CFM
CONTINENTAL FAN

better AIRFLOW *by* DESIGN™

Residential Fans & Air Purifiers

EXT EXTERNAL MOUNT DUCT FANS

EXT External Mount Duct Fans offer the perfect solution when space restrictions prevent the use of in-line duct fans. EXT fans provide a simple through-the-wall solution, and can be mounted on the exterior of a building to allow for easy access to the fan. EXT fans utilize quiet and energy efficient backward-curved centrifugal impellers.

Design Features

- Heavy gauge, galvanized steel housing with baked epoxy finish
- 120V operation
- May be mounted on the exterior of a building
- Enclosed motor housing for dust & lint
- Suitable for air temperatures up to 140 F / 60 C
- Energy efficient - speed controllable (optional solid state speed control)
- Rugged construction for long life
- Built-in backdraft damper
- Exceptionally quiet and efficient BC centrifugal motorized impeller
- External rotor motor design results in superior motor cooling and durability
- Permanently lubricated ball bearing motor for maintenance-free operation
- Automatic reset thermal overload protection
- Fan and motor are precision balanced for quiet and vibration-free operation
- Pre-wired capacitor
- Available to fit duct sizes in 4", 6", & 8"; airflow capacities to 445 cfm

FAN OPTIONS

Accessories	Controls	Grilles
Pages 22-23	Pages 20-21	Page 19

			AIRFLOW PERFORMANCE (CFM)									
MODEL	WATTS	RPM	0" SP	0.1" SP	0.3" SP	0.4" SP	0.5" SP	0.8" SP	1.0" SP	1.3" SP	1.5" SP	2.0" SP
EXT100A	66	1560	118	101	84	72	62	44	28	16		
EXT100B	81	2260	177	163	150	140	125	100	72	47	26	
EXT150A	90	2436	227	202	186	174	162	130	85	21		
EXT150B	140	2830	396	373	350	326	311	268	232	190	149	66
EXT200A	140	2820	445	393	358	328	300	254	212	170	119	
EXT200B	186	2310	420	379	353	329	298	249	211	172	142	

DIMENSIONS IN INCHES*										
MODEL	A	B	C	D	E	F	G	H	J	SHIP WT (LBS)
EXT100A	10.2	14.0	3.6	5.2	3.8	10.3	7.9	6.2	3.8	11.6
EXT100B	10.2	14.0	3.6	5.2	3.8	10.3	7.9	6.2	3.8	11.6
EXT150A	10.2	14.0	3.6	5.2	5.8	10.3	7.9	5.2	2.8	11.6
EXT150B	14.2	17.3	3.6	5.2	5.8	12.3	11.6	7.2	4.2	18.0
EXT200A	14.2	17.3	3.6	5.2	7.8	12.3	11.6	6.3	3.2	18.0
EXT200B	14.2	17.3	3.6	5.2	7.8	12.3	11.6	6.3	3.2	19.0

DO NOT USE FOR CONSTRUCTION   *CONSULT FACTORY FOR CERTIFIED PRINTS*
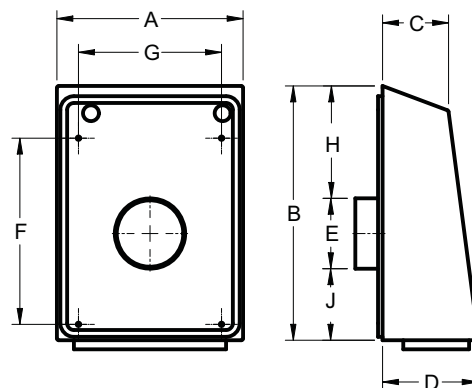
SUPPLY & EXHAUST GRILLES

Enhance your bathroom décor with Continental Fan's attractive ventilation grilles. These sleek and attractive grilles compliment any bathroom interior and maximize your fan's performance.

Adjustable Ventilation Grilles

GR adjustable ventilation grilles are designed for ceiling or wall applications. The fully adjustable ventilation grilles are easy to install and adjust. GR grilles are ideal for use with in-line fans.

- ❑ GR100   Adjustable Grille 4", Collar
- ❑ GR150   Adjustable Grille 6", Collar
- ❑ GR200   Adjustable Grille 8", Collar
- ❑ GR100-6PK   Adjustable Grille 4", Collar - 6 pcs
- ❑ GR150-6PK   Adjustable Grille 6", Collar - 6 pcs

AeroGrille Ventilation Grilles

AeroGrilles feature quality construction and allow for whisper quiet airflow. Designed for use with either in-line or external mount duct fans, they fit a standard 6″ duct.

- ❑ AG150   AeroGrille 6"
- ❑ AG150-C   AeroGrille 6", Collar
- ❑ AG150-CD   AeroGrille 6", Collar, Damper

Retro Ventilation Grilles

Square or round retro supply and exhaust grilles are ideal for use with in-line duct fans.

- ❑ RTR678   Round Grille, 6"-7"-8", Stepped Collar
- ❑ RTS678   Square Grille, 6"-7"-8", Stepped Collar

Decorative Ventilation Grilles

These attractive grilles are designed for use with non-lighted versions of AeroFan bathroom fans.

- ❑ TGRRD90   Grille TBF90, Round Silver/Chrome
- ❑ TGRRD120   Grille TBF120, Round Silver/Chrome
- ❑ TGRSQ90   Grille TBF90, Square Silver/Chrome
- ❑ TGRSQ120   Grille TBF120, Square Silver/Chrome
- ❑ TGRCH90   Grille TBF90, Rectangular Silver/Chrome
- ❑ TGRCH120   Grille TBF120, Rectangular Silver/Chrome

CFM
CONTINENTAL FAN

DFC DIGITAL FAN CONTROL

Indoor Air Quality (IAQ)

Indoor Air Quality (IAQ) has become an important part of our everyday lives. IAQ affects us in the workplace, schools and more significantly, in our homes. The American Society of Heating, Refrigeration and Air-Conditioning Engineers publishes ASHRAE 62.2, a standard that defines the minimum ventilation requirement and acceptable indoor air quality in low-rise residential buildings.

The DFC Digital Fan Control uses smart technology to address the requirements of ASHRAE 62.2, and it is capable of automatically calculating the airflow required to achieve acceptable indoor air quality. It is designed to provide increased ventilation control that is efficient and affordable. Its unique architecture offers a choice of five distinct modes of operation, allowing the control to be programmed to suit a user's preference and lifestyle. When combined with an AXC In-Line Duct Fan, the DFC Digital Fan Control provides an excellent way of meeting IAQ standards.

Design Features

- Easy to install
- Simple to program
- Convenient display with backlight
- User friendly icons
- Easy to read digital clock
- Automatic Daylight Savings Time function
- ASHRAE 62.2 ventilation standard
- Promotes proper Indoor Air Quality (IAQ)
- Ideal for home & bathroom ventilation
- Available in white or ivory
- Designed for single-speed fan operation
- Five year warranty

Modes of Operation

The DFC Digital Fan Control allows the user to choose from five modes of operation:

1. Ventilation Mode

   The Ventilation Mode is designed to achieve ASHRAE 62.2 acceptable indoor air quality. In this mode, the fan control operates on a 60 minute cycle, automatically determining the percentage of run time based on floor space, number of rooms and fan capacity. For example, if the fan is On for 15 minutes, it will be Off for 45 minutes.

2. Customized Cycle Mode

   The Customized Cycle Mode allows the user to set the On and Off periods for the fan. Once selected, the control will cycle the fan automatically based on the user's preference.

3. Daily On/Off Mode

   The Daily On/Off Mode allows the user to program the fan to turn On and Off once a day, at user defined times.

4. Manual Mode

   In the Manual Mode, the control operates the fan like a regular on/off switch. Simply pressing the main button turns the fan On or Off.

5. Countdown Mode

   The Countdown Mode allows the fan to operate for any period between 10 and 60 minutes. At the end of the countdown period, fan operation will return to its prior programmed mode.

VENTILATION AIR REQUIREMENTS (CFM)

Floor Area (ft^2)	Bedrooms				
	0-1	2-3	4-5	6-7	>7
< 1,500	30	45	60	75	90
1,501 - 3,000	45	60	75	90	105
3,001 - 4,500	60	75	90	105	120
4,501 - 6,000	75	90	105	120	135
6,001 - 7,500	90	105	120	135	150
> 7,500	105	120	135	150	165

Table 4.1A, ASHRAE 62.2-2007

Fan Controls

Variable Speed Controls (Solid State)

VSC3 and VSC9 variable speed controls are designed for AC motors.

- ☐ VSC3   Variable Speed Control - 3 amp - 3 Wire
- ☐ VSC9   Variable Speed Control - 9 amp - 3 Wire

Digital Timers

Time control auto shut off, in preset intervals, allows for proper ventilation and energy savings. The red LED indication light remains lit until the unit shuts off.

- ☐ DT60   Digital Timer 10 - 20 - 30 - 60 Minutes

Spring Wound Timer

Spring wound timer provides energy savings by limiting the "on-time" of the fan, up to 60 minutes. CT timers are easily installed in a standard electrical box. Cover plate not included.

- ☐ CT100V   Spring Wound Timer 0 - 1 Hour

On/Off Switch (w/Pilot Light)

The neon light is ON when the switch is in the ON position. 15Amp, 120V Single Pole/ AC Switch. Cover plate not included.

- ☐ PLS120V   ON/OFF Switch w/Pilot Light

Thermostat

The TST120V thermostat is suitable for direct connection with any resistance heating element or unit heater.

- ☐ TST120V   Line Voltage Thermostat, 120V

Dehumidistat (for Humidity Control)

Wall mounted DHS dehumidistat allows for "problem" areas to be targeted for ventilation. Regulates relative humidity from 20% to 80% RH (8% RH Maximum Differential).

- ☐ DHS120V   Dehumidistat

Current Sensor (Solid State)

The CS120VAF current sensor provides a compact, low cost method of detecting AC current. It is ideal for ON/OFF sensing of remote equipment.

- ☐ CS120AF   Current Sensor, 120V, Solid State

Pressure Switch (with Time Delay)

Designed for HVAC or Energy Management applications, PST120V pressure switch is an airflow proving switch with an electronic cycle timing board.

- ☐ PST120V   Pressure Switch w/Time Delay

Auto Transformer

TF auto transformer allows for voltage to be regulated to 60V & 90V increments. Channel frame mounting and metal end shells make for a simple installation.

- ☐ TF120V   Auto Transformer - 90/60V

Fan Accessories

Flexible Insulated Duct

UL listed 181 class 1 air duct , wrapped with R4.2 insulation and black polyethylene cover. Ideal for long run applications for HVAC, bathroom and general venting applications.

- ❑ FL100   Flexible Insulated 4" Duct - 12.5' Length
- ❑ FL100-25   Flexible Insulated 4" Duct - 25' Length
- ❑ FL125   Flexible Insulated 5" Duct - 25' Length
- ❑ FL150   Flexible Insulated 6" Duct - 25' Length
- ❑ FL200   Flexible Insulated 8" Duct - 25' Length
- ❑ FL250   Flexible Insulated 10" Duct - 25' Length
- ❑ FL300   Flexible Insulated 12" Duct - 25' Length
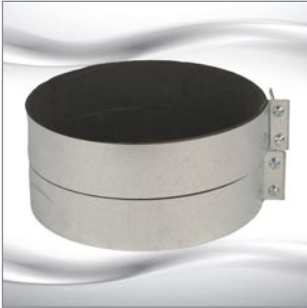
Mounting Clamps for Rigid Duct

MC mounting clamps are designed for use with rigid duct. The foam neoprene layer creates an air tight and solid installation for in-line duct fans.

- ❑ MC100   Mounting Clamps for Rigid 4" Duct (2pc)
- ❑ MC125   Mounting Clamps for Rigid 5" Duct (2pc)
- ❑ MC150   Mounting Clamps for Rigid 6" Duct (2pc)
- ❑ MC200   Mounting Clamps for Rigid 8" Duct (2pc)
- ❑ MC250   Mounting Clamps for Rigid 10" Duct (2pc)
- ❑ MC300   Mounting Clamps for Rigid 12" Duct (2pc)
- ❑ MC355   Mounting Clamps for Rigid 14" Duct (2pc)

Gear Clamps for Flexible Duct

GC stainless steel gear clamps are an easy and effective way to connect an in-line duct fan to flexible insulated duct and other auxiliary pieces.

- ❑ GC150   Gear Clamp for 4" - 6" Duct, Stainless Steel
- ❑ GC200   Gear Clamp for 5.5" - 8.5" Duct, Stainless Steel

Duct Reducers/Increasers

DRI duct reducers/increasers are used to transition a duct from a larger or smaller size. Available in 28 Ga.

- ❑ DRI-04-03   Duct Reducer/Increaser, 4" - 3" Duct, Plastic
- ❑ DRI-06-04   Duct Reducer/Increaser, 6" - 4" Duct, Galvanized
- ❑ DRI-08-06   Duct Reducer/Increaser, 8" - 6" Duct, Galvanized
- ❑ DRI-10-08   Duct Reducer/Increaser, 10" - 8" Duct, Galvanized
- ❑ DRI-12-10   Duct Reducer/Increaser, 12" - 10" Duct, Galvanized
- ❑ DRI-14-12   Duct Reducer/Increaser, 14" - 12" Duct, Galvanized

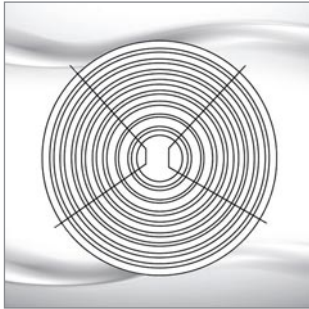### Wye Fittings

WYE fittings provide an airtight branch fitting. The crimp and bead edging ensures an easy connection. Available in 28 Ga.

- ❑ WYE-04   Y-Fitting, 4"x4"x4" Duct
- ❑ WYE-06   Y-Fitting, 6"x6"x6" Duct
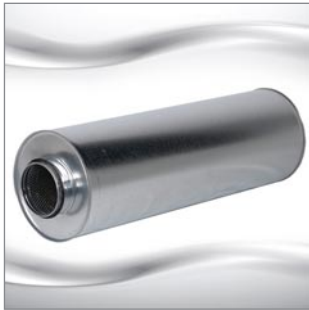- ❑ WYE-08   Y-Fitting, 8"x8"x8" Duct

Fan Accessories

Guards

PG guards are used in various applications. Utilize a PG guard as a grille, or mount it directly on the outlet/inlet of a fan to allow for a safe installation.

- PG100   Guard, 4" Duct
- PG125   Guard, 5" Duct
- PG150   Guard, 6" Duct
- PG200   Guard, 8" Duct
- PG250   Guard, 10" Duct
- PG300   Guard, 12" Duct

Sound Attenuators

SA sound attenuators are designed to reduce fan noise traveling along ventilation ducts. They may be used in either supply or exhaust ducts.

- SA100   Sound Attenuator, 4" Duct
- SA150   Sound Attenuator, 6" Duct
- SA200   Sound Attenuator, 8" Duct
- SA250   Sound Attenuator, 10" Duct
- SA300   Sound Attenuator, 12.4" Duct
- SA400   Sound Attenuator, 16" Duct

Louvered Shutters (with Tail Piece)

LS louvered shutters are designed as plastic molded vent hoods. The weather resistant louvered construction prevents wind and rain from entering the vent.

- LS100-4W   Louvered Shutter, 4" Duct
- LS150-6W   Louvered Shutter, 6" Duct

Roof & Wall Caps

Black plastic roof caps include damper, screen, and collar. Aluminum wall caps include spring controlled damper.

- RC100   Roof Cap, 4" Duct, Black Plastic
- RC150   Roof Cap, 6" Duct, Black Plastic
- RC200   Roof Cap, 8" Duct, Black Plastic
- WC100   Wall Cap, 4" Duct, Aluminum, Reducer 4" - 3"
- WC150   Wall Cap, 6" Duct, Aluminum
- WC200   Wall Cap, 8" Duct, Aluminum

Lint Trap

LT100 lint traps offer a simple solution for reducing maintenance associated with dryer vents. The one-piece door with screen slides easily into place, without having to fuss with flimsy springs or clips. Its versatile design allows for either wall or ceiling mount installation.

- LT100   Lint Trap for Dryer, 4" Duct
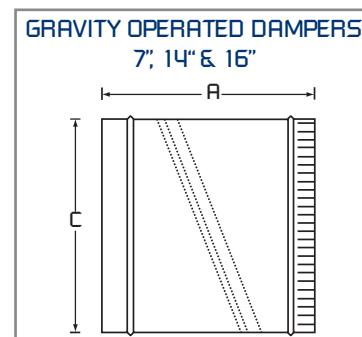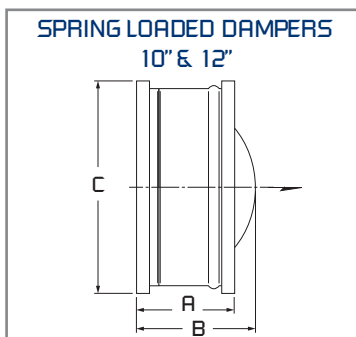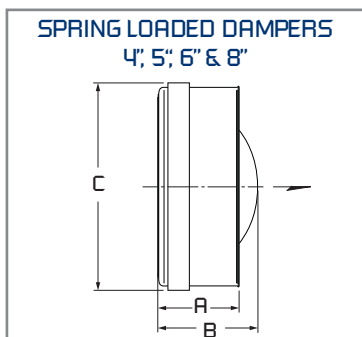
DAMPERS

BDD BACKDRAFT DAMPERS

Spring Loaded Dampers
- Neoprene damper seal to minimize air leakage
- Steel housing, aluminum butterfly damper blades
- Gasket designed to withstand temperatures from -22 F to 180 F
- Requires from 0.04 to 0.08 in. wg pressure to open
- Simple installation in any position - entire assembly inserts into duct
- Exterior foam gasket assures a tight seal against duct
- 4", 5", 6" & 8" sizes include stamped metal sleeve with center pin / post designs
- 10" & 12" sizes include rolled metal sleeve with center post design
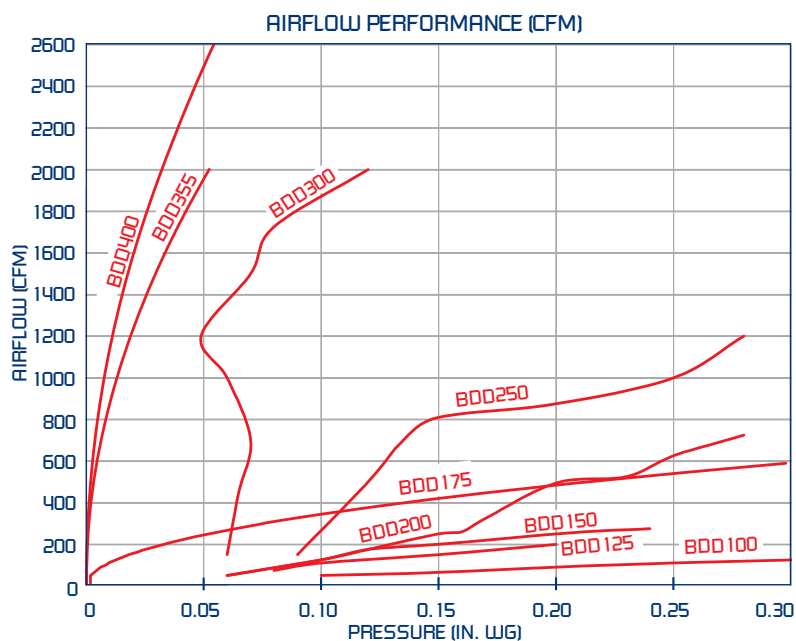
Gravity Operated Dampers
- Low air leakage design
- Galvanized steel housing, aluminum butterfly damper blades
- Gravity operated closure
- Install in horizontal or vertical (upblast only) position
- Suitable for supply or exhaust applications
- Available in 7", 14" & 16" sizes

SPRING LOADED DAMPERS
4", 5", 6" & 8"

SPRING LOADED DAMPERS
10" & 12"

GRAVITY OPERATED DAMPERS
7", 14" & 16"

MODEL	DIMENSIONS IN INCHES*			
	A	B	C (Nominal)	Gauge
SPRING LOADED DAMPERS				
BDD100	1.8	2.0	4	20
BDD125	2.0	2.5	5	20
BDD150	2.5	3.0	6	20
BDD200	2.8	3.8	8	20
BDD250	4.8	6.0	10	20
BDD300	6.3	6.8	12	20
GRAVITY OPERATED DAMPERS				
BDD175	7.0	-	7	28
BDD355	12.0	-	14	24
BDD400	14.0	-	16	22

DO NOT USE FOR CONSTRUCTION
CONSULT FACTORY FOR CERTIFIED PRINTS

AIRFLOW PERFORMANCE (CFM)

Chart: AIRFLOW (CFM) vs PRESSURE (IN. WG), showing curves for BDD400, BDD355, BDD300, BDD250, BDD175, BDD200, BDD150, BDD125, BDD100
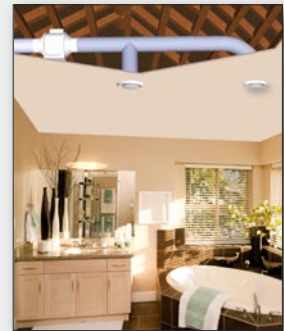
HOME VENTILATION SOLUTIONS

There are many locations in a home where air movement may be necessary:
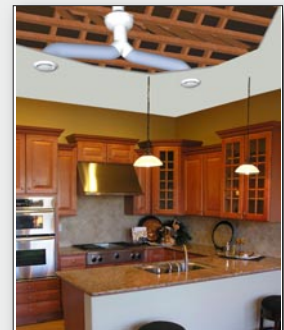
Duct Boosting
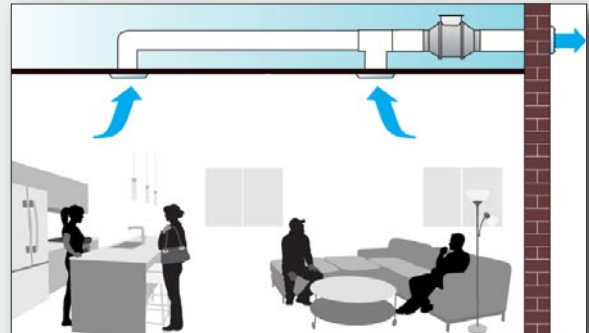
Bathroom Exhaust

Kitchen Exhaust

Additional Applications

- Dryer boosting
- Garage ventilation
- Attic ventilation

- Whole house ventilation
- Crawl space ventilation
- General kitchen exhaust

- Basement kitchens, washrooms
- Apartments/townhouses
- Indoor pool ventilation

Helpful Tips

Use insulated duct in unheated spaces.

Control air volume with a variable speed control.

Sound levels in a duct fan installation decrease as the distance of the fan from the intake grille increases. Five feet is usually adequate.

Rigid duct tends to echo fan noise. To reduce sound levels, use flexible insulated duct.

One 4" fan will boost air up to 90 linear feet of duct.

Always consult local building codes prior to selecting product and materials.

DUCT BOOSTING

DOES YOUR HOME HAVE A ROOM THAT IS DIFFICULT TO HEAT OR COOL?

Many homes and office buildings have at least one area that presents a problem for heating or cooling. This is usually the result of additions or renovations being made without proper consideration for the heating / cooling systems.

In-line duct fans solve many air moving problems efficiently and quietly. They are designed to boost airflow through long or complex duct runs, resulting in better air comfort in the "problem" areas.

Combining a pressure switch with an additional thermostat located in the "problem" area provides additional control. This combination only provides air boosting when both the pressure switch is activated by the furnace fan and the temperature in the area rises or falls below a comfortable setting.

All of Continental Fan's in-line duct fans are ideal for duct boosting.

FAN OPTIONS & ACCESSORIES

AXC
In-Line Duct Fans

EXT
External Mount Duct Fans

MBI
Centrifugal In-Line Fans

MFT-S
Mixed Flow In-Line Fans

HOME VENTILATION SOLUTIONS

How much airflow is required?

The following recommendations follow minimum guidelines published by the Home Ventilating Institute (HVI):

Bathroom less than 100 square feet:
- 1 cfm per square foot of floor area. A minimum of 50 cfm is the required ventilation rate.

Bathroom larger than 100 square feet:
- To calculate the proper ventilation rate, add the cfm requirement for each fixture; toilet 50 cfm, shower 50 cfm, bathtub 50 cfm, jetted tub 100 cfm.

Note: For proper sizing, the static pressure (SP) needs to be calculated. For typical applications, you may read from the 0.2" SP column for a selection.

BATHROOM EXHAUST

HOW WELL DOES YOUR BATHROOM EXHAUST FAN PERFORM?

As our homes continue to grow, so do our bathrooms. A lot of time and effort goes into renovating and creating the ideal bathroom. The bathroom has become a space of luxury and relaxation the entire family enjoys. We crave the tranquil spaces, equipped with everything from traditional tubs and showers, to steam baths, whirlpools, and saunas.

To ventilate these new spaces properly and to prevent mold and mildew buildup, multiple venting points and a powerful yet quiet exhaust system are required. Low quality, noisy, ceiling mounted bath fans are not capable of providing this. There is, however, a simple solution. Continental Fan's remote mount in-line duct fans provide the strong, quiet, and effective exhaust required to meet today's bathroom ventilation needs!

AXC, AXP, and MFT fans can be mounted in the attic. If space is limited, select an EXT external mount duct fan, which can be mounted to an exterior wall, or an MBI centrifugal in-line fan, which can be mounted between two studs.

If a traditional in-ceiling fan is your preference, then the high quality AeroFan is an ideal solution. The sleek design of the AeroFan is available in lighted or non-lighted versions.

FAN OPTIONS & ACCESSORIES

EXT External Mount Duct Fans

AXC In-Line Duct Fans

MBI Centrifugal In-Line Fans

AeroFan Bathroom Fans

How to size a Range Hood Exhaust Fan

The following recommendations follow minimum guidelines published by the Home Ventilating Institute (HVI):

Wall Mounted Range Hood:
- 100 cfm per foot of hood width (36" range would require a minimum 300 cfm)

Island Style Range Hood:
- 150 cfm per foot of hood width (36" range would require a minimum 450 cfm)

Note: Local building codes, as well as any recommendations provided by the range and range hood manufacturers, should be consulted before making a fan selection.

RANGE HOOD EXHAUST

HOW WELL DOES YOUR RESIDENTIAL RANGE HOOD EXHAUST PERFORM?

Whether one is an active parent on the go, or a gourmet chef moonlighting at a day job, the kitchen is the heart of a home. The household congregates there for breakfast, reviews daily activities, and enjoys family dinners. All too often, kitchens can be marred by smoke and odors due to an inefficient range hood.

In-line duct fans are a simple solution for an inefficient residential range hood. In-line duct fans can be used as a principle exhaust fan or as a booster fan to improve the efficiency of an existing residential range hood. These fans may be speed controlled with an independent speed controller, or by tying into an existing range hood controller.

AXC in-line duct fans and EXT external mount duct fans are ideal for range hood exhaust.

WHAT IF A RANGEHOOD ISN'T AN OPTION?

Not every home or remodel is suited for a rangehood to ventilate the kitchen. Homeowners can still evacuate the smoke and odor produced from cooking, with the same quiet and efficient exhaust fans used in rangehood ventilation. Continental Fan recommends using ceiling grilles combined with an AXC in-line duct fan or EXT external mount fan and a variable speed control. Ceiling grilles can be installed directly over the area you want to target, so when in use the fumes will not linger around the house.

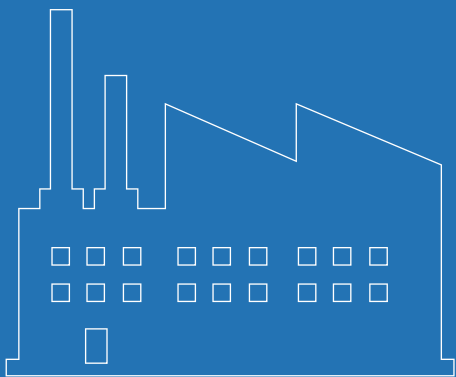## FAN OPTIONS & ACCESSORIES

AXC
In-Line Duct Fans
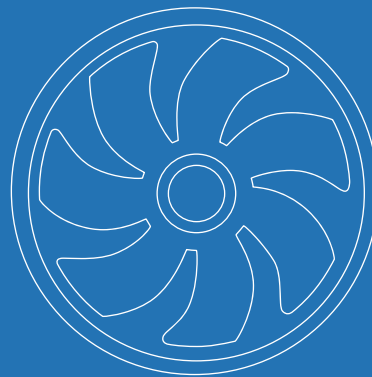

EXT
External Mount Duct Fans

SA
Sound Attenuator

BDD
Backdraft Dampers

Industrial Fans & Blowers

OEM Solutions & Custom Fans

Commercial Fans & Dampers

Residential Fans & Air Purifiers

better AIRFLOW *by* DESIGN™