

Have you considered these other Villavent products?

Villavent Comfort Cooling Systems

Air conditioning is expensive. But Villavent Comfort Cooling Systems are affordable and provide fresh, filtered cool air to your home. Typically, delivering air at 20°C when outside temperatures are around 27°C.

Villavent Central Vacuum Systems

No more carrying heavy portable cleaners or tripping over cables. You'll find Villavent Central Vacuum Systems are clean, efficient, powerful, quiet and easy-to-use. Maintenance is low and there are no bags or belts to replace. Systems are quick and easy to install, with the average home requiring just three inlets.

Glossary of building terms

Building Construction Stages

1st Fix – A building construction stage when the dwelling is ready for fitting of general services – plumbing, electrical, ducting etc. The roof is generally on, prior to ceilings, plasterboard and plastering work.

2nd Fix – A building construction stage when the dwelling is ready for fitting of finished goods – lights, water cylinder, appliances etc.

Tradesmen

Sparky	Electrician
Plumb(bob)	Plumber
Chippy	Carpenter
Bricky	Bricklayer
Slaters/tilers	Roofers
Spread	Plasterers

Brickwork

Soldier course	Course of bricks stood on end
Mullion	Stonework around window
String	Course of stone/brick work which protrudes beyond line of building
Gable end	Vertical face on end of building with sloping roof to left and right

Roof

Ridge	Apex of roof
Ridge Vent	Ridge tile with ventilator in
Tile Vent	Vent in tile on slope of roof
Hip End	Roof lays back at different pitch to main roof

Under Eaves	Bottom course of tiles under all other tiles
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Dormer	Window projected out from roof
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Timber

Wall plate	Timber beam sitting on top course of internal blockwork that roof trusses key into
Soffit	Board under face of rafters projecting out of brickwork
Facia Board	Vertical timber face of house, closing off rafters

FAQS (Frequently Asked Questions)

Q. Why choose a Villavent system?

A. Villavent has over 40 years experience – designing, manufacturing and servicing ventilation and energy systems for all types of buildings. The company has an excellent reputation for quality and service across Europe, and operates a full accredited service support network throughout the UK. With over 20 models available – leave it to Villavent to specify the correct unit for your home.

Q. What health benefits can I expect for my family?

A. A Villavent Ventilation and Heat Recovery System will provide the highest levels of fresh, filtered air throughout your new home. And as Villavent's electrostatic and physical filtration systems remove dust, allergy-causing pollutants and all known pollen – any hay fever or asthma sufferers in your family will notice a great improvement.

Q. What will the living environment be like?

A. Your Villavent system provides a constant change of fresh, filtered air without draughts. No more smells and no damp air or condensation. It's more healthy. More comfortable. More controlled.

Q. Will my Villavent Heat Recovery and Ventilation System add value to my new Self Build home?

A. Our experience indicates that a Villavent system will always increase the market value of your home, should you ever decide to sell.

Q. Could I do the installation myself, or would using a subcontractor be wiser?

A. If you have a fair degree of experience in DIY, you should be able to install your Villavent system easily, although we would always recommend that any electrics should be installed and tested by a qualified electrician. Alternatively, you could ask your builder to do the installation and simply oversee the work to make sure everything goes smoothly. A third option is to hand all the installation work to your builder.

Q. How detailed are the plans Villavent provide?

A. Villavent plans contain everything you or your builder will need to install the system successfully. The plans are computer-designed as an overlay on your architect's plans, so you can see exactly what goes where. Villavent wiring diagrams are clear and easily understood by any qualified electrician.

Q. How much heat is recovered?

A. Villavent VM units achieve a market-leading **90%** heat recovery, making your fuel bills even lower. All Villavent systems achieve exceptional levels of heat recovery – 80% on average.

Q. Is the HRV fan noisy?

A. Villavent systems are whisper quiet – as low as 30dB in the room. They're also extremely energy efficient, helping reduce your fuel bills. And you can keep your windows closed at all times – cutting out external noise, pollution and increasing security.

Q. New building regulations are a minefield. How can I ensure compliance?

A. Building regs are not a problem for Villavent systems. All 'wet' areas, with or without windows – kitchen, bathroom, toilets, utility rooms – have to have some form of mechanical ventilation. Bed and living rooms require trickle ventilators in all windows equal to 8000mm² free area. Using a Villavent system negates the above. Just specify the following on your plans; '*Ventilation system to comply with Part F of the 2006 Building Regulations.*'

Your next step

When you choose Villavent, you are choosing the Best. As soon as you have planning permission, send us your floor plans, elevations and sections, either by post or email (as R14.dwg files) to:

sales@villavent.co.uk

If you require any further information or advice, contact our sales or technical department on:

01993 778481

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Self Build Project Guide

VENTILATION & HEAT RECOVERY SYSTEMS

A Step-by-Step DIY Guide to planning the installation of your Villavent Ventilation and Heat Recovery System

Congratulations! You've chosen the Best!

Villavent is the best-performing ventilation and heat recovery system on the market.

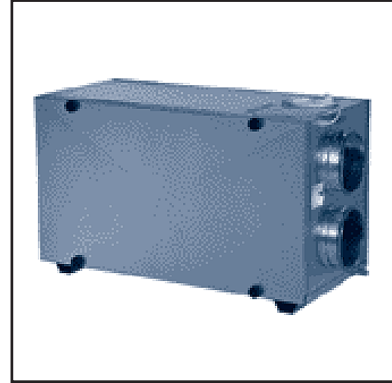
Villavent is also best for DIY installation, thanks to the excellence in design of the equipment and the carefully tailored system plans provided by your Villavent design team.

**This is an important
document –
keep it in a safe place**

Michael Holmes, editor of Home Building & Renovating Magazine installed both Villavent Heat Recovery Ventilation and Central Vacuum systems due to his demand for a Quality product and proven track record. Michael comments 'whilst I was convinced on the technical attributes of the Villavent Products, my wife was sceptical. The ease of use and the power of the Vacuum System has meant we have no hesitation in specifying Villavent for both systems. We now feel these are essential in any modern house'.

Why Villavent Ventilation and Heat Recovery Systems are the best for your new home

- **Best Heat Recovery** – units available with over 90% heat recovery – reduce your heating bills
- **Best Airflow Capability** – typically 50% higher than other UK systems – increased efficiency
- **Best Filtration** – electronic filtration and high efficiency bag filter remove all known pollen – great news for hay fever sufferers
- **Best Condensation Control** – eliminates virtually all condensation
- **Best Energy Efficiency** – the lowest energy consumption per m² – keeping running costs to a minimum
- **Best Humidity Levels** – achieves optimum humidity levels for a comfortable environment. Lowering moisture levels stop dust mites breeding – great news for asthma sufferers
- **Best Sound Levels** – whisper quiet – the lowest sound levels on the market
- **Best Total Service** – design, supply, installation, commissioning, maintenance
- **Best Choice** – the widest range of any manufacturer – choose the system that's absolutely right for your home – 70%, 80% or 90% efficient systems.
- **Best Capacity** – Villavent systems are powerful enough to handle the largest homes
- **Best for Self Build** – widely specified in the Self Build marketplace – providing complete peace of mind



Simple steps to a successful installation

Step 1 – As soon as you have planning permission, send us your floor plans, elevations and sections (as R14.dwg files) either by post or email to: sales@villavent.co.uk

Step 2 – We acknowledge receipt of your plans in writing.

Step 3 – We issue you with a budget quotation, normally within 10 working days.

Step 4 – Together, we discuss your requirements until you are satisfied and confirm your order.

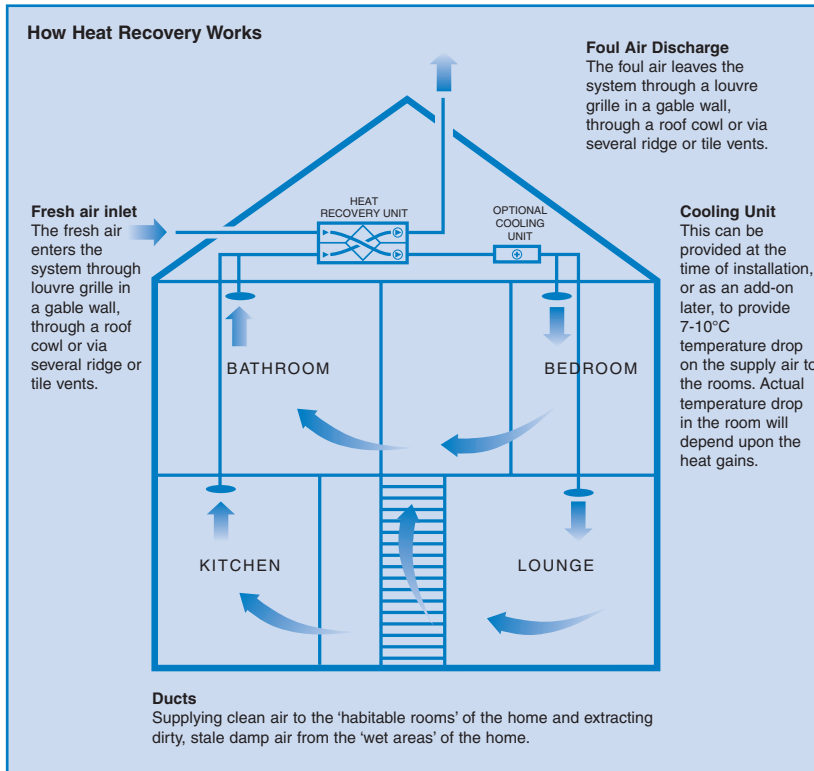
Step 5 – We issue an order confirmation to confirm process and system requirements. *(PLEASE NOTE: NO PAYMENT IS REQUIRED AT THIS STAGE)*

Step 6 – You sign the order confirmation, retain your copy and return the signed copy to us.

Step 7 – Normally within 10-15 working days, we generate CAD drawings and send them to you for approval and signing.

Step 8 – When we receive the signed-off drawings, our Contracts Department (01993 772270) will forward a contract pack and a pro-forma invoice. When you make your payment, a convenient delivery date and installation date (if requested) will be arranged.

Step 9 – Install your system. This is an easy process for any competent DIY enthusiast. Check inside for a basic stage by stage overview.



Planning your new Villavent Ventilation and Heat Recovery System

As early as possible, decide who is going to do the work. Installing a Villavent system is well within the scope of anyone with a reasonable amount of DIY experience. A second option is to project manage the installation, working with your builder, checking each stage to ensure success. Alternatively, you may want to pass the entire project on to your builder. Whichever way you choose, this planning guide will help you achieve excellent results.

What is the best way to ventilate the kitchen?

Connecting a cookerhood to the ventilation heat recovery system can be done but requires a "special" unit which by-passes the heat exchange preventing grease from clogging the fine fins of the heat exchanger. Ask for details. Alternatively a separate cookerhood as part of the kitchen design can be used venting ducting to outside. We would have a ceiling vent only in the kitchen.

Semi-Rigid Ducting – Easier to handle

All Villavent ducting is supplied in semi-rigid 3m lengths which comes compressed to 1m. Flexible ducting is **not** recommended due to its collapsibility and high pressure drop. Rigid spiro ducting can be supplied and has the lowest pressure drops, however this is generally more expensive and takes longer to install.

N.B. Villavent semi-rigid duct work has the advantage that it can be pre-insulated, acoustic and fire rated.

Save money – by not having to fit extractor fans

When you fit a Villavent system, there is no need to fit extractor fans in bathrooms and toilets. So you save money and don't have to put up with noisy fans. There's also no need for trickle vents in your window frames. *You can check this welcome news in Part F of the 2006 Building Regulations.* Savings would be made of between £400-£500 by not fitting traditional room extractors.

N.B. A cooker hood extraction fan can be provided with the kitchen fit-out for either recirculatory extraction or directly to outside, as preferred.

Villavent systems – Best for choice

Villavents new standard is the Revolutionary VR range of thermal wheels which are 80% efficient and have automatic summer by-pass. Villavent experts will help you choose the system that's absolutely right for your new home. All you have to do is let us know the total floor area of your home (ground and upper floors) when you send in your architect's plans. We will assume a standard ceiling height of 2.4 metres. The lists below will give you an indication of the most appropriate units.

Homes up to 200m² (2150sq ft)

Unit no.	Heat Recovery efficiency
VVX 200/2	70%
VR 250-EH/B	80%
VR 300 TK/B	80%
VR 400 E	80%
VM 400 EV	over 90%
VR 400 EV/B	80% with cookerhood connection

Homes between 200m² and 450m² (2150-4838sq ft)

Unit no.	Heat Recovery efficiency
VR 700 E	80%
VR 700 EV	80%

If your property is larger than 450m², please get in touch for a free individual appraisal. Units available for wall or free-standing.

Stage A Checking before you begin

Equipment and tools needed:

- Craft knife ✓
- Heavy duty gloves ✓
- Set of screwdrivers ✓
- Hammer ✓
- Ladder ✓
- Electric drill ✓
- Spirit level ✓
- Tape measure ✓
- Saw ✓
- Wood for loft platform and frame batons ✓

When your Villavent system arrives at your home, make sure the box contains all the information and documents you need:

- Wiring diagrams ✓
- Materials list ✓
- Data sheets ✓
- User and Maintenance Instructions ✓

Open the box, lay out all the parts and check them against the drawings and descriptions on your Materials List.

Stage B Install your HRV Unit

Position your HRV (Heat Recovery and Ventilation) Unit either in the loft space, or on the wall, depending on the type of unit ordered. Support it on a raised platform then push fit a spigot into each of the four ducts.

As shown on the drawings supplied:

- Fresh Air Intake duct (colour coded PINK)
- Stale Air Exhaust duct (colour coded BROWN)
- Exhaust Air duct (colour coded BLUE)
- Supply Air Distribution duct (colour coded RED)
- Acoustic duct (colour coded GREEN)

Important note

Install your HRV Unit and ducting as part of the **1st fix** (see glossary of building terms – page 4), before fitting the ceilings and make sure your HRV Unit and controller is connected to an electrical supply by a qualified electrician, as shown in your working drawings or installation instructions. 2nd fix is then carried out, (described overleaf).

Stage C Intakes and Exhausts to outside

Start by installing your Fresh Air Intake ducting. Connect acoustic ducting to the appropriate spigot on your HRV Unit then push fit additional lengths of ducting, fixing with duct tape, until you reach the fresh air intake point on the outside of your home. This can be at the gable end, soffit or roof of the building. Next, using a similar approach, run ducting from the Stale Air Exhaust duct on your HRV Unit to the stale air exhaust point. The ducting can easily be cut to the right length using a craft knife.

Stage D Extraction ducting

The Room Air Extraction ducting is installed in a similar way to the intake and exhaust ducting. However, in addition to the main run, you will be fitting branch runs to the various rooms around your

home. Each branch run leads off the main run with a simple push fit T piece. This is then taped in position, ensuring an airtight seal, using Villavent duct tape provided. Duct work is supplied pre-insulated for the cold roof space, with un-insulated ducting down through the building. At the end of each run you will fit a metal sleeve (known as a frame). This is another push fit component and is specially engineering to grip the ceiling plasterboard. Once the frame is positioned through the ceiling, you can push fit the extractor louvre. The kitchen louvre has a built-in fusible link, which will close if there is a fire. This louvre is fitted by screwing it to a small wooden batten positioned in the ceiling void space.

Stage E Fresh Air distribution

Fit your Fresh Air distribution diffuser main run and branch runs in the same way that you fitted your Stale Air Extraction ducting.

N.B. Should you be considering the optional cooling unit now or in the future, insulated ducting must be supplied throughout the fresh air distribution system.

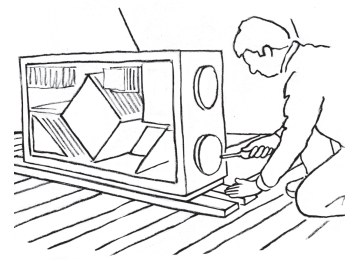
Stage F Check everything is OK

To commission your system, you have to set your louvre and diffusers for optimum comfort. All you have to do is turn the central cone of each louvre and diffuser as indicated in your instructions. Check all wiring is connected in accordance with the regulations in force.

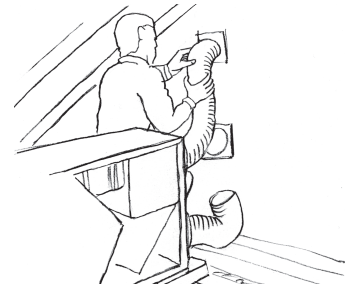
Stage G Congratulate yourself!

You have now installed the Best Heat Recovery and Ventilation system on the market. The fresh, filtered air provided by Villavent means a comfortable, healthy environment for all your family and an end to smells, condensation and air-borne pollutants in your home.

Installation of the Villavent system



Unit is positioned on raised platform



Fitting ducting to outlets (ensuring at least 1m apart)



Push fit 'T' piece in ducting



Fitting extractor louvre in ceiling

Typical loft HRV Unit

