

Our Reference: APPBCA-2021-15

10 August 2021

See Distribution list

Dear Sir/Madam

FEEDBACK SOUGHT ON PROPOSED KEY PROVISIONS IN SUBSIDIARY LEGISLATIONS FOR THE IMPLEMENTATION OF PART I, PART III, PART IV, PART IVA AND PART V OF THE BUILDING CONTROL (AMENDMENT) ACT 2020 AND SUBSIDIARY LEGISLATIONS FOR FIXED INSTALLATIONS

1. The Building and Construction Authority (“**BCA**”) is inviting feedback on key provisions in proposed subsidiary legislations in relation to Periodic Structural Inspection (“**PSI**”), Periodic Façade Inspection (“**PFI**”), exterior features, and fixed installations (i.e. lifts, escalators and mechanised car parking systems (“**MCPS**”)).

Background

2. As part of BCA’s regular reviews of the Building Control Act and regulations, BCA has earlier conducted several rounds of industry and stakeholder consultation to seek feedback on key areas under the building control regime.
3. Under the Building Control Act as amended by the Building Control (Amendment) Act 2020 (the “**Amended Act**”), the Commissioner of Building Control may issue a notice to the owner of a building that is (a) more than 20 years of age, and (b) the highest point of which is more than 13 meters when measured from the ground, requiring a façade inspection of the building to be carried out periodically every 7 years.
4. Additionally, the Amended Act includes provisions enhancing the regulation of lifts, escalators and MCPS (collectively “fixed installations”).

Proposed Regulations relating to PSI, PFI, Exterior Features and Fixed Installations

PSI, PFI and Exterior Features

5. The key provisions in relation to PSI, PFI and exterior features currently proposed are to:
 - (a) update the regulations relating to PSI;
 - (b) prescribe requirements for PFI under the Amended Act; and
 - (c) prescribe items which are “exterior feature” under Section 2(1) of the Amended Act.
6. Please see **Annexes A and B** for details.

Fixed Installations

7. The key provisions on fixed installations currently proposed include:
 - (a) requirements to obtain approval from the Commissioner of Building Control in respect of plans of fixed installation works (including product testing certifications for specific safety components and equipment for lifts) prior to the performance of fixed installation works;
 - (b) duties of stakeholders relating to examination, inspection and testing and maintenance of fixed installations; and
 - (c) other new requirements, such as:
 - i) registration requirements for fixed installation contractors;
 - ii) approaches in regulating existing and new MCPS; and
 - iii) lifts and MCPS that will not be regulated under the Amended Act.
8. Please see **Annex C** for details.

Reportable Matters in relation to Fixed Installations and Exterior Features

9. The key provisions in the proposed regulations will require reporting, to the Commissioner of Building Control, of safety incidents and safety risks (e.g. defects in design, production or installations that could impact on the safety of fixed installations) in respect of fixed installations and exterior features.
10. Please see **Annex D** for details.

Consultation Details

11. This will be a consultation to gather feedback on the proposed regulations. Feedback from the earlier rounds of consultation have been taken into account in drafting the proposed regulations. Please note that the proposed regulations are released only for the purpose of public consultation, and may be subject to further changes. Accordingly, the proposed regulations should not be used or relied on by industry stakeholders,

adjudicators or authorised nominating bodies. BCA will issue a circular on the finalised regulations in due course.

12. The public consultation will start on 10 August 2021 and close at 12pm on 31 August 2021.
13. Members of the public can send their views through post or email, to reach the following address by the deadline:

By post:

Façade Engineering & Technology Department
Building Resilience Group
Building and Construction Authority
52 Jurong Gateway Road
#10-01 Singapore 608550

By email:

Email: bca_bldg_inspection@bca.gov.sg

Yours faithfully



ER. LEE CHEE WEYE
DIRECTOR
FAÇADE ENGINEERING AND TECHNOLOGY DEPARTMENT
BUILDING RESILIENCE GROUP
for COMMISSIONER OF BUILDING CONTROL

ANNEX A: PROPOSED BUILDING CONTROL (PERIODIC INSPECTION OF BUILDINGS AND BUILDING FACADES) REGULATIONS 2021 FOR THE PURPOSE OF PART V OF THE BUILDING CONTROL (AMENDMENT) ACT 2020

Periodic Structural Inspection (“PSI”)

To provide updates in respect of periodic structural inspections under Section 24 and Section 25 of the Building Control (Amendment) Act 2020. The key proposed amendments are as follows:

No	Item	Provisions under the proposed Building Control (Periodic Inspection of Buildings and Building Facades) Regulations 2021	Rationale/Comments
1	Duties of owner	<p><u>Notice of appointment of structural engineer</u> An owner of a building specified in a structural inspection notice, after appointing a structural engineer or a replacement structural engineer, must notify the Commissioner of Building Control by the 7th day after the end of 2 months after the date of the structural inspection notice. Such notice must:</p> <ul style="list-style-type: none"> (a) state the name of the structural engineer appointed; and (b) contain a statement, signed by that structural engineer, confirming the appointment. 	This provision prescribes the requirement that a building owner has to comply with after a structural engineer is appointed, and the timeline for compliance.
2	Additional requirement on structural inspection	<p>The appointed structural engineer must personally carry out a visual inspection of the building, which must include a visual survey of:</p> <ul style="list-style-type: none"> (a) the condition of the building (b) the loading on the structure of the building (c) whether there is evidence of any structural works that are or were carried out without any prior approval of the plans of those works where prior approval is required by Part II of the Act. <p>[New]</p>	In carrying out a visual survey, a structural engineer must identify structures that are not reflected in approved plans.

Periodic Façade Inspection (“PFI”)

To prescribe requirements in respect of periodic façade inspections under Section 24 and Section 25 of the Building Control (Amendment) Act 2020. The key provisions are as follows:

No	Item	Provisions under the proposed Building Control (Periodic Inspection of Buildings and Building Facades) Regulations 2021	Rationale/Comments
1	Meaning of “façade” of building	<p>Meaning of “façade” of building</p> <p>The “façade” of a building means the exterior of the building, any exterior feature attached to the building, and the following parts of a building located on or near the exterior of a building:</p> <ol style="list-style-type: none"> any signage or advertising structure and its supporting structure installed for 36 months or shorter, a structural supporting system and the structural supporting system’s components that may be used to attach to, or that supports or may support for use with, the building, for 36 months or shorter, any externally mounted equipment. 	To specify the parts of a building that are part of the “façade” of a building that is subject to PFI
2	Duties of owner	<p>Duties of owner served with notice to inspect façade</p> <p>When a building owner is served with a façade inspection notice, the owner must appoint a competent person to carry out the required inspection works within 2 months after the date of the façade inspection Notice.</p> <p>The owner must replace the competent person within 2 months after the date the owner becomes aware that the competent person is unable, or does not intend, to carry out or continue carrying out the façade inspection.</p> <p>After appointing a competent person or a replacement competent person, the owner must notify the Commissioner of Building Control of the appointment by the 7th day after the end of 2 months after the date of the façade inspection notice.</p>	This provision prescribes the duties of a building owner after a façade inspection notice is served on the building owner, and the timeline for compliance.
3	Requirement to be competent person	A competent person must attend and successfully complete the course “Certificate in Façade Inspection” conducted or developed by the Building and Construction Authority, solely or jointly with any other person.	This provision prescribes the requirement to be a competent person.

No	Item	Provisions under the proposed Building Control (Periodic Inspection of Buildings and Building Facades) Regulations 2021	Rationale/Comments
4	How façade inspection is to be carried out	<p><u>Performing a façade inspection</u> A complete façade inspection involves the procedures below:</p> <p>(a) <u>Façade inspection:</u></p> <ul style="list-style-type: none"> (i) a visual inspection of the entire façade of the building using photographic cameras (ii) a close-range inspection on suitable parts of each elevation of the building (being at least 10% of the surface area of each elevation) to assess the condition of the façade along vertical drops or trails, using a probing tool, or a borescope or a scanning equipment which does not require special training to operate or use. (iii) The use of other equivalent methods, technology or equipment for visual and close-range inspections will require the approval of the Commissioner of Building Control. <p>(b) <u>Full façade investigation:</u></p> <ul style="list-style-type: none"> (i) After carrying out a visual inspection and close-range inspection of the building's facade, the competent person must, and only with prior approval of the Commissioner of Building Control, carry out a full façade investigation if he/she is of the opinion that a full façade investigation is necessary to (a) ascertain the cause of the excessive defects, and (b) recommend appropriate rectification measures. (ii) The application for approval of the Commissioner of Building Control to carry out a full façade investigation must be accompanied by: <ul style="list-style-type: none"> i. an interim report ii. information on the building's façade; and iii. a proposal on the façade areas and tests involved in the full façade investigation. 	<p>This provision prescribes how the appointed competent person must perform a façade inspection, including the tools that may be used by the competent person.</p> <p>Visual inspection and close-range inspection should first be carried out. The competent person may then seek approval from the Commissioner of Building Control to perform a full façade investigation if such full façade investigation is assessed by the competent person to be necessary.</p>
5	Report requirements	<p><u>Report requirements</u> After carrying out a visual inspection and a close-range inspection of the building's façade, the competent person must prepare a report if he/she:</p> <ul style="list-style-type: none"> (a) is of the opinion that the façade of the building is safe; (b) is of the opinion that the defects do not necessitate a full façade investigation; or (c) has no approval granted by the Commissioner of Building Control for a full façade investigation. 	<p>This provision prescribes when the competent person is required to provide a report on the results of the visual inspection and close-range inspection of the façade, and the requirements that</p>

No	Item	Provisions under the proposed Building Control (Periodic Inspection of Buildings and Building Facades) Regulations 2021	Rationale/Comments						
		<p>A façade inspection report must contain:</p> <ul style="list-style-type: none"> (a) a detailed description of the visual inspection close-range inspection of the façade, and any full façade investigation conducted by the competent person; and (b) analyses of observations about the condition of the façade, and of every test conducted during the visual inspection, close-range inspection and the full façade investigation; and (c) recommended rectification works by the appointed competent person 	<p>the competent person must comply with when preparing the report.</p>						
6	<p>Vicarious visual inspection or close-range inspection</p>	<p>The competent person may carry out a visual inspection and close-range inspection in person; through a façade inspector under direct supervision, or by engaging a person providing the approved equivalent method, technology or equipment (“service providers”)</p> <p>If the competent person engages service providers to perform façade inspection, he/she has to ensure that the service is performed under his/her or his/her façade inspector’s direct supervision. The competent person also has to personally review all outputs from the service provided.</p>	<p>This provision prescribes how a competent person may carry out façade inspections. Regardless of the method used by the competent person, the competent person will be held fully responsible for the visual and close-range inspections and any full façade investigation performed.</p>						
7	<p>Requirements to be Façade Inspector</p>	<p><u>Qualifications, working experience and accreditation of a façade inspector</u></p> <p>A façade inspector must possess the following qualifications and working experience:</p> <ul style="list-style-type: none"> (a) a certificate evidencing attending and successfully completing the “Certificate in Façade Inspection” course; and (b) qualification and minimum working experience from any group in the table below: <table border="1" data-bbox="568 1171 1509 1409"> <thead> <tr> <th data-bbox="568 1171 663 1206">Group</th> <th data-bbox="663 1171 1055 1206">Qualification</th> <th data-bbox="1055 1171 1509 1206">Required minimum working experience</th> </tr> </thead> <tbody> <tr> <td data-bbox="568 1206 663 1409">1</td> <td data-bbox="663 1206 1055 1409"> - University degree/postgraduate master’s degree/doctoral degree in C&S* discipline, recognised by the Professional Engineers Board for registration as a professional engineer </td> <td data-bbox="1055 1206 1509 1409"> 3 months continuous in the civil and structural field </td> </tr> </tbody> </table>	Group	Qualification	Required minimum working experience	1	- University degree/postgraduate master’s degree/doctoral degree in C&S* discipline, recognised by the Professional Engineers Board for registration as a professional engineer	3 months continuous in the civil and structural field	<p>This provision prescribes the qualifications and working experience required for an individual to be a façade inspector, and the organisation that a façade inspector must be accredited with.</p>
Group	Qualification	Required minimum working experience							
1	- University degree/postgraduate master’s degree/doctoral degree in C&S* discipline, recognised by the Professional Engineers Board for registration as a professional engineer	3 months continuous in the civil and structural field							

No	Item	Provisions under the proposed Building Control (Periodic Inspection of Buildings and Building Facades) Regulations 2021				Rationale/Comments
				<p>- a Chartered Engineer registered by the Engineering Council United Kingdom in the C&S* discipline</p> <p>- Any local C&S* diploma/degree</p>		
			2	A university degree or any other professional qualification that entitles one to be registered as an architect under the Architects Act	3 months continuous in the architectural field	
			3	<p>- A diploma in any construction-related field from any local polytechnic or the BCA Academy; or</p> <p>A National Certificate on Construction Supervision from the BCA Academy</p>	<p>At least 1 year of relevant practical experience in full-time supervision of structural works in construction sites in Singapore; or</p> <p>1 year of façade-related working experience</p>	
			4	A diploma or higher certificate from any foreign polytechnic in C&S*	<p>At least 2 years of relevant practical experience in full-time supervision of structural works in construction sites; or</p> <p>2 years of façade-related working experience</p>	
			5	A degree from any foreign universities in C&S* that does not entitle one for registration as a	At least 2 years of relevant practical experience in full-time supervision of	

No	Item	Provisions under the proposed Building Control (Periodic Inspection of Buildings and Building Facades) Regulations 2021				Rationale/Comments
			professional engineer under the Professional Engineers Act	structural works in construction sites in Singapore; or At least 2 years of façade-related working experience		
6	A Chartered Building Surveyor registered with the Royal Institution of Chartered Surveyors	At least 1 year of façade-related working experience occurring within 2 years immediately before accreditation				
7	A university degree in architecture that does not entitle one to be registered as an architect under the Architects Act	At least 2 years of façade-related working experience occurring within 3 years immediately before accreditation.				
8	GCE 'N' (Normal) Levels, GCE 'O' (Ordinary) Levels, GCE 'A' (Advanced) Levels, National ITE (Institute of Technical Education) Certificate, Diploma or a substantially equivalent qualification	At least 10 years of façade-related working experience occurring within 12 years immediately before accreditation				
		<p>* Civil Engineering or Structural Engineering</p> <p>A façade inspector must be accredited with the Joint Accreditation Committee established by the Institution of Engineers, Singapore, the Association of Consulting Engineers Singapore and the Building and Construction Authority for the accreditation of façade inspectors.</p>				

**ANNEX B: LIST OF PROPOSED BUILDING CONTROL (MEANING OF EXTERIOR FEATURES) REGULATIONS
2021 FOR THE PURPOSE OF
PART I OF THE BUILDING CONTROL (AMENDMENT) ACT 2020**

MEANING OF EXTERIOR FEATURES

To prescribe an exterior feature of the building under Section 2(1) of the Building Control (Amendment) Act 2020. The key proposed provisions are as follows:

No	Item	Provisions under the proposed Building Control (Meaning of Exterior Features) Regulations 2021	Rationale/Comments
1	Definition of “exterior feature”	This regulation prescribes items listed below as exterior features: <ul style="list-style-type: none"> (a) any window, with or without movable parts, such as a roof skylight, glass panel, glass brick, louvre, glazed sash, glazed door, translucent sheeting and any other building material which transmits natural light directly from outside a building into an interior of the building; (b) any grille or shutter, with or without movable parts; (c) any tile, cladding, curtain wall, siding, plaster, bracket or cornice; (d) any gutter, rainwater down-pipe or part of the roof; (e) any membrane shade structure, or any awning or device to provide shade; (f) any green wall which is partially or completely covered by vegetation, including any brackets that support it, the growing medium for the vegetation (other than soil) and any integrated water delivery system; (g) any screen or screen wall; (h) any louvres or fins; (i) any masonry veneer; (j) any window hood; (k) any cantilevered roof; (l) any part of a concrete wall, concrete slab, concrete beam or concrete column; (m) any external balustrade; (n) any directional sign, signboard, skysign, animated billboard or other advertising structure installed or intended to be installed for more than 36 months, and includes 	This provision prescribes the permanent features of a building that are “exterior features” under Section 2(e) of Building Control (Amendment) Act 2020

No	Item	Provisions under the proposed Building Control (Meaning of Exterior Features) Regulations 2021	Rationale/Comments
		<p>any frame, panel, hoarding or other supporting structure of or for the directional sign, signboard, skysign, animated billboard or other advertising structure</p> <p>(o) any clothes drying rack;</p> <p>(p) any suspended ceiling system —</p> <p>(i) fitted under or hung from a porch, porte-cochere, portico or similar shelter —</p> <p>(A) that is located at the entrance or side of building or projects from or near an external edge of a building; and</p> <p>(B) that spans across a space below which is accessible to members of the public; and</p> <p>(ii) the underside of which is exposed to rain;</p> <p>(q) any of the following that is used or may be used to attach to, or that supports or may support for use with, the building, for more than 36 months, any externally mounted equipment:</p> <p>(i) a metal or concrete bracket, or similar structural supporting system attached to the building and to the externally mounted equipment (if any);</p> <p>(ii) a cable and other associated components of a structural supporting system mentioned in sub-paragraph (i), where the cable or components are attached to the building and to the externally mounted equipment (if any).</p> <p>In paragraph (q) above, externally mounted equipment includes the following:</p> <p>(a) an air-conditioning unit and its condensing equipment;</p> <p>(b) a ventilation system;</p> <p>(c) a photovoltaic array or panel;</p> <p>(d) a solar water heater;</p> <p>(e) an apparatus (including a dish antenna) or a combination of apparatus for the transmission or direct reception of broadcast matter or wireless communication.</p>	

ANNEX C: LIST OF PROPOSED PROVISIONS FOR FIXED INSTALLATIONS

A “fixed installation” means an escalator, a lift and a mechanised car parking system, including any supporting structure, machinery, equipment, apparatus and enclosure used or designed for use for operating a fixed installation.

During the 2018 public consultation on the Building Control Act amendments, BCA had sought feedback on proposed provisions such as submission of fixed installation plans, duties of key stakeholders, porting over of requirements from the Building Maintenance and Strata Management (Lift, Escalator and Building Maintenance) Regulations 2016 to the regime under the Building Control Act, registration of fixed installation contractors, retrofitting of fixed installations, and regulating user interface in mechanised car parking systems (“MCPS”).

In this public consultation, BCA would like to seek feedback on the further refinements and changes in policies after the 2018 public consultation, as detailed below.

No	Item	Provisions under the proposed subsidiary legislations under the amended Building Control Act (“Amended Act”) for Fixed Installations	Rationale/Comments
1	Approval of plans of fixed installation works (including product testing certifications)	<p>a) No one is allowed to carry out any fixed installation works (i.e. lift, escalator or MCPS installation or major alteration or replacement works) <u>before</u> the Commissioner of Building Control has approved the plans of the fixed installation works. The developer or fixed installation owner must apply for such approval by submitting plans that have been prepared, reviewed and certified by a qualified person appointed by the developer or fixed installation owner.</p> <p>b) For lifts, as part of plan approval, type testing certificates are required to be submitted. These type testing certificates will have to be issued by recognised certification bodies, after they have carried out type testing for the following lift safety components and the entire lift model. The certification bodies will be prescribed in the Regulations.</p> <ul style="list-style-type: none"> i. Car door locking device ii. Landing door locking device iii. Safety gear iv. Overspeed governor v. Car and counterweight buffers vi. Safety circuits containing electronic components and programmable electronic systems in safety related applications for lifts (PESSRAL) vii. Ascending car overspeed protection (ACOP) viii. Unintended car movement protection (UCMP) 	<p>a) The developer or fixed installation owner will be required to obtain approval from the Commissioner of Building Control for fixed installation works before performing such fixed installation works. This will allow the designs of fixed installation works to be evaluated at an earlier stage to ensure compliance with the Amended Act, regulations and relevant requirements.</p> <p>b) A type testing regime is proposed, similar to that</p>

No	Item	Provisions under the proposed subsidiary legislations under the amended Building Control Act (“Amended Act”) for Fixed Installations	Rationale/Comments
		<p>ix. Rupture valve/one way restrictor (for hydraulic lifts only)</p>	<p>adopted in the European Union based on EN 81-20 standards. The type testing regime will ensure that specified safety components and the equipment are adequately tested.</p>
2	<p>Duties of qualified person and fixed installation inspector during testing and commissioning of fixed installation works, and application for Permit to Operate for fixed installation works</p>	<p>a) No duty will be imposed on a qualified person and fixed installation inspector (assisting the qualified person) to supervise the fixed installation works i.e. works carried out for installation of a fixed installation .</p> <p>b) At the testing and commissioning stage, the qualified person or fixed installation inspector is required to examine and inspect the fixed installation works and supervise the installation contractor’s testing of the fixed installation. The qualified person will then submit his certification to the Commissioner of Building Control that the fixed installation works has been examined, inspected and tested in accordance with the necessary requirements as part of the application for permit to operate the fixed installation.</p> <p>c) In addition, on completion of the testing and commissioning of the fixed installation works, the qualified person is to submit a test report (documenting his checks performed in sub-paragraph b) above) of the fixed installation works as part of the application for a permit to operate the fixed installation. The details of the test report will be provided separately in BCA’s submission guide for qualified persons.</p>	<p>a) Unlike building works, the qualified person or fixed installation inspector would not be required to supervise the performance of the fixed installation works.</p> <p>b) As the qualified person will be certifying the fixed installation works, he will be responsible for the examination, inspection and testing of the fixed installation works. The qualified person is to examine and inspect the fixed installation works so as to ensure that it is installed in accordance with the Building Control Act, regulations, approved plans</p>

No	Item	Provisions under the proposed subsidiary legislations under the amended Building Control Act (“Amended Act”) for Fixed Installations	Rationale/Comments
			<p>and any terms and conditions imposed by the Commissioner of Building Control.</p> <p>c) The test report is to supplement the qualified person’s certification, both of which will need to be submitted as part of the application for a permit to operate the fixed installation.</p>
3	<p>Duties of qualified person and fixed installation inspector during annual renewal of permit to operate for fixed installations</p>	<p>a) During annual renewal of permit to operate, the qualified person appointed by the fixed installation owner or a fixed installation inspector appointed by such qualified person is required to examine and inspect the fixed installation and supervise the fixed installation contractor’s testing of the fixed installation. The qualified person will then submit his certification that the fixed installation had been examined, inspected and tested in accordance with the necessary requirements as part of the application for renewal of the permit to operate the fixed installation.</p> <p>b) During annual examination, inspection and testing, the qualified person or fixed installation inspector is required to check for compliance with maintenance outcome requirements in respect of the fixed installations. The qualified person is required to inform the fixed installation owner and the fixed installation contractor of any non-compliances in maintenance outcome requirements found by him and/or the fixed installation inspector. The fixed installation contractor is required to rectify the non-compliances before the Commissioner of Building Control grants any renewal of the permit to operate the fixed installation.</p> <p>c) During annual examination, inspection and testing, the qualified person is required to notify BCA if he is aware of alteration or replacement works done on the fixed installation which are not reflected in approved plans of the fixed installation works or which caused the fixed installation to be non-compliant with the standards to which the fixed</p>	<p>a) The qualified person will be responsible for the examination, inspection and testing of the fixed installation as part of the application for renewal of permit to operate the fixed installation.</p> <p>b) The qualified person or fixed installation inspector is to conduct an independent check on fixed installations during annual examination, inspection</p>

No	Item	Provisions under the proposed subsidiary legislations under the amended Building Control Act (“Amended Act”) for Fixed Installations	Rationale/Comments
		<p>installation was designed. The qualified person or the fixed installation inspector is to check for such works during annual examination, inspection and testing.</p>	<p>and testing of the fixed installations, including whether there is compliance with maintenance outcome requirements. This is to ensure the safety of the fixed installation during operation.</p> <p>c) The qualified person or fixed installation inspector is required to examine and inspect and ensure that no unauthorised alteration/replacement in the fixed installation has been carried out.</p>
4	<p>Standardisation of requirements for different types of fixed installations</p>	<p>a) The following procedures are to be conducted in accordance with both the manufacturer’s recommendations and the standard that the fixed installation was designed to.</p> <ul style="list-style-type: none"> i. Examination, inspection and testing of installation works and major alteration or replacement works ii. Annual examination, inspection and testing iii. Periodic maintenance 	<p>With this arrangement, the requirements in both manufacturer recommendations and design standards will have to be complied with. This will help to raise the safety standards of fixed installations.</p>

No	Item	Provisions under the proposed subsidiary legislations under the amended Building Control Act (“Amended Act”) for Fixed Installations	Rationale/Comments																								
5	Registration of fixed installation contractors	<p>a) Fixed installation contractors will be required to be registered before they are permitted to perform fixed installation works and maintenance of the fixed installations. To be registered, a person is required to meet the requirements in the following table. In addition, a paid up capital of minimum \$50,000 is required. The registration of fixed installation contractors are tiered as set out below.</p> <table border="1" data-bbox="459 576 1680 1267"> <thead> <tr> <th data-bbox="459 576 593 767" rowspan="2">Criteria</th> <th colspan="2" data-bbox="593 576 1003 628">Lifts</th> <th colspan="2" data-bbox="1003 576 1397 628">Escalators</th> <th colspan="2" data-bbox="1397 576 1680 628">MCPS</th> </tr> <tr> <th data-bbox="593 628 743 767">Lift Installation Contractors</th> <th data-bbox="743 628 1003 767">Lift Service Contractors</th> <th data-bbox="1003 628 1158 767">Escalator Installation Contractors</th> <th data-bbox="1158 628 1397 767">Escalator Service Contractors</th> <th data-bbox="1397 628 1538 767">MCPS Installation Contractors</th> <th data-bbox="1538 628 1680 767">MCPS Service Contractors</th> </tr> </thead> <tbody> <tr> <td data-bbox="459 767 593 1267" rowspan="3">Manpower</td> <td data-bbox="593 767 743 1267" rowspan="3">Three P2 or Three T2</td> <td data-bbox="743 767 1003 935">Contractors maintaining > 1000 lifts: Three P2 or Three T2</td> <td data-bbox="1003 767 1158 1267" rowspan="3">Three P2 or Three T2</td> <td data-bbox="1158 767 1397 935">Contractors maintaining > 1000 escalators: Three P2 or Three T2</td> <td data-bbox="1397 767 1538 1267" rowspan="3">One P0 or One T0</td> <td data-bbox="1538 767 1680 1267" rowspan="3">One P0 or One T0</td> </tr> <tr> <td data-bbox="743 935 1003 1102">Contractors maintaining 500-1000 lifts: Two P1 or Two T1</td> <td data-bbox="1158 935 1397 1102">Contractors maintaining 500-1000 escalators: Two P1 or Two T1</td> </tr> <tr> <td data-bbox="743 1102 1003 1267">Contractors maintaining < 500 lifts: One P0 or One T0</td> <td data-bbox="1158 1102 1397 1267">Contractors maintaining < 500 escalators: One P0 or One T0</td> </tr> </tbody> </table>	Criteria	Lifts		Escalators		MCPS		Lift Installation Contractors	Lift Service Contractors	Escalator Installation Contractors	Escalator Service Contractors	MCPS Installation Contractors	MCPS Service Contractors	Manpower	Three P2 or Three T2	Contractors maintaining > 1000 lifts: Three P2 or Three T2	Three P2 or Three T2	Contractors maintaining > 1000 escalators: Three P2 or Three T2	One P0 or One T0	One P0 or One T0	Contractors maintaining 500-1000 lifts: Two P1 or Two T1	Contractors maintaining 500-1000 escalators: Two P1 or Two T1	Contractors maintaining < 500 lifts: One P0 or One T0	Contractors maintaining < 500 escalators: One P0 or One T0	<p>The registration requirements will help to ensure that the fixed installation contractors are competent and well-resourced to install, test and maintain the respective fixed installations.</p>
Criteria	Lifts			Escalators		MCPS																					
	Lift Installation Contractors	Lift Service Contractors	Escalator Installation Contractors	Escalator Service Contractors	MCPS Installation Contractors	MCPS Service Contractors																					
Manpower	Three P2 or Three T2	Contractors maintaining > 1000 lifts: Three P2 or Three T2	Three P2 or Three T2	Contractors maintaining > 1000 escalators: Three P2 or Three T2	One P0 or One T0	One P0 or One T0																					
		Contractors maintaining 500-1000 lifts: Two P1 or Two T1		Contractors maintaining 500-1000 escalators: Two P1 or Two T1																							
		Contractors maintaining < 500 lifts: One P0 or One T0		Contractors maintaining < 500 escalators: One P0 or One T0																							

No	Item	Provisions under the proposed subsidiary legislations under the amended Building Control Act (“Amended Act”) for Fixed Installations	Rationale/Comments
		<p><i>P2 means a Professional qualification with a degree in Electrical/Electronics or Mechanical Engineering or equivalent or Building Services or equivalent from a recognised institution, with at least 5 years of experience.</i></p> <p><i>P1 means a Professional qualification with a degree in Electrical/Electronics or Mechanical Engineering or equivalent or Building Services or equivalent from a recognised institution, with at least 3 years of experience</i></p> <p><i>P0 a Professional qualification with a degree in Electrical/Electronics or Mechanical Engineering or equivalent or Building Services or equivalent from a recognised institution.</i></p> <p><i>T2 means a Technical qualification with a diploma in Electrical/Electronics or Mechanical Engineering or equivalent or Building Services or equivalent from a recognised institution, with at least 8 years of experience.</i></p> <p><i>T1 means a Technical qualification with a diploma in Electrical/Electronics or Mechanical Engineering or equivalent or Building Services or equivalent from a recognised institution, with at least 5 years of experience.</i></p> <p><i>T0 means a Technical qualification with a diploma in Electrical/Electronics or Mechanical Engineering or equivalent or Building Services or equivalent from a recognised institution, with at least 3 years of experience.</i></p> <p>A recognised institution means a university, institution or polytechnic recognised and accepted by:</p> <ul style="list-style-type: none"> <i>i) Professional Engineers Board (PEB)</i> <i>ii) Board of Architects (BOA)</i> <p>For purposes of registering a person as a Professional Engineer under the Professional Engineers Act or registering a person as a Registered Architect under the Architects Act.</p>	
6	Regulating new and existing MCPS	a) The legislative requirements for MCPSEs will take effect six months after the Regulations are gazetted. New MCPS in building projects and retrofitting works performed on existing MCPSEs for which the first plan submission to the Commissioner of Building Control is made on or after the six-month gazetting period will need to comply with the prescribed standards and the new legislative requirements.	MCPS owner who installs new MCPSEs or retrofits existing MCPSEs after the MCPSEs legislative requirements come into

No	Item	Provisions under the proposed subsidiary legislations under the amended Building Control Act (“Amended Act”) for Fixed Installations	Rationale/Comments
			force will be required to comply with the legislative requirements for MCPSEs.
7	Lifts and MCPSEs not regulated under the Building Control Regulations	<p><u>Lifts and MCPSEs that will not be regulated under the proposed subsidiary legislations</u> The following lifts and MCPSEs will not be regulated under the proposed subsidiary legislations under the Building Control Act, as they are not carrying any persons, or not used by the general public, or assessed to pose low risks.</p> <p><u>Lifts</u></p> <ol style="list-style-type: none"> 1. A lift designed to be used solely for the carriage, stacking, loading or unloading of goods or materials. 2. A hoist designed to be used solely for lifting or feeding material directly into a machine. 3. A stage or orchestra lift. 4. A lift or hoist provided, in connection with any building which is being constructed, for the use of persons employed in the construction or for carrying materials used in the construction. 5. A lift or hoist affixed, attached or used in respect of any erection or equipment that is not a building (e.g. cranes and metal tanks), intended for use solely by persons performing work at the erection or using the equipment. 6. A lifting platform not used for the transport of passengers, such as mast climbing work platform, building maintenance unit, suspended scaffold, mobile elevating work platform, and storage and retrieval system. [New] 7. A lift used as part of an amusement ride, as defined in the Amusement Rides Safety Act (Cap. 6A). 8. A stairlift or a vertical platform lift that — <ol style="list-style-type: none"> (i) has a maximum vertical displacement of less than 1,000 mm during operation; (ii) exerts a maximum downward force of less than 150 N when the lift is in downward operation; and (iii) serves a single residential unit. 9. A lift installed in any ship or aircraft. [New] 10. A lifting device that does not move along any guide or guides. [New] <p><u>MCPSEs</u></p> <ol style="list-style-type: none"> 1. Mechanised car parking systems used for the purpose of storage of vehicles and not for parking of vehicles. 2. Mechanised car parking systems installed in vehicle warehouses 3. Mechanised car parking systems installed in vehicle showrooms 	This is to provide clarity on the lifts and MCPSEs that are not regulated under the proposed subsidiary legislations under the Building Control Act.

No	Item	Provisions under the proposed subsidiary legislations under the amended Building Control Act (“Amended Act”) for Fixed Installations	Rationale/Comments
		<p>4. Mechanised car parking systems installed in vehicle workshops used for maintenance of vehicles.</p> <p><i>[New] means the equipment is currently not excluded from the BMSM (Lift, Escalator and Building Maintenance) Regulations 2016.</i></p>	

ANNEX D: PROPOSED BUILDING CONTROL (REPORTABLE MATTERS) REGULATIONS 2021 FOR THE PURPOSE OF PART IV OF THE BUILDING CONTROL (AMENDMENT) ACT 2020

To prescribe requirements on (a) reportable safety incidents in relation to exterior features and fixed installations, and (b) reportable safety risks in relation to fixed installations under Section 22(G) and Section 25B of the Building Control (Amendment) Act 2020. The key proposed provisions are as follows.

No	Item	Provisions under the proposed Building Control (Reportable Matters) Regulations 2021	Rationale/Comments
1	Reportable matters in respect of fixed installations and exterior features	<p><u>Reporting safety risks (defects) in building products in fixed installations</u></p> <p>Under the amended Building Control Act (“Amended Act”), stakeholders such as the fixed installation contractor, fixed installation owner and qualified person have duties to notify the Commissioner of Building Control of safety risks (defects) in building products in fixed installations, within 72 hours after the person first becomes aware of reasonably suspects that a reportable safety risk has arisen or may have arisen involving the use of a building product.</p> <p>A ‘building product’ means any product, material, assembly of components, software or other thing that is, or could be, used in a building and is prescribed by building regulations to be a building product. The following are the building products of the respective fixed installations.</p> <p><u>Lifts</u></p> <ol style="list-style-type: none"> 1. Speed-monitoring and speed-limiting device 2. Device to prevent the car from falling or uncontrolled movements 3. Device for locking landing doors 4. Interlocking device to prevent, during normal operation of a lift — <ol style="list-style-type: none"> (a) the starting movement of the car, whether or not deliberately activated, unless all landing doors are shut and locked; and (b) the opening of a landing door when the car is still moving and outside a designated landing zone 5. Overspeed limitation device (such as an overspeed governor and links with safety gear) 6. Energy-dissipating buffer 7. Energy-accumulating buffer that is — <ol style="list-style-type: none"> (a) non-linear, and 	This is to prescribe the reportable safety risks in respect of building products in fixed installations.

No	Item	Provisions under the proposed Building Control (Reportable Matters) Regulations 2021	Rationale/Comments
		<p>(b) with damping of the return movement.</p> <p>8. Programmable Electronic Safety Systems in Safety Related Applications for Lifts (PESSRAL)</p> <p>9. Safety device fitted to jacks of hydraulic power circuits where these are used as a device to prevent falls</p> <p>10. Electric safety device in the form of safety circuits containing electronic components</p> <p>11. Lift control system (including the application programming or converter of integrated driving machine)</p> <p>12. Lift landing and car doors</p> <p><u>Escalators</u></p> <p>1. Escalator control system (including the application programming or converter of integrated driving machine)</p> <p>2. Braking system</p> <p>3. Auxiliary brake</p> <p>4. Programmable Electronic Safety Systems in Safety Related Applications for Escalators (PESSRAE)</p> <p>5. Electric safety device in the form of safety circuits containing electronic components</p> <p>6. Main drive shaft and mechanism</p> <p>7. Step, step chain, and step axle</p> <p>8. Handrail and handrail drive system</p> <p><u>MCPS</u></p> <p>1. Main electronic control panel that involve the control logic of the systems</p> <p>2. Load carrier</p> <p>3. Suspension element for the load carrier</p> <p>4. Anti-fall device</p> <p>5. Sensors that are used for detecting the presence of a driver in the transfer area including, sensor, proximity sensor, limit switches, entrance single beam or light curtain, etc</p> <p>6. Safety circuits containing electronic components</p> <p><u>Reporting safety incidents in fixed installations and exterior features</u></p> <p>Under Section 25B(2) of the Amended Act, the following persons are required to notify the Commissioner of Building Control of a reportable safety incident:</p>	<p>This is to prescribe the reportable safety incidents arising from fixed installations and exterior features.</p>

No	Item	Provisions under the proposed Building Control (Reportable Matters) Regulations 2021	Rationale/Comments
		<p><u>In relation to fixed installation:</u></p> <ul style="list-style-type: none"> a) A fixed installation contractor who last carried out maintenance works on the fixed installation before the happening of the reportable safety incident, and who becomes aware of the reportable safety incident; or b) A fixed installation owner of the fixed installation who is aware of the reportable safety incident. <p><u>In relation to exterior feature,</u></p> <ul style="list-style-type: none"> a) A person responsible for the exterior feature who is aware of the reportable safety incident; b) A person who is authorised to carry out any retrofitting of that exterior feature for the purposes of Part III of the Amended Act and who becomes aware of the reportable safety incident while performing the retrofitting; c) a builder or supervisor (including a consultant) of building works related to the building who becomes aware of the reportable safety incident while carrying out or supervising the building works; or d) a person appointed to carry out an inspection of the building for the purpose of Part V of the Amended Act who becomes aware of the reportable safety incident while carrying out the inspection. <p>Reportable safety incidents must be notified to the Commissioner of Building Control within 6 hours after the person first becomes aware of reasonably suspects that a reportable safety incident was or may have been caused by the use of, or involves or may have involved, a fixed installation or an exterior feature. The following are the reportable safety incidents for the respective fixed installations and exterior features:</p> <p><u>Lifts</u></p> <ol style="list-style-type: none"> 1. An individual dies or is injured as a result of an incident associated with the operation of a lift. 2. The main drive system of a lift fails due to a reason other than the failure of the main power system of the lift. 3. The suspension rope of a lift breaks. 4. A lift brake fails. 5. An overload device fails, resulting in lift car to operate even when it is carrying a load higher than the maximum load capacity, and further overloading may cause the lift car to plunge. 6. An energy-dissipating or energy-accumulating buffer fails. 	

No	Item	Provisions under the proposed Building Control (Reportable Matters) Regulations 2021	Rationale/Comments
		<p>7. An interlocking device for any doors of the hoistway of a lift or a lift car (including any landing door, car door, emergency access door) fails.</p> <p>8. Fire outbreak, or smoke emitted, from any part of the lift system.</p> <p>9. Lift car over-traveling to or beyond highest or lowest floor.</p> <p>10. Lift car building up speed continuously before an abrupt stop upon impact.</p> <p>11. Lift car traveling above its normal speed or at risk of doing so.</p> <p>12. Abnormal noise from an object falling on top of a car, lift pit or striking against lift car.</p> <p>13. Abnormal entanglement of wire ropes.</p> <p>14. Lift car ascending or falling suddenly in an uncontrolled manner.</p> <p>15. Major damage or dislodgement of lift car cage, ceiling, false ceiling, car door or landing door.</p> <p><u>Escalators</u></p> <p>1. An individual dies or is injured as a result of an incident associated with the operation of an escalator.</p> <p>2. The main drive system, handrail drive system or step drive system of an escalator fails, other than due to a failure of the main power system of the escalator.</p> <p>3. A brake, overload device, or auxiliary brake of an escalator fails.</p> <p>4. Fire outbreak, or smoke emitted, from any part of the escalator system.</p> <p>5. Upriding escalator suddenly reversing direction.</p> <p>6. Escalator travelling at excessive speed.</p> <p>7. Tilting, flipping, or collapsed escalator steps.</p> <p>8. Stoppage or excessive slippage of handrails.</p> <p>9. Broken balustrade glass panel.</p> <p><u>MCPS</u></p> <p>1. An individual dies or is injured as a result of an incident associated with the operation of the mechanised car parking system.</p> <p>2. Failure of brakes.</p> <p>3. Failure of devices connected to the safety circuit.</p>	

No	Item	Provisions under the proposed Building Control (Reportable Matters) Regulations 2021	Rationale/Comments
		<p><u>Exterior features</u></p> <ol style="list-style-type: none"> 1. An individual dies or is injured as a result of an incident associated with the condition of the exterior feature. 2. Fallen exterior feature or any part of an exterior feature where any property (other than the exterior feature itself) is damaged as a result of an incident associated with the condition of the exterior feature. 	

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