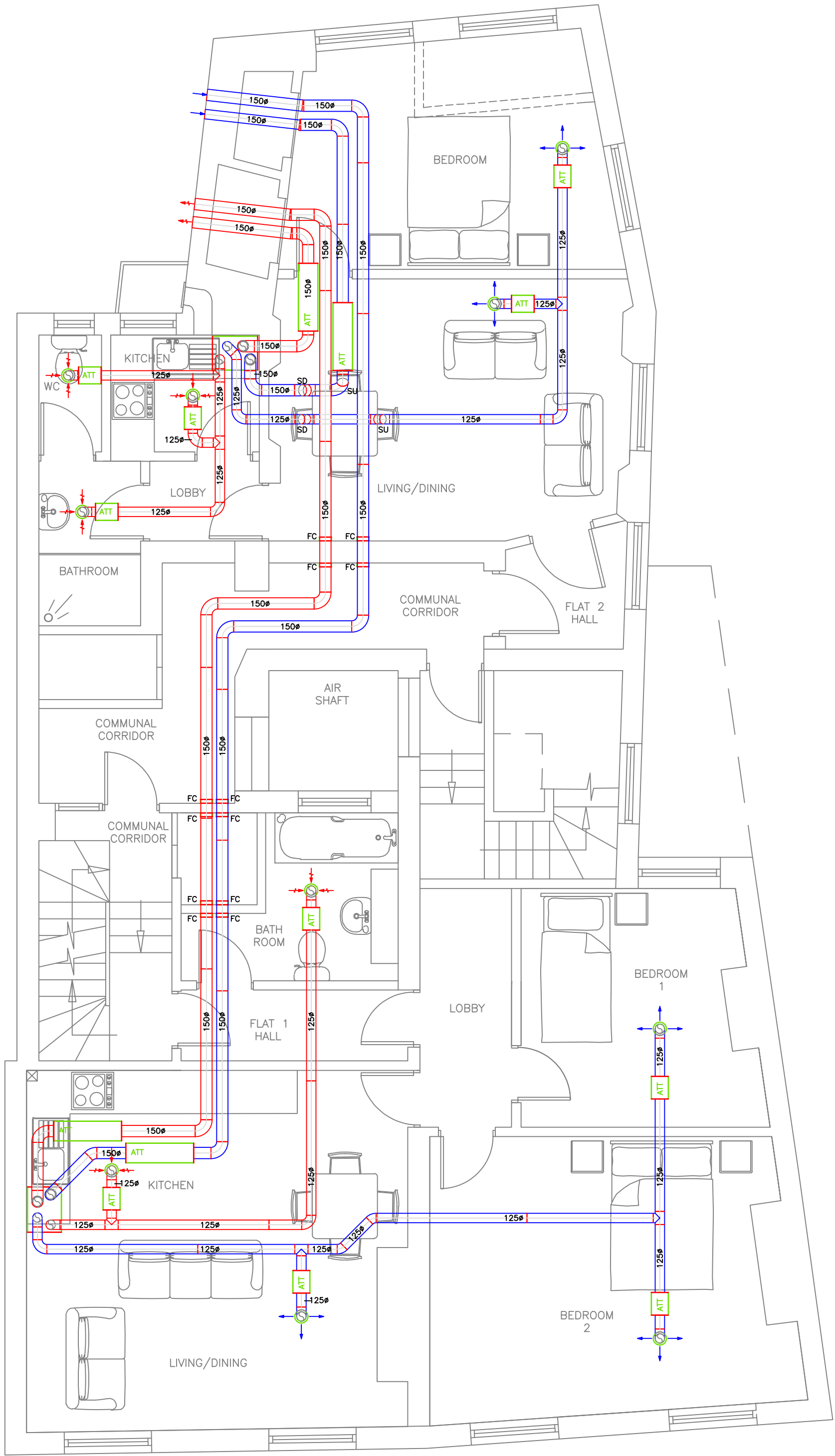
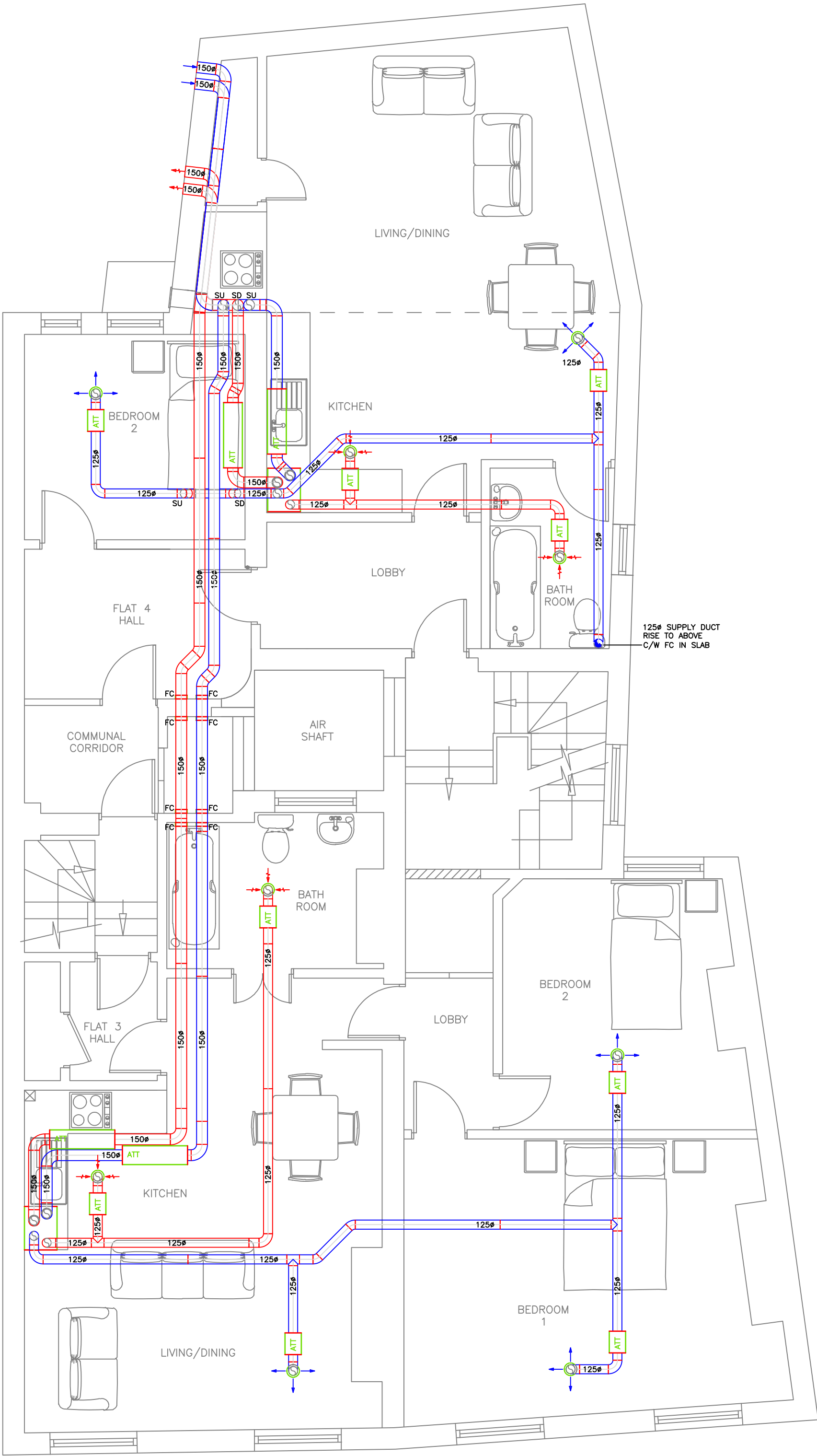
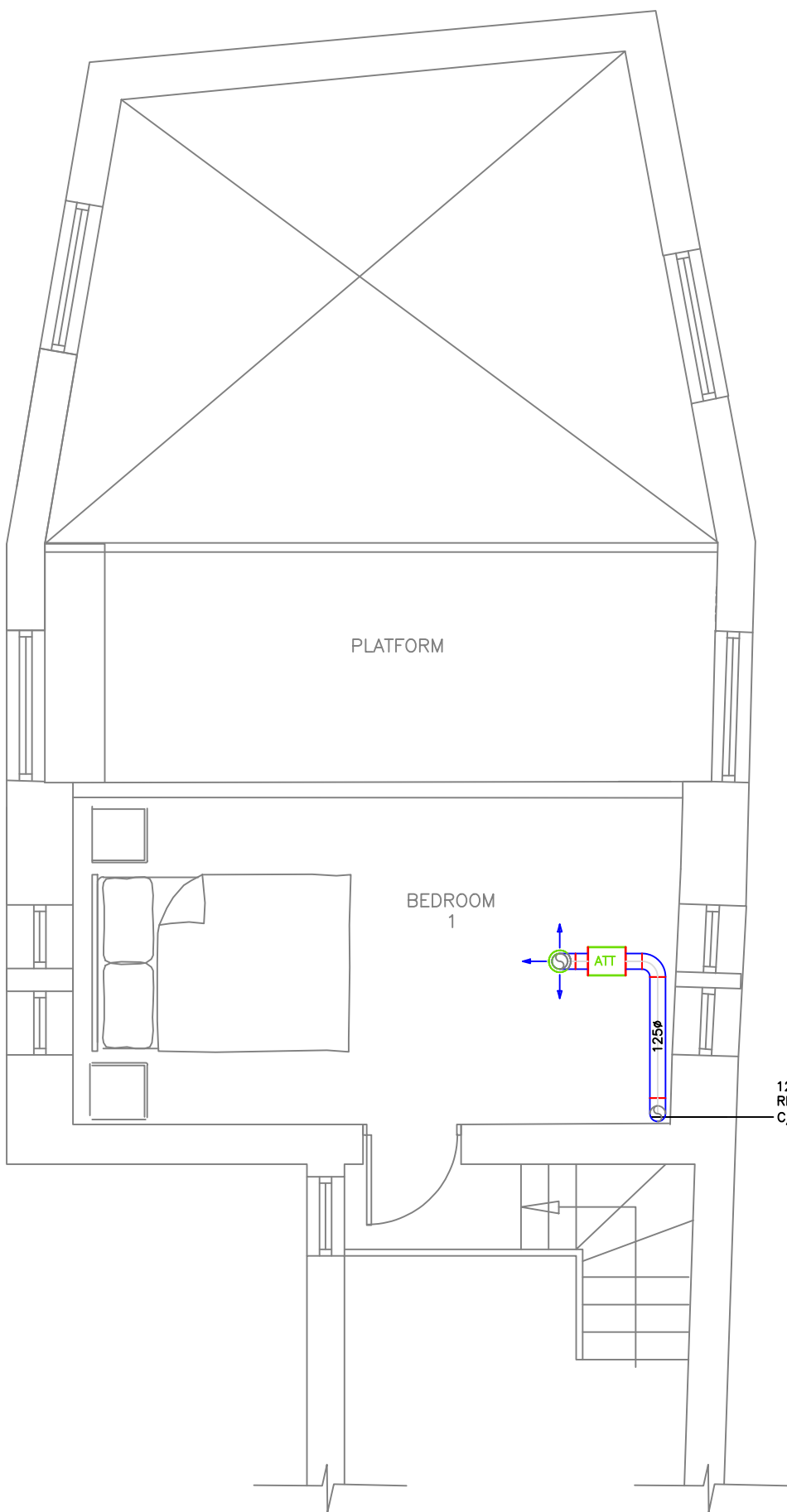




LEVEL 01



LEVEL 02



LEVEL 03 (MEZZANINE)

FLAT 1			
EXTRACT	Required	Boost	Required Trickle
	(m)	(m)	(m)
Kitchen	13.0	11.4	
Bathroom	8.0	7.0	
Total	21.0	18.4	
SUPPLY			
	Required	Boost	Required Trickle
	(m)	(m)	(m)
Living/Dining	7.8	6.9	
Bedroom 1	4.7	4.1	
Bedroom 2	8.5	7.4	
Total	21.0	18.4	

(Values for rates based on dwelling design for permeability less than 9x10m² @ 5Pa. From then 5Pa the rates will be lower)

FLAT 2			
EXTRACT	Required	Boost	Required Trickle
	(m)	(m)	(m)
Kitchen	13.0	6.3	
Bathroom	8.0	3.9	
WC	4.0	2.9	
Total	25.0	13.0	
SUPPLY			
	Required	Boost	Required Trickle
	(m)	(m)	(m)
Living/Dining	15.2	7.3	
Bedroom	11.8	5.7	
Total	27.0	13.0	

(Values for rates based on dwelling design for permeability less than 9x10m² @ 5Pa. From then 5Pa the rates will be lower)

FLAT 3			
EXTRACT	Required	Boost	Required Trickle
	(m)	(m)	(m)
Kitchen	14.3	10.0	
Bathroom	8.8	7.4	
Total	23.1	19.4	
SUPPLY			
	Required	Boost	Required Trickle
	(m)	(m)	(m)
Living/Dining	8.7	7.3	
Bedroom 1	9.1	7.6	
Bedroom 2	5.3	4.5	
Total	23.1	19.4	

(Values for rates based on dwelling design for permeability less than 9x10m² @ 5Pa. From then 5Pa the rates will be lower)

FLAT 4			
EXTRACT	Required	Boost	Required Trickle
	(m)	(m)	(m)
Kitchen	16.4	14.9	
Bathroom	10.1	8.2	
Total	26.5	24.1	
SUPPLY			
	Required	Boost	Required Trickle
	(m)	(m)	(m)
Living/Dining	13.0	11.6	
Bedroom 1	9.8	9.0	
Bedroom 2	3.7	3.3	
Total	26.5	24.1	

(Values for rates based on dwelling design for permeability less than 9x10m² @ 5Pa. From then 5Pa the rates will be lower)

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General Notes:

THIS SYSTEM HAS BEEN DESIGNED TO COMPLY WITH 2010 BUILDING REGULATIONS PART F MEANS OF VENTILATION.

THE SYSTEM MUST BE INSTALLED AND COMMISSIONED AS PER THE DESIGN SPECIFICATION TO ENSURE COMPLIANCE WITH THE ABOVE MENTIONED.

THE COMMISSIONED SYSTEM MUST COMPLY WITH THE 18th EDITION (SEE 2017) PART 7 (ADDITIONAL WORKS)

Legend:

Standard Air Extract: RED MAGNETA DUCT

Pre-Filtered Fresh Air Supply: BLUE CYAN DUCT

Fire Color: FC (One Side to each side of the wall)

Fire Slope: FS (Through the wall)

Sel Down: SD (In direction of airflow)

Sel Up: SU (In direction of airflow)

Volume Control Damper: VCD

Complete VCB: CVC

Attenuator: ATT

Project Notes:

UNIT TYPE:
Ductless HCV 300 MHR unit.

UNIT LOCATION:
Vertically wall mounted in the kitchen.

UNIT OPERATION:
Unit operation: integral humidifier & CO₂ sensor.

DUCTING & DIFFUSERS:
Un-insulated 125mm galvanneal spiral ducting connecting to 125mm white metal adjustable 1 hour fire rated offshoots.

EXTERNAL TERMINATIONS:
Insulated 125mm (just 200mm) galvanneal spiral ducting to external terrace grilles.

GENERAL:
Pre-insulated ducting is required if the ducting is installed in a cold, un-insulated void.

Fire collars required from the MHR unit up to ceiling and when the ducting passes through the external corridor and floor slab.

Exhaust & intake terminals to have a minimum separation distance of 1m.

The MHR unit requires a condensate drain to run to the nearest internal waste system (Pipework waste velocity trap or similar is recommended).

125mm SUPPLY DUCT RISE TO ABOVE C/W FC IN SLAB

125mm SUPPLY DUCT RISE FROM BELOW C/W FC IN SLAB

125mm SUPPLY DUCT RISE FROM BELOW C/W FC IN SLAB

125mm SUPPLY DUCT RISE FROM BELOW C/W FC IN SLAB

125mm SUPPLY DUCT RISE FROM BELOW C/W FC IN SLAB

125mm SUPPLY DUCT RISE FROM BELOW C/W FC IN SLAB

125mm SUPPLY DUCT RISE FROM BELOW C/W FC IN SLAB

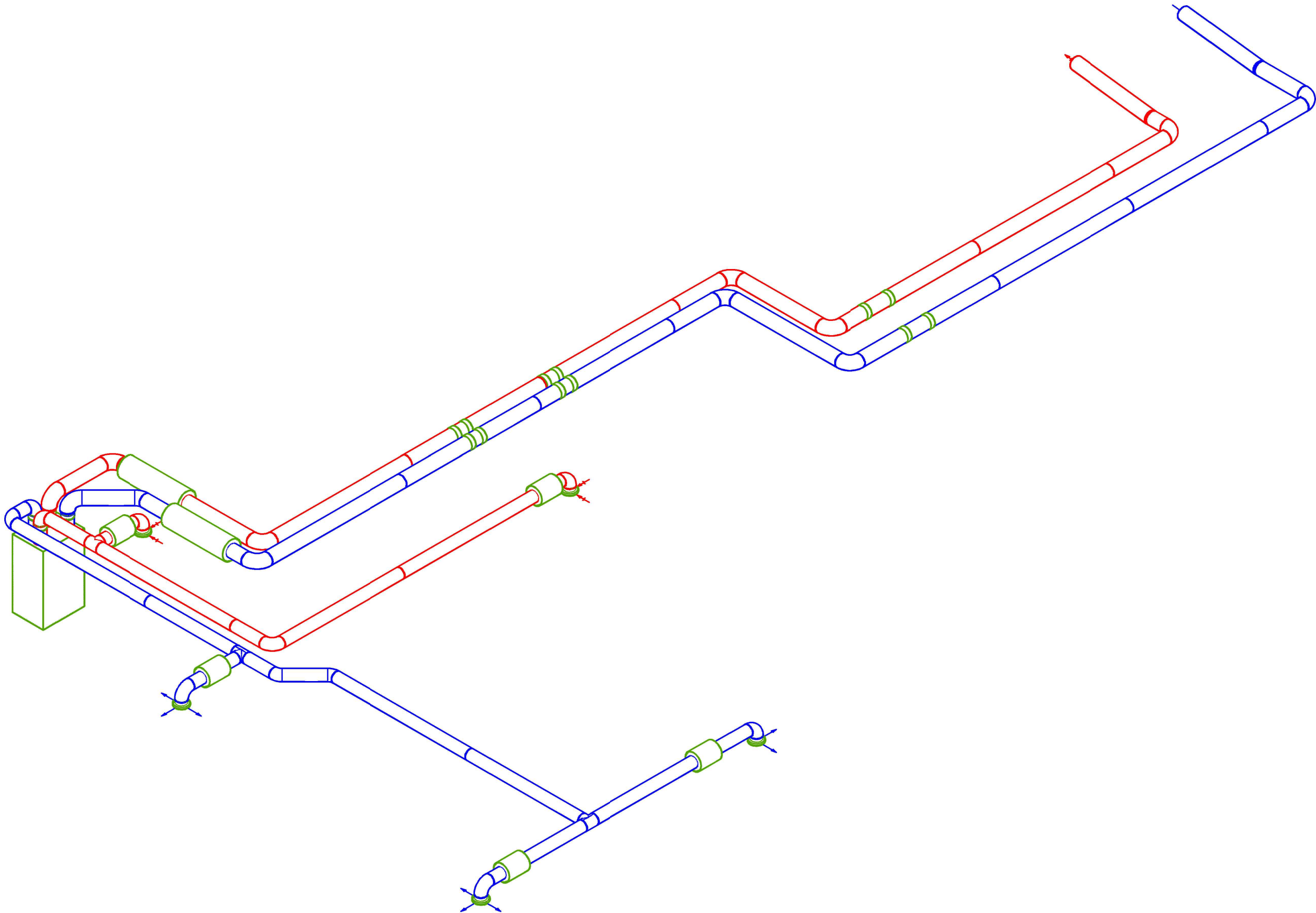
125mm SUPPLY DUCT RISE FROM BELOW C/W FC IN SLAB

125mm SUPPLY DUCT RISE FROM BELOW C/W FC IN SLAB

125mm SUPPLY DUCT RISE FROM BELOW C/W FC IN SLAB

125mm SUPPLY DUCT RISE FROM BELOW C/W FC IN SLAB

125mm SUPPLY DUCT RISE FROM BELOW C/W FC IN SLAB



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General Notes:

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THE COMMISSIONED SYSTEM MUST COMPLY WITH THE 18th EDITION IEE BS7671 PART 7 (ADDITIONAL WORKS).

Legend:

Stale/Moist Air Extract: RED/MAGENTA DUCT
Pre-Warmed Fresh Air Supply: BLUE/CYAN DUCT
Fire Collar: FC (One fitted to each side of the wall/slab)
Fire Sleeve: FS (Through the wall)
Set Down: SD (in direction of airflow)
Set Up: SU (in direction of airflow)
Volume Control Damper: VCD
Complete With: C/W
Attenuator: ATT

Project Notes:

UNIT TYPE:
Dantherm HCV 300 MVHR unit.

UNIT LOCATION:
Vertically wall mounted in the kitchen.

UNIT OPERATION:
Wired controller, integral humidistat & CO² sensor.

DUCTING & DIFFUSERS:
Un-insulated 125mmØ galvanised spiral ducting connecting to 125mmØ white metal adjustable 1 hour fire rated diffusers.

EXTERNAL TERMINATIONS:
Insulated 150mmØ (old: 200mmØ) galvanised spiral ducting to external louvre grilles.

GENERAL:
Pre-insulated ducting is required if the ducting is installed in a cold, un-insulated void.

Fire collars required from the MVHR unit spigot to ceiling and when the ducting passes through the communal corridors and floor slab.

Exhaust & intake terminals to have a minimum separation distance of 1m.

The MVHR unit requires a condensate drain to run to the nearest internal waste system (HepVo waste valve/dry trap or similar is recommended).

P01	PRELIMINARY ISSUE	GR	22-04-25
Rev.	Description	Author	Date

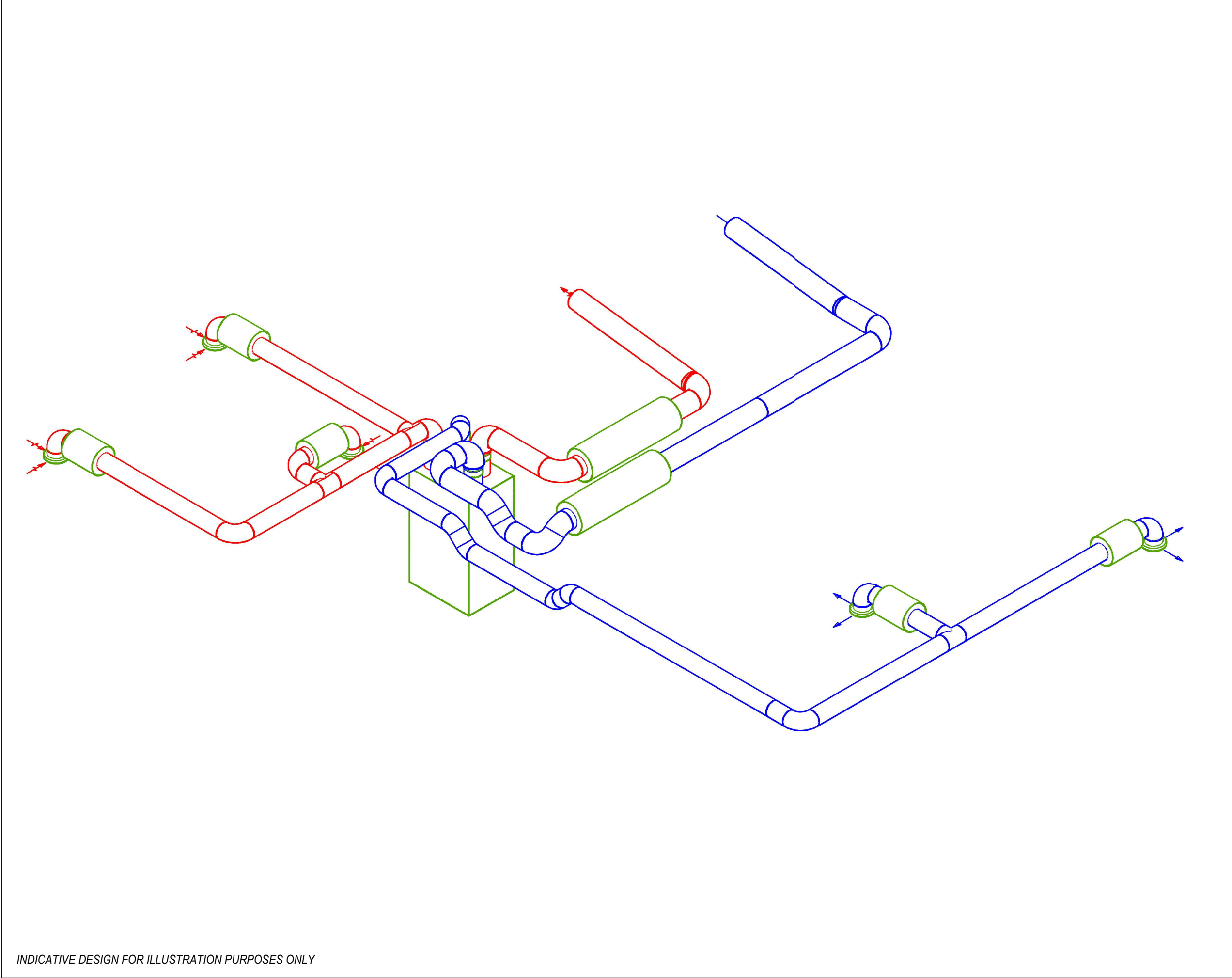
Status **PRELIMINARY ISSUE**



Project Title
157 MILTON ROAD
GRAVESEND
KENT

Drawing Title
FLAT 1
MECHANICAL VENTILATION
ISOMETRIC VIEW

Project No.	Discipline	Engineer
0580	Mechanical	GR
Author	Date	Scale
GR	APR-25	NTS@A3
Drawing Number		Revision
0580-CH-XX-XX-M-ISO-1002		P01



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THE COMMISSIONED SYSTEM MUST COMPLY WITH THE 18th EDITION IEE BS7671 PART 7 (ADDITIONAL WORKS).

Legend:

Stale/Moist Air Extract: RED/MAGENTA DUCT
Pre-Warmed Fresh Air Supply: BLUE/CYAN DUCT
Fire Collar: FC (One fitted to each side of the wall/slab)
Fire Sleeve: FS (Through the wall)
Set Down: SD (in direction of airflow)
Set Up: SU (in direction of airflow)
Volume Control Damper: VCD
Complete With: C/W
Attenuator: ATT

Project Notes:

UNIT TYPE:
Dantherm HCV 300 MVHR unit.

UNIT LOCATION:
Vertically wall mounted in the kitchen.

UNIT OPERATION:
Wired controller, integral humidistat & CO² sensor.

DUCTING & DIFFUSERS:
Un-insulated 125mmØ galvanised spiral ducting connecting to 125mmØ white metal adjustable 1 hour fire rated diffusers.

EXTERNAL TERMINATIONS:
Insulated 150mmØ (old: 200mmØ) galvanised spiral ducting to external louvre grilles.

GENERAL:
Pre-insulated ducting is required if the ducting is installed in a cold, un-insulated void.

Fire collars required from the MVHR unit spigot to ceiling and when the ducting passes through the communal corridors and floor slab.

Exhaust & intake terminals to have a minimum separation distance of 1m.

The MVHR unit requires a condensate drain to run to the nearest internal waste system (HepVo waste valve/dry trap or similar is recommended).

P01	PRELIMINARY ISSUE	GR	22-04-25
Rev.	Description	Author	Date

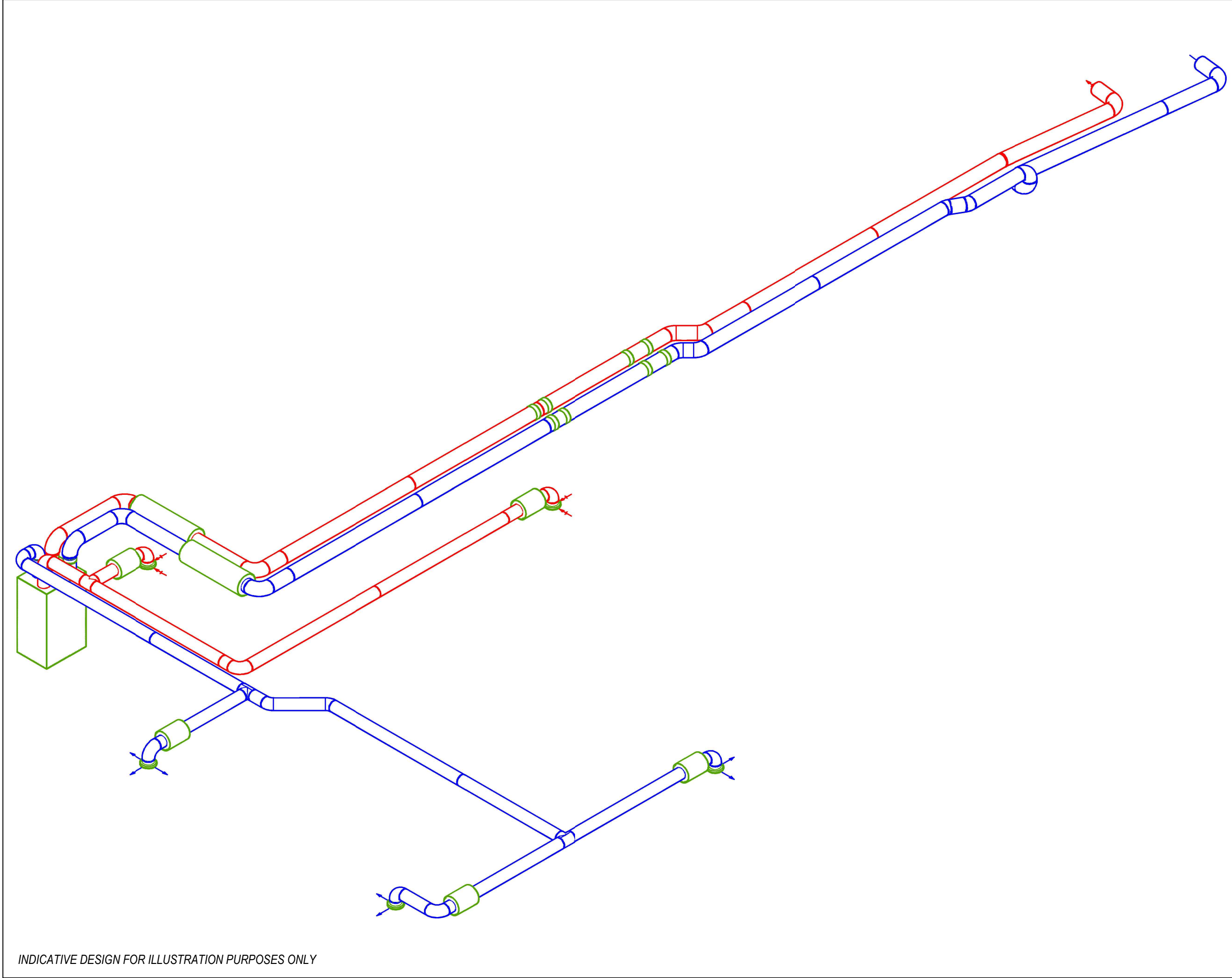
Status **PRELIMINARY ISSUE**



Project Title
157 MILTON ROAD
GRAVESEND
KENT

Drawing Title
FLAT 2
MECHANICAL VENTILATION
ISOMETRIC VIEW

Project No.	Discipline	Engineer
0580	Mechanical	GR
Author	Date	Scale
GR	APR-25	NTS@A3
Drawing Number		Revision
0580-CH-XX-XX-M-ISO-1003		P01



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THE COMMISSIONED SYSTEM MUST COMPLY WITH THE 18th EDITION IEE BS7671 PART 7 (ADDITIONAL WORKS).

Legend:

Stale/Moist Air Extract: RED/MAGENTA DUCT
Pre-Warmed Fresh Air Supply: BLUE/CYAN DUCT
Fire Collar: FC (One fitted to each side of the wall/slab)
Fire Sleeve: FS (Through the wall)
Set Down: SD (in direction of airflow)
Set Up: SU (in direction of airflow)
Volume Control Damper: VCD
Complete With: C/W
Attenuator: ATT

Project Notes:

UNIT TYPE:
Dantherm HCV 300 MVHR unit.

UNIT LOCATION:
Vertically wall mounted in the kitchen.

UNIT OPERATION:
Wired controller, integral humidistat & CO₂ sensor.

DUCTING & DIFFUSERS:
Un-insulated 125mmØ galvanised spiral ducting connecting to 125mmØ white metal adjustable 1 hour fire rated diffusers.

EXTERNAL TERMINATIONS:
Insulated 150mmØ (old: 200mmØ) galvanised spiral ducting to external louvre grilles.

GENERAL:
Pre-insulated ducting is required if the ducting is installed in a cold, un-insulated void.

Fire collars required from the MVHR unit spigot to ceiling and when the ducting passes through the communal corridors and floor slab.

Exhaust & intake terminals to have a minimum separation distance of 1m.

The MVHR unit requires a condensate drain to run to the nearest internal waste system (HepVo waste valve/dry trap or similar is recommended).

P01	PRELIMINARY ISSUE	GR	22-04-25
Rev.	Description	Author	Date

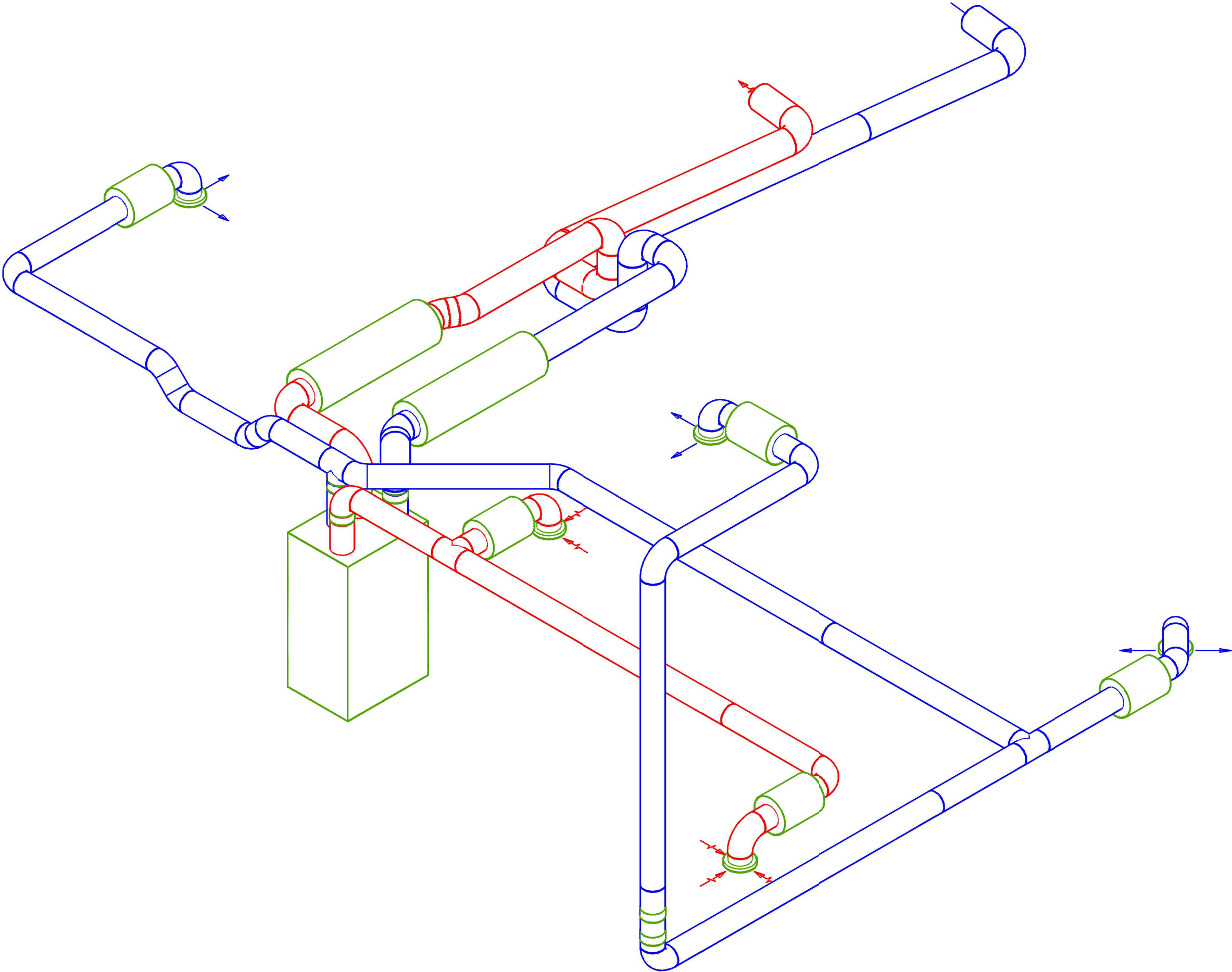
Status **PRELIMINARY ISSUE**



Project Title
157 MILTON ROAD
GRAVESEND
KENT

Drawing Title
FLAT 3
MECHANICAL VENTILATION
ISOMETRIC VIEW

Project No.	Discipline	Engineer
0580	Mechanical	GR
Author	Date	Scale
GR	APR-25	NTS@A3
Drawing Number		Revision
0580-CH-XX-XX-M-ISO-1004		P01



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THE COMMISSIONED SYSTEM MUST COMPLY WITH THE 18th EDITION IEE BS7671 PART 7 (ADDITIONAL WORKS).

Legend:
Stale/Moist Air Extract: RED/MAGENTA DUCT
Pre-Warmed Fresh Air Supply: BLUE/CYAN DUCT
Fire Collar: FC (One fitted to each side of the wall/slab)
Fire Sleeve: FS (Through the wall)
Set Down: SD (in direction of airflow)
Set Up: SU (in direction of airflow)
Volume Control Damper: VCD
Complete With: C/W
Attenuator: ATT

Project Notes:
UNIT TYPE:
Dantherm HCV 300 MVHR unit.
UNIT LOCATION:
Vertically wall mounted in the kitchen.
UNIT OPERATION:
Wired controller, integral humidistat & CO² sensor.
DUCTING & DIFFUSERS:
Un-insulated 125mmØ galvanised spiral ducting connecting to 125mmØ white metal adjustable 1 hour fire rated diffusers.
EXTERNAL TERMINATIONS:
Insulated 150mmØ (old: 200mmØ) galvanised spiral ducting to external louvre grilles.
GENERAL:
Pre-insulated ducting is required if the ducting is installed in a cold, un-insulated void.

Fire collars required from the MVHR unit spigot to ceiling and when the ducting passes through the communal corridors and floor slab.

Exhaust & intake terminals to have a minimum separation distance of 1m.
The MVHR unit requires a condensate drain to run to the nearest internal waste system (HepVo waste valve/dry trap or similar is recommended).

P01	PRELIMINARY ISSUE	GR	22-04-25
Rev.	Description	Author	Date

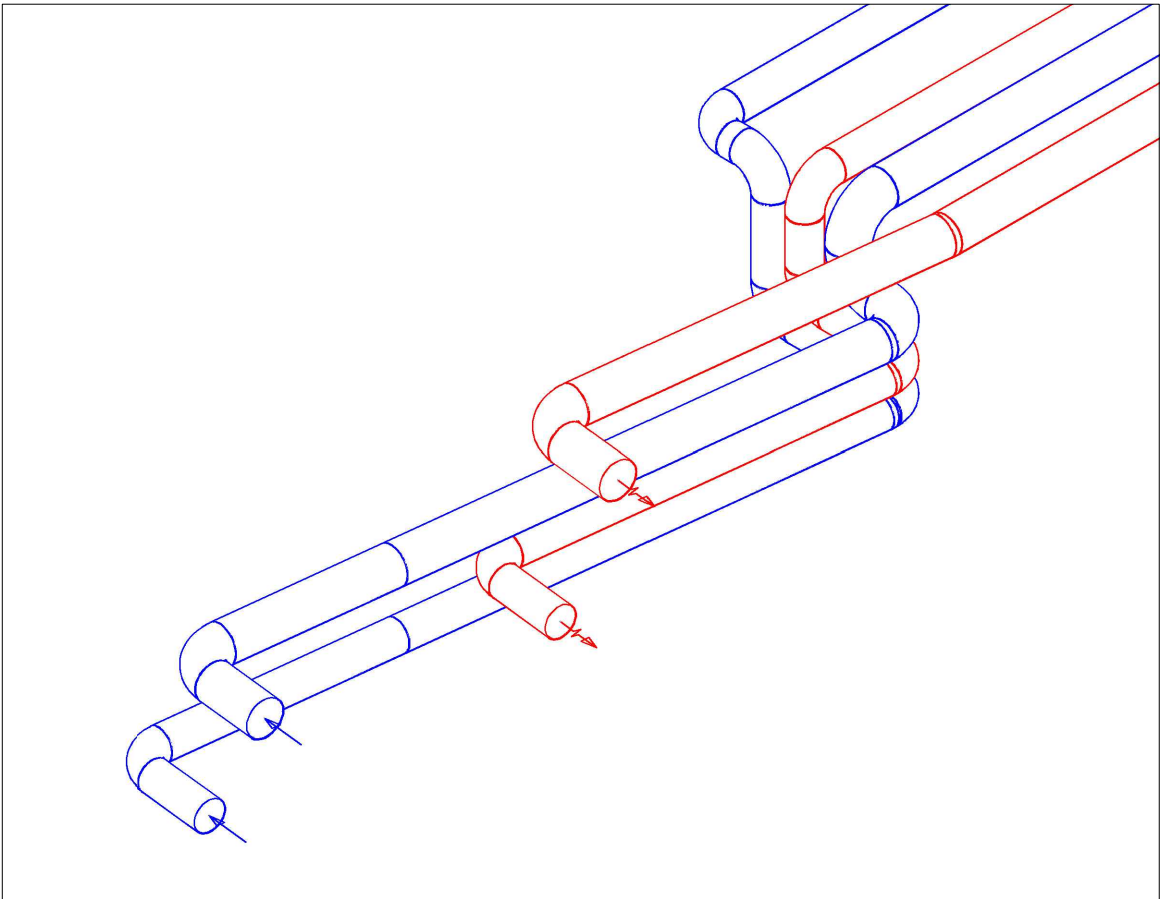
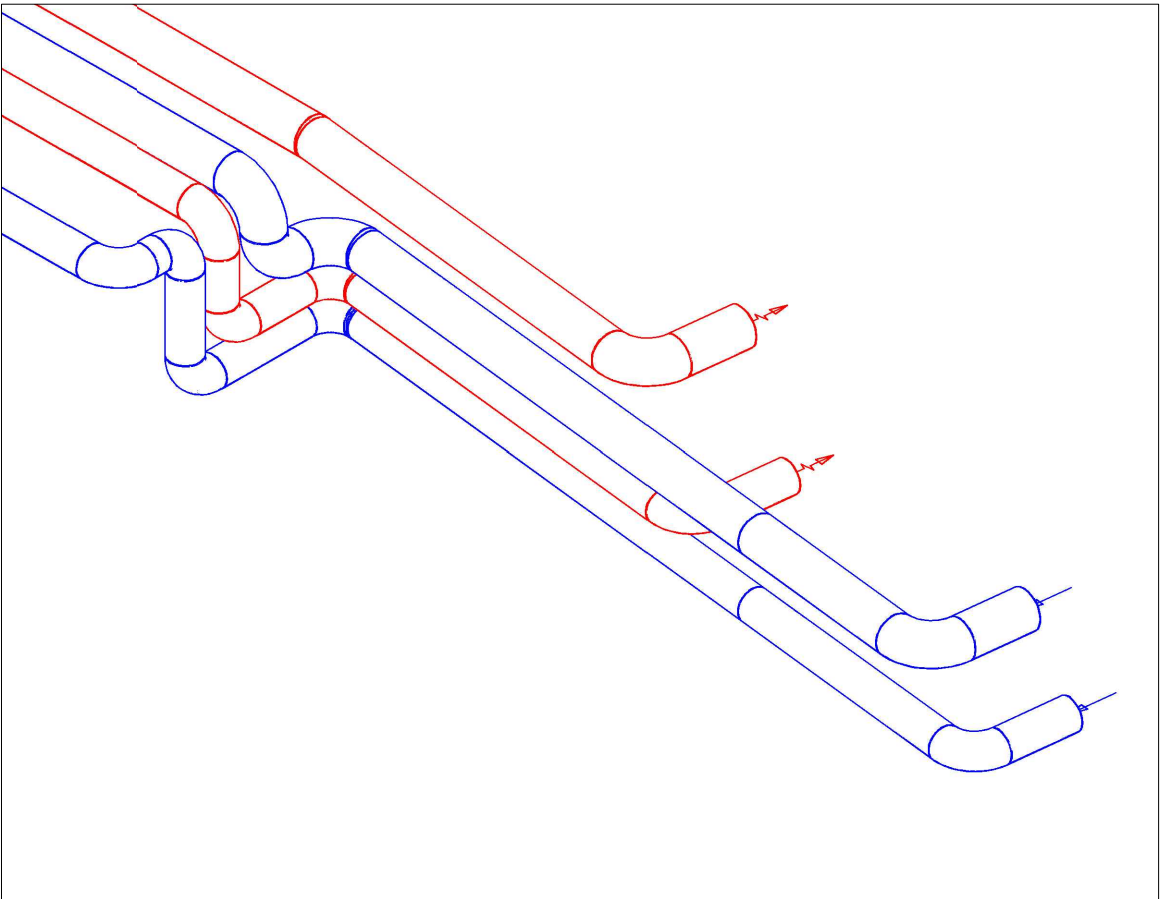
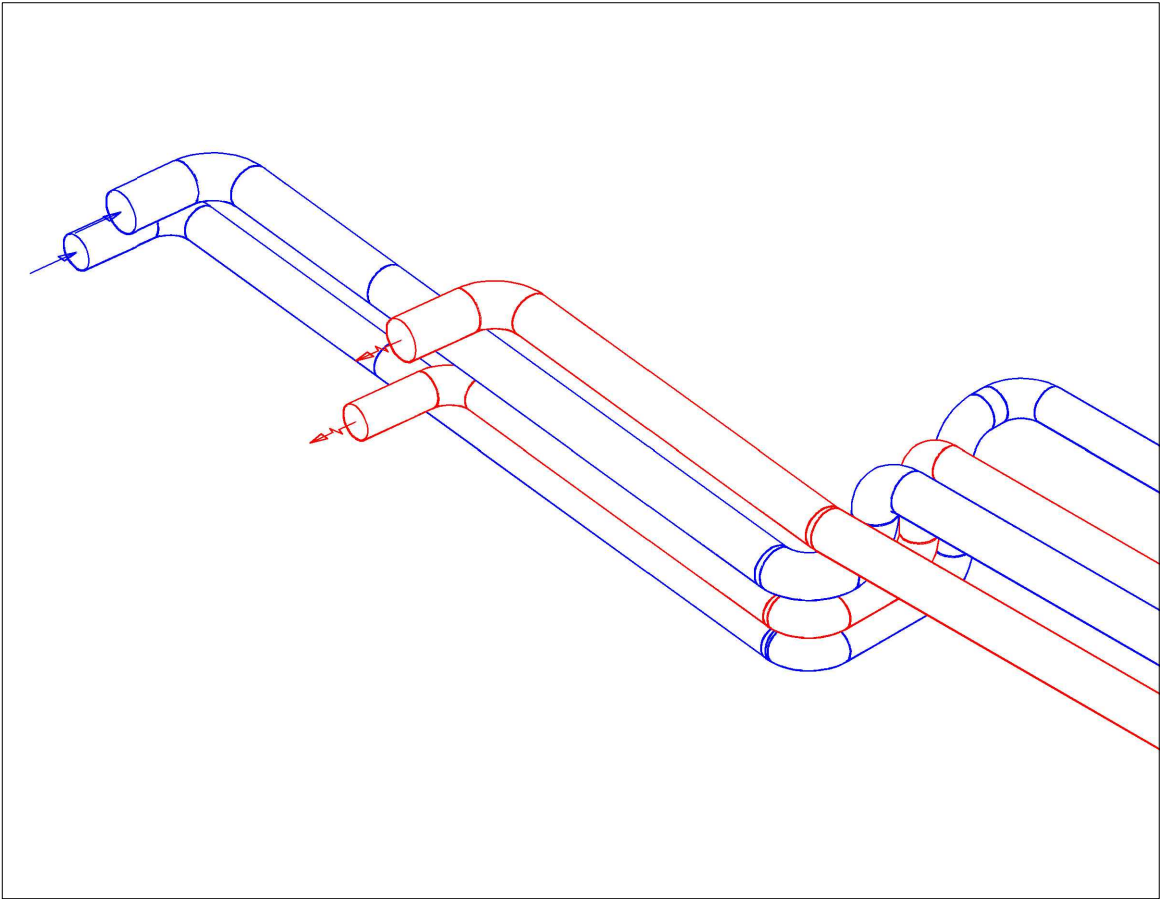
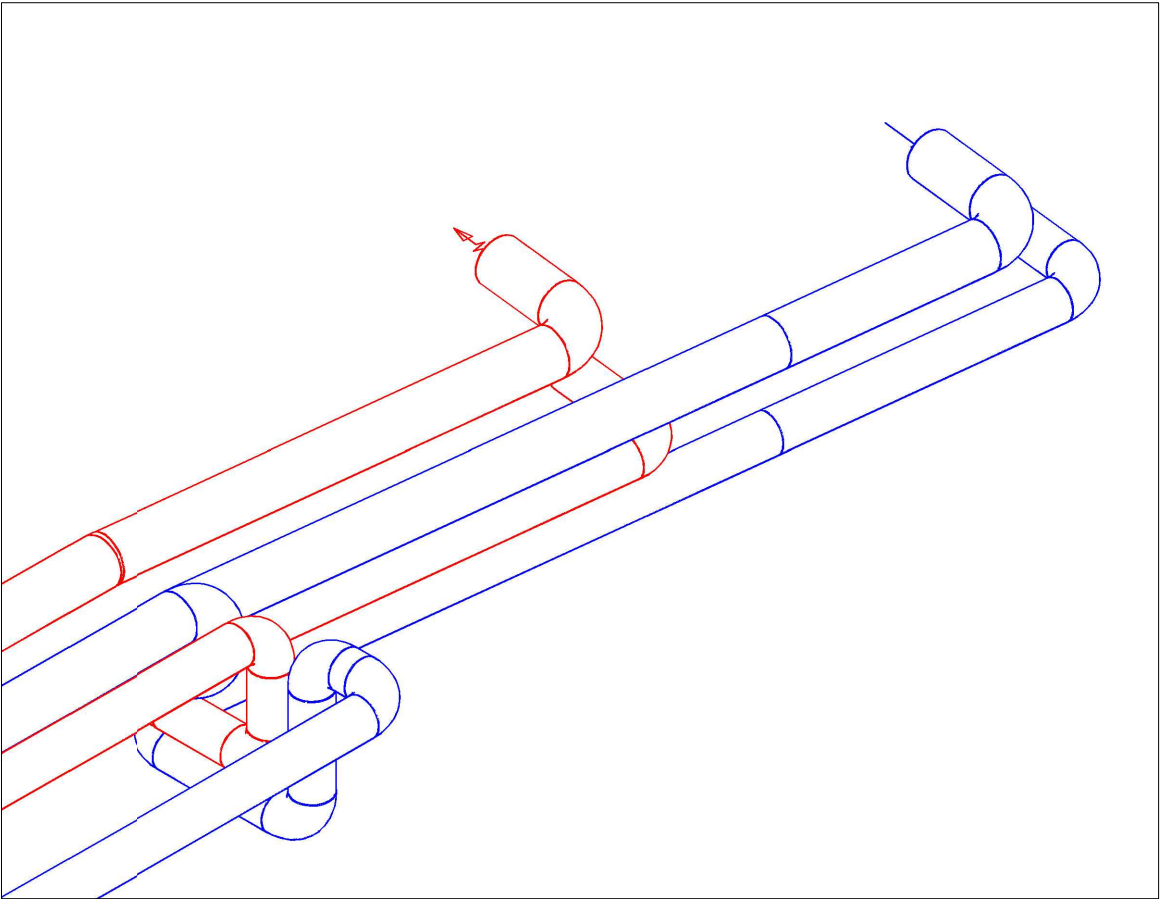
Status **PRELIMINARY ISSUE**



Project Title
157 MILTON ROAD
GRAVESEND
KENT

Drawing Title
FLAT 4
MECHANICAL VENTILATION
ISOMETRIC VIEW

Project No.	Discipline	Engineer
0580	Mechanical	GR
Author	Date	Scale
GR	APR-25	NTS@A3
Drawing Number		Revision
0580-CH-XX-XX-M-ISO-1005		P01



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THE COMMISSIONED SYSTEM MUST COMPLY WITH THE 18th EDITION IEE BS7671 PART 7 (ADDITIONAL WORKS).

Legend:
Stale/Moist Air Extract: RED/MAGENTA DUCT
Pre-Warmed Fresh Air Supply: BLUE/CYAN DUCT
Fire Collar: FC (One fitted to each side of the wall/slab)
Fire Sleeve: FS (Through the wall)
Set Down: SD (in direction of airflow)
Set Up: SU (in direction of airflow)
Volume Control Damper: VCD
Complete With: C/W
Attenuator: ATT

Project Notes:
UNIT TYPE:
Dantherm HCV 300 MVHR unit.
UNIT LOCATION:
Vertically wall mounted in the kitchen.
UNIT OPERATION:
Wired controller, integral humidistat & CO₂ sensor.
DUCTING & DIFFUSERS:
Un-insulated 125mmØ galvanised spiral ducting connecting to 125mmØ white metal adjustable 1 hour fire rated diffusers.
EXTERNAL TERMINATIONS:
Insulated 150mmØ (old: 200mmØ) galvanised spiral ducting to external louvre grilles.
GENERAL:
Pre-insulated ducting is required if the ducting is installed in a cold, un-insulated void.
Fire collars required from the MVHR unit spigot to ceiling and when the ducting passes through the communal corridors and floor slab.
Exhaust & intake terminals to have a minimum separation distance of 1m.
The MVHR unit requires a condensate drain to run to the nearest internal waste system (HepVo waste valve/dry trap or similar is recommended).

P01	PRELIMINARY ISSUE	GR	22-04-25
Rev.	Description	Author	Date

Status **PRELIMINARY ISSUE**



Project Title
157 MILTON ROAD
GRAVESEND
KENT

Drawing Title
EXTERNAL DUCT DETAIL (FLAT 3 & 4)
MECHANICAL VENTILATION
ISOMETRIC VIEW

Project No.	Discipline	Engineer
0580	Mechanical	GR
Author	Date	Scale
GR	APR-25	NTS@A3
Drawing Number		Revision
0580-CH-XX-XX-M-ISO-1006		P01