

21 June 2024

Building Plan & Management Group

See Distribution List

Dear Sir/Madam,

**CONSOLIDATED QUESTIONS & ANSWERS FROM THE BCA ANNUAL SHARING ON
BP/TOP REGULATORY UPDATES 2024**

We refer to the BCA Annual Sharing Session held virtually on 07 May 2024. The seminar session provided a useful platform where BCA engaged Qualified Persons, Builders and Developers, to enable better understanding and clarity on regulatory requirements.

2 Following the Sharing Session, BCA has consolidated the queries and corresponding responses, which are appended herewith.

3 For industry's information, please.

Yours faithfully

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BCA ANNUAL SHARING ON BP/TOP REGULATORY UPDATES 2024

Q&A CATEGORIES

LEGEND:

	LOGDMT SCHEME FOR BUILDING WORKS UNDER BC ACT
	CLARIFICATION ON BP REQUIREMENTS
	CLARIFICATION ON ST REQUIREMENTS
	LIGHTNING PROTECTION SYSTEMS
	ACCESSIBILITY AND UNIVERSAL DESIGN
	FINDINGS AND ISSUES FROM TOP INSPECTION AND APPLICATION
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	LIFTS
	OTHER QUERIES

LOGDMT SCHEME FOR BUILDING WORKS UNDER BC ACT

LOGDMT SCHEME UNDER BC ACT

S/N	Participant's Feedback / Enquiry	BCA's Response
1	What is the processing time for lodgment?	Once the plans are lodged, QP would receive an acknowledgment for the lodged plans and the plans would be deemed approved.
2	Can standalone pipe supports or platform be submitted under lodgment scheme?	Single level platform can be lodged if it meets the conditions specified in item 3 of the Ninth Schedule of the Building Control Regulations. All conditions specified in the Ninth Schedule need to be met for the project to be eligible for lodgment.
3	Owner-occupied house with 2m excavation cannot be lodged; does this refer to the main ST plans or ERSS only or both?	It refers to all plans of the project. All conditions specified in the Ninth Schedule need to be met for the project to be eligible for lodgment.

CLARIFICATION ON BP REQUIREMENTS

AC LEDGES

S/N	Participant's Feedback / Enquiry	BCA's Response
1	Does Approved Document Clause H. 3.4.1 - no gap at lowest part of barrier also apply for AC ledges?	For AC ledges which are not accessible except for maintenance purposes only (e.g. where there is a 1m high parapet wall separating the interior of a residential unit and the AC ledge), AD Cl H.3.4.1 does not apply.

HEADROOM & CEILING HEIGHT

2	We understand that 2m headroom is allowed under building services. We would like to clarify if the entire lobby is congested with services without any false ceiling? Does it mean that the lobby can be 2m height?	Please note that the Approved Document stated that the minimum 2m headroom applies to localised area within a room or space. This does not apply to the entire lobby or similarly, the whole room or space.
3	For bicycle parking area within carpark, does the minimum ceiling height of 2.4m also apply to the entire cycling route to the bicycle parking lots?	The minimum ceiling height of 2.4m is applicable for the end of commute facilities and bicycle parking/storage areas, the cycling route within the sheltered car parks shall comply with headroom clause C.3.2.2 and be not less than 2.2m.

PLANTER BOX

4	If a planter is between 600mm and less than 1000mm high, is it considered climbable?	Planters less than 1000m height are considered climbable footholds. If the vertical drop from the top of the planter is 1.0 m or more, the QP is to ensure that appropriate measures are taken to prevent people from falling from a height (i.e. providing 1m high safety barrier).
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VENTILATION

5	Approved Document exempted warehouse from 12m distance requirement for natural ventilation. We wish to clarify if the driveway and loading bay are exempted as well. Reason: driveway is already wider than 12m.	Clause G.3.2.3 exempts a room in a warehouse from 12m distance requirement for natural ventilation. This is mainly based on the assumption that the room in a warehouse would be primarily for storage without frequent occupation or production of contaminants. For driveway and loading bay areas, if they are designed to be naturally ventilated, they shall comply with G.3.2.1(b) for NV at an aboveground carpark which refer to the relevant clause in SS553.
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6	Approved Document Clause G.2.3 states that storeroom and private lift lobbies with area not exceeding 6m ² are exempted from Ventilation provision. Please advise if riser with area not exceeding 6m ² , can it also be exempted from Clause G.2.3?	<p>All rooms must have ventilation, except for those exempted in clause G.2.3 of the Approved Document. Although conventional risers do not need dedicated ventilation due to their shallow depth and small size, we recognize that there may be variations in designs.</p> <p>We would appreciate it if you could provide more details on the design of risers through BCA's Online Feedback Form at bca.gov.sg/feedback form for further discussion.</p>
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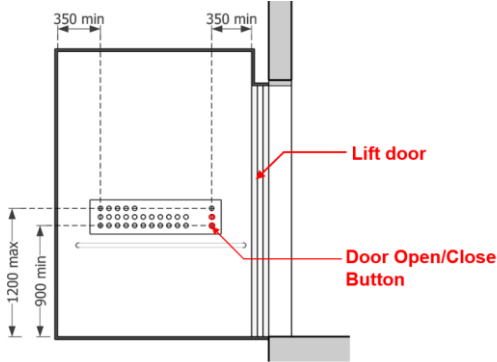
CLARIFICATION ON STRUCTURE PLAN REQUIREMENTS		
S/N	Participant's Feedback / Enquiry	BCA's Response
1	Do demolition of knock off panels require BCA ST submission?	Yes, demolition of structural elements requires demolition ST plans to be submitted.
2	For riser fire stops on slab, if the riser is lockable and only accessible for maintenance, with signage to warn "do not step," is structural submission still required?	Yes. ST submission is required for all structural slabs of a building, including riser floor slabs.

LIGHTNING PROTECTION SYSTEMS		
S/N	Participant's Feedback / Enquiry	BCA's Response
1	When is the implement date for mandatory Lightning Protection System (LPS) plans submission? Will circular be issued to inform the industry on LPS Plan submission?	The submission of the LPS Plan is targeted for the 2nd quarter of 2025 or earlier. A circular will be issued at a later date, allowing a 6-month grace period before the industry commences the submission of LPS Plans.
2	We would like to clarify if metallic capping is required to be provided on parapet for building above 45M & above?	In accordance with SS555:2018, metal capping is required to be provided at exposed corners of building of 45m and above to allow lightning current to be diverted through the down conductor system to earth termination system. For building below 45m, in lieu of metal capping, suitable finials should be provided at exposed corners.
3	Does BCA regulate LPS on solar panels?	The Design PE will need to conduct a Risk Assessment in consultation with the Owner to determine the need to protect the solar panels or any other

		M&E equipment. Under the BCA BC Regulations, the PE is required to design the LPS for the protection of the building and its occupants. It is advisable to protect exposed solar panels and M&E equipment against lightning and its effects in accordance with SS555: 2018 Part 3 Physical Damage to Structure and Life Hazard, and Part 4 Electrical and Electronic Systems within Structures.
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ACCESSIBILITY AND UNIVERSAL DESIGN		
ACCESSIBLE LIFT CAR BUTTONS		
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")?	It is recommended to place the side panel to the right side of the lift car wall upon entering the lift.
2	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.
3	The requirement for lift buttons in the car to keep min 350mm from wall is not written in Code of Accessibility 2009 version. When will this new interpretation kick in?	The 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. If your project requires further advice on this, you may consult BCA with the drawings of your proposal.
4	The space for lift call button and space for the wheelchair before the lift car entrance. Since it's imaginary. Why can't they overlap. Do we expect 2 wheelchairs to be squeezed in a lift car?	The Code prescribes a centralised manoeuvring space at the lift landing area to safeguard a clear floor 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, which is required for wheelchair user to access the lift call button and wait to enter the lift when other users are coming out of the lift.

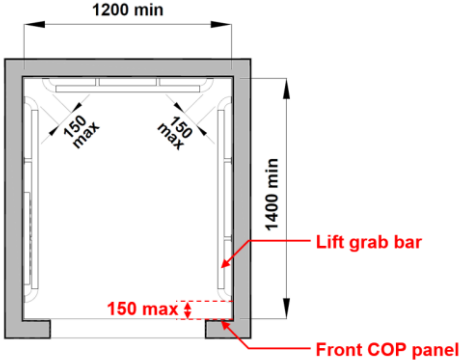
5	Why is there a need for the dash ' – ' and ' E ' buttons for a keypad control in the lift? What are the functions of the dash ' – 'and ' E ' buttons?	The ' – ' button is to be used for correcting, cancelling, or clearing a number entered, or used to prefix a basement floor, e.g. ' – 1 ' for B1, etc. The ' E ' button is to complete the keying sequence for the call (keyed string) to be processed.
6	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).
7	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.
8	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.
9	Do all lift buttons require braille?	Yes, braille and tactile markings must be provided to all lift buttons of ALL passenger lifts.
10	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.
11	Is there a specific Code requirement regarding the arrangement of the lift buttons?	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.

		
12	<p>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>	<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> 
13	<p>Why is the blinking light needed for the emergency bell in the lift?</p>	<p>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.</p>
14	<p>Can the emergency blinking light be located at the emergency bell button instead of the car position indicator?</p>	<p>The blinking light does not need to be located at the emergency bell button so long as it is clear and easily seen.</p>

15	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.
ACCESSIBLE LIFT		
S/N	Participant's Feedback / Enquiry	BCA's Response
16	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.
17	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.
18	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.
19	If the project already has an accessible lift at the common area, does the private lift still need to comply with accessibility requirements for lifts?	There must be at least one barrier-free access route into the residential dwelling unit. If a residential dwelling unit is served by a private lift with a private lift lobby, this lift and lobby should be made accessible since the resident would primarily use them to access the unit. If your project requires further advice on this, you may consult BCA with the drawings of your proposal.
20	Units with private lifts have BFA access from the common lift lobby via the yard door, when will the lift button/manoeuvring requirements at private lobbies be implemented?	
21	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.
22	How do we apply the mirror for UD wheelchair users for glass lifts?	Designers should understand the rationale of having the mirror within the lift car and consider mitigation measures that might allow wheelchair users to

23	For scenic glass lifts (“bubble lifts”), where should the mirror be mounted?	safely access and exit the lift 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.
24	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, aluminium, 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.
25	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,
26	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.
27	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.
28	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.
29	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.
30	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.
31	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.
32	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.
33	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.
34	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.
35	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.
36	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.
37	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.

38	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.
39	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 the following dimensions and labels:</p> <ul style="list-style-type: none"> Width: 1200 min Height: 1400 min Maximum gap between the front COP panel and the lift grab bar: 150 max Labels: Lift grab bar, Front COP panel
40	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.
41	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.
42	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.
43	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.

44	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.
45	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.
46	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.
BASIC ACCESSIBILITY LEGISLATION (BAL)		
S/N	Participant's Feedback / Enquiry	BCA's Response
47	Refer to BAL, please confirm if it applies to A&A are exceeding 500m2 or any A&A work. Ie: A&A work which involve addition of cargo lift, <500m2.	<p>Except for factories and residential developments, BAL will apply to all existing non-barrier-free building with a total GFA of more than 500 sqm when the building owners submit plans to BCA for approval.</p> <p>For more information, please refer to the "Understanding Basic Accessibility Legislation Booklet", which is available for download at https://www1.bca.gov.sg/docs/default-source/universaldesign/bal-booklet_final.pdf?sfvrsn=80bf02b6_6</p>
OTHERS		
S/N	Participant's Feedback / Enquiry	BCA's Response
48	Is child handrail required at mid landing of staircases of buildings accessible by the public?	There is no mandatory requirement for child-friendly handrails. The Approved Document does not stipulate requirements for provision of child handrail at mid landing of staircases.
49	How is equitable accessibility being defined?	Equitable access refers to the principle of ensuring people of different age and abilities have fair and impartial access to buildings and spaces.

	Designers should eliminate barriers that prevent certain groups of users from accessing and using building facilities on equal basis as others.
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FINDINGS AND ISSUES FROM TOP INSPECTION AND APPLICATION

TOP/CSC INSPECTION AND APPLICATION QUERIES		
S/N	Participant's Feedback / Enquiry	BCA's Response
1	How long is the duration to be considered as delayed response from QP for replying to TOP WD?	Please refer to IACC-BCA's circular (Ref: APPBCA-2022-19) dated 1 Sep 2022 (a copy is available in our website https://www1.bca.gov.sg) for details pertaining to response time.
2	Is there is cap on number of phases of TOP for commercial AEI projects?	Phase TOP is assessed on a case-by-case basis. The project team is strongly encouraged to consult BCA early on their proposal.
3	Please specify date of circular regarding TOP phasing for our reference.	You may refer to the BCA circular (Ref: BCA BC 15.0.3) dated 16 Jan 2014 (a copy is available in our website https://www1.bca.gov.sg).
4	If a small area within the final TOP is hoarded off, will that be considered for site readiness? Can final TOP be issued with "condition" to complete outstanding works within a required period?	All building works within the development has to be fully completed before the TOP inspection. The project team is strongly encouraged to consult BCA early on their proposal if there are clarifications to be made. Please contact us through BCA's Online Feedback Form at https://www.bca.gov.sg/feedbackform/ .
5	During one of the TOP inspections, it was commented that fixed glass panel between the kitchen and living room within the unit needs to comply with the glass at height. Is this requirement applicable to unit interior glass?	Yes, if any part of the glass panel is located at height of 2.4m or more, whether situated within the interior or forming the exterior of a building, requirements for use of glass at height would apply. Please refer to the Approved Document Clause N.2.1 for details.
6	TOP checklist for landed houses, under item K - lift. We have provided home lift for our site. Should I complete the checklist as Yes, No or NA? Checklist indicated as vertical lift.	Home lifts with a maximum vertical displacement of 1 metre or more, are regulated by BCA. For such cases, QP shall select 'Yes'.

TOP/CSC HANDOVER INSPECTION QUERIES		
7	We have a TOP case for private residential flat where BCA implemented a “handover inspection”, highlighting minor defects as non-compliances, despite CONQUAS & QM clearance. Is this a new process?	<p>The site readiness of a project for occupancy has always been assessed as part of TOP inspection, with some projects requiring re-inspections. The project team is responsible to ensure all building works are fully completed and in liveable conditions for occupancy. Please refer to the circular (Ref: APPBCA-2023-03) dated 17 Feb 2023 on required site conditions for TOP/CSC inspection (a copy is available in our website https://www1.bca.gov.sg).</p> <p>We would also continue to provide clarifications on the expected project site conditions in our upcoming circulars and industry briefings. For any clarifications on a specific project please contact us through BCA's Online Feedback Form at https://www.bca.gov.sg/feedbackform/.</p>
8	BCA highlighted small chips in tiles as major defects during a recent TOP. These are typically understood as defects, rather than non-compliances. Can BCA clarify the allowable defects for TOP?	
9	BCA's TOP requirement for private residential projects seems bridge on defects rectification. This contradicts industry's understanding of TOP and DLP. Can BCA issue a circular to clarify this?	
10	Why is the handover inspection only applicable to private condos but not to commercial or civic institutions?	
11	What are the expectations of site completeness during phased TOP submission. If areas that are not within the phased TOP are hoarded off, will that be considered for readiness? What about driveway area?	
360 VIDEO INSPECTIONS		
S/N	Participant's Feedback / Enquiry	BCA's Response
12	When is the implementation of Virtual TOP inspection? Will it be eventually the default inspection by BCA?	360 Capture (or Virtual Inspection) is now accepted as an alternative form of inspection evidence by BCA in lieu of physical inspection or as part of a hybrid inspections prior to TOP/CSC issuance. Please refer to BCA's guidebook on virtual TOP/CSC for more details.
13	Will we be looking at an AI technology in near future to verify site compliance when we use photo scanning to scan on those constructed areas?	Yes. BCA is looking at the usage of AI technology for TOP inspections.

CD SHELTERS

S/N	Participant's Feedback / Enquiry	BCA's Response
1	For non-compliance related to skylight installed within Household Shelter (HS) setback distance, how was it resolved on site since it's already built?	The setback distance for the HS shall be built in accordance with technical requirements. Rectification works are required to rectify the non-compliance detected. The skylight may be replaced with RC roof or clay tile roof, or adding trellis subjected to approval.
2	For staircase within HS protection zone under skylight can it be metal hollow section with RC infill (composite)?	Only RC staircase is allowed as setback distance for household shelter. If metal hollow section infilled with RC material is proposed, this will have to be assessed if it is equivalent to RC material in terms of its strength and effectiveness under blast loading.
3	Services like twin switch inside the HS is 450mm above FFL. There is no indication of the max height. Can we have the twin switch socket at 1m height?	The code specifies that for the 13A switched socket outlets, the minimum height is 450mm and maximum height is 1200mm.
4	For the Storey Shelter (SS) vent sleeve height, the code shows that it should be 1.9m to 3.55m from the internal floor area, does this apply to the external area where the vent sleeve is facing?	In general, it does not. However, the external face of VS shall meet the SS technical requirements and accessible for maintenance and operation.

LIFTS

S/N	Participant's Feedback / Enquiry	BCA's Response
1	Lift FI design plan, will it effect on going project which the lift not yet installed, but structures are already built halfway?	The submission of design plans for Fixed Installation (FI) has not been implemented yet. When the above requirement is ready to be implemented, BCA intends to inform the industry early and include a suitable grace period so that the industry is aware of the requirements and can have sufficient time to prepare.
2	Most high-rise residential Block lobby in front of units, how do we avoid less noise for the lifts?	<p>In general, the lift shafts should not abut the living spaces of residential units since noise can transmit through the building structure.</p> <p>Building designers who are uncertain if their design would have an impact on the noise level of the nearby residential units are encouraged to engage or seek advice from an acoustics consultant on the suitable mitigating solutions.</p>

OTHER QUERIES		
S/N	Participant's Feedback / Enquiry	BCA's Response
1	Is the circular for ambulance applicable to all types of developments?	The recommendations in the SCDF advisory on designing for ambulance access are <u>good practice guidelines applicable to all types of developments.</u>
2	We would like to clarify if the ambulance provision of 3m height to basement and 1st sty is only applicable to designated point or require to be provided at every lift lobby?	The principle behind this advisory on provision of ambulance access is to design for sheltered access taking into account the shortest route from the driveway where the ambulance is expected to park to any block or building in the development. This is to enable emergency crew to reach patients in a timely manner. The provision of sheltered access can be through the basement or at ground level, and along the planned ambulance route, QPs are to take note that the height of clearance for SCDF ambulances is 3m.
3	For ambulance access in basement, we have a case where ingress access to development is through B2 with internal access ramp to B1. Must the internal access ramp from B2 to B1 be 3m clear height?	
4	For ambulance access to buildings, for sheltered walkway at ground level to any buildings, would this include standalone common facilities/pavilions like a gym or function room etc?	While the recommendations in this circular are not mandated, the QP should consider the level of provision to achieve the intended principles of sheltered ambulance access suitable for the development type.
5	Is there a flowchart diagram that guides you through the necessary approvals required from start to finish with quick links to the codes requirements?	<p>QP may refer to links below for flowcharts and regulatory information on the following processes:</p> <p>For more information on Building Plan Submission, it is available at https://www1.bca.gov.sg/regulatory-info/building-control/building-plan-submission</p> <p>For more information on Application for TOP, it is available at https://www1.bca.gov.sg/regulatory-info/building-control/application-for-temporary-occupation-permit-top</p>
6	Please advise if BP01 is disapproved, do I need to pay plan fee again when I submit BP02?	<p>If BP01 submission was disapproved due to non-compliances/ written direction lapsed, the plan fee made in BP01 can be used for BP02.</p> <p>If BP01 was approved and BP02 is an amendment submission, new plan fee is required for the BP02 amendment submission.</p>