

IQAir – Scientifically Proven Air Cleaning Performance

In a market where most air purifiers do not live up to their exaggerated marketing claims, the IQAir Group takes a very different approach to ensure that its products can make a real difference on people's lives. The unique 55-year track record in the filtration industry enables IQAir not only to design and build superior air cleaning systems, but also to offer air cleaning solutions that go far beyond what other brands offer in terms of

- a) actual performance and
- b) proof of actual performance

IQAir offers a unique 3-step approach to scientific testing and independent verification of air cleaning performance:

1. Individual Testing

We believe that individual testing is the ultimate quality control and the very best way to ensure that every compact IQAir room air purifier we manufacture (e.g. the HealthPro Series) actually meets the advertised performance targets. For that reason, IQAir individually tests and certifies every unit for:

- a) actual filtration efficiency for airborne particulates $\geq 0.3 \mu\text{m}$ at maximum fan speed and
- b) actual airflow at each fan speed

A hand-signed *Certificate of Performance* provides details of the unit's individual test performance. To our knowledge IQAir is currently the only manufacturer worldwide to test 100% of its room air purifiers before they are released for sale.

2. Independent Testing

IQAir has its air cleaners regularly tested by independent laboratories in accordance with applicable test standards and also in real-life applications. Here are some examples:

Filter Tests in Accordance with European Norm EN1822 by Fiatec GmbH, Germany. In this challenging test the IQAir HealthPro 250's HyperHEPA filter passed the HEPA class H13 filter classification which means that even the smallest airborne particles and microorganisms are removed with an absolute minimum efficiency of 99.95%.

Scientifically Proven 99.9% Virus Reduction

The outstanding effectiveness of the HealthPro models against airborne viruses was confirmed by the independent European test laboratory, *Airmid Healthgroup* which is an ISO/IEC 17025 accredited testing facility. Within only 10 minutes both HealthPro models (HealthPro 100 and HealthPro 250) reduced the viral load in a 28.5 m³ test chamber by over 99.9%, eliminating the virus beyond the measuring threshold. The test was carried out with H1N1 (Influenza A) viruses, which are in the same size range as SARS-CoV-2 and used by microbiology laboratories as a safe test surrogate for the corona virus.

Real-Life Research Study in Schools

Over the past decades, the IQAir Group has gained extensive experience in working with government agencies to provide air cleaning technology that significantly improves the air quality in hospitals and schools. A research study published at the *Indoor Air* conference in 2012 confirmed that IQAir filtration systems are able to protect classrooms from up to 96% of outdoor diesel soot, PM 2.5 and ultrafine particles.

3. Peer-Reviewed Research Article Attests Substantial Reduction in Infection Rates

In an independent research study published in February 2010 in the *American Journal of Infection Control* it was shown that IQAir HyperHEPA® systems reduced the rate of invasive aspergillosis infections by 50%. The research was conducted by a team of doctors and scientists at *Singapore General Hospital* over a 2.5-year period with 48 units IQAir HealthPro air purifiers. The researchers concluded that IQAir systems are an effective and powerful tool for hospital infection control and that their deployment will enable hospitals to realise massive cost savings by reducing infection rates:

"Compared with patients without IA [invasive aspergillosis], patients with IA have an average excess duration of hospitalization of 12.3 days and an excess cost of \$ 51'779. Thus, the deployment of [IQAir] portable HEPA units is a very cost-effective strategy."

In view of the fact that invasive aspergillosis is often fatal, with mortality rates ranging from 30% to 95%, and the enormous costs associated with its treatment, IQAir systems can save lives as well as costs.

In view of these research findings, the elaborate tests that were performed on IQAir by independent institutes and the extensive tests which we perform on IQAir systems every day, we can assure our customers that every IQAir system will truly be effective in what it is supposed to do — cleaning the air you breathe.