

PREVENTIVE VS CORRECTIVE MAINTENANCE: WHICH ONE IS BETTER?

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Introduction

Building maintenance plays a crucial role in preserving the safety, durability, and value of any property. For building owners, engineers, and facility managers, a proper maintenance strategy helps prevent premature deterioration, structural damage, and costly repairs.

In the construction and property maintenance industry, two common approaches are used: preventive maintenance and corrective maintenance. Understanding the difference between these two methods is key to managing problems such as roof leaking, wall cracks, water seepage, tile damage, concrete spalling, and structural instability. By selecting the right approach, property owners can make smarter repair decisions, improve building performance, and extend the service life of their assets.

What is Preventive Maintenance?

Preventive maintenance (PM) is a proactive strategy that focuses on inspecting, servicing, and minor repairs before serious damage occur ^[1]. The goal is to detect early signs of wear and deterioration to prevent future failures.

In practical terms, preventive maintenance may include: regular roof and wall waterproofing inspections to prevent water leaking or seepage; checking tiles, walls, and ceilings for cracks, grout deterioration, or surface bubbling; inspecting balconies, toilets, and roofs for waterproofing problems before leakage spreads; monitoring wall and structural conditions to identify potential settlement or cracks.

This approach helps catch problems early such as moisture seepage or wall cracks allowing for timely waterproofing repair, PU injection, or minor patch works before they evolve into larger and costlier issues ^[2].

Benefits of Preventive Maintenance

1. Cost Savings:

Addressing small defects early such as waterproofing failures or minor cracks helps prevent serious water damage and expensive structural repairs later. For instance, fixing a small toilet leaking issue today can save thousands in future concrete or wall repair costs. ^[3].

2. Longer Building Lifespan:

Routine checks and timely repairs by a building repair specialist help extend the structure's life. By maintaining key components like roofs, walls, and waterproofing membranes, property owners preserve both the building's strength and its appearance.

3. Improved Safety and Comfort:

Preventive maintenance reduces risks such as falling plaster, wall bulges, or roof leakage that can threaten safety. Regular upkeep ensures a safe and comfortable environment for occupants.

What is Corrective Maintenance?

Corrective maintenance is a reactive approach which repairs are made after a problem has occurred. It focuses on resolving visible or reported issues such as roof leaking, wall crack, tile damage, or concrete spalling ^[4].

For example, when a ceiling leak appears, a waterproofing contractor would inspect and identify the source of water ingress, then apply suitable solutions such as PU injection, membrane replacement, or re-grouting. Similarly, if wall cracks appear, repair specialists may perform crack sealing, repainting, or surface restoration.

This approach is common in older buildings or facilities without regular maintenance records.

Benefits of Corrective Maintenance

1. Lower Initial Cost

Since maintenance is only performed when problems arise, there are no recurring inspection or monitoring costs. This can be cost-efficient for smaller buildings or non-critical areas ^[4].

2. Simple and Direct

There's no need for complicated scheduling. Repairs are done as soon as damage is identified, allowing for fast action ^[5].

3. Focused Resource Allocation

Corrective maintenance does not require detailed scheduling, unlike preventive maintenance. Resources can be directed specifically to the affected areas, for instance, carrying out localized tile grouting, wall crack injection, or waterproofing membrane replacement where damage is prevalent, and leaving out areas that are undamaged.

Which Approach is More Effective?

Both preventive and corrective maintenance have their roles, depending on the building's condition, age, and usage.

For critical areas like roofs, balconies, car parks, and toilets, preventive maintenance is the better choice. Regular inspections, waterproofing checks, and minor repairs help prevent major failures.

However, corrective maintenance can be practical for non-critical areas such as decorative finishes or small wall touch-ups. The best strategy is a balanced approach, combining preventive maintenance for key components with corrective repair when necessary.

Regular inspections by a building repair specialist ensure problems like roof leaks, wall cracks, and water seepage are identified early and resolved properly. Working with an experienced waterproofing contractor or repair specialist ensures the right solution for each issue, protecting both the structure and your investment.

Conclusion

A well-maintained building not only looks better but also lasts longer and provides a safer environment for its occupants. While preventive maintenance helps avoid costly breakdowns, corrective repair remains necessary for unexpected damages.

Ultimately, combining both approaches offers the best results, preventive maintenance to minimize future risks, and corrective repair to handle immediate issues.

By engaging professional services such as roof repair, waterproofing repair, PU injection, wall crack repair, and balcony repair, building owners can protect their properties effectively and ensure long-term structural integrity and comfort.

Table 1: Preventive vs Corrective Maintenance

Aspect	Preventive Maintenance	Corrective Maintenance
Definition	A proactive approach that involves regular inspection, servicing, and repair before major damage occurs.	A reactive approach where repairs are carried out after damage or failure has already happened.
Objective	To prevent future issues and extend the building's lifespan through scheduled maintenance.	To fix existing problems and restore functionality after defects appear.
Common Examples	Roof inspection and cleaning, waterproofing maintenance, sealing minor wall cracks, repairing toilet leaks early, checking balcony waterproofing.	Fixing roof leaks, performing PU injection for water seepage, repairing wall cracks and spalling concrete, replacing damaged tiles or waterproofing layers.
When It's Used	Suitable for buildings under regular use, or critical structures such as high-rise buildings, offices, and commercial properties.	Suitable for older buildings or properties with limited maintenance records or minor non-structural defects.
Advantages	Reduces long-term repair costs; Extends building lifespan; Ensures safety and comfort; Helps maintain property value	Lower initial cost; Simple and direct repair process; Focused on damaged areas only
Disadvantages	Requires consistent scheduling and manpower; May result in unnecessary repairs; Higher short-term cost	Can lead to recurring issues if not properly investigated; More expensive in the long run; Reduces overall building durability
Cost Implication	Higher short-term cost but saves money over time through reduced major repairs.	Lower short-term cost but potentially higher expenses later due to recurring or worsened damage.
Impact on Building Condition	Maintains the building's integrity, waterproofing performance, and aesthetic appearance over time.	Deterioration continues until repairs are made; may affect structure and comfort if delayed.
Recommended For	Property owners who want long-term protection through scheduled maintenance and inspection.	Property owners handling immediate visible problems like leaks, wall cracks, or tile damage.

References:

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