FRONT VIEW

XFS SERIES EXHAUST SHUTTER FANS

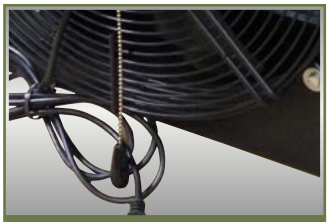
For use in garages, sheds, workshops and more!

Canarm's **XFS series** wall exhaust fans are ideal for commercial applications. They feature smooth, quiet, reliable, maintenance free operation.
Available in 12" to 24" sizes - fans are 2 or 3 speeds with OFF and come complete with a 9' cord and grounded plug.
The fans have a durable steel construction with powder coat black finish and quiet, aluminum shutters with tie bar to maximize airflow.
Installation is easy - simply mount the fan with 4 screws, plug it in and turn it on!

FEATURES

- Smooth, quiet, reliable, maintenance free operation.
- Available in 12" to 24" sizes.
- 12" and 16" models are 3 speed
- 20" and 24" models are 2 speed.
- Durable steel construction with powder coat black finish.
- Swept back, high efficiency, low noise blade design.
- Quiet, aluminum shutters with tie bar to maximize airflow.
- Strong powder coated OSHA guarding inside.
- ETL certified
- Euro design outside rotor motor for higher efficiency.
  - Totally enclosed with sealed ball bearings
  - Pull chain speed control
  - 9 foot cord with 115 volt, 3-prong plug
- Fans shipped totally assembled.


Tie bar aluminum shutters


Pull chain switch

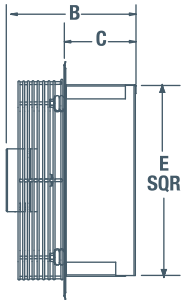
SPECIFICATIONS

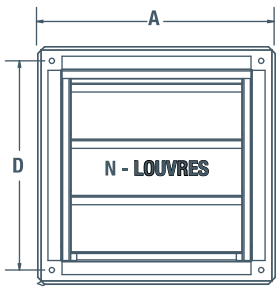
MODEL	FAN SIZE	MOTOR HP	SPEED	VOLTS	NET WEIGHT	FAN RPM	CFM	HIGH SPEED SOUND LEVEL dB(A)	MAX AMPS	MAX AMBIENT TEMP
XFS12	12"	1/12	3	115	19 lbs	1600/1420/1150	1100/900/800	58	0.8 / 0.8 / 0.7	90°C/194°F
XFS16	16"	1/8	3	115	27 lbs	1630/1450/1330	2300/2000/1800	58	2.0 / 1.8 / 1.6	74°C/158°F
XFS20	20"	1/4	2	115	40 lbs	1140/1050	3300/2900	68	2.3 / 2.0	70°C/158°F
XFS24	24"	1/2	2	115	56 lbs	1140/1070	4700/3800	72	5.0 / 4.3	70°C/158°F

DIMENSIONS

Note: Dimensions subject to change

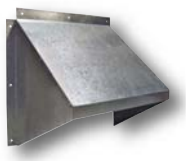
MODEL	A X A SQUARE	B	C	D (c/c)	E SQR	N (# OF LOUVRES)	FRAMING	CARTON DIMENSIONS		
								Length	Height	Width
XFS12	16 7/8"	8 3/8"	5"	14 7/8"	13 1/2"	3	14" x 14"	17 3/8"	17 3/8"	9 7/8"
XFS16	20 7/8"	9 1/2"	5"	18 7/8"	17 1/2"	4	18" x 18"	21 3/8"	21 3/8"	9 7/8"
XFS20	24 7/8"	9 1/2"	5"	22 7/8"	21 1/2"	5	22" x 22"	25 1/4"	25 1/4"	10 1/4"
XFS24	28 7/8"	11 1/8"	5"	26 7/8"	25 1/2"	6	26" x26"	29 1/8"	29 1/8"	11 1/2"





ACCESSORIES

Optional galvanized weather hood.



OPTIONAL WEATHER HOOD	
FAN SIZES	HOOD #
12"	GH-XF12
16"	GH-XF16
20"	GH-XF20
24"	GH-XF24

XFS SERIES
EXHAUST SHUTTER FANS

To determine the proper XFS Fan for your applications, use the following formula.
Number of cubic feet in room / Number of minutes per air change = Required CFM Capacity

EXAMPLE: A general office, (see chart) which requires an air change every ten minutes, would require the following fan capacity.

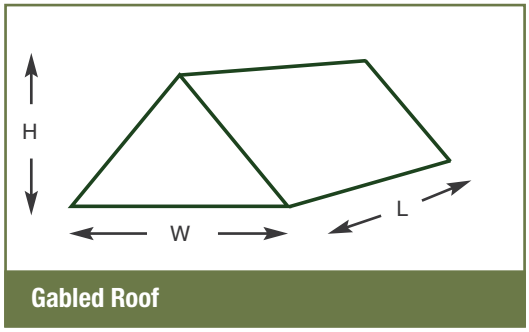
If office is 100' x 40' x 10' = 40,000 cubic ft; 40,000 cubic ft / 10 minutes per air change = 4000 Required CFM

From the chart, you would select a fan that is rated at 4000 CFM at 1/8" S.P. (Static Pressure)

Application	Minutes per Air Change	Application	Minutes per Air Change	Application	Minutes per Air Change	Application	Minutes per Air Change
Assembly Hall	7	Church	15	Foundry	4	Pressing Room	1
Attic	2	Classroom	6	Garage	5	Projection Booth	2
Auditorium	10	Dance Hall	5	General Office	10	Summer Cooling	1
Barber Shop	6	Department Store	6	Gymnasium	8	Toilet	3
Basement	8	Dry Cleaning	5	Laundry	2	Transformer Room	1
Battery Room	4	Engine Room	6	Locker Room	3	Warehouse	12
Boiler Room	1	Factory	6	Machine Shop	8	Welding Shop	2
Bowling Alley	5	Forge Room	3	Plating Room	3		

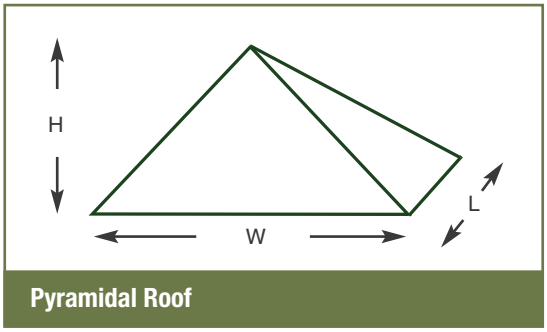
ATTIC VENTILATION

CAUTION!
Attic temperatures can get very high and exceed the high temperature protection device, shutting down the fan if there is not enough air change to keep the attic at a temperature below 120 °F.



Gabled Roof

Volume = L x W x 1/2 H



Pyramidal Roof

Volume = L x W x 1/3 H

Recommended air changes in an attic are about 2-3 minutes per air charge (MIN/AC) to keep the temperatures down. (2 minutes in southern climates and 3 minutes in northern climates.)

Using 2 minutes, required exhaust CFM = $\frac{\text{Total Volume}}{\text{2 MIN/AC}}$

This provides your required CFM of the exhaust fan, BUT there must be enough venting to supply fresh air to the attic space. A good rule of thumb is 1.5 ft^2 for every 1000 CFM of airflow.

Example:

Texas $\frac{6000\ ft^3}{2} = 3000$ CFM

Use XFS20

Texas inlet opening $= 3000 \times \frac{1.5}{1000} = 4.5\ ft^2$

Minnesota $\frac{6000\ ft^3}{3} = 2000$ CFM

Use XFS16

Minnesota inlet opening $= 2000 \times \frac{1.5}{1000} = 3\ ft^2$