

XPELAIR



FRESH AIR

**AT YOUR
FINGER TIPS**





LAUNDRETERS

Phoenix

DRY CLEANERS

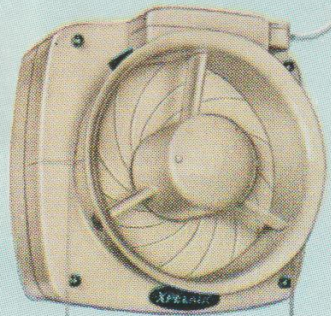
Phoenix
Dry Cleaning

Drycleaning
8 HOUR
SERVICE

2 HOUR
EXPRESS
SERVICE

12" XPELAIR

XPELAIR gives you a fresh steam-free kitchen



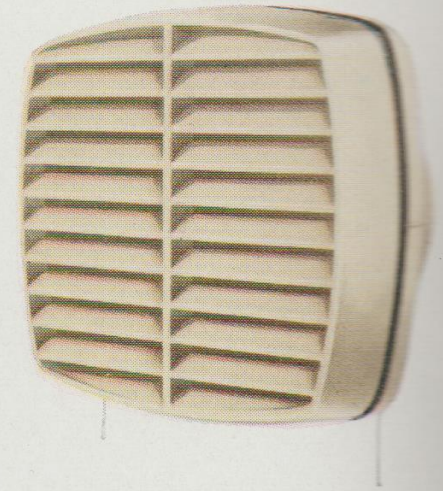
6" model—ideal for domestic kitchens.

Save Redecoration. Have you realised that steam in your kitchen costs you money? Those wet streaks of condensation take the gloss off paintwork! The cure is to whisk steamy air out of the house. Put in the Xpelair. Your decoration will last much longer.

Less Cleaning. You'll save work, too! The Xpelair will stop those grimy, greasy stains on the walls. The fan extracts dirt-laden air that at present remains in your kitchen.

Expels Cooking Smells. No cooking smells will bother you when you have the Xpelair. It expels odours into the outside air. You can cook fish, onions or cabbage without it being unpleasantly obvious.

No Draughts. Windows can be kept closed when you have the Xpelair. What's more, the fan itself is draughtproof—see page 6.



7½" model—in ivory or black.

The right business atmosphere



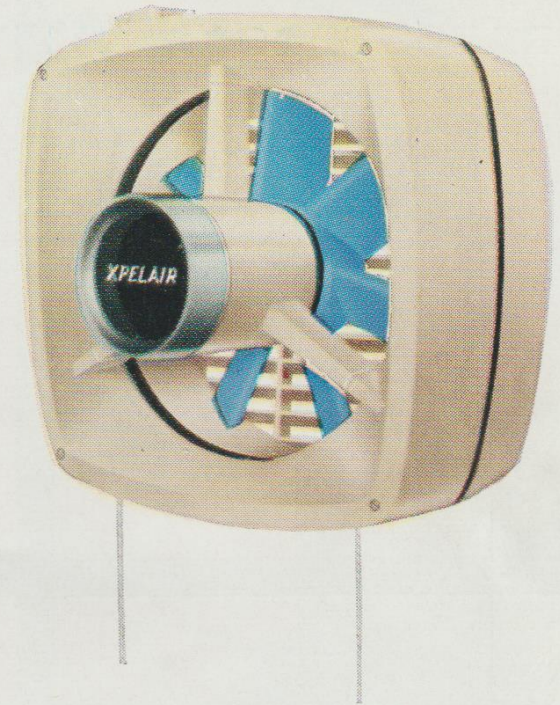
9½" model.

In offices the Xpelair will keep air fresh—conductive to wide-awake working—while windows remain closed to shut out distracting street noises and chilly draughts.

In restaurants, hotel bars, clubs and pubs the Xpelair will keep the atmosphere inviting to patrons. It puts fresh air at your finger tips. Odours, stale air and smoke haze can be whisked away at will.

Coffee bars can be so easily kept fresh with Xpelair ventilation. After all, customers go where the conditions are most pleasant.

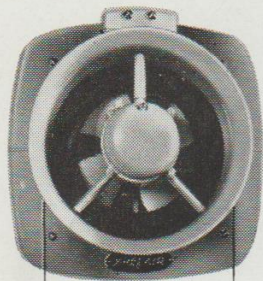
Shops can be made more attractive to customers with the Xpelair to keep the atmosphere fresh. And the elegant design of the Xpelair harmonises with good shop fitting.



12" reversible Xpelair.

Extraction or fresh air input is obtained with the 12in. Xpelair. It moves the volume of air required for large spaces. And it is the most elegant fan of its kind.

DRAUGHTPROOF



Built into the Xpelair is a draught-preventing iris shutter linked with an inbuilt fan switch. Pull one operating cord, the shutter opens and the fan is switched on. Pull the other cord and the fan is switched off and the shutter closed, sealing out back-draught. No separate switch is necessary.

6

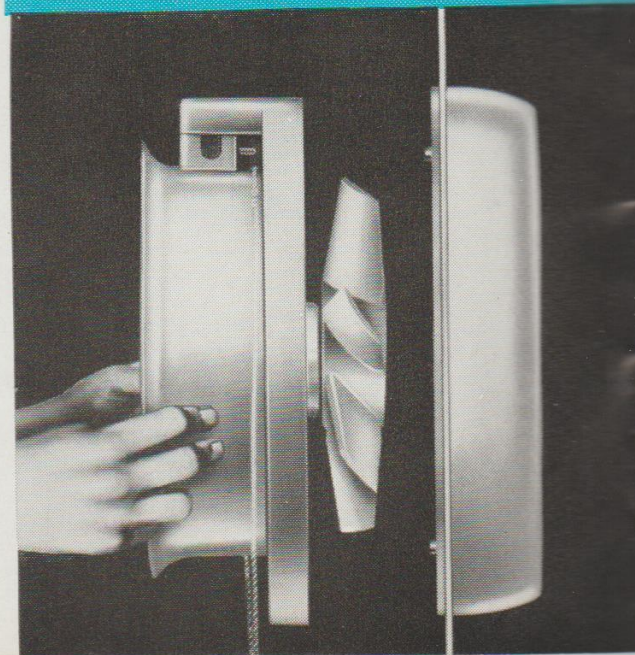
REVERSIBLE 12" MODEL

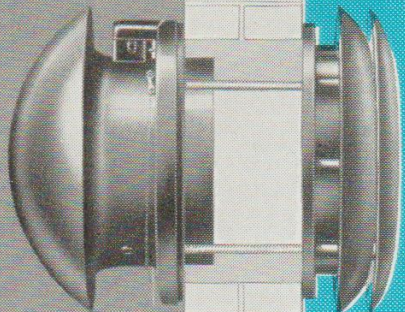
The elegant 12 inch Xpelair gives reversal of air flow by turning the socket connection on the fan through 90 degrees, and the fan speed can be reduced to half of maximum by a short pull on the left hand operating cord.

Remote control of reversal and speed regulation is provided by a reversing controller—see page 7.

EASILY CLEANED

Every extract fan needs cleaning periodically, and this is easy to do with the Xpelair. The fan unit can be removed in 30 seconds for cleaning without disturbing the fixture. A quick wipe of the smooth plastic surfaces will make it new-looking again.





DARKROOM MODELS

Lightproof models of the 7½" and 9½" Xpelair are available for ventilating photographic darkrooms. These have a circular baffle over the outlet and a blackout shield on the inside.

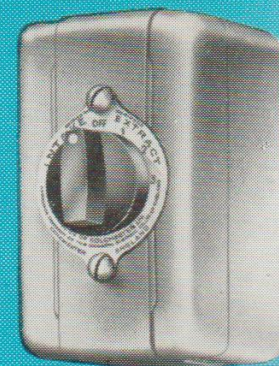
North Light Models. For vertical mounting and for north lights the 7½" and 9½" Xpelairs are supplied with a circular outlet baffle.

REGULATED VENTILATION

The rate of ventilation by the larger Xpelairs can be adjusted to suit requirements. Speed regulators can be supplied for all sizes except the 6 inch model. These give four fan speeds—four rates of air movement—and an 'Off' position. Two types of mounting are available :

- (i) Surface mounting in a neat, compact case, either ivory or black, for 7½", 9½" and 12" Xpelairs.
- (ii) Recessed mounting with aluminium face plate flush with the wall for 7½" and 9½" sizes only.

Reversing Controller. A combined reversing controller and speed regulator is available for the 12" Xpelair. It gives remote control of the direction of air flow—extract or fresh air intake—and 4 fan speeds in either direction and an 'Off' position. Surface mounting only, it has a neat aluminium case, finished ivory-white or black.



Reversing controller



Recessed regulator

THE **XPELAIR** RANGE

Fan diam. in.	Capacity cu. ft. h.		Watts		Type	Colours	With shutter and switch Cat. No.†	Less shutter and switch Cat. No.†	Speed Regulators†		Reversing Regulator Cat. No.†
	50-cycle	60-cycle	50-cycle	60-cycle					Surface mounting	Recessed mounting	
6	10,000	10,000	30	30	Grille outlet	Ivory	V350	—	—	—	—
7½	15,000	18,000	40	55	Grille outlet	Black Ivory	V360 V360C	V362 V362C	V67895 V67895C	V67890	— —
					Baffle outlet	Black	V320	V328	V67895	V67890	—
					*Dark-room	Black	V320DR	V328DR	V67895	V67890	—
9½	30,000	33,000	65	90	Grille outlet	Black Ivory	V370 V370C	V372 V372C	V67897 V67897C	V67891	— —
					Baffle outlet	Black	V324	V332	V67897	V67891	—
					*Dark-room	Black	V324DR	V332DR	V67897	V67891	—
12	60,000	66,000	90	100	Grille outlet	Black Ivory	V380 V380C	V382 V382C	V67888 V67888C	— —	V67889 V67889C

For Xpelair 9 in. concealed wall fan—see page 14

* Complete with internal blackout cowl and baffle outlet.

† When ordering for 60 cycles add ' /6 ' after catalogue number.

GUIDE TO VENTILATION

The Xpelair continuously changes the air of the room, and the number of air changes required for good ventilation are shown on the right. Hotel bars, restaurants, small cafes, clubs, etc., will generally require intermittent extraction—a high rate to clear the air quickly at some periods and a lower rate at others. The rate of air changes should be based on the peak required.

The size of Xpelair needed and the number necessary for large rooms can be easily determined as follows: Find the volume of the room in cubic feet (multiply the length by the width and height). Multiply the result by the number of air changes required and divide the total by the extract capacity of the Xpelair in cu. ft. per hour—see page 8.

Example 1

A domestic kitchen is $10' \times 9' \times 8'$ high. Cubic volume is: $10' \times 9' \times 8' = 720$ cu. ft. Rate of air changes, say, 10 per hour. Extraction required:

7,200 cu. ft. per hour. Xpelair required: 6" size extracting 10,000 cu. ft. per hour will give nearly 14 air changes per hour.

Example 2

An Espresso coffee bar is $20' \times 12' \times 10'$ high. Cubic volume is: $20' \times 12' \times 10' = 2,400$ cu. ft. Rate of air changes: 12 per hour. Extraction required: 28,800 cu. ft. per hour. Xpelair required: $9\frac{1}{2}$ " size extracting 30,000 cu. ft. per hour.

Example 3

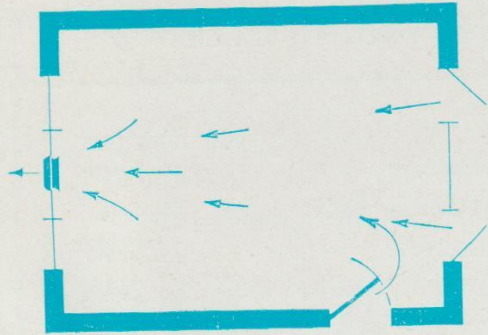
An office is $80' \times 25' \times 12'$ high. Cubic volume is: 24,000 cu. ft. Rate of air changes: 6 per hour. Extraction required: 144,000 cu. ft. per hour. Xpelairs required: (a) Five $9\frac{1}{2}$ " size, each extracting 30,000 cu. ft. per hour (total 150,000) spaced at 16-ft. intervals; or (b) Three 12" size each extracting 60,000 cu. ft. per hour (total 180,000) spaced at 20-ft. intervals.

RECOMMENDED AIR CHANGES

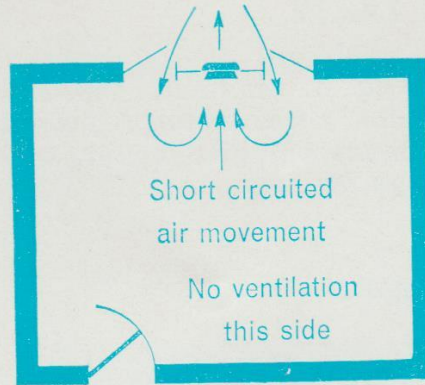
<i>Situation</i>	<i>Air changes per hour</i>
Assembly halls	4-6
Bakeries	20-30
Banks	2-4
Banquet halls	6-10
Billiard rooms	6-8
Cafes	10-12
Canteens	4-6
Coffee bars	10-12
Club rooms	8-10
Factory work shops	6-10
Hotel bars	4-6*
Kitchens (domestic)	10-15
Kitchens (commercial or school)	15-20
Offices	4-6
Photographic dark rooms	10-15
Restaurants	6-10

* Increase to at least 10 when crowded

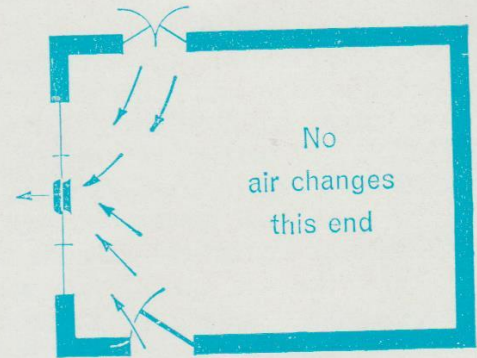
INSTALLATION



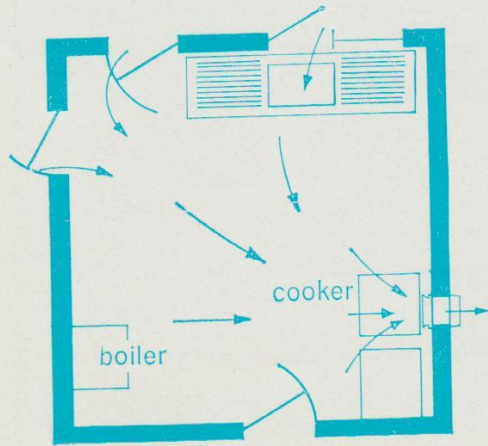
The Xpelair should be opposite main air inlets, such as doors. Air drawn into the room to replace extracted air will then flow right across the space.



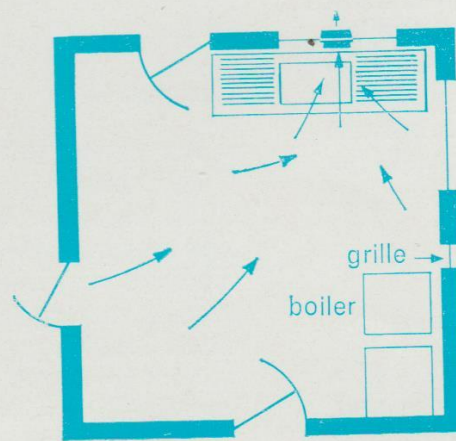
Windows adjacent to the Xpelair should be kept closed when the fan is in use; otherwise short-circuiting of air movement will occur as shown above.



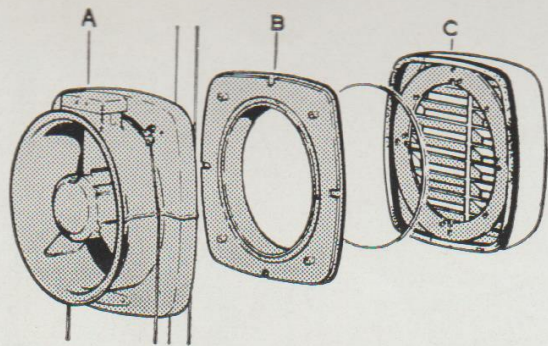
Avoid placing the Xpelair close to doors which may be left open, otherwise air changes will be confined to the space between the doors and the fan.



In the kitchen install the Xpelair as near as possible to the main source of steam—usually the cooker. Also it should be placed as high as possible. Although fixing in window glass is the simpler, the best place for the fan may be in the wall. A plug and socket connection to the mains is recommended.



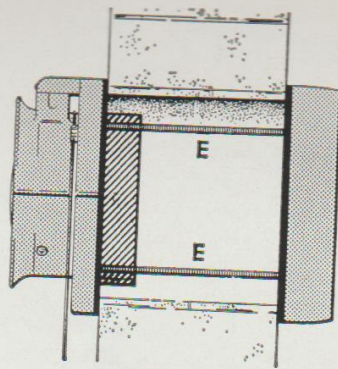
If the boiler is in the kitchen make sure there is an air inlet when the fan is running, otherwise the fan may draw fumes from the boiler. Generally it is sufficient if a door or window remote from the fan is left ajar. The better safeguard, however, is to provide a small grille in an interior door or an air brick in the wall.



WINDOW GLASS

The Xpelair is fixed in a circular hole in glass by screwing together the inner clamp plate 'B' (on the inside) to the outlet grille 'C' (on the outside). The fan unit 'A' is then fixed by the screws provided to the inner clamp plate. The glass should be not less than the following:

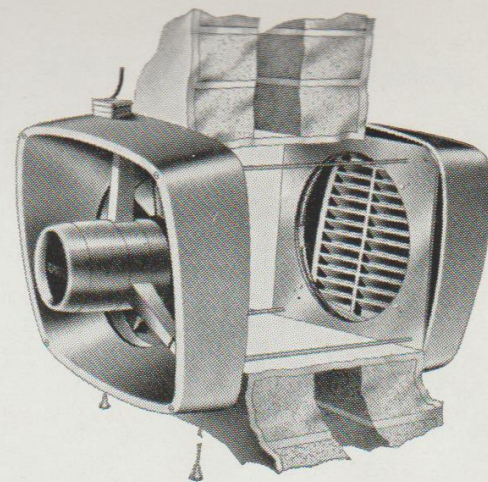
6 in. diam. fan	24 oz. glass
7½ in. " "	24 oz. glass
9½ in. " "	32 oz. glass
12 in. " "	...	¼ in. plate glass	



WALL MOUNTING

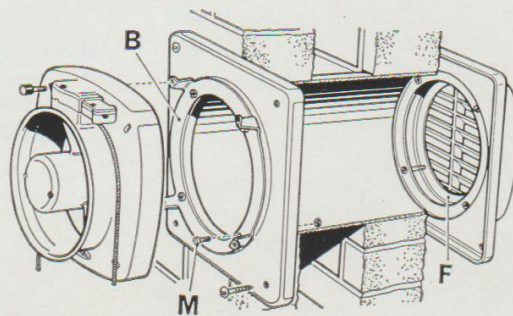
The fans can be fixed to walls by screwing the clamp plate 'B' to the outlet grille by long screwed rods 'E', supplied to order at small extra cost and cut to length.

The 12" Xpelair requires a special mounting plate for wall fixing,



which should be specified when ordering.

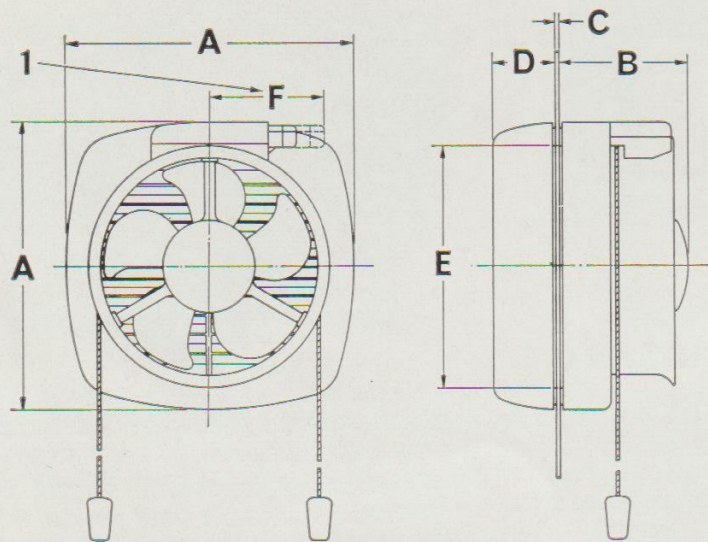
The cavity in a wall should be covered. A simple way to do this for the 6" fan is to use a short length of 7" diam. asbestos tube obtainable from builders' merchants.



WALL PLATES

Alternatively, the 6" size can be fixed to a wall by means of a pair of steel plates (supplied at extra cost) screwed over a hole in the wall on the inside and outside. The clamp plate 'B' is bolted to the inner plate by four screws 'M' provided and the grille 'F' to the outer plate.

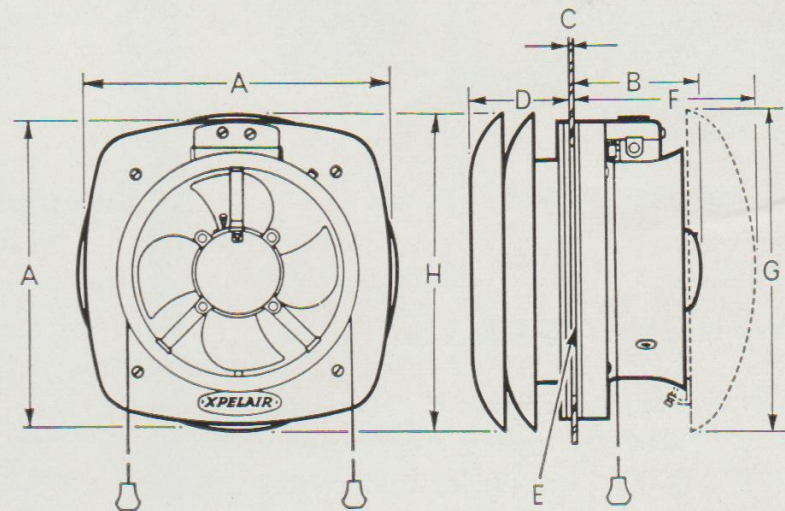
DIMENSIONS AND WEIGHTS



1. Withdrawal clearance (F) for plug on 6-in. size only.

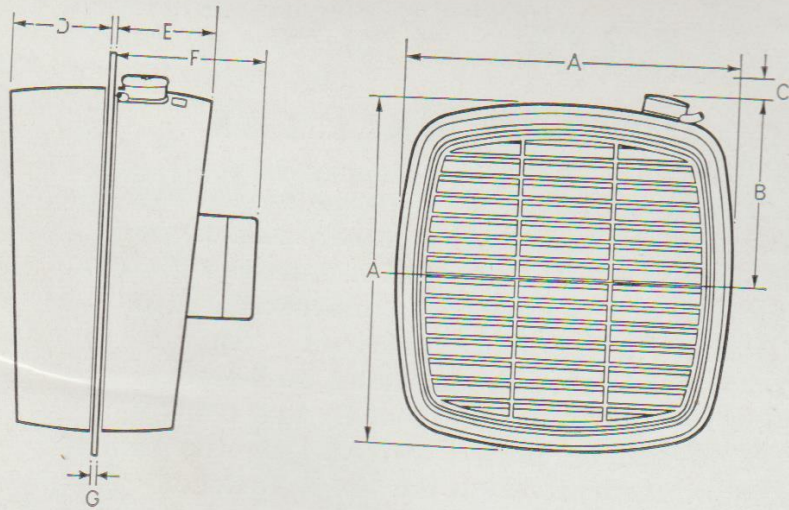
6", 7½", 9½" grille outlet

Fan diam. in.	A in.	B in.	C with standard screws in.	D in.	E diam. of hole in glass in.	F in.	Weight lb.
6	8	3 $\frac{17}{32}$	$\frac{3}{32}$ - $\frac{5}{32}$	1 $\frac{11}{16}$	6 $\frac{3}{4}$	3 $\frac{1}{4}$	4 $\frac{1}{2}$
7½	11 $\frac{5}{16}$	4 $\frac{5}{16}$	$\frac{5}{32}$ - 1	2 $\frac{3}{8}$	9 $\frac{1}{2}$	—	10 $\frac{1}{2}$
9½	13 $\frac{11}{16}$	4 $\frac{3}{4}$	$\frac{5}{32}$ - 1	2 $\frac{3}{8}$	11 $\frac{5}{8}$	—	14 $\frac{3}{4}$



Baffle outlet and Darkroom types

Fan diam. in.	A in.	B in.	C in.	D in.	E diam. of hole in glass in.	F in.	G in.	H in.	Weight lb. with blackout cowl
7½	11 $\frac{5}{16}$	4 $\frac{5}{16}$	$\frac{5}{32}$ - 1	3 $\frac{3}{4}$	9 $\frac{1}{2}$	6 $\frac{3}{4}$	12 $\frac{3}{8}$	11 $\frac{1}{2}$	13 $\frac{1}{4}$
9½	13 $\frac{11}{16}$	4 $\frac{3}{4}$	$\frac{5}{32}$ - 1	4 $\frac{1}{16}$	11 $\frac{5}{8}$	7 $\frac{3}{8}$	15 $\frac{3}{8}$	14 $\frac{3}{4}$	19



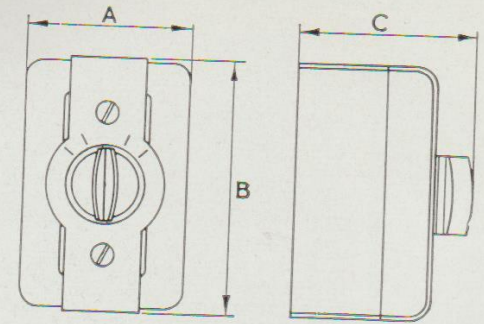
12" Xpelair

A	B	C	D	E	F	G	Diam. hole	Weight
in.	in.	Withdrawal clearance in.	in.	in.	in.	Glass in.	in glass in.*	with Shutter†
16 ³ / ₁₆	8 ³ / ₃₂	1	4 ³ / ₄	4 ³ / ₄	7 ³ / ₁₆	1- ³ / ₈	12 ³ / ₄	27 ¹ / ₄ lb.

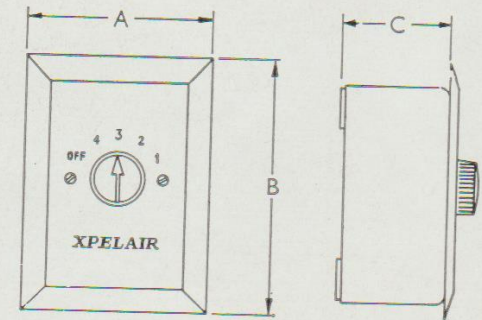
* For wall mounting the hole must be 12³/₄ in. square.

† Without shutter 24 lb.

Surface mounted speed regulator also reversing controller

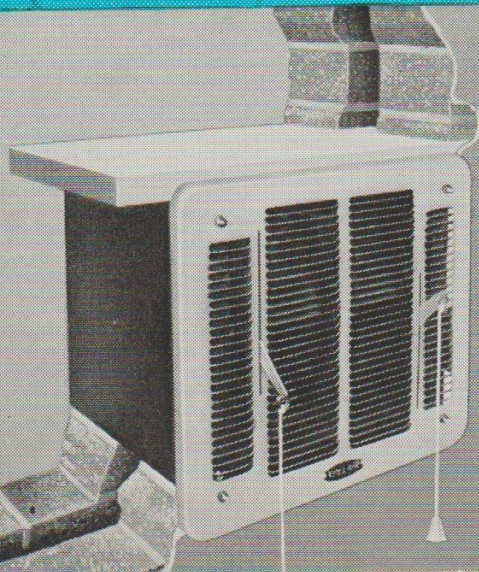
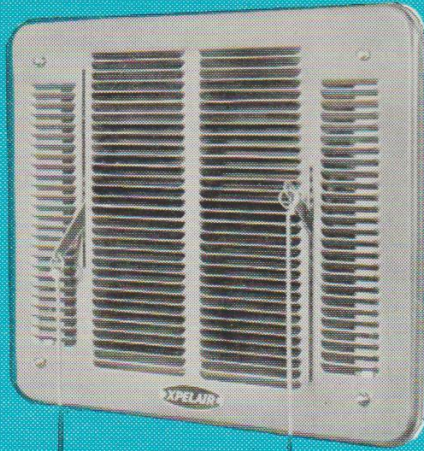


Recessed regulator



Regulators

Xpelair diam. in.	Surface mounted Regulator			Recessed Regulator		
	A in.	B in.	C in.	A in.	B in.	C in.
7 ¹ / ₂	2 ³ / ₄	4 ³ / ₈	2 ³ / ₄	3 ³ / ₄	5 ³ / ₈	2 ⁷ / ₃₂
9 ¹ / ₂	2 ³ / ₄	4 ³ / ₈	2 ³ / ₄	3 ³ / ₄	5 ³ / ₈	2 ⁷ / ₃₂
12	3 ⁵ / ₈	5 ¹ / ₂	4	—	—	—



XPELAIR

9" CONCEALED WALL FAN

Concealed ventilation is provided by the Xpelair wall fan. Only a neat grille inside and outside denote its presence. The unit comprises a 9" diam. fan housed in a steel box which is inserted into the wall. The fan is draughtproof. An automatic shutter is linked with a built-in fan switch, both operated together by two control cords. When the fan is switched on the shutter opens and it closes when the fan is switched off. The fan and shutter are removable, can be removed at the time of installation and taken out for cleaning without disturbing the fixture. The unit is supplied with a red oxide rust-resisting finish, the grilles being painted to match the walls after installation.

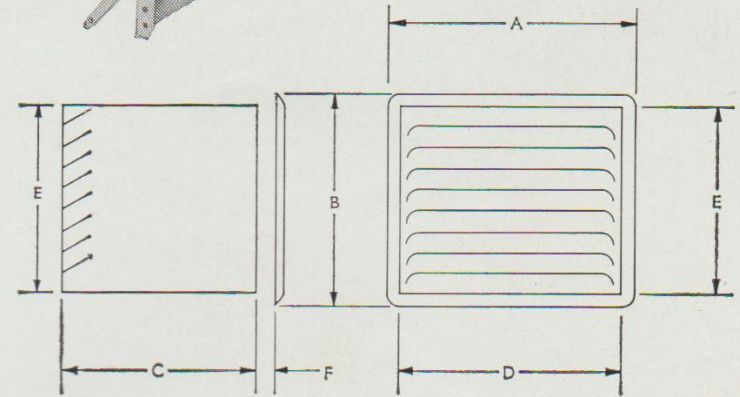
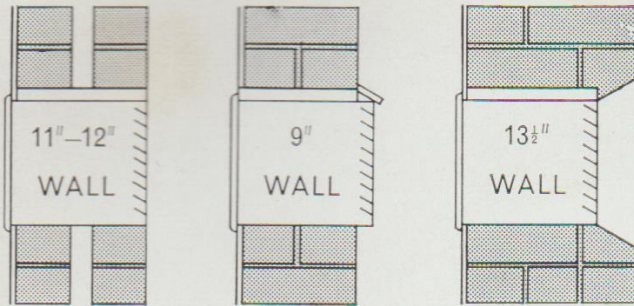
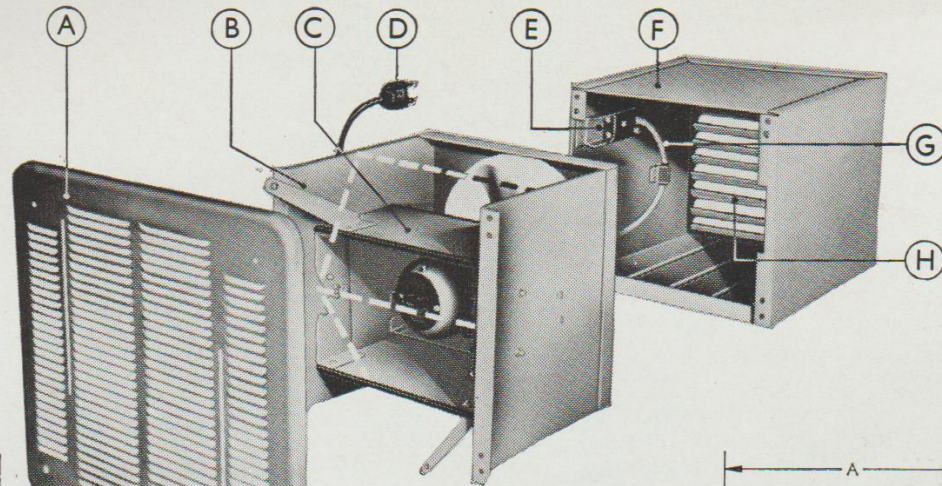
Extract capacity: 50 cycles...20,000 cu. ft. per hour
60 cycles...23,000 cu. ft. per hour

Watts: 50 cycles-40; 60 cycles-45.

Cat. No. V312.

Speed regulator: Cat. No. V67886.

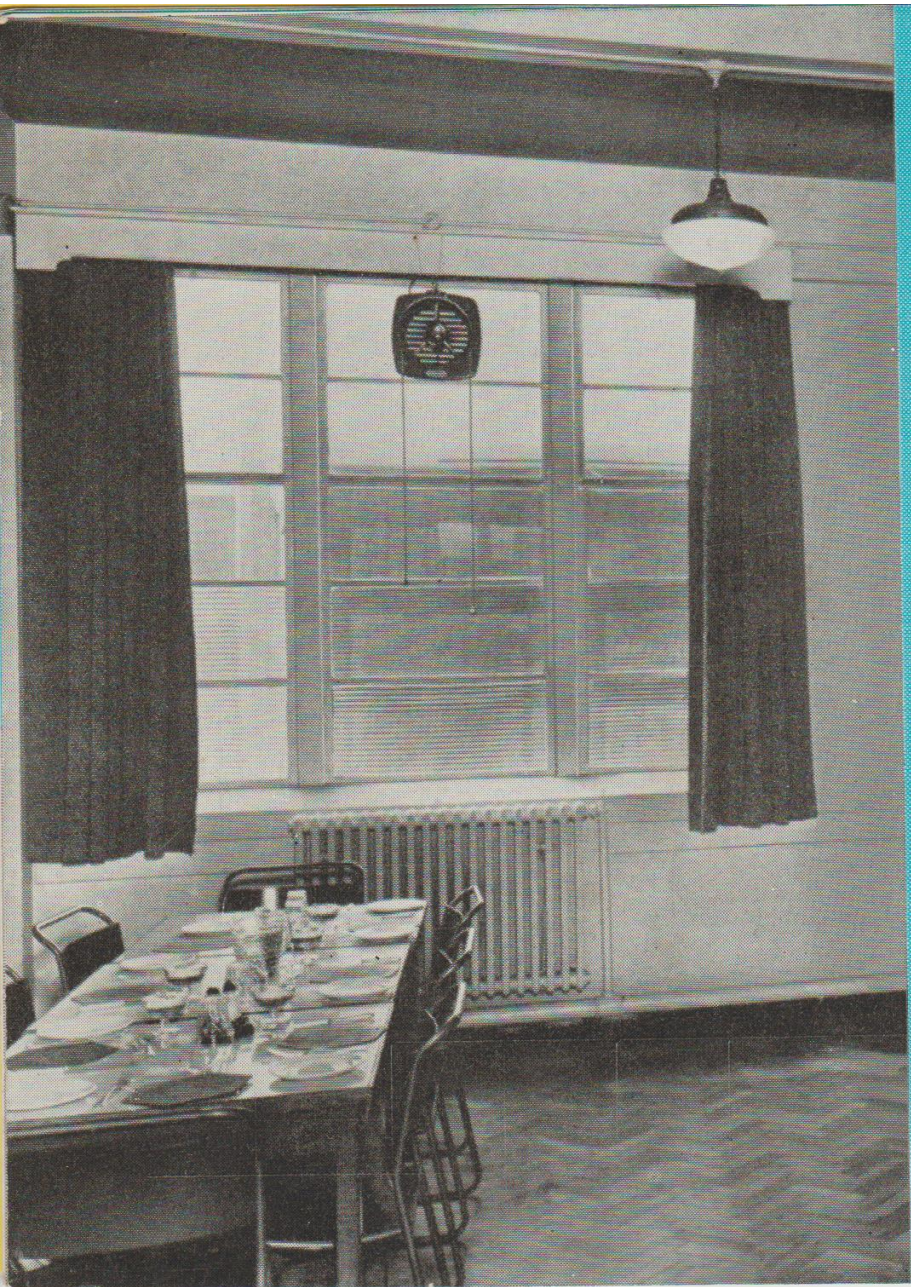
- A. Interior grille, painted after installation to match the wall finish.
- B. Fan unit (removable).
- C. Shutter (dotted lines show closed position).
- D. Electrical plug for connecting to mains.
- E. Socket for connecting plug.
- F. Fan box, which is fixed in wall.
- G. Mains supply cable.
- H. Louvred outer grille.



When fixed in an 11" cavity brick wall the inside and outside grilles are flush with the wall surfaces. In a narrower wall the outer grille will project and should be covered with a tile. If the wall is thicker than 11" to 12" the outside surface should be shaped into the outer grille as shown above.

Dimensions and weight

A in.	B in.	C in.	D in.	E in.	F in.	Weight lb.
13½	12	11 ¹ / ₁₆	11 ¹ / ₁₆	10 ³ / ₁₆	0 to ¹ / ₁₆	22¼



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