

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, vapours, odours and dust particles directly at their source.

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

applications and environments including:

- Laboratories
- Hospitals and Dental Surgeries
- Cleanrooms
- Quality Control
- Pharmaceutical
- Assembly and Finishing
- Soldering and Electronics
- Research and Development

Mobile Extraction-At-Source Kit for IQAir® Filter Systems

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, vapours, smells and dust particles their source. Distinguishing benefits of the *FlexVac* kit are:

- Reach
- Maneuverability
- Stability
- Suction power
- Durability
- Expandability
- Easy Maintenance

Exceptional Reach

The flexible suction duct has a unique interlocking construction that can be extended by pulling and compressed by pushing it back together. This gives the *FlexVac* mobile source capture kit a horizontal reach of up to 2100 mm (7') and a vertical reach of up to 2800 mm (9').

Exceptional Maneuverability

The mobility of the *FlexVac* kit is ensured by six casters, of which two are lockable. The flexible suction duct can be manually bent, twisted and turned into virtually any position and will remain in place until repositioned. Its minimum bend radius is 360 mm (14").

Exceptional Stability

The overall stability of the flexible suction arm is superior to that of conventional suction ducts due to the unique interlocked design.

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 125 mm (5") diameter of the

suction duct and the internal ducts connecting the suction duct 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 250 m³/h (167 cfm) the air velocity in the arm is approx. 20 km/h (12.5 mph).

Exceptional Durability

All *FlexVac* components are designed for outstanding durability. The flexible suction duct is made from shatterproof and chemically resistant polypropylene (PP). It has flame retardant characteristics, resists abrasion and withstands temperatures from -28 bis 93°C (-13 to 180°F). The support column is made from powder coated steel. The base platform consists of solid 30 mm (1.25") thick PVC plates.

Exceptional Expandability

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

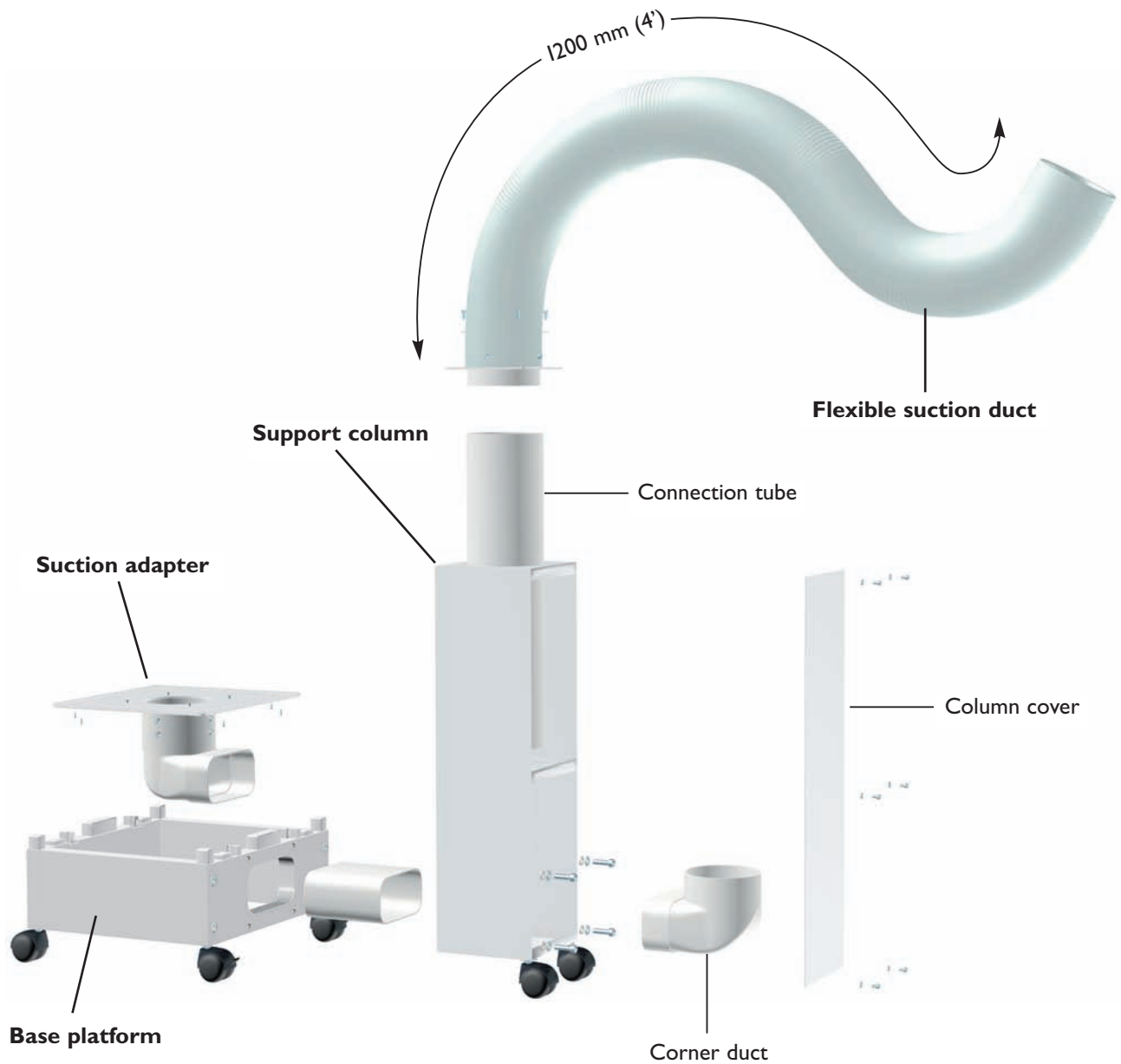
Ease of Use

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

Component Overview



The four main parts of the FlexVac kit:

Suction Adapter

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

Base Platform

- Slides onto the unit's base. Enables ducting to connect to the suction adapter and holds support column in place.

Support Column

- Leads internal ducting and supports flexible suction duct.

Flexible Suction Duct

- 125 mm (5") diameter, 1200 mm (5') long flexible polypropylene (PP) plastic suction duct.

Technical Specifications

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

Typical Suction Velocity
Approx. 20 km/h - 5.5 m/s (12.5 mph - 18 ft/s) at air flow of 250 m³/h (167 cfm)

Suction Adapter
Material: powder-coated steel with PVC

Base Platform
Material: solid PVC, grey

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

Flexible Suction Duct

- **Material**
Interlocked polypropylene, mint white
Compressed length: 1200 mm (4').
Extended length: 1800 mm (6').
- **Horizontal Reach (from unit centre)**
Compressed duct: 1200 mm (4')
Extended duct: 1800 mm (6')
- **Vertical Reach (from floor)**
Compressed duct: 2000 mm (6.5')
Extended duct: 2500 mm (8.2')
- **Minimum Bending Radius**
360 mm (14") at 25°C (72°F)
- **Temperature Range**
-28 to 93°C (-13 to 180°F)

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 vapour 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.

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