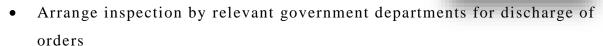


Conduct Inspection and Confirm Completion of Works



6.1 Conduct Inspection of Completed Works for Acceptance and Apply for Order Discharge (If Applicable)

- Testing and Commissioning
- Conduct inspection of works for acceptance
- Submit statutory documentation



• Approve completion date and extension arrangement of the works and issue works completion certificate



Rectifications by Works Contractor within Defects Liability Period

 Understand the responsibilities of each party during defects liability period

6.3 Drawing Up Long-Term Plans for Building Maintenance

- Understand the reasons for building maintenance
- Understand preventive maintenance
- Understand the strategies and standards of building maintenance
- Formulate schedules of building maintenance cycle
- Set up dedicated Building rehabilitation fund

6.4 Procure Insurance for the Building



- Understand the purpose of building insurance
- Understand the types of building insurance





Step 6: Conduct Inspection and Confirm Completion of Works



(Scan QR Codes to Watch Videos on 'Building Rehab Platform' Website)

Section 6.1 Conduct Inspection of Completed Works for Acceptance and Apply for Order Discharge (If Applicable)

6.1.1 Testing and Commissioning

Once the works are complete, tests such as adherence of paint and tensile strength of concrete can be conducted on contractual standards. In general, before the acceptance of works for electrical and mechanical facilities, e.g. lifts and fire service systems, relevant tests shall as well be conducted by authorised persons on statutory and contract terms.

6.1.2 Inspection of Works for Acceptance

Once an individual work item or rehabilitation phase is complete, representatives of **owners/OCs** can join with work consultant, work supervisor (if any) and works contractor to conduct site inspection for quality assurance and acceptance of the works, followed by approval of any necessary rectifications.

What is a 'works supervisor'? Please refer to Section 5.1.1

Once the entire rehabilitation project is complete, representatives of owners/OCs should join with the works consultant and the works contractor to conduct another thorough inspection for acceptance of all work items listed in the contract to verify the contractor's satisfactory completion of the entire project on contract specifications. In case of missing parts or defects, the consultant shall document all such items in detail to facilitate follow-ups in the future.

6.1.3 Statutory Documentation

Owners/OCs should note whether statutory documentation are submitted by the works consultant and the works contractor in compliance with regulations and requirements prescribed by the law and relevant government departments. In the case where specific authoritative requirements, e.g. orders, are involved, owners/OCs should ensure the works' compliance with prescribed requirements and completion within reasonable timeframe to facilitate the completion of order discharge.

6.1.4 Engagement of Government Departments

If the works are carried out on orders issued by government departments, e.g. the Buildings Department (BD), then the works consultant shall, upon completion of such works, arrange site inspection by relevant personnel. Certificates of Compliance issued by government departments are generally regarded as a milestone marking the completion of rehabilitation project and should be obtained as early as possible.

6.1.5 Record Floor Plan

Owners/OCs should instruct the works contractor to table finalised floor plan documentation of various facilities to facilitate their rehabilitation or modification in the future. All work items in the rehabilitation project shall comply with their relevant statutory requirements. The following table lists some documentary proofs for certification of compliance for some types of works:

Type of Works	Documentary Proof to be Submitted	Responsible Government Department	Responsible Personnel ¹
Building works with mandatory submission of drawings to the BD	Certificate on Completion of Building Works BA14	BD	Prescribed professionals and prescribed registered contractors
Minor Works	Certificate of Completion of Works MW02/MW04 Notice and Certificate of Completion MW05		(including prescribed structural engineers and/or prescribed geotechnical engineers where
	Notice of Inspection and Certification MW06		necessary)
Fixed electrical installation works	Certificate WR1/WR2	Electrical and Mechanical Services Department (EMSD)	Registered electrical workers and registered electrical contractors
Water supply works	Form WWO46	Water Supplies Department (WSD)	Licensed plumbers
Fire service system works	Certificate FS251/ FSI 314/ FSI 501	Fire Services Department (FSD)	Authorised persons and fire service installation contractors
Fireproof structures	All certificates / test reports / assessment reports	BD	Prescribed professionals and prescribed registered contractors
Removals of materials containing asbestos	Works completion certificate	Environmental Protection Department (EPD)	Registered asbestos contractors
Gas installation works	Documentary proof for completion of works	EMSD	Registered gas contractors
Lift maintenance works	Documentation for application of use permit and safety examination	EMSD	Registered lift contractors

 $^{^{1}}$ When handling documentation and forms required for different types of works, their individual statutory terms and qualification requirements of prescribed persons shall be taken note of.

6.1.6 Arrangement for Certifying Completion Date and Extension for Completion

The works consultant shall approve the final date of completion of the works proposed by the works contractor on contract terms. In case of delays, the contractor shall obtain approval and a signed certificate on extension of works period from the consultant before issuing formal notification on the new completion date to the owners/OCs. The consultant shall as well verify with the owners/OCs any impacts on work costs so caused. If the extension of works period is not approved by the consultant, the contractor shall indemnify the owners/OCs for the delay on contract terms.

6.1.7 **Works Completion Certificate**

Upon completion of acceptance inspection on substantial works, a works completion certificate proofing the works contractor's proper completion of all work items on contract terms and specifications shall be issued by the work consultant, followed by the commencement of the 'defects liability period'. Given that the works contractor may refrain from handling unfinished items once the works completion certificate is issued, owners/OCs should actively participate in the acceptance inspection to ensure the proper completion of the substantial works.



What is 'defects liability period'? Please refer to Section 6.2



O Useful Tip

Owners/OCs should not accept substandard or unfinished works, nor should they neglect supervision of rectification works carried out by the works contractor. Before all rehabilitation or rectification works are properly complete, the owners/OCs should make discreet decision on whether to approve the completion of works or to make payments of final instalment or performance bond. In case of uncertainties, they should seek professional advice.

O Useful Tip

It is not advisable to issue completion certificates for works partially complete (excluding rectification works in progress), as the works contractor may refrain from handling those works afterwards.

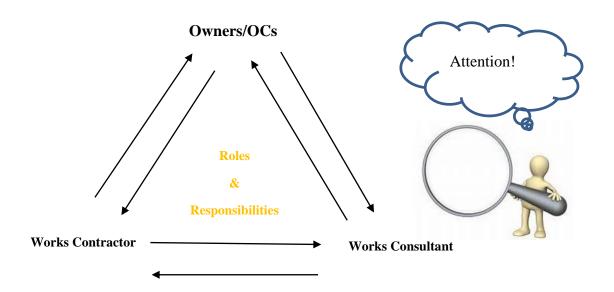
For rehabilitation project where multiple buildings are involved, on the other hand, the works consultant may issue an individual works completion certificate for each building once its necessary works are complete.

Section 6.2 Rectifications by Works Contractor within Defects Liability Period

6.2.1 Defects Liability Period

The issuance of the works completion certificate marks the acceptance of the rehabilitated parts of the building by the owners/OCs. Within the defects liability period, which generally spans 6 months to 1 year after issuance of the works completion certificate depending on contract terms, the work contractor shall be responsible for rectifications of all defects found. Upon proper completion of all rectification works, a relevant completion certificate will be issued by the works consultant for release of retained payments by the owners/OCs, whose final settlement marks the completion of the entire contract.

6. 2. 2 Roles and Responsibilities of Each Party during Defects Liability Period



Owners/OCs

- To instruct the works consultant to table a list of defective work items for owners/OCs' approval before certifying substantial completion of works;
- To invite all **owners** or residents to report to the **OC** on any defects or delays of works for the works consultant and the works contractor to follow up within the defects liability period;
- To conduct, under feasible and safe circumstances within the defects liability period and before issuance of rectification works completion certificate, a joint inspection with the works consultant to verify the proper completion of rectification works;
- To settle, upon verification of proper completion of all rectification works and the issuance of completion certificate of making good defects by the works consultant, release the remaining payments and retention money to the works contractor.

Works Consultant

- To issue, upon completion of all works on contract specifications and progress requirements, a works completion certificate specifying the start and end dates of defects liability period to the works contractor:
- To conduct acceptance inspection and supervise rectification works on contract terms to ensure no works are substandard or unfinished;
- To approve completion of works and calculate the amounts of final instalment and retention money for owners/OCs' verification only after all works or rectifications are complete;
- To prepare and submit to relevant government departments a report or certificate on completion of rehabilitation items prescribed by statutory orders/notices;
- To issue completion certificate of making good to the works contractor at the end of the defects liability period.

Works Contractor

The works contractor shall be responsible for, within the defects liability period specified in the contract, early completion of all unfinished items and rectifications on any defects found therein while ensuring their acceptable quality to the works consultant and the owner/OCs.



For more anti-corruption information concerning acceptance inspection and completion of works - Please refer to **Appendix I**

Draw Long-Term Plans for Building Maintenance Section 6.3



6.3.1 Reasons for Building Maintenance

Improve Living Environment and Lower the Risk of Accidents with Preventive Measures

In addition to one-off comprehensive rehabilitation project, it is also important to draw long-term plans for building maintenance. As the proverb 'prevention is better than cure' goes, regular inspections and proper maintenance cycles are essential for early detection and timely rectifications of building issues to perpetuate sound conditions of building structure and facilities, in turn providing owners and residents with a safe and comfortable living environment while preventing accidents in an effective manner.

Plan Properly to Avoid Impetuous Actions

A building maintenance plan allows sufficient time for the owners/OCs and the 'managers' to prepare for the works involved and necessary funding. Such plan generally involves comprehensive inspection and assessment of building conditions for gauging the necessary scope of works, followed by determination of targets on the scope and priority of work items based on factors such as materials, efficacy and reliability of facilities, maintenance strategies, budget and lifespan of facilities, etc.

Improve Cost-Effectiveness

At present, maintenance works of buildings in old districts of Hong Kong are largely 'corrective' ad lib, where owners' actions are often deferred to the point that repair orders are issued by the Building Authority in respect of obvious defects. On the other hand, regular inspections of defects and maintenance of facilities can alleviate the deterioration of their components, in turn minimising the inconvenience to residents and the costs involved.

Avoid 'Vicious Cycle'

Defects in a building without maintenance plans are easily neglected by the **owners/OCs**, where a 'vicious cycle' occurs in that, as the condition deteriorates, the cost of rehabilitation project may increase beyond affordability, in turn further dampening the willingness of the **owners** to bear the responsibility therein.

6.3.2 Preventive Maintenance

Effective 'preventive maintenance' should put multiple factors concerning the building into consideration, including its use, grading, condition and service indicators etc., with adjustments made on specific circumstances and expected standards.

'Preventive maintenance' is a strategy intended to assess and/or alleviate deterioration of building components/facilities and reduce their probability of failure/degradation before occurrence by means of regular and appropriate inspection and repair initiatives. It helps minimises, to the greatest possible extent, unexpected failures in building elements or systems and their emergency maintenance that causes inconvenience and high costs.

Advantages of 'Preventive Maintenance'

- To effectively maintain building elements and facilities in good condition for ideal functioning;
- To eliminate the danger posed to the safety of residents and the public;
- To minimise the inconvenience caused to residents by emergency maintenance:
- To enjoy a lower cost as compared to emergency maintenance;
- To slow down the dilapidation of the building and to extend its lifespan.



Owners/OCs should understand that while regular preventive maintenance and timely fixes can prevent most emergency issues, failures/defects may still occur. Therefore, owners/OCs should make due preparations to facilitate their swift and effective response in case of such issues.

6.3.3 Strategies and Standards of Maintenance

While the required maintenance standards and priority order of the relevant work items for each building vary in accordance with its usage and grading, one-off execution of all necessary work items may not be affordable for the **owners/OCs** concerned. The priority order of work items should be properly understood and determined formulating strategies, plans and budgets for maintenance in the arrangements of daily building management tasks.

Owners/OCs of newly established buildings are recommended to formulate strategies and standards for maintenance as early as possible to facilitate long-term arrangements of budgets and plans for rehabilitation, and to adopt preventive maintenance practices to enhance quality of building management, in turn perpetuating the effective operation of facilities therein.

Priority Order of Maintenance Work Items

(i) Emergency Maintenance

Defects that may pose threats to the safety and health of the public and the residents require emergency maintenance. These include loosened/spalled tiles from external walls, defective fire service installations and lift components, etc.

O Useful Tip

Contingency Instructions

To prepare for emergency maintenance, **owners/OCs** are recommended to:

- Prepare a contact list of all owners/residents of the building to facilitate timely notification for the affected in case of emergencies;
- Display the names and contact numbers of representatives of the OCs/'managers' at prominent location of the building to facilitate timely report of issues by the owners/residents;
- Prepare a list of relevant works contractors to facilitate the timely contact of suitable contractor to carry out necessary maintenance works for emergency issues.

(ii) General Maintenance and Replacement

The maintenance works for defects that may cause inconvenience or nuisance to **owners**/residents, such as water seepage from rooftop, freshwater supply system or drainage pipes, should take priority over work items for renovation and facility enhancement purposes. Delay of these maintenance works may not only aggravate the condition of the building, but also result in emergency maintenance of higher costs.

(iii) Renovation and Facility Enhancement Works

Work items for pure renovation or facility enhancement purposes should be given a lower priority except when they are to be carried out in parallel with emergency work items to reduce costs. However, their relatively lower priority does not necessarily imply their unimportance, for these works are generally intended to enhance the comfort and beauty of the building concerned, such as replacing dilapidated tiles on external walls with quality renderings.



Useful Tip

During building rehabilitation, modernised facilities such as smart lighting system and smart card entrance and security system may be added where necessary to enhance the effectiveness of building security and energy saving.

6.3.4 Formulate Schedules for Building Maintenance Cycle

In view of the individual lifespan of each equipment/facility in a building, owners/OCs shall formulate an individual schedule of maintenance cycle ² for each equipment/facility to facilitate their timely inspection, maintenance and repair on respective statutory requirements, frequency and condition of use, or objective circumstances such as weather condition.



To learn more about building maintenance cycle - Please refer

to Appendix II

6.3.5 Set up Dedicated Building Rehabilitation Fund

The substantial costs involved in sustaining proper condition of a building and regular maintenance works may not be met solely by the revenue stream from standard management fee. One of the feasible and effective financial solutions is to set up dedicated building rehabilitation fund³, where instalments can be collected along with monthly management fee payable by the **owners** to support comprehensive maintenance plans, thereby largely relieving the financial burden on **owners** in case of large-scale rehabilitation works⁴.

² The inspection cycles for fire service facilities, electrical and lift installations etc. shall comply with their relevant statutory requirements. For maintenance cycles of other facilities, please refer to *Building Maintenance Guidebook* published by the **BD** and Item 5.3 in Section 5 of *DIY Tool-kit* by the Smart Tender scheme.

³ In compliance with regulations in force in *Guidelines for Deeds of Mutual Covenant* issued by the **Lands Department** (LD) and the *Building Management Ordinance*, it is mandatory for all buildings to set up a contingency fund to pay for the costs of non-regular items in the future, including building rehabilitation, maintenance and enhancement projects.

⁴ For more information about financial management of OCs, please refer to Section 3.1 in *Building Financial Management Toolkit* or the HAD website:

https://www.buildingmgt.gov.hk/en/financial_management_procurement_and_insurance/5_1.htm

Section 6.4 Procure Insurance for the Building⁵



6.4.1 Purpose of Building Insurance

The purpose of building insurance is to provide indemnification for financial losses induced by casualties and damage or destruction of property with regard to building management so as to minimise the bearable risk of **owners** or building management organisation.

While it is common for owners to purchase insurance for private property in their flats and the building, the management organisation shall procure a policy of insurance for common areas and facilities in the building (e.g. lifts, staircases and fire service installations, etc.) to make claims with the insurance company for indemnification for relevant losses.

In the case where accidents relevant to rehabilitation works occur at a building where no policies of insurance have been procured, the owners shall be responsible for the costs and claims incurred, where the collection of funds by the owners themselves may result in delay of relevant works and disputes. Even if such costs or claims are incurred by negligence of the building management company or the OC, individual owners may as well be liable.

For more information about procurement of insurance for building, please refer to **Home Affairs Department** – **Building Management website**

⁽https://www.buildingmgt.gov.hk/en/financial management procurement and insurance/5 3.htm).

6. 4. 2 Types of Building Insurance

Three types of insurance for private buildings:

Type	S	Scope	Coverage
Mandatory	Public Liability Insurance (also known as "Third Party Risk Insurance") Employees' Compensati on Insurance (also known as "Workmen' s Compensati on Insurance")	This insurance provides indemnity for compensation and associated legal costs against the insured, as a result of bodily injury to or the death of a third party caused by the insured's (and his employees') negligence in managing the building. If staff are involved in building management work, their employer (i.e. OC, mutual aid committee or property manager) is required under the Employees' Compensation Ordinance (Cap.282) to take out such an insurance policy to provide compensation for those injured or killed out of and in the course of their employment.	Section 28 of the Building Management Ordinance (Cap.344) requires and OC to procure and keep in force in relation to the common parts of the building and the property of the corporation. The minimum insured amount of each policy shall be \$10 million per event. The amount shall be calculated on the basis of the total annual income of all employees, including salaries, double pay, bonuses, allowances, cash awards, etc.
Non-mandatory	Property- All-Risks Insurance (also known as "Property Insurance")	When there is any loss or damage to the common properties of the building due to fire or other risks covered by the terms of the policy, the insured can seek the insurance company for indemnity. Such risks may include storm, flood, malicious act, etc.	The amount should be able to cover the current cost of repairing the common parts or replacing the common facilities of the building

For details of the above, please refer to the latest legislative provisions ⁶.

⁶ For details of the Building Management (Third Party Risk Insurance) Regulation, please refer to the relevant website. (https://www.buildingmgt.gov.hk/tc/whats-new/2-4.htm)

Q Useful Tip

To learn about 'points to note' and 'list of authorised insurers' when procuring insurance,

please refer to **Home Affairs Department** – Building Management website:

'Points to Note'

https://www.buildingmgt.gov.hk/en/financial_management_procurement_a nd insurance/5 3 3.htm

'List of Authorised Insurers'

 $\underline{https://www.buildingmgt.gov.hk/en/financial_management_procurement_a}$ nd_insurance/5_3_6.htm



- 1. Building Maintenance Toolkit published by ICAC
- 2. Building Maintenance Guidebook published by Buildings Department
- 3. Smart Tender DIY toolkit published by URA



Step 6

Appendix I - Anti-Corruption Information (Building Rehabilitation Workflow - Step 6)

Appendix II - Building Maintenance Handbook



Anti-Corruption Information (Building Rehabilitation Workflow – Step 6)

Stage	Risk of corruption and malpractices	Tips of preventing corruption
Work Completion	 Acceptance of substandard/incomplete works, lax supervision on defects rectification, etc. Certifying final completion, or releasing final payment or retention money, before completion of all works or defects rectification 	 require the consultant to prepare and submit a defects list for agreement by the MC/OC before certifying practical completion of the works; invite all property owners/occupants to report on any defects or outstanding works to the MC/OC, consultant and/or contractor for follow-up actions during defects liability period; where practicable and under safe conditions, conduct joint inspections with the consultant to check the satisfactory completion of the defect rectification works before expiry of the defects liability period and issue of final certificate of completion to the contractor.

Building Maintenance Handbook

Facility	Works item	Cycle
External Walls Painting	Redecoration	4 to 5 years
External Walls Finishes	Regular inspection	yearly
	Detail inspection and check up	5 to 6 years
Structural Regular Checking		yearly
	Detailed checking	5 to 6 years
	Structural repair	as and when necessary
Internal wall	Redecoration/touching up	3 years
	Structural repair	as and when necessary
Fresh Water Supply	Inspect grease, switches pumps & check valves	monthly
	Cleanse water tanks & check valves	3 months
Flushing Water Supply Inspect grease, switches pumps & check valv		monthly
	Cleanse water tanks & check valves	6 months
Windows, External Railings & Metalwork	inspect condition & refix	yearly
Zummigo de Macum om	Re-painting (Steel and iron)	2 to 3 years
Drainage-Roof	Check and cleanse drains and surface channels	Every two weeks and before and after a heavy rainstorm or a typhoon
	Check externally for defects or vegetation growth	yearly

Facility	Works item	Cycle
Underground drainage system	Check and cleanse manhole	2 months
5,500.11	C.C.T.V. survey for underground drains (if frequent subsoil movements are expected)	2 years
Lifts	Oiling & servicing	monthly
	Overhaul	yearly
Electrical Installations (an approved loading exceeding 100A)	Employ a registered electrical contractor to inspect, test your electrical installations and certified.	Shall be tested and certified once every five years.
Fire Safety Installation Inspect & refix by management staff		weekly
	Overhaul & report to Fire Services Department	yearly
	Fire-resisting doors	1 to 2 days
Service Risers and installation Pipes	Regular check up by registered gas contractors	At least once every 18 months
Play Equipment	Inspection by management staff	1 to 2 days
	Inspection by mechanics/ specialist	yearly
Slopes and Retaining Walls	Inspection of surface drainage channels and surface protection by management staff	At least once a year and should preferably be completed before the wet seasons and after a heavy rainstorm or a typhoon
	Routine maintenance inspections	At least once a year and should preferably be completed before the wet seasons and after a heavy rainstorm or a typhoon
	Inspection by a qualified Geotechnical Engineer	At least once every five years
Others	Alarms, Communal Aerial Broadcasting Distribution System (CABD), security, etc.	6 months to 1 year
	Roofing, floors, finishes	yearly

Source: Building Maintenance Guidebook published by BD and Smart Tender DIY toolkit published by URA