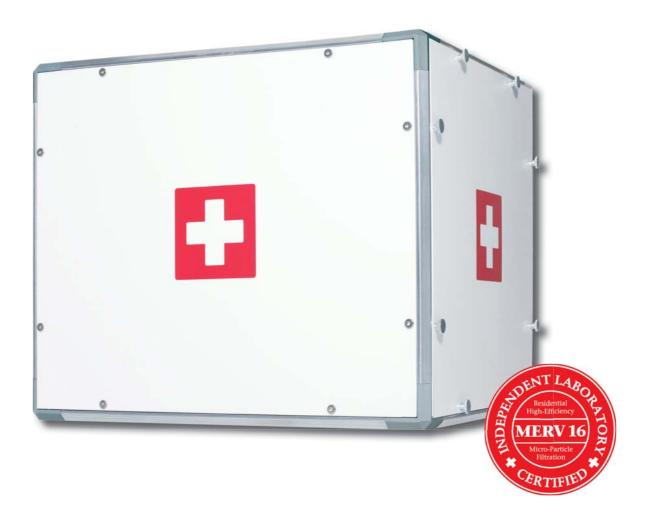




# Celebrate Your Freedom from Allergens & Particulate Pollution



## The No.1 Rated In-Duct Air Purification System



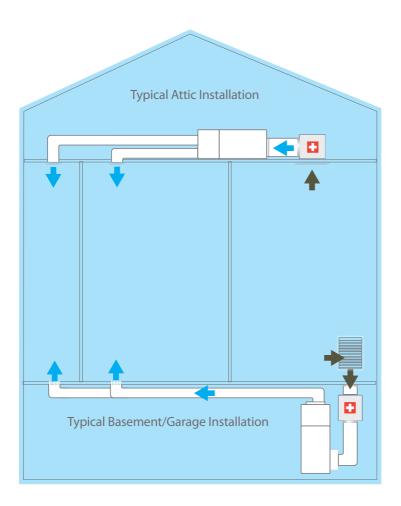
### **Highest Efficiency – Lowest Air Restriction**

The Perfect 16<sup>™</sup> is the only system that is rated a perfect MERV 16, the highest filtration rating possible for air conditioning filters. MERV stands for Minimum Efficiency Reporting Value. The MERV system was created by the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) to independently verify how well an air filtration system really cleans the air. Until the Perfect 16, no residential/office air cleaning system had ever achieved this ultra-high rating.

While efficiency is very important, low air restriction is equally important. Conventional air filters can decrease the airflow of your central heating and air conditioning system by as much as 50%. As a result, the forced air system has to work harder and longer to cool or heat your home. Increased energy consumption adds to your monthly electricity bill. In contrast, the Perfect 16 has the highest filtration efficiency coupled with one of the lowest air restrictions\* in the industry. In fact, it actually improves the performance of your heating and air cooling system when compared to conventional air cleaners.

The Perfect 16 powerfully removes more allergens, bacteria, dust, pollen and other airborne contaminants that are detrimental to your health. It's the perfect system for people who suffer from allergies, asthma or for people who simply want to breathe the cleanest air possible. Let IQAir® transform your home or office into a healthy living and work space.

### **How It Works**

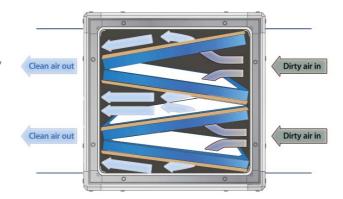


### **Seamless Integration**

Unlike other air cleaning systems, the Perfect 16<sup>™</sup> is seamlessly retrofitted into your existing heating and/or air conditioning system. It cleans 100% of the air flowing through the system. No partial cleaning or limited bypass installation.

Air is drawn through the return grill typically located in a common area such as a hallway, then filtered through pleated micro-fiber filtration panels. This traps harmful micro-particles each and every time the air circulates through the system.

Purified air goes through your central air handling unit where it



is distributed to every corner of your home or office. The air gets filtered through this system up to 125 times per day.

### **IQAir: First in Air Quality**



In 1963, the brothers Klaus and Manfred Hammes introduced the world's first residential air cleaner. It was designed to help people who had coal burning stoves remove dust and soot from the air. Soon they discovered that people who had their air cleaners were experiencing better health. Manfred, a life-long allergy and asthma sufferer, was the first person to benefit from his own machine.

### Swiss Craftsmanship -The Highest Quality



Crafted, assembled, individually inspected and tested at IQAir's Swiss factory, each Perfect 16™ meets our high standards before it leaves our facility. IQAir expert craftsmen construct each unit with dedication and extreme attention to detail.

IQAir's passion for the highest product quality extends to our expert, professional installation practices.

### The Perfect 16™ Delivers up to 50 Times More Filtration Power



### The Secret is the Revolutionary V2 Design



The V2 Difference: Perfect 16's revolutionary V2 design

Most air filters have a single flat surface that fits squarely into the housing of the system. The Perfect 16's filters are positioned in a double "V" shape. This V2 design allows the Perfect 16 to use 16 square metres of filter media. This is up to 50 times more filtration material than that of ordinary filtration systems. The additional surface area creates higher filtration efficiency, while allowing more air to pass through the system. This truly innovative design with substantially increased collection area provides superior filtration power over ordinary filtration systems.

### More Collection Area Provides Better Filtration



### Extreme Makeover: Home Edition



When the popular ABC television show Extreme Makeover: Home Edition (French title: "Les Maçons du Coeur") needs to create an ultra-clean home for a deserving family with health concerns, they turn to the world's leader in advanced air cleaning solutions.



Over the years, IQAir is proud to have been able to improve the quality of lives for so many families through the power of clean air.

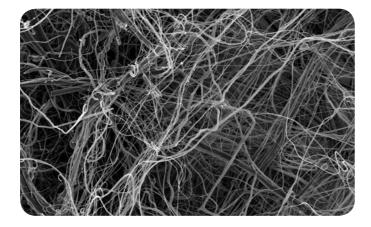


Extreme Makeover: Home Edition ean Air Team led by Frank Hammes, President of IOAir®

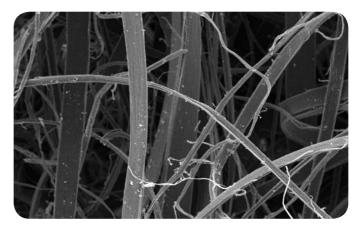
### Featuring Unique AMF Technology

The Perfect  $16^{\text{TM}}$  is the first in-duct air cleaning system to utilize advanced micro-fiber filtration technology. Filter fibers are 10 times thinner than those used in standard air filters. This allows air to easily pass through the filters, while the ultra-fine threads create an almost impenetrable barrier for pollution particles. The result is an air filter that sets a new standard for air cleaning efficiency as well as airflow.

### Perfect 16<sup>™</sup> micro-fibers



### Conventional air filter fibers



100x magnified images generated on scanning electron microscope by Washington University School of Medicine.

### No Filter Replacements for 3 Years!



Most in-duct air filtration systems and furnace filters require monthly changing and many even require weekly cleaning. The Perfect 16 takes the worry and hassle out of frequent filter changes and servicing.

The Perfect 16's extra large filter surface area is so efficient and long lasting that you won't need service or replacements for up to three full years.\*

\*At average pollution levels, your filters will last approximately 3 years based on 50% HVAC usage.

### **Compare for Yourself**

Many manufacturers make impressive advertising statements about the performance of their air cleaning systems. Unfortunately, these claims often fall far short of their real world performance. This is because their statements are based on theoretical efficiencies – not what their air cleaners can actually achieve in real homes and offices.

This is why IQAir® has scientifically validated the performance of the Perfect16™ in real-life applications. Take a look at how the Perfect 16 outperforms other types of in-duct air cleaners.

Special Features	Panel Filter	Electronic Air Cleaner	Enhanced Media Filter	HEPA Bypass Air Cleaner	IQAir Perfect 16™
MERV 16 tested & certified					<b>√</b>
Captures over 95% of bacteria					<b>√</b>
Captures over 95% of pet allergens					<b>√</b>
Captures over 95% of mold spores					<b>√</b>
Captures over 95% of dust and pollen					<b>√</b>
Filters 100% of central air (no bypass)	✓	✓	✓		✓
Ultra-low air restriction				<b>✓</b>	<b>√</b>
100% ozone-free technology	<b>✓</b>			<b>✓</b>	<b>√</b>
100% ion-free technology	<b>√</b>			<b>✓</b>	✓
Medical-grade air cleaning					<b>√</b>
Uses no electricity	<b>√</b>				<b>√</b>
Maintenance-free for up to three years					<b>√</b>
Lifetime clean duct guarantee					✓
Absolutely silent	<b>√</b>		<b>√</b>		<b>√</b>

### IQAir - The No.1 for Hospitals



IQAir® makes the No.1 air purifier used in hospitals worldwide. Many people consider hospitals to be the most critical health environment – a place where clean air literally means the difference between life and death. Doctors and other caregivers need to be protected from cross contamination of infectious disease while they care for patients. Patients need to be protected from viruses, bacteria, and other microscopic airborne pollutants that can hinder their recovery. Patients with severe allergies and asthma need relief from their respiratory symptoms. Patients with lung infections need an environment that is free of airborne contaminants. IQAir is very proud of its history of providing hospitals with the very best in air filtration systems.

In a comprehensive research study published in the February 2010 issue of the American Journal of Infection Control, it was shown that IQAir systems reduced the rate of airborne infections (invasive aspergillosis) by over 50%. The research also concluded that the cost of procuring IQAir systems will be offset many times by the huge cost savings associated with the decreases in patient infections.

### Product of the Year

#### **IQAir's In-Duct Air Cleaning System Wins Reviewboard's Product of the Year**

Written by Philip Ferreira, Editor-in-Chief of Reviewboard Magazine

The home we tested the Perfect 16<sup>™</sup> in was immaculate, but like many homes it had a hidden problem – unhealthy indoor air. We used advanced laser particle counting equipment before and after installation so that our readers could see what they could really expect if they had this system installed in their own home.



The Perfect 16 delivers the highest level of air cleaning effectiveness available to homeowners. Reviewboard tested the system in a real home, not in a laboratory, and we saw an almost 95% improvement in air quality.

The Perfect 16 retrofits into existing heating and/or air conditioning (HVAC) systems. It uses the existing duct work of a home to provide clean air to every room of the house. The Perfect 16 utilizes IQAir's Advanced Micro-Fiber Filtration technology. The ultra-fine fibers used in the Perfect 16's filters are ten times thinner than the fibers used in standard air filters. This allows air to pass easily through the filter mesh while creating an almost impenetrable barrier for common household pollutants like dust, pollen, mold spores, allergens, even bacteria and viruses.

We also noted that the Perfect 16 does away with a major annoyance of other whole-house air purifiers: frequent cleaning or filter changes. Most air purifier systems require cleaning or filter changes every few months. The Perfect 16 is filter replacement and maintenance free for up to three years.

The Perfect 16 utilizes the circulation of a home's forced air HVAC system. It does not require additional electricity to operate, and unlike electronic air purifiers, it produces absolutely no ozone.

The Perfect 16 is a truly amazing product. In our judgment, it is the best whole-house air purification system on the market. It is exceptional in its air cleaning effectiveness and ultralow maintenance. It's a true winner and deserving of Reviewboard's Product of the Year award.

The Perfect 16 can be seen Sundays on ABC's popular television show "Extreme Makeover: Home Edition" (French title: "Les Maçons du Coeur"), as IQAir® helps the show's Design Team build healthy homes for deserving families. It is also currently featured in "Esquire House 360" in Beverly Hills, California.

About Reviewboard – Alexa ranking lists Reviewboard Magazine as the third largest consumer product review publication in the world. Their product reviews are read each year by more than 110 million readers in 54 countries worldwide. Alexa also lists Reviewboard as the #1 user ranked consumer publication in the world.

### High-Quality, Expert Installation

The IQAir authorised installers manage your Perfect 16<sup>™</sup> installation process – from the pre-installation evaluation to the final system testing.



#### **Step 1: Pre-Installation Evaluation**

The IQAir autorised installer arranges the pre-installation evaluation with you and inspects your HVAC system for compatibility and tonnage to determine which Perfect 16 model(s) you'll need. Larger homes and offices (over 230 m<sup>2</sup>) usually have more than one HVAC system.



#### **Step 2: System Installation**

Upon completed evaluation, an appointment to install the unit(s) is arranged. The IQAir authorised installer will place the Perfect 16(s) into your HVAC system(s). In less than a day, your Perfect 16 is up and running.



### Step 3: Post-Installation Testing and Verification (subject to availability)

After the installation, your system will be tested and verified with an advanced laser particle counter. The system performance will be detailed in a personalised owner's certificate. Within one hour after installation, the Perfect 16 provides at least 10 times cleaner air – guaranteed!

### **Frequently Asked Questions**

#### Can the Perfect 16 in-duct air filter system be installed in any home or office?

The Perfect 16 can be installed in the vast majority of homes and offices with forced air heating, ventilation and air conditioning systems (HVAC). If for any reason it is determined that your home or office is not suited for a Perfect 16 in-duct air filter system, we will be happy to suggest an alternate IQAir® product to suit your particular needs.

#### Do I need to run my heating or air conditioning system for the Perfect 16 to work?

No. The Perfect 16 works whenever you run your HVAC fan. You don't need to run your heating or air conditioning. Simply place your thermostat control setting to "Fan On".

#### Does the Perfect 16 make noise?

No. The Perfect 16 is absolutely silent.

#### Does the Perfect 16 affect the look of my house?

No. The system is out of view in your attic, basement, or garage, depending on where your central forced air system is located.

#### Can I replace the filters myself?

Yes, you can replace the filters yourself. However, we recommend that your IQAir Authorized Installer replace your filters, so that your system can be retested and verified at the time of filter replacement.

#### Does running the Perfect 16 increase my electric bill?

No. The Perfect 16 makes your HVAC system run more efficiently than with a conventional air cleaner. This can actually lower your electricity bill.

#### How long does the installation take?

The typical installation for the Perfect 16 is 4-6 hours. Actual time required may vary.

#### Does the Perfect 16 eliminate my existing air filters?

Yes, once the Perfect 16 is installed, you can dispose of any other filters that were previously used in your HVAC system.

#### What difference will the Perfect 16 make in your home or office?

Take a look at the results achieved in this old home built in 1928. It is hillside property in Los Angeles, a city known for its poor air quality. Indoor air quality specialists used advanced laser particle counters to measure the home's indoor air quality before and after the installation. The instruments recorded the microscopic airborne pollution particles in the home including dust, mold, pollen, bacteria, and other irritants. Before the installation the air pollution levels throughout the home were at approximately 1.5 million particles per cubic foot. After the Perfect 16 was installed, the air quality was improved by over 90% in just 60 minutes. After 90 minutes, air quality was improved by over 95%. The home went from an unhealthy indoor environment to one of America's cleanest homes in just an hour and a half.



Air Pollution Reduction with a Perfect 16<sup>TM</sup>

Airbone Particle Concentration (s0.3 micron, per cubic foot)

1'250'000

750'000

250'000

Pollution Reduction Rate

0 15 30 45 60 75 90
Time (minutes)

This home's air quality was improved by over 95% within 90 minutes of installation, and that's a typical result.

Location: Los Angeles County, California | HVAC System airflow: 1200 cfm (2040 m³/h), Air Cleaning: Perfect 16 ID-2225

### Minimal Resistance - Maximum Performance

While high efficiency is an important performance criteria for an in-duct filter system, it is equally important that the filter has a minimal impact on the airflow of the air handling system. The IQAir Perfect 16 offers the highest filtration efficiency coupled with one of the lowest air resistance values for maximum air cleaning performance.

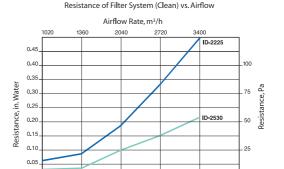
#### Airflow vs. Filter Resistance

	Supply Airflow vs. Filter System Resistance				
	ID-2225		ID-2530		
cfm (m³/h)	in H <sub>2</sub> O	Pa	in H <sub>2</sub> O	Pa	
600 (1020)	0.06	14	0.03	8	
800 (1360)	0.09	21	0.04	12	
1200 (2040)	0.18	44	0.10	24	
1600 (2720)	0.33	82	0.15	38	
2000 (3400)	0.49	122	0.22	54	

### **Efficiency for Various Particle Sizes**

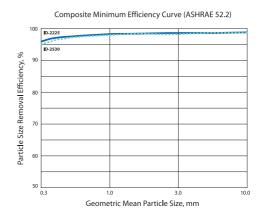
Composite Minimum Efficiency Table (%)				
Size Range (µm)	Efficiency ID-2225*	Efficiency ID-2530*		
0.30 - 0.40	96.2	94.9		
0.40 - 0.55	96.6	95.9		
0.55 – 0.70	97.0	96.3		
0.70 - 1.00	97.2	96.6		
1.00 – 1.30	97.4	96.8		
1.30 – 1.60	97.5	97.2		
1.60 – 2.20	97.8	97.5		
2.20 – 3.00	98.0	97.7		
3.00 – 4.00	98.3	98.0		
4.00 - 5.50	98.4	98.5		
5.50 – 7.00	98.6	98.1		
7.00 – 10.00	98.6	98.7		

<sup>\*</sup>Perfect 16 ID-2225 at 1400 cfm (2380 m<sup>3</sup>/h)



Airflow Rate, cfm

2000



### **Technical Specifications**

0.00.

	Perfect 16 ID-2225	Perfect 16 ID-2530	
Dimensions (width x lenght x height)	54 x 64 x 54 cm	64 x 74 x 54 cm	
Weight	approx. 27 kg	approx. 33.5kg	
Power Requirements	None, no electrical parts	None, no electrical parts	
Rating	MERV 16 rated at 295 fpm (2000 m³/h)	MERV 16 rated at 192 fpm (3400 m³/h)	
Efficiency	≥95% for particles 0.3µm and greater ≥75% for particles 0.003 µm and greater	≥95% for particles 0.3 µm and greater ≥75% for particles 0.003µm and greater	
Maximum Recommended Airflow	2040 m³/h	3400 m³/h	
Pressure Drop	0.18" wc at 2000m³/h	0.22" wc at 3400 m³/h	
Insulation	Pre-installed, fiberglass-free aluminum- foam insulation	Pre-installed, fiberglass-free aluminum- foam insulation	
Minimum Efficiency Reporting Value (MERV)	MERV 16 @ 498 fpm (2.5 m/s)	MERV 16 @ 492 fpm (2.5 m/s)	
Rated Airflow	1400 cfm (2380 m³/h)	2000 cfm (3400 m <sup>3</sup> /h)	
Composite Average Efficiency	E1 (0.3 – 1.0 μm) = 96.7% E2 (1.0 – 3.0 μm) = 97.7% E3 (3.0 – 10.0 μm) = 98.5 %	E1 (0.3 – 1.0 μm) = 96.9 % E2 (1.0 – 3.0 μm) = 97.8 % E3 (3.0 – 10.0 μm) = 98.3 %	
Media Area	170 sq ft. (16 m <sup>2</sup> )	210 sq ft. (19.5 m <sup>2</sup> )	

<sup>\*</sup>Perfect 16 ID-2230 at 2000 cfm (3400 m<sup>3</sup>/h)

### The Leading Air Filtration Specialist

For over 50 years, the IQAir Group has been an industry leader for indoor air quality.

IQAir systems are built exclusively in Switzerland to the highest quality standards and in accordance with strict international norms.

Leading institutions around the world are relying on IQAir to protect against airborne infectious diseases, toxic chemicals and particulate contaminants.

Whenever the best air quality is required, IQAir provides a powerful solution.



### **Applications**

IQAir® systems are used in over 70 countries worldwide in a great variety of indoor environments:

### Medical & Healthcare

- clinics/hospitals
- IVF-Laboratories
- medical practices
- microbiological & research laboratories
- pulmonary medicine
- pharmacies
- · sanitary facilities
- · waiting rooms



### **Public & Institutional**

- airports
- archives/libraries
- cafeterias
- military
- museums
- nursing homes
- places of worship
- schools & kindergartens

### **Trade & Industry**

- bars/restaurants
- data centres/network server rooms
- fitness studios & wellness centres
- hotels
- laboratories
- mechanical workshops
- offices/open-plan offices





For more information, contact your IQAir® Authorized Installer or Retailer:



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Email: Info@CommercialAirFiltration.co.uk

To find your local autorised installer or retailer please contact us at: www.iqair.com/uk