

New Building Control Regulations for Fixed Installations

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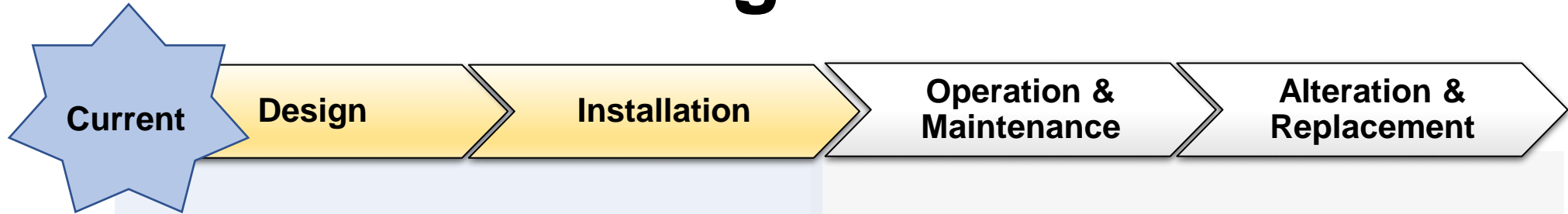


Scope

- Key Changes
- BC (Fixed Installations) Regulations, Stakeholders and Duties
- BC (Reportable Matters) Regulations
- BC (Exempt Fixed Installations and Fixed Installation Works) Order



Current Regime



Design standards/
codes prescribed under
Approved Document;
no need for plan
submission.

Certify compliance to
standards by **Specialist
Professional
Engineers** (SPEs) upon
completion of works.

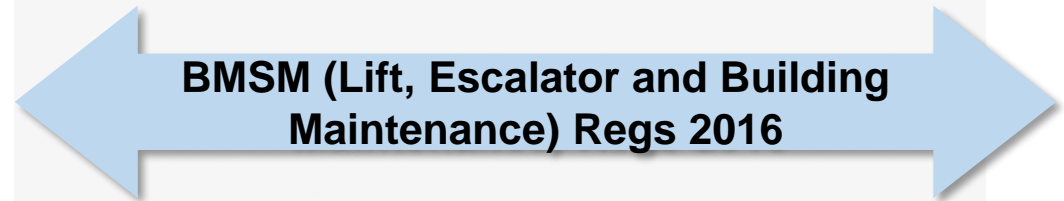
Periodic maintenance;
Owner to appoint **service
contractor to maintain**
according to prescribed
requirements.

Owner notify BCA
in writing before work
commences.



Renewal of PTO annually:
Contractor conduct
examination, inspection &
testing (EIT) in presence of
SPE.

**Contractor conduct
EIT** in presence of
SPE. SPE certify the
works.



Regime after implementation of BC (FI) Regs



BMSM (Lift, Escalator and Building Maintenance) Regs 2016 will be repealed

Type testing of lift model and safety components.

Qualified Person (QP) prepare and certify plans to be submitted for approval.

- **Fixed installation contractor** carry out FI works in accordance with approved plans.

- **QP supervise** the contractor's examination, inspection, testing & commissioning (EITC) of FI after completion.

Periodic maintenance; Owner appoint **service contractor to maintain** according to prescribed requirements.

Renewal of PTO annually: **QP supervise** the contractor's examination, inspection & testing of FI.

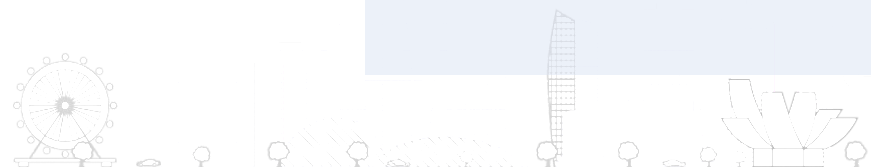
Owner notify BCA in writing before work commences.

QP prepare and certify plans to be submitted for major A/R works, supervise contractor's EITC of FI after works completion.



To tighten L&E safety standards right from the start:

- Design to be approved before installation in accordance to approved plans → **minimise non-compliances downstream, difficult to rectify later on.**
- Major alteration & replacement to require plan approval before works commences.



Definition of Fixed Installation in Building Control Act

“fixed installation” means any of the following machine-powered installations:

- (a) an escalator;
- (b) a lift;
- (c) a mechanised car parking system,

and includes any supporting structure, machinery, equipment, apparatus and enclosure used or designed for use for operating a fixed installation;



Key Changes

- 1) Fixed Installation plan application and approval
- 2) Appointment of Plan submission QP and Supervisor QP
- 3) Requirements for Examination, Inspection, Testing and Commissioning (EITC)
- 4) Fixed Installation Inspector
- 5) Regulation of new MCPS. Existing MCPS will be regulated at a later time.
- 6) Maintenance frequency of lifts in single residential units.



1) Key Change- Fixed Installation Plan Application

Requirements

- Developer appoint Qualified Person (QP), to **prepare and submit** fixed installation (FI) plans to BCA for approval.
- Design plans are to comply with the **prevailing code requirements**.
- Installation contractor provide **type test reports and certificates** from certification body to the QP, for submission to BCA.
- Key requirement – **Type-testing requirements** for safety components and entire equipment.



2) Key Change- Duties of Supervisor QP and SPE

During EITC or EIT	
Current	New
Service contractor to EIT the L&E <u>in the presence</u> of a SPE	Supervisor QP or SPE must be <i>physically present to supervise</i> the EITC or EIT by a FI contractor.

QP or SPE ***must be on site to supervise*** the conduct of the EITC or EIT are carried out in accordance with the ***manufacturer's recommendations and applicable standards***, unless he/she appoints a fixed installation inspector to be on site to perform the above duty.



3) Key Change- Fixed Installation Inspector

Key Duties

- **Exercise due diligence** to assist the SPE to supervise the FI service contractor's EIT of the FI (for **annual PTO renewal** applications). Be **physically present** during EIT.
- Assist the SPE to check compliance with maintenance outcome requirements during EIT.
- Submit the results of his/her EIT checks to the SPE, and ensure they are accurate.
- **Cannot** assist the QP to supervise the FI works contractor's **EITC** of the FI (for **new** and **recommissioning PTO** applications).



4) Key Change- Regulation of New MCPS

MCPS vs Lift

- **MCPS** designed to transport to or retrieve a car from the parking area **without anyone** inside the car.
- **Car Lifts** allow people to drive car in, and bring car and driver to parking floor.

Regulation of Man Machine Interface

“man machine interface”, for a mechanised car parking system, means all parts of the mechanised car parking system other than a part of the mechanised car parking system that —

(a) is designed for the storage of a vehicle; and

(b) is not intended to be accessible by any person operating or using the mechanised car parking system;

Examples:

i) **Interlock system** to ensure one process is completed before another can be initiated, stop system when access door is opened.

ii) Emergency stop button.

iii) **Maximum allowable floor gaps** inside the transfer area, to prevent the driver from accidentally falling through any gap as he exits the transfer area.



5) Key Change- Maintenance frequency of lifts in single residential units

Current Requirements	
	Maintenance Frequency
Home Lift	Frequency recommended in the manufacturer's recommendations; or once every 3 months , whichever is more frequent
Vertical Platform Lift	
Stairlift	
Any Other Lift	Frequency recommended in the manufacturer's recommendations; or once every month , whichever is more frequent



5) Key Change- Maintenance frequency of lifts in single residential units

	<u>New Requirements</u>
Home Lift	a) frequency recommended in the <i>manufacturer's recommendation</i> ; or
Vertical Platform Lift	b) if the frequency mentioned a) is not available — once every 3 months.
Stairlift	
Any Other Lift	



Key Duties of Stakeholders- Design and Installation

1	Developers	<ul style="list-style-type: none">• Appoint plan submission QP and FI works contractor.
2	Plan Submission QPs	<ul style="list-style-type: none">• Ensure that the FI works are designed in accordance with the Regs.• Check the type test certificates and reports.
3	Supervisor QPs	<ul style="list-style-type: none">• Be physically present to supervise the examination, inspection, testing and commissioning (EITC) of the FI.
4	Builders	<ul style="list-style-type: none">• Appoint plan submission QP, supervisor QP or FI works contractor, if they have not been appointed by the developer or owner.
5	FI Works Contractors	<ul style="list-style-type: none">• Ensure that the FI works are carried out in accordance with the Regs and approved plans.• Conduct EITC on the FI under the supervision of supervisor QP.
6	Building Works QP	<ul style="list-style-type: none">• Ensure relevant stakeholders are onboarded early.• Ensure sufficient time is catered for review and inspection by BCA.

Key Duties of Stakeholders- Operations and Maintenance

1

FI Owners

- Appoint supervisor QP to supervise FI works contractor's EITC of FI, for application of 1st PTO.
- Appoint specialist professional engineer (SPE) and FI service contractor to conduct EIT on the FI, for renewal of PTO.

2

Specialist Professional Engineers

- Be physically present to supervise the examination, inspection and testing (EIT) of the FI.

3

FI Inspectors

- Assist the SPE to supervise the FI service contractor's EIT of the FI.

4

FI Service Contractors

- Conduct EIT on the FI under the supervision of SPE.
- Do not perform any works on the FI to make it unsafe for operation.



BC (Reportable Matters) Regs

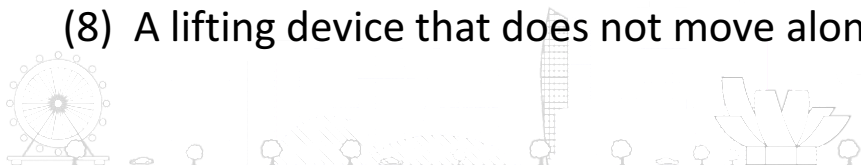
- Prescribe the reportable safety incidents, fixed installation components, and reportable defects in the components.
- When reportable matter must be notified:
 - i) Within **72 hours** after owner/contractor/SPE becomes aware of defect.
 - ii) Within **6 hours** after owner/contractor/consultants/CP/person responsible becomes aware of incident (including fallen exterior feature safety incidents).
- Prescribe the manner of reporting and info to be reported. E.g. reporting is done using FormSG or phone call. Report must contain information such as the **name and address of reporter** as well as **location and details** of reportable matter.



BC (Exempt Fixed Installations and Fixed Installation Works) Order

BC Act and regulations do not apply to the following specified FIs and FI works:

- (1) A stage or orchestra lift.
- (2) A lift that is used solely to carry out building works.
- (3) A lift that is not attached to any building and is designed to be used by a person to carry out works.
- (4) A lifting platform that is designed to be used to raise or lower a person who is carrying out works, such as a mast climbing work platform, building maintenance unit, suspended scaffold or mobile elevating work platform.
- (5) A lift that is used as part of an amusement ride (within the meaning given by section 2(1) of the Amusement Rides Safety Act 2011).
- (6) A stairlift or vertical platform lift that —
 - (a) has a maximum vertical displacement of less than 1,000 millimetres during operation;
 - (b) exerts a maximum downward force of less than 150 Newtons when the lift moves downwards; and
 - (c) serves a single residential unit.
- (7) A lift installed in any ship or aircraft.
- (8) A lifting device that does not move along any guide or guides.



Implementation

- The BC (Fixed Installation) Regs, BC (Reportable Matters) Regs, BC (Exempt Fixed Installations and Fixed Installation Works) Order and the corresponding provisions in the amendments to the BC Act, will be implemented on **1 July 2025**.
- Apply to fixed installation works that are:
 - i) carried out on or after 1 July 2025; and
 - ii) not part of building works for which an application to the CBC for approval of plans of the building works was submitted before 1 July 2025.



Thank you

