

nuaire



**PATENT
PENDING**

ductmaster

NUAIRE THERMAL DUCTING

SAVE TIME AND USE NUAIRE'S DESIGN CENTRE GETTING IT RIGHT FROM THE START

The complete ventilation solution at every stage of your build. At Nuaire we understand the ever increasing challenges that our customers encounter when building new homes. Our complete ventilation solution supports you at every stage of your build.



NUAIRE'S DESIGN SERVICE GOES BEYOND JUST PRODUCT SELECTION

Nuaire uses the latest Autodesk Revit Software with 3D modelling to guarantee your design replicates system performance. Together with our team of experienced designers, we ensure you have the most efficient system and practical design for your property or development.

DEAL WITH VENTILATION EXPERTS

Nuaire's technical application team are not only proficient in our 3D Autodesk Revit Software, they are ventilation experts. This expertise together with our Autodesk Revit software and our extensive product range means you get the best ventilation solution for your property or development.

OUR EXPERT SERVICE DOESN'T STOP AT DESIGN STAGE

Nuaire recognises that when it comes to installation there are always challenges on site to overcome. Our team of experts both at our head office in South Wales and out on the road nationally are always on hand to offer further advice and if needed a re-design that will still meet building regulations, ensure effective system performance and work within the challenges of your build.

Nuaire uses the latest 3D AutoCAD Revit Software, which enables them to provide a design that not only conforms to building regulations but is guaranteed to replicate installed system performance.

When information is provided, the 3D software used by Nuaire will detect clashes with other systems early on and therefore provides a design that works within your build requirements and can help to avoid costly on site remedies.

When a product manufacturer such as Nuaire selects a MVHR product and designs the ducted system that must go with it, all of the above would have been taken into careful consideration.

Nuaire's design will be fully compliant with building regulations and it's important to ensure that it's installed as designed. Most importantly, if issues are encountered on site requiring the design to be changed, you must make sure you go back to your manufacturer and re-work the design so that it still conforms to building regulations.

- Advice on compliance with the very latest building regulations
- A drawing service using the latest 3D AutoCAD Revit Software
- Drawings showing appropriate duct runs for each floor
- A full listing of all the necessary ancillaries needed

ductmaster

SAVE TIME & MONEY WITH THERMAL DUCTING

Nuaire's range of thermal ducting has been specifically designed to meet the building regulations for thermal insulated duct. Nuaire's unique quick fix clip system will significantly reduce the amount of time that is required to install a compliant insulated ductwork system as it can cut the insulation time by over 50% saving time and money. Unlike other compliant systems Nuaire's Thermal Ducting does not require to be wrapped around the ductwork, Nuaire's components form the ductwork system saving time and money.



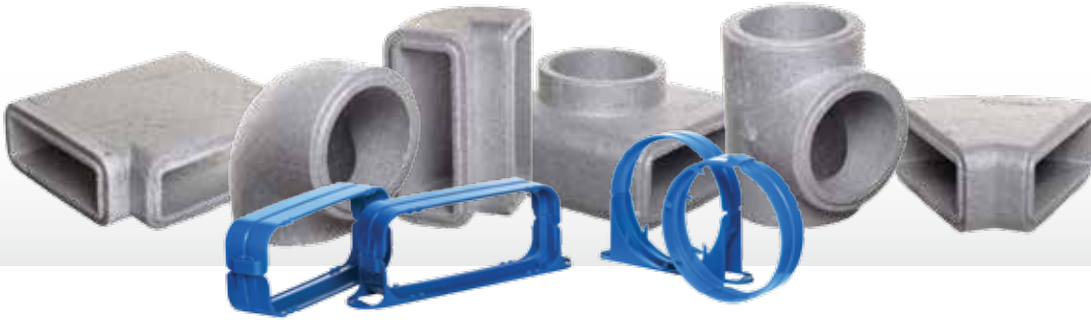
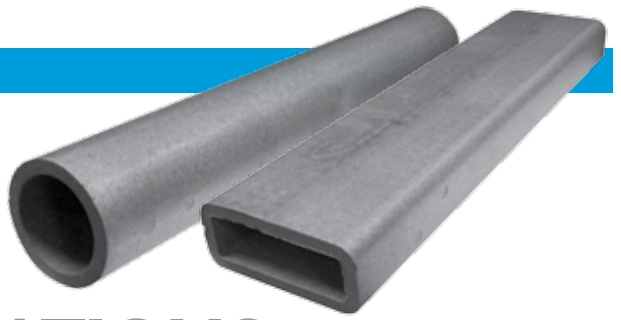
THE ONLY COMPLETE SOLUTION ON THE MARKET

- Fully compliant with Building Regulations
- Improved thermal efficiency
- Unique clamping mechanism – no requirement for sealant & tape
- Lightweight material - one person install
- Simple quick fit components
- Significantly reduces time on site
- Environmentally friendly through eco-efficiency
- Cost effective solution
- Independently tested for thermal conductivity by BASF – Germany
- LABC Pending
- Patent Pending



The logo for ductmaster, with 'duct' in blue and 'master' in red, both in a bold, sans-serif font.

YOU NEED TO COMPLY WITH BUILDING REGULATIONS



THERMAL DUCTING WHAT BUILDING REGULATIONS SAY

Ductmaster's new range of thermal duct is specifically designed to comply with 2010 Building Regulations to significantly improve thermal conductivity and thermal resistance of ventilation ducting used in domestic properties.



THE REQUIREMENT

Ducting should be insulated where it passes through unheated areas and voids (e.g. loft spaces) with equivalent of at least 25mm of a material having a thermal conductivity of $\leq 0.04 \text{ W/(m.K)}$ to reduce the possibility of condensation forming. Where a duct extends above roof level the section above the roof should be insulated or a condensate trap should be fitted just below roof level.

THE REASON

Ducting in MVHR systems carry warm air through them, when these ducts pass through unheated spaces such as loft spaces if the ductwork does not have sufficient thermal insulation condensation can form on the ductwork and cause water damage to your property.

HOW NUAIRE THERMAL COMPLIES

THE SIMPLE SOLUTION TO MEET BUILDING REGULATIONS

The most common method of insulation duct used through un-heated spaces is bubble wrapped ductwork (figure 1) which has limited resistance. Single wrap using this method does not comply with building regulations. An alternative method which is currently used is to wrap the ductwork in 25mm of rockwool (figure 2) which can be very labour intensive and can be prone to human error, often leaving areas of the ductwork uncovered. Nuaire's thermal insulation (figure 3) significantly improves thermal efficiency and is the simplest cost effective solution to meet current building regulations.



Figure 1: Bubble wrap.



Figure 2: Rockwool.

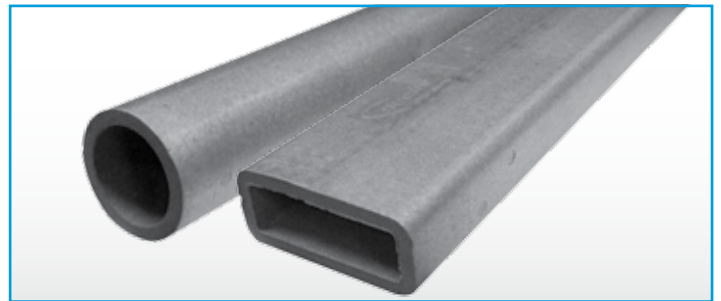
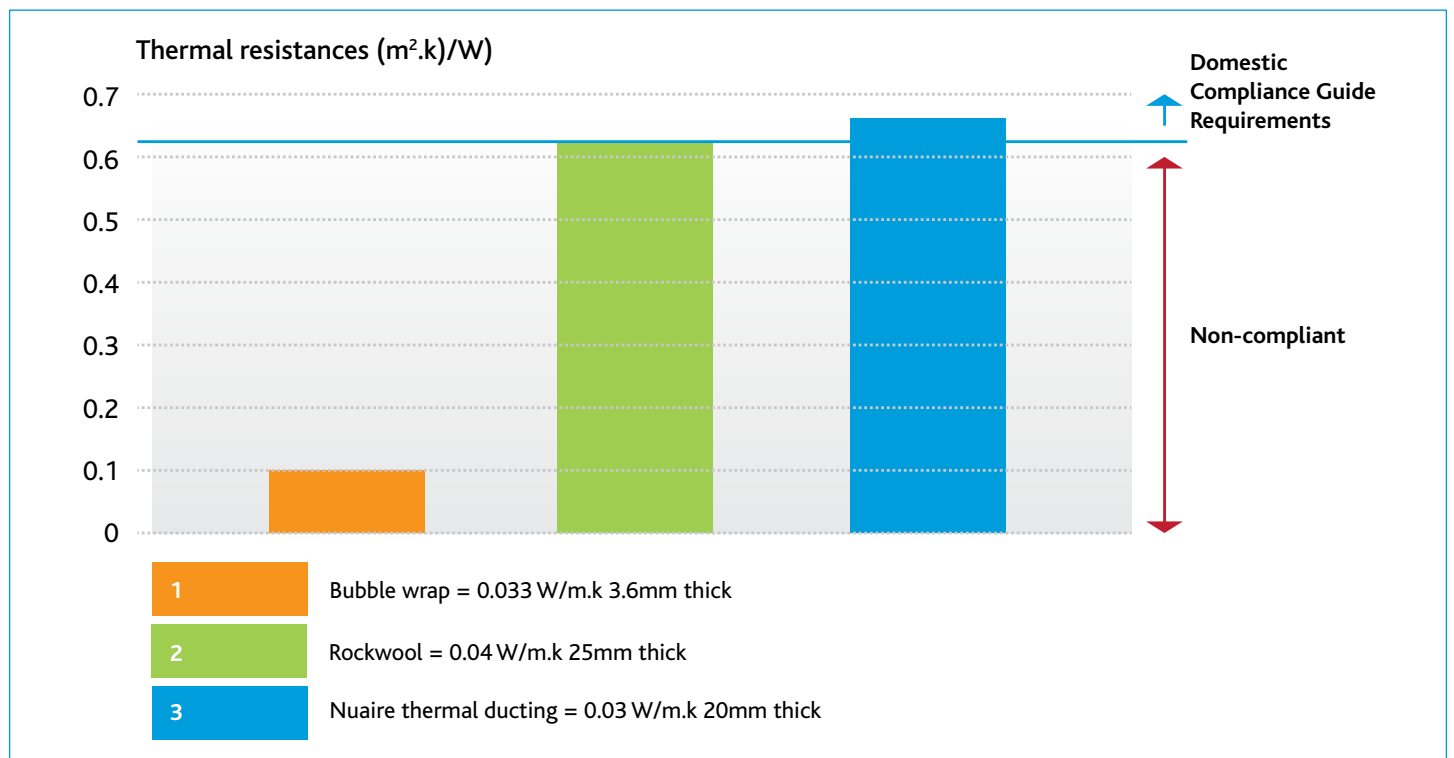


Figure 3: Nuaire thermal ducting.

COMPLIANCE CHART



NUAIRE THERMAL EXCEEDS BUILDING REGULATION REQUIREMENTS



DUCTING AND ANCILLARIES INSULATED 204 X 60MM RECTANGULAR DUCTING ANCILLARIES

INSULATED T PIECE

Part Number	Duct Size	Box Description	Resistance in PA Quantity	Resistance in PA				
				@8l/s	@13l/s	@21l/s	@29l/s	@37l/s
NTD-204-TP	204mm x 60mm	Insulated T Piece	6	0.9	2.3	5.9	11.2	18.3



INSULATED 90° HORIZONTAL BEND

Part Number	Duct Size	Description	Box Quantity	Resistance in PA				
				@8l/s	@13l/s	@21l/s	@29l/s	@37l/s
NTD-204-90H	204mm x 60mm	Insulated 90° Horizontal Bend	6	0.6	1.6	4.1	7.9	12.8



INSULATED 45° HORIZONTAL BEND

Part Number	Duct Size	Description	Box Quantity	Resistance in PA				
				@8l/s	@13l/s	@21l/s	@29l/s	@37l/s
NTD-204-45H	204mm x 60mm	Insulated 45° Horizontal Bend	6	0	0.3	1.2	2.6	4.5



INSULATED 90° VERTICAL BEND

Part Number	Duct Size	Description	Box Quantity	Resistance in PA				
				@8l/s	@13l/s	@21l/s	@29l/s	@37l/s
NTD-204-90V	204mm X 60mm	Insulated 90° Vertical Bend	6	0.7	1.9	5.2	10.1	16.6



INSULATED PLENUM

Part Number	Duct Size	Description	Box Quantity	Resistance in PA				
				@8l/s	@13l/s	@21l/s	@29l/s	@37l/s
NTD-204-PL	204mm x 60mm	Insulated Plenum	6	0.5	1.3	3.4	6.4	10.4



INSULATED DUCT 1M LENGTH

Part Number	Duct Size	Description	Box Quantity	Resistance in PA				
				@8l/s	@13l/s	@21l/s	@29l/s	@37l/s
NTD-204-1M	204mm x 60mm	Insulated Duct 1m length	6	0.2	0.4	0.8	1.4	2.2



INSULATED RECTANGULAR DUCT CLAMP WITH FIXING LUGS

Part Number	Duct Size	Description	Box Quantity	Resistance in PA				
				@8l/s	@13l/s	@21l/s	@29l/s	@37l/s
NTD-204-CONL	204mm x 60mm	Insulated Duct Clamps with Fixing Lugs	6	-	-	-	-	-



INSULATED RECTANGULAR DUCT CLAMP

Part Number	Duct Size	Description	Box Quantity	Resistance in PA				
				@8l/s	@13l/s	@21l/s	@29l/s	@37l/s
NTD-204-CON	204mm x 60mm	Insulated Duct Clamps without Fixing Lugs	6	-	-	-	-	-



INSULATED T PIECE

Part Number	Duct Size	Description	Box Quantity	Resistance in PA				
				@8l/s	@13l/s	@21l/s	@29l/s	@37l/s
NTD-125-TP	125mm Dia.	Insulated T Piece	6	0.5	1	2.2	3.9	6.1



INSULATED 90° BEND

Part Number	Duct Size	Description	Box Quantity	Resistance in PA				
				@8l/s	@13l/s	@21l/s	@29l/s	@37l/s
NTD-125-90H	125mm Dia.	Insulated 90° Bend	6	0.5	1.4	4	7.9	13



INSULATED 45° BEND

Part Number	Duct Size	Description	Box Quantity	Resistance in PA				
				@8l/s	@13l/s	@21l/s	@29l/s	@37l/s
NTD-125-45H	125mm Dia.	Insulated 45° Bend	6	0.2	0.5	1.4	2.7	4.5



INSULATED DUCT 1M LENGTH

Part Number	Duct Size	Description	Box Quantity	Resistance in PA				
				@8l/s	@13l/s	@21l/s	@29l/s	@37l/s
NTD-125-1M	125mm Dia.	Insulated Duct 1M length	6	0.1	0.2	0.4	0.65	0.9



INSULATED ROUND DUCT CLAMP WITH FIXING LUGS

Part Number	Duct Size	Description	Box Quantity	Resistance in PA				
				@8l/s	@13l/s	@21l/s	@29l/s	@37l/s
NTD-125-CONL	125mm Dia.	Insulated Duct Clamps with Fixing Lugs	6	-	-	-	-	-



INSULATED ROUND DUCT CLAMPS

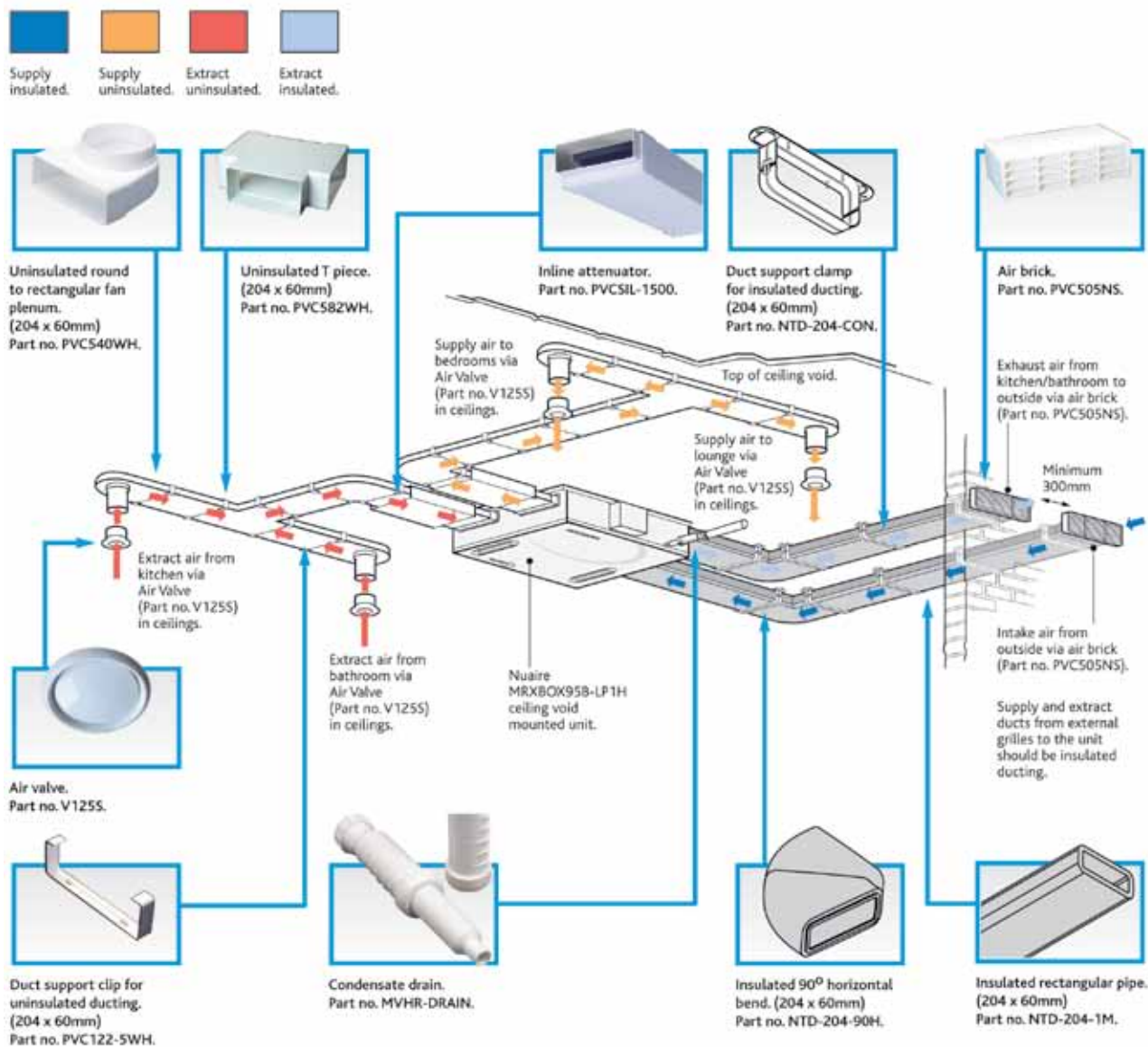
Part Number	Duct Size	Description	Box Quantity	Resistance in PA				
				@8l/s	@13l/s	@21l/s	@29l/s	@37l/s
NTD-125-CON	125mm Dia.	Insulated Duct Clamps without Fixing Lugs	6	-	-	-	-	-



NUAIRE'S TOP TIPS

- Use rigid duct for the majority of your installation
- Avoid using flexible ducting, if you must, remember the regulations, pull taut to 90% of its length, support the install and don't install where it can be crushed
- Minimise bends and ensure your duct routes take the path of least resistance
- Use a non-hardening acrylic sealant and aluminium duct tape to connect your ductwork and use ducting with guide veins to avoid gaps and air leakage
- Use insulated ducting for unheated spaces or heated spaces that are carrying cold air
- Install Nuaire's CONTRAP and install the ductwork correctly to prevent backflow of moisture going to the fan unit
- Follow the design provided by Nuaire

TYPICAL MVHR DUCTED ARRANGEMENT FOR A CEILING VOID MOUNTED UNIT RECTANGULAR INSULATED & UNINSULATED 204 X 60MM DUCTING

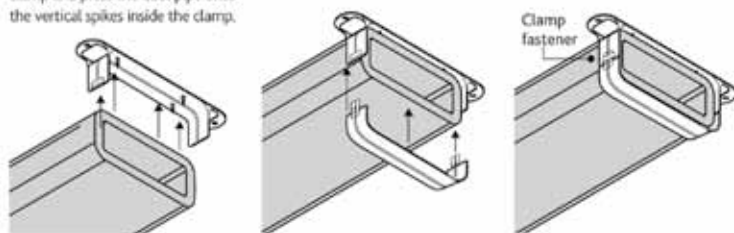


USING DUCT CLAMP NTD-204-CON WITH RECTANGULAR INSULATED DUCT PIPE

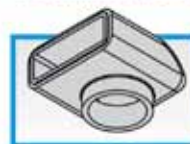
Remove the bottom part of the duct clamp from the top half of the clamp and using two screws attach the top half of the clamp to the installation position. Offer the rectangular duct pipe up to the installed portion of duct clamp and press the duct pipe onto the vertical spikes inside the clamp.

With the duct length in position, offer the lower part of the duct clamp up to the top half of the clamp.

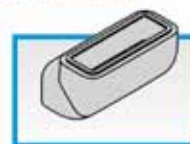
Locate the fixing tabs on each side of the lower part of the duct clamp into the clamp fasteners each side of the top half of the clamp. Each duct joint should be supported by a clamp centrally positioned over each joint.



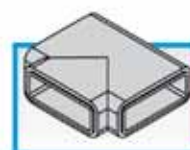
OTHER INSULATED DUCTING ANCILLARIES



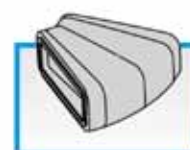
Insulated fan plenum. (204 x 60mm) Part no. NTD-204-PL.



Insulated 90° vertical bend. (204 x 60mm) Part no. NTD-204-90V.

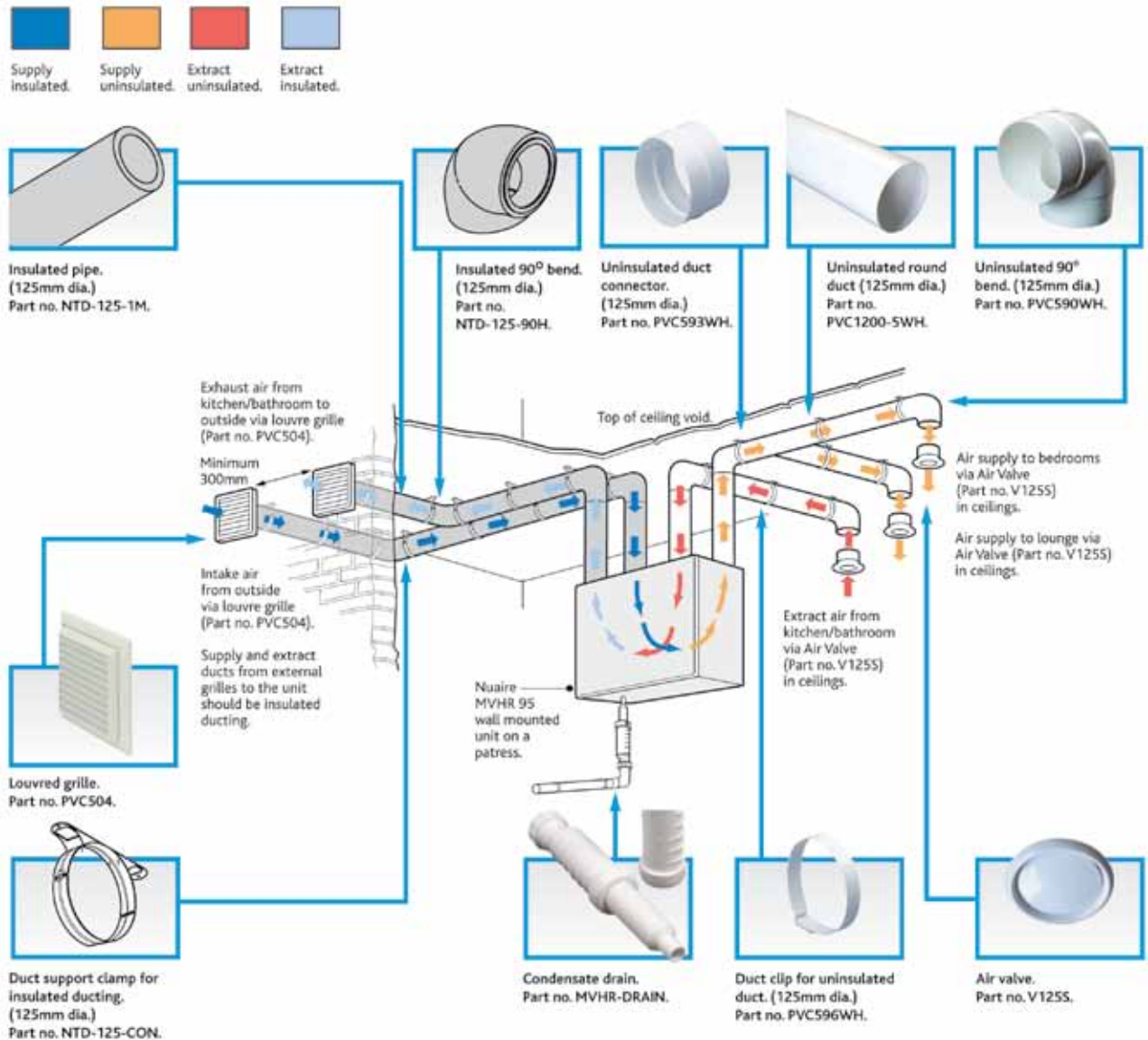


Insulated T piece. (204 x 60mm) Part no. NTD-204-TP.

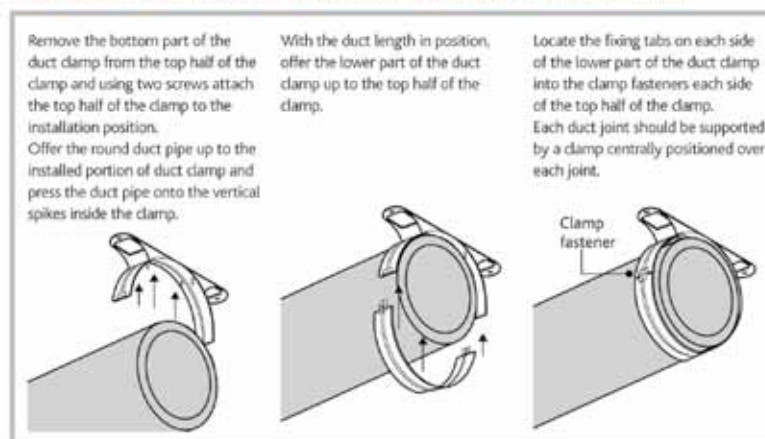


Insulated 45° horizontal bend. (204 x 60mm) Part no. NTD-204-45H.

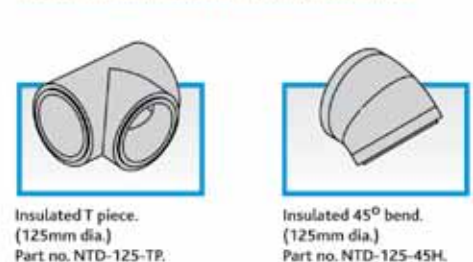
TYPICAL MVHR DUCTED ARRANGEMENT FOR A WALL MOUNTED UNIT CIRCULAR INSULATED & UNINSULATED 125MM DIAMETER DUCTING



USING DUCT CLAMP NTD-125-CON WITH ROUND INSULATED DUCT PIPE



OTHER INSULATED DUCTING ANCILLARIES





PRODUCT SPECIFICATION

MANUFACTURER	Nuaire Ltd.
PRODUCT BRAND NAME	Ductmaster
INSULATION PROPERTIES	Thermal Conductivity: 0.03 W/(m.K) Thermal Resistance: 0.67(m ² .K)/W U value: 1.49 W(m ² .K)
MATERIAL	Injection moulded 20mm in thickness; carbon impregnated Expanded Polystyrene (EPS) Density: 25 Kg/m ³ Colour: Silver/Grey
THERMAL CONDUCTIVITY	Thermal conductivity tested to BASF EN13163
FIRE RESISTANCE	Flame retardant to Class EN1350 ¹⁻¹
ENVIROMENTAL	Environmentally friendly through high eco-efficiency
PRODUCTS	Nuaire Ductmaster thermal insulated duct shall be available in two different sizes, based on the internal dimension: 125mm Diameter or 204 x 60mm rectangular. Unlike other thermal ducting systems Nuaire's unique ducting design negates the need for solid plastic inner ducting to achieve the required thermal properties and leakage rates stipulated by building regulations.
COMPONENT DESCRIPTIONS	NTD-125-TP: 125mm DIAMETER T PIECE NTD-125-90H: 125mm DIAMETER 90 DEG BEND NTD-125-45H: 125mm DIAMETER 45 DEG BEND NTD-125-1M: 125mm DIAMETER 1M DUCT NTD-204-TP: 204X60mm T PIECE NTD-204-90H: 204X60mm 90 DEG HORIZONTAL BEND NTD-204-45H: 204X60mm 45 DEG HORIZONTAL BEND NTD-204-90V: 204X60mm 90 DEG VERTICAL BEND NTD-204-PL: 204X60mm PLENUM NTD-204-1M: 204X60mm 1M DUCT
CLAMPING MECHANISM SPECIFICATION	Material: Acrylonitrile Butadiene Styrene (ABS) Colour: Blue - RAL 5015
COMPONENT DESCRIPTIONS	Nuaire's fast clamp system shall achieve a level of leakage substantially lower than the maximum allowed for a class A duct as defined in DW/143 (Ductwork leakage testing). Fast clamps also negate the need to use any sealants or tapes to join the duct pieces resulting in a cleaner, faster and easier installation on site. NTD-125-CONL: 125mm DIAMETER CLAMP WITH FIXING LUGS NTD-125-CON: 125mm DIAMETER CLAMP WITH OUT FIXING LUGS NTD-204-CONL: 204X60 CLAMP WITH FIXING LUGS NTD-204-CON: 204X60 CLAMP WITH OUT FIXING LUGS

NUAIRE THERMAL DUCTING

THE RIGHT STOCK AT THE RIGHT PRICE, RIGHT HERE IN THE UK

NEED A COMPONENT FAST? TRUST NUAIRE TO DELIVER!

Next day delivery available on ductmaster range of thermal ducting. With a dedicated Nuaire Xpress team and over 50 sales staff throughout the UK we can ensure you can get what you need, fast! Our excellent service is one of the many reasons thousands of customers keep coming back to us.



NORTHERN SCOTLAND
48 HOUR DELIVERY*

SCOTLAND TO M8 CORRIDOR
NEXT DAY

PLEASE CALL FOR DELIVERY* TIMES

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Telephone calls may be recorded for quality and training purposes.
