THERMO KING

Air Filters for Bus HVAC Applications

Improve the air quality for passengers and reduce maintenance costs.

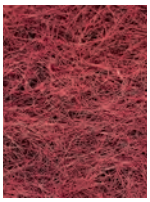
TRANE TECHNOLOGIES

PEACE OF MIND for your passengers and your equipment

In today's environment, transportation agencies are increasingly focused on reducing the risk posed by pollutants and airborne contaminants to deliver the safest environments for their customers. The MERV 13 filter is extremely effective against airborne pathogens, capturing even the smallest viral particles and bacteria from the air circulating through a transit bus.

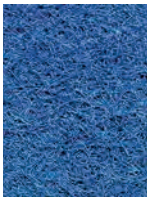
Thermo King's return air filters provide the maximum protection for both your passengers and HVAC equipment. Our filters prevent particulate accumulation on evaporator coils resulting in reduced road calls from HVAC system failures.

Thermo King offers air filters in several filtering efficiencies with different contaminant holding capacities.



MERV 2

- Made from 100% virgin natural fibers and bonded for added rigidity.
- Economical.
- No frame included.
- UL Classified as Class 2.



MERV 4

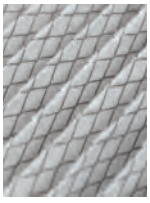
- Made from blue self-supporting polyester fiber with proprietary binder.
- No frame included.
- Fibers unaffected by moisture.
- Safe to handle, no fiberglass, sharp edges, flaking or shedding.
- Bi-directional airflow.

MERV 7

- Made of multi-layer non-toxic synthetic media and securely heat-sealed around the external periphery.
- 9 gauge metal internal support wire frame.
- Provides gradient density for maximum contaminant loading and incorporates an internal tackifier for enhanced performance.
- Uni-directional airflow.
- UL Classified as Class 2.

MERV 10

- Made of four-layer non-toxic synthetic media and securely heat-sealed around the external periphery.
- 9 gauge metal internal support wire frame.
- Employs two non-migrating tackifiers, an internal wet tackifier and a super-tackifier as the final layer
- Uni-directional airflow.
- Self-gasketing design prevents air by-pass.



MERV 13

- Electrostatic charged layer provides reduced pressure drop and prolonged efficiencies.
- Rust resistant galvanized-dipped expanded metal support grid laminated to media to ensure pleat spacing and support.
- Moisture resistant frame maintains rigidity in high humidity environments.
- Double-walled frame structure and reinforced corners ensure rigidity in the toughest applications.
- Listed and tested in accordance with UL 900 standard.

All air filters meet the standard set forth by the Federal Motor Vehicle Safety Standard 302 (49 CFR 571.302) and American Society of Heating, Refrigerating and Air-Conditioning Engineers Standard 52.2-2007.

Thermo King filters are disposable. Refer to the Thermo King maintenance manual for specific change intervals for your HVAC unit.

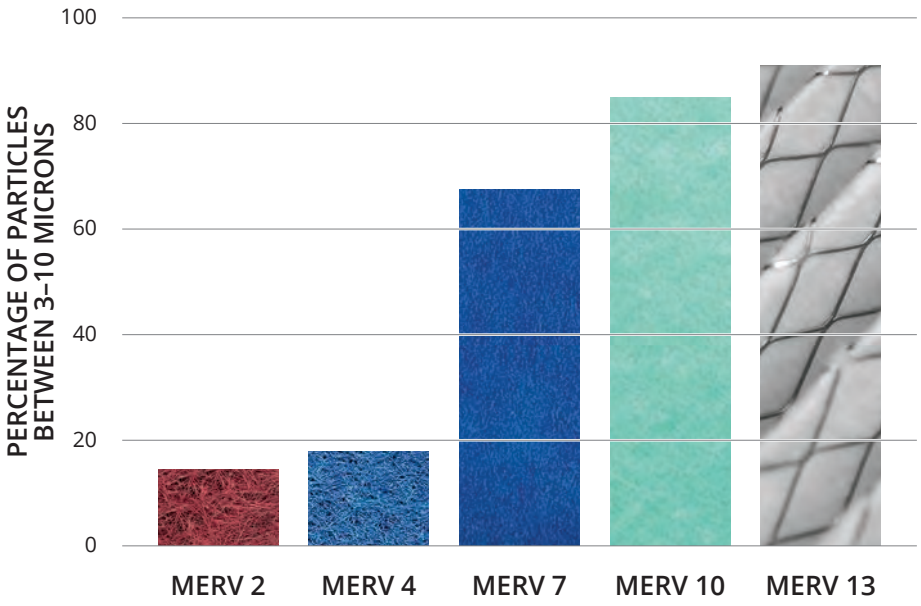
HOW AN INEFFICIENT FILTER CAN AFFECT YOUR BOTTOM LINE

Non-OEM filters can create many downstream impacts to the reliability of your Thermo King system. Over time, this could make your system work harder than it needs to and lead to **early system component failure**.

Other pitfalls:

- Using filters that create airflow restrictions in the HVAC system leads to **reduced cooling ability** and creates the potential for **evaporator coil freeze**.
- Low MERV and loose-fitting filters allow for air bypass and results in **additional preventative maintenance procedures**, such as coil cleaning.
- Dirty evaporator coils reduce the cooling capacity and **decrease efficiency** of the system.

MATERIAL EFFICIENCY TO BLOCKING CONTAMINATIONS



What MERV rating means in air filtration

A clear strategy to mitigate in-cabin contaminant exposure to passengers and reduce HVAC maintenance costs is to use a quality filter with a high Minimum Efficiency Reporting Value (MERV) and efficiency rating.

A filter with a higher rating is more effective at filtering out contaminants and small particles.

MERV RATING LEVELS

Between 1–4
CAPTURES: less than 20% of particles between 3–10 microns in size
INCLUDING: Dust Mites and Pollen

Between 5–8
CAPTURES: 20%–70% of particles between 3–10 microns in size less than 20% of particles between 1–3 microns in size
INCLUDING: Mold Spores and Cement Dust

10
CAPTURES: 85% of particles between 3–10 microns in size 50–65% of particles between 1–3 microns in size
INCLUDING: Mold Spores and Cement Dust

13
CAPTURES: 90% of particles between 3–10 microns in size 85% of particles between 1–3 microns in size 50% of particles between 0.3–1 microns in size
INCLUDING: Bacteria and Smoke

DID YOU KNOW?

A sneeze droplet is between 0.5–12 microns in diameter.

A sneeze may produce as many as 40,000 droplets.

https://www.ncbi.nlm.nih.gov/books/NBK143281/

LET US BE YOUR FIRST LINE OF DEFENSE AGAINST CONTAMINATED AIR

We understand that you are working tirelessly to provide a safer environment for your customer. Air filters are an essential part of that process. Let us help you provide cleaner, higher-quality air, and keep your HVAC system clean and operating efficiently.

For more information visit thermoking.com/bus, or if you need assistance selecting a filter for your system, contact your local Thermo King representative.

THERMO KING

Thermo King—by Trane Technologies (NYSE: TT), a global climate innovator—is a worldwide leader in sustainable transport temperature control solutions. Thermo King has been providing transport temperature control solutions for a variety of applications, including trailers, truck bodies, buses, air, shipboard containers and railway cars since 1938. For more information, visit *thermoking.com* or *tranetechnologies.com*.

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