



# VENTILATION WITH HEAT RECOVERY

"Fresh, clean, warm air...
...and saving energy too!"

## DUPLEXVENT – CREATING A HEALTHIER ENVIRONMENT

With ever increasing energy costs the need to conserve heat and power is leading to higher levels of insulation and air tightness in residential dwellings and commercial buildings. The resulting poor indoor climate can lead to health problems for occupants and visitors alike and long term damaging effects to the fabric of a building.

The lack of effective ventilation within a well sealed environment increases the prevalence of airborne contaminants, odours and smells which together with high levels of humidity and condensation all add to an unhealthy environment.

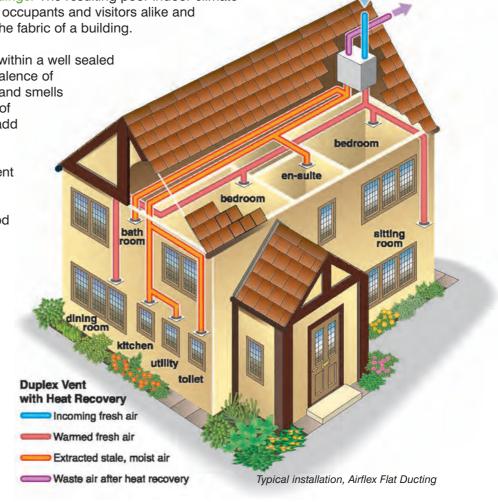
If left unchecked the development of dampness leads to mould growth and the spread of mites which can increase the likelihood of headaches, allergies and the development of asthma in children.

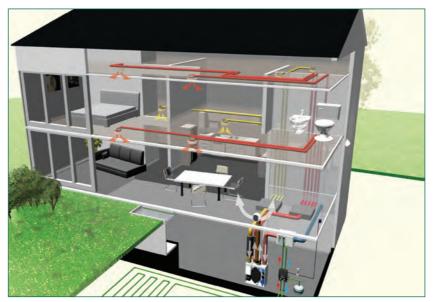
### Fresh, filtered air is the answer!

In a healthy home thousands of litres of fresh air is needed everyday to compensate for the moisture generated by each individual person, and also through cooking, washing and bathing.

Duplexvent provides continuous mechanical ventilation with heat recovery for the supply of controlled, fresh, filtered air while extracting potentially harmful, unwanted moisture and airborne pollutants.

It helps to save energy too by re-claiming waste heat from extracted air that would otherwise be lost and returning it via the incoming fresh air into the dwelling. By adding back warmed, fresh air the thermostat can be turned down and, over time, tangible benefits in reduced energy consumption will be realised.





Typical installation, Airflex Pro and iSO

## DUPLEXVENT – EFFECTIVE AND EFFICIENT

Heat recovery is a process of continuously preheating incoming cool supply air by warming it with the outgoing exhaust air. Warm air is not simply exhausted but transfers most of its heat to supply air in a highly efficient heat recovery exchanger. At no time do the airstreams mix as the heat radiates through the plates of the exchanger.

#### What is Heat Recovery Efficiency?

Heat recovery efficiency is the utilising of waste heat to cool fresh incoming air.

Generally speaking efficiency above 60% is considered good and above 80% excellent. The heat recovery efficiency for DUPLEXVENT units is up to 90% (it depends on the unit size, air flow and the heat recovery exchanger type).

The heat recovery exchanger is fitted directly in the ventilation unit. This allows use of heat recovery in all building types such as flats, apartments, family houses and residential accommodation.

Larger units can be installed in commercial buildings, swimming pools, retail and industrial buildings.

Duplexvent units also incorporate a "By-Pass" mechanism so that in summer supply air is not warmed unnecessarily.

Heat recovery exchangers can be used even in air-conditioned buildings where during the summer season it serves as cold recovery. Incoming warm air is cooled by air-conditioned exhaust air.

#### Fresh Air for a Healthy Environment

For the maintenance of the building fabric and for a healthy indoor climate, controlled mechanical ventilation is essential.

Energy savings are achieved by improved insulating measures and by the use of heat recovery. Carbon emissions in the dwelling are also reduced with the contribution of heat recovery.

Just as important is that there is a healthy and comfortable climate in highly insulated buildings. Research proves that people living, working or studying in inadequately ventilated buildings suffer from more ailments such as headache and allergies.

On average, humans spend 90% of their lives in closed buildings. Therefore, it is of prime importance to provide healthier indoor air, free from odours, high humidity and airborne pollutants.

#### **Extract Air**

Stale air is contaminated with humidity, toxins and smells extracted from the kitchen, bathroom and toilet. Outlet grilles in toilets and wet room areas, such as the bathroom, en-suite, utility and kitchen allow a constant or demand oriented air flow volume to be extracted, matched to the users' individual needs or room demands. Much of the heat of the extracted air is retained by the exchanger and transferred to the incoming fresh external air.

#### **Supply Air**

Fresh air is fed directly from outside into the ventilation system through a filter.

The heat taken from the extracted air is used to warm the fresh filtered air in the exchanger and then flows through ducting to termination points such as air valves or air inlets into the living rooms and bedrooms. By undercutting doors and fitting transfer grilles fresh air circulation is ensured throughout the dwelling.

#### **DUPLEXVENT**

Creating a healthy home

- Meets Building Regulations, Approved document F, April 2006 (MVHR)
- Helps comply with code for sustainable homes level 4 and higher
- Save energy by reducing heating costs
- Extracts airborne pollutants that can cause allergies and asthma
- Supplies warmed, filtered air to living spaces
- Removes condensation and humidity from wet rooms
- Reduces carbon dioxide levels that can cause headaches and drowsiness
- Clears odours, tobacco smoke and cooking smells
- Eliminates dampness and mould growth
- Helps reduce the dwellings carbon footprint (DER)
- SAP Appendix Q Eligible models

#### **DUPLEXVENT T E SERIES**

A range of high quality top entry connection mechanical ventilation units with heat recovery for residential and light commercial applications.

## **Duplexvent 70 Compact Duplexvent 70K Compact**

Wall mounting for small dwellings and renovation projects

DV70 is a ventilation unit for social housing and private sector small blocks-of-flats and terraced houses. Ideal for renovation purposes.

Control either with a speed selection switch or with a cooker hood control.

The ventilation unit is available as the DV70C standard wall or floor model or wall mounted as the DV 70K Compact model, equipped with a cooker hood.

Heat recovery exceeds 65%. Extracts up to 234 m3/hr @ 50 Pa.



## **Duplexvent 75EC** (SAP APPENDIX Q – ELIGIBLE)



DV75EC uses EC motor technology to ensure that constant, pre-set installed performance air flow levels are automatically maintained when system resistance increases as filters degrade.

With significantly low SFP (Specific Fan Power) levels this equipment is perfect for inclusion in SAP assessments by contributing to a low dwelling emission rate (DER). Unit is supplied with a special four speed selection switch as standard.

Heat recovery exceeds 60%. Extracts up to 240 m3/hr @ 130 Pa.



#### Duplexvent 75/95 Duplexvent 75/95

Quality and silence

DV75/95 are a high-quality standard solution for private and social housing in blocks of flats, terraced houses and detached houses. Control through a separate switch or optional cooker hood.

The "Silent" versions of DV 75/95 units are the solution for places with problems in terms of sound transmission. Thanks to the advanced insulation technology, Duplexvent Silent is quieter than many conventional solutions.

Heat recovery efficiency in excess of 60%. Extracts up to 270 m3/hr (DV75) @ 130 Pa or 342 m3/hr (DV95) @ 130 Pa.



## **Duplexvent 90 SE** (SAP APPENDIX Q – ELIGIBLE)



#### High technology for dwellings

DV90 SE is a high-quality ventilation unit suitable for small and medium sized family houses and terraced houses.

Available with energy-efficient dc fans or with ac fans and the intelligent electronic Duplexvent SED control system. The unit can be connected to remote monitoring.

Heat recovery efficiency exceeds 80%. Extracts up to 306 m3/hr @ 50 Pa.



#### Duplexvent 90SC Duplexvent 90K SC (SAP APPENDIX Q – ELIGIBLE)



#### For basic residential ventilation

DV 90 SC is a transformer-adjusted ventilation unit, equipped with a separate speed selection switch, suitable for flats, apartments, terraced houses and small family houses. The unit is also manufactured as a DV 90K SC wall mounted model equipped with a cooker hood.

Excellent heat recovery of more than 80%. Extracts up to 306 m3/hr @ 50 Pa.



#### **Duplexvent 130 E**

#### All-round workhorse

DV130 E is an easy-to-use ventilation unit, suitable for medium sized one-family houses and terraced houses as well as business premises and classrooms. The transformer-adjusted unit is equipped with a separate speed selection switch.

Heat recovery efficiency in excess of 60%. Extracts up to 468 m3/hr @ 50 Pa.



## **Duplexvent 150 SE**(SAP APPENDIX Q – ELIGIBLE)



High-tech specification

DV150 SE is a ventilation unit with state-of-the-art technology. The unit is controlled either automatically with an intelligent Duplexvent SED control system sensing carbon dioxide or humidity content, or electronically according to resident needs, e.g. with time clock control. The unit has energy-efficient dc fans. The unit can also be connected to remote monitoring.





## **Duplexvent 150 SC** (SAP APPENDIX Q – ELIGIBLE)



Standard solution for large dwellings

DV 150 SC is an easy-to-use and efficient ventilation unit for large family houses and dwellings. The transformer-adjusted unit is equipped with a separate speed selection switch.

Excellent heat recovery, exceeds 80%. Extracts up to 432 m3/hr @ 100 Pa.



#### **Duplexvent 180 SE**

Powerhouse for a larger dwelling

DV180 SE has enough power for a large dwelling. The unit is controlled automatically with an intelligent Duplexvent SED control system. Sensor options include carbon dioxide or humidity content or electronically according to resident needs, e.g. with time clock control.

The unit is available with energy-efficient dc fans or as an ac model. The unit can be connected to remote monitoring.

Heat recovery efficiency exceeds 80%. Extracts up to 738 m3/hr @ 100 Pa.



#### **Duplexvent 280 SE**

Intelligent solution for larger premises

The DV280 SE ventilation unit for large family houses and public premises. The unit is equipped with efficient energy-saving dc fans. The intelligent, digital Duplexvent Digit SED control centre simplifies the use of ventilation and facilitates planning, installation and maintenance.

The unit's heat recovery efficiency is more than 70%. Extracts up to 1044 m3/hr @ 100 Pa.



#### **Duplexvent MULTI 50/80**

Easy maintenance in rental blocks

Two popular units for social housing blocks of flats. The unit can be integrated into the structure of the dwelling, i.e. above the entry door and routine maintenance can be performed from the outside corridor without disturbing the resident.

Heat Recovery of more than 90%. Extract up to 370 m3/hr @ 100 Pa.



#### **Duplexvent X-Line Cooker Hood**

Colour options of white or grey.

Duplexvent X-line cooker hoods are equipped with a fixed glass panel. Cooker hoods have easy-to-detach metallic grease filters, which can be easily washed. X-line units are equipped with a fluorescent lamp.

Power is adjusted with a 4-step speed selection switch.



#### **Duplexvent Slim-Line Cooker Hood**

Colour options of white or grey.

Duplexvent Slim-line cooker hoods are equipped with a handy sliding glass panel.

The hoods have detachable metallic grease filters, which can be washed easily. Duplexvent Slim-Line units are equipped with a fluorescent lamp.

Power is adjusted with a 4-step speed selection switch.





#### **Duplexvent Digit SED**

Ideal indoor air quality is achieved by automatically adjusted ventilation. Duplexvent Digit SED is the brain of the automatically controlled Duplexvent TE Series ventilation units. It can monitor a variety of sensor inputs including indoor air humidity and carbon dioxide content and control the level of ventilation accordingly.

The benefits are that Indoor air stays healthy and fresh and that boost ventilation works only 'On Demand' resulting in highly energy efficient fan operation.

The ease of use of a Digit SED control centre is based on the logical menu structure. The intelligent control panel is equipped with a back lit LCD display that can be used to set the ventilation operating parameters required for each individual dwelling.

- Ergonomic design
- Easy to operate
- Time clock control
- Backlit display
- Sensor options
- Humidity
- $\circ$  co<sup>2</sup>



#### **FOUR SPEED SWITCH**

An alternative to the digital control system is the manually operated 4 position speed control switch which allows 'On Demand' ventilation to be selected when required.

- Simple to install
- Manual selection of fan speed
- User friendly



#### **DUPLEXVENT I L SERIES**

A range of light weight in-line entry connection, mechanical ventilation units with Heat Recovery for residential and light commercial applications.

#### **Duplexvent DV220/360/550**

#### In-line connectivity and convenience

The Duplexvent range of DV220 (BP), DV360 (BP) and DV550 (BP) unit ventilators are designed for comfortable and healthy ventilation in both private and social residential dwellings such as low energy and passive family homes, flats and high rise apartments.

The unit incorporates a plastic counterflow heat recovery core, two centrifugal fans and supply and return air filters. Round or flat oval duct connections are available. Minimal maintenance is required and filter replacement is simple through the hinged opening door. Optional manual speed humidity control.

Excellent heat recovery efficiency up to 90%. Extracts up to 220/360/600 m3/hr.



The Duplexvent range of DV230 EC, DV330 EC and DV500 EC unit ventilators have electronically commutated motors to ensure constant airflow against changes in system resistance. Each unit has a plastic counterflow heat recovery core, two centrifugal fans with electronic EC control, supply and return air filters and an automatic built in bypass damper for summer cooling. Round or flat oval duct connections are available. Minimal maintenance is required and filter replacement is simple through the hinged opening door. Also now available with top entry connections.

Excellent heat recovery efficiency up to 90%. Extracts up to 230/360/530 m3/hr.

### **NEW - Top Entry Configuration Now Available**

## Model DV230ECV/380ECV/DV540ECV

#### **DV01 DIGITAL CONTROLLER**

Digital controller for DV 230EC/360EC/500EC auto control models. The controller provides a simple to use wall mounted control with comfort settings of all the units air handling parameters. Equipped with an LCD for visual operation and alarm indication and a mode selector switch for setting off / manual / automatic control positions.









#### DUPLEXVENT – A COMPLETE SYSTEM

Mechanical ventilation units require good quality compatible ducting and a high standard of installation. It makes no sense to invest in future energy efficiency and indoor well being if the benefits are to be lost by leakage from a poor quality and badly fitted ductwork system.

DUPLEXVENT can be used with Airflow standard AIRFLEX 204 x 60mm plastic flat ducting.

However to ensure the best results we recommend the innovative AIRFLEX PRO and AIRFLEX ISO insulated ducting system.

#### **AIRFLEX PRO**

A quick and easy to fit system of flexible pipe that can result in up to 70% time savings during the on-site installation process, compared to other duct methods. This innovative system uses low resistance, smooth bore tubing to individually connect each room to the heat recovery unit via an Air Distribution Box.

By directly connecting each inlet/outlet there is ZERO LEAKAGE, so no loss of valuable regained air.

Also the bore of the duct is coated with an anti-static coating ensuring hygienic conditions and with no dust traps it is easy to clean simply by purging with a high pressure vacuum cleaner.

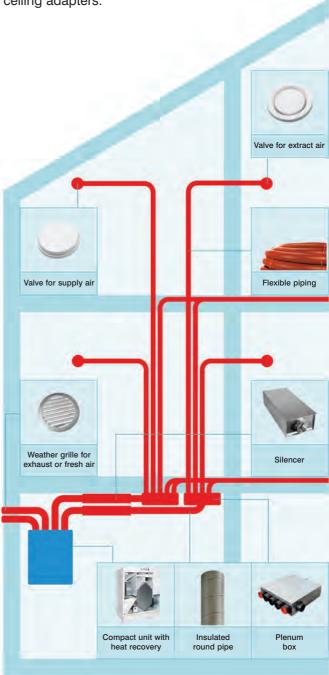
By direct connection to the air distribution box noise transmission is greatly reduced compared to flat duct systems with numerous branches and tee joints. Requiring limited space Airflex Pro can be fitted in narrow joists or run in concrete screeds for a permanent installation that will never degrade.







Available in two bore sizes (75mm dia and 63mm dia) with a choice of air distribution boxes and termination ceiling adapters.



#### DUPLEXVENT – AIRFLEX PRO



- Zero leakage ensures performance
- Save up to 70% on installation time
- Flexible, tough and durable for on-site
- Smooth bore for hygiene and easy cleaning
- Very low noise transmission between rooms
- Highly efficient, connects each room individually
- Compact, suits narrow joists and or screeded floors
- Constant air distribution throughout





#### **AIRFLEX ISO**

A high performance alternative to spiral and lagged ducting with in-built thermal insulation. Ready insulated circular pipe produced from sound absorbing, vapour proof EPP-foam that is both durable and lightweight and easy to clean. With moulded sleeves and connectors it is fast and easy to install and eliminates the extensive need to lag ducts in areas where condensation may occur. Available in 125mm and 150mm diameter pipe with a selection of bends, wall and roof outlets that slot together with ease.





- Pre-insulated one-piece
- Quick and easy assembly
- Tough, durable, anti-static EPP
- Fire retardant to B2
- Avoids condensation build up
- Sound absorbing, smooth bore pipe
- Choice of components to suit any layout
- Compatible with Airflex Pro, Air Distribution Box

#### **ACCESSORIES**

In addition to a choice of compatible ducting systems a full range of air heaters, in-line silencers, floor, wall and ceiling inlet and outlet diffusers are available to complete the installation.

See web site for details

Replacement filter packs are also available via the web site.

#### SPECIFICATION CHECK LIST (a few useful tips)

Before you start - Questions that should be considered first

- Consider the requirements of the latest building regulations, approved document F, April 2006.\*
- What level of Code for Sustainable Homes dwelling do you want to build to, for example, (Code level 4, 5 or 6)?
- Can you draw in fresh supply air passing through an undersoil heat exchanger (improved temperature efficiency)?
- How many rooms require extract ventilation (bathroom, toilet, utility, en-suite, kitchen etc)?
- How many rooms require supply ventilation (bedrooms, living rooms, dining room, study etc)?
- Where do you want the unit to be installed (basement, cupboard mounting or in the loft) or wall mounted with a cooker hood?
- Where to place the room air outlets / inlets (wall, ceiling or floor)?
- Which kind of outlets do you intend to use (linear or diffusion grilles)?
- How do you want the system to be operated (manual switching for boost speed or automatic humidity,Co2 etc control)?
- Who is in charge of future maintenance and service ie: filter changes, system cleaning (installer or proprietor)?

#### Where to set up the unit

- Where is the most convenient place to run your ducting from the unit ie; the basement, an airing cupboard or in the loft?
- With space in mind consider the most appropriate mounting (handing) of the unit. With a choice of in-line connection or top entry connection units it has to be decided whether you prefer the unit to be mounted on the floor or on the wall with a horizontal or vertical alignment.
- For flats and small houses don't forget the wall mounted kitchen units with cooker hood options.
- If using an undersoil heat exchanger the unit must be installed in the basement. Reserve enough space for the undersoil heat exchanger.
- Make sure you have an uninterrupted space in the garden for the intake pipe where you want the outside air to be taken in.

#### Commissioning

- Allow for adjusting individual room ventilation rates after installation.
- Optimal long term savings will be ensured by correct system balancing.

<sup>\*</sup> Visit www.communities.gov.uk



#### **TECHNICAL SPECIFICATIONS**

#### DUPLEXVENT TE (TOP ENTRY) SERIES

| Model                      | DV70 C          | DV75EC          | DV75                | DV90 SC         | DV90 SE         | DV95                 |
|----------------------------|-----------------|-----------------|---------------------|-----------------|-----------------|----------------------|
|                            | DV70 KC         |                 | DV75 SILENT         | DV90KSC         |                 | DV95 SILENT          |
| Max extract air            |                 |                 | 324                 |                 |                 | 414                  |
| m3/hr                      | 250             | 320             | 299 silent          | 349             | 349             | 385 silent           |
| Extract air                | 234@50 Pa ac    | 241@130 Pa ac   | 270@130 Pa ac       | 306@50 Pa dc    | 306@50 Pa ac/dc | 342@130 Pa ac silent |
| m3/hr @ Pascals            |                 |                 | 270@75 Pa ac silent |                 |                 | 342@75 Pa ac silent  |
| Supply air                 | 201@50 Pa ac    | 223@90 Pa ac    | 234@90 Pa ac        | 259@50 Pa dc    | 248@50 Pa ac    | 342@75 Pa ac         |
| m3/hr @ Pascals            |                 |                 | 234@60 Pa ac silent |                 | 259@50 Pa dc    | 306@50 Pa silent     |
| Control                    | 4 Speed switch  | 4 Speed switch  | 4 Speed switch      | 4 Speed switch  | Digit SED       | 4 Speed switch       |
| Fan Input (w)              | 20-160w ac      | 11-132w         | 24-176w ac          | 20-200w dc      | 38-240w ac      | 41-228w ac           |
|                            |                 |                 | 25-182w ac silent   |                 | 20-200w dc      | 42-221w ac silent    |
| Heat Exchanger             |                 |                 |                     |                 |                 |                      |
| CR-Cross Flow              | CR              | CR              | CR                  |                 |                 | CR                   |
| CO-Counter Flow            |                 |                 |                     | CO              | CO              |                      |
| Heat Recovery              | >65%            | >60%            | >60%                | >80%            | >80%            | >60%                 |
| Summer by-pass             | Manual          | Manual          | Manual              | Manual          | Automatic       | Manual               |
| Supply Air Filter          | G3 + F7         | G3 + F7         | G3 + F7             | G3 + F7         | G3 + F7         | G3 + F7              |
|                            |                 | (optional)      |                     | (optional)      |                 |                      |
| Extract Air Filter         | G3              | G3              | G3                  | G3              | G3              | G3                   |
| Anti Frost                 | Standard        | Standard        | Standard            | Standard        | Standard        | Standard             |
| Pre-Heater                 | 900w standard   |                 |                     | 900w Optional   | 900w standard   |                      |
| After Heater               | 900w standard   | 500w standard   | 500w standard       |                 | 900w standard   | 500w standard        |
| Duct Connections x4        | 125mm Ø         | 125mm Ø         | 125mm Ø             | 125mm Ø         | 125mm Ø         | 125mm Ø              |
| Overall Dims               | 597 x 660 x 294 | 564 x 530 x 403 | 564 x 530 x 403     | 595 x 668 x 345 | 595 x 688 x 345 | 564 x 530 x 403      |
| (approx)                   | 70C             |                 |                     | SC              |                 |                      |
| W x H x D mm               | 597 x 770 x 294 |                 |                     | 595 x 797 x 345 |                 |                      |
|                            | 70KC            |                 |                     | KSC             |                 |                      |
| SAP APPENDIX Q<br>Eligible |                 | ~               |                     | V               | V               |                      |

#### **TECHNICAL SPECIFICATIONS**

#### **DUPLEXVENT IL (IN-LINE) SERIES**

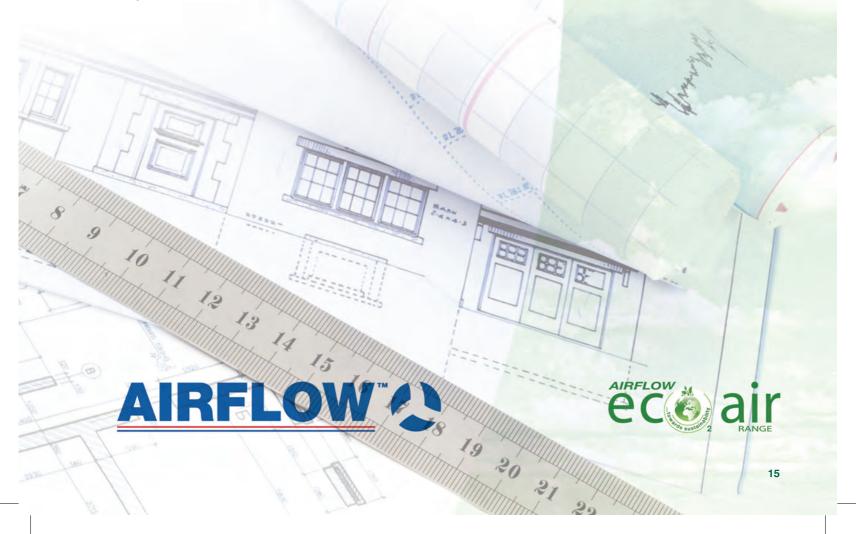
| Model                 | DV220 (BP)         | DV360 (BP)         | DV550 (BP)      | DV230 EC / ECV  | DV330 EC        | DV500 EC        |
|-----------------------|--------------------|--------------------|-----------------|-----------------|-----------------|-----------------|
| Max extract air       |                    |                    |                 |                 |                 |                 |
| m3/hr                 | 220                | 360                | 600             | 230             | 330             | 500             |
| Max supply air        | 220                | 360                | 600             | 230             | 330             | 500             |
| Control               | Optional           | Optional           | Optional        | Digital DV01    | Digital DV01    | Digital DV01    |
| Fan Input (w)         | 30-80w ac          | 50-130w ac         | 60-200w ac      | 10-70w dc       | 10-100w dc      | 25-175w dc      |
| Heat Exchanger        |                    |                    |                 |                 |                 |                 |
| CR-Cross Flow         |                    |                    |                 |                 |                 |                 |
| CO-Counter Flow       | CO                 | CO                 | CO              | CO              | CO              | CO              |
| Heat Recovery         | >90%               | >90%               | >90%            | >90%            | >90%            | >90%            |
| Summer by-pass        | Manual – (BP Unit) | Manual – (BP Unit) | Manual          | Automatic       | Automatic       | Automatic       |
| Supply Air Filter     | G4                 | G4                 | G4              | G4              | G4              | G4              |
|                       |                    |                    |                 | +F7 Optional    | +F7 Optional    | +F7 Optional    |
| Extract Air Filter    | G4                 | G4                 | G4              | G4              | G4              | G4              |
| Anti Frost            | Standard           | Standard           | Standard        | Standard        | Standard        | Standard        |
| Pre-Heater            | Optional           | Optional           | Optional        | Optional        | Optional        | Optional        |
| After Heater          | Optional           | Optional           | Optional        | Optional        | Optional        | Optional        |
| Duct Connections x4   | 125mm Ø            | 160mm oval         | 200mm Ø         | 125mm oval      | 160mm oval      | 200mm Ø         |
| Overall Dims          |                    |                    |                 |                 |                 |                 |
| (approx) W x H x D mm | 755 x 472 x 295    | 755 x 472 x 399    |                 |                 |                 |                 |
| BP Units              | 750 x 530 x 360    | 750 x 530 x 530    | 830 x 735 x 360 | 750 x 530 x 360 | 750 x 530 x 360 | 830 x 735 x 360 |
| SAP-APPENDIX Q        |                    |                    |                 |                 |                 |                 |
| ELIGIBLE              |                    |                    |                 |                 |                 |                 |

## TECHNICAL SPECIFICATIONS DUPLEXVENT TE (TOP ENTRY) SERIES

### <u>DUPLEXVENT</u>™

| Model                      | DV130 E         | DV150 SC        | DV150 SE        | DV180 SE         | DV280 SE          |
|----------------------------|-----------------|-----------------|-----------------|------------------|-------------------|
|                            |                 |                 |                 |                  |                   |
| Max extract air            |                 |                 |                 |                  |                   |
| m3/hr                      | 479             | 540             | 540             |                  |                   |
| extract air                | 468@50 Pa ac    | 432@100 Pa dc   | 432@100 Pa dc   | 738@100 Pa ac    | 1044@100Pa dc     |
| m3/hr                      |                 |                 |                 | 648@100 Pa dc    |                   |
| supply air                 | 396@50 Pa ac    | 388@100 Pa dc   | 388@100 Pa dc   | 666@100 Pa ac    | 864@100 Pa dc     |
| m3/hr                      |                 |                 |                 | 594@100 Pa dc    |                   |
| Control                    | 4 Speed switch  | 4 Speed switch  | Digit SED       | Digit SED        | Digit SED         |
| Fan Input (w)              | 105w 25-185w ac | 30-280w dc      | 30-280w dc      | 130-470w ac      | 150-830w dc       |
|                            | 180w 43-240w ac |                 |                 | 40-420w dc       |                   |
| Heat Exchanger             |                 |                 |                 |                  |                   |
| <b>CR-Cross Flow</b>       | CR              |                 |                 |                  | CR                |
| CO-Counter Flow            |                 | CO              | CO              | CO               |                   |
| <b>Heat Recovery</b>       | >60%            | >80%            | >80%            | >80%             | >70%              |
| Summer by-pass             | Manual          | Manual          | Automatic       | Automatic        | Automatic         |
| Supply Air Filter          | G3 + F7         | G3 + F7         | G3 + F7         | G3 + F7          | G3 + F7           |
|                            |                 | (optional)      |                 |                  |                   |
| Extract Air Filter         | G3              | G3              | G3              | G3               | G3                |
| Anti Frost                 | Standard        |                 |                 | Standard         | Standard          |
| Pre-Heater                 | Optional        | 1000w optional  | 1000w standard  | 1000w optional   | 2500w optional    |
| After Heater               | 1000w standard  |                 | 1000w standard  |                  | 2500w optional    |
| <b>Duct Connections x4</b> | 160mm Ø         | 200mm Ø         | 200mm Ø         | 200mm Ø          | 250mm Ø           |
| Overall Dims               | 598 x 565 x 560 | 748 x 922 x 644 | 748 x 922 x 644 | 900 x 1130 x 720 | 1100 x 1370 x 665 |
| (approx)                   |                 |                 |                 |                  |                   |
| W x H x D mm               |                 |                 |                 |                  |                   |
|                            |                 |                 |                 |                  |                   |
| SAP APPENDIX Q             |                 |                 |                 |                  |                   |
| ELIGIBLE                   |                 | _               |                 |                  |                   |

Handy Conversion: 3.6 m3/hr = 1 litre/sec



#### **Maintenance and Service**

- Many systems fail to run properly because of inadequate maintenance
- The AIRFLEX PRO system is perfect for avoiding the build up of dust and airborne particulates which can be damaging to human health
- Filters e.g. should be checked and washed every six months and replaced at least one per year
- Remember, a properly maintained system is a healthy system and results in a healthy environment

#### **Quality and Certification**

All Duplexvent heat recovery units are designed and manufactured to the highest standards. Thermally insulated with double skin casings for optimum thermal retention they are well proven with many thousands installed across Europe.

All units carry a two year warranty, supplied with pressure and performance test certification and meet the requirements of the latest Building Regulations approved document F, April 2006. Additionally for specifiers designing dwellings to the Code for Sustainable Homes and SAP requirements, indicated units have been tested by BRE as SAP Appendix Q Eligible.



#### **Technical Support**

Specification and system design service available.



Modular Design

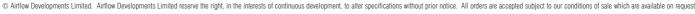


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**DUPLEXVENT**<sup>™</sup>