IQAir®

PerfectPro® and PerfectPro® CF

HVAC Air Filtration System

Installation Guide

Swiss Made

Safety Precautions - READ AND SAVE THESE INSTRUCTIONS

- Follow professional safety standards and all local codes for plumbing, electrical, and mechanical considerations.
- Installations must be done in accordance with all applicable standards, building and electrical codes and must be performed by qualified personnel only.
- Do not cut into any air conditioning or electrical lines.
- Always disconnect the power supply from the HVAC before working on the system, changing filters, or cleaning.
- This unit must be installed in an indoor location, protected from the elements.
- Use this unit only in the manner intended by the manufacturer. If you have any questions, contact the manufacturer at the address or telephone number listed in this document.
- Only use original IQAir filters and accessories. Use of non-IQAir parts or accessories may damage the system and will void the warranty.
- If the unit is used during construction or renovation or in environments subject to heavy contamination, check filters regularly for prematurely clogged filters.
- Always wear appropriate protective equipment, such as work gloves and safety goggles for service.
- Save these instructions for future reference.

Warranty Information

This air cleaning system is covered by a **two (2) year limited warranty**. If within **two years** from the original purchase by the end user from the authorized dealer this air cleaning system or any part thereof (with the exception of filters) is proved to be defective by reason only of faulty workmanship or materials, the faulty item, or parts thereof, will be repaired or replaced free of charge for labor and materials. The warranty for replaced parts and service work will expire automatically with the termination of the original system's warranty.

This warranty shall not apply to damage caused by misuse, wear and tear, neglect, unauthorized repair, damage caused by installation, adaptation, modification or use in an improper manner or inconsistent with operating and maintenance instructions, or to wear or deterioration resulting from environmental conditions or to damage sustained during transport. No liability will be accepted under this warranty for any fault or damage arising from defective workmanship, if the unit has been serviced, repaired or modified by any person other than the manufacturer's authorized service personnel or if the system's serial sticker has been removed or tampered with.

No shipping, handling or insurance costs for warranty repairs will be refunded. Obvious defects must be communicated to the authorized dealer within 10 days of the purchase date.

To secure your warranty rights and prevent transport damage, all products must be returned in original packaging. Please keep the original packaging.

IQAir® reserves the right to change specifications contained in this document at any time and without prior notice.

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Important Note: In the event of a defect occurring, please contact your point of purchase immediately and describe the defect. Before any product is returned for service or repair, please seek the express prior permission from your point of purchase. Your dealer reserves the right to refuse any return shipment which is received without prior permission. Such shipments may be returned at the original sender's cost.

The permission to return products does not constitute an acceptance of liability. Upon receipt, the returned product will be inspected carefully. Should the fault be covered by the terms of this warranty, the product will be repaired free of charge. Should the fault not be covered by the warranty, a repair and transport quote will be issued which needs to be accepted in writing before repair work will be carried out.

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Chapter 1 – Air Cleaning Systems and Indoor Air Quality

1.1 Improving Indoor Air Quality

Air cleaning can play an important role when it comes to improving indoor air quality. However, it should be noted that air cleaning should be used in conjunction with pollution source control and ventilation, wherever possible.

Strategy to improve indoor air quality
To tackle any indoor air quality problem, keep the following three-step strategy in mind:

1. Eliminate or reduce the air pollution source as much as possible. Source control is by far the most effective way to improve indoor air quality, since it deals with air pollution at the point of origin.

2. Ensure that sufficient fresh air is entering the room from outside. Air cleaners are not a substitution for sufficient ventilation. They are not able to reverse the conversion of oxygen (O_2) into carbon dioxide (CO_2), caused by breathing and combustion processes.

3. Ensure the IQAir system can clean enough air to cope with the size of the indoor environment. The actual hourly air volume cleaned by the system should be at least double the air volume of the indoor space. If the rate at which pollutants enter the room air is high or the indoor air quality requirements are stringent, the hourly air delivery of the HVAC system needs to exceed the room air volume several times. To achieve the appropriate level of air turnover, it may be necessary to employ supplemental stand-alone air cleaners.

Air Cleaning Results
Although air cleaners may be advertised and sold to be suitable for use in specific indoor environments and to deal with specific indoor air quality problems, the manufacturer and distributors make no claim as to the specific air cleaning results that are achieved under the user's individual operating conditions. The air quality improvements that can be realised with the IQAir® system (as with any air cleaner) in indoor environments depends to a significant degree on individual circumstances, which are out of the control of the manufacturer or distributors. Important factors which will influence the air quality improvements that can be achieved in an indoor environment with an air cleaner include:

- Type of air pollutants present
- Intensity of the pollutant source(s)
- Pollutant concentration
- Size of the indoor environment
- Operating speed of the unit
- Saturation state of the filters in the air cleaner

Consult a qualified specialist to determine an effective and comprehensive indoor air quality strategy.

1.2 PerfectPro® Operational Principles

The PerfectPro is a high-performance air cleaning system that connects to the return air duct of a forced air Heating, Ventilation, and Air Conditioning (HVAC) system.

The PerfectPro system is a mechanical filtration system, and does not generate harmful ozone or charged particles. As a passive filtration system, it requires the operation of the HVAC to clean the air in the home.

Particle Filtration
The PerfectPro system is equipped with a high performance particle filter that combines high efficiency particle filtration with low airflow resistance. Filter life is a nominal 1 year, based on 50% duty cycle.

Formaldehyde and Ozone Filtration
The PerfectPro CF is also equipped with a ColdFire® catalyst filter element for the reduction of formaldehyde and ozone. The catalyst operates at room temperature, and does not require the use of UV lights for activation. Filter life is a nominal 6 years. The ColdFire® filter is optional, and can be added or removed as desired. The particle filter is mandatory, and must be in place to provide particle filtration for the HVAC system.

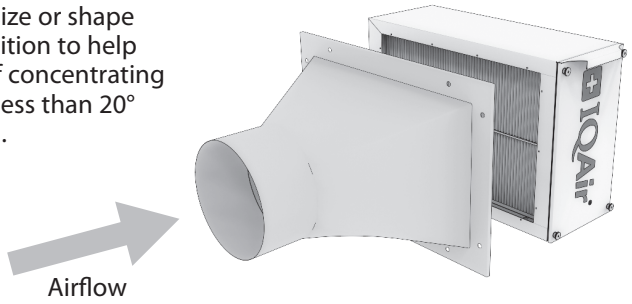
1.3 Application Considerations

Mount on the Return Side of Air Handler
Mount the PerfectPro on the return side of the air handler. This will help keep the coils clean and reduce maintenance.

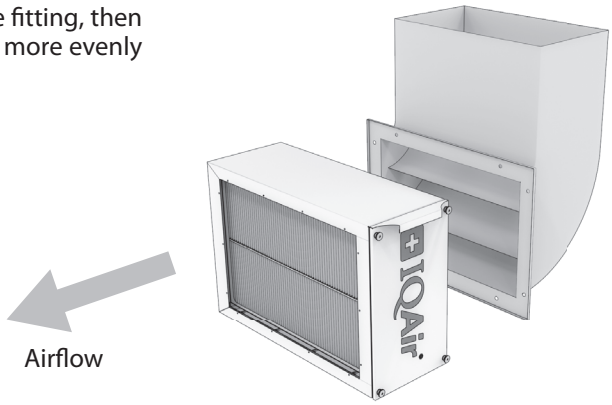
Humidifiers
Mount the PerfectPro upstream of humidifiers, so that the water mist does not come in contact with the filters.

UV lights
Germicidal UV lights can cause degradation of the filter. The UV light should be located out of line of sight, or a minimum of 3 feet from the filter.

Duct Transitions
Filtration is most effective when the airflow is even across the face of the filter. Therefore, if the duct is a different size or shape than the filter cabinet opening, then use a duct transition to help spread the airflow across the full filter area instead of concentrating the airflow on a small spot. Use gradual transitions (less than 20° expansion) to reduce air turbulence and duct friction.



Turning Vanes
If the filter cabinet is installed next to an elbow or angle fitting, then add turning vanes inside the angle to distribute airflow more evenly across the face of the filter.



Chapter 2 – Product Data

2.1 Dimensions & Weight

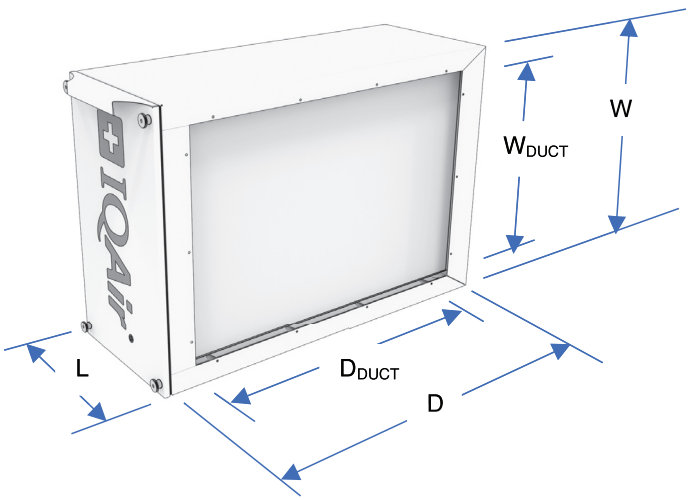
Table of Dimensions and Weights

	1625	2020	2025
Cabinet Dimensions (W x D x L)	17.4 x 24.8 x 9.6 in	21.4 x 21.2 x 9.6 in	21.4 x 24.8 x 9.6 in
	441 x 630 x 244 mm	543 x 538 x 244 mm	543 x 630 x 244 mm
Duct Opening (W x D)	14.6 x 21.0 in	18.6 x 17.4 in	18.6 x 21.0 in
	371 x 534 mm	473 x 443 mm	473 x 534 mm
Weight	19.0 lbs	19.2 lbs	21.4 lbs
	8.6 kg	8.7 kg	9.7 kg
Weight with Filters Perfect Pro	22.3 lbs	22.7 lbs	25.4 lbs
	10.1 kg	10.3 kg	11.5 kg
Weight with Filters Perfect Pro CF	26.2 lbs	26.9 lbs	30.2 lbs
	11.9 kg	12.2 kg	13.7 kg

2.2 Replacement Filters

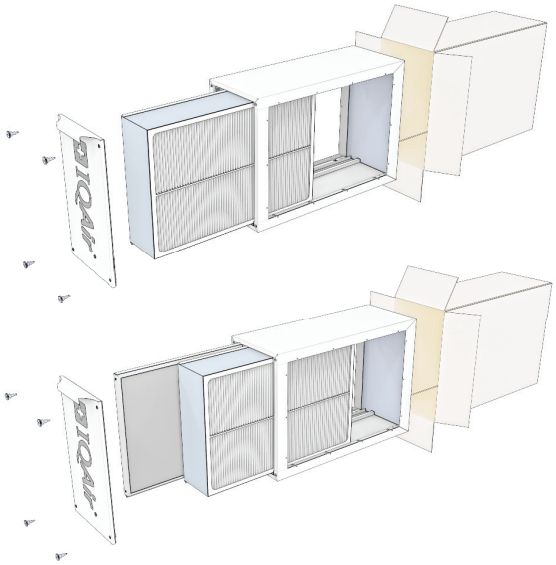
	1625	2020	2025
Devices			
PerfectPro	207.80.00.01	207.80.00.02	207.80.00.03
PerfectPro CF	207.80.00.21	207.80.00.22	207.80.00.23
Replacement Filters			
Particle Filter	202.12.30.01	202.12.30.02	202.12.30.03
Formaldehyde Catalyst Filter	202.30.20.02	202.30.20.03	202.30.20.04

2.3 Diagrams and Dimensions



Chapter 3 – Parts & Tools

3.1 Equipment Packaging



PerfectPro

- PerfectPro filter cabinet
- Particle Filter (pre-installed in filter cabinet)
- Installation Guide

PerfectPro CF

- PerfectPro filter cabinet
- Particle Filter (pre-installed in filter cabinet)
- ColdFire catalyst element (pre-installed in filter cabinet)
- Installation Guide

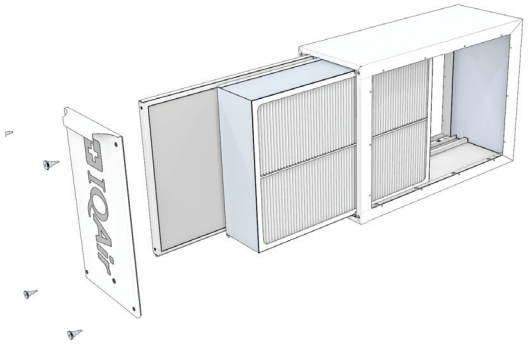
3.2 Tools Required

- Standard screwdriver
- Philips screwdriver
- ¼" hex driver
- Metal cutter
- Power drill & drill bits
- ¼" hex head (#8 x ½" sheet metal screws)
- Foil tape or duct sealant

Additional equipment, such as special wall anchors and screws, may be required for your application. Please plan accordingly.

Chapter 4 – Installation Instructions

WARNING:
Always shut off the electrical power supply to the HVAC before working on the appliance.



1. Remove the PerfectPro from the carton

2. Remove the access panel door from the filter cabinet. The door is secured with four (4pcs) thumbscrews.

3. Remove the filter(s) from the filter cabinet.

Caution**:** *do not touch the surface of the catalyst filter element.*

4. Inspect the installation area. Remove existing filters or systems that may add additional pressure drop to the system.

5. Choose an installation location between the main return duct and the furnace. Position the filter cabinet so that the access panel is readily accessible for checking and replacing the filter. Allow at least 26 inches (660 mm) clearance in front of the filter cabinet.

6. Orient the filter cabinet so the wide filter channel (for the particle filter) is on the air inlet side. The narrow filter channel (for the catalyst filter) should be on the side closest to the air handler. See also the airflow direction arrow on the filter channel

7. Attach ducting. Duct transitions may be necessary to properly mount the filter cabinet. Be sure to follow the local installation codes.

8. When the filter cabinet is mounted directly to the air handler or existing duct, mark the inside opening of the filter cabinet and all mounting screw locations. Drill the marked mounting holes with a 1/8" diameter drill bit. Remove the marked filter cabinet opening with metal cutting shears or equivalent.

9. Attach the filter cabinet to the air handler or ductwork using ¼" hex head sheet metal screws (#8 x ½").

10. Seal the filter cabinet and/or duct connections with foil tape or equivalent.

Important: *all leaks on the return side of the system may cause dirty air to leak into the return air stream. Leakage also occurs in many air handlers via the blower door. The blower door should also be sealed with foil tape for the best air cleaning results.*

11. Write the installation date on the filter labels, and reinstall the filter(s) in their respective filter channels. The filter labels should be visible when installed, and the airflow direction arrows should match the arrow on the filter channel.

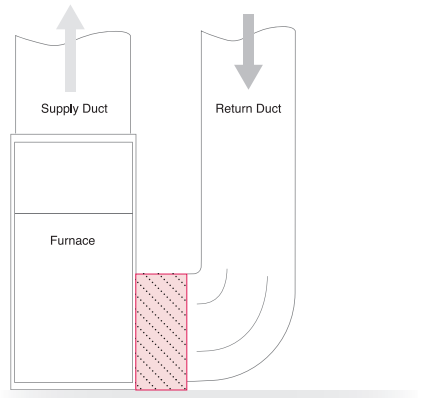
12. Reattach the access panel door to the filter cabinet. The door is secured with four (4pcs) thumbscrews.

13. Check and inspect the system for leakage.

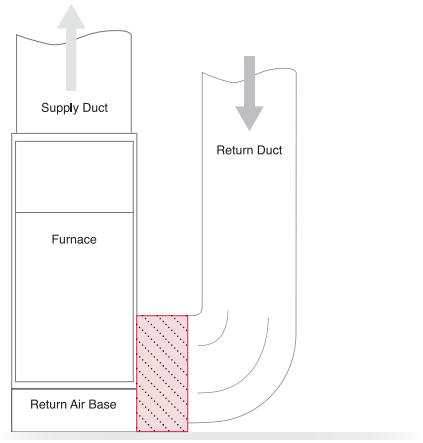
14. Place the HVAC back into service. HVAC must operate within the HVAC manufacturer's recommended temperature and pressure drop requirements.

15. Register warranty online at www.iqair.com/support

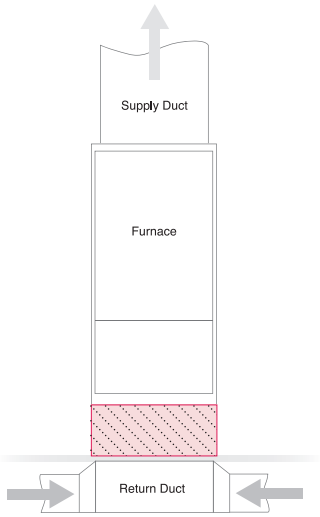
Chapter 5 – Installation Examples



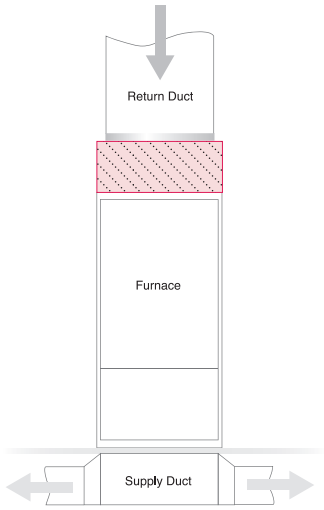
Up-Flow Furnace
Filter system is installed vertically and return air enters the furnace side inlet (up to 4 ton application).



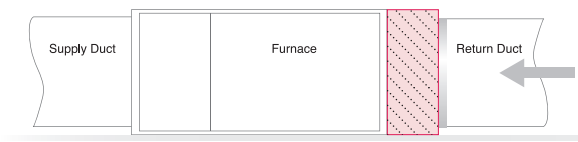
Up-Flow Furnace (5 ton application)
Filter system is installed vertically and return air enters the furnace side inlet (5 ton application).



Up-Flow Furnace
Filter system is installed horizontally beneath the furnace. Return air enters from the bottom.



Down-Flow Furnace
Filter system is installed horizontally in the return air duct just above the furnace.

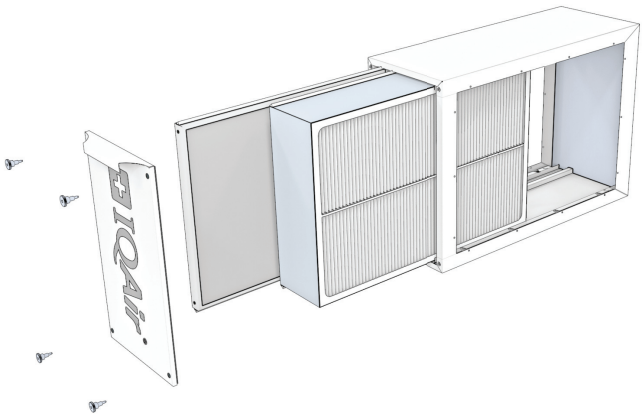


Horizontal Furnace
Filter system is installed vertically in the return air duct near the furnace.

Chapter 6 – Filter Replacement Instructions

WARNING:
Always shut off the electrical power supply to the HVAC before working on the appliance.

Caution: Wear dust mask and gloves to reduce exposure to dust and other pollutants from filters.



1. Remove the access panel door from the filter cabinet. The door is secured with four (4pcs) thumbscrews.

2. Remove the Particle Filter. Dispose of used filter per local laws or regulations.

3. (As needed) Remove the catalyst filter element. (The catalyst filter element has a nominal 6 year filter life.) Dispose of used filter per local laws or regulations.

Caution: do not touch the surface of the catalyst filter element.

4. Write the installation date on the filter label(s).

5. (As needed) Insert new catalyst filter element in the narrow channel. Ensure that the filter label is visible when installed, and the airflow direction arrow matches the arrow on the adjacent particle filter channel.

6. Insert new particle filter. The filter label should be visible when installed, and the airflow direction arrows should point in the same direction as the arrow on the formaldehyde catalyst element.

7. Reattach the access panel door to the filter cabinet. The door is secured with four (4pcs) thumbscrews.

Chapter 7 – Technical Support

7.1 Technical Support

Should technical questions or issues arise during or after the warranty period, please contact your local IQAir dealer.

To expedite your service request, please have the following information ready when contacting us:

- IQAir model, item number and lot number (found on the filter rack)
- Your details (name, address, phone, email)
- Date of purchase
- Description of issue

7.2 Ordering Replacement Filters

For all your filter replacement needs, please contact your local IQAir dealer.

7.3 Contact Information

For further information on installation and technical issues, please contact the IQAir technical support center for your region:

North America (United States, Canada and Mexico)
IQAir North America, Inc.
Technical Support
14351 Firestone Blvd
La Mirada, CA 90638
USA
Tel: 1-888-560-1020
www.iqair.com/support

International
INCEN AG
Technical Support
Hauptstrasse 100
CH-9422 Staad
Switzerland
Email: info@incen.com

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100600 Beijing
Tel.: 400 108 5117

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