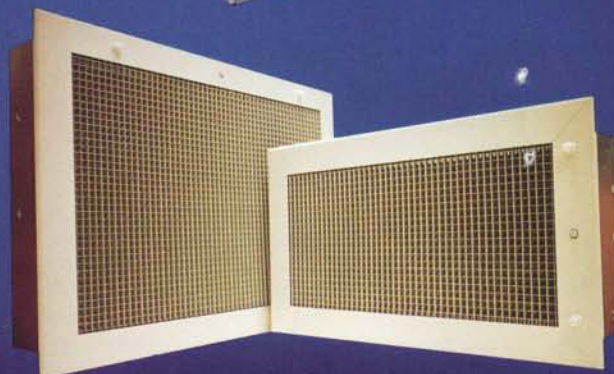




RESIDENTIAL AIR QUALITY

## *The Guide to Residential Indoor Air Quality*

*Now the company that brought you the best Electronic Air Cleaner in the business brings you the best Media Air Filter in the business.*



*Together, we can find the answers.*

**Honeywell**



# unless they include a Honeywell Electronic Air Cleaner or Media Air Filter.

## How Clean is Clean Enough?



### **CLEAN... Media Air Filter.**

Effectively removes 25 to 35 percent<sup>A</sup> of airborne particles.

Highly efficient. Traps particles to 0.5 micron in size.<sup>B</sup> Ideal for any standard-efficiency heating/cooling system.

Filters last up to one year.

Can be upgraded to Electronic Air Cleaner at any time.



### **CLEANER... Electronic Air Cleaner.**

Effectively removes 70 to 95 percent<sup>A</sup> of airborne particles.

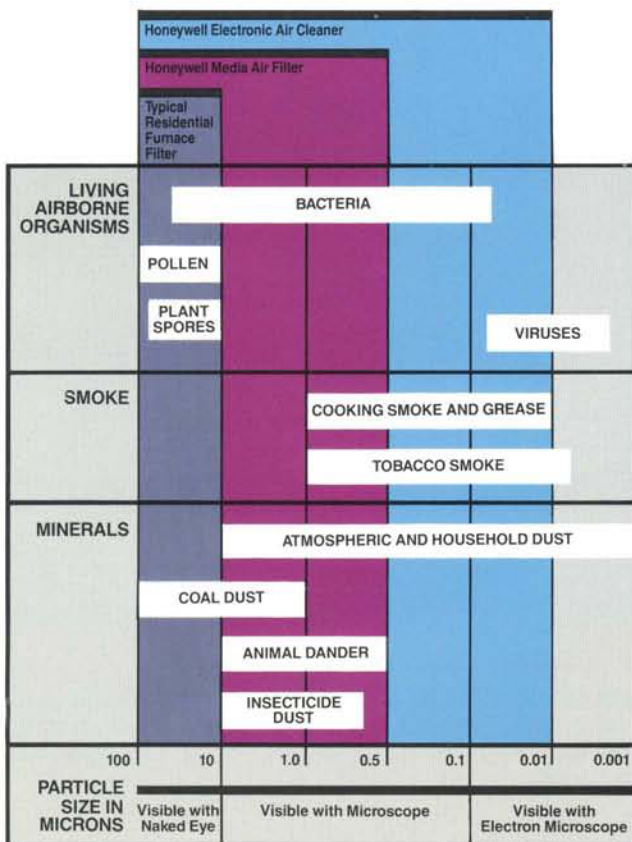
Highest efficiency. Effectively traps particles to 0.01 micron in size.

Wash "super cells" in dishwasher or laundry tub and reuse.

Ideal for heat pump or high-efficiency heating/cooling systems.

<sup>A</sup>As measured by Atmospheric Dust Spot Method, ASHRAE Standard 52-76.

<sup>B</sup>Media Air Filter efficiency varies with size. Electronic Air Cleaners are much more effective on particles below one micron.



### **Media Air Filter or Electronic Air Cleaner... Which is Better?**

Electronic Air Cleaners are far more efficient at removing very small (less than one micron—see particle chart) dirty air particles than Media Air Filters, but cost more for this extra performance.

If you're concerned about the most effective removal of very small particles like tobacco smoke or cooking smoke from the air, then only an Electronic Air Cleaner will do.

There is one other difference. Media Air Filters cost less initially, but do require annual filter replacement. Electronic Air Cleaner "super cells" can easily be re-washed in a dishwasher or laundry tub and reused almost indefinitely.

Consider the size of the particles you want to remove and the price you're willing to pay. Then choose the Honeywell unit that is best for your needs.

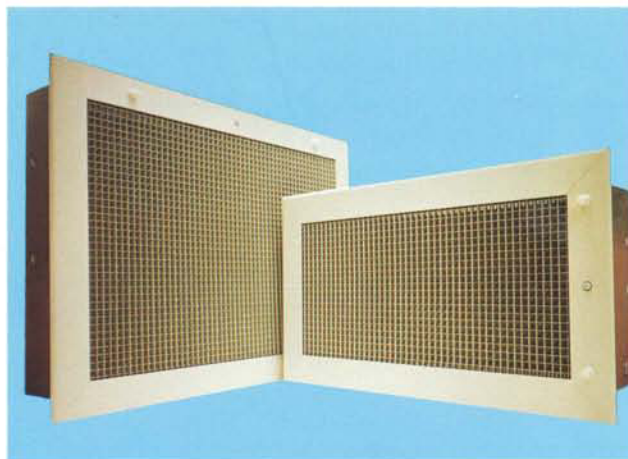
Air cleaning efficiency varies with particle size. The efficiency of residential furnace filters decreases rapidly on particles below 100 microns, and they are virtually ineffective on particles below 10 microns. Honeywell's Media Air Filter is 5 to 10 times more efficient than a furnace filter. It's virtually 100% effective on particles above 10 microns, and effectively removes most dirty air particles down to 0.5 microns. Highest efficiency is achieved with electronic air cleaning, which effectively removes particles up to 0.01 micron, so small an electron microscope is required to see them.



### **F52 Return Grille Electronic Air Cleaner.**

The F52 Return Grille Electronic Air Cleaner is designed for individually heated and cooled condominiums, apartments or town houses where one central air return is located on a wall, ceiling or closet. Among its many applications are hydronic or "west coast" systems where spider ductwork is run through attics and closets.

A system monitor light tells the homeowner when the unit is operating. An automatic interlock cuts power if the air cleaner door is opened.



### **F56 Console Electronic Air Cleaner. Portable Clean Air!**

Now you can take fresh air anywhere in the home. The lightweight F56 Console Electronic Air Cleaner moves to any room that requires air cleaning. Reduces cooking smoke in the kitchen, tobacco smoke in the living room, or creates more pleasant sleeping conditions in the bedroom.

With the styling of fine furniture, the F56 fits well anywhere in the home! An activated carbon filter absorbs odors and a lighted on/off switch indicates when the unit is on.



### **Residential Air Quality Product Selection Guide.**

ITEM COMPARED	F66A MEDIA AIR FILTER	F50/52 ELECTRONIC AIR CLEANER
Annual maintenance/operating costs.	Replacement filter \$30-\$40 per year.	Cost less than 40W light bulb to operate. Periodically wash cells in dishwasher or laundry tub.
Use with standard efficiency heating/cooling appliances.	Recommended.	Recommended.
Use with high efficiency heating/cooling appliances and heat pumps.	Recommended only with S830A Clogged Filter Indicator.	Highly Recommended. Superior (up to 95 percent) efficiency keeps coils and heat exchangers cleaner to maintain high efficiency.
Effective against these common dirty air particles: <ul style="list-style-type: none"><li>• Pollen/plant spores</li><li>• Tobacco smoke</li><li>• Dust 0.5 to 1 micron</li><li>• Cooking smoke/grease</li><li>• Bacteria</li><li>• Viruses</li><li>• Particles less than 0.5 microns</li></ul>	<b>MEDIA FILTER</b> Yes Partial Partial Partial Partial No No	<b>ELECTRONIC AIR CLEANER</b> Yes Yes Yes Yes Yes Yes Yes
Tested average efficiency—Atmospheric Dust Spot Method (ASHRAE Standard 52-76, ARI 680-70)	25-35 percent	70-95 percent
Pressure drop (in inches water column)	1400 cfm = 0.15 2000 cfm = 0.25	1400 cfm = 0.10 2000 cfm = 0.21
Underwriter Laboratories, Inc., listed	Yes	Yes
Available models	In-Duct (1 size) (25-3/8x22-3/4)	In-Duct (3 sizes) (18x25, 22x14, 22x25) Return Grille (2 sizes) (13x26, 22x29)
Can be upgraded to Electronic Air Cleaner	Yes	Not applicable.

Essential information to help you select the right Honeywell Residential Air Quality product for your new homes is above. If you subcontract the heating/cooling systems in your new homes, be sure to give this guide to your subcontractor.

### **For more information:**

Call toll-free **800-328-5111, ext. 7011**. In Minnesota, call collect, **612-870-2142, ext. 7011**. Or write, Honeywell, Inquiries Department, Honeywell Plaza, Minneapolis, MN 55408.

**Honeywell**



# The comfort conditioning systems you install in your new homes are only half complete...

Most comfort conditioning systems in new homes do only half the job. True, they heat and cool the air for indoor comfort. But they lack the important "other half" of a complete comfort conditioning system—a Honeywell Electronic Air Cleaner or Honeywell Media Air Filter.

## **A quality indoor environment includes clean air.**

At one time the few people concerned with clean indoor air were those with hay fever or allergies. Today, everyone is concerned. Especially when they buy a new home. Today's building techniques—super insulation, sealed-up walls, weatherstripping, multiple-glazed windows—all combine to create a tight, energy efficient home.

But an energy-tight home has fewer air exchanges. Little "new" air enters, while old, stale air gets trapped in the home with nowhere to escape, making the home environment unpleasant.

In addition, microscopic particles of dirt, dust, smoke and pollen—particles far too small for the eye to see—are damaging the environment of new homes. These particles collect on windows, furniture, draperies and carpeting, dulling the bright, clean look of the new homes.

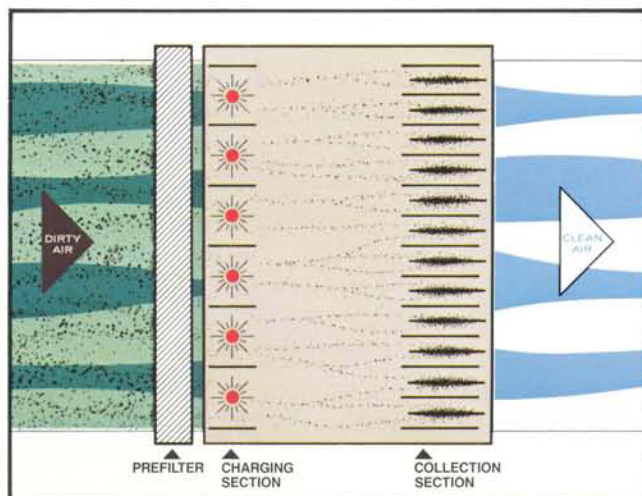
## **Two Effective Ways to Clear the Air**

### **ZAP DIRT**

Electronic Air Cleaner "super cells" trap millions of airborne dirt, dust, pollen and smoke particles in your indoor air through a two-stage process called "electrostatic precipitation." It is up to 95% efficient; unlike a media filter, its efficiency varies little with particle size.

In the first stage, large particles entering the Electronic Air Cleaner are caught on the prefilter screen. Particles that get through the prefilter receive an intensive electrical charge in a charging section.

In the second stage, charged particles pass on to the "collection section" where oppositely charged collection plates attract them like magnets attract steel.



But something can be done.

## **Remove up to 95% of dust, dirt, smoke and pollen before they can soil your new homes.**

Honeywell's Electronic Air Cleaner is up to 95% efficient at removing dirty air particles and the Media Air Filter is up to 35% efficient (duststop furnace filters are 10% efficient at best). Both units trap invisible air particles before they get a chance to soil walls, drapes and furnishings. Homes stay cleaner longer.

Your customers will do routine cleaning and dusting less often because floors, walls and windows stay cleaner. The interval between painting and redecorating is also stretched, saving money on redecorating supplies.

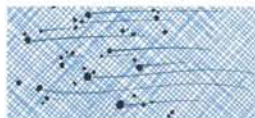
And an installed Electronic Air Cleaner or Media Air Filter will add value to your home.

## **An extra benefit—protects high efficiency equipment.**

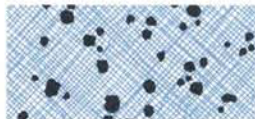
High-efficiency heating/cooling systems or heat pumps depend on cleanliness to maintain their initial high-efficiency. An Electronic Air Cleaner or Media Air Filter removes most particles before they coat critical coils or heat exchangers. Equipment efficiency stays high, saving the homebuyer substantially on energy costs.

### **TRAP DIRT**

Honeywell's Media Air Filter is made of laboratory grade fiberglass that is 5 to 10 times more efficient than a standard fiberglass filter. It works to clean air three ways...



1) **IMPACTION.** When fast-moving particles encounter a filtering media, they can't change direction quickly enough to follow the airflow through the filter. Particles "impact" and stick to the filter fiber.



2) **STRAINING.** Some dirty air particles are too large to pass between the loosely packed filter fibers. The fibers catch and hold these particles like a strainer.



3) **DIFFUSION.** Random collisions with moving air molecules "bump" very small dirty air particles—so small they might otherwise pass through—into the filter fibers where they become trapped.