) Fire extinguisher installation height

With effect from 1 May 2013, fire extinguishers installed in newly approved areas shall meet the new height requirements.

Action by Building Owner and Occupants

From 1 May 2013, CAG FM and all tenants in CAG buildings shall install fire extinguishers according to the new height requirements for all newly approved areas within CAG premises.