

Our Reference: APPBCA-2017-08

Building Plan & Management Group

08 June 2017

See distribution

Dear Sir/Madam

**DISPLAY OF PERMIT TO OPERATE AND OTHER CHANGES TO TECHNICAL REQUIREMENTS FOR LIFTS AND ESCALATORS**

- (A) IMPLEMENTATION DATE FOR SECOND AMENDMENT TO SS 550:2009 – CODE OF PRACTICE FOR INSTALLATION, OPERATION AND MAINTENANCE OF ELECTRIC PASSENGER AND GOODS LIFTS**
- (B) IMPLEMENTATION DATE FOR NEW SS 626:2017 – CODE OF PRACTICE FOR DESIGN, INSTALLATION AND MAINTENANCE OF ESCALATORS AND MOVING WALKS**
- (C) NEW REQUIREMENTS IN THE BUILDING CONTROL ACT APPROVED DOCUMENT SECTION K – LIFTS AND ESCALATORS**
- (D) DISPLAY OF PERMIT TO OPERATE (PTO) IN LIFTS AND ON ESCALATORS**

**OBJECTIVE**

The purpose of this circular is to provide information on the following matters with regard to lifts and escalators:

- a) Inform the industry of the implementation date for the second amendment to SS 550:2009 – Code of Practice for Installation, Operation and Maintenance of Electric Passenger and Goods Lifts;
- b) Inform the industry of the implementation date for SS 626:2017 – Code of Practice for Design, Installation and Maintenance of Escalators and Moving Walks;
- c) Inform the industry of new requirements in the Approved Document on Lifts and Escalators in the Building Control Act; and
- d) Remind and provide instructions to owners on the requirement to display Permit to Operate (PTO) in lifts and on escalators.

**(A) IMPLEMENTATION DATE FOR SECOND AMENDMENT TO SS 550:2009 – CODE OF PRACTICE FOR INSTALLATION, OPERATION AND MAINTENANCE OF ELECTRIC PASSENGER AND GOODS LIFTS**

2. Amendments have been made to SS550:2009 to include existing requirements for Evacuation Lifts in Fire Safety Code 2013 and door close gap requirements.

3. With effect from 1 December 2017, projects whose first set of plans (either building plans or structural plans, whichever is earlier) is submitted to the Commissioner of Building Control for approval under the Building Control Act must ensure that the lifts in that project are designed and installed in accordance with the above mentioned requirements in SS 550:2009 (Amendments 1 and 2).

**(B) IMPLEMENTATION DATE FOR NEW SS 626:2017 – CODE OF PRACTICE FOR DESIGN, INSTALLATION AND MAINTENANCE OF ESCALATORS AND MOVING WALKS**

4. The new SS 626:2017 – Code of Practice for Design, Installation and Maintenance of Escalators and Moving Walks was launched in April 2017.

5. With effect from 1 December 2017, the above mentioned code will replace CP15:2014 as the acceptable solution in BCA’s Approved Document for the design of escalators under the Building Control Regulations. Projects whose first set of plans (either building plans or structural plans, whichever is earlier) is submitted to the Commissioner of Building Control for approval under the Building Control Act on and after 1 December 2017 must ensure that the escalators in the project are designed and installed in accordance with the relevant requirements in SS 626:2017.

**(C) NEW REQUIREMENTS IN THE BUILDING CONTROL ACT APPROVED DOCUMENT SECTION K – LIFTS AND ESCALATORS**

6. New requirements for new lifts and escalators will be added to the acceptable solution for the design of lifts and escalators under BCA’s Approved Document, with effect from 1 December 2017. The new requirements (detailed in Annex A) are:

<b>Lifts</b>	<b>Escalators</b>
a. Light curtains as door protective device for lifts b. Emergency communication device for communication with emergency personnel c. Video recording	a. Step upthrust prevention b. Video recording

7. The new requirements will apply only to new projects where the first set of plans (either building plans or structural plans, whichever is earlier) is submitted to the Commissioner of Building Control for approval under the Building Control Act on or after 1 December 2017.

**(D) DISPLAY OF PERMIT TO OPERATE (PTO) IN LIFTS AND ON ESCALATORS**

8. BCA had earlier through its circular issued on 25 July 2016, informed of the duty on lift and escalator owners to display at all times the valid PTO in their lifts and on their escalators respectively. This requirement will take effect on 1 September 2017 for lifts, and on 1 March 2018 for escalators. Please refer to Annex B for display requirements.

**CLARIFICATIONS**

9. We would appreciate it if you could convey the contents of this circular to the members of your organisation. For further information, you may send an email to [BCA\\_Lift\\_Escalator@bca.gov.sg](mailto:BCA_Lift_Escalator@bca.gov.sg) or call us at (65)1800-342-5222. Thank you.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Teo Orh Hai', enclosed within a circular scribble.

TEO ORH HAI  
GROUP DIRECTOR  
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for COMMISSIONER OF BUILDING CONTROL  
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All CORNET e-info subscribers

All registered lift contractors with BCA RW02

All registered escalator contractors with BCA RW03

All lift and escalator owners, including Town Councils

**Annex A – Amendments to the Approved Document – Section K, Lifts and Escalators**

**LIFTS**

<i>Design Area</i>	<i>Requirements</i>
1. Light Curtain	<p>A light curtain installed at the lift door as a door protective device shall automatically initiate re-opening of the door(s) in the event of a person crossing the entrance during the closing movement, and that the light curtain:</p> <ul style="list-style-type: none"> <li>a. shall cover the door opening over the distance between at least 25 mm and 1600 mm above the car door sill;</li> <li>b. shall be capable of detecting obstacles of minimum 50 mm diameter;</li> <li>c. may be rendered inoperative in the last 20 mm of door closing gap; and</li> <li>d. shall have its <b>nudging mode de-activated</b>, if nudging mode is provided.</li> </ul>
2. Emergency Communication	<p>Provision of a telephone, intercom system or any other communication device that enables notification or direct communication with personnel who can initiate an emergency response.</p>
3. Video Recording	<p>Provision of a video recorder that has the following minimum specifications ---</p> <ul style="list-style-type: none"> <li>a. Capacity to record 24 hours a day, 7 days a week;</li> <li>b. Capture the lift car, lift car door(s) and in-car floor indicator;</li> <li>c. Frame rate of at least 6 frames per second;</li> <li>d. Video resolution of at least 352 x 240 pixels or CIF CCTV resolution; and</li> <li>e. Storage of video footage of at least 30 days.</li> </ul>

## ESCALATORS

<i>Design Area</i>	<i>Requirements</i>
1. Step Upthrust Prevention	<p>Installation of step upthrust switches or roller guides as means to detect or limit respectively the riser end of the step being displaced upward by more than 5mm at the upper and lower transition curves at or prior to the point of tangency of the horizontal and curved track.</p> <p>When the upward displacement exceeds 5mm, step upthrust switches shall initiate power cut off to the driving machine, and brake and stop the escalator before the detected step reaches the combplate with any load up to brake rated load with escalator running.</p>
2. Video Recording	<p>Provision of a video recorder that has the following minimum specifications ---</p> <ol style="list-style-type: none"><li>a. Capacity to record 24 hours a day, 7 days a week;</li><li>b. Capture a video footage of the full escalator length and its landings;</li><li>c. Frame rate of at least 6 frames per second;</li><li>d. Video resolution of at least 352 x 240 pixels or CIF CCTV resolution; and</li><li>e. Storage of video footage of at least 30 days.</li></ol>



## **Annex B – Requirements for Display of Permit to Operate (PTO)**

For display of valid PTO in lifts and on escalators, lift and escalator owners are required to do the following:

- (a) download the valid PTO from our online eLift and eEscalator portals at the following weblink with effect from 15 June 2017: [www.bca.gov.sg/bmsm\\_eservice](http://www.bca.gov.sg/bmsm_eservice);
- (b) print the PTO in A5-size; and
- (c) display the printed hardcopy PTO in a display panel above or around the control panel in the lift car, and at a level which is not too high or too low so that passengers would be able to view the PTO properly.

2. BCA observes that lifts, especially in commercial buildings, have informational monitor screens for advertisement or the display of other information. BCA would like to advise that a digital display of the valid PTO will not be able to fulfil the requirement. This is because electronic devices which are used for digital display might experience glitches such as loss of signal, loss of power, damage to display panel etc., during which the digital PTO might not display properly on the screens. In these events, the lift will be deemed not to have a valid PTO displayed “at all times”.

3. Even though the requirement to display PTO in lifts will take effect on 1 September 2017, and that for escalators will take effect on 1 March 2018, owners are encouraged to display the PTO before that.