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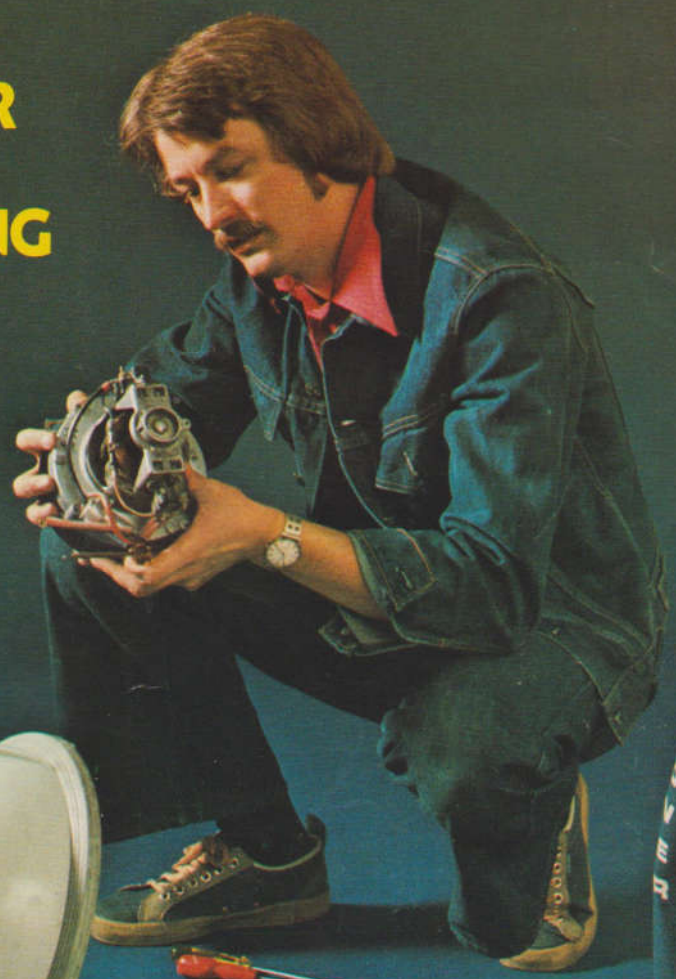
# Do it yourself

**HOW TO SERVICE  
A VACUUM CLEANER**  
**BEDS—BUYING,  
HIDING AND MAKING**



**FACTS ON DAMP,  
WOODFINISHING,  
CENTRAL HEATING  
AND WINDOWS**

**50 EXTRACTOR  
FANS TO  
BE WON!**





**38**

**Win a fan**

50 extractor fans to be won in a simple, free competition



**40**



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# 50 FANS TO BE WON!

HERE'S your chance to put an end to your steamed-up bathroom. By entering this easy competition, you may win one of 50 prizes of Xpelair ceiling extractor fans, each worth nearly £20.

Not only will you cut down steam, but ruined wallcoverings and paintwork will be a thing of the past. And won't it be nice to be able to find the towel after a bath? The fan is also suitable for use in a kitchen in a bungalow or top floor flat.

The fans are designed for mounting in the ceiling of any room directly below a loft or attic. In normal cases, this is a perfectly satisfactory method of disposing of steam. However, where it is felt that the steam has to be taken out of the building, 8in. diameter ducting can be fitted.

## Fitting the fan

Cut a hole 11½in. in diameter in the ceiling between the joists. This can be done with a drill and padsaw.

With the screws supplied, the fan can be installed in ceilings up to 1½in. thick, but for fixing in thicker ceilings, longer screws are available from the makers.

Once fixed in position, the fan can be connected to the electricity supply. Connection should be made by an on/off switch (pull-cord type in a bathroom) or by the room light switch if the fan is connected to the lighting circuit.

## How to enter

Look at the list of features of the Xpelair ceiling extractor fan listed below. You have to decide their order of importance for a family of four living in a semi-detached, two-storey house.

For example, if you think that D is the most important feature, write the letter D in box number 1 on the entry form. Then pick the feature next in importance and write its letter in box number 2. Work through the list until all the boxes are filled.

In addition, think of an extra feature that you would like to see incorporated in extractor fans of the future. Using no more than 12 words, write your idea in the space provided on the entry form. This will be considered only in the event of a tie.

Complete the entry form by adding your name and address. Post the form in a sealed envelope to DIY Fan Competition, Link House, Dingwall Avenue, Croydon, CR9 2TA.

The winning entries will be those that, in the opinion of the judges, have listed the features in the best order of importance.

The judges include Graham Mooney of GEC-Xpelair Ltd. and Tony Wilkins, Editor of DIY magazine.

## Competition rules

- 1: Each entry must be submitted on the form published in September DIY magazine.
- 2: Entries must be received by September 12. Those received after this date will not be considered. Proof of posting cannot be accepted as proof of delivery.
- 3: This competition is open only to readers in the U.K.
- 4: Employees of the Link House Group and GEC-Xpelair Ltd. or their agents are not eligible to enter.
- 5: In the event of a tie or ties between entrants who have listed the fan features in the same order, the judges will examine the tie-breaker entries submitted by those entrants and award prizes to the sender/s of the most original idea/s whether serious or humorous.
- 6: The judges' decision is final, and no correspondence will be entered into.

Entrants will be deemed to have accepted and agreed to follow the rules of the competition.

Winners will be notified by post. The winners will be listed in a future issue of the magazine.

## Xpelair fan features

A: Easy to install. B: Low running costs. C: Unobtrusive design. D: Easy to clean. E: Little maintenance needed. F: Low noise level. G: Good air extract capacity. H: Two-year guarantee.

## ENTRY FORM

1  2  3  4  5  6  7  8

Additional feature: \_\_\_\_\_

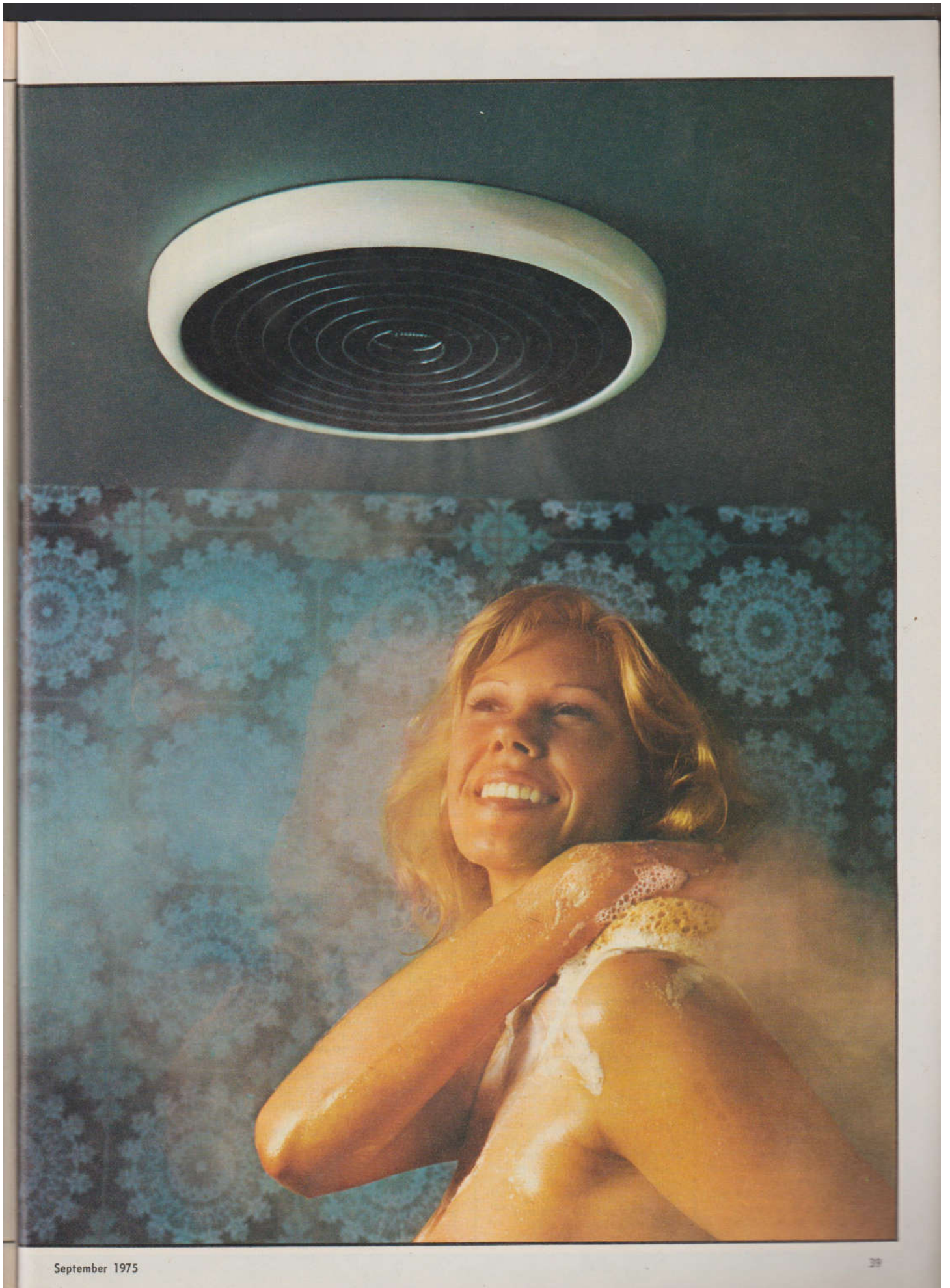
NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

(Capitals please)

Entries should be sent in a sealed envelope to DIY Fan Competition, Link House, Dingwall Avenue, Croydon, CR9 2TA.







# FACTS ON

## DAMP AND VENTILATION

Damp and ventilation problems are common to many households. Musty smells, spoiled decorations, and a generally unhealthy atmosphere are sure signs of damp. More than just coldness and discomfort, damp can cause structural decay. Once detected, damp must be dealt with immediately.

Condensation, often taken for damp, also has unpleasant effects around the house. Understanding the difference between the two, and finding their causes and most suitable cures, is vital.

Here, we give brief accounts of both and offer some possible remedies.

### Damp

There are many areas of a house where damp can penetrate. Walls are common offenders. They present large surface areas to driving rain and absorb much water, and rely solely on the sun and wind to dry them out. For a number of reasons external walls can become damp on the inside.

This dampness can extend over complete walls, except the upper areas under the shelter of the eaves. This can be cured by coating the outside wall with a silicone water repellent—a colourless liquid which seals the brickwork but still allows it to breathe, so trapped moisture can escape.

Paint also can be used effectively to prevent the ingress of rain. Stone, cement, plastic coating or exterior grade emulsion paint, are all suitable. Gloss paint can be expensive, and rarely looks good.

Another area where dampness penetrates is through defective or porous pointing. To cure this, rake out the old mortar to a depth of about  $\frac{3}{4}$  in. and repoint.

Where woodwork has shrunk and left a crack between window frames and brickwork, fill with a mastic compound to give a permanently flexible seal regardless of slight movement in the fabric.

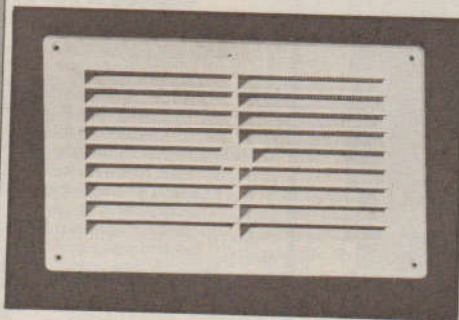
In some houses built many years ago, no provision was made for preventing damp from

### PRODUCTS

Effective against damp by penetration and rising damp, is Stroma. Depending on porosity, Stroma penetrates deeply to form a damp proof barrier. This is particularly useful in older properties without a d.p.c. It is effective on bricks, concrete, plaster, stone, roughcast and cement. Brearley Concrete Units Ltd., 2A Tenby Road, Birmingham, B13 9LZ.



From Philips Electric Ltd., Century House, Shaftesbury Avenue, London, WC2H 8AS, is this reversible flow electric window fan. It is light in weight, easy to clean and, the makers claim, 'whisper-quiet'. To suck in air instead of blowing it out, you simply flick a built-in lever and the fan blades tip over. A cover seals out the elements when the fan is switched off.



The Mapvent range of plastic ventilators, produced by MAP Ltd., King Alfred Way, Cheitenham, Glos., are supplied complete with fixing screws and instructions. Above: The 916 louvre ventilator is suitable for fixed ventilation jobs, and has a detachable, easy-to-clean flyscreen. Their 906 model is a hit and miss ventilator with integral flyscreen.

Penetrex, from Hawk X-L Ltd., Sunnydale Mills, Ossett, Yorks., is a colourless silicone resin based water repellent for application to external surfaces of above-ground masonry. The use of this liquid stops the penetration of wind-driven rain through porous walls. It can be applied successfully to brick, stone, stucco, cement rendering, concrete and asbestos cement. Penetrex does not discolour the surface, nor does it prevent the circulation of air in the masonry. Their X.L. Mastic is a linseed oil based mastic for sealing gaps between window and door frames and the surrounding masonry. This is applied using a trowel, and is available in red and stone.



Aqua-Chek is a damp proofing product for outside walls, suitable for all masonry, including very porous surfaces. It is fungicidal and dries to a transparent coat. Produced by Silixine Paints Ltd., Abbey Road, Barking, Essex. They also produce Watertite, which gives a waterproof coating to external timbers.

Cuprinol Ltd., Adderwell, Frome, Somerset, BA11 1NL, produce a wide range of home protection products. Their bitumen based Blackcote, waterproofs and protects exterior surfaces. Rayncote repels rain and damp from exterior walls and masonry. Dampcote seals out damp penetration on interior walls. In addition to these they produce wood preservers, dry rot killers, woodworm killers and many more.

Coo-Var damp repellent is manufactured by Coo-Var Ltd., Ellenshaw Works, Lockwood Street, Hull, HU2 0HN. It does not contain any silicate or bitumen, and therefore has no adverse effects on subsequent decorations. It is available in two grades—transparent, where the desire is to retain, as far as possible, the natural appearance of the substrate; and pigmented (broken white), to produce an opaque, impervious ground where a painted finish is intended. It can be used for sealing interior and exterior walls, for sealing and waterproofing hardboard and fixed canvas, and for sealing porous surfaces such as brick, stone, roughcast, dry neutral plaster or concrete and wood.



Shown is a typical application for the 6in. diameter Vent-Axia unit, from Vent-Axia Ltd., Flemming Way, Crawley, West Sussex, RH10 2NN. The company are particularly interested in combatting condensation in kitchens and bathrooms. The Time-span 20 time delay controller, is connected to a lighting switch to turn on a ventilation unit, and to keep it working for 20 minutes after the light has been switched off. It is primarily designed for use in confined areas such as bathrooms and lavatories.

rising from the ground. In most houses a d.p.c. (damp proof course), usually of slate or bitumen, is used for this. Quite a lot of problems can arise at d.p.c. level. Though the d.p.c. might be perfectly adequate, its object can be defeated if without thinking a

householder builds a rockery above the d.p.c. level, heaps sand or earth above it, or builds up a path too high. Water is then able to run off and penetrate the walls above the d.p.c. level. Ideally, d.p.c.s should be at least 6in. above ground or path level. A water-

proofed skirting can be applied to the lower part of the wall for added protection.

Where a d.p.c. is at fault, there are several cures. Two methods are: treating the wall with a damp repelling liquid which soaks into the brickwork and masonry; and feeding into



# FACTS ON

the wall from bottles a liquid to saturate the wall with a material which repels moisture.

Some other causes for damp in a house are: damaged chimney flaunching, loose or damaged flashing; loose, damaged or missing slates and tiles; defective gutter and downpipes; bridged wall ties.

## Condensation

Basically, condensation occurs when warm, moist air comes into contact with a cool surface. Beads of moisture on bathroom wall tiles, kitchen or bathroom windows, and in newly decorated rooms, are examples of this. The air has become heavily laden with water vapour.

Air in a room is moistened in a variety of ways—steam given off from cooking, washing and bathing; burning gas, solid fuel or paraffin (for every gallon of fuel a paraffin heater burns, it releases an equal amount of water vapour into the air); breathing and perspiration. These factors, together, raise the temperature of a room and load it with water vapour which condenses when the air comes into contact with cool surfaces.

In addition to walls and windows, condensation appears in the form of sweating on floor tiles or under floorcoverings laid over concrete or tiled floors.

In kitchens particularly, condensation and cooking smells pose big problems. In warm, dry weather a window can be opened to allow steam to escape, without causing discomfort. Otherwise, the most effective way is to fit an extractor fan. For maximum benefit it should be fitted as near to the cooker or other source of steam and as high up in the room as possible.

It is important that a large enough extractor fan is fitted. There is a simple method for working out the correct size. Generally, air in a kitchen should be changed about 15 times an hour. Work out the volume of the room (length x width x height) in cubic feet. Multiply the result by the number of hourly air changes.

Let's take an example. A kitchen measures 10ft. x 8ft.

Electro-Osmosis treatment from Rentokil Ltd., Felcourt, East Grinstead, Sussex, removes minute electrical charges in a wet wall by introducing into the wall, at d.p.c. level, a copper strip linked to an earth rod driven deep into the soil. This provides a path down which the electricity can discharge and prevent the moisture from rising into the wall. They also produce Discovac, a method of inserting a tough polythene membrane d.p.c.

The Sylglas Co., 81 Knight's Hill, West Norwood, London, S.E.27, produce Sylglas tape (standard or aluminium) for waterproofing glass roofs and skylights, Skyglas mastic for sealing gaps around windows, and Skyglas cord for sealing cracks.

Berry Wiggins, Hoo, Rochester, Kent, ME3 9ND, produce a wide range of waterproofing and damp proofing products. Their Aqua-seal wood preservatives deal with wood-worm, wet and dry rot, and other decay. They can be over-painted, varnished or polished.

Among the range of damp proofing products from Thomas Ness Ltd. are: Synthaprufe, a waterproofer and adhesive for walls, floors, roofs and so on; Heviprufe, an epoxy pitch surface damp proof membrane, which is applied cold to concrete surfaces; Synthabond, a high solid content universal bonding agent, adhesive and sealer;

x 8ft. Therefore, its volume equals 640 cubic feet. Multiplied by 15 gives us 9,600 cubic feet/hour. In this instance a 6in. model (which has an extraction capacity of 10,000 cubic feet/hour), is suitable.

There are various types of extractor fans. Some are designed for wall or window fitting. Others can be mounted in roof lights or pitched roofs. Many models have built-in back-draught shutters which prevent cold blasts entering a room when an extractor is switched off.

For those who prefer concealed ventilators, there are



Newtonite is a pitch impregnated fibre base, corrugated to form dovetail keys for plaster one side and insulating cavities the other. It is usually fixed direct to brickwork or masonry with galvanized nails, and is supplied in 5m. x 1m. rolls. This system is equally effective on walls without d.p.c.s., and requires no special treatment. It is produced by Newtonite Ltd., 12 Verney Road, London, SE16 3DR.

Wykamol Ltd., 21 Hyde Street, Winchester, Hampshire, produce a wide range of damp resisting equipment. Their silicone based solution renders porous building material completely water repellent, while leaving the pores of the substance open and ventilated. They also produce irrigation bottles which admit an aqueous based solution into the wall to create a chemical d.p.c.

Hyload pitch polymer d.p.c. is suitable for many applications including those which normally require special d.p.c.s. It is most effectively used with Hyload cloaks (units designed for use at stepped or horizontal angles). It can be cut using a trowel and laid in the traditional way. Hyload will withstand considerable movement. It is unlikely to be impaired unless the wall actually collapses! Made by Ruberoid Building Products Ltd., 1 New Oxford Street, London, WC1A 1PE.

and a silicone injection damp course system, designed to stop rising damp in

houses either not fitted with a d.p.c., or where the d.p.c. has failed.

built-in extractors whose presence on an interior wall is indicated by only a panel containing shutters. On the outside wall is an inconspicuous grille. If buying an extractor fan to fit in a window, it is important that the glass is strong enough to carry it. Seek a glass merchant's advice. Likewise, if there is a boiler in a kitchen an extractor could affect its operation. So consult an expert.

Where the problems of steam are not acute a hit and miss, or fixed louvre ventilator, installed above a door or, in a wall or window, may be sufficient. Even a strategically



R. W. Beach & Co. Ltd., 179 Bradford Street, Birmingham, B12 0JD, produce louvred grilles for outside walls, and a comprehensive range of extractor fans. Their Ventwall model XVb with butterfly valve, is an unobtrusive design with a push-fit recessed inlet grille for easy cleaning. A built-in pull cord can be fitted as an extra. The Ventwin model WXB (above) is an aluminium anodised unit which can be fitted easily to window panes. There are models available for double-glazed windows.

GEC-Xpelair Ltd., P.O. Box 220, Deykin Avenue, Witton, Birmingham, B6 7JH, are producers of a wide range of domestic ventilation equipment. They make a variety of electrically operated wall and window mounted extractor fans (including a model with a two-speed reversible motor, so that air can either be sucked in or blown out) which are easy to install. They also produce a ceiling extractor fan and a wall mounted duct fan, ideal for bathrooms. Specifically for kitchens are their wall mounted cooker

placed fan helps disperse concentrations of steam towards open windows or air bricks.

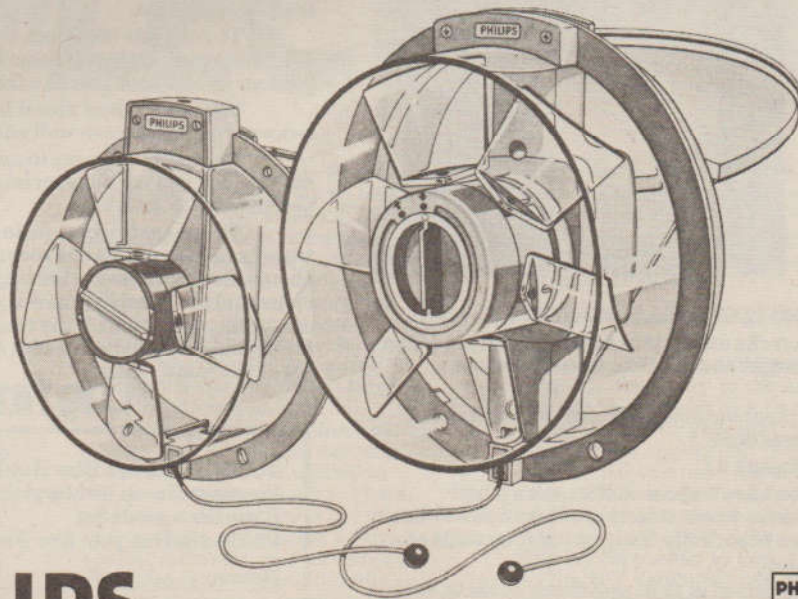
Useful attachments for removing steam, grease and other smells from cooking, are cooker hoods. If the cooker is not positioned on an outside wall trunking may be needed to convey the fumes to the nearest point of extraction. Some models operate by a switch offering the choice of dispersing the odours through an outlet in the wall, or recirculating the air after it has been filtered through a charcoal filter situated in the cooker hood.





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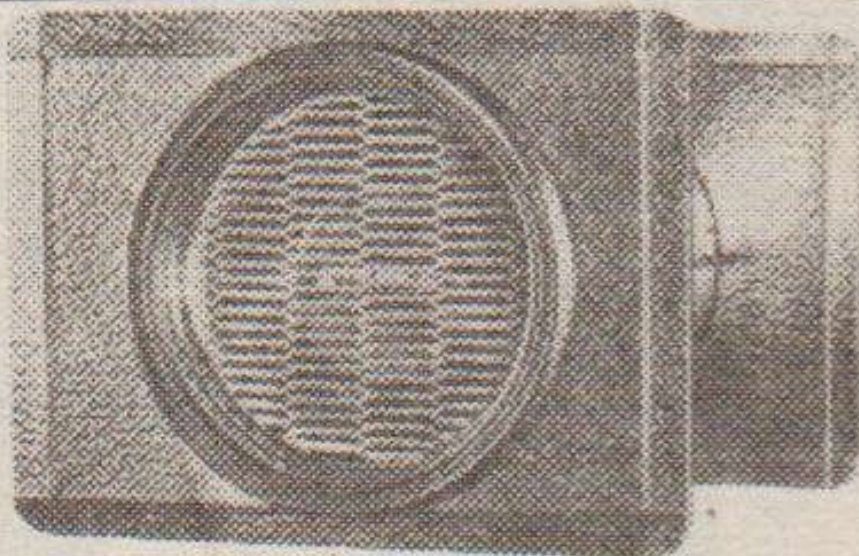




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