

INSTRUCTIONS

On 15 December 2020, BCA issued a circular 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, re-construction and A&A works.

The QP for the building works for landed house built for owner's own use no longer need to book a TOP inspection. When the project is ready for application of TOP/CSC, the QP shall submit his/her inspection report/checklist as part of the supporting documents for the application of TOP/CSC. QP can submit the TOP/CSC application via e-CORENET directly, instead of via the TOP Portal.

As part of our continuous efforts to improve the current processes, we have made some changes to the previous checklist.

The QP for the building works shall use this document to prepare his/her inspection report/checklist as part of the supporting documents for the application of TOP/CSC.

The Professional Engineer (Electrical) for the lightning protection system shall prepare his separate report (e.g. Certificate of Supervision of Lightning Protection System, As-built Plans, Test Reports, Site Inspection Report) and provide to the QP for building works as part of the overall TOP/CSC submission. See Appendix B as a guide.

The Professional Engineer (Mechanical) shall provide the Certificate of Supervision of Air-conditioning/Mechanical Ventilation System for any ACMV installation indicated on the building plans.

The owner of lift shall apply for PTO via the Online Permit to Operate (OPTO) system. As a continuing effort in providing better service to the industry with a more intuitive user experience, the new Lifts and Escalators Application ("LEAP") Portal portal (<https://www2.bca.gov.sg/LEAP>), which will replace the existing Online Permit To Operate ("OPTO") system, will go live on 21 November 2022 0900 hrs.

We have prepared three appendices for guidance.

1. Appendix A: Guideline and sample of Site Inspection Report for Residential Landed House (Built for The Owner's Own Use)
2. Appendix B: Guideline for Supervising PE (Electrical) to provide photographs for lightning protection system, in lieu of physical site inspection
3. Appendix C: Supporting documents for the application of TOP/CSC

This document is for QP's use**PROJECT INFORMATION**

1	Project Reference No.	
2	Project Title	

CLAUSES IN APPROVED DOCUMENT

The QP shall indicate the clauses that are applicable for the building works and the status of compliance. For clauses that obtained waiver approval (or owner's undertaking), QP may indicate under remarks column. The QP may also provide further information (e.g. material specifications) if deemed necessary.

S/N	Clauses in the Approved Document	Status of compliance (Yes/No/Not applicable)	Remarks, if any
1	C - Headroom and Ceiling Height		
2	E - Staircases		
3	F -Lighting		
4	G - Ventilation		
5	H - Safety from Falling		
6	J - Roof		
7	K - Lift and Escalators		
8	L - Lightning Protection		
9	M - Safety of Windows		
10	N - Use of Glass at Height		
11	P -Daylight Reflectance		

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SITE INSPECTION REPORT

1. Under Section 9 of the Building Control Act, the QP is required to ensure that the building works comply with the regulatory requirements
2. The submission of site inspection report is in lieu of the physical joint TOP inspection.
3. The QP shall compile the photos/measurements for the items listed in Sections 1 and 2 below.
4. QP is required to annotate the locations of photos on site/floor plan clearly. The QP shall refer to Appendix A as a guide to complete Sections 1 and 2 below.

SECTION 1A: GENERAL OVERVIEW OF COMPLETED BUILDING AND SECTION 1B: GENERAL LAYOUT OF ALL FLOORS TO SHOW COMPLETION (BASEMENT TO ATTIC)		
Front Elevation	Rear elevation	Side elevation
Basement	1 st Storey	2 nd Storey
3 rd storey	Attic	Mezzanine (If applicable)

SECTION 2: COMPLIANCE OF CLAUSES		
Clauses in Approved Document	Photographs/ Location/Measurements	Remark (if any)
Headroom and Ceiling Height		
Staircases		
Safety From Falling		

QP can insert more rows and insert photos. See Appendix A as a guide

I certify that the site has been inspected and complies with the requirements of the Building Control Act and Regulation, and the relevant Singapore Standard Code of Practice.

Submitted by:

Name and Signature of QP

Date

APPENDIX A: GUIDELINE AND SAMPLE OF SITE INSPECTION REPORT/CHECKLIST FOR RESIDENTIAL LANDED HOUSE (BUILT FOR THE OWNER'S OWN USE)

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

OBJECTIVE

1. Simplified Submission- Photos of ONLY critical Clauses to be submitted.
2. Consistency of submission in the industry
3. Evidence based inspection by QP

SUBMISSION GUIDELINE

1. Targeted photo evidence i.e., headroom, barrier, climbability etc. Please refer to the checklist.
2. Provide photo for **each typical Clause type**
3. To ensure resolution of photos and dimensions to be annotated clearly.
4. To reference approved building plans to show location of photograph taken.
5. Owner undertaking letters - reference shall be clearly indicated, e.g., Refer to attached LOU(a) etc.

APPENDIX A: GUIDELINE AND SAMPLE OF SITE INSPECTION REPORT/CHECKLIST FOR RESIDENTIAL LANDED HOUSE (BUILT FOR THE OWNER’S OWN USE)
EXAMPLE OF SUBMISSION FOR SECTIONS 1 AND 2

1. General Layout of completed building e.g. Photos of the front, rear and side elevation

SECTION 1A: GENERAL OVERVIEW OF COMPLETED BUILDING	
Photos	Photos
<div>Front Elevational</div> 	<div>Rear Elevation</div> <div></div>

APPENDIX A: GUIDELINE AND SAMPLE OF SITE INSPECTION REPORT/CHECKLIST FOR RESIDENTIAL LANDED HOUSE (BUILT FOR THE OWNER’S OWN USE)

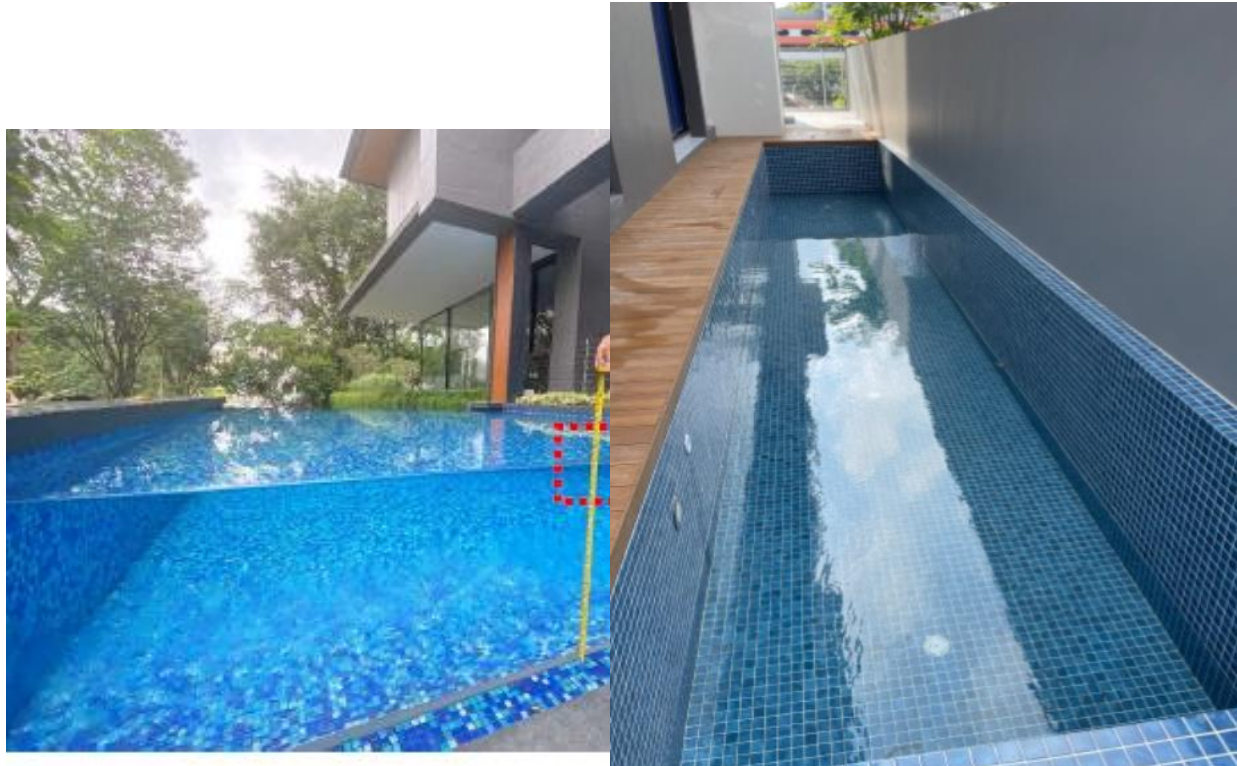
Side Elevation 1







Side Elevation 2




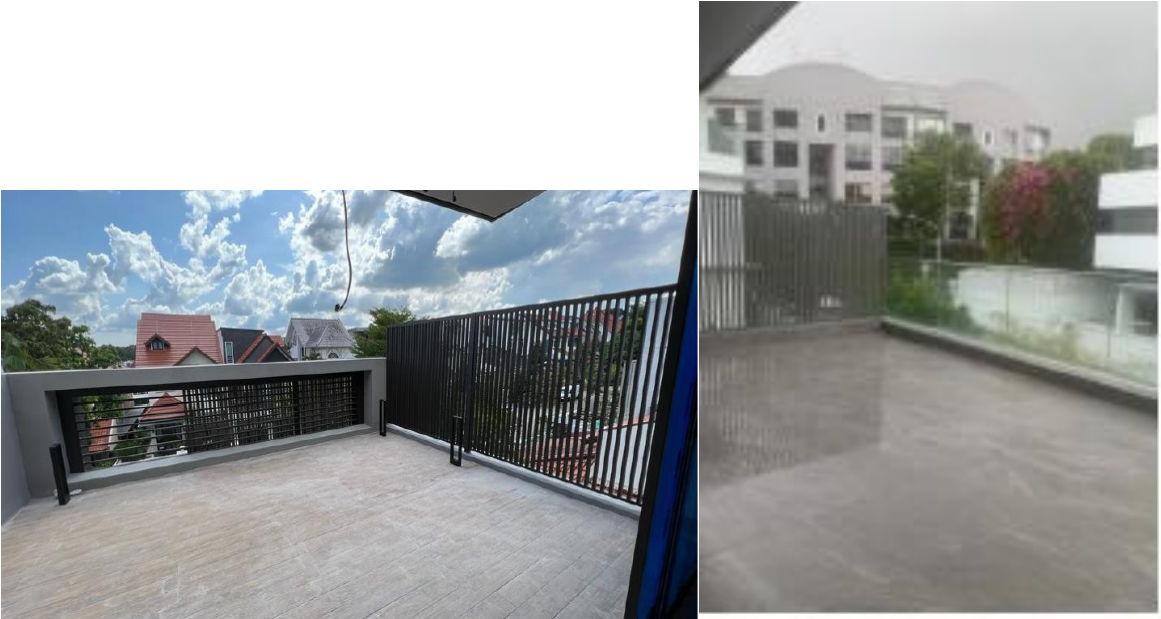
Swimming Pool (if any)





APPENDIX A: GUIDELINE AND SAMPLE OF SITE INSPECTION REPORT/CHECKLIST FOR RESIDENTIAL LANDED HOUSE (BUILT FOR THE OWNER’S OWN USE)

SECTION 1B: GENERAL LAYOUT OF ALL FLOORS TO SHOW COMPLETION (BASEMENT TO ATTIC)			
Basement		1 st storey	
			
2 nd storey		3 rd storey	
			



APPENDIX A: GUIDELINE AND SAMPLE OF SITE INSPECTION REPORT/CHECKLIST FOR RESIDENTIAL LANDED HOUSE (BUILT FOR THE OWNER’S OWN USE)

<p>Attic</p> 	<p>Balcony or terrace for every storey</p> 
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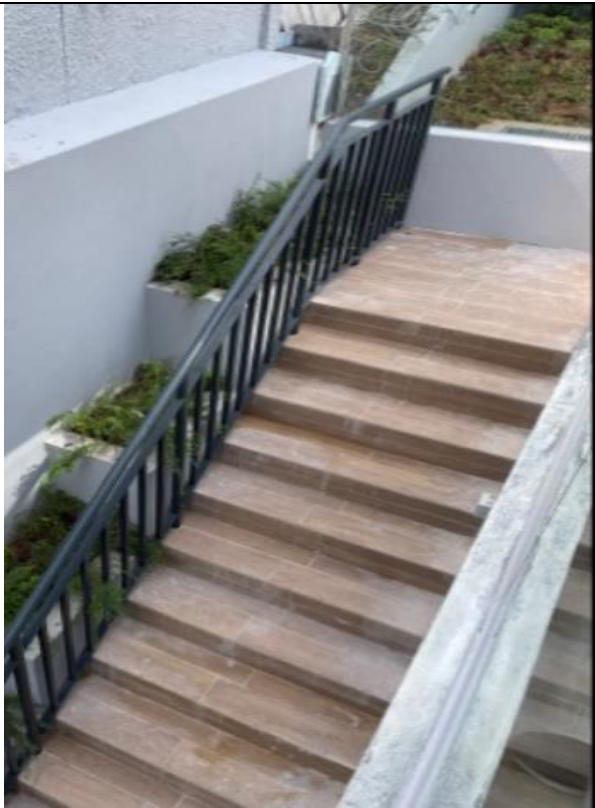

APPENDIX A: GUIDELINE AND SAMPLE OF SITE INSPECTION REPORT/CHECKLIST FOR RESIDENTIAL LANDED HOUSE (BUILT FOR THE OWNER’S OWN USE)

<p>Status of compliance - Y: comply N: does not comply NA: not applicable</p> <p><i>Note: For locations that obtained waiver approval (or owner’s undertaking), QP may indicate under remark.</i></p>				
SECTION 2: COMPLIANCE OF CLAUSES				
	Clauses in Approved Document	Status of compliance (Y/N/NA)	Location / measurement of non-compliance	Remark (if any)
C	<p>Headroom and Ceiling Height</p> <p>General layout of all floors with site measurements of ceiling height (typical & worst-case scenario for each room/space)</p>	Y	<p>Typical room</p>  <p>The ceiling height is 2.4m</p>	
			<p>Attic photos</p>  <p>The lowest headroom is 1.5m</p>	
			<p>Staircase</p>	

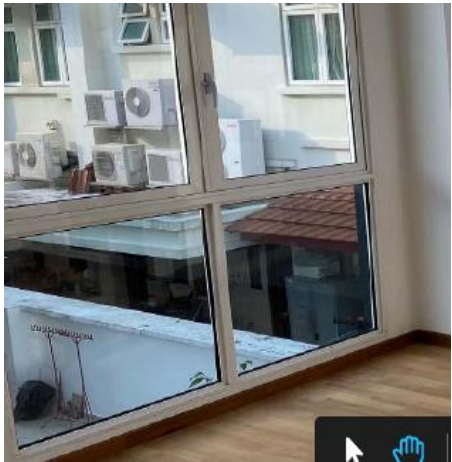


APPENDIX A: GUIDELINE AND SAMPLE OF SITE INSPECTION REPORT/CHECKLIST FOR RESIDENTIAL LANDED HOUSE (BUILT FOR THE OWNER’S OWN USE)

				
			The headroom is 2.0m	
E	Staircases <u>Typical</u> staircase (1st /one intermediate/ last landing for each stairs) with site measurements (tread & riser, clear width, handrail) I. tread & riser - measurement at the centre of every step II. clear width (typical & worst-case scenario for every flight) III. handrail (height, opening)		To indicate the location of typical staircase design 	
			Internal staircase a. Riser : 175mm b. Thread: 275mm	

APPENDIX A: GUIDELINE AND SAMPLE OF SITE INSPECTION REPORT/CHECKLIST FOR RESIDENTIAL LANDED HOUSE (BUILT FOR THE OWNER’S OWN USE)

			 <p>External staircase a. Riser : 175mm b. Thread: 275mm</p>	
H	<p>Safety From Falling</p> <p><u>Typical</u> safety barriers on all floors (close-up view) with site measurements (height, opening) (typical & worst-case scenario/locations)</p> <p>I. Glass material label for laminated glass (one for each type)</p>		<p>Typical design glass barrier at 2nd storey between Grid XX-XX</p>  <p>Barrier height 1m</p>	
			Typical design window glass barrier at Master bedroom, Bedroom 2 and 3.	

APPENDIX A: GUIDELINE AND SAMPLE OF SITE INSPECTION REPORT/CHECKLIST FOR RESIDENTIAL LANDED HOUSE (BUILT FOR THE OWNER’S OWN USE)

			 <p>Barrier height 900mm</p>	
			<p>Typical steel barriers</p>  <p>Internal staircase Barrier height: 1000mm Gap size: 100mm</p>  <p>Balcony at L2 Barrier height: 1000mm Gap size: 100mm</p>	

APPENDIX B : GUIDELINE AND SAMPLE OF SITE INSPECTION REPORT/CHECKLIST FOR RESIDENTIAL LANDED HOUSE (BUILT FOR THE OWNER'S OWN USE)

GUIDELINE TO PROVIDE PHOTOGRAPHS FOR LIGHTNING PROTECTION SYSTEM
















The PE(Electrical) shall submit the following documents during TOP/CSC applications.

1. Certificate of Design & Supervision of Lightning Protection System (CSC 03)
2. Earth Resistance & Electrical Continuity Test Form (Test Form shall be provided for each building)
3. LPS As-built Plans should include air-termination system, down conductor system, earth termination system, details of equipotential bonding, zones of lightning protection provided by rolling sphere and/or protection angle.
4. Site inspection report for the lightning protection system


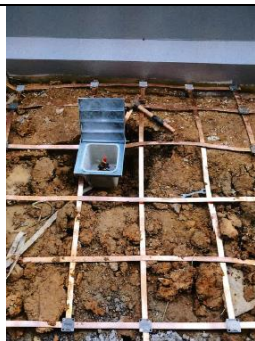



Please [refer to Circular dated 31 Oct 2018](#) for details

SITE INSPECTION REPORT

5. The submission of site inspection report is in lieu of joint inspection.
6. **The Supervising Professional Engineer (Electrical) for the lightning protection system shall provide the following photographs as part of the report.**

L	Lightning Protection (to be completed by the Professional Engineer (Electrical) for the lightning protection system)							
	Part 1 : Air Termination System							
	SS555:2018 BP submitted on or after 1 May 2019	1. Air-finials are provided at exposed corners of roof						
		2. Lightning tapes shall be located not more than 100mm from the corners, exposed points, edges of parapet wall and roof						
		3. LPS warning sign is provided at entrances to habitable and non-habitable roof spaces						
	<table><tr><td></td><td></td><td></td></tr><tr><td>Air-Finials</td><td>Tape ≤ 100mm</td><td>LPS Sign</td></tr></table>						Air-Finials	Tape ≤ 100mm
								
Air-Finials	Tape ≤ 100mm	LPS Sign						
Part 2 : Down Conductor System								
SS555:2018 BP submitted on or after 1 May 2019	Test links are installed at 2.5m (min) for exposed down conductor or 1.5m for natural down conductor with flushed mounted test links. Insulation of any exposed down conductor below 2.5m is required to meet a 100KV, 1.2/50µs impulse voltage e.g at least 3mm cross-linked polyethylene.							
	<table><tr><td></td><td></td></tr><tr><td>Height of Test Link</td><td>BI Connector</td></tr></table>				Height of Test Link	BI Connector		
								
Height of Test Link	BI Connector							

**APPENDIX B : GUIDELINE AND SAMPLE OF SITE INSPECTION REPORT/CHECKLIST
FOR RESIDENTIAL LANDED HOUSE (BUILT FOR THE OWNER’S OWN USE)**

Part 3 : Earth System			
SS555:2018 BP submitted on or after 1 May 2019	Earth Pits shall be located at areas where the risk of exposure of a person to step voltage is low. Example is landscape area where there is no person during normal time. Otherwise, equipotential mesh has to be provided around the earth pit.		
		Earth Pits at Landscape Area	Buried BRC mesh creating an equipotential zone around earth pit
		Part 4 : Equipotential Bonding	
SS555:2018 BP submitted on or after 1 May 2019	Equipotential bonding between lightning tapes and any exposed metallic fixtures (trellis, railing, etc) including concealed steel rebars of concrete parapet wall or BRC mesh of concrete floor slab.		
		Bonding to exposed metallic trellis	 
		Bonding to concealed rebars of concrete parapet wall	Bonding to concealed BRC mesh inside floor slab

APPENDIX C : GUIDELINE AND SAMPLE OF SITE INSPECTION REPORT/CHECKLIST FOR RESIDENTIAL LANDED HOUSE (BUILT FOR THE OWNER’S OWN USE)

A) UNDERTAKING CLAUSES IN APPROVED DOCUMENT

The requirements below do not apply in any house built for the owner’s own use. QP may submit owner’s undertaking letter for non-compliances of the following clauses:

Approved Document Clauses	Description
E.3.3, E.3.4, E.3.5	Width of staircase, Risers and Treads and landing
E.3.6	Handrails of staircase
G.2.2	Ventilation
H.3.2.1	Safety barrier height
H.3.4	Size of opening of barrier
H.3.4A	Climbing issue

B) How to apply

Submit the following documents via CORENET e-Submission System:

- Site Inspection Report/Checklist for Residential Landed House (Built for the Owner’s Own Use)
- Certificate of Supervision of Building Works (Form BCA-CSC-CSPBW)
- Declaration by Qualified Person (Form BCA-CSC-TOPCSCDQP)
- As-built Plans, Test Reports, Site Inspection Report and Certificate of Supervision of Lightning Protection System (Form BCA-CSC-CSPLP or BPD_CSC03). [Refer to Circular dated 31 Oct 2018](#)
- Certificate of Supervision of Installation of Escalators/ Lifts/ Stair lift/ Platform lift (Form BCA-CSC-CSPLE or BPD_CSC04) and Permit to Operate (PTO) in development
- Certificate of Supervision of Air-conditioning/Mechanical Ventilation System (Form BCA-CSC-CSPACMVS or BPD_CSC05)
- Certificate of Supervision of Piling Works and Notice of Completion (Form BCA-BE-QPCTPW or BEV C1)
- Certificate of Supervision of Structural Works (Form BCA-BE-QPCTSSW or BEV C2)
- Certificate of Record Structural Plans/Calculations (Form BCA-BE-CTASST or BEV C3)
- Builder's Certificate of Completion of Building Works (Form BCA-BE-BRCTBW or BC/BC)
- Commissioning approval for the CD shelters (Form BCA-CD-COMM01)

C) TECHNICAL AGENCIES CLEARANCES

Please submit the following clearances from Technical Agencies where applicable.

1	SCDF TFP/FSC
2	NEA TOP/CSC
3	PUB TOP/CSC
4	URA TOP/CSC
5	NParks BP/CSC (Internal & External)
6	LTA BP/CSC (e.g. Road & Transportation, Vehicle Parking, Rails)