



PINNACLE

DUCTWORK
Est 1992

SUITABLE FOR
OVERHEATING
AND AIR QUALITY
PLANNING
REQUIREMENTS
IN RESIDENTIAL
DWELLINGS

ResiDUCT™

LOW PROFILE METAL DUCTING FOR RESIDENTIAL
VENTILATION SYSTEMS REQUIRING HIGH AIRFLOW RATES

ResiDUCT™ offers a simple solution for residential ventilation ducting used with MVHR or MEV systems where higher ventilation rates are required due to overheating and air quality planning conditions and restrictions.

The ducting is sized to offer a larger cross sectional area than typical plastic ducting, resulting in greater air volumes, whilst still retaining a low profile for application in standard sized ceiling voids.

ResiDUCT™ can be designed and installed in conjunction with round and rectangular ducting used for residential ventilation installations such as 220mm x 90mm and 204 x 60mm.



A typical MVHR Unit installed in new build properties.

WHY IS LARGER DUCTING NEEDED FOR RESIDENTIAL SYSTEMS?

Due to the increasing density of buildings, and energy efficiency regulations, **the risk of overheating has increased**, leading to poor comfort levels and impact on health and well-being of occupants.

Approved Document O: Overheating

The control of overheating is covered by Regulations (England & Wales) and the key requirements include;

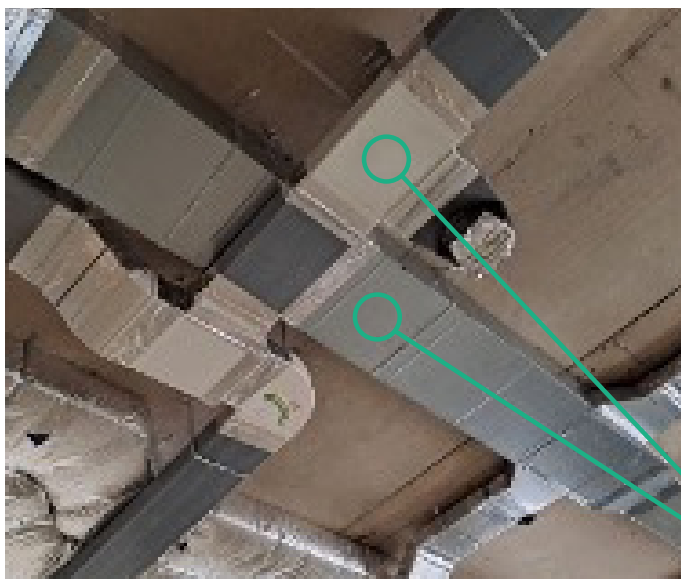
- Design for comfort
- Limit solar gain
- Provide adequate ventilation
- Meet performance standards.

Higher Ventilation Rates = Larger Ductwork

In practise, it is not simple or cost effective to just 'increase the duct size' due to ceiling void restrictions and other services.

In addition, other requirements such as NOx filtration due to air quality planning restrictions, further resistance is added to the ducting system, again demanding large ducts to ensure installed performance is achieved.

ResiDUCT™ is a low profile ducting range with a larger cross-sectional area that typical plastic sized ducting meaning a greater volume of air can flow through at a given velocity, resulting in higher airflow rates



SPACE

Low profile ducting allowing high airflows in restricted or standard ceiling voids

| | |
|-----------------------|-----------------------|
| 300 x 100mm = 180mm Ø | 400 x 100mm = 205mm Ø |
| 300 x 125mm = 200mm Ø | 400 x 125mm = 230mm Ø |



SPEED

Designed and manufactured using slip-joint jointing technology for easy integration with plastic ducting and minimal air leakage

SAVINGS



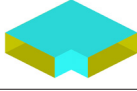
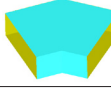
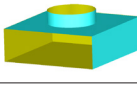



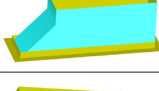
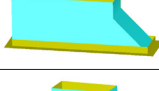



Significantly quicker to install than typical metal duct used in residential applications

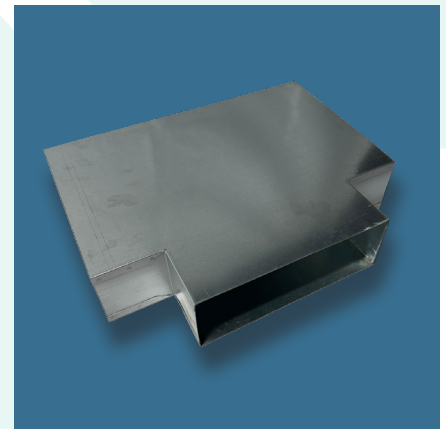
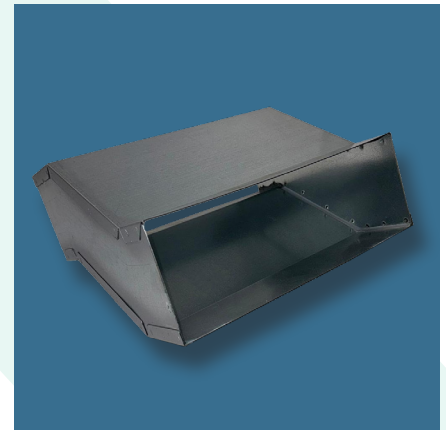
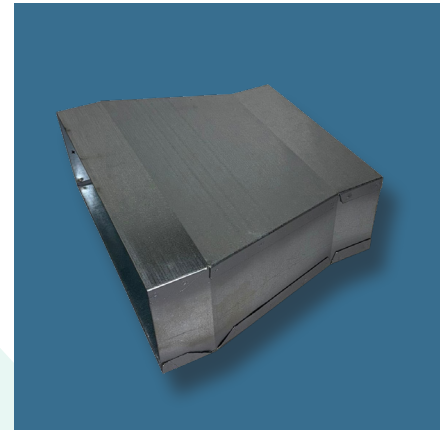
Here a mix of 220 x 90mm PVC ducting is used with 300 x 125mm ResiDUCT™ for a residential MVHR Ventilation System equivalent to 200mm Ø

The ResiDUCT™ range is a high-performance, duct range suitable for use with residential ventilation systems including MVHR and MEV

- All parts are made to order based on client drawings and specifications
- Manufactured to DW144 Standards
- Also available to meet A1 Non Combustible Duct Performance Criteria

Note: All rectangular metal ducting is manufactured to size. If you require bespoke sized transitions and plenums, please send drawings. The pieces below provide examples of what we can manufacture quickly and efficiently;

| ResiDUCT™ | 300 x 100mm | 300 x 125mm | 400 x 100mm | 400 x 125mm |
|---|-------------|-------------|-------------|-------------|
| Duct Length 1.5m  | ● | ● | ● | ● |
| Duct Connector  | ● | ● | ● | ● |
| 90° Horizontal Bend – high efficiency  | ● | ● | ● | ● |
| 45° Horizontal Bend  | ● | ● | ● | ● |
| Plenum Elbow  | ● | ● | ● | ● |
| 90° Vertical Bend – High Efficiency  | ● | ● | ● | ● |
| 45° Vertical Bend  | ● | ● | ● | ● |
| Horizontal Equal T Piece  | ● | ● | ● | ● |
| Flat Shoe – Left Hand  | ● | ● | ● | ● |
| Flat Shoe – Right Hand  | ● | ● | ● | ● |
| Taper  | ● | ● | ● | ● |
| Offset  | ● | ● | ● | ● |
| Cavity Wall Sleeve  | ● | ● | ● | ● |



All technical performance data sheets are available for ResiDUCT™