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Preventive HVAC Maintenance it's a must

Imagine working in an office building that lacks proper ventilation and air circulation – one that is sweltering and stuffy in the summer, and frosty and cold in the winter. No one would want to work there. Building systems are the lifeblood of any facility. Without lighting, water, or heating and cooling, a building would be uninhabitable. That's why a strong preventive maintenance program isn't an option; it's a must.

Think of preventive HVAC maintenance in the same way as the preventive maintenance for your car. If you don't change your oil and replace filters and belts, the engine will lock up and the vehicle won't operate. The same holds true for HVAC systems. Maintenance isn't expensive compared to what you might spend if your system degrades and ultimately fails. If you have a piece of equipment that cost \$10,000 to maintain and has a life expectancy of 10 years if properly maintained, you will spend \$20,000 from first cost to replacement cost at the end of its life cycle. However, if you did not properly maintain the unit and it failed at the five-year mark, you would need to spend \$10,000 to replace it after five years and then replace the same unit again in another five years if you continued to not perform maintenance. Your total cost would be \$30,000. Proper maintenance costs a lot less over the life of the equipment than to change out equipment on a more frequent basis.

The two main issues at the heart of any HVAC maintenance program are:

1. The recommended performance and maintenance task for each piece of equipment.
2. The overall operation of the system in relation to the building in which it's installed.

The first place to turn if you have questions about how to build a successful HVAC maintenance plan is the operating and maintenance manual, provided by the manufacturer. Some aspects of a maintenance plan are simple – change the oil, change the belts, and change the filters. But, to keep a system operating at maximum efficiency, you will need to go beyond the basics from time to time. Air-handler coils need to be cleaned periodically.

Once you have built your plan, take the list of HVAC tasks that need to be done monthly, quarterly, or annually and include them in your maintenance management system. A good program should provide a comprehensive history of maintenance conducted on every piece of equipment, as well as the corrective cost incurred. By doing this you will be able to see trends and better predict what should be done in the future.

Once you read the manuals and consider your systems specific needs, you will have all the necessary information to get a successful preventive maintenance plan off the ground, one that is tailored to your buildings HVAC system and operating environment.

Source: Building Magazine