

Fantech Inline Fans

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Fantech - A Systemair Company

- Plants in Lenexa, Kansas & New Brunswick, Canada
- ISO9001 Certified
- In house R&D Labs
- Air Performance, Sound and Climate Testing



Systemair Group

- Founded in Sweden in 1974
- Offices in 50 Countries in Europe, North & South America, Middle East, Asia and Africa
- 27 Plants Globally with a over 3 Million square feet of manufacturing and warehouse floor space
- Listed on the NASDAQ OMX Nordic Exchange
- The Group includes 65 companies with 5,200 employees



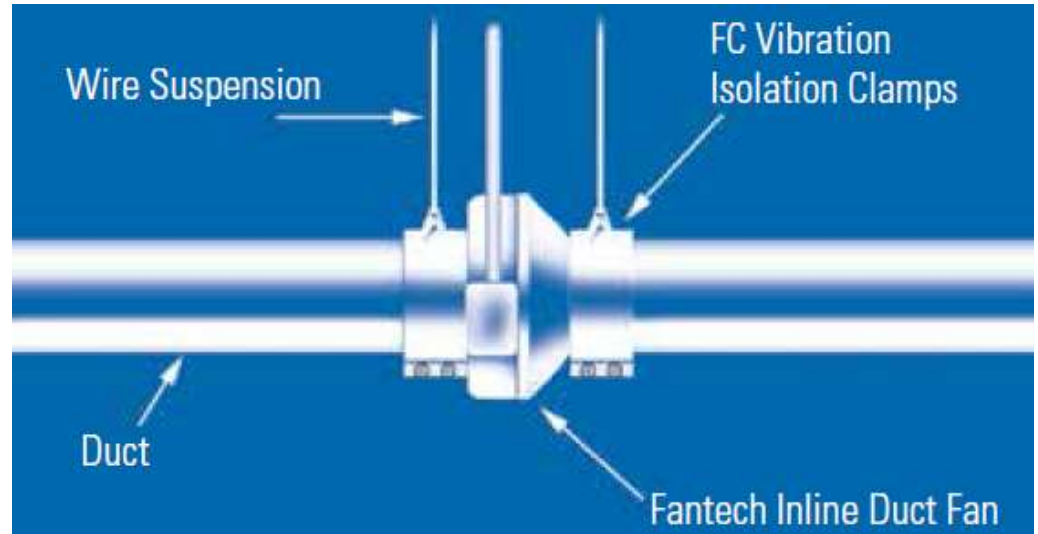
What's an Inline Fan?

The name describes it quite well...

It's a fan that is installed in or at the end of a run of duct work.

The inline fan creates or assists the flow of air within the duct.

Inline fans are available in many shapes and sizes.



What's an Inline Fan?

Inline fans can be used to exhaust air out of buildings.

Exhaust applications might be the most common use for inline fans.

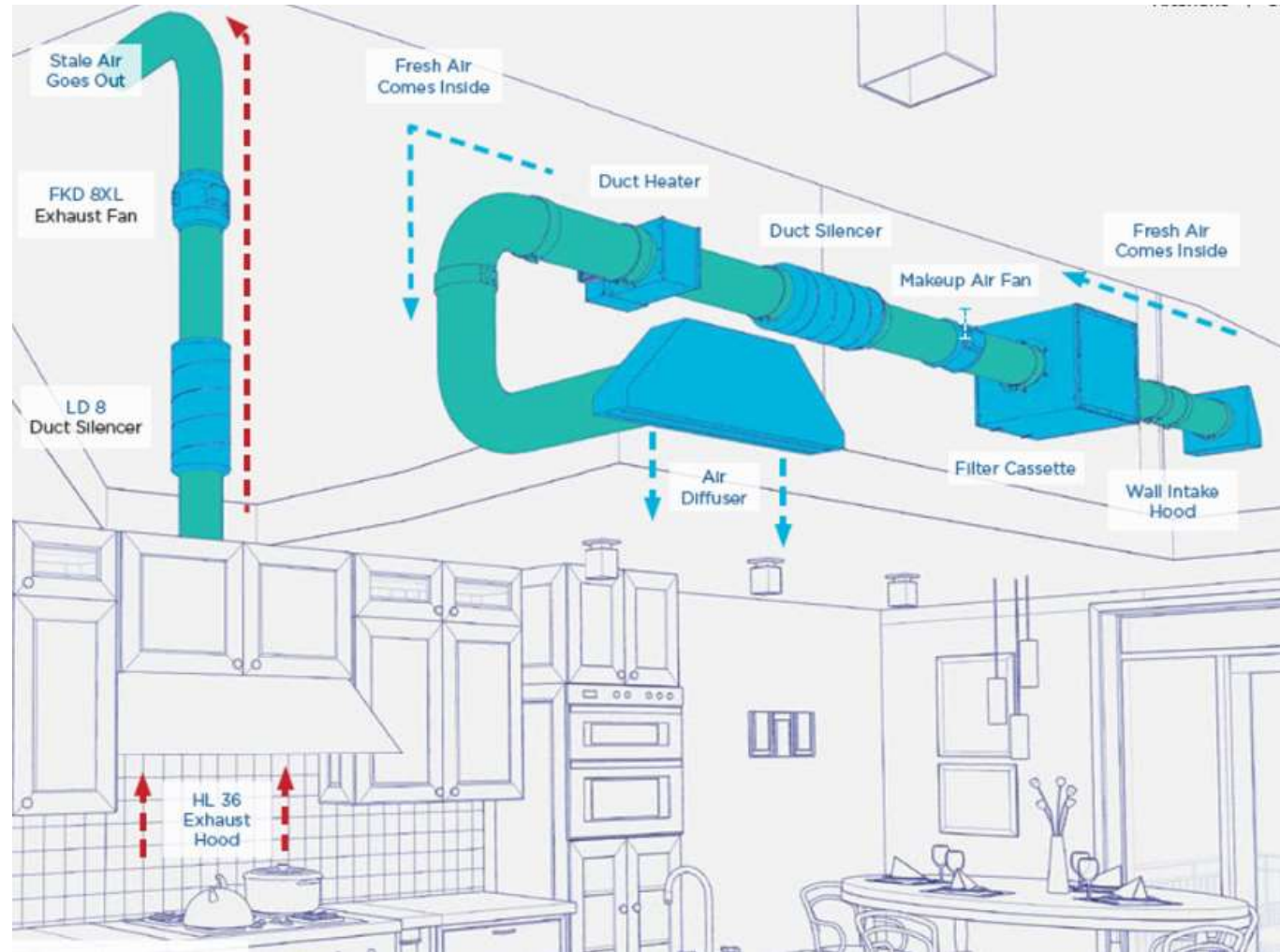
Bathrooms, range hoods, attics, garages, and more.



What's an Inline Fan?

Inline fans can be used to supply outdoor air into buildings.

This example depicts compensating makeup air for the kitchen range hood.

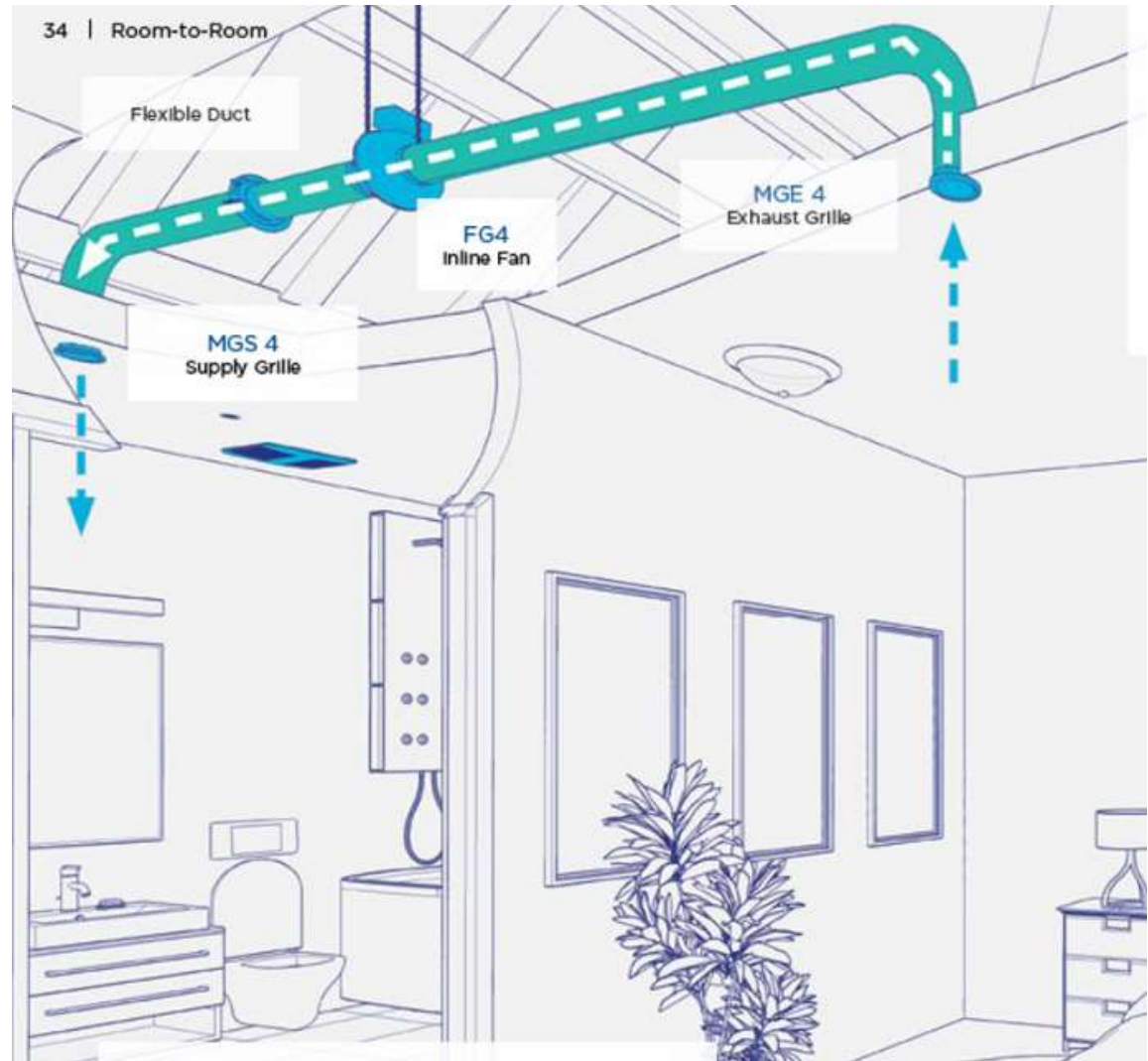


What's an Inline Fan?

Inline fans can also move air between areas within buildings.

Here's an example of the transfer of air from one space to another.

Inline fans can also assist (boost) air systems that have long duct runs.



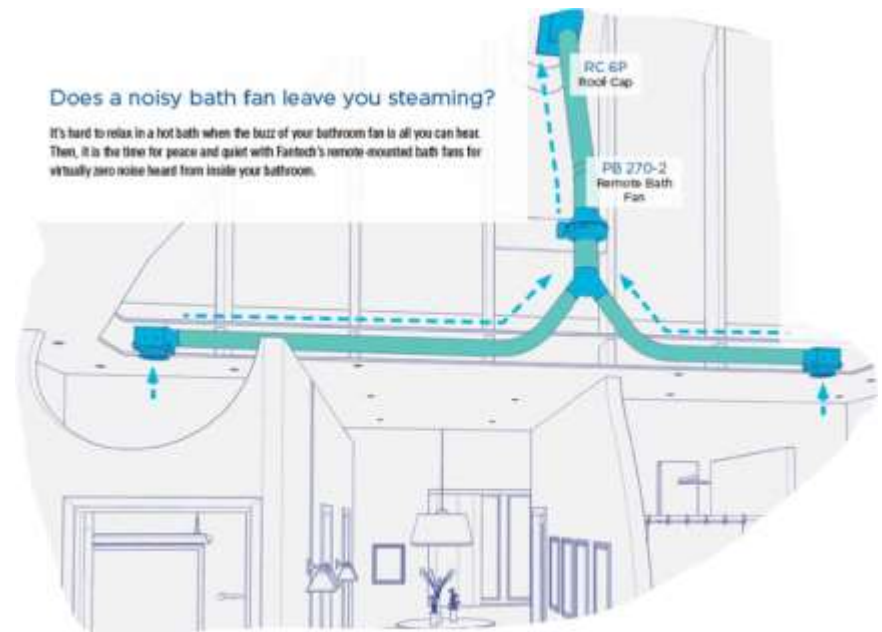
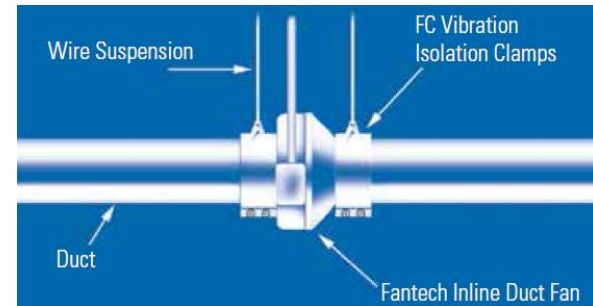
What's To Like About an Inline Fan?

Inline fans don't require a lot of clearance beyond the duct dimensions.

Inline fans are not located in the occupied space, so that smaller, less-obtrusive grilles can be used in the space.

Since inline fans are installed remotely (away) from the occupied space, their operating sound is very minimal, and quite often virtually silent.

Permits multiple points of pick-up or delivery from a single fan.



Fantech Inline Fan Characteristics

No maintenance – really!

- Direct drive - no belts, pulleys or sheaves
- No grease (permanently-sealed bearings)
- Factory-balanced impeller wheels
- Totally enclosed (TE) motors

Unbelievably reliable

- German motors
- Long warranties – very rarely needed

Speed-controllable and ready for continuous or intermittent duty

- Fully variable to well below 50% full speed
- Motors suitable for 100F+ air temps



Fantech Inline Fans – Two Motor Types

Standard (AC) Motor Fans

Many model series – dozens of fans.

Speed-controlled by reducing the voltage of the supply power with a solid state or transformer type control. Many accessory controls available.

All models are capable of continuous operation at full or reduced speeds.

EC-Motor (ECM) Fans

Four model series – 19 fans.

Powered by standard AC power, but converts to and operates on DC power. Speed-controlled by a low voltage command (0-10Vdc) signal.

Extremely efficient: 20-30% energy savings at full speed, and even more at reduced speeds.

All models are capable of continuous operation at full or reduced speeds.

Fantech AC-motor Inline Fans



FSD
Square Inline



FKD
Round Inline



FG
Round Inline



prioAir
Round Inline



FRD
Rectangular
Inline



CVS
Round
Multi-port



FR
Round Inline



App-specific
Various

INLINE DUCT FANS



RE
Roof/Wall Mount



RVF
Wall Mount

EXTERIOR FANS

Powerful fans in duct connection sizes 4"-20" round and up to 20" square.

Air flow rates from less than 100 cfm to over 6,000 cfm.

Some larger sized models available in commercial voltages.

Fantech AC-motor Inline Fans Speed Control

- All fan models can be speed-controlled to deliver the exact air flow rate (cfm) required for each installation.
- Common solid state voltage-reducing speed controls provides fully variable speed reduction to below 50% of full speed.
- Numerous accessory wall-mount speed controls exist.



WC 15
Rotary



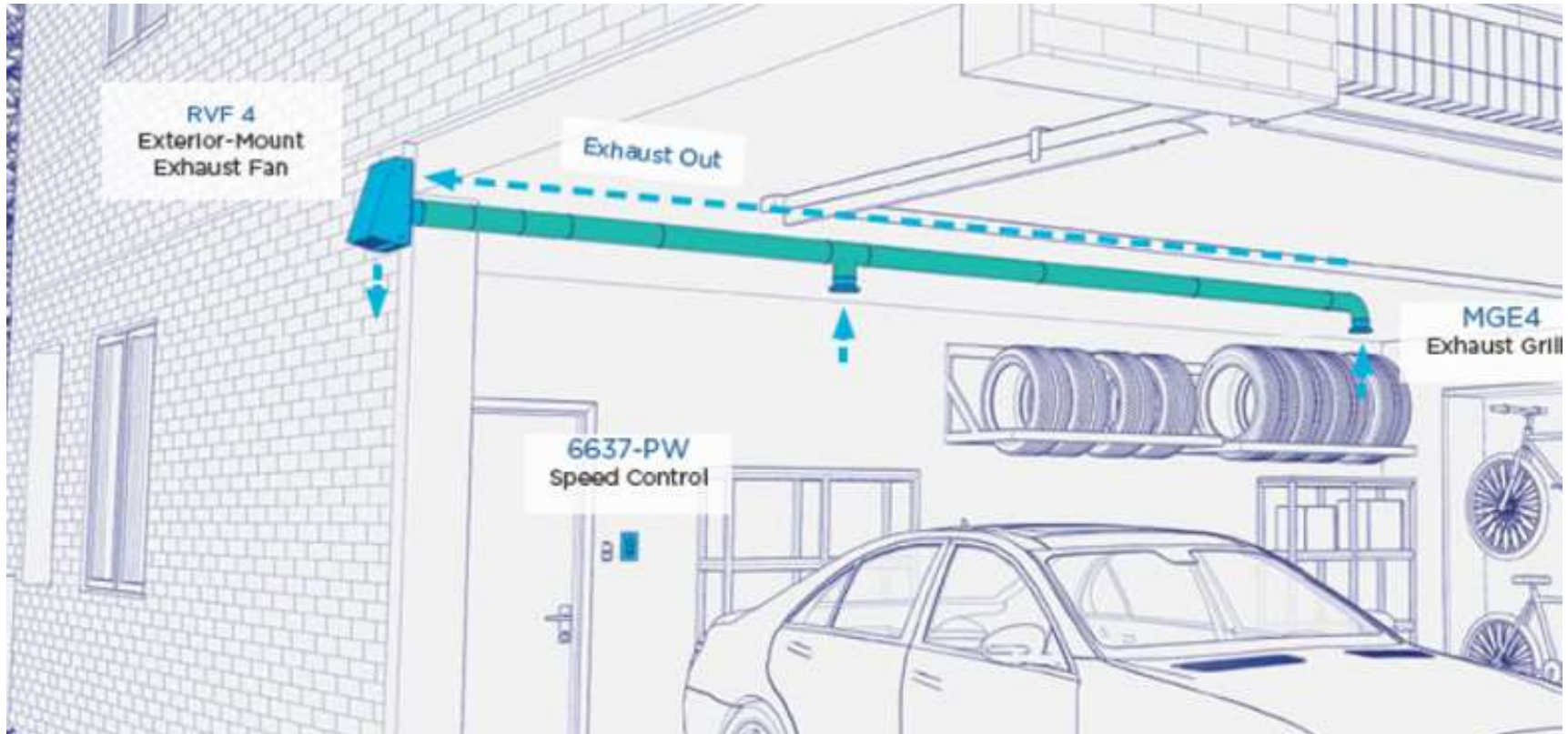
RPE
Rotary



SCD
Slide



AC-motor Inline Fans - More Examples



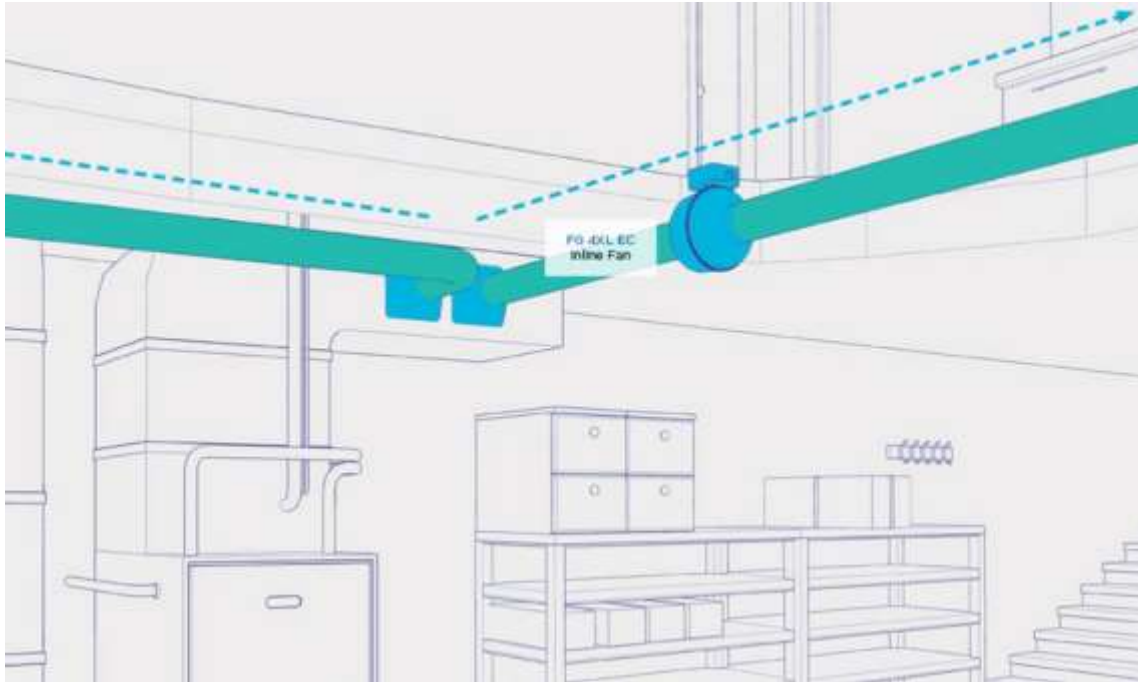
RVF exterior wall fan exhausting a garage.

AC-motor Inline Fans - More Examples



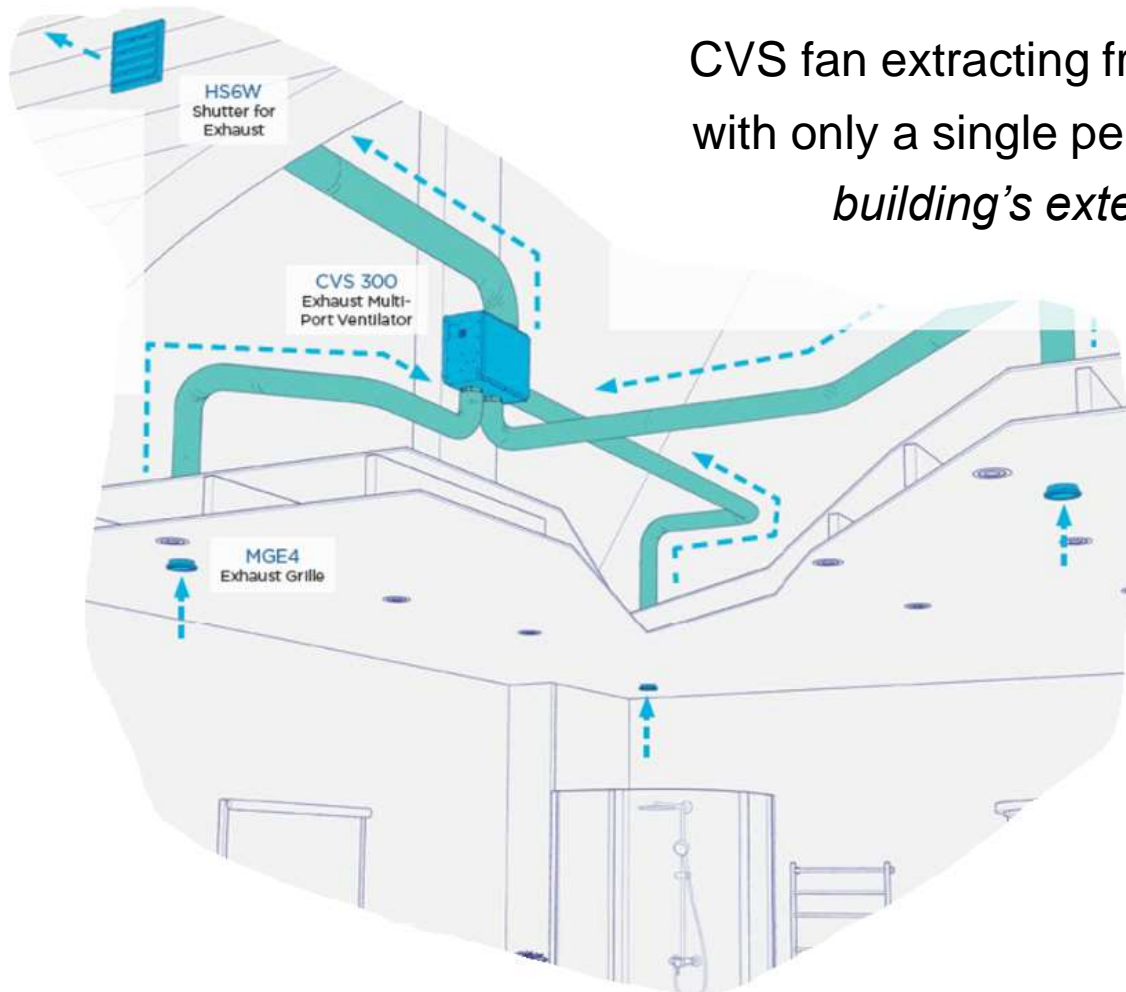
RE exterior roof/wall fan exhausting atop a roof.

AC-motor Inline Fans - More Examples



FG / FR round inline fan boosting central HVAC air through the long duct run to the back bedroom.

AC-motor Inline Fans - More Examples



CVS fan extracting from several locations with only a single penetration through the *building's exterior envelope.*



Fantech ECM Inline Fans

Used for the same applications
as AC-motor fans + more!



Powerful + efficient fans in duct connection
sizes 4"-20" round.

Air flow rates from less than 100 cfm to
nearly 6,000 cfm.

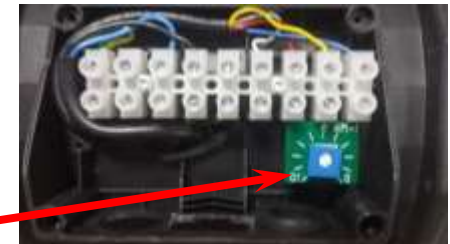
Some larger sized models available in
commercial voltages.

Cool, quiet operation when speed-controlled.

Fantech ECM Inline Fans Speed Control



- All fan models can be speed-controlled to deliver the exact air flow rate (cfm) required for each installation.
- Fully variable speed adjustment between ~30-100%, as commanded by 0-10Vdc. The speed command may be provided by any means: potentiometer, control device or Building Management System (BMS).
- All models include a speed control potentiometer.
- Some accessory control devices are available:



MTP 10
Potentiometer
Speed Control



**PCA
1000D2**
Pressure
Control



AEOLUS
Temperature
Control



ECM Fan Control MTP 10 Potentiometer

- Remote-mount, manual speed control
- Compatible with Fantech EC-motor fans
 - Does not require power
 - Utilize the +10V from EC motor
- For installation on a wall
 - surface mount
 - or partially recessed



ECM Fan Control PCA 1000D2 Pressure Controller

- Differential pressure-sensing controller
- Compatible with Fantech EC-motor fans
 - Requires external 10-24Vdc power
 - Provides a 0-10Vdc speed command
- Constant pressure applications
 - Duct or space pressure
 - Setpoint range = -4.0 to 4.0 in. w.c.
- Constant flow (cfm) applications
 - With use of a system K factor



Multi-point Bath Exhaust

One EC-motor fan and multiple, common-ducted bath exhaust grilles per system.

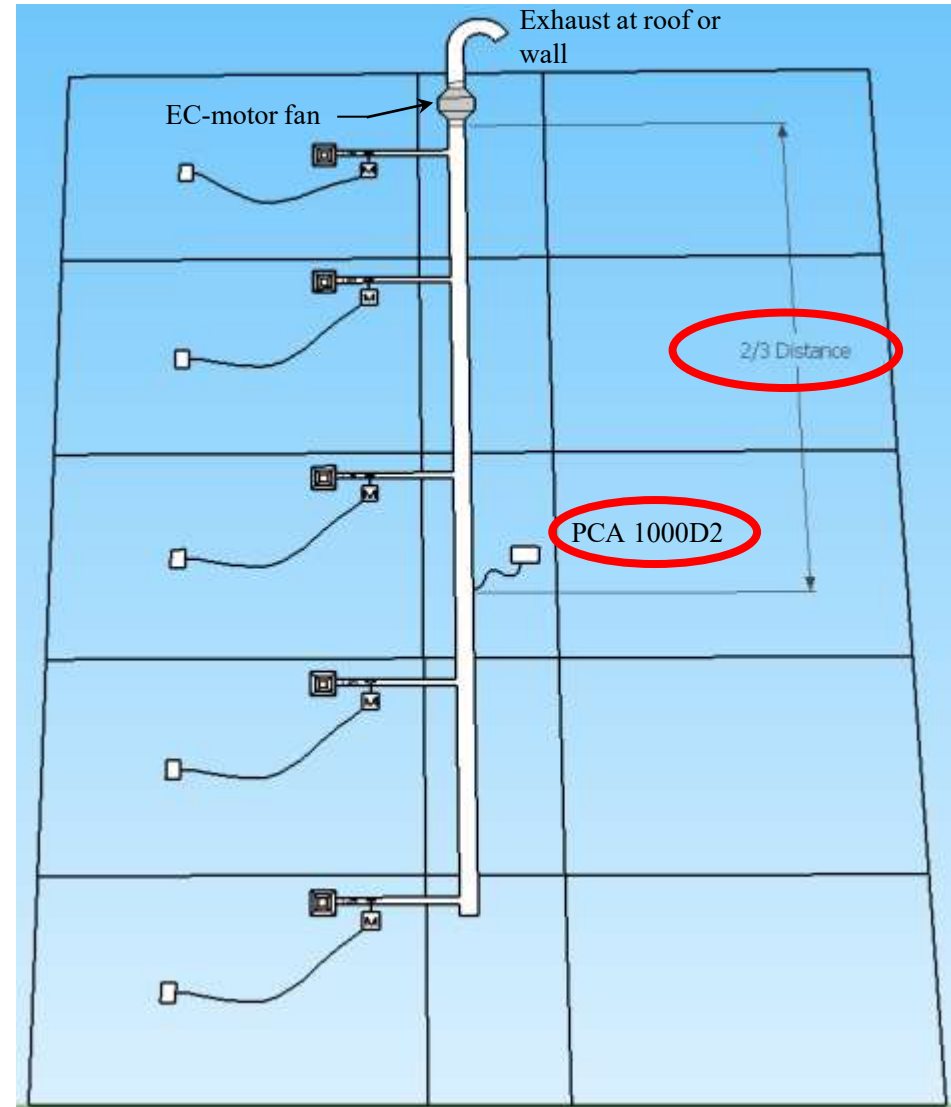
- Strategy for controlling humidity and/or odors
- Common fan operates continuously
- Fan slows to a very slow speed with no bath exhaust demand

Utilize PCA 1000D2 for constant pressure control.

- Install 2/3 distance away from fan.



Standard duct sizing for non-particulate exhaust.



ECM Fan Control

Aeolus Temperature Controller

- Maintains a space temperature set point by varying ventilation for cooling effect
- Compatible with Fantech EC-motor fans
 - Provides a 0-10Vdc speed command
 - External 120-1-60 power required for included transformer power plug
- Industrial applications
 - Greenhouse / Agriculture
 - Mechanical equipment room
 - Factory



Application-specific Ventilation Solutions

Solution – Bathroom

Solution – Kitchen

Solution – Dryer

Solution – Radon



Bathroom Ventilation

PB Series

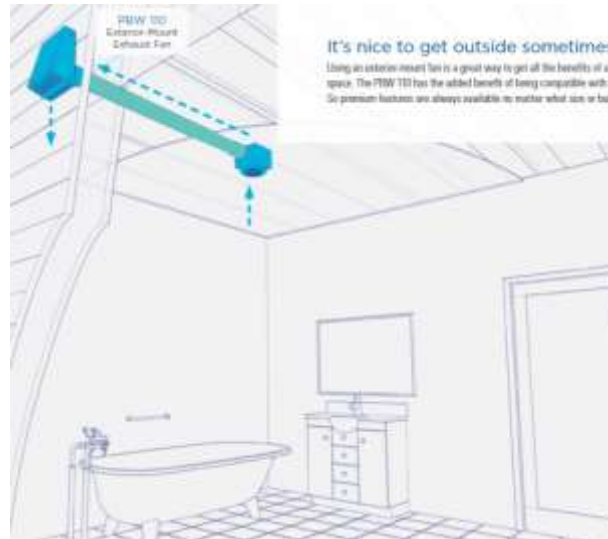
Premium Bath Fans



PBW Series

Exterior Mount Bath Fans

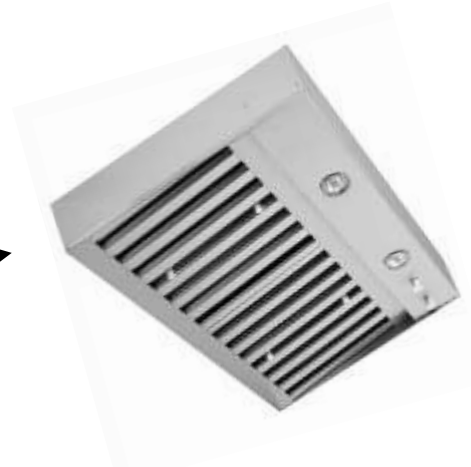
PBW 110 L7



Range Hood Exhaust



HL Series
Hood Liner



RE(C) Series
Exterior Roof/Wall Fans



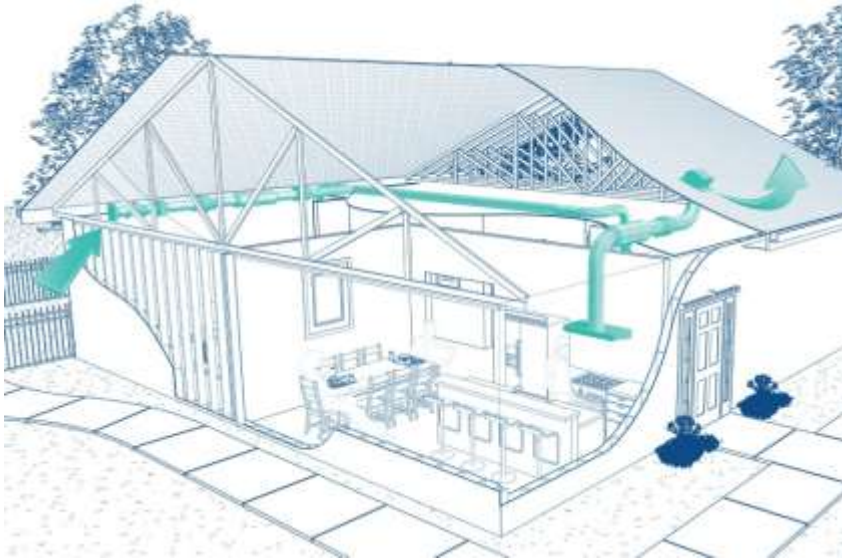
FKD Series
Inline Fans



LD Series
Silencers



Residential Kitchen Make Up Air



MUAS Series – automatic, fan-powered, and managed delivery of makeup air to compensate kitchen range hood exhaust



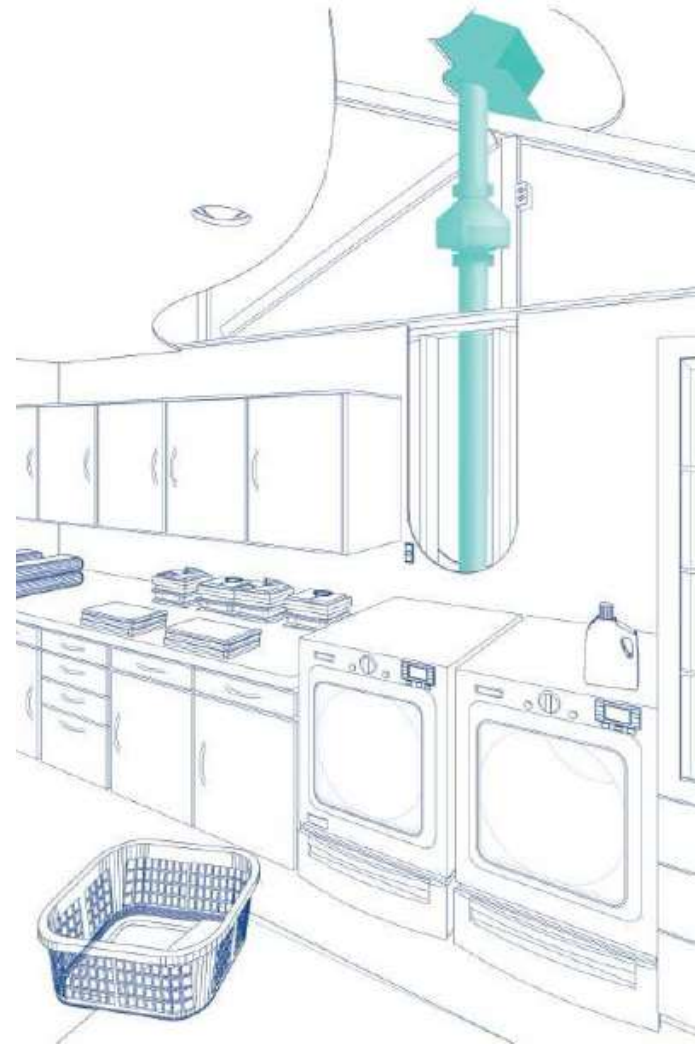
MUAH

Accessory Electric Heat



Dryer Ventilation Assist

DEDPV-705 Dryer Exhaust Fan



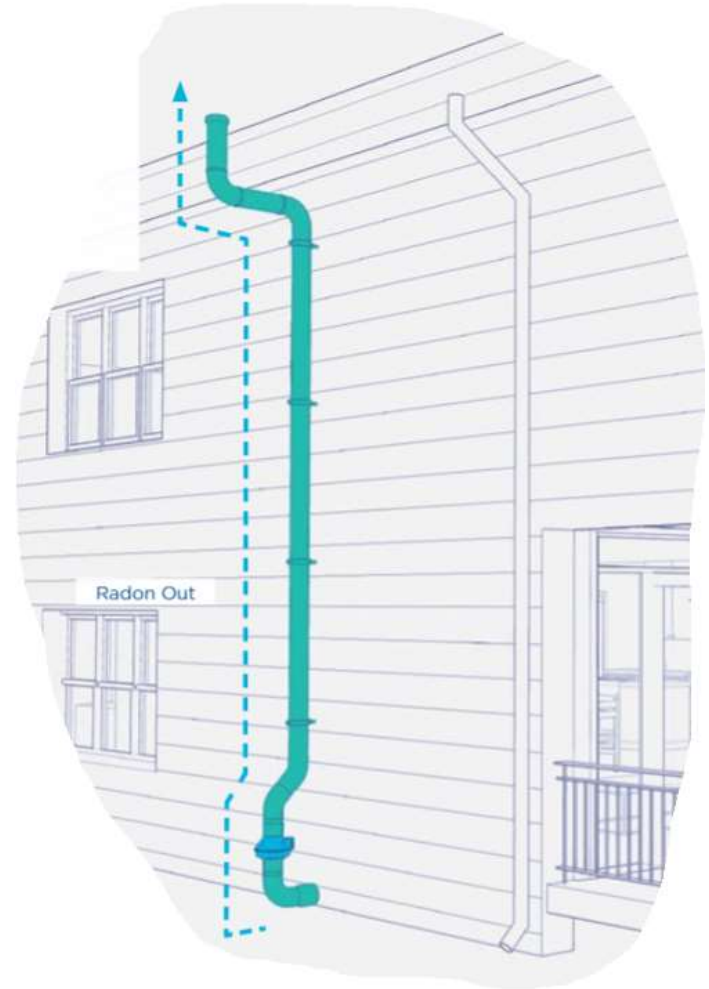
DBLT 4W

Lint Trap for Dryer Exhaust Fans



Radon Mitigation

Rn Series Radon Fans



Accessory Kits

- Couplings
- Labels
- Manometers



Some Fan Accessories

RSK



Backdraft Damper

FML



Intake Hood

FC



Mounting Clamps

FTD 7



7 Day Timer

LD



Silencer

FD 60EM



Electronic timer

SCD



Speed Control

WC 15



Speed Control

MGS



Supply Grille

MGE



Exhaust Grille

IR



Iris Damper

For more Accessories please visit www.fantech.net



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a systemair company