CFM
CONTINENTAL FAN

better AIRFLOW *by* DESIGN™

AXC
In-Line Duct Fans

AXC In-Line Duct Fans

Continental Fan's AXC in-line centrifugal duct fans are designed for residential, commercial and industrial ventilation applications. The quiet and efficient backward-curved impeller is capable of developing significant pressure, and the in-line configuration simplifies installation, saving time and money!

Design Features

- ENERGY STAR® qualified fan models (AXC-ES)
- Quiet, powerful, compact; the most user-friendly fan in the industry
- Exclusive mounting brackets included for simple installation
- 147 cfm - 1400 cfm available, to fit duct sizes from 4"-14"
- 120V operation (also available in 220V; contact factory for details)
- Speed controllable using optional solid state speed control
- Fans are easily installed in flexible or rigid duct
- Fans may be used to supply or exhaust air
- Fans may be mounted in any position
- Heavy gauge, drawn steel housing with baked epoxy finish inside and out
- Suitable for light dust and fumes
- Backward-curved fan impeller:
  - ✔ Operates at low sound levels
  - ✔ Overcomes high static pressure
  - ✔ Will not stall or overload motor at low airflow
- External rotor motor design results in superior motor cooling, durability
- Permanently lubricated ball bearing motors for maintenance free operation
- Automatic reset thermal overload protection for additional safety
- External junction box contains pre-wired capacitor, to simplify wiring
- Fan and motor assembly is precision balanced for quiet and vibration-free operation

For performance and dimensional data, see back page.

Applications

AXC in-line duct fans can solve many air moving problems. They are designed to boost airflow through long or complex duct runs, and provide ideal solutions for areas that are hard to heat or cool.

Range Hood Exhaust (see page 3)

Bathroom Exhaust (see pages 4 & 5)

Duct Boosting

Other applications include:

- Residential kitchen exhaust
- Cafeteria exhaust
- Hot tub / sauna exhaust
- Warm air transfer
- Spot cooling

- Conference room exhaust
- Computer rooms
- Health care facilities
- Humidity and moisture removal
- Equipment cooling

- Principal exhaust fan
- General ventilation
- Hair and nail salons
- Powered make-up air
- HRV/ERV boosting

AXC Range Hood Exhaust

All too often, kitchens can be marred by smoke and odors due to an inefficient range hood. Continental Fan's AXC Range Hood Exhaust Fans provide strong yet quiet exhaust, and can be used to improve the efficiency of an existing residential range hood. AXC fans may be speed controlled with an independent speed controller, or by tying into an existing range hood controller. Rugged, heavy gauge housings have a baked epoxy coating, inside and out, for superior corrosion protection.

In today's energy conscious environment, selecting an ENERGY STAR® qualified range hood exhaust fan assures the highest efficiency and lowest operating cost.

Design Features

- ENERGY STAR® qualified fan models (AXC-ES)
- Stronger, quieter residential range hood exhaust
- Superior performance over traditional in-hood fans
- Use as principle exhaust fan or as a booster fan
- Remote mounted in-line duct fan design
- See all AXC fan design features on page 2

For performance and dimensional data, see back page.

Helpful Tips

- Prior to selecting product and materials, consult local building codes.
- A range hood grease filter, commonly found in pre-fabricated hoods, must be used in conjunction with AXC fans.
- AXC fans may be mounted at any angle.
- AXC fan sound levels decrease as the installation distance from the range hood increases.

How to size a Range Hood Exhaust Fan
The following recommendations follow guidelines published by the Home Ventilating Institute (HVI):

- For a Wall Mounted Range Hood:
  - 100 cfm per foot of hood width
    - i.e. a 36″ range would require a minimum 300 cfm

- For an Island Style Range Hood:
  - 150 cfm per foot of hood width
    - i.e. a 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.
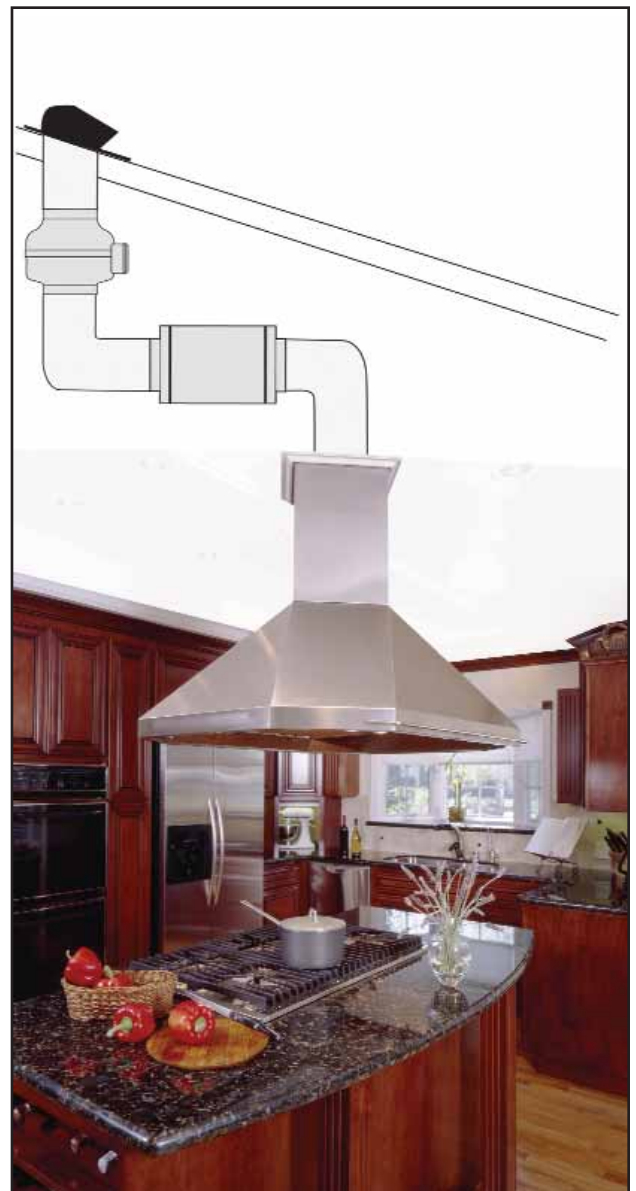
AXC Bathroom Ventilation

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

Design Features

· ENERGY STAR® qualified fan models (AXC-ES)
· Quiet, powerful, compact bathroom ventilation
· Exhaust is two to four times greater than traditional bathroom fans
· Remote mounted in-line duct fan design
· Suitable for direct shower ventilation
· Suitable for use with multiple ventilation points
· Designed to handle long duct runs
· Easy-to-install fan kits
· See all AXC fan design features on page 2

For performance and dimensional data, see back page.

Bathroom Ventilation Kits

ENERGY STAR® qualified AXC fans are available in a selection of easy-to-install kits.

ROOM SIZE	FAN MODEL	AVAILABLE KITS
Up to 100 sq. ft.	AXC100A-ES	RG100-ES; AGK100-ES; RBFK100-ES
Up to 150 sq. ft.	AXC150A-ES	RG150A-ES; AGK150A-ES; DX150A-ES; DXAGK150A-ES
Over 150 sq. ft.	AXC200A-ES	DX200A-ES

Note: DX kits feature two vents and may be used for two rooms.

Helpful Tips

· AXC fan mounts easily to attic joists with the exclusive Continental Fan mounting bracket.
· Always use insulated duct in unheated spaces.
· When direct venting a shower, or if noise is a significant factor, use insulated flexible duct to reduce condensation and/or noise levels.
· Add a DFC digital fan control for smart control technology and energy savings.

DFC Digital Fan Control

The DFC Digital Fan Control uses smart technology to address the requirements of ASHRAE 62.2, and 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.

Just how much airflow is required?

HVI recommends ventilation rates based on 8 air changes per hour. For most bathrooms this works out to 1 cfm per square foot of area, with a minimum of 50 cfm.

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

A 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.

AXC Bathroom Ventilation

Adjustable Grille Bathroom Ventilation Kits

Attack moisture at its source. Vary airflow to suit your needs. Adjustable Grille Bathroom Ventilation Kits are available with one or two ventilation points.

RG Kits Include:
AXC-ES Fan, Mounting Brackets, Duct Clamps, GR Adjustable Grille/Collar

- ❑ RG100-ES 147 cfm Fan, 4" Duct
- ❑ RG150A-ES 235 cfm Fan, 6" Duct

DX Kits Include:
AXC-ES Fan, Mounting Brackets, Duct Clamps, 2 GR Adjustable Grilles/Collars, Y-Fitting

- ❑ DX150A-ES 235 cfm Fan, 6" Duct
- ❑ DX200A-ES 368 cfm Fan, 8" Duct

AeroGrille Bathroom Ventilation Kits

The attractive, non-adjustable AeroGrille provides superior ventilation when combined with an AXC in-line duct fan. Kits are available for either one or two ventilation points.

AGK Kits Include:
AXC-ES Fan, Mounting Brackets, AeroGrille AG150-CD, Duct Clamps

- ❑ AGK100-ES 147 cfm Fan, 4" Duct
- ❑ AGK150A-ES 235 cfm Fan, 6" Duct

DXAGK Kit Includes:
AXC-ES Fan, Mounting Brackets, 2 AeroGrilles AG150-CD, Duct Clamps, Y-Fitting

- ❑ DXAGK150A-ES 235 cfm Fan, 6" Duct

RBFK Retrofit Bath Fan Kit

Retrofit a noisy and inefficient bathroom fan with an RBFK Retrofit Bath Fan Kit. Kits include all necessary hardware for a simple conversion and installation.

RBFK Kit Includes:
AXC-ES Fan, Mounting Brackets, 12.5' of 4" Insulated Flexible Duct, 12' of No. 14 AWG Wire, 2 Reducers (4"-3"), 2 Wire Nuts, Wire Cable Restraint, Mounting Screws

- ❑ RBFK100-ES 147 cfm Fan, 4" Duct

AXC Accessories

Flexible Insulated Duct

MODEL	DESCRIPTION
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

Louvered Shutters (with Tail Piece)

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

Sound Attenuators

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

Backdraft Dampers

Spring Loaded Dampers	
BDD100	Backdraft Damper, 4″ Duct
BDD125	Backdraft Damper, 5″ Duct
BDD150	Backdraft Damper, 6″ Duct
BDD200	Backdraft Damper, 8″ Duct
BDD250	Backdraft Damper, 10″ Duct
BDD300	Backdraft Damper, 12″ Duct
Gravity Operated Dampers*	
BDD175	Backdraft Damper, 7″ Duct
BDD355	Backdraft Damper, 14″ Duct
BDD400	Backdraft Damper, 16″ Duct

*Suitable for horizontal or vertical (upblast only) installations

Protection Guards
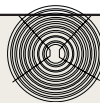
PG100	Protection Guard, 4″ Duct
PG125	Protection Guard, 5″ Duct
PG150	Protection Guard, 6″ Duct
PG200	Protection Guard, 8″ Duct
PG250	Protection Guard, 10″ Duct
PG300	Protection Guard, 12″ Duct

Mounting Clamps for Rigid Duct (Sold in Pairs)

MODEL	DESCRIPTION
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

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

Duct Reducers/Increasers

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

Roof Caps (Black Plastic)

RC100	Roof Cap, 4″ Duct, Black Plastic
RC150	Roof Cap, 6″ Duct, Black Plastic
RC200	Roof Cap, 8″ Duct, Black Plastic

Roof caps include damper, screen and collar

Wall Caps (Aluminum)

WC100	Wall Cap, 4″ Duct, Aluminum, Reducer 4″ - 3″
WC150	Wall Cap, 6″ Duct, Aluminum
WC200	Wall Cap, 8″ Duct, Aluminum

Wall caps include spring controlled damper

AXC Controls

Digital Fan Control

MODEL	DESCRIPTION
DFC	Digital Fan Control 5 Modes of Operation - 120V

Thermostat

MODEL	DESCRIPTION
TST120V	Line Voltage Thermostat, 120V

Variable Speed Controls (Solid State)

VSC3	Variable Speed Control - 3 AMP - 3 Wire
VSC9	Variable Speed Control - 9 AMP - 3 Wire

Dehumidistat (for Humidity Control)

DHS120V	Dehumidistat

Digital Timer

DT60	Digital Timer 10 - 20 - 30 - 60 Minutes

Pressure Switch (with Time Delay)

PST120V	Pressure Switch w/Time Delay

Spring Wound Timer

CT100V	Spring Wound Timer 0 - 1 Hour

Face plate not included

Current Sensor (Solid State)

CS120AF	Current Sensor, 120V, Solid State

On/Off Switch (with Pilot Light)

PLS120V	ON/OFF Switch w/Pilot Light

Auto Transformer

TF120V	Auto Transformer - 90/60V

AXC Supply & Exhaust Grilles

AeroGrille Ventilation Grilles

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

Adjustable Ventilation Grilles

GR100	Adjustable Grille, Collar, 4" Duct
GR150*	Adjustable Grille, Collar, 6" or 5" Duct
GR200	Adjustable Grille, Collar, 8" Duct
GR100-6PK	Adjustable Grille, Collar, 4" Duct - 6 per Box
GR150-6PK*	Adjustable Grille, Collar, 6" or 5" Duct - 6 per Box

* GR150 & GR150-6PK fit standard 6" duct; suitable for 5" duct when used without collar

Retro Ventilation Grilles

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

AXC In-Line Duct Fans

Performance Data

MODEL	WATTS	RPM	ENERGY STAR	CUBIC FEET PER MINUTE									
				0"SP	0.2"SP	0.4"SP	0.6"SP	0.8"SP	1.0"SP	1.2"SP	1.5"SP	2.0"SP	3.0"SP
AXC100A-ES	43.3	2580	Yes	147	130	107	82	57	34	11			
AXC100B	83.4	2620	No	150	140	127	112	94	74	53	23		
AXC125A-ES	44.4	2520	Yes	179	150	121	87	49	14				
AXC125B	85.4	2750	No	183	160	141	122	101	77	51	14		
AXC150A-ES	46.8	2390	Yes	235	190	148	97	44					
AXC150B-ES	89.2	2450	Yes	308	260	216	175	139	108	81	47		
AXC200A-ES	84.5	2500	Yes	368	300	234	184	149	114	70			
AXC200B-ES	188	2550	Yes	579	520	453	387	329	282	245	206	154	
AXC250-ES	197	2470	Yes	616	550	488	431	379	330	286	227	143	
AXC300A-ES	206	2450	Yes	780	700	595	420	330	290	255	210	132	
AXC300B-ES	312	2780	Yes	970	910	803	680	559	453	367	273	164	
AXC355A	334	1360	No	1325	1150	960	790	660	550	430	238		
AXC355B	830	2900	No	1400	1370	1325	1250	1210	1135	1090	1000	880	675

Dimensional Data

MODEL	D (in.)	d (in.)	a (in.)	B (in.)	WT (lbs)
AXC100A-ES	9.5	3.9	1.0	8.3	6.5
AXC100B	9.5	3.9	1.0	8.3	6.5
AXC125A-ES	9.5	4.8	1.0	8.3	6.5
AXC125B	9.5	4.8	1.0	8.3	6.5
AXC150A-ES	9.5	5.8	1.0	8.3	6.5
AXC150B-ES	13.2	5.8	1.0	9.1	11.0
AXC200A-ES	13.2	7.8	1.0	9.1	11.0
AXC200B-ES	13.2	7.8	1.0	9.1	11.0
AXC250-ES	13.2	9.8	1.0	9.1	11.0
AXC300A-ES	15.9	11.8	1.2	11.8	18.0
AXC300B-ES	15.9	11.8	1.2	11.8	20.0
AXC355A	19.0	14.0	1.5	15.7	26.0
AXC355B	19.0	14.0	1.5	15.7	31.0

HVI currently does not have a standard in place for testing the sound of a remote mounted fan. Many factors, such as ducting and fan location, can contribute to sound levels. Generally, a remote mounted fan should be quieter than a typical ceiling mounted fan.

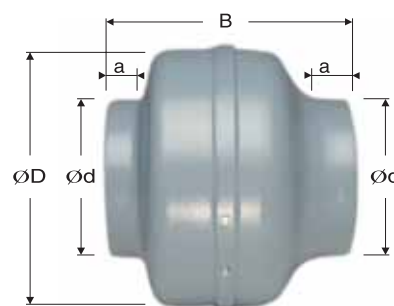AXC models 355A and 355B are CSA listed to both US and Canadian standards.

Products are HVI certified for airflow and power at 0.2″ SP

Fan models ending in -ES are ENERGY STAR® qualified

Helpful Tips

- Rigid duct tends to echo fan noise. To reduce sound levels, use flexible insulated duct (consult local codes before selecting duct type).
- To minimize condensation, use insulated, flexible duct when venting bathrooms or other warm and moist areas.

How do I know which fan is best suited for my application?

As previously summarized, there are numerous applications where ventilation is required. Whether it is for residential or commercial applications, it is imperative that the proper amount of airflow be calculated.

Residential

One of our qualified technical support personnel would be happy to assist in selecting a fan for your residential ventilating needs. If you would like to inform yourself further, HVI, the Home Ventilating Institute provides ventilating guidelines for consumers. For more information, visit www.hvi.org.

Commercial

For an application that is commercial or very specific in nature, you may want to enlist an HVAC contractor. For a list of contractors near you, consult the yellow pages.