

01 December 2025

For enquiries, please contact:
Building Engineering Group (#12-01)
Tel: 1800 342 5222 (1800-DIAL-BCA) or
use our Online Feedback Form at:
https://www.bca.gov.sg/feedbackform/

Dear Sir/Madam

REVISION TO EARLY PRE-CONSULTATION OF STRUCTURAL CONCEPT FOR COMPLEX BUILDINGS AND INTRODUCTION OF FAST-TRACKING AND FACILITATING SCHEME FOR ADOPTION OF GOOD DESIGN PRACTICES

Objective

1. This circular informs the industry of the improvements to the early pre-consultation comprising the refinement to complex building types and the introduction of fast-tracking and facilitating scheme.

Background

- 2. The early pre-consultation was introduced in June 2014 and subsequently revised in March 2021, with the key objective of ensuring the structural robustness of complex buildings. The early pre-consultation has been serving its intended objective well where Qualified Person ("QP") for structural works of major complex building projects had been able to reduce the complexity and/or improve the robustness of the structural system. BCA also observed greater QP's awareness and consideration of robustness checks to prevent disproportionate collapse, hence early pre-consultation process for minor complex building projects can be simplified and expedited.
- 3. At the recent industry seminar on 5 Sep 2025 (BE Seminar 2025), BCA has shared on the proposed refinement to complex building types with simplified and expedited early pre-consultation process for minor complex building projects. In addition, BCA has also shared another pro-enterprise improvement to the early pre-consultation process, which now includes fast-tracking and facilitating scheme. These schemes aim to incentivise good design practices that enhance productivity, buildability and sustainability, and to foster an innovative culture among building professionals, Builders and Developers.

Refinement to Complex Building types and Early Pre-consultation process

- 4. BCA has reviewed and refined complex building types into major and minor complex categories. For major complex buildings, the QP will continue to request formal early pre-consultation to discuss the structural concept with BCA. For minor complex buildings, the QP can submit request for early pre-consultation together with necessary design checks to prevent disproportionate collapse. BCA will assess and may exempt formal pre-consultation if QP's design checks and robustness considerations are satisfactory.
- 5. Details of the various refinement to complex building types can be found in **Annex A**.

Early Pre-consultation for Fast-tracking and Facilitating scheme

6. The Fast-tracking scheme is introduced to incentivise projects that adopt good practices in structural, geotechnical and sustainable design. These practices contribute to improvements in productivity, buildability, and sustainability. Under this scheme, processing of Structural Plan (ST) submissions will be prioritised in order to <u>facilitate fast-track approval</u>. The level of prioritisation depends on the level of QPs' efforts in adopting good design practices in the project.



- The Facilitating scheme is introduced to provide dedicated technical assessment, thereby facilitating acceptance for innovative and/or alternative solutions that help achieve productivity improvements, construction time and manpower savings without reduction to safety considerations and outcomes.
- 8. Details of Fast-tracking and Facilitating scheme can be found in Annex E. BCA wishes to emphasise that these proenterprise schemes will only work as intended if QPs and project parties, including Accredited Checkers (ACs), Builders and Developers, are able to demonstrate and meet the competency and performance required for the schemes.
- 9. QPs are encouraged to enquire about or submit early pre-consultation request for proposals that are applicable for Fast-tracking and Facilitating Scheme. For successful proposals, an Acceptance Letter for the Fast-tracking scheme or a Completion Letter for the Facilitating scheme will be issued to the QP.

Revised arrangement for early pre-consultation with BCA

- 10. BCA has also revised the contact information for the arrangement of early pre-consultation with BCA. For projects involving Complex Buildings, the QPs for structural works should submit the request form shown in Annex D to the Building Engineering Group via:
 - a. By Email: <u>BCA_preconsultation@bca.gov.sg</u>; or
 - b. Via formsg: https://go.gov.sg/complexstructurepreconsultation
- 11. For Fast-tracking and Facilitating scheme, QPs can submit request form online via Formsg https://go.gov.sg/fasttrackingandfacilitatingscheme
- 12. We would appreciate it if you could bring the contents of this circular to the attention of your members. Should you require clarification, you may:

Email: BCA preconsultation@bca.gov.sg

BCA's Online Feedback Form: https://www.bca.gov.sg/feedbackform/

Call: 1800 342 5222

Yours faithfully

DR TRAN CHI TRUNG

DIRECTOR, BUILDING ENGINEERING GROUP

for COMMISSIONER OF BUILDING CONTROL



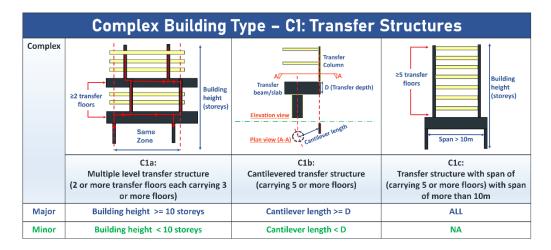
ANNEX A

COMPLEX BUILDINGS

A building (excluding a bridge, viaduct, tunnel, and MRT/LRT station) is deemed to be a complex building if it consists of one or more of the following:

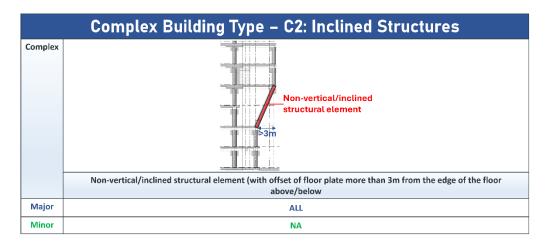
- 1) Multiple level transfer structure (2 or more transfer floors each carrying 3 or more floors) or cantilevered transfer structure (carrying 5 or more floors) or transfer structure with span of more than 10m (carrying 5 or more floors);
- 2) Non-vertical/inclined structural element (with offset of floor plate more than 3m from the edge of the floor above or below);
- 3) Structure with unconventional geometry (e.g. dome or arch-shaped) or a building (> 20 storeys) with irregular layout or behaviour (e.g. building governed by torsional mode; slender building with natural frequency < 0.2Hz; or building coupled/ connected by link bridge at height > 10 storeys);
- 4) Large span structure (with span more than 40m) or large cantilever span structure (where cantilever span is more than 8m);
- 5) Addition and alteration projects involving removal of any existing column or vertical support.

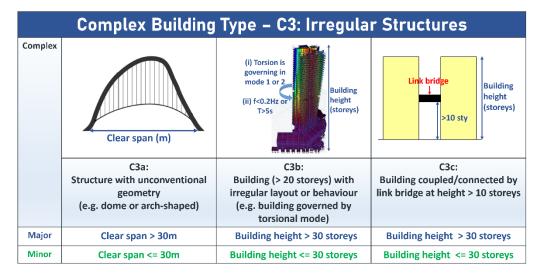
MAJOR AND MINOR COMPLEX BUILDINGS





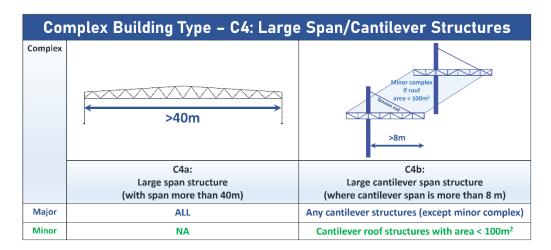
MAJOR AND MINOR COMPLEX BUILDINGS (continued)

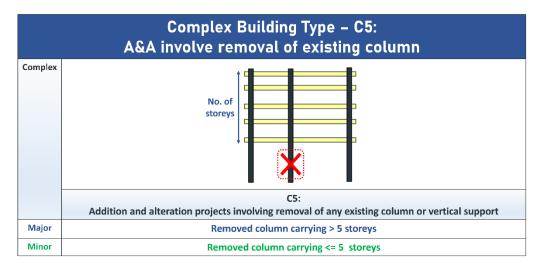






MAJOR AND MINOR COMPLEX BUILDINGS (continued)







ANNEX B SUBMISSION PROCESS FOR APPROVAL OF BUILDING AND STRUCTURAL PLANS

- During submission of structural plans for foundation works or building plans, QPs for structural or architectural works (as the case may be) will have to indicate, on the relevant application forms BPD_BP03 and BEV/A1 in Corenet, whether a structure in their project is a Complex Building QPs for architectural works will also have to submit a form in Annex C which is to be completed by the QP for structural works to determine if there is any Complex Building in their project, together with the first building plan submission.
- For a project involving any Complex Building(s), the respective QPs will also have to indicate on the application form whether early pre-consultation has been made prior to the submission. If QPs fail to arrange for early pre-consultation, it may slow down the approval process for plan submission. Hence, to enable a smoother and faster processing of plans, QPs are advised to plan ahead and come for an early pre-consultation with BCA.
- 3 For early pre-consultation, the QP for structural works should provide the following details:
 - the structural concept and design of the Complex Buildings
 - issues affecting building performance, e.g. deflection, vibration and acceleration
 - and long-term effects; measures to prevent disproportionate collapse, etc
 - the proposal on how buildability requirements can be met; and
 - tentative methods of construction.
- 4 Parties involved in the project, namely the Developer, Architect, Accredited Checker and Builder (if they are on board) should also attend the session. A Pre-consultation Completion letter will be issued after the session when queries and comments, if any, from BCA are adequately addressed.





ANNEX C

This form may take you 10 minutes to complete.

VERIFICATION BY QUALIFIED PERSON FOR STRUCTURAL WORKS ON WHETHER PROJECT FALLS UNDER COMPLEX BUILDING CRITERIA (THIS IS TO BE ATTACHED DURING FIRST PLAN SUBMISSION)				
A.	PROJECT DETAILS	,		
1	Project Reference No.:			
	Project Title:			
	-			
	_			
		TS/MK:		
	House No:Road:			
2	As the QP for Structural Works of the above project, I have reviewed and confirmed that the project			
	i) does not involve any complex building structure.			
	ii)			
	involves one or more of the following complex building structures:			
		floors each carrying 3 or more floors) or cantilevered asfer structure with span of more than 10m (carrying 5 or		
	Non-vertical/inclined structural element (with offse above or below)	et of floor plate more than 3m from the edge of the floor		
	Structure with unconventional geometry (e.g. dom irregular layout or behaviour (e.g. building govern-frequency < 0.2Hz; or building coupled/connected	ed by torsional mode; slender building with natural		
	Large span structures (with span more than 40m) or large cantilever span structures (where cantilever span is more than 8m).			
	Addition and alteration projects involving removal of any existing column or vertical support.			
		roup after completing pre-consultation session on the re-consultation Completion Letter Reference No. is		
	Note: If such pre-consultation has not been made, please arrange for it before any building or foundation plans can be processed. These criteria do not apply to bridges, viaducts, tunnels, and MRT/LRT stations.			
В.	DECLARATION BY THE QUALIFIED PERSON FOR ST	RU CTURAL WORKS		
	-			
	Address of Qualified Person	Stamp & Signature of Qualified Person		
UEN: Tel No.: Fax No.:		Deter		
H/P	H/P No. :			





ANNEX D

Form BE-EP-ANNEX D

This form may take you 10 minutes to complete.

REQUEST FORM FOR EARLY PRE-CONSULTATION OF STRUCTURAL CONCEPT FOR COMPLEX BUILDINGS			
A.	PROJECT DETAILS		
1	Project Reference No.: Project Title:		
	House No:Road:		
	Usage: Residential/ Commercial/ Industrial / Institutional and others No. of Storey: Est. Project Cost:		
	Developer/Owner:		
	QP for Structural Works:		
	QP for Architectural Works:		
	Builder:		
В.	REQUEST FOR EARLY PRE-CONSULTATION		
2	Building Engineering Group Building and Construction Authority Email: BCA preconsultation@bca.gov.sg Attention: Er. Dr Tran Chi Trung Dear BCA Officer		
	I would like to request for an early pre-consultation with BCA for the project which involves the following complex structures: <u>Tick where applicable:</u>		
	 ✓ Multiple level transfer structures (2 or more transfer floors each carrying 3 or more floors) or cantilevered transfer structures (carrying 5 or more floors) or transfer structure with span of more than 10m (carrying 5 or more floors). ✓ Non-vertical/inclined structural elements (with offset of floor plate is more than 3m from the edge of the floor above or below). ✓ Structures with unconventional geometry (e.g. dome or arch-shaped) or a building (>20 storeys) with irregular layout or behaviour (e.g. building governed by torsional mode; slender building with natural frequency < 0.2Hz, or building 		
	coupled/connected by link bridge at height > 10 storeys). Large span structures (with span more than 40m) or large cantilever span structures (where cantilever span is more than 8m).		
	Addition and alteration projects involving removal of any existing column or vertical support.		
	Endorsement of QP for Structural Works QP's contact no. and email		
	Date:		
	Note: The QP is to sign and send/email the form to the Building Engineering Group. These criteria do not apply to bridges, viaducts, tunnels, and MRT/LRT stations.		



ANNEX E FAST-TRACKING SCHEME AND FACILITATING SCHEME

Fast-Tracking Scheme-Criteria

Category A: Structural

- High strength Steel-Concrete Composite Columns (BC4),
- ii. Semi-Rigid Composite Joints and Beams:
- iii. Steel Fibre Reinforced Concrete;
- iv. Headed rebar, G600 rebar (BC5) and other acceptable structural solutions that improve productivity, buildability and sustainability.

Category B: Geotechnical

- Framework on Observational Method for the design and construction of ERSS work
- ii. Adoption of Rigorous Approach for Risk based Slope Design
- iii. Pile-Raft/Raft Foundation for highrise
- iv. and other acceptable geotechnical solutions that improve productivity, buildability and sustainability.

Category C: Green Design

- i. Low Embodied Carbon materials
 (e.g.: using Green Steel, Green Concrete, MET, etc.)
- ii. Reuse/repurpose/recycle existing structures

(e.g.: reuse of existing piles)

iii. and other acceptable low-carbon design solutions

Level of
PRIORITISATION of ST
Plan Processing

PARTIAL PRIORITISATION

For processing of ST submissions that involve adoption of Cat A OR Cat B OR Cat C

PRIORITISATION

For processing of All ST submissions if project shows significant adoption of at least 2 Categories

Facilitating Scheme for Alternative/Innovative Solutions

Adoption of Alternative / Innovative Solutions





RISK Low to Medium









Provide dedicated technical assessment and support to:

- Allow implementation of alternative and/or innovative solutions, nascent construction technologies, methodologies
- ✓ Achieve productivity improvements, and manpower/cost savings