

# **XPELAIR**

will clear the air



IN KITCHENS • OFFICES • RESTAURANTS • BARS







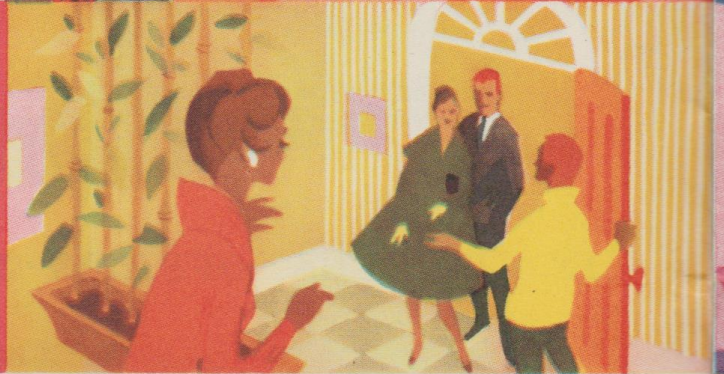
## IN THE HOME

The only way to prevent wet streaks on kitchen walls is to get rid of steam. The Xpelair will draw greasy steam out of the house. You will have fresh atmosphere, less cleaning of paint, less redecorating to do, and, very important, no draught. The Xpelair has a draught-preventing shutter.

No cooking smells will drift into your dining room if you install the Xpelair in your kitchen. You can then gaily cook cabbage, onions or fish without it being unpleasantly obvious, for the Xpelair will expel cooking vapours into the outside air.



When you entertain you certainly don't want your guests greeted at the door by smells of the meal prepared for them. But that won't happen if your kitchen is fitted with the Xpelair; it will keep the menu out of the atmosphere, and keep you fresher, too.



In the bathroom, too, the Xpelair is a blessing. It will take out steam without letting cold air in. You won't have steamed-up mirrors or streaming wet walls, nor will you have to do so much polishing up after every bath.

In winter you will appreciate the comfort of having the Xpelair in your living room, especially when you have visitors and there is steady smoking. The Xpelair will clear the air while windows remain closed. You won't have that morning-after odour of stale tobacco fumes.





## IN THE OFFICE

Fresh ideas seldom blossom in stale air. Fit the Xpelair in office windows and you can then keep the atmosphere fresh while you shut out distracting street noises and chilly draught. The Xpelair, remember, is draughtproof.



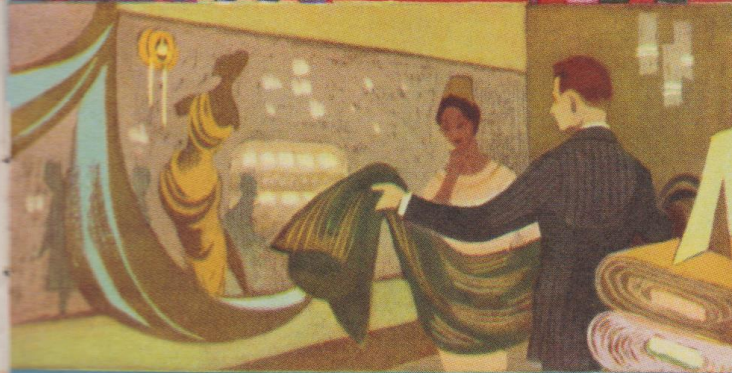
## IN RESTAURANTS

The Xpelair will keep the atmosphere inviting. It will continuously change the air, taking away food odours and tobacco smoke. In the kitchen, too, it is a necessity for removing steam and cooking vapours.



## IN HOTELS AND CLUBS

Where crowds throng and the air can be blue with tobacco smoke the value of Xpelair ventilation is beyond all question. It means clear air instead of fug.



## IN SHOPS

The Xpelair is such a simple means of making sure that the atmosphere is attractive to customers—free from all traces of staleness. And its pleasing design harmonises with good shop fitting.

## IN COFFEE BARS

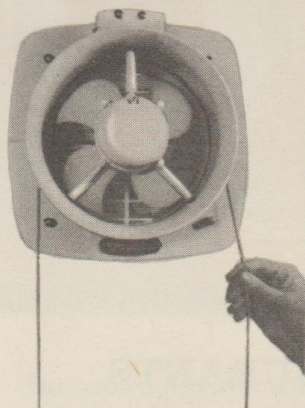
Put in the Xpelair and you pull out food smells, steam and tobacco fug. Customers go where conditions are pleasantest.





# XPELAIR

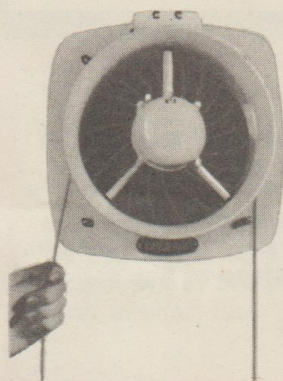
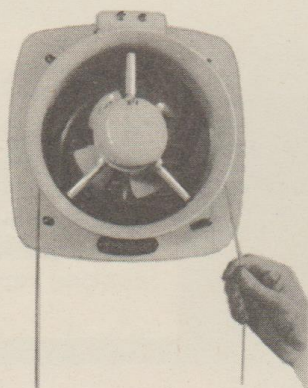
## IS DRAUGHTPROOF



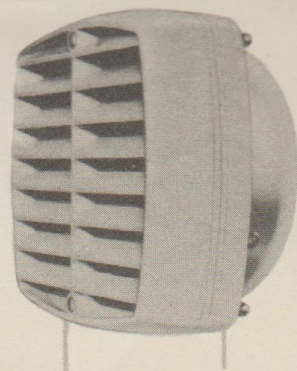
It does not let in cold air when the fan is not running.

Built into it is an iris shutter linked with a built-in fan switch, both operated simultaneously by cords. Pull one cord, the shutter opens and the fan is switched on.

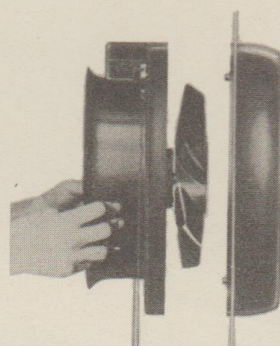
Pull the other cord and the shutter closes and the fan is switched off.



When closed the shutter seals out backdraught—it works like the aperture of a camera—an exclusive comfort feature. **AND NO SEPARATE SWITCH IS NEEDED.**



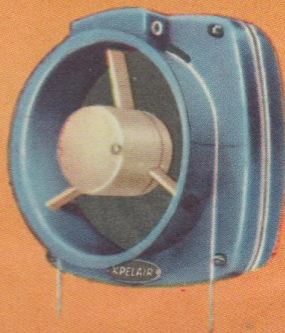
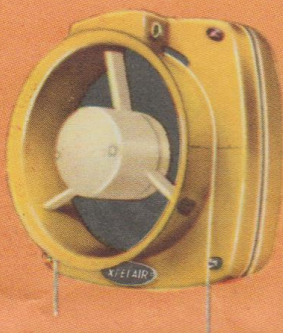
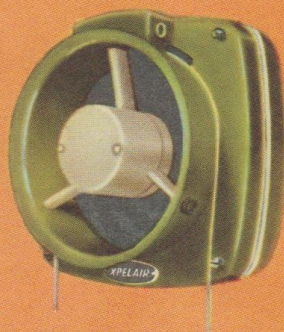
Discreetly unobtrusive, the Xpelair has a compact grille outlet which projects very little from the window or wall. Alternatively, for north light roofs the fan can be supplied with a circular baffle outlet.



The fan unit can be removed in a few seconds for cleaning without disturbing the permanent fixture. And when you clean it you'll see how much dirt the Xpelair has taken out of the room.

### Colours to match decoration

You can have the 6" Xpelair in ivory-white, yellow, green, red, blue or black plastic. Larger sizes in ivory-white or black.





Elegant in design, the 12" Xpelair is reversible; it has two-speed operation; it gives the air movement required for large spaces—60,000 cu. ft. per hour.

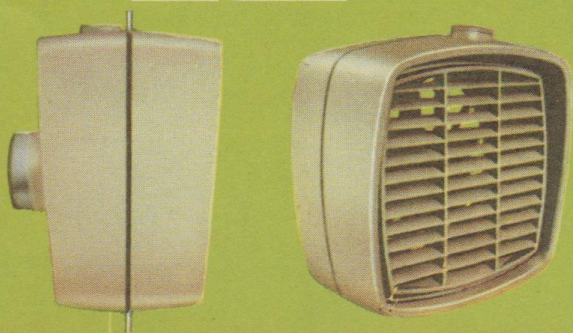
Direction of airflow can be reversed by simply turning the socket connection from the mains supply through 90 deg.

To regulate ventilation the fan can be slowed to half speed by a short pull on one control cord.

Alternatively the fan can be remotely controlled—see below.

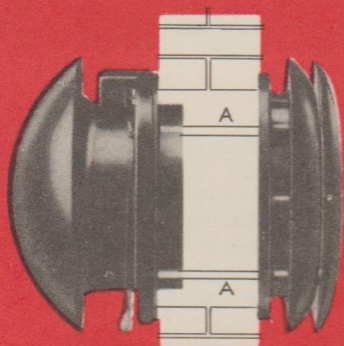


# 12" XPELAIR



Like other models the 12" Xpelair is draughtproof. It has the exclusive Xpelair built-in iris shutter linked with a built-in fan switch.

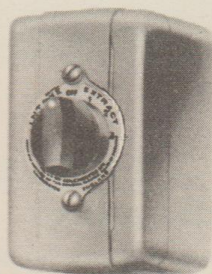
Also it has a compact, unobtrusive external grille.



## XPELAIR

### for darkrooms

Two sizes of Xpelair can be supplied for ventilating photographic darkrooms. These have a circular baffle outlet and a blackout cowl over the fan intake on the inside. They are both lightproof and draughtproof.



## REMOTE CONTROL REGULATORS

Speed regulators are available for all Xpelairs except the 6" size.

### 7½" and 9½" Xpelairs

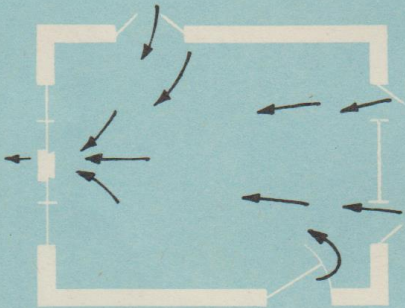
A wall-mounted regulator in a plastic case gives four speeds and "Off". A warning light shows when the fan is running.

### 12" Xpelair

A reversing controller gives remote control of direction of air flow, four fan speeds in either direction and "Off". A non-reversing regulator gives four fan speeds and "Off".

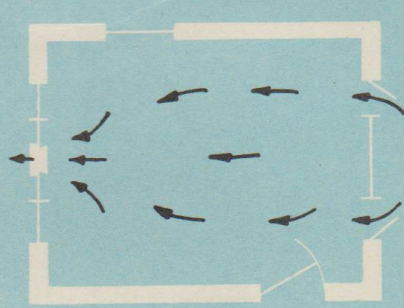


# GUIDE TO GOOD VENTILATION



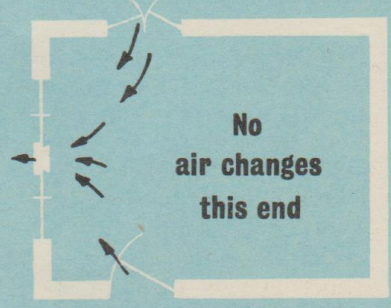
## RIGHT

Extraction by the Xpelair draws air in through doors, windows or grilles. Place the Xpelair so that incoming air flows right across the room.



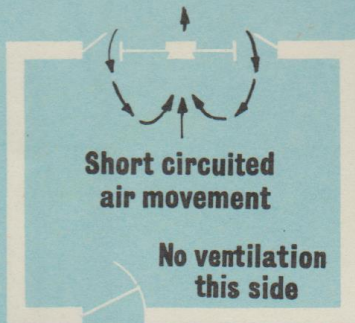
## RIGHT

The further inlets are from the Xpelair the greater will be the area of ventilation. The Xpelair should, if possible, be opposite main inlets.



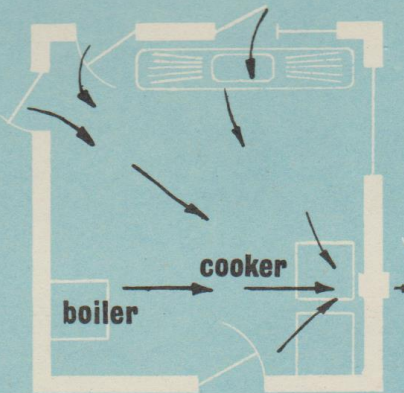
## WRONG

If an air inlet is close to the fan much of the air drawn in will come through that inlet and the rest of the room will be unventilated.



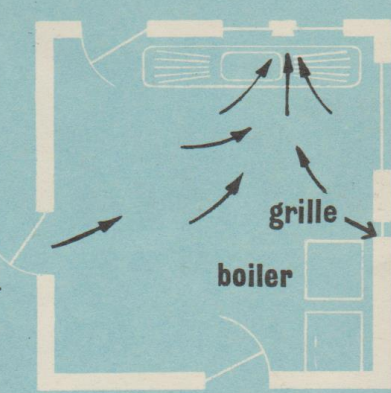
## WRONG

Short-circuiting of air flow will occur if windows adjacent to the Xpelair are left open. Keep nearby windows closed.



## RIGHT

In kitchens install the Xpelair as near as possible to the main source of steam — usually the cooker.



## RIGHT

If the boiler is in the kitchen make sure there is an air inlet when doors are closed; otherwise the fan may draw fumes from the boiler.

## How many air changes?

The size of Xpelair required, and the number necessary for a particular space, depend on two factors: (a) the rate of ventilation or air changes per hour required, (b) the size of the space in cubic feet.

No hard and fast rules can be laid down for rates of air changes, but the recommendations in the table may be taken as a general guide.

Domestic kitchens, hotel bars and small cafes will generally require intermittent extraction: a high rate to clear the air quickly at some periods, and a lower rate or none at others. The rate of air changes should ideally be based on the peak rate required.

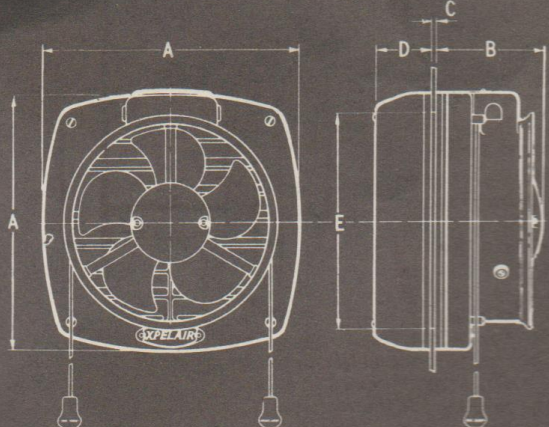
### Situation

### Air changes per hour

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

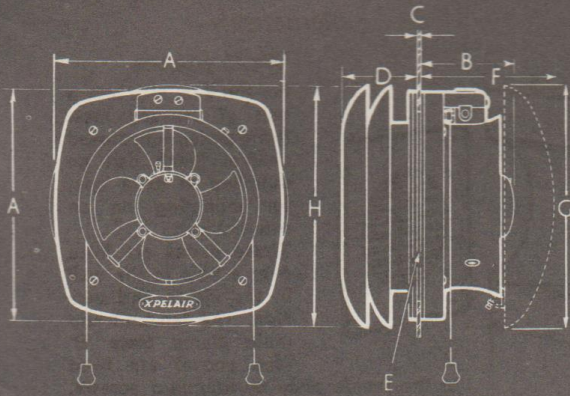


### 6", 7½", 9½" grille outlet



Fan diam.	A	B	C with standard screws in.	D	E diam. of hole in glass in.	Weight
in.	in.	in.	in.	in.	in.	lb.
6	8	3½	¾-1	1½	6½	5½
7½	11¾	4½	¾-1	2½	9½	10½
9½	13¼	4½	¾-1	2½	11½	14½

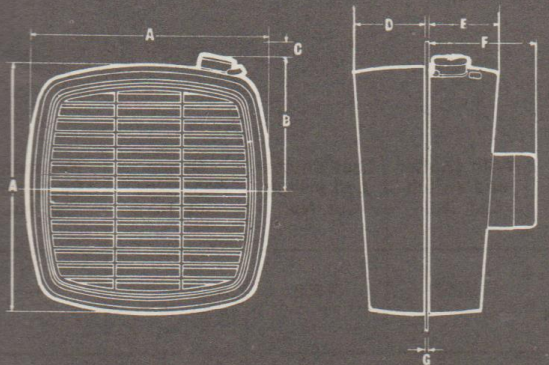
### Baffle outlet and Darkroom types



Fan diam.	A cowl diam. * in.	B in.	C in.	D in.	E diam. of hole in glass in.	F in.	G in.	Weight lb. with blackout cowl
in.	in.	in.	in.	in.	in.	in.	in.	lb.
7½	11½	4½	¾-1	3½	9½	6½	12½	13½
9½	14½	4½	¾-1	4¾	11½	7½	15½	19

\*inside dimensions as A above

### 12" Xpelair



A in.	B in.	C Withdrawal clearance	D in.	E in.	F in.
16¾	8¾	1	4½	4½	7¾

G Glass in.	Diam. hole in. glass in.*	Weight with Shutter† lb.	Remote Controller width in.	Remote Controller height in.	Remote Controller depth in.
4-¾	12½	27½ lb.	4	6½	4-¾

\*For wall mounting the hole must be 12½ in. square  
 †Without shutter 24 lb.

## CALCULATION OF XPELAIRS REQUIRED

Multiply the length of the room by the width and height to find the volume in cubic feet. Multiply the result by the number of air changes per hour required to find the total extraction necessary. Divide that by the extraction capacity of the Xpelair in cu. ft. per hour (see overleaf).

#### Example 1

A domestic kitchen is 10 ft. x 9 ft. x 8 ft. high. Cubic volume is 10 x 9 x 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 8,000 cu. ft. per hour will give 11 air changes per hour.

#### Example 2

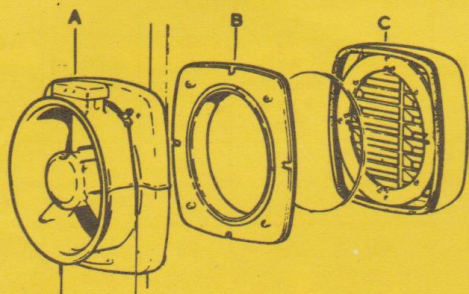
An Espresso coffee bar is 20 ft. x 12 ft. x 10 ft. high. Cubic volume is: 20 x 12 x 10 = 2,400 cu. ft. Rate of air changes: 12 per hour. Extraction required: 28,800 cu. ft. per hour. Xpelair required:  
 9½" size extracting 30,000 cu. ft. per hour.

#### Example ii

An office is 80 ft. x 25 ft. x 12 ft. 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 9½" size, each extracting 30,000 cu. ft. per hour (total 150,000) spaced at 16 ft. intervals.  
 (b) Three 12" size each extracting 60,000 cu. ft. per hour (total 180,000) spaced at 20 ft. intervals.



# INSTALLATION



## Window glass and partitions

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

6 in. diam. size	18 oz. glass
7½ in. diam. "	24 oz. glass
9½ in. diam. "	32 oz. glass
12 in. diam. "	½" plate glass

## Wall fixing with screwed rods

All sizes can be fixed to walls by means of long screwed rods in place of the standard screws for fixing the inner clamp plate 'B' to the outlet grille.

Supplied at extra cost, these screwed rods can be cut to the required length on site. When fixing to cavity walls, the cavity should be covered; and the inside surfaces of ALL walls should be plastered.

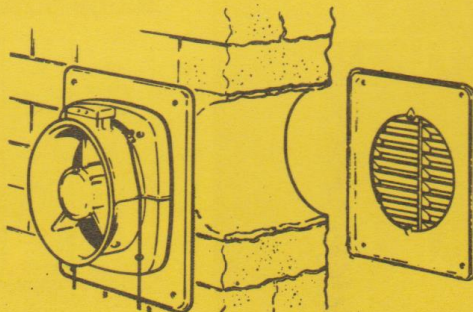
alternatively—

## Wall plates

For the 6 in. size only a pair of pressed steel fixing plates with stoved enamel finish can be supplied at extra cost for mounting on an external wall.

These plates are fixed over a hole in the wall in the inside and outside. The fan unit and inner clamp plate 'B' (see above) are fixed

to the inside plate by standard screws. The outlet grille is fixed to the outside plate.



## The XPELAIR range

Fan diam.	Capacity cu. ft./n.		Watts		Type	Colours	With shutter and switch Cat. No.	Less shutter and switch Cat. No.	Speed Regulator Cat. No.†	Reversing Regulator Cat. No.†
	50-cyc	60-cyc	50-cyc	60-cyc						
6"	8,000	7,500	25	27	Grille outlet	Yellow, green, red, blue, black, ivory-white	V350	V352	—	—
7½"	15,000	18,000	30	30	Grille outlet	Black Ivory-white	V360 † V360/C †	V362 † V362/C †	V67895 V67895/C	—
					Baffle outlet	Black	V320 †	V328 †	V67895	—
					*Dark-room	Black	V320DR †	V328DR †	V67895	—
9½" (60 cyc. 9")	30,000	30,000	50	52	Grille outlet	Black Ivory-white	V370 † V370/C †	V372 † V372/C †	V67897 V67897/C	—
					Baffle outlet	Black	V324 †	V332 †	V67897	—
					*Dark-room	Black	V324DR †	V332DR †	V67897	—
12"	60,000	66,000	90	100	Grille outlet	Black	V380 †	V382 †	V67888	V67889
					Ivory-white	V380/C †	V382/C †	V67888/C	V67889/C	

\*Complete with internal blackout cowl and baffle outlet.

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

Xpelair Sales Division, WOODS OF COLCHESTER LTD., Kemble House, 20, Kean Street, London, W.C.2.

An associate company of the General Electric Co. Ltd., of England.

Available from good electrical suppliers.

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