Personal Safety

Improving Your Indoor Air Quality Through Better Filtration

Brought To You by Filtration Group | Aug 17, 2022

The air you breathe inside a building is often less healthy than that found outdoors. This is due to the contaminants that build up as air is recirculated through the HVAC system. One of the most effective ways to improve indoor air quality and protect the occupants of your building is to upgrade the HVAC air filters that are used to treat the air.
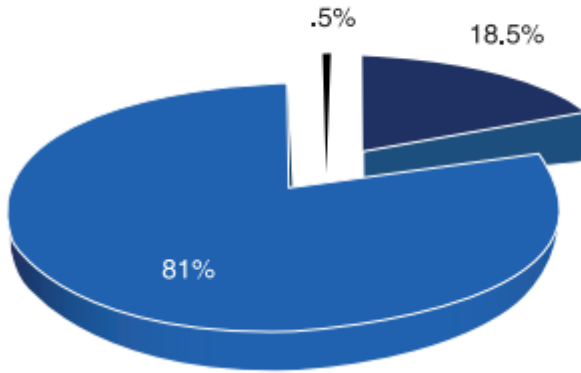
Equipment Protection is No Longer Good Enough

Air filters were originally developed to protect HVAC equipment and products like fiberglass furnace filters filled that need. However, with the increasing popularity of high efficiency AC coils and desire to provide improved indoor air quality, the time for those low efficiency fiberglass products has passed. Modern Pleated filters are now the standard for commercial HVAC systems and there are a variety of different types and performance levels.

Energy and Air Filters

For most buildings, the HVAC system represents the largest portion of the energy bill. By utilizing low resistance air filters and variable speed drives, you can significantly reduce the amount of energy consumed by the system.

Life Cycle Cost for Filters

.5%   18.5%   81%

Standard Commercial HVAC Filter Solutions

GOOD
Self Supported Pleated

- MERV 8
- Lower Cost to purchase
- Removes a wide range of particles to protect the HVAC equipment

BETTER
High Capacity Wire Backed Pleated

- MERV 10
- Lower resistance than many
- High Capacity Media lasts up to 50% longer than Standard Capacity
- Low Resistance to allow for better airflow

BEST
MERV 13 Pleated

- MERV 13
- Available in 1", 2", and 4" depths
- Meets the requirement for MERV 13 without needing to retrofit most units

MERV stands for **M**inimum **E**fficiency **R**eporting **V**alue and is a scale from 1 to 16. The higher the MERV rating, the better a filter is at removing small particles from the air. Wire backed pleated filters have a wire backing that allows for the use of media that has the ability to capture smaller particles. Self Supported Pleated contain no metal and are typically less expensive to purchase.

Higher Efficiency Solutions

If your HVAC system has higher efficiency filters, there are options to improve those as well. MERV 13 is typically the minimum efficiency seen in modern high efficiency systems, but the option to upgrade in both format and efficiency is available.

GOOD
Pocket Filter

- Available from MERV 11-15
- For use in constant air flow applications
- Low cost approach to high efficiency

BETTER
GeoPleat

- Slim Format for easy transport
- Rigid media pack for variable speed applications
- Replaces larger 12" filters without sacrificing performance

BEST
V-Bank Mini-pleat

- Available up to MERV 16
- Replaces most pocket, Rigid Cell, and Cartridge applications
- Lower operating costs with longer service life