adm systems

Independent Heat Recovery
Ventilation Specialists

Ducting Options

DUCTING OPTIONS

As your ducting is an integral part of your build it should be a primary consideration. It is well worth thinking about this not only in terms of its quality but also its life cycle. The more air we can distribute at any one time, whether it is through a larger diameter rigid duct or a multiple port radial system, the quieter your system will be and the more efficiently your unit will run. ADM's independence means that we can offer a wide range of ducting to suit all applications and budgets.

uPVC Smooth Bore Rigid Branch Ducting

- Push fit connections
- Easy to cut with hand tools
- Smooth bore to improve air flows
- Available in 150mm and 125mm diameter
- SAP Appendix Q compliant
- Also available in 204 x 60mm, 220mm x 90mm for limited void spaces

Radial (Semi-Rigid) Ducting

- Available overall diameter of 75mm or 90mm circular profile, design-specific.
- SAP Appendix Q and Passive House preferred
- Smooth-bore anti-microbial lining improves air flows and reduces possible contaminants
- Ideal for limited void spaces
- Suitable for Metal Web Joists, engineered timber joists and retro-fit projects
- Simpler to install than branch ducting
- Manifold system reduces any chance of "cross talk" between rooms. Used in conjunction with a multiple port distribution manifold for central air distribution
- Rubber seal on joints ensures 100% air tightness

Galvanised Steel Spiral Ducting

- Highly efficient ducting
- Widely considered as standard for Passive House installations
- Utilised with Safe Seal connectors
- Sound attenuation is recommended to reduce cross-talk between rooms
- Available in a range of sizes: 125mm - 315mm

Safe Seal Connectors

Safe Seal Connectors are designed and pre-sealed to fit together quickly and easily and can help you save time and money when installing your system.

The double-lipped sealing gaskets manufactured from durable EDPM rubber prevent air leakage and replace the need for additional sealing (or waiting for sealant to cure). The gasket lips increase in size in correlation with the duct dimensions to allow greater tolerances in installation. Manufacturer's tests have confirmed that the EDPM gasket will maintain air tightness for over 15 years.

The connectors are only for use with branch ducting systems, the connectors will improve system performance overall compared with uPVC fittings and are normally a requirement in **Passive House** properties.

Acoustic flexible ducting for the attenuation of duct borne noise

Flow Rate Control and Sound Attentuation

Locating the heat recovery unit away from sleeping areas and incorporating acoustic materials and volume control dampers in your system will reduce noise levels and deter any potential sound transfer from the unit into the rooms via the network of ducting.

Installation of volume control dampers helps regulate the flow of air and controls back pressure

Fire Stopping

Where ducting passes through a fire resisting wall, floor or fire compartment, the required measures to ensure compliance with Part B of the Building Regulations must be taken. You must always seek the guidance of your Building Control Officer to help you determine your exact requirements. We have a number of appropriate products available for most applications.

Framed Fire Shutter Damper

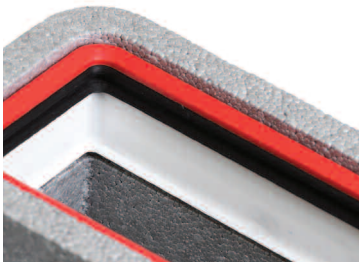
Fitted where Building Regulations have noted it as required. May be operated electrically or using a fusible link.

Intumescent Fire Collar

Attached to ductwork where it passes through walls and ceilings.

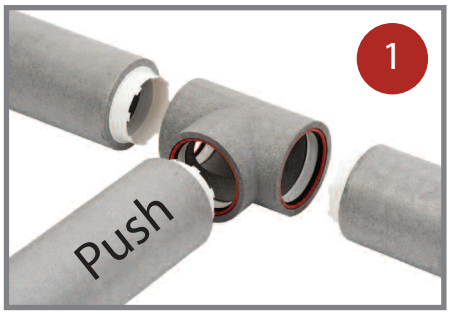
Insulation of Ducting

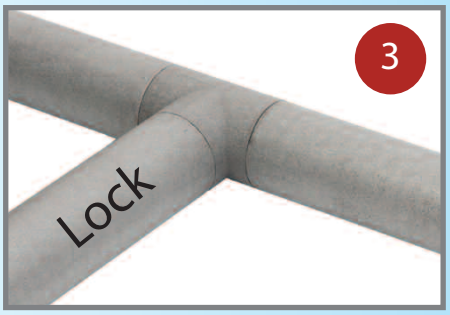
It is a **mandatory requirement for NHBC Guidance Document Chapter 3.2 compliance** that a Thermal Resistance of the insulating materials should be equivalent to a minimum of 25mm, with a thermal conductivity of 0.04 W/mK which gives a minimum Thermal Resistance requirement of 0.625 m²K/W. Insulation must be fitted to all exposed ductwork in order to prevent condensation from forming when ducting is located within cold void areas. Please be aware, however, that if you are looking to achieve a Passive House standard or considering the ComfoCool uplift on a Q600 it will be necessary to insulate all duct runs, irrespective of location.



Self-Seal Thermal Ducting

- At 20mm thick, it provides a thermal conductivity of **0.03 W/mK** and Thermal Resistance (R-value) of **0.666m²K/W**
- Manufactured from Neopor® graphite impregnated polystyrene (EPS) with infrared absorbers and reflectors which imporoves the thermal resistance of the materials
- Fully tested to meet the thermal conductivity requirement of BASF-EN13163
- Flame retardant to DIN 4012 B1
- Exceeds current UK Domestic Ventilation Regulations for thermal properties
- Independently airflow performance tested by the Building Research Establishment
- Push, click and lock mechanism minimises air leakage and makes it easier to install





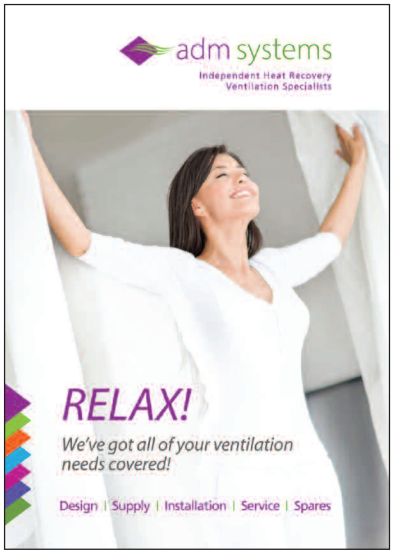
Foil Faced Mineral Wool Wrap

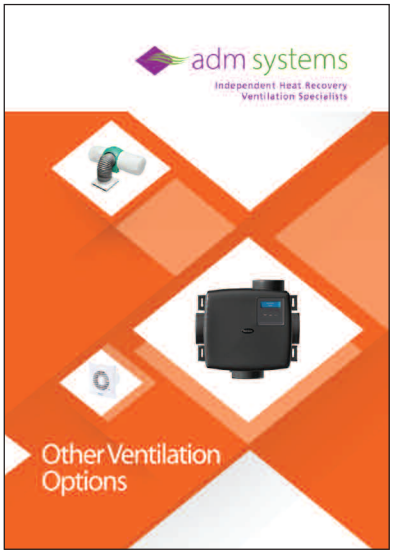
- Required for ducting passing within cold voids
- Improves thermal performance and reduces duct noise ingress/egress
- Available in 25mm or 50mm thickness
- Suitable for all ducts sizes and profiles available
- Required for use with heating or cooling option ductwork
- Thermal conductivity of 0.032W/mK at 10°C
- For use with both Branch and Radial ducting systems

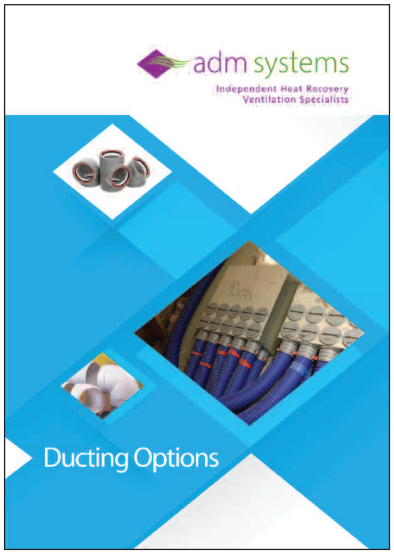
Why choose ADM?

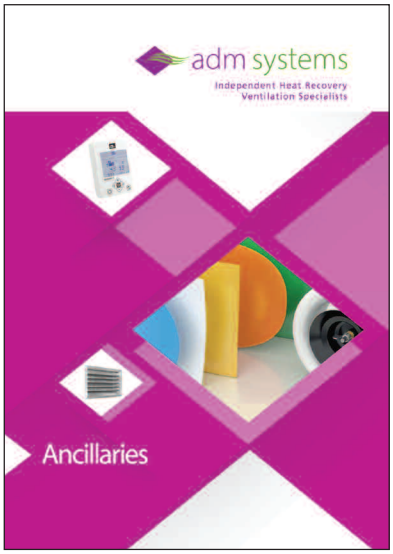
- ADM's independence provides access to a wider product range
- We will help de-mystify domestic ventilation regulations to ensure compliance
- Our extensive knowledge and years of experience at the cutting edge of technology (ADM were pioneers in MVHR in the early 90s)
- All our MVHR systems are completely bespoke, designed to suit your needs and your budget
- Unlike others, we don't provide indicative designs (unless you ask) our bespoke systems are designed to work
- Flexible service options including our "Buddy Service" to help support you on site
- We will guide and support you at every project milestone

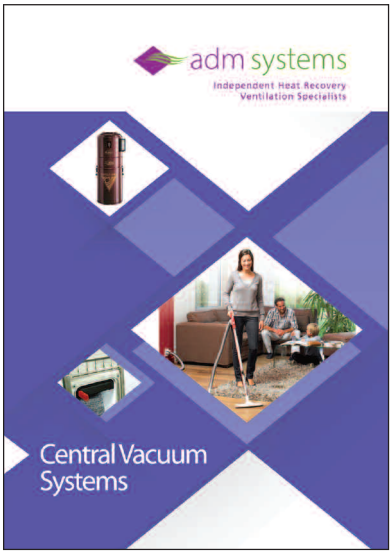
Check out the downloads section of our website
for more information concerning all our products and services.
www.admsystems.co.uk/downloads



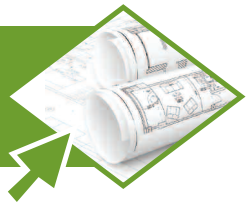








FORWARD YOUR PLANS TO:
plans@admsystems.co.uk



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