

Mobile Direct Source Capture Kit: FlexVac™



The *FlexVac* kit converts any IQAir filtration unit into a mobile self-contained extraction-at-source system. The *FlexVac* extraction system captures gases, fumes, vapors, odors and dust particles directly at their source.

Since the *FlexVac* kit is compatible with all IQAir filtration devices, the system can easily be configured to capture contaminants generated by processes in a wide variety of

applications and environments including:

- Laboratories
- Hospitals
- Cleanrooms
- Quality Control
- Pharmaceutical
- Assembly and Finishing
- Soldering / Electronics
- Research & Development

Mobile Extraction-At-Source Kit for IQAir® Filtration Devices

Airborne pollution from gases, fumes and dust is a serious problem affecting the working environment in electronic, chemical, pharmaceutical, healthcare and other industries. Direct source capture of these pollutants is by far the most effective way to reduce human exposure.

The *FlexVac* kit converts any IQAir filtration unit into a mobile, self-contained extraction system for the capture of gases, fumes, vapors, smells and dust particles at the air pollution source. Distinguishing features of the *FlexVac* kit are:

- Reach
- Maneuverability
- Stability
- Suction power
- Durability
- Ease of Use
- Easy Maintenance
- Expandability

Exceptional Reach

The *FlexVac* kit features a self-supporting suction duct that gives the *FlexVac* a horizontal reach of up to 7' and a vertical reach of up to 9'.

Exceptional Maneuverability

The mobility of the *FlexVac* kit is ensured by six casters, of which two are lockable. The suction duct can be bent, twisted and turned into virtually any position and will remain in place until repositioned.

Exceptional Stability

The *FlexVac* suction duct is made of interlocked polypropylene plastic. This makes the duct stiff enough to be self-supporting and flexible enough to allow for convenient positioning. The interlocked construction also enables the stiffness of the suction duct to be adjusted. In its compressed state the duct is at its stiffest. Extending it by pulling make the duct less stiff.

Exceptional Suction Power

The *FlexVac* kit has exceptional direct source capture power for a system of its size and reach. This is due to the 5" diameter of the suction duct and the internal connection ducts to the main filter unit. Adding a *FlexVac* source capture kit to an IQAir filtration device typically reduces its air flow by only 10-30% (depending on the model and fan speed). At a typical air flow of 150 cfm the air velocity in the suction duct is approx. 17 ft/s.

Exceptional Durability

All *FlexVac* components are designed for outstanding durability. The suction duct is made from shatterproof and chemically resistant polypropylene. It has flame retardant characteristics, resists abrasion and withstands temperatures from -13 to 180°F. The support column is made from powder coated steel. The base platform consists of solid 1.25" PVC plates.

Ease of Use

Due to its self-contained design the IQAir extraction system requires no venting or ducting to the outside. This makes the system completely mobile, saves energy and expensive building conversion work. Assembly of the *FlexVac* kit takes just a few minutes and all required tools are supplied.

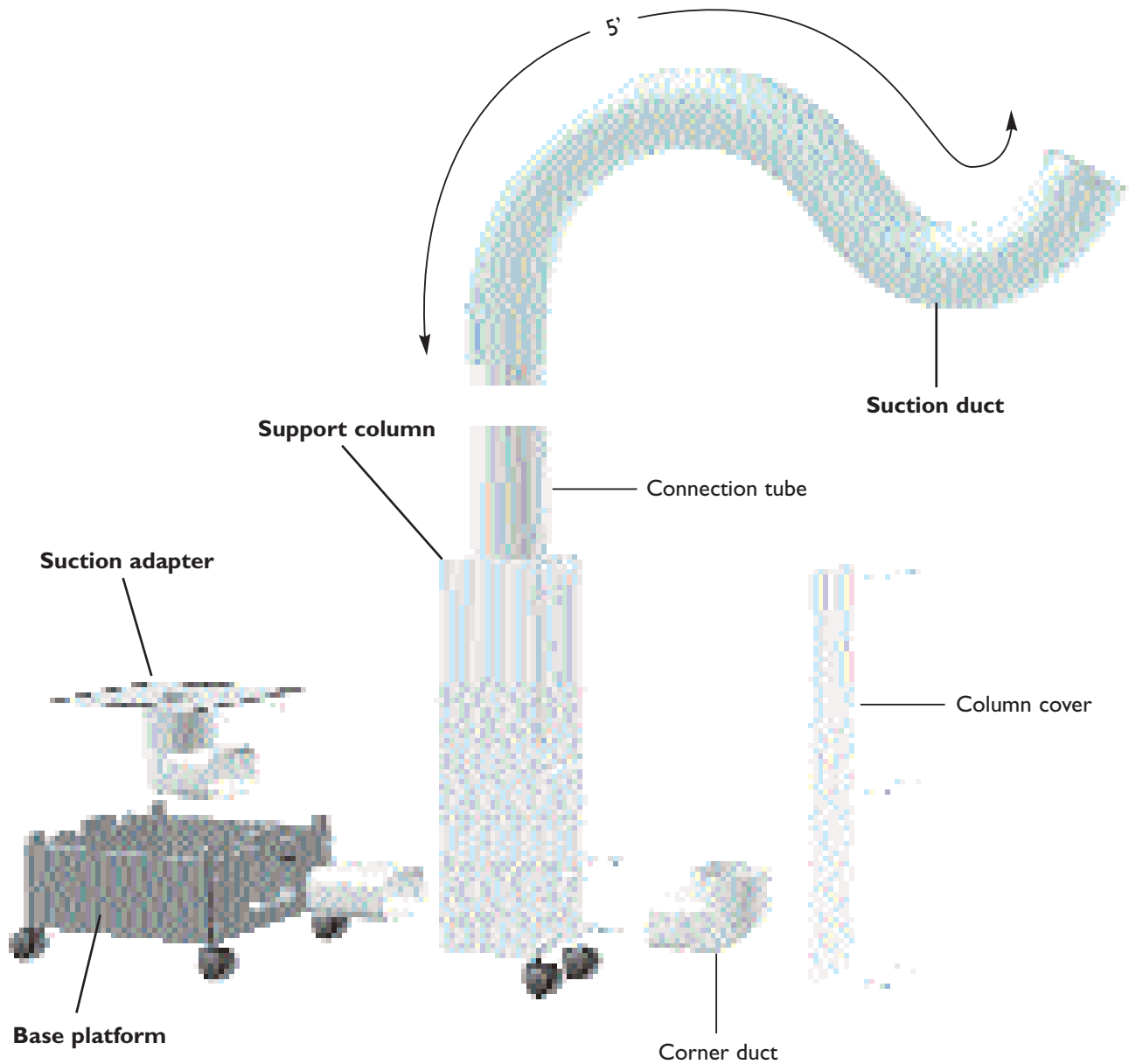
Easy Maintenance

Dust deposits inside the suction duct and the internal ducting are minimal since there are no internal support structures. The *FlexVac* kit is easily dismantled for cleaning.

Exceptional Expandability

New accessories are under constant and ongoing development in order to satisfy new application requirements. Ask your IQAir authorized dealer for further information.

Component Overview



The four main parts of the FlexVac kit:

Suction Adapter

- Screws to the base of the air filtration unit to enable connection of internal ducting.

Base Platform

- Slides onto the unit's base. Raises unit to accommodate the suction adapter. Serves as fixture point for the support column.

Support Column

- Leads internal ducting to and supports the suction duct.

Suction Duct

- 5" diameter, 5' long self-supporting polypropylene suction duct.

Technical Specifications

Typical IQAir Unit Air Flow Reduction
10-30% (depending on model and fan speed)

Typical Suction Velocity
Approx. 12 mph - 17 ft/s (19 km/h - 5 m/s) at
air flow of 150 cfm (255 m³/h)

Suction Adapter
Material: powder-coated steel with PVC

Base Platform
Material: solid PVC

Support Column & Column Cover
Material: steel, white powder-coated

Suction Duct (Self-Supporting)

- **Material**
Interlocked polypropylene (PP)
Compressed length: 5' (1500 mm).
Extended length: 7.5' (2300 mm).
- **Horizontal Reach (from unit center)**
Compressed duct: 6' (1800 mm)
Extended duct: 7' (2100 mm)
- **Vertical Reach (from floor)**
Compressed duct: 7.2' (2200 mm)
Extended duct: 9' (2800 mm)
- **Minimum Bending Radius**
14" (360 mm) at 72°F (25°C)
- **Temperature Range**
-13 to 180°F (-28 to 93°C)

IQAir Compatibility
Compatible with all IQAir filtration devices.
Not compatible with accessories PF40,
VM FlexVac, Mobility 56 and InFlow WI25.

Environments & Applications

Healthcare Industry

- Laser surgery
- Acupuncture
- Disinfectant control
- Mercury vapor control

Plastics Industry

- Plastic welding
- Injection moulding
- Gluing
- Laser cutting

Chemical & Pharmaceutical Industry

- Chemical compound control
- Powder dust control

Laboratories

- Chemical compound control

Printing workshops

- Solvent control
- Dust control

Computer & Electronic Industry

- Hand soldering
- Wave soldering
- Dedrossing
- Laser marking

The indoor air quality (IAQ) improvements that can be achieved with IQAir units depend not only on the system performance, but also on factors which are specific to the indoor environment, such as room size, type and concentration of contaminants and source intensity. Consult a qualified IAQ specialist to determine an effective and comprehensive IAQ strategy. Source control and ventilation should be considered first in solving any IAQ problem.

© 1999 IQAir. All rights reserved. Technical specifications are subject to change without prior notice. IQAir is the trademark and the registered trademark of the IQAir group. InFlow, OutFlow, TopFlow, FlexVac, MaxVac and VMF are trademarks of the IQAir Group. U.S., European and Asian patents pending. Swiss Made.