

Wall Fan

F-MU44R-WT

Features

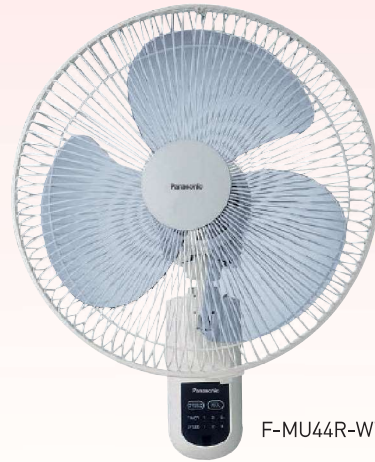
- Full Multi-functional Remote Control With On/Off Function, 3-speed Control, Timer Setting And Oscillation Control
- 1,3,6-Hour Timer
- Ball-bearing Motor
- Thermal Safety Fuse

Blade Size

Width: 40cm (16")

Colour

White



F-MU44R-WT

F-MU453VBHH

Features

- 3-speed On/Off Pull Switch
- Oscillation Control By Pull Switch
- Durable Condenser Motor With Permanently Lubricated Ball-bearing Assembly
- Transparent Plastic Blades
- Thermal Safety Fuse

Blade Size

Width: 45cm (18")

Colour

Dark Grey



F-MU453VBHH

F-MU408-WT / F-MU308-WT

Features

- 3-blade design for Better Air Delivery
- 3-speed On/Off Pull Switch
- Oscillation Control By Pull Switch
- Durable Condenser Motor With Permanently Lubricated Ball-bearing Assembly
- Transparent Plastic Blades
- Thermal Safety Fuse



F-MU408-WT

Blade Size

40cm (16") - F-MU408-WT
30cm (12") - F-MU308-WT



F-MU308-WT

Colour

White





F-MU405VBHH



Wall Fan F-MU405VBHH

Features

- 5-blade design for Better Air Delivery
- 3-speed On/Off Pull Switch
- Oscillation Control By Pull Switch
- Durable Condenser Motor With Permanently Lubricated Ball-bearing Assembly
- Transparent Plastic Blades
- Thermal Safety Fuse

Blade Size

Width: 40cm (16")

Colour

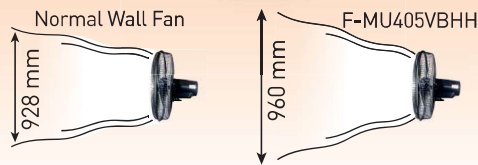
Dark Grey

New Design– Slim & Sleek
with slimmer guard depth of 130mm that is space saving



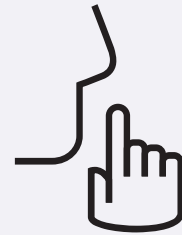
Slim design

New 5 Blade Design Technology
for a wider airflow performance



Airflow surrounding for normal wall fan and F-MU405VBHH

Silent Operation
low noise with 52dB



F-MQ409-DG
(Dark Grey)



F-MQ409-GY
(White)



Oscillation Fan F-MQ409-DG / F-MQ409-GY (Dark Grey) / (White)

Features

- Thermal Safety Fuse
- Regulator 5-speed Selection
- Transparent Plastic Blades
- 360° Oscillation Circle
- Durable Condenser Motor
- Adjustment Angle - 15°, 30° And 50°

Blade Size

Width: 40cm (16")

Colour

Dark Grey / White



Ventilation Fan

Healthy Air Exchange for a Healthy Living Environment

Panasonic Ventilation Fans ensure you and everyone in your home can enjoy a healthy, fresh environment.

Benefits

What are the existing indoor air quality problems in your house?

Recently, there are reports showing that people having poor physical conditions. It is due to chemical substance emission from new-built or reformed houses which causes indoor air quality problem.

The symptoms due to poor indoor quality include eyes/throat nausea, feeling unwell, skin irritation, headache, dizziness, breathing problem and so on. Furthermore, chemical substances like formaldehyde, can lead to deterioration of allergic illness.

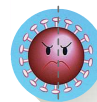
Hazardous indoor chemical substances can be categorized into 3 groups

Chemicals Substance	Origin
Formaldehyde (HCHO)	Plywood Board, Flooring, Furniture, Wall Paper
Volatile Organic Compounds	
<ul style="list-style-type: none"> • Toluene, Xylene, Trimethyl Benzen • Phosphoric Acid Triester (TCEP) 	Non-Flammable Vinyl Cloth
Organic Phocphoric	Pesticides



Walls and Floors which occupies most of the area is the biggest enemy of clean air

Materials like adhesives used on walls and floors will continuously release chemical substances over a period of time.



Beware of curtains, sofas and any other furniture that you brought in

Chemical substances will also be released from curtains, sofas and any other furnitures.



Floor and bathroom sinks are targeted area for termites to inhabit

High humidity from bathrooms (especially the floor) will attract termites to inhabit.



Water vapor created from cooking attracts molds to grow

Water vapor is created from burning fuels. Also, the dirt from the burning fuels speed up the growth of molds.



Fabric sofa and stuffed toys

Scurf and dander from human and pets attract mites. Thus, it is important to be cautious with fabric sofa and stuffed toys in your homes.



Bathroom with high humidity inhabits mold

Bathrooms which are known as area with high humidity can cause the formation of mold. You are advised to clean the bathroom without leaving any soap residue.



Chemical substances from the floor

Although natural flooring material looks safe, gloss wax from the floor (for example) may emit chemical substances.

Mites

There are around 30 types of mites which can be found in homes. In general, most mites do not cause any harm to humans. However, sting mites like House Mite and Dust Mite group can cause allergen.



Termites

Termites are terror to the house as they will cause damages to furniture, floor, wall, roofs and

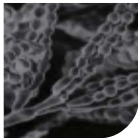


Formaldehyde (HCHO)

Volatile Organic Compounds (VOC) like Formaldehyde generated from building materials and/or home furniture can easily cause indoor air pollution.



Mold



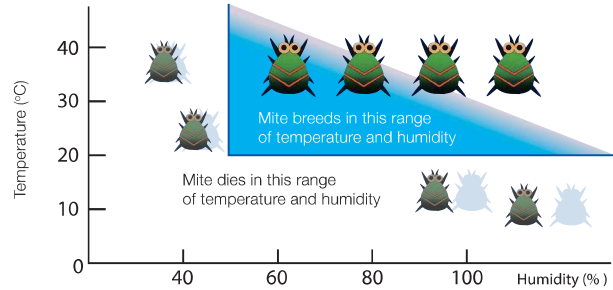
Mold breeds faster only damages our home appearance, it also emits bad odors and it is bad for health. The growth of mold increases during rainy season and its spores will disperse around at the end of the raining season.



when humidity increases. Mold not only damages our home appearance, it also emits bad odors and it is bad for health. The growth of mold increases during rainy season and its spores will disperse around at the end of the raining season.

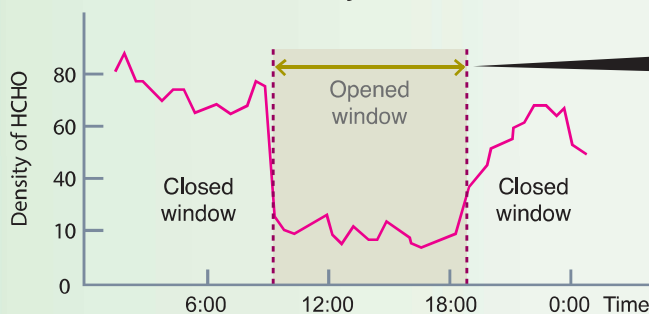
Temperature and Humidity for Mite Breeding

Mite breeds when temperature is over 20 degrees and humidity is over 60%



(Source: "Information of Residence and Home"; Environment Hygiene Section, Health and Welfare Department, Osaka Prefecture)

Indoor Formaldehyde concentration was measured



When window is opened, density decreases rapidly. When window is closed, density then starts to increase again.

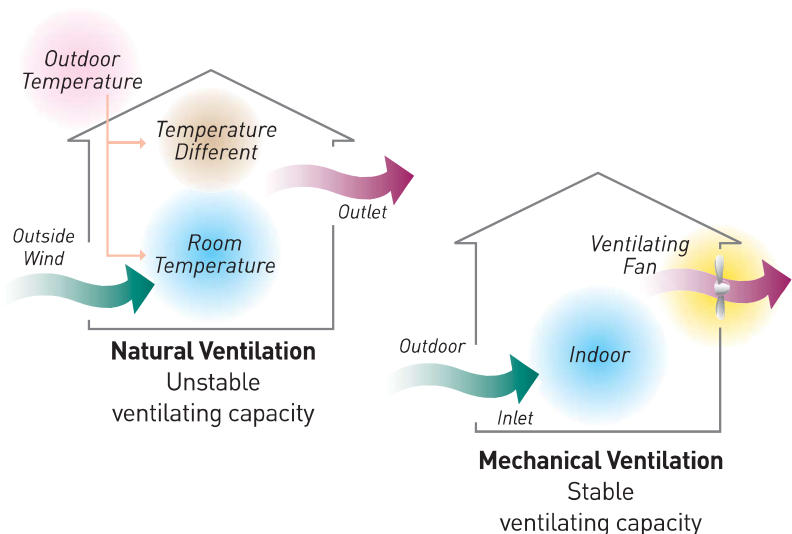
(Source: "Information of Health and Residence", Environment Hygiene Section, Health and Welfare Department, Osaka Prefecture)
Formaldehyde: It is considered to be the main chemical substance causing the "Sick House Syndrome" - (Main sources: building materials, furniture, heat machines, smoking, etc.)

Ways to Improve Indoor Air Quality

The first step to improve indoor air quality is to reduce or remove the source of pollutants. Unfortunately, indoor air pollutants are virtually impossible to eliminate completely.

The alternative towards improving indoor air quality is via ventilation. Ventilation is divided into two types: Natural Ventilation and Mechanical Ventilation.

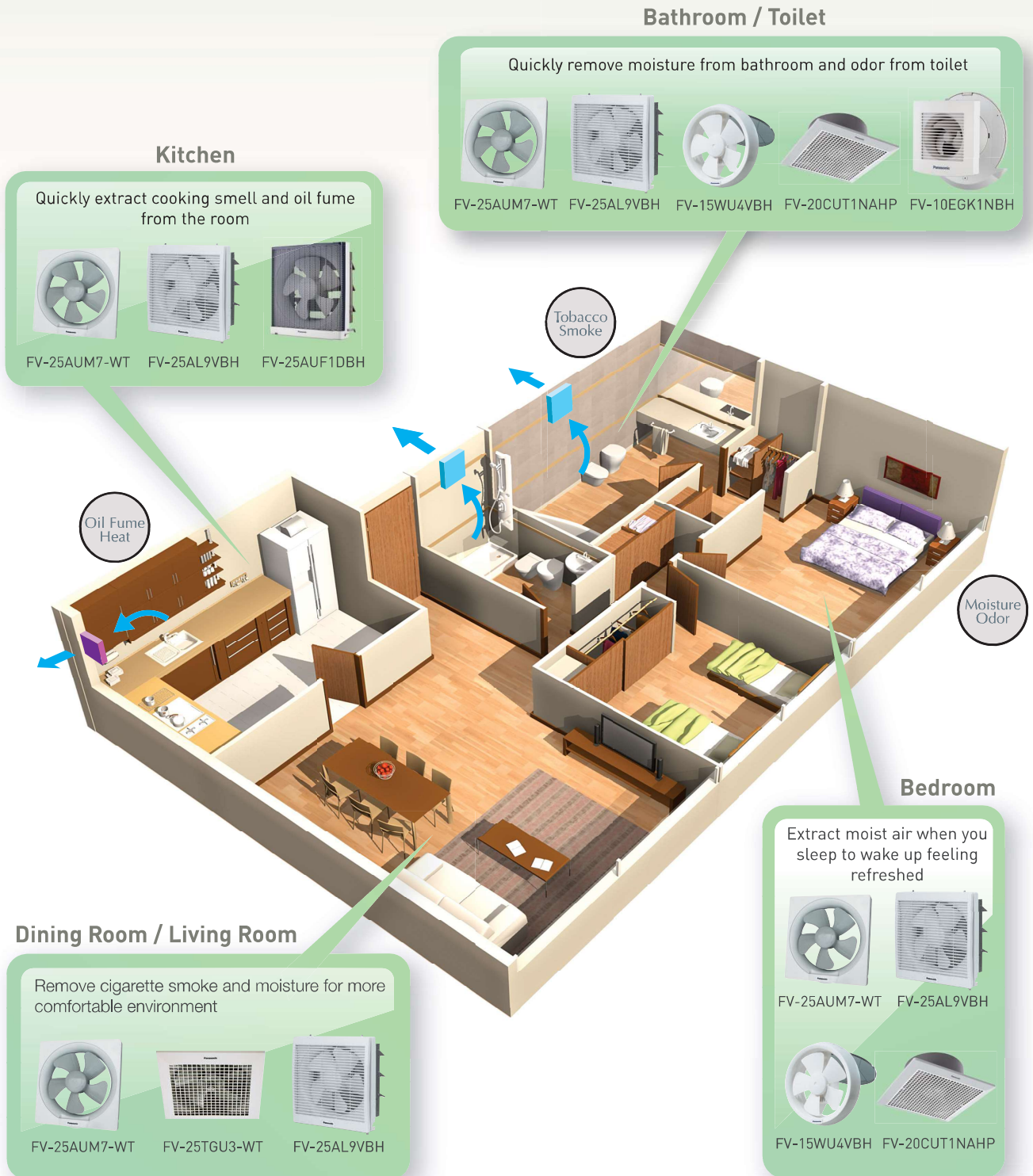
Natural Ventilation is neither consistent nor reliable since it heavily relies on wind and weather conditions. Mechanical ventilation removes stale, moist, polluted air and replaces it with fresh air by using a ventilating fan.



Benefits

Our Recommendation For Indoor Air Quality

Bathroom, toilet and kitchen are the places with high concentration of contaminants. When these places are being used, ventilation fans should be operated to extract the pollutants directly to outside before they spread throughout the rooms.



Ventilation Schedule

The Number of Ventilation Fans Required

$$\frac{(A): \text{Room size (M}^3\text{)} \times (B): \text{Necessary frequency of Ventilation per hour}}{(C): \text{Air Volume of Ventilation Fan (M}^3\text{)}}$$

Note:

Room size (A) is calculated from the following equation:

(A) = Floor area (sq. m. or sq. ft.) x Room height (m or ft). If the room height exceeds 4 meters (13 feet), use 4 meters (13 feet) in the calculation regardless of the actual room height.

Values for (B) in above equation are given in the table on the below. These values were empirically found by the research scientists. Value for (C) in the above equation are given in our catalogs.

Ventilation Schedule

I: Type of room		II: Necessary frequency of ventilation per hour		
	I	II		
Hotel	Dance Hall	8	Photo Studio	
	Dining Hall	8	Dark Room	10
	Kitchen	15	School	
	Hallway	5	Laboratory	6
	Toilet	5	Cooking Room	15
	Lavatory	10	Auditorium	6
	Boiler Room	20	Gymnasium	8
	Laundry	15	Toilet	12
			Library	6
		Classroom	6	
Hospital	Waiting Room	10	Theatre	
	Clinic	6	Auditorium	6
	Ward	6	Hallway	6
	Bathroom	5	Smoking Room	12
	Office	6	Toilet	10
	Restaurant	8	Projection Booth	20
	Kitchen	15	Workroom	6
	Gallery	5	Telephone Switch Board Room	6
	Toilet	10	Factory	
	Boiler Room	10	Painting Room	20
	Laundry	15	Dynamo Room and Substation	20
	Operating Room	15	Condenser Room	15
	Disinfecting Room	12	Office	6
	Room for the Patients Receiving		Restaurant & snack bar	
	Medical Treatment for	10	Restaurant	6
The Diseases of Respiratory Organs		Kitchen	20	
Public Toilet	20	Office Building		
Vessel	Passenger Room	6	Office	6
Home	Kitchen	15	Waiting Room	10
	Parlor	6	Conference Room	12
	Living Room	6	Display Room	10
Library	Reading Room	6	Toilet	10
			Rooms where poisonous or Inflammable gas is produced	More than 20

Benefits

Wall Mount Ventilation Fan

These fans shall be installed in and exhaust air through a wall. They are equipped with outside shutters which will open when the fan is on and vice versa. There is a wide range of products, either blade size or functions, that can fit to various requirements.

Filter type collects oil effectively that is ideal for the use in kitchen. Louver Type provides additional safety protection from finger reach while the Bathroom Series has a powerful exhaust capacity to remove moisture and smell in bathroom and toilet.

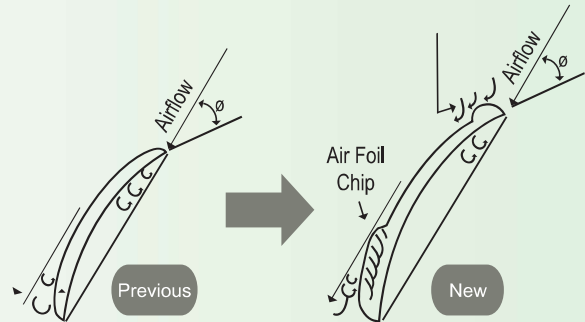


Advanced Blade Design

New blade design applies advanced aerodynamic principle that minimizes any obstacles against the airflow.



Leading Edge forms no obstacle to airflow that streamlines airflow from every direction



Air Foil Chip is to reduce turbulence at rear edge, and curvature of front edge is improved for smooth airflow that minimizes fan noise as well.

New HP Motor & Bearing

Compared with previous models, new models adopt high performance condenser motor and long life bearing that prolong the product durability, from average 30,000 hours life time to 60,000 hours. It enables saving by reducing power consumption down to average 13%.





Wall Mount

Easy Maintenance

Our design is easy to dismantle and reassemble for cleaning.

Unique Q-blades For Low Noise

Uniquely designed blades ensure minimal noise disruption during operation.

Thermal Safety Fuse

Safety fuse ensures that no accidents occur, even when there is a spike in current.

Features

(Applicable for FV-10EGK1NBH / FV15EGK1NBH)

Compact and Stylish

Compact size with powerful exhaust capacity can fit most bathrooms up to 7.5m³ and 15 m³ respectively. Moreover, the slim and elegant design of front louver match any modern decor perfectly.

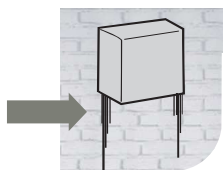
All Accessories Included

The Moisture & Smell Exhauster includes all required accessories in the packaging. It provides you convenience saves your time for seeking available accessories in the market.

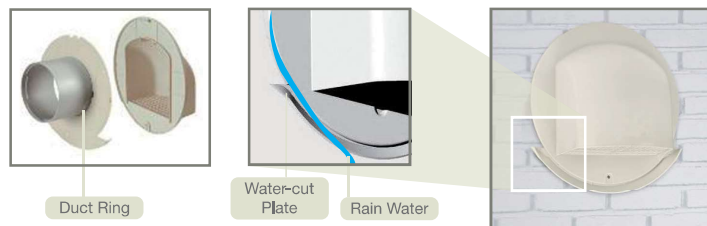


Trace-Prevention

When it rains, rain water flowing along pipe hood may cause trace marks on the wall. The exclusively designed duct ring leads the water flow to get rid of traces on the wall.



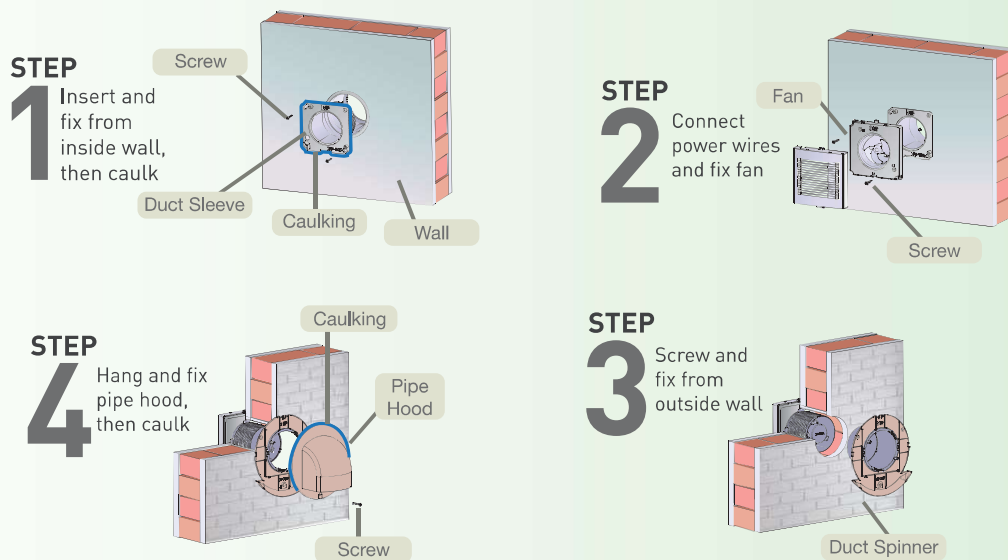
With a standard pipe hood, rain water may cause trace mark on the wall



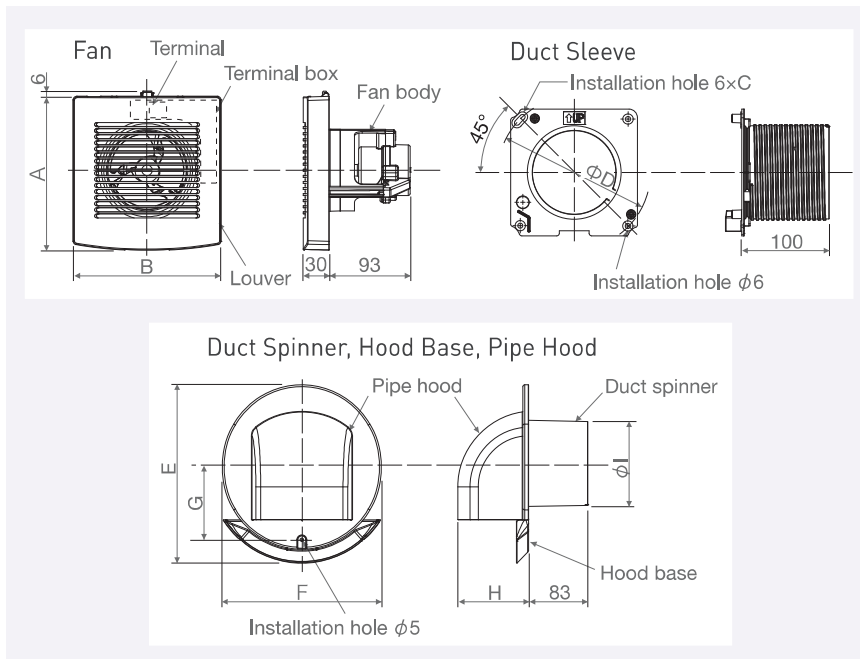
The water-cut plate of duct ring leads water flow over the wall to avoid forming of trace mark on the wall

Easy Installation

The ventilation is well-designed to facilitate the installation of product. With the supplied accessories, only 4 steps are required to complete the installation.



FV-10EGK1NBH / FV-15EGK1NBH



Features

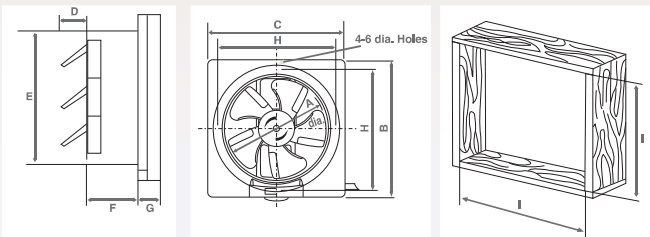
- Easy Installation
- All Accessories Provided
- (Including External Duct Cap)
- Thermal Safety Fuse
- Suitable For Bathrooms

Model	Installation Hole Dia. mm	Wall Thickness mm	mm								
			A	B	C	D	E	F	G	H	I
FV-10EGK1NBH	φ135 ±5	100-150	176	170	9,3	177	250	220	107	99	120
FV-15EGK1NBH	φ180 ±5		230	220	11,5	221	310	270	142	138	165

FV-20AUM8 / FV-25AUM7-WT / FV-30AUM8

Features

- Unique Q-blades For Low Noise
- Energy-saving, High Performance Motor
- Ball-Bearing Motor For Smoother And Durable Operation
- Automatic Shutters
- Built-in Oil Receptor
- Simple And Easy Installation (Non-duct)
- Thermal Safety Fuse
- Suitable For Kitchens



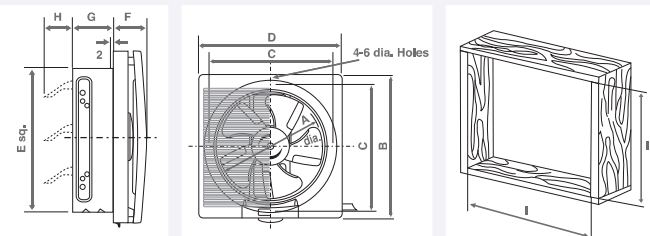
Model	Size		mm								
	cm	inch	A	B	C	D	E	F	G	H	I*
FV-20AUM8	20	8	200	300	300	83	240	90	45	260	250
FV-25AUM7-WT	25	10	250	350	350	70	290	90	40	310	300
FV-30AUM8	30	12	300	400	400	81	340	90	40	360	350

* Opening Hole Size

FV-20AL9VBH / FV-25AL9VBH

Features

- New Front Louver Design For Neater Outlook And Better Safety
- New Blade Design To Improve Efficiency
- Ball-Bearing Motor For Smoother And Durable Operation
- Automatic Shutter
- Thermal Safety Fuse
- Suitable For Kitchens And Living Rooms

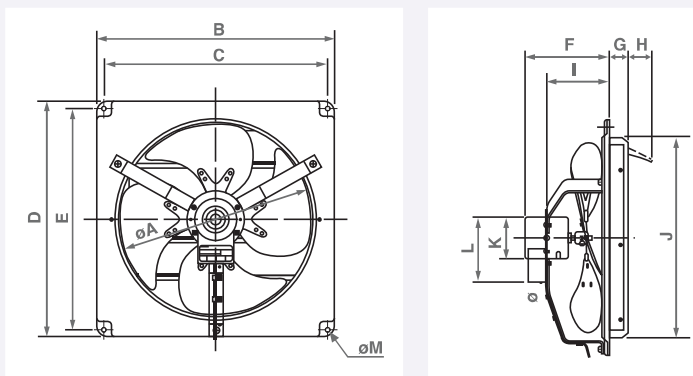


Model	Size		mm								
	cm	inch	A	B	C	D	E	F	G	H	I*
FV-20AL9VBH	20	8	200	306	260	302	240	88	90	80	250
FV-25AL9VBH	25	10	250	356	310	352	290	68	90	63	300

* Opening Hole Size

FV-40KUTNAHP

(Industrial)



Features

- Large Metal Blade Assembly For Abundant Air Volume
- Possible To Install Horizontally
- Built-in Safety Thermal Fuse
- Powerful, Efficient And Durable Condenser Motor
- Ideal For Workshops, Bakeries & Warehouses

Model	Size		mm												
	cm	inch	A	B	C	D	E	F	G	H	I	J*	K	L	M
FV-40KUTNAHP	40	16	410	510	480	510	480	181	40	52	133	434	90	141	10

* Opening Hole Size



Glass Mount

Easy Maintenance

Our design is easy to dismantle and reassemble for cleaning.

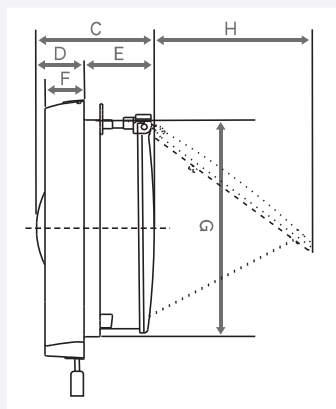
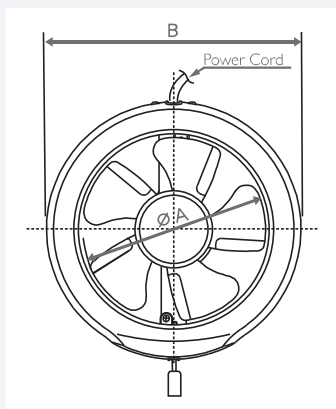
Unique Q-blades For Low Noise

Uniquely designed blades to ensure minimal noise disruption during operation.

Thermal Safety Fuse

Safety fuse ensures that no accidents occur, even when there is a spike in current.

FV-15WU403V/ FV-20WU403V



Features

- Thermal Safety Fuse
- Installed Directly Into The Glass Window, Window Panel Thickness (From 3mm - 7mm)
- Easy To Remove And Disassemble For Cleaning
- Cord Operated Shutter For Easy Operation
- Suitable For Bathrooms And Toilets

Model	Size		mm							
	cm	inch	A	B	C	D	E	F	G*	H
FV-15WU4VBH	15	6	150	210	97	43	54	37,4	177	149
FV-20WU4VBH	20	8	200	271	98	36	62	36	237	201

* Opening Hole Size



Ceiling Mount

Easy Maintenance

Our design is easy to dismantle and reassemble for cleaning.

Unique Q-blades For Low Noise

Uniquely designed blades to ensure minimal noise disruption during operation.

Thermal Safety Fuse

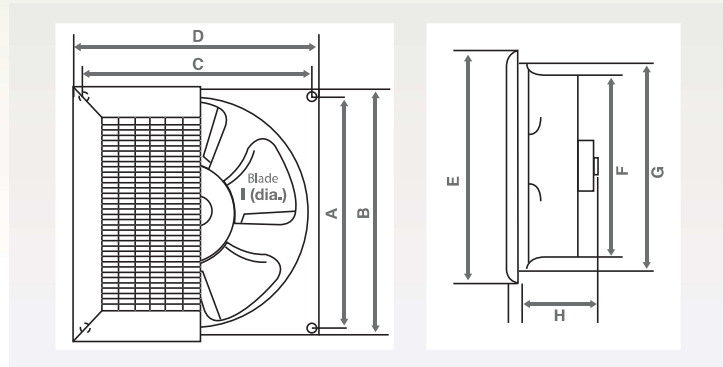
Safety fuse ensures that no accidents occur, even when there is a spike in current.

FV-15TGUZ-WT / FV-25TGU3-WT



Features

- Q-blades For Low Noise Operation
- Automatic Oil Circulation For Smoother And Durable Operation
- Easy To Install
- Built-in Safety Thermal Fuse
- Suitable For Offices And Bedrooms



Model	Size		mm								
	cm	inch	A	B	C	D	E	F	G*	H	I
FV-15TGUZ-WT	16	6,4	230	244	230	244	253	174	214	108	160
FV-25TGU3-WT	25	10	336	355	336	355	365	272	310	117,5	250

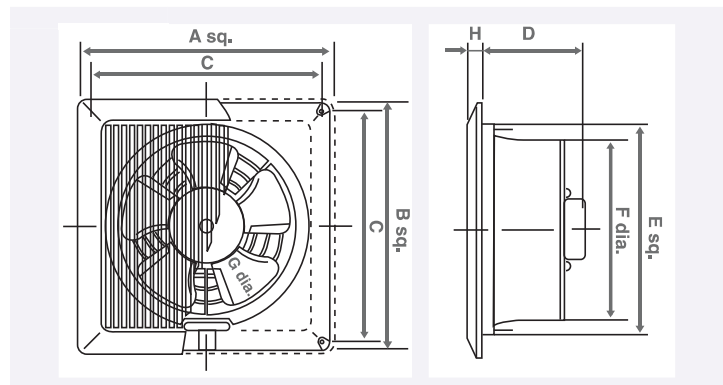
* Opening Hole Size

FV-20CUT1NAHP



Features

- Unique Q-blades For Low Noise
- Energy-saving, High Performance Motor
- Ball Bearing Motor For Smoother And Durable Operation
- Easy To Disassemble For Cleaning And Maintenance
- Easy To Install
- Built-in Safety Thermal Fuse
- Suitable For Offices And Bedrooms



Model	Size		mm							
	cm	inch	A	B	C	D	E*	F	G	H
FV-20CUT1NAHP	20	8	315	305	286	128	260	223	200	18

* Opening Hole Size

Features

- Energy Saving
- Quiet Operation
- Compact and Stylish
- Powerful, Efficient and Durable Ball Bearing Motor
- Easy Installation
- Easy Maintenance
- Suitable for Bedrooms, Bathrooms, Living Rooms & Offices
- Built-in Safety Thermal Fuse

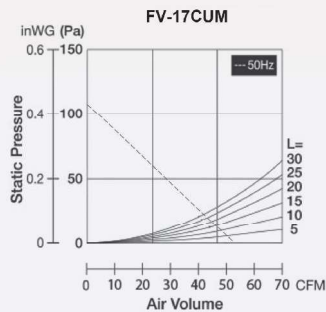
Friction Factor

- Aluminium flexible duct 0.03~0.04
- PVC pipe 0.01~0.02
- Galvanized steel pipe 0.016~0.025

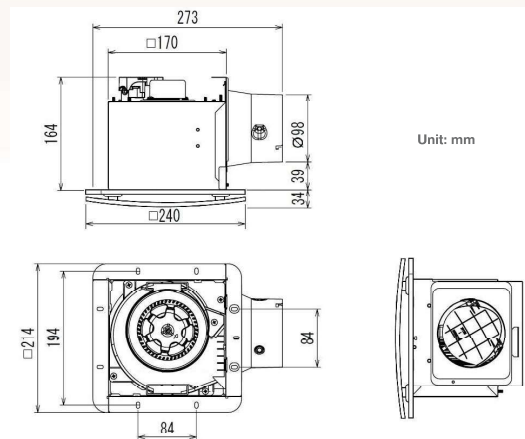
Colour

Silver

Static Pressure Performance Data



CEILING MOUNT SIROCCO FV-17CUMVBSH



Features

- Energy Saving
- Quiet Operation
- Compact and Stylish
- Powerful, Efficient and Durable Ball Bearing Motor
- Easy Installation
- Easy Maintenance
- Suitable for Bedrooms, Bathrooms, Living Rooms & Offices
- Built-in Safety Thermal Fuse

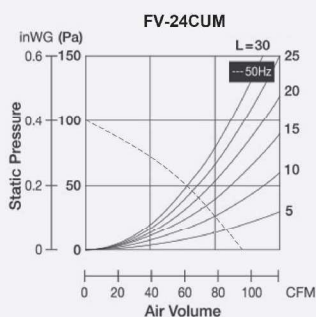
Friction Factor

- Aluminium flexible duct 0.03~0.04
- PVC pipe 0.01~0.02
- Galvanized steel pipe 0.016~0.025

Colour

Silver

Static Pressure Performance Data



CEILING MOUNT SIROCCO FV-24CUMVBSH

