# A guide to better ventilation from Vent-Axia

# Vent-Axia: A worldwide success story

**Just why is Vent-Axia so successful? Three reasons lie behind forty years of continuing growth: the products, the service, and a concept unique in ventilation.**

In 1934 Vent-Axia invented the world's first window ventilation unit, electrically operated and moulded in plastic. It was the start of a revolution in living and working conditions. Because Vent-Axia had done more than invent a piece of precision equipment. They'd created a totally new and unique concept: reliable and economical ventilation as conveniently and easily available as a radio or a refrigerator, ventilation needing no complex skills or special construction in its installation.

**Unit ventilation, as this revolutionary Vent-Axia concept soon came to be called, was – and still is – a major breakthrough in ventilation technology.**

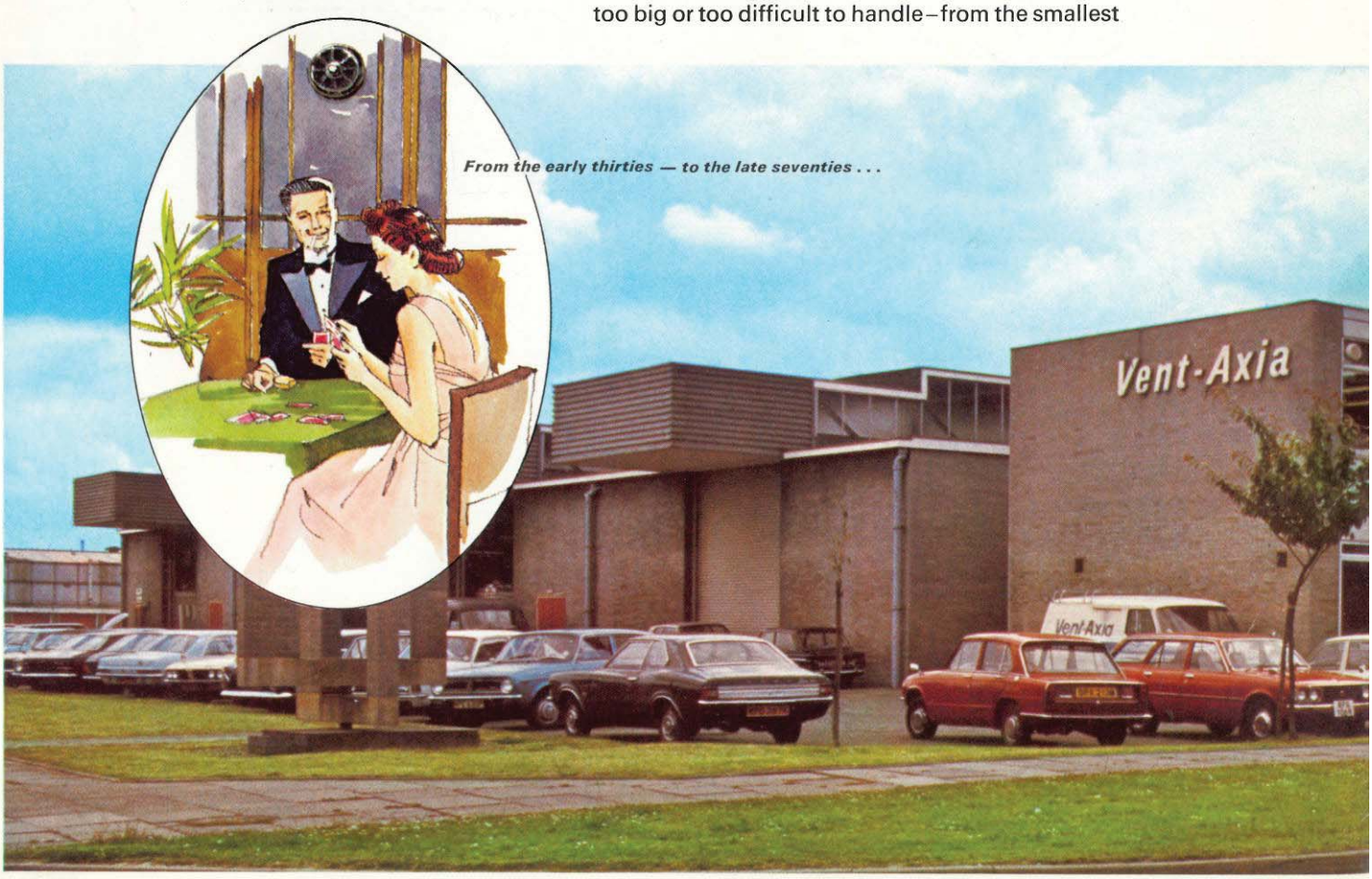
The first Vent-Axia was called the 'Silent Six' (even then obeying the maxim that ventilation should be 'seen and not heard'), quickly followed by the 'Silent Nine' and the 'Industrial Twelve'. Right from the start, Vent-Axia saw the need to provide products tailored to the different sectors of the market they had pioneered.

From the start, too, the accent was on quality. Materials and components were handpicked to meet Vent-Axia's stringent quality standards. They still are today.

The company's first sales office opened at 9 Victoria Street, London, in 1936. From the first ventilation unit in 1934, and from that small office, Vent-Axia has grown and grown. Today Vent-Axia is the acknowledged leader in unit ventilation operating from a purpose-built 40,000 sq ft development, assembly and marketing complex at Crawley, Sussex – with a product range that has shown the same dramatic growth.

**The products are masterpieces of engineering, built to the highest quality standards. And built to last.** Plastics for impellers and housings are specially formulated to Vent-Axia specifications. The electric motors are the most reliable and efficient available. Small wonder that Vent-Axia units installed as long as 30 years ago are still working efficiently, day in, day out.

Vent-Axia provides a complete ventilation system, based on individual units giving a high degree of commonsense flexibility which is unique. So virtually no ventilation problem is too small, too big or too difficult to handle – from the smallest



domestic kitchen through shops and offices to the biggest commercial and industrial premises.

**Vent-Axia service is superbly comprehensive.** Apart from the Head Office in Crawley, there are now no less than twelve Vent-Axia Sales, Service and Distribution Centres throughout the United Kingdom, each holding its own stock and giving local delivery, offering a truly nationwide service. Each Sales, Service and Distribution Centre is staffed by highly skilled professionals who are always available to give free technical advice to the trade, to commercial and industrial customers, and to architects and specifiers – covering both equipment and its installation. After-sales service and guidance on the optional maintenance service agreements (which guarantee Vent-Axia units virtually for life) are also readily available from each Centre.

**Worldwide, too, the story is the same. Vent-Axia ventilation is sold in more than fifty countries throughout the world.** In Europe, where Vent-Axia is a major supplier, distribution is handled by a huge warehousing complex in Rotterdam, Holland.

Sales are handled through Vent-Axia companies in Germany and Norway, and agents and distributors strategically placed throughout Europe and the rest of the world. Over one third of Vent-Axia production every year goes overseas, making Vent-Axia a valuable export earner.

Wherever you go, whatever you do, whether you need a single ventilation unit in a kitchen window or ventilation for an entire factory or office block, Vent-Axia ventilation provides the most simple, effective and economic answer available anywhere in the world.

**The Vent-Axia Universal range** is the ultimate in unit ventilation, the universal answer to all ventilation needs. It offers window, roof, wall and panel models, each in four sizes. All models are fitted with the exclusive automatic Autospring shutter, and finished in blend-anywhere Tundra shades.

**The Vent-Axia Standard range** (with optional shutters) features four models in four sizes, as the Vent-Axia Universal range. Window and roof models are available in black or ivory, wall and panel models with ivory fascias.

**Vent-Axia 150** is the newest unit from Vent-Axia, specifically for domestic use. Designed in white with distinctive black trim to blend in with any decor.

**Rangemaster Controllers** (for use with Universal and Standard ranges) give the choice of three airflow speeds and two airflow directions, intake and extract.

**Timespan Controllers** (for use with Universal and Standard ranges) give adjustable time-delay control for bathrooms/toilets.

**Vent-Axia AVA** is a wide range of Approved and Additional Ventilation Accessories for use with Vent-Axia ventilation units to create an even more flexible ventilation system.

*Full technical details on pages 11 and 12.*

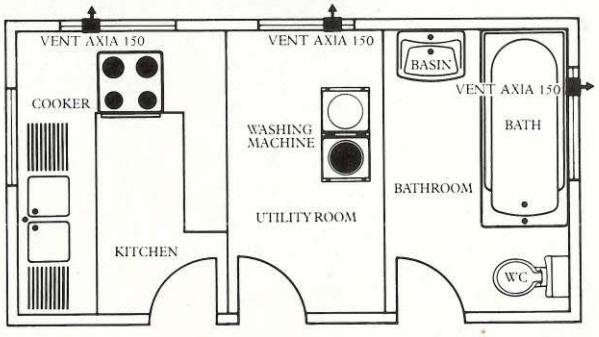
Main picture : *Vent-Axia head office and works, Crawley.*
Inset right : *Two of Vent-Axia's nationwide Sales, Service and Distribution Centres: Kingston-upon-Thames and Newcastle-upon-Tyne.*
Below : *A section of Vent-Axia's main warehouse at Crawley.*

# How Vent-Axia helps in the home

Efficient ventilation in the home is important for two reasons. The first, more obvious reason is the removal of stale air and cooking smells from kitchens.

The second, less well known reason is the way ventilation helps combat steam and moisture, known as condensation. In kitchens and bathrooms, ventilation helps preserve decorations, fabrics, painted surfaces, etc., to such an extent that the entire decor of kitchens and bathrooms can be made to last virtually twice as long.

Condensation is a problem which is increasing rather than decreasing. Modern dwellings are now so designed that there is little or no scope for natural ventilation through ill-fitting doors and windows. Even in older properties modernisation often results in the blocking up of natural air channels such as chimneys and the exclusion of draughts coming through doors and windows.




The simplicity of Vent-Axia ventilation makes it the ideal solution. Like the new Vent-Axia 150 domestic unit, specifically designed for today's kitchens, bathrooms, and utility rooms. Or any of the Standard and Universal range of models which can be used in conjunction with three-speed, single or reverse direction controllers, as well as Timespan, a time delay controller for bathrooms/toilets.

Vent-Axia ventilation really can help in the home. Efficient ventilation that gets rid of smells and steam, efficient ventilation that helps combat condensation, helps keep kitchen and bathroom decorations looking as good as new.


# The new Vent-Axia 150

This is the very latest unit from Vent-Axia, specifically designed to provide the very best in ventilation for today's kitchens, bathrooms and utility rooms. With the accent, as always, on quality, the new Vent-Axia 150 has sleek, stylish lines finished in white with distinctive black trim to blend in perfectly with any decor. Vent-Axia 150 is specially designed for ease of installation in most windows, including most types of double glazing.

Operation, too, reflects the many years' experience which has gone into its development, and Vent-Axia's overriding concern with quality and ease of use. Simple pull-cords operate both the shutter and the fan. Pull one and the shutter opens and the fan starts working ; pull the other and the shutter closes and the fan switches off.

Simple to install, operate and keep in tip-top condition, the new Vent-Axia 150 fights kitchen, bathroom and utility room smells and steam, fights those steamed-up windows right through the home. The Vent-Axia 150 helps keep decorations looking as good as new by keeping the air clear – and all this for a low running cost (uses less electricity than the average household light bulb) and the minimum of cleaning and maintenance.

The typical layout of a modern house (*left*), shows how Vent-Axia 150 is suitable for ventilation of modern kitchens, bathrooms, utility rooms, etc. One such room measuring approx. 3m x 3.8m x 2.4m high (10' x 12½' x 8' high), for example, would have its air changed no less than ten times every hour (see table of recommended air changes at back) with just one Vent-Axia 150 unit.

For larger kitchens eg. open plan, for larger bathrooms and utility rooms in older properties for example, one of the units from the Universal or Standard ranges may be preferred.

# How Vent-Axia helps in public service



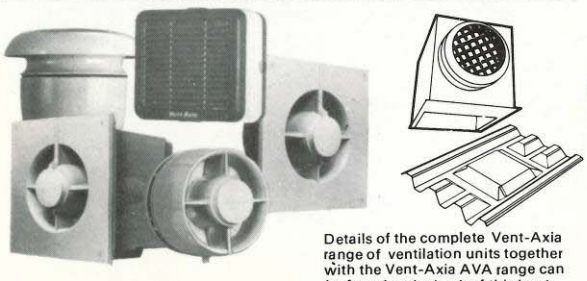
In all types of public building – hospitals, schools, government offices, and residential – Vent-Axia provides the level of ventilation required far more economically than any other system available (central ducted schemes, for example). Vent-Axia, too, plays a vital part in the increasing amount of conversion work being carried out on existing properties.

Again, Vent-Axia is very important in helping combat condensation in both new and old properties, making it a particularly attractive investment for local authorities keen to keep down their annual repair and maintenance bills. The Department of the Environment states in its literature: "mechanical ventilation is recommended to get rid of the steam from cooking, washing and clothes drying".

Vent-Axia units are easy to install in windows, roofs, walls, panels and partitionings, causing little or no disruption. And the accessories available, such as speed and air direction controllers and time delay controllers, provide even greater flexibility.

In public service Vent-Axia extends from the new Vent-Axia 150 domestic unit for kitchen and bathroom use in old peoples' homes and flats to the Universal and Standard ranges of unit ventilation and the wide range of Vent-Axia AVA (Approved Ventilation Accessories).

Whatever the project, from a single unit installation to a complete multi-duct configuration, Vent-Axia has the right products, the right accessories and service back-up to do the job efficiently, reliably – and economically.



Details of the complete Vent-Axia range of ventilation units together with the Vent-Axia AVA range can be found at the back of this book.

# How Vent-Axia helps in industry

Another area where efficient ventilation is absolutely vital is industry. It has been shown time and time again that output can be directly related to working conditions – and it's here that ventilation plays such an important part. Poor, inadequate ventilation can lead to discomfort, low morale and reduced production all round – not to mention the increased risk of infections like colds and flu spreading. Efficient ventilation has the opposite effect.

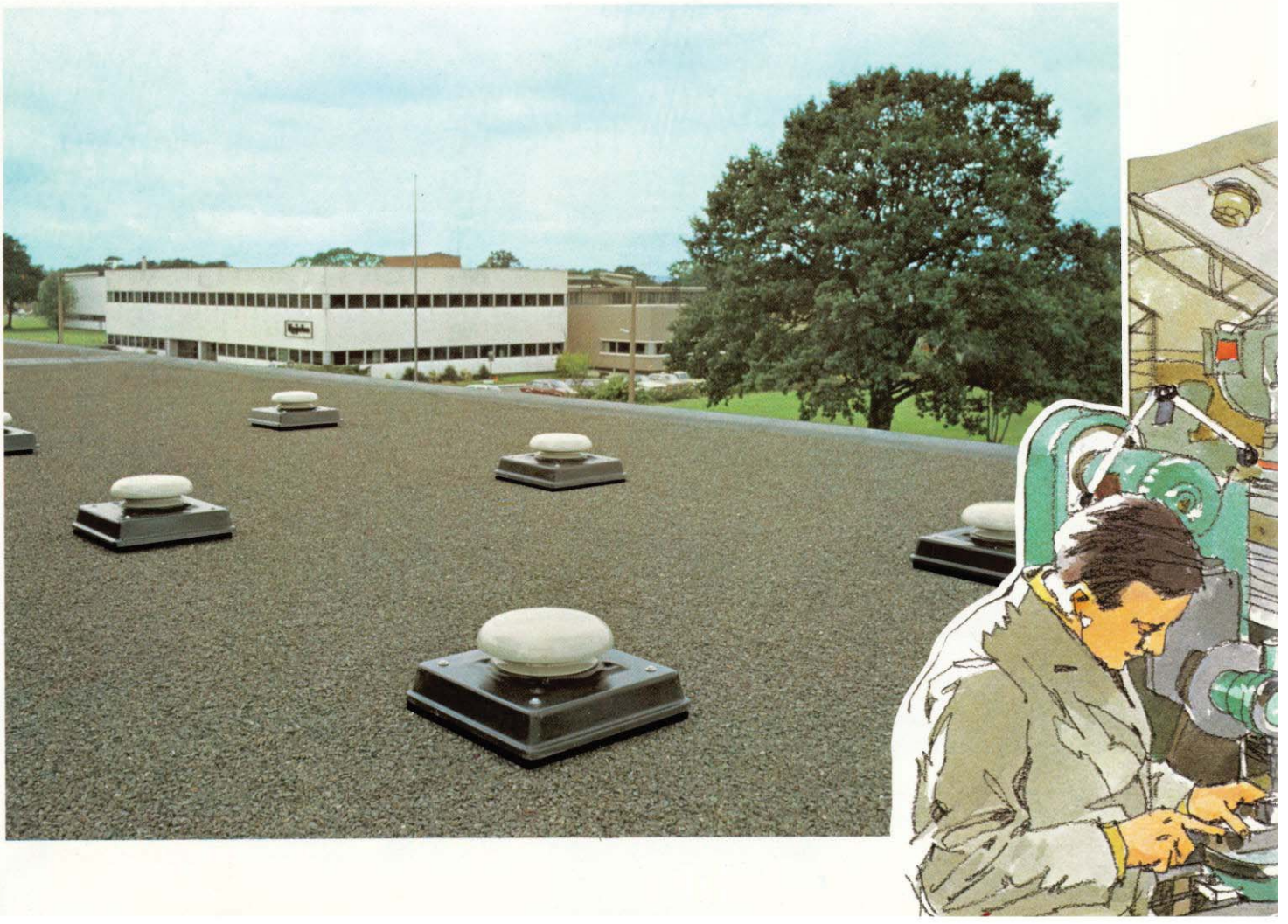
Time and time again, Vent-Axia ventilation has been proved to be a really worthwhile investment. Throughout the world there are hundreds of thousands of factories where Vent-Axia is daily doing the job for which it is famous – removing stale air and helping to create a better working atmosphere. In workshops, warehouses, toilets, canteens – in fact any sort of situation – Vent-Axia offers the ideal solution to a factory's ventilation problems.

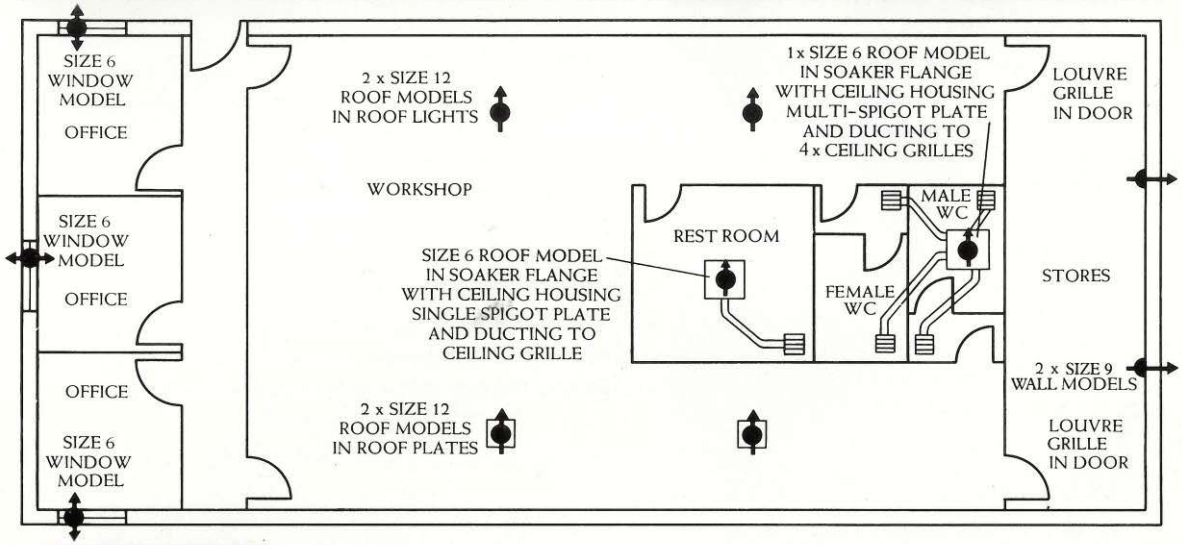
Vent-Axia is the obvious alternative to large central ducted installations, offering all the advantages and none of the disadvantages. It costs less, is cheaper and easier to install, causes little or no disruption – yet is economical to run and maintain and minimises expensive heat loss.

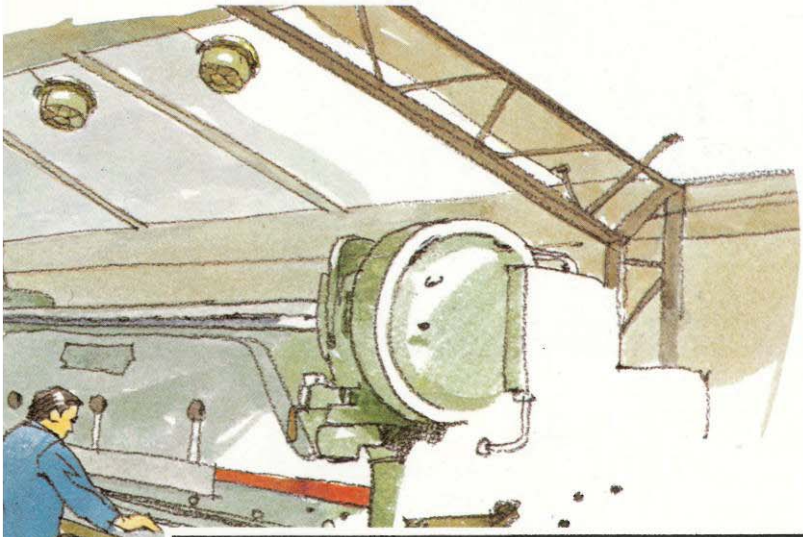
Vent-Axia unit ventilation is totally flexible. In the unlikely event of one unit being out of action for repair or maintenance, the remainder of the system keeps on working. And when needs change, for example when premises are extended or existing premises are reorganised, then Vent-Axia ventilation involves no costly or time-consuming disruptive alteration of fixed, bulky ducting.

As to performance, one compact unit on its own, with a 229mm (9″) or 305mm (12″) diameter impeller, is more than powerful enough to draw the stale air out of, and the fresh air into, a fair sized room or production area (at normal speed a size 12 model will change the air in a room measuring 10.4m x 6.1m x 3m (34'x 20'x 10') eight times each and every hour).

Of the four different-sized units available (each in window, wall, roof and panel models), the bigger and more powerful sizes 9 and 12 are particularly recommended for industrial use, the smaller sizes 6 and 7 being extremely suitable for smaller areas such as stores, offices, etc. Specialist models are also available for use in light-exclusion situations (eg : darkrooms and X-ray rooms) ; and also where resistance to steam and corrosive fumes and gases is required.





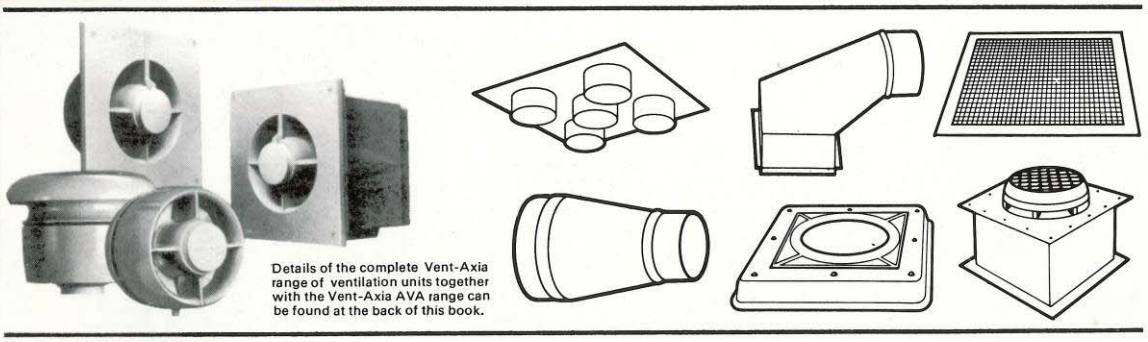



*Industrial installations with Vent-Axia AVA*

What really makes Vent-Axia ventilation an even more viable alternative to a far more costly central ducted system is the wide range of Approved and Additional Ventilation Accessories available (Vent-Axia AVA). AVA, together with Vent-Axia ventilation units, offers the complete ventilation answer.

Vent-Axia makes for economic, flexible ventilation as the drawing indicates, where a typical installation is reproduced.

A complete list of AVA equipment is shown at the back of this book.



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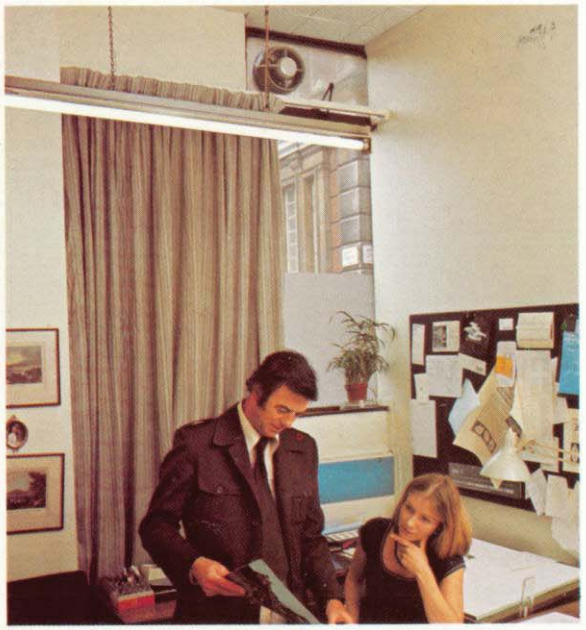
# How Vent-Axia helps in the office

The need for efficient ventilation is no less important in offices than in other places of work. They need a constant supply of fresh air, a constant removal of stale air. And there's a very effective alternative to the inconvenience of papers blown across the office because of an open window or door.

Vent-Axia ventilation.

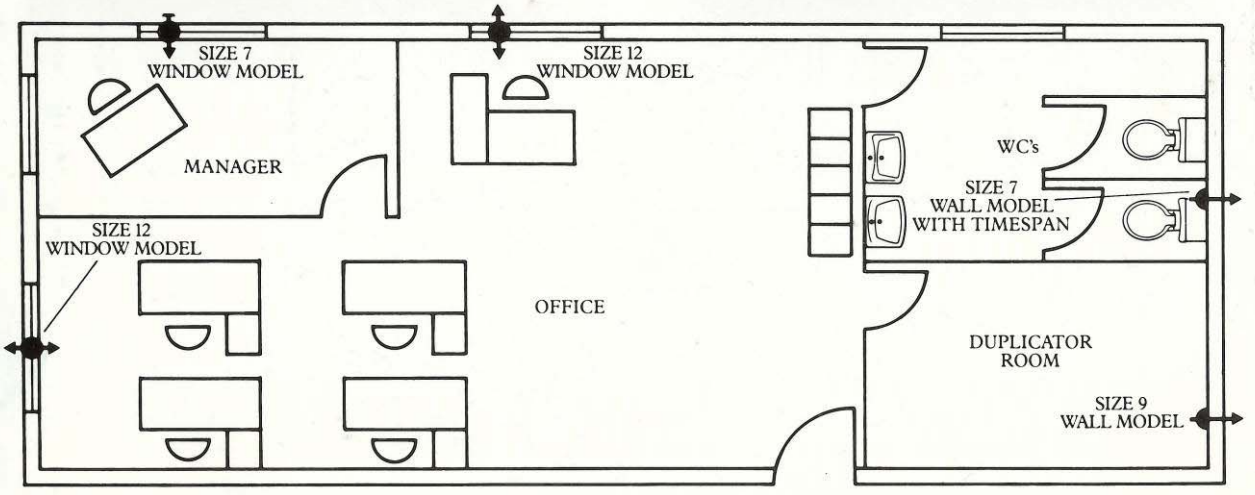
It answers all the ventilation needs of the office – quietly, unobtrusively, efficiently, stylishly. And with far less expensive heat loss than that caused by an open window or door.

Vent-Axia units are easily fitted in windows, roofs, walls and internal panelling and partitioning. Ducting, too, is available from the Vent-Axia AVA range, and is localised to the particular unit or units for maximum efficiency, maximum economy. With Vent-Axia you get no unsightly central ducted installation because Vent-Axia flexibility means an unobtrusive, *neat* solution to all commercial ventilation needs.



Outstanding performance, too. Vent-Axia units, sizes 7 and 9, are ideally suited to most office applications ; for very small offices size 6 could be suitable and in very large offices size 12 may be required. A size 9 unit, for example, can change the air in a stuffy 6.1m x 3.7m x 3m (20'x12' x10') office no less than ten times every hour.

Put in two units, three units, or more, singly or in connected groupings – in the office, the boardroom, the canteen, the lavatory – whatever the size, whatever the needs, Vent-Axia ventilation is the quiet, economic answer.



# How Vent-Axia helps in your leisure hours

In hotels, pubs, clubs, restaurants, whatever the environment in which people get together to relax and enjoy themselves, there's one thing virtually guaranteed to ruin the atmosphere.

And that's the atmosphere.

If senses which are looking forward to being entertained are suddenly dulled by fumes, smoke, stale air or just a general lack of fresh air, then their entertainment is dulled, too.

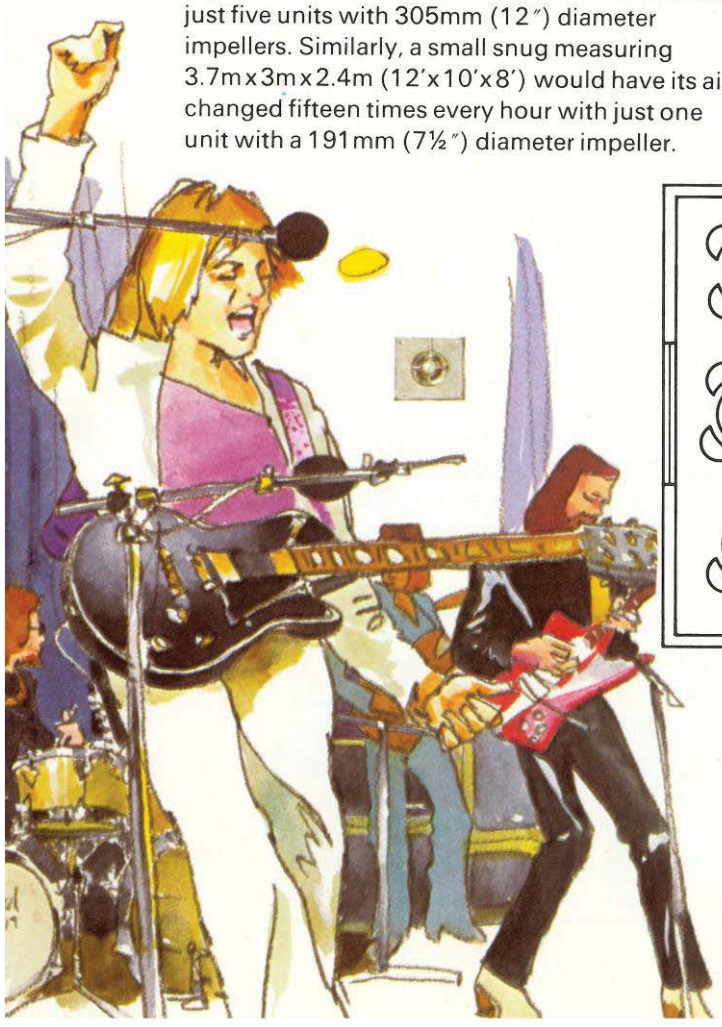
On the other hand, it's all too easy to overcompensate for the lack of fresh air and suddenly supply too much of it with a blast of cold air through an open door, thus destroying the atmosphere altogether. The secret lies in the balance – in the ventilation control.

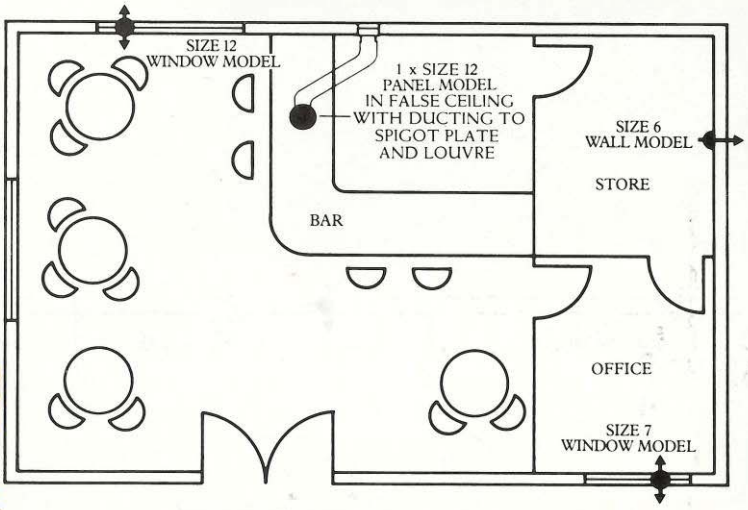
This is where Vent-Axia ventilation can help. Being based on individual fan units, the system is extremely flexible, and simplicity itself to create the perfect balance between fresh air and atmosphere every time.

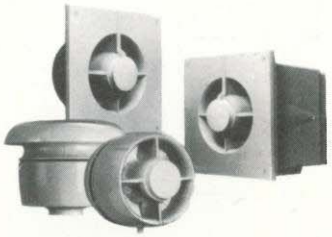
From the smallest snug to the largest restaurant, from a single squash court to a large sporting complex, Vent-Axia ventilation is the logical, economic answer to all ventilation needs.

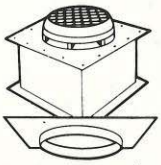
Take a restaurant measuring 27.4m x 10.7m x 3m (90'x35'x10'). It could have its air changed eight times an hour with the simple installation of just five units with 305mm (12″) diameter impellers. Similarly, a small snug measuring 3.7m x 3m x 2.4m (12'x10'x8') would have its air changed fifteen times every hour with just one unit with a 191mm (7½″) diameter impeller.

Efficient ventilation leads of course to another major advantage – happier staff. The better the atmosphere the happier they are, the more willing they are – because it's simply a more pleasant place to work in.







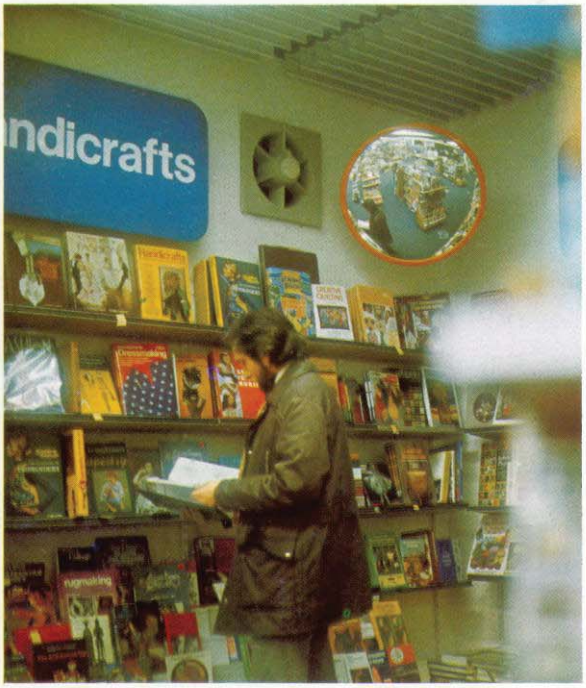
Details of the complete Vent-Axia range of ventilation units together with the Vent-Axia AVA range can be found at the back of this book.

# How Vent-Axia helps in the High Street

Efficient ventilation in shops is of two-fold importance. First, shops and stores offering their busy, harassed shoppers a relaxed, cool, inviting atmosphere build up very strong customer loyalty – and therefore extra business – through sheer pleasantness.

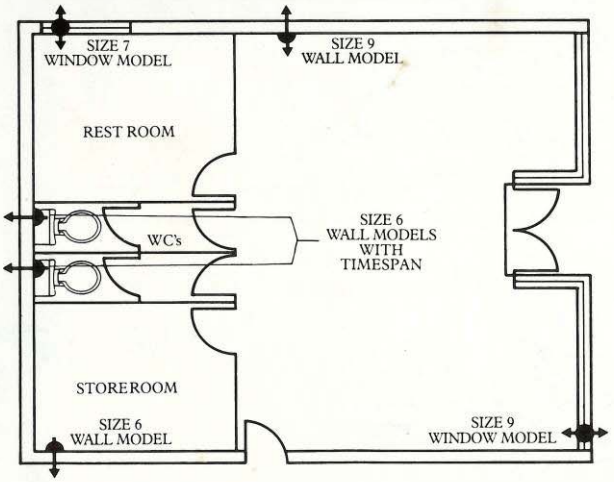
Secondly, of course, are the benefits through having a happier staff. A shop staffed by discontented people soon communicates that feeling through to the customers – it's only natural. Which could mean a lot of lost custom.

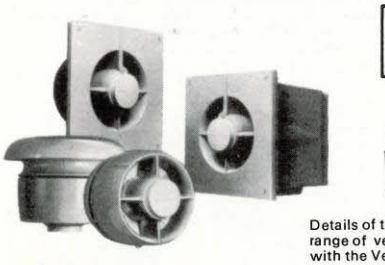
The better the working conditions, through increased efficiency by ventilation, the happier (and more loyal) staff become and the more that feeling gets through to customers. Plus the fact that efficient ventilation helps cut down the risk of heat, smoke and condensation damage to your goods and helps combat steamed-up windows which obscure those goods from customers' view.


Vent-Axia helps provide efficient ventilation at minimum cost. With a lot of ventilation systems (central ducted, for example), the premises would have to close or endure equally loss-making disruptions during installation. With Vent-Axia, disruption is kept to an absolute minimum, and the store stays open.

Flexibility, too, means that Vent-Axia ventilation can fit any shop function or layout easily. A single unit in a window, a bank of units let into a ceiling or roof, unobtrusive ventilation through partitioning, individual or trunked units to changing rooms. Whatever the size, whatever the type of shop or store, Vent-Axia ventilation provides the simplest, most cost-effective answer to trouble-free shopping and increased customer loyalty.



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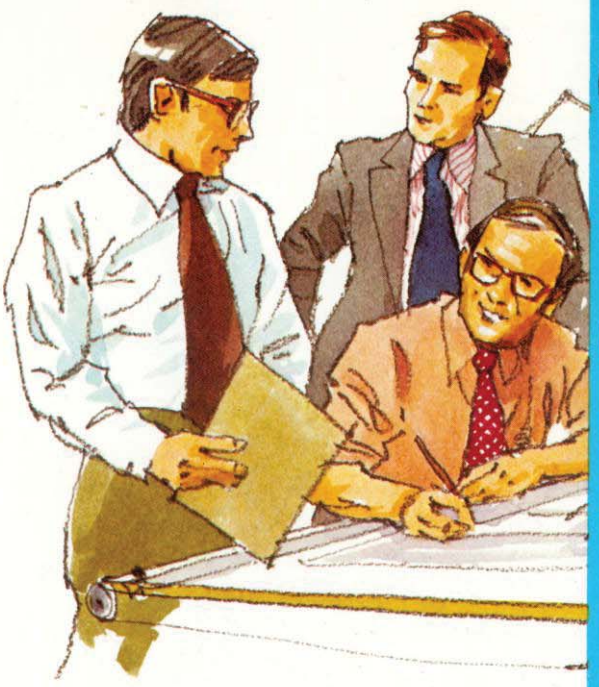
# Vent-Axia – Guaranteed to help





Vent-Axia is the finest quality unit ventilation money can buy. Quality engineered from the finest materials and components available, every Vent-Axia unit is the economic answer to years of trouble-free service when properly looked after.

The best value ventilation products available – and backed by a nationwide service to match.

Vent-Axia service operates from twelve Sales, Service and Distribution Centres in major cities throughout the United Kingdom, each staffed by professionals and offering to the trade, to commercial and industrial customers, and to architects and specifiers :–

- **Free pre-sales technical advice**
- **Installation advice on which units to choose and why**
- **Technical advice on Vent-Axia AVA**
- **Free after-sales service advice**
- **Advice on Vent-Axia's unique maintenance service agreements**
- **Local stocks**
- **Fast, local delivery**

For customer convenience Vent-Axia service available at each Centre is divided into two separate divisions.

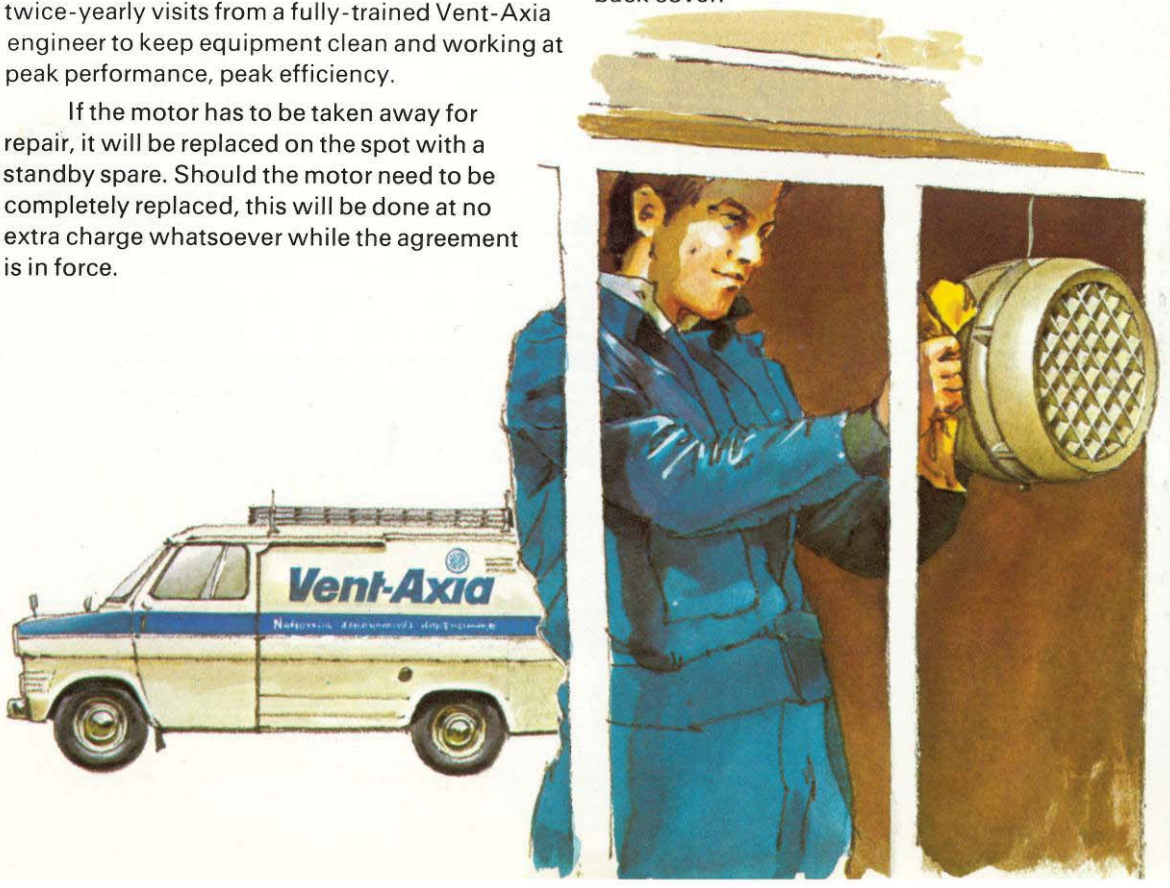
***Commercial and Industrial Division***
provides free pre-sales technical and specification help and advice on all industrial and commercial installations from straightforward to highly sophisticated systems involving Vent-Axia AVA. It also advises on the post-installation optional maintenance service agreement that provides twice-yearly visits from a fully-trained Vent-Axia engineer to keep equipment clean and working at peak performance, peak efficiency.

If the motor has to be taken away for repair, it will be replaced on the spot with a standby spare. Should the motor need to be completely replaced, this will be done at no extra charge whatsoever while the agreement is in force.

This optional commercial and industrial maintenance service agreement guarantees each unit virtually for life. Further proof that Vent-Axia is the best value in ventilation nationwide.

***Domestic Division***
Vent-Axia 150 is available through a wide range of electrical goods suppliers who can provide advice on installation.

In the event of any difficulty in obtaining a Vent-Axia 150, contact should be made with the Domestic Division of Vent-Axia through any one of the nationwide Sales, Service and Distribution Centres throughout the UK. They will be pleased to furnish a complete list of stockists and installers. A list of these Centres can be found on the back cover.



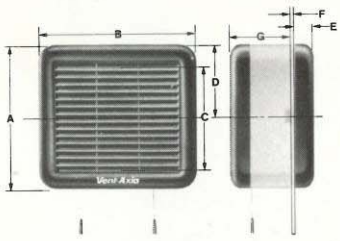
# Vent-Axia The most economic, flexible, efficient and effective ventilation system in the world.

Vent-Axia ventilation is now available in three ranges, each perfected after years of research and development and each made from the finest materials available.

Vent-Axia 150, Vent-Axia Universal range, Vent-Axia Standard range, Vent-Axia Rangemaster controllers, Vent-Axia AVA. For the best in cost-effective ventilation, Vent-Axia has the complete answer.

## Vent-Axia 150

The new Vent-Axia 150 domestic unit is specifically designed for today's kitchens, bathrooms and utility rooms. Its sleek, stylish lines are finished in white with distinctive black trim to blend in perfectly with any decor. Fits most types of windows (including most types of double glazing). Simple pull-cords operate both the shutter and the fan. Pull one, the shutter opens, the fan switches on; pull the other, the shutter closes against backdraught, the fan switches off. An extract airflow ventilation unit, the new Vent-Axia 150 is the ideal answer to low-cost, efficient ventilation in the home.




| Dimensions | mm | ins |
|---|---|---|
| A | 219 | 8⅝ |
| B | 228 | 9 |
| C Hole dia. in glass | 184 | 7¼ |
| D | 111 | 4⅜ |
| E | 28 | 1⅛ |
| F | 1.5–50 | 1/16–2 |
| G | 95 | 3¾ |

**Weight** 2·5kg (5½lb)

**Wattage** 45

**Air movement** 284m³/h (10000 ft³/h)

**Fixing** Vent-Axia 150 can be fitted to most types of glass (including reeded glass) and partitions up to 50mm (2in).

**Glass size/weight** 4mm (32oz) is generally recommended, but 3mm (24oz) may be used where the glass area does not exceed 0.3m² (3ft²) and where the installation is not in a situation exposed to high winds, e.g. coastal, tower block, etc.

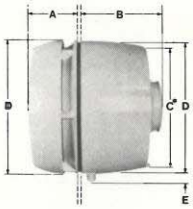
## Vent-Axia Universal Range

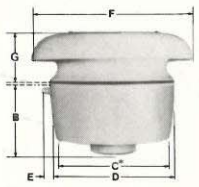
This range is the universal answer to *all* ventilation needs, the ultimate in unit ventilation. All models are fitted with the unique Autospring automatic shutter – no cords or solenoids, works perfectly whatever the angle of the unit, operating automatically on both intake and extract ventilation. Simply switch on and the shutter clicks positively open; switch off and powerful springs hold it closed against backdraught.

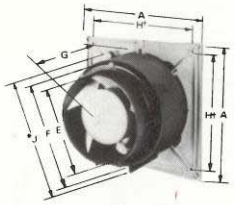
Available in window, roof, wall and panel models, each in sizes 6, 7, 9 and 12 (152mm: 6", 191mm: 7½", 229mm: 9", 305mm: 12" diameter impellers). All models are finished in blend-anywhere Tundra shades. The Vent-Axia Universal range is all you need in no-fuss ventilation.

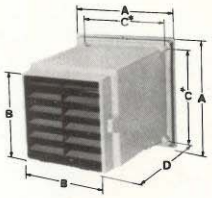
Roof plate assemblies* are available for fitting Universal range roof units in flat and pitched roofs.

*See AVA- 1 for details.




### Dimensions UNIVERSAL RANGE

| | WINDOW AND ROOF MODELS | | | | WALL AND PANEL MODELS | | | |
|---|---|---|---|---|---|---|---|---|
| Model size | 6 | 7 | 9 | 12 | 6 | 7 | 9 | 12 |
| Impeller diameter | mm (in) 152 (6) | mm (in) 191 (7½) | mm (in) 229 (9) | mm (in) 305 (12) | mm (in) 152 (6) | mm (in) 191 (7½) | mm (in) 229 (9) | mm (in) 305 (12) |
| A | 83 (3¼) | 83 (3¼) | 92 (3⅝) | 105 (4⅛) | 279 (11) | 362 (14¼) | 362 (14¼) | 448 (17⅝) |
| B | 149 (5⅞) | 152 (6) | 184 (7¼) | 213 (8⅜) | 203 (8) | 279 (11) | 279 (11) | 356 (14) |
| *C | 184 (7¼) | 222 (8¾) | 260 (10¼) | 337 (13¼) | 235 (9¼) | 311 (12¼) | 311 (12¼) | 400 (15¾) |
| D | 216 (8½) | 254 (10) | 295 (11⅝) | 381 (15) | 279 (11) | 279 (11) | 279 (11) | 279 (11) |
| E | 21 (⅞) | 21 (⅞) | 21 (⅞) | 21 (⅞) | 171 (6¾) | 210 (8¼) | 248 (9¾) | 324 (12¾) |
| F | 267 (10½) | 330 (13) | 394 (15½) | 508 (20) | 213 (8¾) | 257 (10⅛) | 302 (11⅞) | 378 (14⅞) |
| G | 95 (3¾) | 108 (4¼) | 121 (4¾) | 146 (5¾) | 152 (6) | 159 (6¼) | 181 (7⅛) | 203 (8) |
| †H | | | | | 238 (9⅜) | 311 (12¼) | 311 (12¼) | 397 (15⅝) |
| *J Panel model only | | | | | 260 (10¼) | 318 (12½) | 343 (13½) | 425 (16¾) |
| | *Fixing hole size | | | | †Fixing screw centres | | | |

## Performance Data – Universal and Standard Ranges

| Unit size | 6 | | | 7 | | | 9 | | | 12 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LOW | NORMAL | BOOST | LOW | NORMAL | BOOST | LOW | NORMAL | BOOST | LOW | NORMAL | BOOST |
| Volume of air moved per hour Cubic metres | 198 | 284 | 340 | 284 | 425 | 510 | 453 | 709 | 850 | 1050 | 1560 | 1758 |
| Cubic feet | 7000 | 10000 | 12000 | 10000 | 15000 | 18000 | 16000 | 25000 | 30000 | 37000 | 55000 | 62000 |
| **Watts input:** | | | | | | | | | | | | |
| Universal range | 24 | 33 | 42 | 26 | 36 | 44 | 52 | 72 | 100 | 84 | 100 | 130 |
| Standard range | 19 | 32 | 38 | 20 | 34 | 44 | 33 | 53 | 81 | 50 | 84 | 112 |

*Data given above are for extract only – air movement is reduced on intake.*

## Make sure your Vent-Axia is the right size

One of the essentials of successful ventilation lies in selecting one or more Vent-Axia units of the correct size. This is done by a simple calculation based on the size of room and the number of air changes needed every hour (see this page). For normal conditions the table shown, giving minimum air changes per hour and based on manufacturer's experience, may be used as a guide to calculate the size and number of units required.

The table above gives the performance range for each unit size at 240V supply. With a Rangemaster controller, Low, Normal and Boost performance are all available according to the selector position. Without a Rangemaster controller, normal performance only is obtained.

**Minimum air changes per hour**

| | |
|---|---|
| Domestic kitchens, bathrooms and toilets | 10–15 |
| Living rooms | 5 |
| Offices | 6 |
| Factories and workrooms | 8 |
| Canteens, restaurants and dance halls | 8 |
| Club rooms, cafes and bars | 10 |
| Commercial kitchens | 25 |
| Shops and supermarkets | 8 |
| Hairdressing salons and launderettes | 10 |
| Schoolrooms, hospital wards, etc | 5 |
| Photographic and X-ray darkrooms | 10 |

For other locations, please consult your Vent-Axia Sales and Distribution Centre for recommended minimum air changes per hour.

**Method**

Multiply room height x width x length = room volume
Multiply room volume x recommended air changes (see above) = air movement required.

**Example**

A room 7.6m long x 3.7m wide x 2.4m high (25' x 12' x 8') requiring 10 air changes per hour.
Room volume = 7.6 x 3.7 x 2.4 = 67.5m³ (25' x 12' x 8' = 2400 ft³)
Room volume x recommended air changes = 67.5 x 10 = 675m³/h (2400 x 10 = 24000 ft³)
From Performance Rating Table, it can be seen that one size 9 unit (moving 709m³/h (25000 ft³/h) will give the desired result.

**Siting the unit correctly**

For general extract ventilation the units should always be placed as high as possible in the window or wall near to any local source of smells or steam. In large rooms – offices, restaurants, meeting halls, etc – the units must be well distributed in order to obtain thorough ventilation. A short circuit of the airflow should always be avoided by siting the unit as far away as possible and opposite the main source of air replacement.
In the case of rooms containing fuel burning appliances care should be taken to ensure that air replacement is adequate both for the existing appliances and the ventilating unit.

# Vent-Axia Standard Range

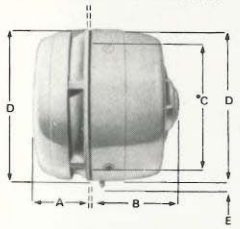
Window, roof, wall and panel models, each in sizes 6, 7, 9 and 12 (152mm : 6", 191mm : 7½", 229mm : 9", 305mm : 12" diameter impellers). Window and roof models available in black or ivory, wall and panel models with ivory fascias. Choice of cord or airflow operated shutters on all models : iris (cord operated for intake and extract ventilation), airflow SD, extract only, and airflow R for both intake and extract (with locking cord for intake ventilation). Roof plate assemblies* are available for fitting Standard range roof units in flat and pitched roofs.
*See AVA-1 for details.

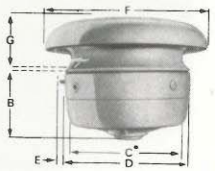
## Dimensions STANDARD RANGE

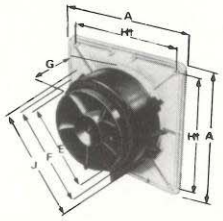
| | WINDOW AND ROOF MODELS | | | | | | | | WALL AND PANEL MODELS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model size | 6 | | 7 | | 9 | | 12 | | 6 | | 7 | | 9 | | 12 | |
| Impeller diameter | mm | (in) | mm | (in) | mm | (in) | mm | (in) | mm | (in) | mm | (in) | mm | (in) | mm | (in) |
| | 152 | (6) | 191 | (7½) | 229 | (9) | 305 | (12) | 152 | (6) | 191 | (7½) | 229 | (9) | 305 | (12) |
| A | 73 | (2⅞) | 79 | (3⅛) | 92 | (3⅝) | 105 | (4⅛) | 279 | (11) | 362 | (14¼) | 362 | (14¼) | 448 | (17⅝) |
| B | 133 | (5¼) | 140 | (5½) | 159 | (6¼) | 194 | (7⅝) | 203 | (8) | 279 | (11) | 279 | (11) | 356 | (14) |
| *C | 184 | (7¼) | 222 | (8¾) | 260 | (10¼) | 337 | (13¼) | 235 | (9¼) | 311 | (12¼) | 311 | (12¼) | 400 | (15¾) |
| D | 216 | (8½) | 254 | (10) | 295 | (11⅝) | 381 | (15) | 279 | (11) | 279 | (11) | 279 | (11) | 279 | (11) |
| E | 21 | (1/16) | 21 | (1/16) | 21 | (1/16) | 21 | (1/16) | 171 | (6¾) | 210 | ( 8¼) | 248 | (9¾) | 324 | (12¾) |
| F | 267 | (10½) | 330 | (13) | 394 | (15½) | 508 | (20) | 219 | (8⅝) | 260 | (10¼) | 302 | (11⅞) | 387 | (15¼) |
| G | 95 | (3¾) | 108 | (4¼) | 121 | (4¾) | 146 | (5¾) | 127 | (5) | 137 | (5⅜) | 156 | (6⅛) | 197 | (7¾) |
| †H | | | | | | | | | 226 | (8 29/32) | 311 | (12¼) | 311 | (12¼) | 397 | (15⅝) |
| *J Panel model only. | | | | | | | | | 254 | (10) | 337 | (13¼) | 337 | (13¼) | 419 | (16½) |

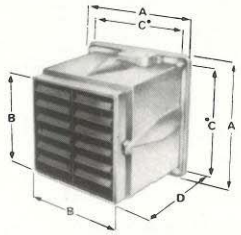
*Fixing hole size †Fixing screw centres

*Diameter of fixing hole




# Vent-Axia Controllers For use with Universal and Standard range ventilation units

***RANGEMASTER CONTROLLERS***

Provide 3-speed airflow control. Also 2-way directional control (for intake and extract ventilation) or single direction control for intake or extract ventilation. Available as surface-mounting or flush-fitting.

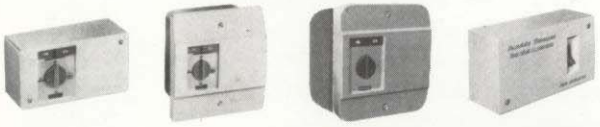
***SPECIALIST CONTROLLERS***

**Metal-clad** – 3-speed, 2-way direction, for industrial use where a robust application and conduit wiring is required. Single direction or reversible versions available.

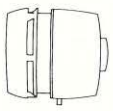
**Timespan** – a variable time-delay controller which keeps a ventilation unit running for any period between 1½ and 35 minutes in areas such as bathrooms/toilets after the light has been switched off.

**Dimensions**

| | Surface-mounting | | Flush-fitting (cover) | | Metal-clad | | Timespan | |
|---|---|---|---|---|---|---|---|---|
| Height | 89mm | 3½in | 178mm | 7in | 162mm | 6⅜in | 89mm | 3½in |
| Width | 159mm | 6¼in | 165mm | 6½in | 149mm | 5⅝in | 159mm | 6¼in |



# Vent-Axia Specialist models



**Universal Range**

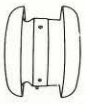
**Special double-glazing model,** size 7 – the extended fixing model. Window and roof fitting for most types of sealed double glazing or partitions up to 29mm (1⅛") thick.

**Short projection model,** size 7 – special model with short exterior projection 27mm (1 1/16") for use where shutters, blinds and burglar bars would prevent the use of normal window models. Suitable only for weather protected situations. Before ordering consult Vent-Axia.
Note : Fixing hole size, 238mm (9⅜") is larger than normal models.

**Standard Range**

**Steamproof models,** sizes 6, 7, 9 and 12 – window and roof fitting for use in atmospheres containing a high moisture content, eg commercial laundries. Standard range panel model is steamproof in normal form.

**Acid resistant models,** sizes 6, 7, 9 and 12 – window, roof and panel fitting for use in laboratories and similar situations where concentrations of acids and alkalis prevail.



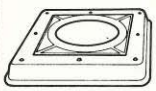
**Darkroom models,** sizes 6, 7, 9 and 12 – black finish. Designed for extract only to provide ventilation coupled with complete light exclusion. Interior projections (for Exterior projections, see Standard range roof model dimensions)

| Model | 6 | | 7 | | 9 | | 12 | |
|---|---|---|---|---|---|---|---|---|
| | mm | in | mm | in | mm | in | mm | in |
| Interior Projection | 140 | 5½ | 162 | 6⅜ | 187 | 7⅜ | 248 | 9¾ |
| Max. Fixing* Thickness | 10 | ⅜ | 10 | ⅜ | 10 | ⅜ | 11 | 7/16 |

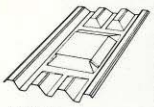
*For fitting in greater thicknesses consult VENT–AXIA

# Vent-Axia AVA

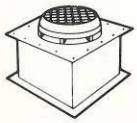
The following are thumbnail sketches and brief applications of Vent-Axia Approved and Additional Ventilation Accessories.



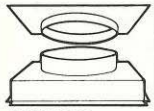
**AVA 1**
Roof Plate Assemblies enabling roof models to be fitted in flat and pitched roofs.



**AVA 4**
Soaker Flanges for fitting roof models in corrugated roofs.

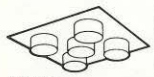


**AVA 2**
Ceiling Housing (Top Entry) for room ventilation via roof voids using window or roof models and grilles.

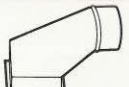


**AVA 5 & 6**
Single Spigot Plates and Boxes for room ventilation through ceiling void using roof models.

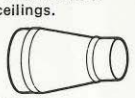
**AVA 3**
Ceiling Housing (Side Entry) for room ventilation where some attenuation of noise is required.



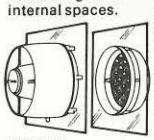
**AVA 7**
Multi-spigot Plates for multi-duct ventilation using roof, wall or window models.



**AVA 8**
Terminal Connector Assembly for multi-duct ventilation terminating through service walls or ceilings.

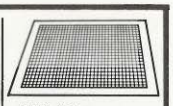


**AVA 9**
Cone Connector for assembly required in ventilating small internal spaces.



**AVA 10**
Adaptor Kit for use in double windows, roofs, or walls.

**AVA 11 & 12**
Wall Fixing Plates for use with wall or roof models in walls or as top part of Ceiling Housing (Top Entry)



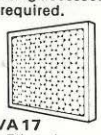
**AVA 13**
'Egg-Crate' Grilles for roofs, ceilings and walls. Natural aluminium finish.

**AVA 14**
Grilles and Louvres for internal fixing to ceilings, walls and ducting ; lightproof grilles and external weather louvres. Various materials and colours.

**AVA 15**
Variable Auto-Transformer giving infinitely variable speed control for bank of units.

# Additional Vent-Axia Accessories

**AVA 16**
Flexible ducting available in most sizes from 102mm (4") to 406mm (16"). Aluminium covered steel also available, plus wide range of ducting accessories as required.



**AVA 17**
Air Filters in various sizes to suit different applications.

**AVA 18**
Grease Eliminators for commercial kitchen extract systems.

**AVA 19**
Fire Dampers of the hinged door, folding concertina or intumescent paint types.

**AVA 20**
Four core cable available in black or ivory, in minimum lengths of 5m.

Venetian Blinds with holes to accommodate Vent-Axia units.

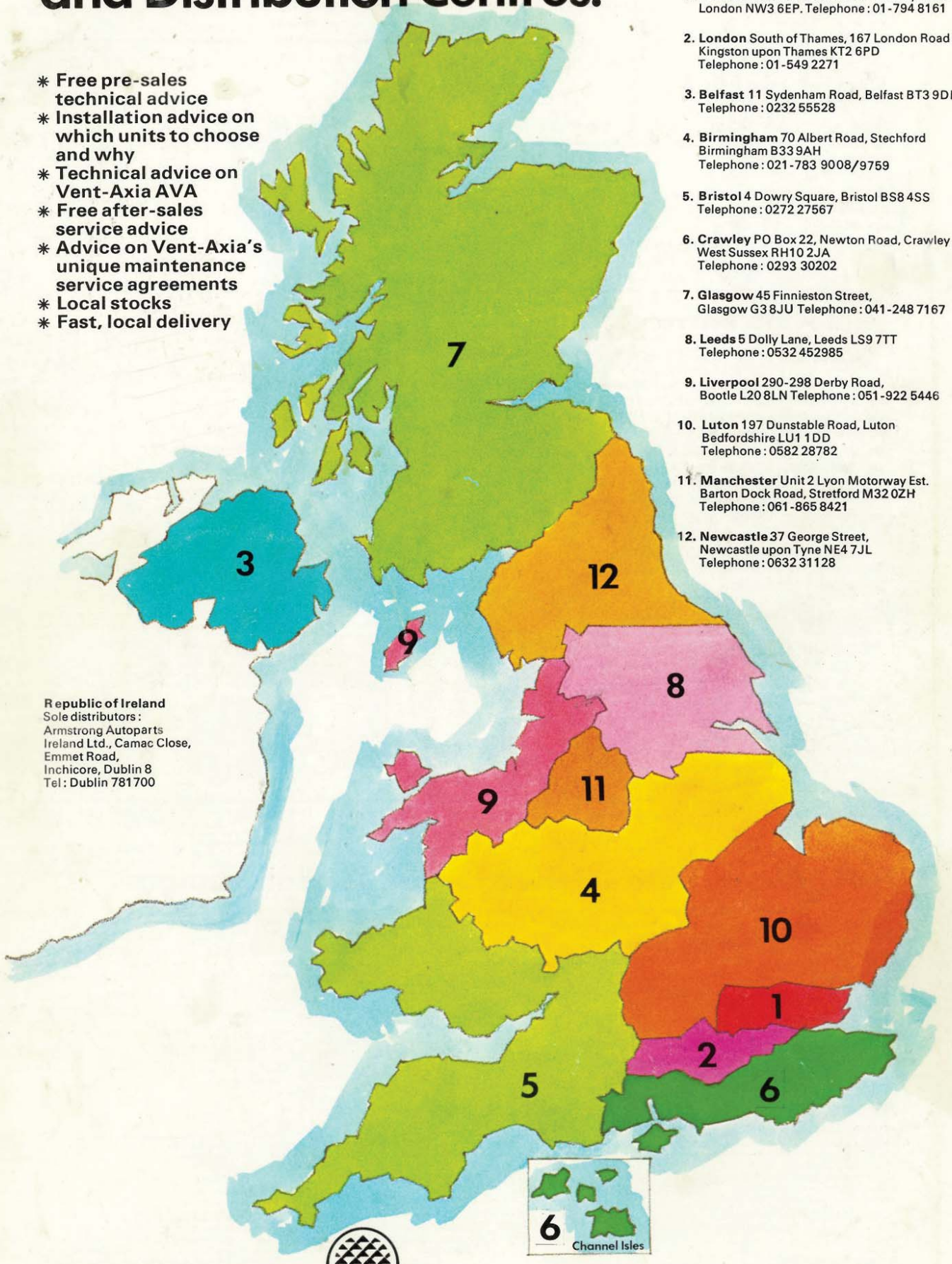
Duplus Domes for use with roof models in roof lights on flat roofs.

Air Filters – Eaton Williams – for use with window models to provide filtered intake.

For further details and technical specifications, please contact your nearest : Vent-Axia Sales and Distribution Centres (addresses on back cover).

# Vent-Axia nationwide Sales, Service and Distribution Centres.

- ✳ Free pre-sales technical advice
- ✳ Installation advice on which units to choose and why
- ✳ Technical advice on Vent-Axia AVA
- ✳ Free after-sales service advice
- ✳ Advice on Vent-Axia's unique maintenance service agreements
- ✳ Local stocks
- ✳ Fast, local delivery

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