

Our Ref : APPBCA-2020-08
15 December 2020

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Dear Sir/Madam

CHANGES TO TEMPORARY OCCUPATION PERMIT (TOP) / CERTIFICATE OF STATUTORY COMPLETION (CSC) APPLICATION PROCESS:

- **SUBMISSION OF INSPECTION REPORT/CHECKLIST FOR HOUSE BUILT FOR THE OWNER'S OWN USE DURING APPLICATION FOR TOP/CSC IN LIEU OF JOINT INSPECTION**

Objective and Current Procedure

1 This circular is to inform the industry of the changes related to the Temporary Occupation Permit (TOP)/ Certificate of Statutory Completion (CSC) application requirements for landed house built for the owner's own use including new erection, reconstruction and A&A works.

2 Currently, before the application for TOP/CSC may be considered, the Qualified Person (QP) may be required to apply for a joint site inspection with BCA of the completed building works. The issuance of TOP/CSC will only be considered after successful site inspection and the submission of all the required documents and clearances from the other relevant technical authorities.

New Procedure

3 As part of our continuous efforts to improve the current processes, QP for the building works for landed house built for owner's own use will no longer need to book a TOP inspection¹. When the project is ready for application of TOP/CSC, the QP shall submit his/her inspection report/checklist (see attachment in Annex A) as part of the supporting documents for the application of TOP/CSC.

4 QP can submit the TOP/CSC application via e-CORENET directly, instead of via the TOP Portal. If a joint site inspection date has been scheduled via the TOP Portal before the date of this circular, the QP could either submit a copy of the inspection checklist to the TOP Portal; or cancel the inspection in the TOP Portal and submit the TOP/CSC application via CORENET.

¹ TOP inspection may be arranged if the attached photos in the inspection report/checklist are inadequate or unsatisfactory in meeting the requirements.

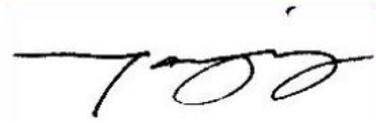
5 The above changes will start with immediate effect.

For Clarification

6 We would appreciate if you could convey the contents of this circular to your members. If you need clarifications, please submit your enquiry through BCA's Online Feedback Form at <https://www.bca.gov.sg/feedbackform/> or call us at 1800 342 5222.

7 Thank you.

Yours faithfully

A handwritten signature in black ink, appearing to read 'T. J. Yih', is written over a light blue rectangular background.

TAN JWU YIH
DIRECTOR
BUILDING PLAN AND MANAGEMENT GROUP
for COMMISSIONER OF BUILDING CONTROL

SITE INSPECTION REPORT/CHECKLIST FOR RESIDENTIAL LANDED HOUSE (BUILT FOR THE OWNER'S OWN USE)

Instructions

1. The QP(Architect) shall submit this inspection report, with item (L) – LPS completed by the Professional Engineer (Electrical) for the lightning protection system.
2. The QP (Architect) must compile the photos/measurements for all the items shown from (a) to (i) as a PDF attachment to the separate file to this checklist. QP is required to annotate the locations of photos on site/floor plan clearly.

1.	Project Reference No.		
2.	Project Title		
3.	Date of submission of first plan (BP/ST) to BCA		
4.	Photos/ measurements showing completed works are in accordance with the approved BP plans		<p>a. External works including boundary wall/swimming pool etc.</p> <p>b. Building elevations & envelop</p> <p>c. LPS provisions (air-terminal system, down conductor system, earth system, equipotential bonding)</p> <p>d. General layout of all floors with site measurements of ceiling height (typical & worst-case scenario for each room/space)</p> <p>e. Staircase (1st/one intermediate/ last landing for each stairs) with site measurements (tread & riser, clear width, handrail)</p> <p style="margin-left: 20px;">i. tread & riser - measurement at the centre of every step</p> <p style="margin-left: 20px;">ii. clear width (typical & worst-case scenario for every flight)</p> <p style="margin-left: 20px;">iii. handrail (height, opening)</p> <p>f. Lift at all floors at 1st and last landing</p> <p style="margin-left: 20px;">i. Safety feature for vertical platform lifts (hold-to-run, edge protection)</p> <p>g. Safety barriers on all floors (close-up view) with site measurements (height, opening) (typical & worst-case scenario/locations)</p> <p style="margin-left: 20px;">i. Glass material label for laminated glass (one for each type)</p> <p>h. Natural lighting and natural ventilation</p> <p style="margin-left: 20px;">i. Casement window (one typical and one largest panel)</p> <p style="margin-left: 20px;">ii. Sliding window (one typical and one largest panel)</p> <p>i. Fresh-air and exhaust outlet for mechanical ventilation system (MV) at all floors</p> <p><i>Note: For locations that obtained waiver approval (with owner's undertaking), QP may provide measurement at 10% of such locations (randomly selected) or 1 whichever is larger.</i></p>
5.	Have all waivers been obtained for non-compliances and updated in the record plan accordingly?	Y / N	If 'N', please provide details of the non-compliance(s) that has/have not been updated.
6.	Is the building occupied?	Y / N	If 'Y', please provide details of the occupant(s) and state the reasons for the occupation without TOP
7.	For new erection/reconstruction abutting existing neighbouring properties,		
	a) is flashing provided to prevent leakage of water to the existing neighbouring properties?	Y / N	If 'N', please explain why it is not provided and what alternatives have been provided to resolve any leakage issue to the neighbouring properties.
	b) any feedback from neighbors on water leakage?	Y / N	If 'Y', please provide details of feedback and indicate whether it has been resolved.
8.	All TOP/CSC clearances have been obtained from other technical agencies?	Y / N	If 'N', please indicate what are the outstanding clearance(s).

Status of compliance - Y: comply N: does not comply NA: not applicable					
	Clauses in Approved Document	Status of compliance (Y/N/NA)	Location / measurement of non-compliance	Waiver obtained for non-compliance?	Remark (if any)
C	Headroom and Ceiling Height				
	3.2.1	Headroom is 2m or more for every room/ access route/ circulation space			
	3.2.2	Headroom is 2.2m or more for parking lots/driveway			
	3.3.1	Ceiling height is 2.4m or more for rooms and spaces			
E	Staircases				
	3.2.1	No projection, other than handrails, is within a height of 2.0m from the landing or pitch line.			
	3.3.1	The clearance of the width is 900mm or more.			
	3.4.1	The height of a riser does not exceed 175mm			
	3.4.2	The minimum width of a tread is 225mm in a residential unit			
	3.4.3	The width of the tread of a tapered step shall be taken as that when measured at distance of 500mm from the narrower end.			
	3.4.4	The risers and treads are of uniform height and size.			
	3.5.1	A landing is provided at every floor level and door opening.			
	3.5.2	Number of risers in a flight do not exceed 18 .			
	3.5.3	The clear width of landing is 900mm or more.			
	3.5.4	A landing shall not have any step or drop.			
	3.5.5	One winder in every 90° turn is provided in the staircase of dwelling unit			
	3.6.1	Handrail is provided at the staircase			
	3.6.2	The height of the handrail is between 750mm and 1000mm above the pitch line.			
	3.6.3	Handrail (a) has a circular section of 32mm to 50mm in diameter or an equivalent gripping surface; and (b) has a clear space between the handrail and wall surface of 40mm (smooth surface)/ 60mm (rough surface)			
	3.6.4	A recess containing a handrail is extended 450mm or more above the top of the handrail			
F	Lighting				
	3.2.1	Opening of window is 10% or more of floor area.			
G	Ventilation				
	3.1(b)	Mechanical Ventilation/ air-conditioning system complies with SS553. Details of fresh-air and exhaust outlets.			
		The exhaust outlet from the basement car park or the kitchen exhaust system does not discharge to the neighboring buildings,			

		especially residential buildings.				
	3.2.1	Natural ventilation is provided by means of openable windows with an aggregate area of not less than (a) 5% of the floor area of the room or space; and (b) 15% cross ventilation is provided to aboveground car park				
	3.2.2	The windows or opening is open to (a) the exterior of the building; (b) an airwell with a minimum width of 3m; or (c) a recess of minimum 3m width				
	3.3.3	No part of any room or space is more than 12m from any window/opening ventilating the space				
H Safety From Falling						
	3.2.1	The height of a barrier is not less than: (a) 1000mm at all locations except for (b); (b) 900mm at the lower edge of the window and gallery or balcony with fixed seating in areas such as theatres, cinemas and assembling halls.				
	3.3.1	The barrier is designed to withstand a horizontal loading (BSEN1991-Part 1-1)				
	3.4.1	The lowest 75mm of the barrier at the external wall is built solid.				
	3.4.2	The lowest 75mm of the bay window is not openable.				
	3.4.3	The gap is not large enough to permit the passage of a sphere of a diameter of 100mm for non-industrial buildings / 500mm for maintenance areas.				
	3.4.4	The triangular opening around a tread and riser and the bottom edge of the barrier is 150mm or less.				
	3.4A.1	The barrier has a height of at least – (a) that specified in paragraph H.3.2.1; or (b) 850mm measured from the last climbable toehold, whichever is higher.				
	3.5.1	Laminated glass is used for glass forming part or whole of the barrier				
	3.5.2	All glass used comply with SS341				
J Roof						
	3.1	The party wall is extended above the level of the roof so that each roof is separate and independent of the roof of the adjoining house.				
K Lifts						
	Safety features are provided for vertical platform lifts : • Hold to run function; and • Edge protection (mechanical safety edge or light curtain)					

L Lightning Protection (to be completed by the Professional Engineer (Electrical) for the lightning protection system)									
Part 1: Air Termination System									
SS555: 2018	1. Protection of people against direct lightning strike at open habitable roof terraces and balconies where people are regularly present. <i>Note: Human consideration 2.5m</i>								
	2. Touch Voltage Prevention <i>Note: No tape shall be placed in the vicinity of a habitable areas</i>								
	3. Flash Over Prevention								
	4. Provision of air-finials at exposed corners in non-habitable roof areas of building								
	5. Intercepting tape/conductor laid within 100mm from open edges and roof of building								
	6. LPS Warning Sign shall be provided at entrances to habitable and non-habitable roof spaces								
Part 2: Down Conductor System									
SS555: 2018	1. Flash Over Prevention <i>Note: Separation distance consideration near metallic window's frame, metal handrail and trunking, etc.</i>								
	2. Bimetallic connector for dissimilar metal <i>Note: Aluminium & copper can't mix</i>								
	3. Wall test joint at 2.5m (min)								
Part 3: Earth System									
SS555: 2018	<table border="1"> <tr> <td>Step Voltage Prevention</td> <td> <input type="checkbox"/> Isolation/Restriction min 3m <input type="checkbox"/> Ground Surface Contact resistance > 100kΩ </td> </tr> <tr> <td>Note: Ground Level</td> <td> <input type="checkbox"/> Mesh earth termination <input type="checkbox"/> Others </td> </tr> </table>	Step Voltage Prevention	<input type="checkbox"/> Isolation/Restriction min 3m <input type="checkbox"/> Ground Surface Contact resistance > 100kΩ	Note: Ground Level	<input type="checkbox"/> Mesh earth termination <input type="checkbox"/> Others				
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Part 4: Equipotential Bonding									
SS555: 2018	Bonding for exposed metal fixtures and metals within flash over distance to LPS. Examples are metal trellis, metallic window frames, metal handrails, etc. where applicable.								

M	Safety of windows				
	3.1	Aluminium alloy window, is designed and constructed in accordance with SS 212 – Specification for Aluminium Alloy Windows			
		For casement window, fasteners including stainless steel screws or rivets are provided.			
		For sliding window, safety stopper and deep-seated tracks is provided to ensure sliding panel cannot be lifted upwards and dislodged.			
N	Use of glass at height				
	3.3	Monolithic tempered glass, heat-soaked tempered glass or other types of glass that are prone to spontaneous breakage is used at a height of 2.4m or more, and suitable protection such as installation of screens or shields is provided to protect people from any injury.			
	3.4	All glass used comply with SS341			
P	Daylight Reflectance				
	3.2	The façade materials comply with the daylight reflectance and specular reflectance value specified.			
1	Swimming Pool				
	(a)	No infinity edge next to a drop > 1.0m			
	(b)	No sharp corner protruding into pool area			
	(c)	Signage indicating depth installed for areas of pool depth > 1.2m.			
	(d)	Sufficient protective edge provision to prevent falling from swimming pool (infinity pool).			
2	Boundary wall				
		Height of boundary wall/fence is 1800 mm or less measured from the higher ground level.			

Submitted by :

Name and Signature of QP (Architect)

Date