

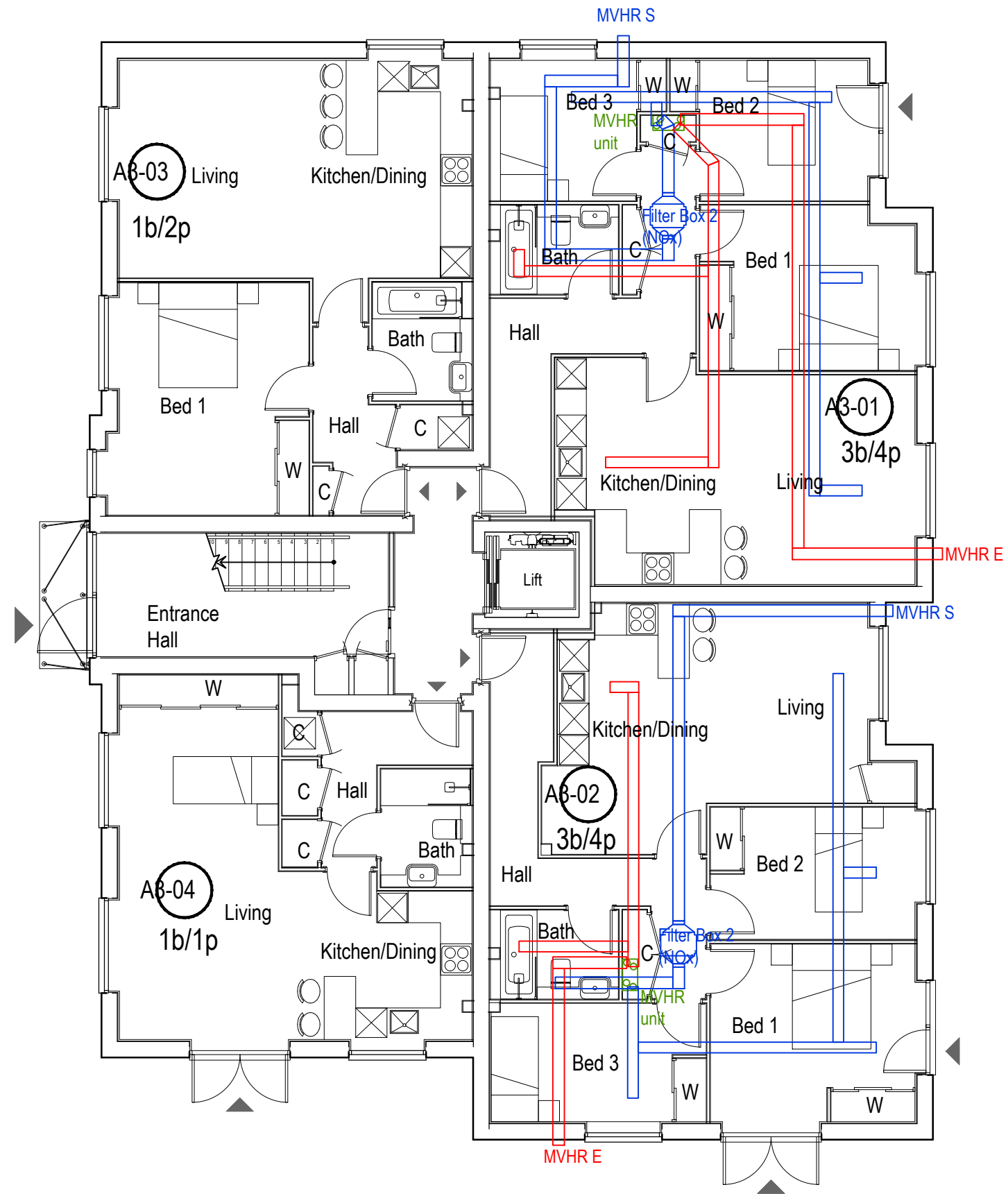
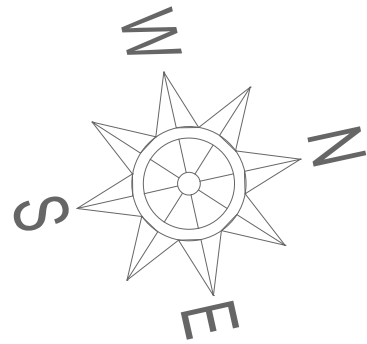


579-583 UXBRIDGE ROAD HAYES

PLANNING REFERENCE 72470/APP/2023/747

DISCHARGE OF CONDITION 9

Ingress of Polluted Air



0 1 2 4 6m

1:100

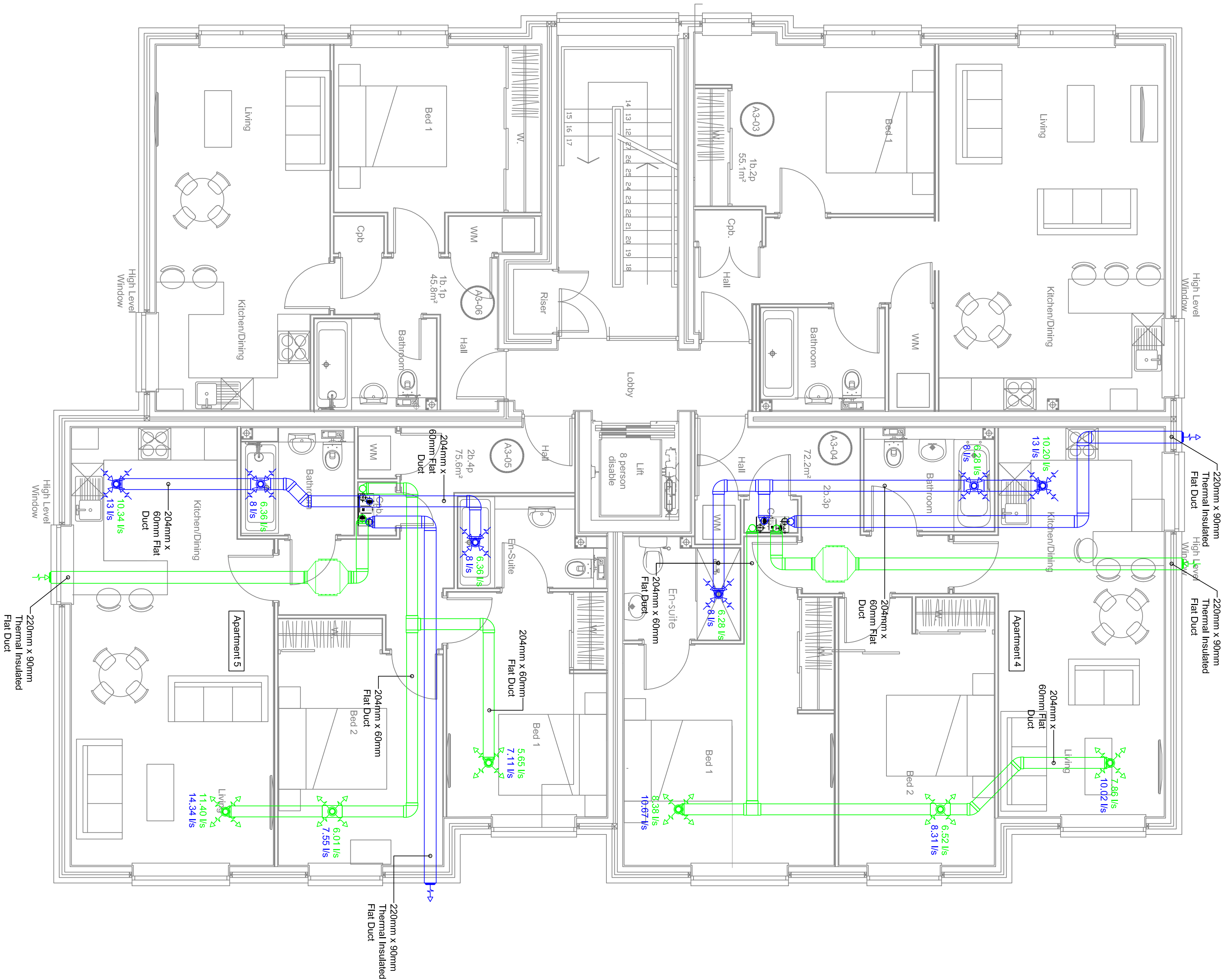
REV:	DESCRIPTION:	BY:	DATE:

CLIENT:	Thorney Farm Developments
SITE:	579-583 Uxbridge Road Hayes Middlesex

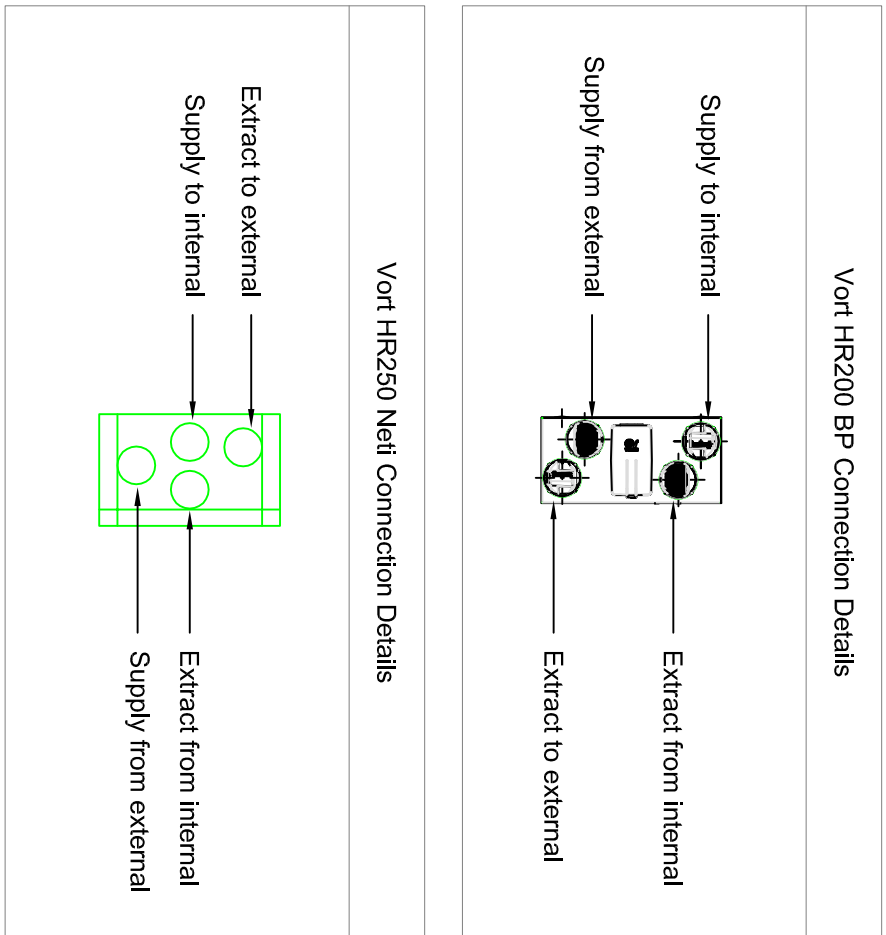
TITLE:	Block A3 Ground Floor Plan MVHR Vortice System
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STATUS: PLANNING			
SCALE AT A3:	DATE:	DRAWN:	CHECKED:
1:100	Feb 2023	JJ	
PROJECT:	DRAWING NO:	REVISION:	
TPH5A3	PL-960		

jsa jsa architects	Tavistock House Waltham Road Maidenhead SL6 3NH 01628 828 241 reception@jsaarchitects.com www.jsaarchitects.com		



FD200 Key			FD220 Key		
Symbol	Product Code	Description	Symbol	Product Code	Description
	11933	HR250 Neat Green Supply Side Ducting		11933	HR250 Neat Green Supply Side Ducting
	12102	HR250 BP Blue Extract Side Ducting		12102	HR250 BP Blue Extract Side Ducting
	46713 - 1 Metre	FD200 204mm x 60mm Right Ducting Thermal Insulated		46723 - 1 Metre	FD200 220mm x 90mm Right Ducting Thermal Insulated
	46714 - 2 Metre	FD200 204mm x 60mm Rigid Ducting		46724 - 2 Metre	FD200 204mm x 60mm Rigid Ducting Thermal Insulated
	46155 - 1 Metre	FD200 Round to Square 90° Bend 100mm Ø		46730	FD220 Thermal Round to Square 90° Bend 125mm Ø
	46160	FD200 Round to Square 90° Bend 125mm Ø		46481	FD220 Round to Square 90° Bend 150mm Ø
	46720	FD200 Thermal Round to Square 90° Bend 125mm Ø		46487	FD220 Round to Square 90° Bend 150mm Ø
	46169	FD200 Round to Square 90° Bend 150mm Ø		46490	FD220 to FD200 Adaptor 150mm Ø
	46421	FD200 Vertical T Piece - 125mmØ		46484	FD220 Round - Rectangular Adaptor 150mm Ø
	46717	FD200 T Piece Thermal Insulated		46728	FD220 Vertical 90° Bend Thermal Insulated
	46711	FD200 T Piece		46483	FD220 Vertical 90° Bend
	46715	FD200 Horizontal 90° Bend Thermal Insulated		46727	FD220 T Piece Thermal Insulated
	46159	FD200 Horizontal 90° Bend Thermal Insulated		46488	FD220 T Piece
	46726	FD200 Horizontal 45° Bend Thermal Insulated		46715	FD220 Horizontal 90° Bend Thermal Insulated
	46167	FD200 Horizontal 45° Bend		46159	FD220 Horizontal 90° Bend Thermal Insulated
	46087	FD200 Double Airbrick Adaptor Grey Airbrick Insert (2 Required)		46726	FD220 Horizontal 45° Bend Thermal Insulated
	46432	FD200 Double Airbrick Adaptor Grey Airbrick Insert (2 Required)		46485	FD220 Horizontal 45° Bend
	46718	FD200 Vertical 90° Bend Thermal Insulated		46489	FD220 Double Airbrick Adaptor Grey Airbrick Insert (2 Required)
	46164	FD200 Vertical 90° Bend		46432	FD25mmØ Duct Valve Extract - Fire Rated
	46750	FD200 Crossover Duct Connector		46017	FD25mmØ Duct Valve Extract
	46165	FD200 Round - Rectangular Adaptor 125mm Ø		46434	FD25mmØ Duct Valve Extract - Fire Rated
	46017	FD25mmØ Duct Valve Extract		46021	FD25mmØ Duct Valve Supply
	46434	FD25mmØ Duct Valve Extract - Fire Rated		46435	FD25mmØ Duct Valve Supply - Fire Rated
	46021	FD25mmØ Duct Valve Supply		46325	FD200 Firewrap
	46334	FD200 Firewrap Sleeve		46334	FD200 Firewrap Sleeve



Drawing to be read in relation to corresponding Vortice quotation VORO3405-03

Vortice Limited
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Title: Vortice MHR Design (System 4)
Thorney Farm Development
Block A3
First Floor

Client: Neil D Thomas Architect
100-102, The Woodlands
Woodlands Park,
Maldenhead, Berks, SL6 3NH

Rev:			
Drawn:	KE	Check'd:	AD
KE	AD	App:	AD
Date:	05/04/2019	Enquiry Drg No:	VORO3405-03
		MVHR_B3_1F	
		Contract Drg No:	
Scale:	1:50 @ A1		



FD200 Key			FD220 Key		
Symbol	Product Code	Description	Symbol	Product Code	Description
	11933	HR250 Neil Green Supply Side Ducting		11933	HR250 Neil Green Supply Side Ducting
	12102	HR200 BP Blue Extract Side Ducting		12102	HR200 BP Blue Extract Side Ducting
	46713 - 1 Metre	FD200 204mm x 60mm Right Ducting Thermal Insulated		46723 - 1 Metre	FD220 220mm x 90mm Right Ducting Thermal Insulated
	46714 - 2 Metre	FD200 204mm x 60mm Rigid Ducting		46724 - 2 Metre	FD220 220mm x 90mm Rigid Ducting Thermal Insulated
	46155 - 1 Metre	FD200 204mm x 60mm Rigid Ducting		46155 - 1 Metre	FD200 204mm x 60mm Rigid Ducting
	46157 - 1.5 Metre	FD200 Round to Square 90° Bend 100mm Ø		46157 - 1.5 Metre	FD220 Thermal Round to Square 90° Bend 125mm Ø
	46160	FD200 Round to Square 90° Bend 125mm Ø		46481	FD220 Round to Square 90° Bend 125mm Ø
	46720	FD200 Thermal Round to Square 90° Bend 125mm Ø		46487	FD220 Round to Square 90° Bend 150mm Ø
	46169	FD200 Round to Square 90° Bend 150mm Ø		46490	FD220 to FD200 Adaptor 150mm Ø
	46421	FD200 Vertical T Piece - 125mmØ		46484	FD220 Round - Rectangular Adaptor 150mm Ø
	46717	FD200 T Piece Thermal Insulated		46728	FD220 Vertical 90° Bend Thermal Insulated
	46711	FD200 T Piece		46483	FD220 Vertical 90° Bend Thermal Insulated
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	46159	FD200 Horizontal 90° Bend Thermal Insulated		46488	FD220 T Piece
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	46017	125mmØ Duct Valve Extract		46021	125mmØ Duct Valve Supply
	46434	125mmØ Duct Valve Extract - Fire Rated		46435	125mmØ Duct Valve Supply - Fire Rated
	46021	125mmØ Duct Valve Supply		46491	FD220 Firewrap +
	46435	125mmØ Duct Valve Supply - Fire Rated		46492	FD220 Firewrap Sleeve
	46325	FD200 Firewrap		46766	Filter Box 2 (NOX)
	46334	FD200 Firewrap Sleeve			

Vortice HR200 BP Connection Details	
	Supply to internal
	Extract from internal
	Supply from external
	Extract to external
Vort HR250 Neil Connection Details	
	Supply to internal
	Extract from internal
	Supply from external
	Extract to external

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Drawing to be read in relation to
corresponding Vortice quotation
VORO3405-03

Rev:		Client:	
Drawn:	Checked:	Neil D Thomas Architect	
KE	AD	Thornley Farm Development	
Date:	05/04/2019	Block A3	
Contract Dwg No:		Second Floor	
Scale:		1:50 @ A1	



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05 February 2019

Project Reference: VORQ3405

Project: TPH5 - Thorney Farm Development, Block A3

Niall Thomas
JSA Architects
Tavistock House
Waltham Road
Woodlands Park
Maidenhead, Berks
SL6 3NH

Dear Niall

Thank you for your enquiry regarding mechanical ventilation with heat recovery (MVHR) for the above project.

We have prepared our quotation on the basis that the development is being constructed to the criteria of the Building Regulations Approved Document F: Means of Ventilation 2010 (ADF2010). The detailed guidance of The Domestic Ventilation Compliance Guide 2010 (DVCG2010) should also be complied with.

With reference to your drawings we are pleased to enclose our quotation for this project as follows:

Unit Information

We have quoted for our Vort HR200 BP and Vort Neti HR 250 and associated ductwork components. Moist air will be extracted from the wet rooms i.e. kitchen and bathroom areas, by ceiling mounted adjustable extract valves (code: 46017 - 125mmØ) and the warmed fresh air will be supplied to the habitable rooms i.e. bedrooms, lounge/dining areas, by ceiling mounted adjustable circular supply valves (code: 46021 -125mmØ). The Vort HR200 BP and Vort Neti HR 250 is a hard wired unit and is boosted by use of switches quoted (46426) and the controller supplied. The ducting quoted is appropriate for the volumes and void space available.

You should also be aware that the system will require airflow rates in accordance with ADF2010 to be properly set-up and commissioned by fan speed and room duct valve adjustment in order to set up the machine for its correct use.

Cooker hoods and associated ductwork have not been included within this quotation. However if cooker hoods are to be installed, they will need to be installed on recirculation mode.

Terminations

We have quoted for our FD200 Double Airbrick Adaptor (code 46087) and Universal Airbrick Insert in grey (46432). These are also available in white (46510) brown (46511) beige (46512) or terracotta (46513).

Fire Wrap Information

We were unable to establish from the drawings the positions of any fire separating elements. If you are able to advise us of the locations and construction type of any such fire separating elements where fire wrap is necessary we can provide an additional quotation. **Please note it is the responsibility of others to ensure that Fire Wrap has been used correctly where any ducts pass through a fire barrier**

Design Notes

We have marked up your drawings with our recommendations.

The ducts are shown in indicative positions. Please note that it is important that holes in joists are sized and positioned according to the manufacturers' instructions. Inlet and extract terminals should be kept a minimum of 300mm apart. Location of these terminals should be kept clear of flue exhausts (see BS 5440)

The ducting quoted may be of sufficient length for more than one duct run. It may also be necessary to use off cuts of the duct to aid in attaching the spigot of the fan to the plenum (Round to Square bend).

In addition, the most suitable extract point in kitchens is between the 2 main sources of moisture and as a consequence we recommend that terminals in be positioned mid-way between the cooker and the sink.

Your note about the MVHR system 'be sufficient to prevent summer overheating'. It is not the role or the function of a MVHR ventilation system to prevent overheating during warm periods. This is achieved by means of purge ventilation, such as opening windows or by a separate mechanical means, please refer to paragraph 5.7 of Approved Document F 2010.

Ducting quoted may be of sufficient length for more than one duct run. It may also be necessary to use off cuts of flexible duct to aid in attaching the spigot of the fan/grille to the plenum (Round to Square bend). The DVCG2010 includes guidance *"Flexible duct should be pulled taught to ensure that the full internal diameter is obtained and flow resistance minimised"*.

In addition, provision must be made to allow good air transfer throughout the dwelling. ADF states on page 24 **"Air transfer between rooms - To ensure good transfer of air throughout the dwelling, there should be an undercut of minimum area 7600mm² in all internal doors above the floor finish (equivalent to an undercut of 10mm for a standard 760mm width door).**

All fans mounted in any of the locations within a bathroom/en-suite (as detailed in the current IEE Wiring Regulations) will require an RCD.

In addition, ADF states that "Fans and ducting placed in or passing through unheated voids or loft spaces should be insulated to reduce the possibility of condensation forming". The flat duct system should be insulated on site.

It is recommended that any bends in the short pieces of flexible duct that are required should have a minimum internal radius equal to the diameter of the duct.

In accordance with the DVCG2010, permanent connection and sealing of all joints with an appropriate non-hardening silicone sealant is required. In addition, we recommend that duct tape (code 46319) be used over the cured silicone joint (please note that the silicone sealant would be supplied by others). It is essential to ensure that an airtight seal is achieved. It is important that where applicable all rotating spigots are included in this sealing process.

We trust that this quotation meets with your approval and look forward to hearing from you. All products are subject to availability at the time of order placement. In the meantime, should you require any further information or clarification, please do not hesitate to contact your Area Business Manager, Russell Beardsworth on mobile 07764 357776 or our Technical Department.

Yours Sincerely

[Technical](#) Department
Vortice Limited

Cc Russell Beardsworth



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Please note:

- This proposal is based on information provided at this time and could be subject to change and are based on the drawing received being typical and current.
- The proposal assumes that the void spaces are of a size that can allow for the ductwork.
- These prices are based on special nett prices and are not subject to any further discount.
- All products are subject to availability at the time of order placement.
- All products are available from our National Network of Approved Stockists. A list of stockists is available either from our website www.vortice.ltd.uk or upon request.

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