



## 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 36" sizes - fans are single, 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 36" sizes.
- 12" and 16" models are 3 speed
- 20" to 30" models are 2 speed.
- 36" model is single speed.
- Durable steel construction with powder coat black finish.
- Swept back, high efficiency, low noise blade design.
- Shutters have a small magnet to prevent flapping and provide a superior seal.

- 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.

## SPECIFICATIONS

MODEL	FAN SIZE	MOTOR HP	SPEED	VOLTS	NET WEIGHT	FAN RPM	CFM at 1/8" SP	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
XFS30	30"	1/2	2	115	72 lbs	1080/980	5200/4100	71	4.9/4.3	70°C/158°F
XFS36	36"	1	1	115	88 lbs	943	6339   FEI: 1.1	76	7.2	70°C/158°F



Tie bar aluminum shutters

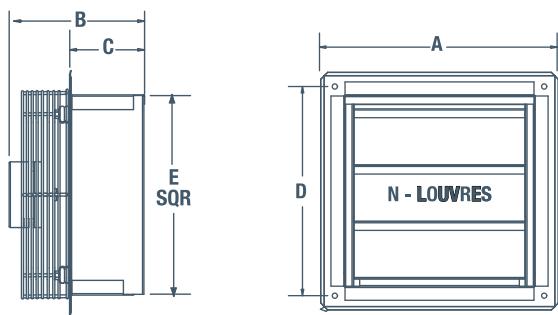


Pull chain switch

## DIMENSIONS

MODEL	A X A SQUARE	B	C	D (c/c)	E SQR	N (# OF LOUVRES)	FRAMING	CARTON DIMENSIONS		
								Length	Height	Width
XFS12	17"	8 3/4"	5"	15"	13 7/8"	3	14-1/8" x 14-1/8"	20"	20"	12"
XFS16	21"	9 7/8"	5 1/8"	18 3/4"	17 11/16"	4	17-15/16" x 17-15/16"	25"	25"	13"
XFS20	25"	10"	5 1/8"	22 7/8"	21 11/16"	5	21-15/16" X 21-15/16"	28"	28"	13"
XFS24	28 7/8"	11 1/3"	5 1/8"	26 11/16"	25 5/8"	6	25-7/8" X 25-7/8"	32"	32"	15"
XFS30	34 3/4"	12 1/8"	5 1/8"	32 5/8"	31 1/2"	7	31-3/4" X 31-3/4"	38"	38"	17"
XFS36	40 5/8"	13"	5 1/5"	38 1/2"	37 1/2"	8	37-3/4" X 37-3/4"	44"	44"	17"

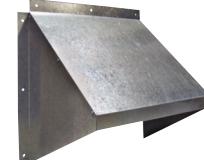
Note: Dimensions subject to change



## 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



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 the office is 100' x 40' x 10' = 40,000 cubic ft**

**40,000 cubic ft / 10 minutes per air change = 4000 Required CFM**

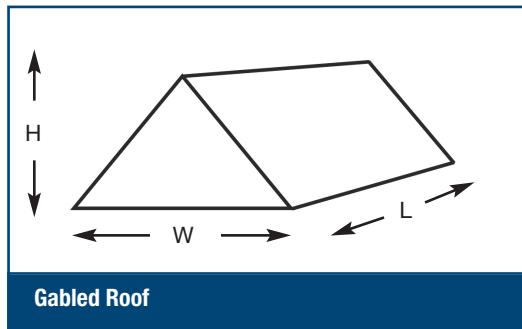
From the chart, you would select a fan that is rated at 4000 CFM at 1/8" S.P. (Static Pressure)

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		

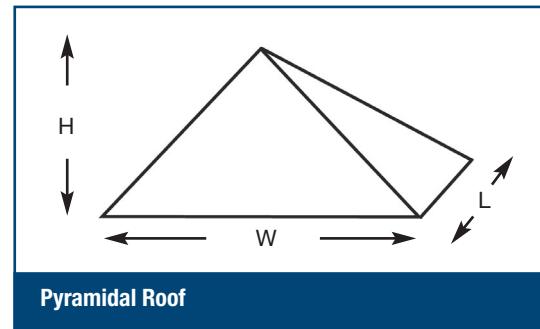
## ATTIC VENTILATION

### 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.



$$\text{Volume} = L \times W \times \frac{1}{2} H$$



$$\text{Volume} = L \times W \times \frac{1}{3} H$$

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

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

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<sup>2</sup> for every 1000 CFM of airflow.

### Example:

$$\text{Southern Climate} \quad \frac{6000 \text{ ft}^3}{2} = 3000 \text{ CFM}$$

Use XFS20

$$\text{Southern climate} = 3000 \times \frac{1.5}{1000} = 4.5 \text{ ft}^2$$

inlet opening

$$\text{Northern Climate} \quad \frac{6000 \text{ ft}^3}{3} = 2000 \text{ CFM}$$

Use XFS16

$$\text{Northern climate} = 2000 \times \frac{1.5}{1000} = 3 \text{ ft}^2$$

inlet opening