



Cross Road Angmering

Ventilation Report

Version 1.0
Issued May 2020



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All dimensions are in mm unless otherwise stated.
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All works shall be carried out in accordance with the Specification.
Contractor must verify all dimensions on site before commencing any works.

NOTES

Internal ducts:
All ducts to be Comfotube dia75mm. All ducts to remain within the thermal envelope. If any ducts run outside the thermal envelope, please wrap with 25mm mineral fibre foil faced duct insulation.

Electrical requirements:
A boost switch to be installed in the kitchen (for easy access). A 1mm 4 core flexible cable should be run between the MVHR unit location and location of the boost switch. A separate fused spur supply is required close to the location of the MVHR unit.

Installation of the unit should be in accordance with the current editions of Building Regulations and BS7671: IEE Wiring Regulations.

The design, material specification and installation must only be carried out by 'competent persons'. Electrical installation must be carried out by a qualified Electrician.

A	Basement Ventilation Layout	KM	KB	MAY '20
REV	DESCRIPTION	DES	CH	DATE

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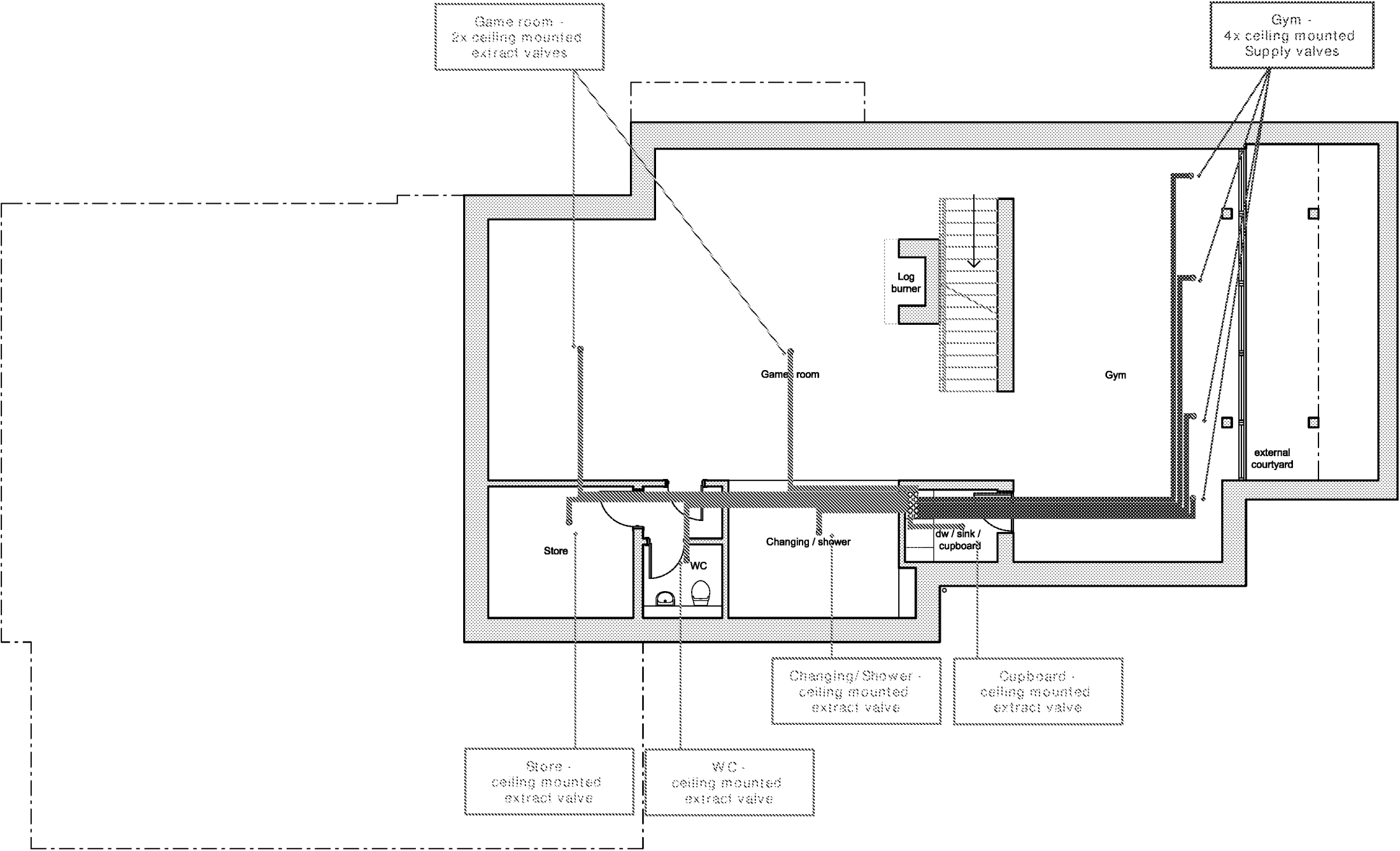
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London SE10NZ

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Martin Osborne-Shaw

PROJECT
Cross Road Angmering

DRAWING TITLE
Basement Ventilation Layout

DRAWING NUMBER	REVISION
J000983-800	A
SCALE 1:100@A3	DATE MAY '20
DESIGNED KM	CHECKED KB



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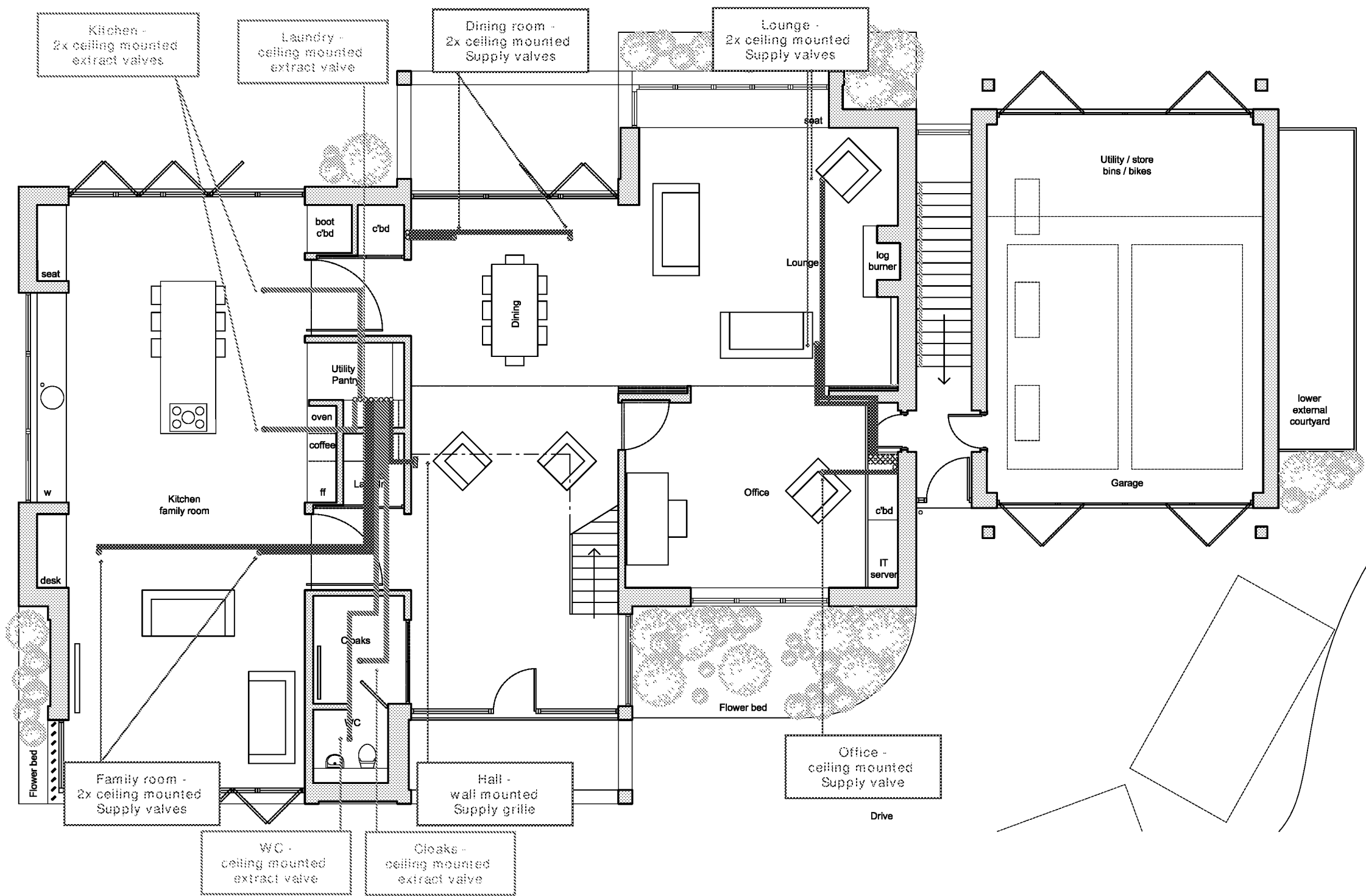
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NOTES

Ventilation rates:
All systems have been designed to operate continuously to provide ventilation rates that comply with Building Regulation Part F - System 4 Continuous Supply and Extract Ventilation with Heat Recovery.

The system has been designed to provide ventilation rates that comply with requirements of Passivhaus Standard.

Ducts leading to outside:
The Intake & Exhaust ducts (leading from the extractor unit to the outside) to be:
Ubbink pre-insulated duct (external diameter 212mm - internal diameter 180mm).



REV	DESCRIPTION	DES	CH	DATE
A	Ground Floor Ventilation Layout	KM	KB	MAY '20



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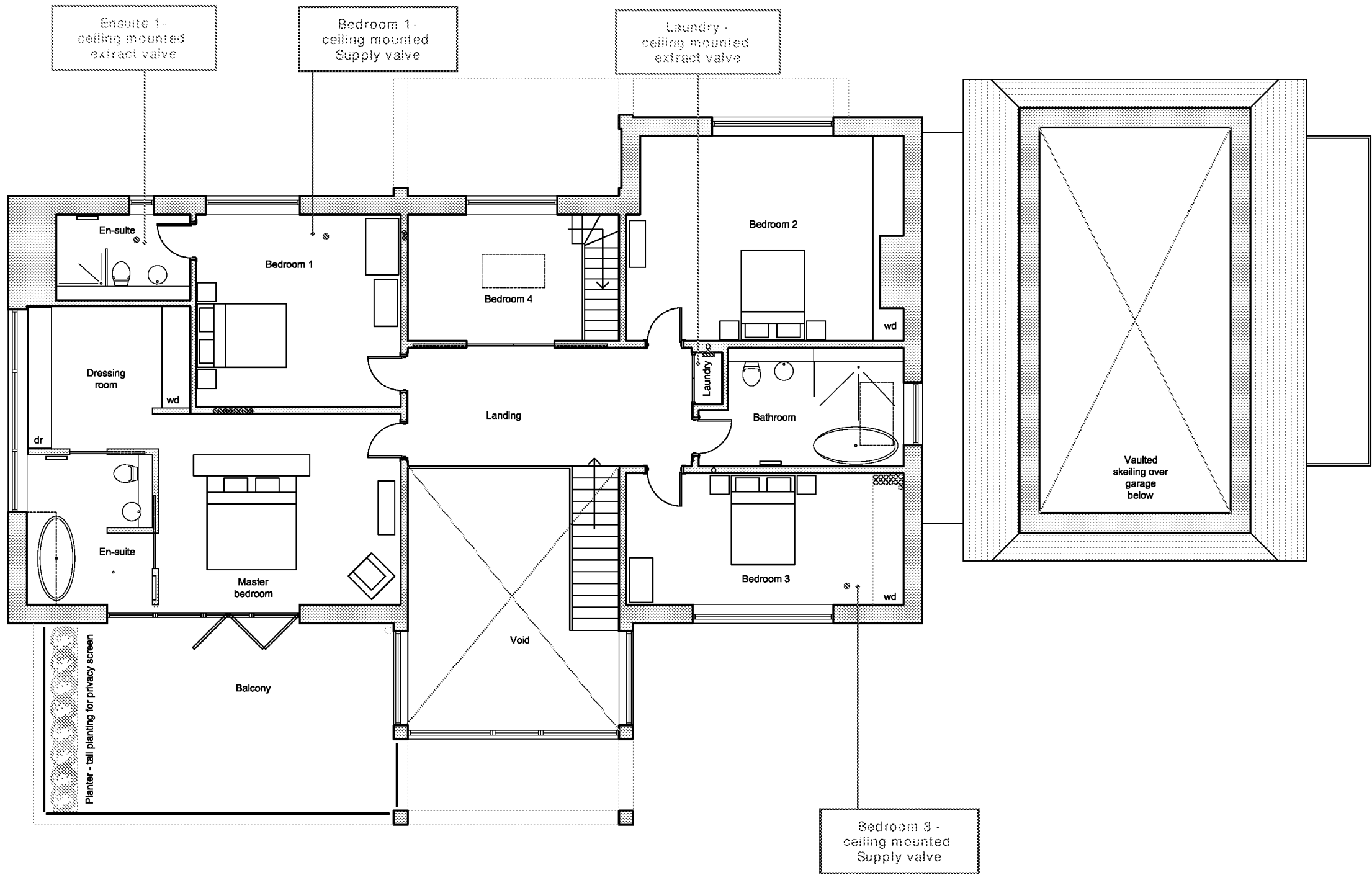
DRAWING TITLE
Ground Floor Ventilation Layout

DRAWING NUMBER	REVISION
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A	First Floor Ventilation Layout	KM	KB	MAY '20
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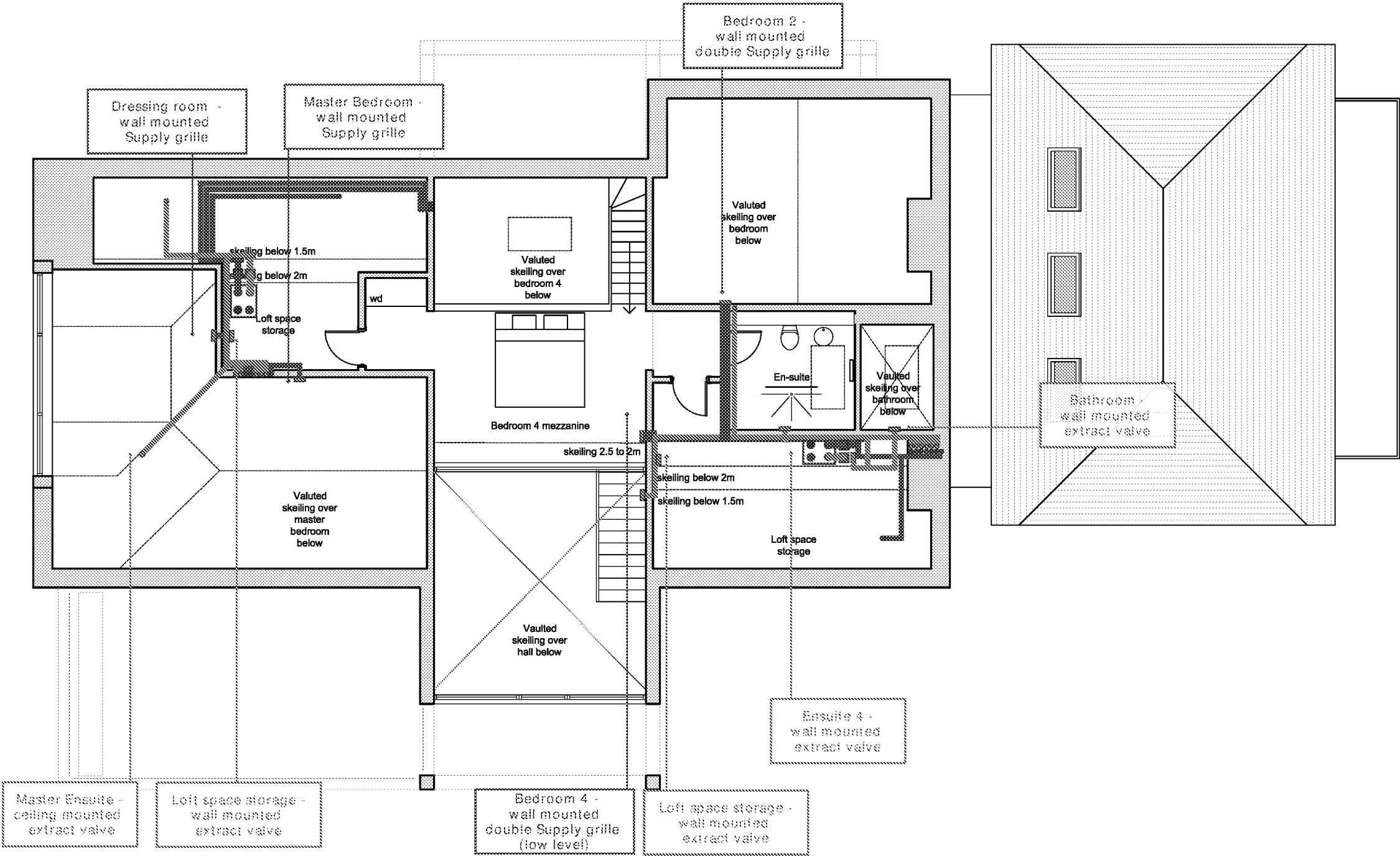
First Floor Ventilation Layout

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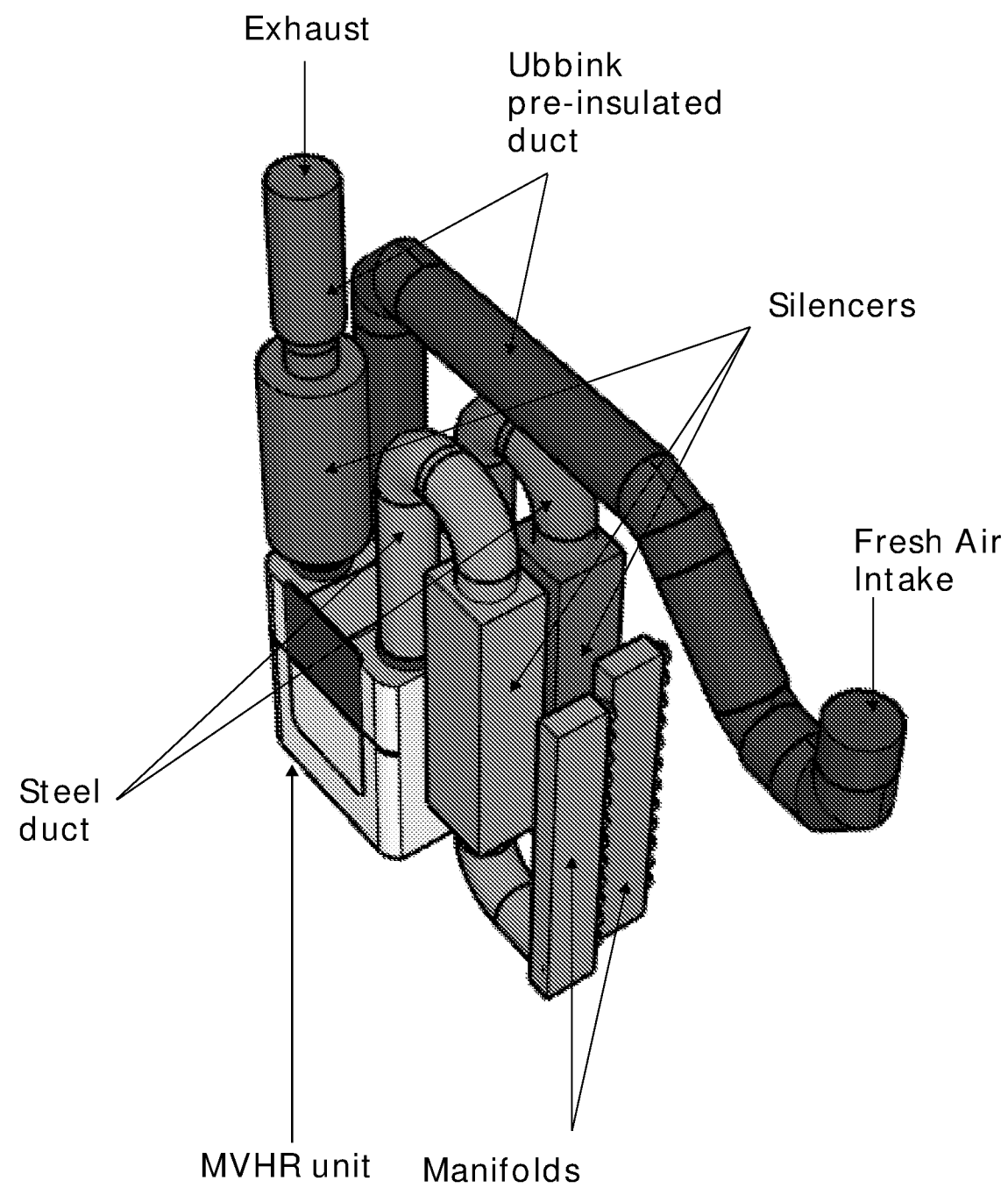
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Cross Road Angmering

DRAWING TITLE
Second Floor Ventilation Layout

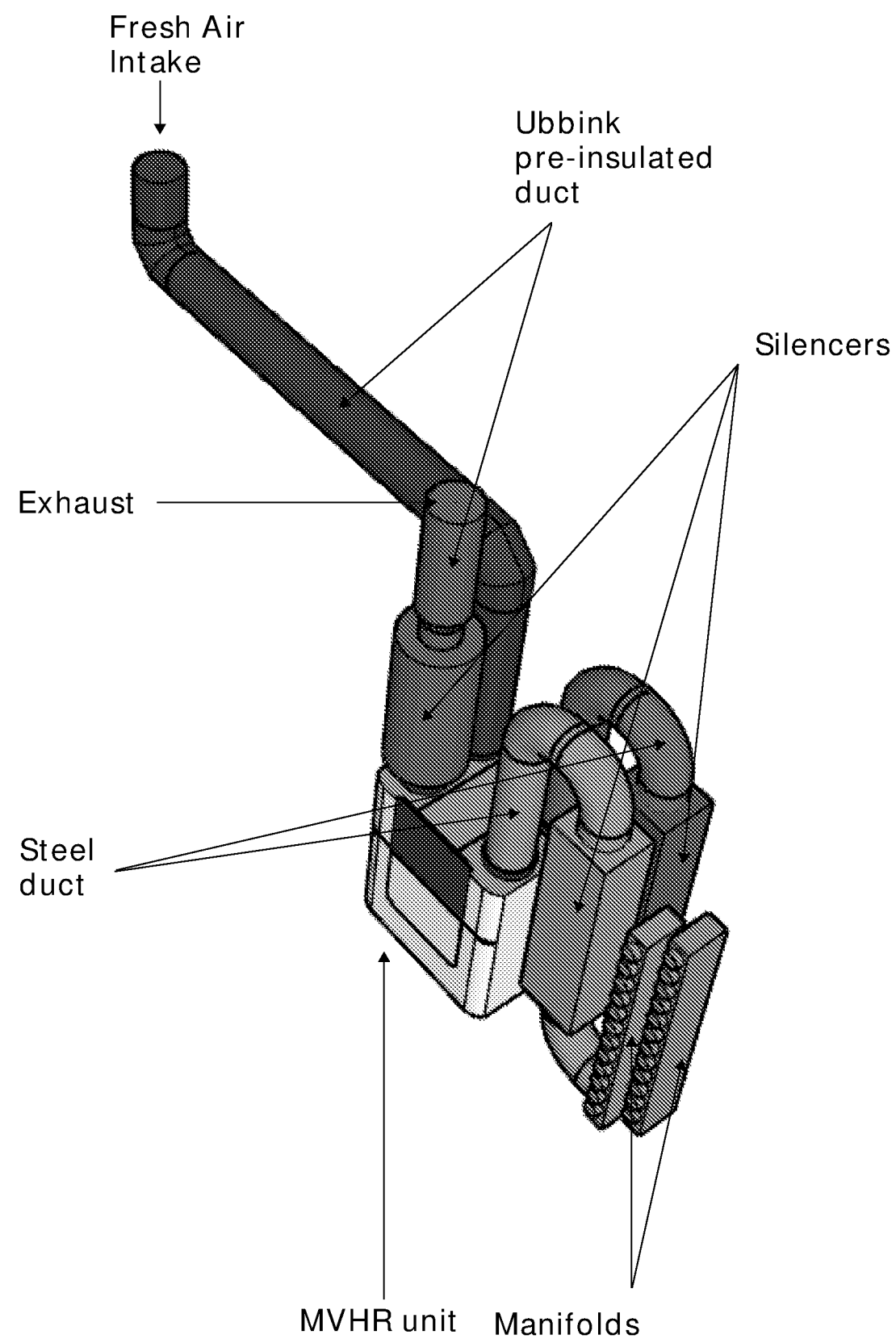
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J000983-803	A
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Left Hand System: Zehnder ComfoAir Q450



Right Hand System: Zehnder ComfoAir Q600



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Units:
Zehnder ComfoAir Q600 and
Q450 with enthalpy
exchanger

Intake & Exhaust ducts:
Ubbink pre-insulated ducting

Manifold MRU/MLU:Lindab
160mm outlet / 12-port x Ø
90mm

Internal ducts:
Zehnder dia90mm ComfoTube

Plenums:
Ubbink double plenum
90

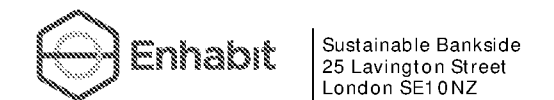
Zehnder TVA-P 90
Single

Valves:
Ceiling mounted extract valve - KU

Valves:
Ceiling mounted supply valve - KI

Roof Terminal:
Ubbink UB/48

	Perspective views - Plant room	KM	KB	MAY '20
REV	DESCRIPTION	DES	CH	DATE



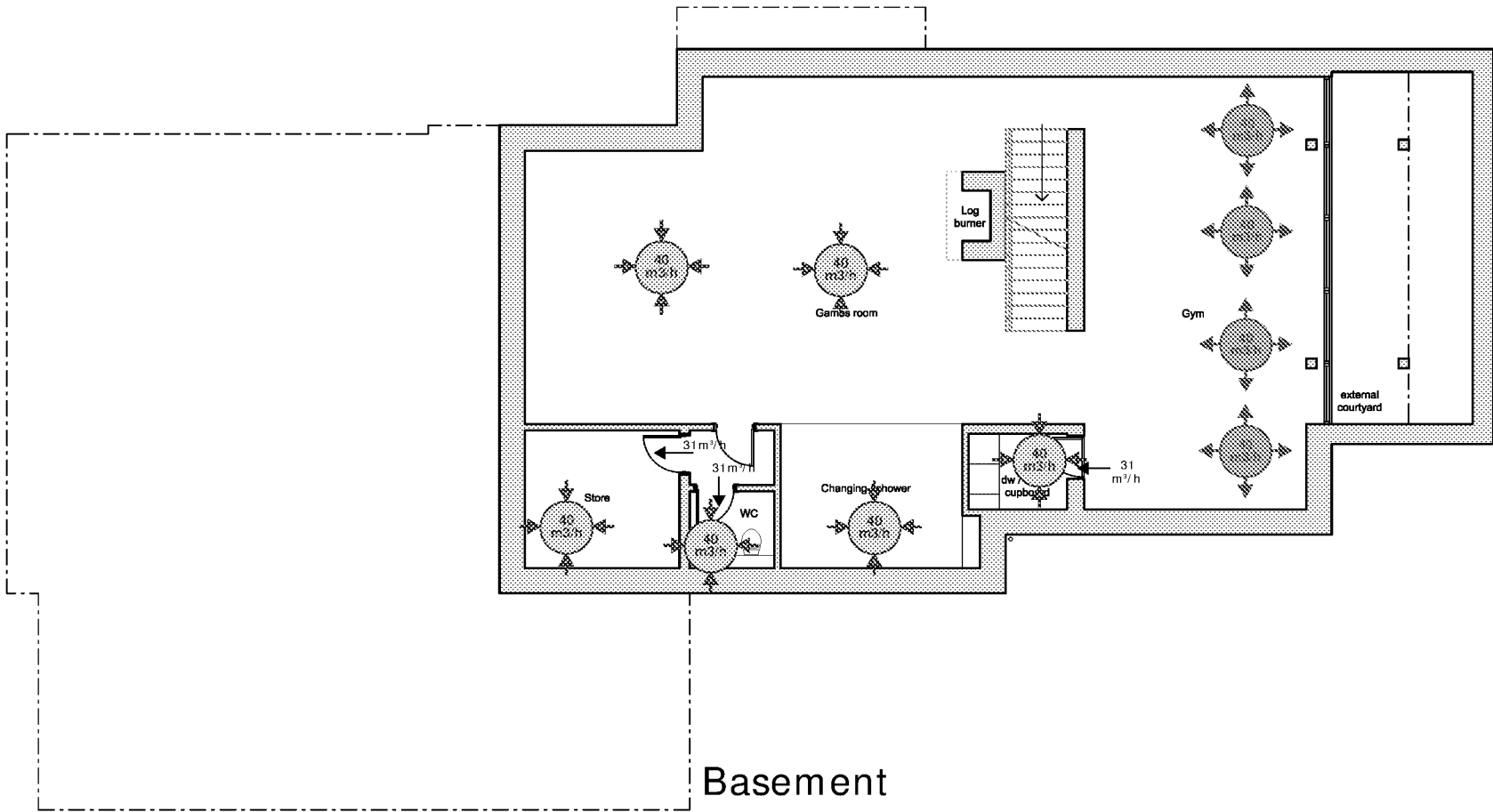
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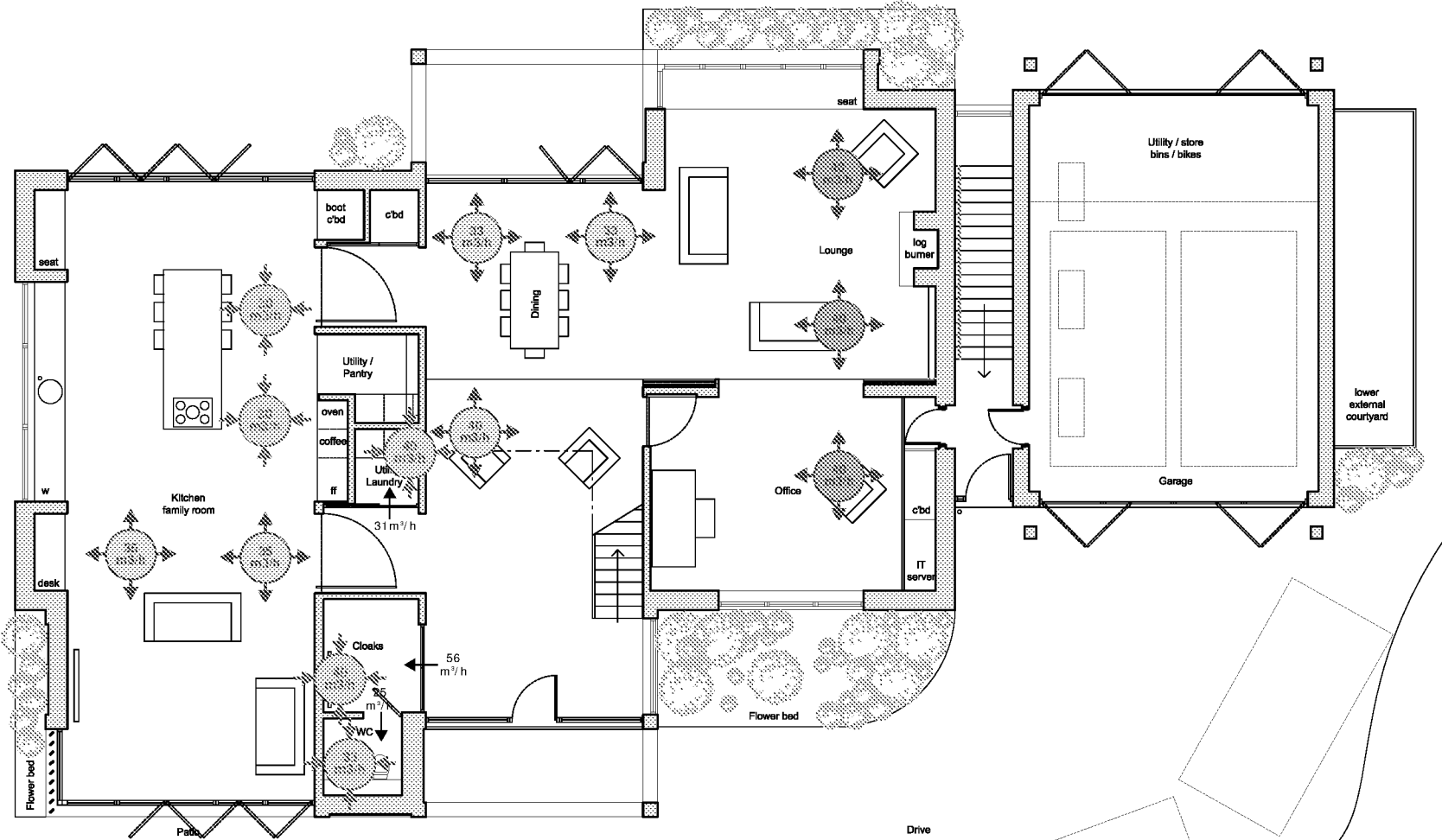
DRAWING TITLE
Perspective Views - Plant room

DRAWING NUMBER	REVISION
J000983-804	A
SCALE	DATE MAY '20
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Basement



Ground Floor

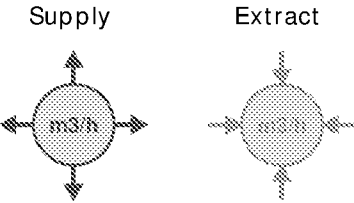
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NOTES

→ Air Transfer Path under Door

→ Air Transfer Arrow



Flow rates mentioned in the blue and red circles are the designed Boost rates and the flow rates mentioned for door undercuts are the design Normal rates.

Ventilation Rates:
Ventilation rates shown relate to Building Regulations Part F.

Air Transfer Paths:
Air Transfer Paths shown are under doors or through acoustic ventilation grilles (mounted on wall or door). As a guideline, air velocity should be about 1m/s.

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A	Air Transfer	KM	KB	MAY '20



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DRAWING TITLE
Air Transfer

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J000983-805	A
SCALE	DATE
-	MAY '20
DESIGNED	CHECKED
KM	KB

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 Air Transfer Path under Door
 Air Transfer Arrow

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REV	DESCRIPTION	DES	CH	DATE



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J000983-806	A
SCALE -	DATE MAY '20
DESIGNED KM	CHECKED KB



Left Hand System

Ventilation Rate :

Low: 260 m3/ h

Standard: 339 m3/ h

Boost: 440 m3/ h

Please, note that in the drawings,
the Boost Ventilation Rate is presented.

Right Hand System

Ventilation Rate :

Low: 170 m3/ h

Standard: 220 m3/ h

Boost: 286 m3/ h

Please, note that in the drawings,
the Boost Ventilation Rate is presented.

	Design Normal Rate	Door Width	Depth Undercut
	(m3/hr)	(mm)	(mm)
Store	31	710	12
WC Games area	31	730	12
Hall to Store and WC	62	730	24
Cupboard	31	830	10
Laundry	31	1320	7
Cloaks room	56	1820	9
WC Ground floor	25	800	9
Ensuite 1	31	700	12
Master Ensuite	31	1550	6
Laundry Cupboard	31	1000	9
Bedroom 1	31	730	12
Bedroom 2	42	730	16
Bedroom 3	31	730	12
Bathroom	31	730	12
Ensuite 4	31	730	12
Loft space 1	25	740	9
Loft space 2	31	740	12

Sound attenuating transfer unit will need to be mounted on the wall or on the door of all rooms highlighted in red, if a door undercut larger than 10mm is not desired.

The product suggested is the DSR Acoustic Air Tranfer Grille. Its size to be min. 200mm x 150mm (width x height). Tranfer units are not included in the costs proposal, but can be quoted for separately, if requested.

It is advised (Building Regulation – Part F 2010) that there is a door undercut with a minimum area of 7.600mm2 above floor finish in all internal doors (10mm).

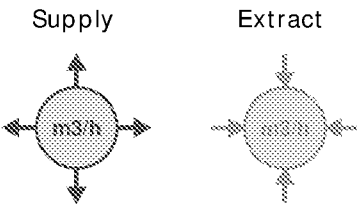
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Air Transfer

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J000983-807	A
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