

Regular HVAC Filter Inspection and Replacement

Why is it important to inspect and regularly replace equipment filters? What is the right filter for your situation?

Background

Regular inspection and replacement of HVAC equipment filters is fundamental in reducing maintenance and operating costs of the equipment, and essential in providing the highest level of cleanliness and good air quality for the well being of the building occupants.

Clean air prevents staining of furniture through airborne dust. It reduces general maintenance costs by changing the frequency of required of washing window treatments, blinds, and fluorescent lights. It helps protect contents such as paintings, sculptures, and other items of historic or cultural value. It prevents lint build-up and potential fire hazard in ductwork, and extends the shelf life of food product in kitchen and storage areas from potential airborne mold and bacteria during processing operations.

There are many types of filters, for every application. Filters come in a wide variety of sizes, ranges of efficiency, depth and media types. There are filters that will withstand wet environments as well as filters designed for high velocity equipment. You need to make note of the specific needs of your facility, and make determination on the optimal schedule of replacement, in coordination with other regular equipment maintenance that may be taking place.

Solutions

1. Regularly (recommend monthly) inspect the equipment filters in your equipment. Make note of the size and type of filter you are presently using. Also make note of how dirty the filter becomes during that time frame. It may be necessary to get a better quality replacement if the filters are continually filthy during that time frame.
2. If you have a service maintenance contract with regular periodic inspections on your equipment, make sure the filters are inspected by those professionals during every visit. You may find it to be very adequate to replace filters as part of those regular inspections. In any event you should not go beyond three months (quarterly), in replacing them.

3. A nationally recognized organization (ASHRAE) has developed a rating system for filters generally known as MERV (minimum efficiency reporting value). When you go to the hardware store or equipment supply house, they will have filter products with respective MERV ratings. Generally the better (or higher) the rating, the more effective the filter is supposed to be with respect to filtering out the size of airborne particles, based upon the velocity of the air flow. Without getting too technical, you should look to procure the highest rating in relation to cost. By keeping track of how often you change the filters, and how dirty they seem to be, you may need to do a little trial and error to see which type filter works best, for the longest period of time, for the least amount of money. Generally a MERV rating range of between 5 and 12 is recommended for commercial installations. This would include church facilities utilizing both commercial and residential heating and cooling equipment.
4. Consider carefully the price of filters. While initially some filter choices may seem more expensive, they may actually be very economical over the life of the filter.

If your facility experiences continual issue with dust or moldy, musty air, then you may want to contact a reputable heating and cooling company to acquire a professional recommendation.

Contact LCEF to find an Architectural Advisory Committee member near you for additional information.



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