

The Complete Guide to BCA Periodic Facade Inspection in Singapore

Bca periodic facade inspection — practical guidance for building owners and managers

Facade Inspection Singapore — BCA-Approved Competent Person

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A practical guide to BCA periodic facade inspection in Singapore — who needs one, what the Competent Person inspects, defect classifications, and timelines.

A piece of plaster the size of a dinner plate falling from a 15-storey building doesn't need much help to kill someone on the pavement below. That single risk — multiplied across thousands of ageing buildings on this island — is why the Building and Construction Authority introduced a mandatory BCA periodic facade inspection regime under the Building Control (Periodic Inspection of Buildings and Building Facades) Regulations 2021. If you own, manage or sit on the management council of a building taller than 13 metres and older than 20 years, this regime applies to you.

This guide walks through what the inspection actually entails, who must carry it out, the classification system used to grade defects, and the timeline you need to plan around. Everything below is drawn from BCA's training material for the Certificate in Façade Inspection course and the regulations that govern the regime.

Why Singapore made periodic facade inspection mandatory

Three trends pushed the regulator's hand. First, an ageing building stock — large numbers of HDB blocks, condominiums, walk-up apartments and office towers from the 1960s, 70s and 80s have now exceeded the service life of their original render, tile bedding and metal fixings. Second, a rising tally of fallen-facade incidents involving plaster, cladding panels, awnings and even stone slabs. Third, the increasing complexity of modern facade systems — unitised curtain walls, free-form geometry, cable-net walls and green walls — which need expert eyes to inspect properly.

The BCA framework is meant to catch deterioration early, before a tile or panel becomes a falling object. Owners are required to engage a BCA Competent Person (a Professional Engineer (C&S) or Registered Architect who has obtained the Certificate in Façade Inspection) who carries out the

inspection and submits a report.

Who is covered by the regime

The PFI regime applies to buildings that meet all the following:

- More than 20 years old (focused on older stock first)
- More than 13 metres in height
- Not exempted (landed houses are exempted)

Examples of in-scope buildings include HDB estates, condominiums, walk-up apartments, hotels, shopping centres, office towers, schools, hospitals and industrial buildings. The cycle is once every 7 years, with BCA issuing PFI notices in batches starting with the oldest buildings.

What "facade" actually means under the regulations

Owners often assume facade inspection is just about glass and curtain walls. The regulations are far broader. Under the Building Control (Periodic Inspection of Buildings and Building Facades) Regulations 2021, "facade" means the exterior of the building, any exterior feature attached to it, and any associated bracket or installation. In practice, that covers:

- Cladding, curtain wall, tile, plaster and structural brackets
- Concrete, facade bricks and external walls
- Exterior false ceilings, green walls and screen walls
- Sunshades, clothes-drying systems and awnings
- Safety barriers — metal railings and glass parapets

Anything on the outside of the building — and anything that could fall off it — is in scope.

The two-stage inspection: visual and close-range

A periodic facade inspection is structured in two stages, both carried out by the appointed Competent Person, who may be assisted by a registered Façade Inspector (typically a Resident Engineer or Resident Technical Officer with the appropriate qualification).

Stage 1: 100% visual inspection

The CP must visually inspect the entire facade — every elevation, every exterior feature — from ground level or other available vantage points. High-powered cameras, binoculars and increasingly drones are used to reach areas that the naked eye can't resolve. The CP records all facade types, materials and connections, and identifies areas that require close-range inspection.

Stage 2: minimum 10% close-range inspection

For each facade face, the CP must carry out close-range (hands-on) inspection of at least 10% of the area. This is where the real diagnostic work happens. Tools commonly used include:

- Tapping with a rubber mallet to detect hollowness behind tile or render
- Borescope to inspect concealed supports behind cladding panels
- Cover meter / metal scanner to confirm presence of dowel pins, rebars and brackets

- Crack meter and moisture meter for crevice width and rising damp
- Infrared thermography to map sub-surface anomalies

Coverage must be spread around the perimeter, not clustered in one easy spot, and must include locations above high human traffic — entrances, pedestrian pathways, communal areas. If tell-tale signs of deterioration appear, the CP is expected to expand coverage beyond the 10% minimum.

Defect classification: Safe, Require Repair, Unsafe

The CP grades every finding into one of three severities:

- Safe — condition does not require repair and is unlikely to become unsafe.
- Require Repair — facade is deteriorating but does not pose imminent danger; repair is needed to prevent further deterioration.
- Unsafe — condition is dangerous and requires immediate repair.

If an "Unsafe" condition is found, the CP must inform the Commissioner of Building Control immediately, and the owner is expected to put up temporary safety measures (cordon-offs, hoardings) and carry out detailed inspection and repair without delay.

Common defects and red flags every CP looks for

Across the BCA training material, the same defect families appear again and again. These are the items a competent inspector will not miss:

- Plaster — bulging, cracking, hollowness on tapping, and corrosion of any metal attachments behind it
- Tiles — cracked tiles, loose tiles, debonded tile bedding, deteriorated joint sealant
- Concrete — early-stage and full-stage spalling, exposed rebar, carbonation cracking
- Stone cladding — cracks across stone panels, misalignment, missing dowel pins, signs of epoxy "gluing" rather than mechanical fixing, corroded brackets
- Curtain wall — missing capping, loose or compressed gaskets (EPDM, silicone, neoprene), misaligned or loose transoms, cohesive or adhesion sealant failure
- Cladding — corroded fixings behind ACP, rusty connections at brackets, dislodged panels
- Add-on features — rusty railings, dangling louvres, loose awnings, dislodged ledges, cracked window frames

Singapore regulatory context

The legal backbone is the Building Control Act and the Building Control (Periodic Inspection of Buildings and Building Facades) Regulations 2021, with implementation phased from 1 January 2022. The CP must be a registered Professional Engineer (C&S) or Registered Architect with the Certificate in Façade Inspection. Workplace safety during the inspection itself falls under the Workplace Safety and Health Act, with relevant subsidiary rules including the WSH (Work at Heights) Regulations and the WSH (Risk Management) Regulations. Where access uses a gondola, MOM's rules on suspended scaffolds (Approved Code of Practice CP 20) apply, and the equipment must be tested by an Authorised Examiner.

What to do next

If your building has received — or is approaching — its PFI notice, the immediate priorities are: appoint a BCA-Approved Competent Person within the two-month window stated in the notice, give them access to existing drawings, past inspection reports and repair records, and plan facade access (gondola, MEWP, rope access or a combination) early. Late access planning is the single biggest cause of timeline slippage.

A well-run inspection produces a clear report, an actionable repair list classified by severity, and — crucially — peace of mind for occupants and members of the public walking past your building.

Author — Facade Inspection Singapore · BCA-Approved Competent Person Team. We carry out PFI inspections under the Building Control Act and issue inspection reports within 5 working days of completion.

- Service overview: facadeinspection.com.sg
- Periodic facade & structural inspection: [Periodic Structural Inspection](#)
- Get a quote: [Contact our facade inspectors](#)

Sources & references

- Source training material: 1.1-IESA-Training_BCA — Certificate in Façade Inspection (BCA, 14th Run, Apr 2022).
- Building and Construction Authority (BCA) — Periodic Facade Inspection (PFI), Building Control Act and Building Control (Periodic Inspection of Buildings and Building Facades) Regulations 2021. www1.bca.gov.sg
- Ministry of Manpower (MOM) — Workplace Safety and Health Act 2006 and subsidiary regulations including WSH (Risk Management), WSH (Work at Heights), and WSH (Scaffolds) Regulations. www.mom.gov.sg
- Singapore Civil Defence Force (SCDF) — Code of Practice for Fire Precautions in Buildings 2023 Edition (effective 1 March 2024). www.scdf.gov.sg