

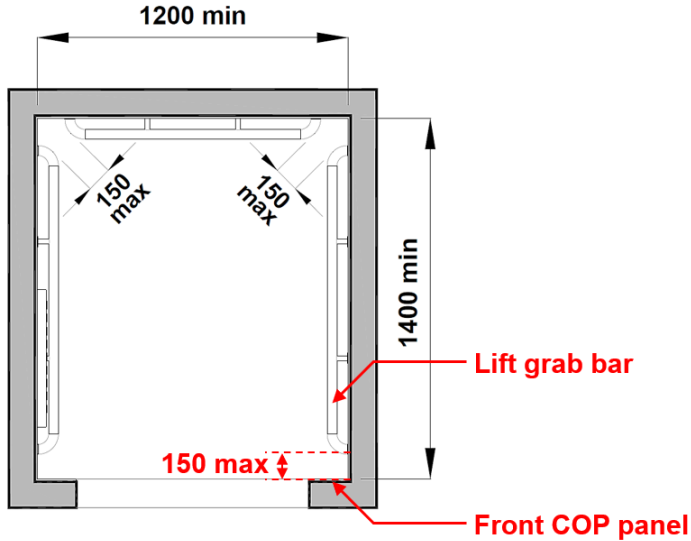
**BRIEFING ON ACCESSIBILITY-RELATED REQUIREMENTS FOR LIFT CARS (HELD ON 5 APR 2024 & 3 MAY 2024)
FOR LIFT SUPPLIERS/CONTRACTORS**

Q&A		
LIFT CAR CONTROL SIDE PANEL		
S/N	Participant's Feedback / Enquiry	BCA's Response
1	Is it mandatory to have an accessible lift car control side panel if the buttons on the front lift car control panels already complied with the height requirements stated in the Code on Accessibility in the Built Environment 2019 ("Code")?	For accessible lifts with more than one control panels, at least one lift car control panel must be placed at the side wall of the lift car. This is because wheelchair users had given feedback on the challenges faced in turning their wheelchairs around to reach the lift control buttons if these were placed at the front. This is more so when the lift is crowded. The buttons on the lift car control side panel must comply with the height requirements stated in the Code.
2	Should the lift car control side panel be located on the left or right side of the lift car upon entering the lift?	It is recommended to place the side panel to the right side of the lift car wall upon entering the lift.
3	Why do current HDB lifts lack a lift car control side panel?	The mandatory requirement for lift car control side panel was introduced in the 2019 version of the Code. All building plans that are submitted to BCA on and after 6 Jan 2020 are subjected to this requirement. Lifts that were installed before the implementation of the Code might not comply with the latest code or standards.
4	Is the requirement for the lift car control side panel to be positioned 350mm away from any corners of the lift car a mandatory requirement or a recommendation? There are ongoing projects where the lifts were fabricated before the release of the related circular dated 8 April 2024.	For affected projects, the Qualified Person may write to us with supporting documents. BCA will assess the respective circumstances and adopt a light-touch approach for these projects.


REAR MIRROR IN LIFT CAR		
S/N	Participant's Feedback / Enquiry	BCA's Response
5	Is it mandatory to install a glass mirror at the rear of the lift car?	Non-breakable mirrors or mirror-like finish surfaces must be provided at the rear of lift car that is designated as accessible lift. This is to facilitate wheelchair user to back in or out of the lift safely without having to turn, preventing injury and damage to wheelchair. If glass is used, please ensure that it is a safety glass. Other mirror-like surfaces can be accepted so long as they achieve the intended performance requirement.
6	Are there examples for the mirror-like finishes at the lift car rear wall?	There are many different types of mirror-like finishes that designers can consider such as laminated glass, aluminum, or stainless-steel finishes. Designers should be mindful that the selected material should not cause too much light reflection/glare resulting in visual discomfort for users.
7	For scenic glass lifts ("bubble lifts"), where should the mirror be mounted?	Designers should understand the rationale of having the mirror within the lift car and consider mitigation measures that might allow wheelchair users to safely turn around without the help of the mirror. If your project requires further advice on this, you may consult BCA with the drawings of your proposal and we will advise accordingly.
8	Where should the mirror be placed if there are lift doors on more than one side of the lift car?	Depending on position of the lift doors, whether opposite or adjacent, the mirror should be placed in a way that provides the correct visual feedback required for the wheelchair user to exit the lift car safely. Usually in such cases, mirror-like finishes will be provided either on the lift doors or on more than one side of the lift car walls. If your project is facing difficulties complying with the requirement, you may consult BCA with the drawings of your proposal and we will advise accordingly.

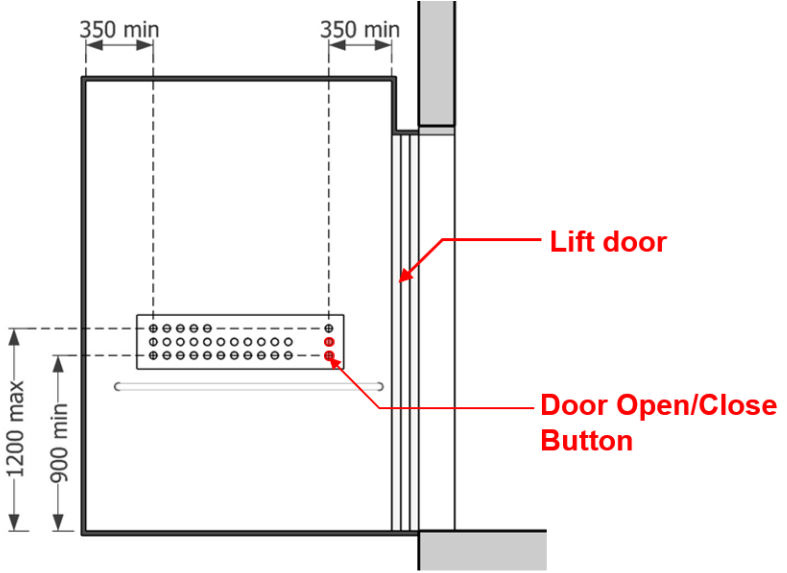
SIGNAGE		
S/N	Participant's Feedback / Enquiry	BCA's Response
9	Is it necessary to have one Symbol of Access sign per lift? Is it acceptable to put up one Symbol of Access sign per lift lobby with multiple lifts?	The sign with symbol of access is required for each lift that is designated as an accessible lift so that persons with disabilities can easily identify the accessible lift/s.
10	Is there any height requirement for placing the Symbol of Access sign at the lift lobby?	There is no specific height requirement as long as the sign can be easily viewed and read by the lift users.
11	Are there any colour requirements for the Symbol of Access sign?	For the international Symbol of Access sign, the symbolised figure must be in white on a blue background. Please consult BCA if alternative colours are proposed.
12	Where should the Symbol of Access sign be placed?	The Symbol of Access sign should be displayed at all accessible facilities so that persons with disabilities can easily identify such facilities. For accessible lifts, designers typically place the sign near the lift call buttons of the accessible lift designated for wheelchair users. You may refer to Table 8 under Clause 8.5.2.1 in the Code of Accessibility 2019 for more information on the appropriate sizes of the sign for the respective viewing distances.
13	Is the Symbol of Access sign required to be placed on the lift car operating panel?	The Symbol of Access sign is used to identify the accessible lift. It is not required to be placed on the lift car operating panel within the lift car, as users would have already identified the Symbol of Access sign displayed at the lift landing.
14	Is there a minimum size requirement for the Symbol of Access sign?	The minimum size of the Symbol of Access sign is based on the intended viewing distance. For more details, please refer to Figure 93 under Clause 8.2.2.3 and Table 8 under Clause 8.5.2.1 of the Code on Accessibility 2019.

GRAB BARS IN LIFT CAR		
S/N	Participant's Feedback / Enquiry	BCA's Response
15	If there is a vertical panel of lift car control buttons on the side of the lift car, must the grab bar be continuous and overlap the panel?	The grab bar should be continuous and placed in such a way that does not interfere with the user's access to the buttons, while considering easy maintenance/replacement of the control panel.
16	Are grab bars compulsory in lifts?	Yes, the provision of horizontal grab bars is mandatory in all lifts as they provide support for the elderly and the ambulant disabled. Designers must ensure that the corners of the grab bars have no open ends that can hook onto things such as handbags and clothes.
17	Can we omit grab bar between vertical lift car control side panel and the front wall of the due to the lack of space?	Grab bars are important features for safety and provide support for elderly and users with mobility difficulties. Thus, grab bars must be installed on lift car walls not used for entry/exit. If your project is facing difficulties complying with the Code's requirements, please consult BCA with the drawings of your proposal and we will advise accordingly. BCA will assess each project on a case-by-case basis.
18	Regarding the profile of the grab bars, must it be rounded?	Yes, the grab bars should provide a comfortable grip for users. Please refer to Figure 39 under Clause 4.7.4 of the Code on Accessibility for the acceptable profiles.
19	Is it necessary to maintain the 270° gripping surface for the mounting of the grab bar at the point of mounting, or can this requirement be disregarded?	Yes, the grab bars should have continuous gripping surfaces without interruptions or obstructions that can break a hand hold.

S/N	Participant's Feedback / Enquiry	BCA's Response
20	Referring to Clause 4.7.3.1 (e) and Figure 39 of the Code on Accessibility 2019, which specify the min 40mm and 60mm spacings between the handrail and wall surfaces for smooth and rough wall surfaces respectively, is there a similar requirement for minimum distance between the lift grab bar and the lift car wall?	While the Code does not specify a requirement for the distance between the lift grab bar and wall surfaces, similar principles will apply to ensure that the grab bars can be used safely and effectively. The grab bar is an essential feature as it provides support for the elderly and the ambulant disabled individuals.
21	Does the grab bar requirement apply to home lifts?	No, the requirements in the Code do not apply to home lifts installed in landed houses that are built by owners for their own use.
22	What is the required distance that needs to be maintained from the front COP panel to the start of the grab bar in the lift car?	<p>Lift grab bar should be extended to the furthest possible extent with a maximum gap of 150mm.</p>  <p>The diagram illustrates the interior of a lift car with a width of 1200 mm (minimum) and a height of 1400 mm (minimum). Two grab bars are positioned on the side walls, each with a maximum gap of 150 mm from the wall. A front COP panel is located at the bottom, with a maximum gap of 150 mm from the start of the grab bar.</p>

DESTINATION CONTROL SYSTEM		
S/N	Participant's Feedback / Enquiry	BCA's Response
23	Why is there a need for the dash ' - ' and ' E ' buttons for a keypad control in the lift? What are the functions of the dash ' – ' and ' E ' buttons?	The ' - ' button is to be used for correcting, cancelling, or clearing a number entered, or used to prefix a basement floor, e.g. ' – 1 ' for B1, etc. The ' E ' button is to complete the keying sequence for the call (keyed string) to be processed.
LIFT BUTTONS		
S/N	Participant's Feedback / Enquiry	BCA's Response
24	Can stick-on braille be used for touchless lift buttons on the lift car control panel installed at the side of lift cars?	For contact-less lift buttons, the braille and tactile markings must be provided to the left of the lift control buttons. The use of "stick-on braille" is not recommended as it might peel/fall off and affect the ways that a person with visual impairment understand the braille. The braille must be provided in the correct language (i.e. English).
25	Is there any reason to have the tactile marking to be between 15 mm and 20 mm high? Jumbo buttons are frequently used in healthcare segment/public transport facilities and the tactile marking is usually taller than 20 mm.	The Code on Accessibility safeguards the minimum accessibility provision required. Larger tactile markings are acceptable as long as the performance requirements are met.
26	Why are the lift buttons located at certain height?	Lift car control buttons must be placed at a height of between 900 mm and 1200mm from the floor level to ensure that wheelchairs users can easily reach and access them.
27	Do all lift buttons require braille?	Yes, braille and tactile markings must be provided to all lift buttons of <u>ALL</u> passenger lifts.
28	Is the positioning of Braille markings at the bottom of the Tactile markings a recommendation or a requirement in the Code?	Braille markings must be placed below the tactile markings. Please refer to Figure 40 under Clause 4.8.2.1 of Code on Accessibility for the acceptable placements of the Braille and Tactile markings.

S/N	Participant's Feedback / Enquiry	BCA's Response
29	Is there a specific Code requirement regarding the arrangement of the lift buttons?	<p>The Code on Accessibility does not specify the arrangement of lift buttons. However, based on feedback from users and the Singapore Association of the Visually Handicapped (SAVH), the recommended arrangement of the lift buttons should be in ascending order and in a vertical direction.</p> 

S/N	Participant's Feedback / Enquiry	BCA's Response
30	Where should the "DO" (Door Open) and "DC" (Door Close) buttons be located on the horizontal lift car control side panel, nearer the front or the rear?	<p>The Code on Accessibility does not specify the positioning of the "DO" and "DC" buttons. It is recommended to position the buttons nearer the lift car door for the convenience of the users.</p>  <p>The diagram illustrates the recommended placement of the lift car control panel. The panel is shown as a rectangular grid of buttons. Two red buttons are highlighted and labeled as 'Door Open/Close Button'. These buttons are positioned near the lift door. The diagram includes the following dimensions:</p> <ul style="list-style-type: none"> 350 min: Minimum distance from the lift door to the center of the control panel. 350 min: Minimum distance from the lift door to the center of the 'Door Open/Close Button'. 1200 max: Maximum height of the control panel. 900 min: Minimum height of the control panel.

EMERGENCY BLINKING LIGHT		
S/N	Participant's Feedback / Enquiry	BCA's Response
31	Why is the blinking light needed for the emergency bell in the lift?	The emergency bell in the lift must be connected to a blinking light in the lift car to signal to persons with hard of hearing that the emergency bell has been activated. Building owners are encouraged to also display a SMS number that the deaf can reach out to for help if they are trapped inside the lift.
32	Can the emergency blinking light be located at the emergency bell button instead of the car position indicator?	The blinking light does not need to be located at the emergency bell button so long as it is clear and easily seen.
33	Is a light-up ring on the button an acceptable alternative to a blinking light for the emergency bell?	The proposed solution is acceptable as long as it effectively provides a clear visual signal to persons with hard of hearing in the event of an emergency, informing users that the emergency bell has been activated.
LIFT DOOR / LIFT LANDING / CLEAR MANOEUVRING SPACES		
S/N	Participant's Feedback / Enquiry	BCA's Response
34	Is it mandatory for accessible lifts to have vision panel for lift doors?	While it is not a requirement, it is recommended for the lift doors of accessible lifts to be provided with vision panels to enable persons with hard of hearing to signal for help or assistance in the event of an emergency.
35	Is it acceptable for the lift door wide jamb to be extra deep, for example, 1 meter?	The lift door wide jamb should not be too deep, as it may result in the lift door closing before users arrive at the doorstep.
36	Does the manoeuvring space for the lift landing area need to be centralised with the required width of 1200mm?	The Code prescribes a centralised manoeuvring space at the lift landing area to safeguard a clear space for wheelchair users. This space must be kept clear of obstruction and should not overlap the clear floor space required at the lift call button.

OTHERS		
S/N	Participant's Feedback / Enquiry	BCA's Response
37	Section 4.9 is only applicable to lift designated for wheelchair user and not mandatory for all passenger lifts?	Yes, Clause 4.9 in the Code on Accessibility outlines the requirements for accessible lifts designated for wheelchair users. All other passenger lifts must include provisions for ambulant disabled and persons with sensory impairments (visual and hearing disabilities) as per Clause 4.8.
38	Are there plans to include the checking of these requirements in annual PTO inspection checklists in LEAP?	No, accessible requirements will only be checked during building plan submission stage.
39	Does an existing lift need to comply with the Code on Accessibility if there is a renovation?	If there are major upgrading works that require building plan submission to BCA, compliance with the prevailing Code on Accessibility will be required.
40	For an existing building which only has a single lift shaft undergoes refurbishment works (e.g. upgrading of lift car), is it necessary for the single lift shaft to comply with the Code on Accessibility?	For older buildings with existing lift shafts that are unable to comply with the minimum lift car size and accessible design requirements, the Qualified Person (QP) may submit a waiver application to BCA. However, other than lift size and spatial provisions, there are other relevant requirements (grab bars, lift buttons, etc.) in the Code that the QP must comply with. If your project is facing difficulties complying with the Code's requirements, please consult BCA with the drawings of your proposal and we will advise accordingly.
41	In the case of lift modernization, does the lift car need to comply with the requirements of the Code on Accessibility?	If the lift modernisation works falls under a major Alteration & Replacement (A&R) works where building plan submission to BCA is required, then compliance with the prevailing Code on Accessibility is required.
42	Will there be enforcement actions taken against lift suppliers if the lift design does not comply with the Code on Accessibility requirements?	If the design and construction of the lift do not comply with the Code's requirements, the TOP/CSC of the project will be affected. The Qualified Person of the project may also be subjected to enforcement actions.

S/N	Participant's Feedback / Enquiry	BCA's Response
43	Is it mandatory to provide a lift landing indicator (LCI) or visual information display for all passenger lifts? In developments with multiple lift car groups, such as 3 to 8 lift car groups, the lift landing indicator might not function effectively, as the lift car may bypass floors or the closest lift may not serve that landing.	A visual information display system must be provided and suitably colour contrasted as specified under Clause 4.8.2.7 of the Code on Accessibility.