



CELEBRATING  
55 YEARS

# nerej

## **Different approaches to HVAC maintenance - by Gamble Wiseman**

May 05, 2023 - Owners Developers & Managers



Gamble Wiseman

Commercial building owners have several approaches available to maintain their HVAC equipment, which is critical to ensuring the safety, comfort, and health of building occupants. These approaches include reactive maintenance, preventive maintenance, predictive maintenance, and condition-based maintenance.

Reactive maintenance is a method where building owners or managers respond to equipment failures as they occur. This approach is common among those with limited budgets who do not want to spend money on maintenance unless it is necessary. However, reactive maintenance can be costly in the long run, resulting in expensive repairs and replacements, equipment downtime, and negative impacts on business operations.

Preventive maintenance is a proactive approach to HVAC equipment maintenance that involves regular inspections, cleaning, and tune-ups to keep equipment in good working order. Preventive maintenance can identify and fix minor issues before they become major problems that require costly repairs or replacements. Additionally, it can improve energy efficiency and indoor air quality, resulting in significant cost savings and better health outcomes for building occupants.

Predictive maintenance is a data-driven approach to HVAC equipment maintenance that involves using sensors and other data collection tools to monitor equipment performance and predict when maintenance is needed. By analyzing data, building owners can identify trends and patterns that help predict equipment failures before they occur. Predictive maintenance can be more cost-effective than reactive maintenance because it allows building owners to schedule maintenance activities when they are most convenient and least disruptive to business operations. This approach can also help building owners identify opportunities to optimize energy efficiency and reduce energy consumption.

Condition-based maintenance is another data-driven approach to HVAC equipment maintenance. This approach involves monitoring equipment performance and making maintenance decisions based on its condition. Building owners can use data from sensors and other tools to identify when equipment needs maintenance, such as when certain components are showing signs of wear and tear. Condition-based maintenance can be more cost-effective than other approaches because it allows building owners to focus maintenance efforts where they are most needed. This approach can also help building owners identify opportunities to optimize energy efficiency and reduce consumption.

When selecting an approach to HVAC equipment maintenance, building owners should consider their budget, business operations, and equipment age and condition. Reactive maintenance may be appropriate for older equipment that is nearing the end of its useful life, while preventive maintenance may be more appropriate for newer equipment that is still under warranty. Predictive maintenance and condition-based maintenance may be more appropriate for larger commercial buildings with more complex HVAC systems. These approaches can help building owners identify potential equipment failures and optimize energy efficiency. To maintain HVAC equipment properly,

building owners should work with qualified HVAC technicians who have the necessary knowledge and expertise. Additionally, they should follow manufacturer recommendations and guidelines for maintenance and operation to ensure that their equipment performs as intended and meets safety standards.

In conclusion, maintaining HVAC equipment is crucial for commercial building owners to ensure the safety, comfort, and health of building occupants. By selecting the right approach to maintenance and working with qualified HVAC technicians, building owners can minimize costs, improve energy efficiency, and extend the life of their equipment. Following manufacturer recommendations and guidelines is also essential to ensure that equipment performs as intended and meets safety standards.

Gamble Wiseman handles commercial maintenance at Cotti-Johnson HVAC, Inc., Taunton, Mass.

New England Real Estate Journal - 17 Accord Park Drive #207, Norwell MA 02061 - (781) 878-4540