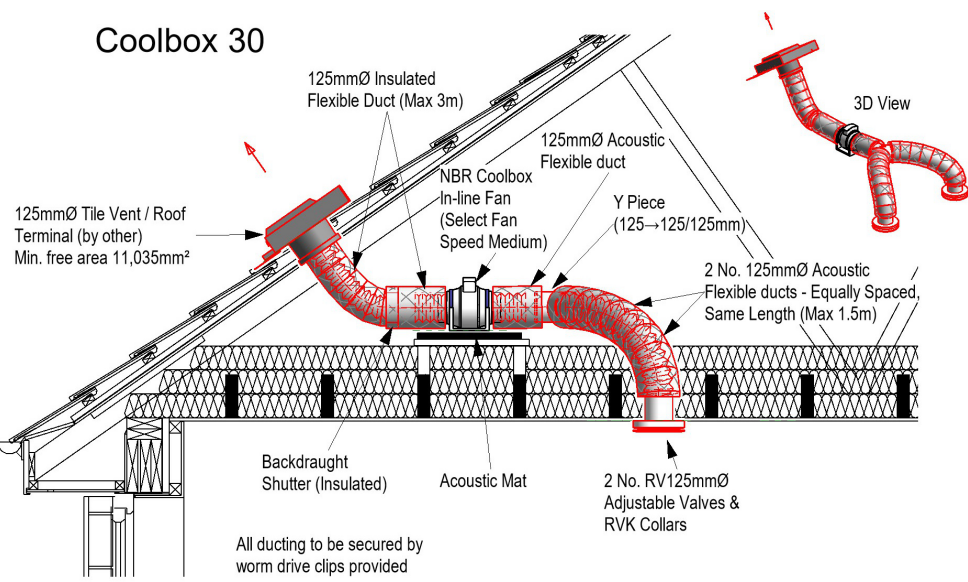


# Coolbox 30



## Background Ventilation

Where continuous mechanical extract ventilation is used, background ventilators should satisfy all of the following conditions.

1. Not be in wet rooms.
2. Provide a minimum equivalent area of 4000mm<sup>2</sup> for each habitable room in the dwelling.
3. Provide a minimum total number of ventilators that is the same as the number of bedrooms plus two ventilators (i.e. a one bedroom dwelling should have 3 background ventilators, a two bedroom dwelling should have four background ventilators, etc.)

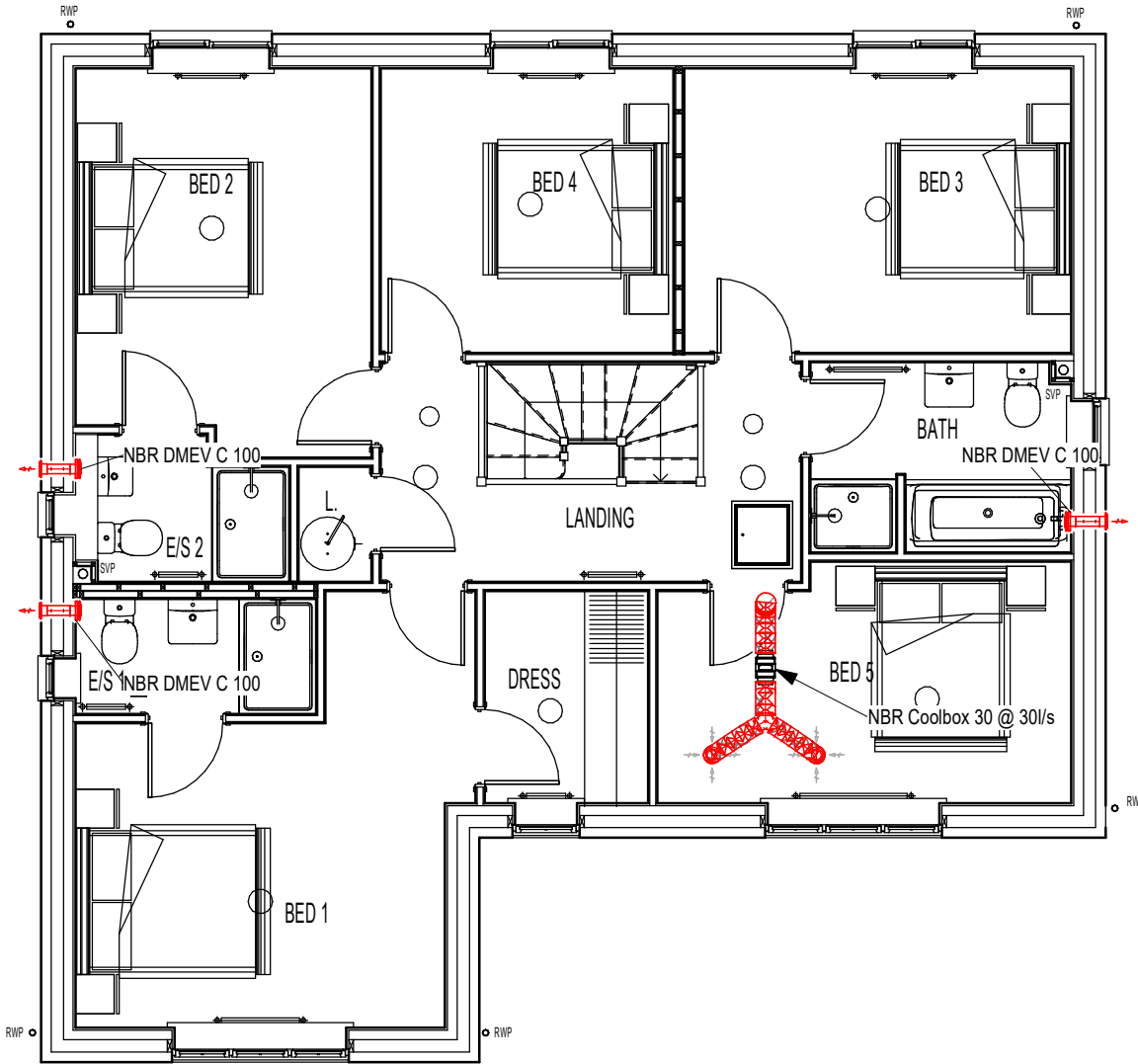
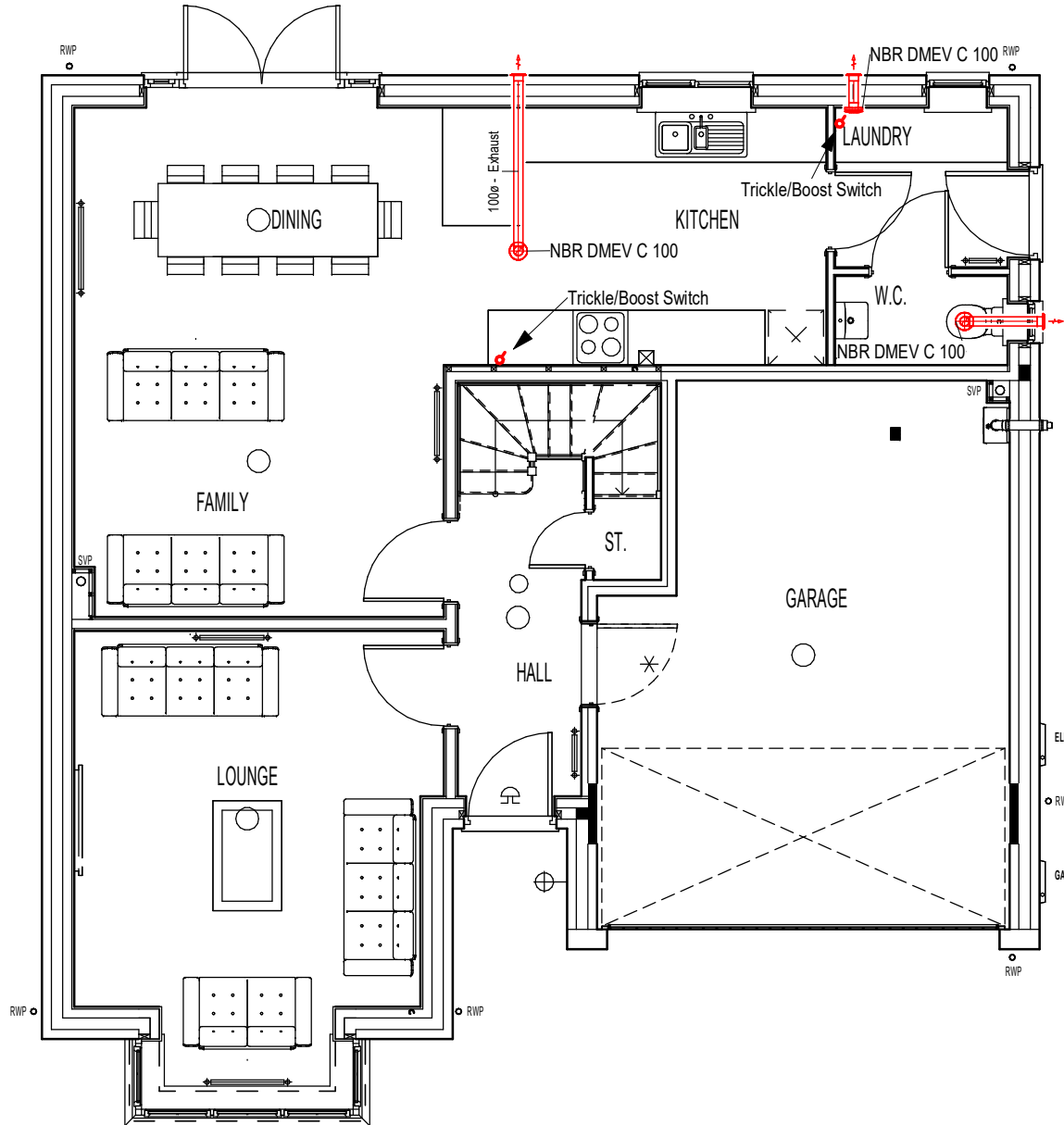
Denford			
Dwelling Details		l/s	
Whole Dwelling Ventilation Rate			
Floor Area (m <sup>2</sup> )	153.2	Default	43
Bedrooms	5	0.3l/s per m <sup>2</sup>	46.0
		Required Minimum Continuous Rates	46.0

Extract	High Rates l/s	Extract	Continuous Rates l/s
Kitchen	13.0	Kitchen	9.0
Utility	12.0	Utility	8.0
WC	9.0	WC	6.0
Bathroom	12.0	Bathroom	8.0
En-Suite 1	12.0	En-Suite 1	8.0
En-Suite 2	12.0	En-Suite 2	8.0
<b>Total Airflow</b>	<b>70.0</b>	<b>Total Airflow</b>	<b>47.0</b>

Minimum flow rates to Doc F Building Regs 2021 Edition  
 The fan High rate will be pre-programmed at 50% more than the continuous rate. Minimum background ventilators per habitable room 4000mm<sup>2</sup> - No background ventilators in wetrooms

**NOTES:**  
 THIS SYSTEM PROPOSAL HAS BEEN DESIGNED TO COMPLY WITH THE CURRENT BUILDING REGULATIONS - MEANS OF VENTILATION.  
 THE SYSTEM MUST BE INSTALLED AND COMMISSIONED WITH GOOD INSTALLATION PRACTICE AND AS PER THE DESIGN SPECIFICATION.  
 VENT-AXIA CANNOT GUARANTEE SYSTEM COMPLIANCE IF ALTERNATIVE DESIGN IS USED OR INSTALLED BY OTHERS. THE COMMISSIONED SYSTEM MUST COMPLY WITH THE LATEST EDITION I.E. BS7671 WIRING REGULATIONS.  
 VENT-AXIA WILL NOT BE RESPONSIBLE FOR CONSEQUENCES OUTSIDE OUR CONTROL CAUSED BY THE SYSTEM INSTALLATION E.G. PROPERTY ACoustics, STRUCTURAL INTEGRITY ETC.  
 THIS DESIGN PROPOSAL HAS BEEN PRODUCED IN GOOD FAITH BUT IS SUBJECT TO APPROVAL BY THE PROJECT CLIENT.  
 THIS DESIGN IS SUBJECT TO COPYRIGHT AND MUST NOT BE ALTERED, AMENDED OR INCORPORATED IN ANYWAY WHATSOEVER, NOR SHALL IT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE EXPRESS PERMISSION OF VENT-AXIA.  
 UNIT IS TO RUN AT CONTINUOUS TRICKLE WITH BOOST BEING ACTIVATED VIA A TRICKLE / BOOST CONTROLLER AND LOCAL BOOST SWITCHES (EG LIGHTS IN ALL WET ROOMS, IF SWITCHING VIA LIGHTS, DOUBLE POLE SWITCHED OR RELAYS (E.G. VIA 42030)) WILL BE REQUIRED. LOCAL SWITCHING NOT SPECIFICALLY REQUIRED FOR INTEGRAL HUMIDISTAT UNITS.  
 EXHAUST AND INTAKE DUCTING TO AND FROM ATMOSPHERE AND ALL DUCTING IN COLD ROOF SPACE TO BE DUCTED VIA FULLY INSULATED RIGID PLASTIC DUCTING TO EXTERNAL TERMINATIONS (INSTALLED BY OTHERS).  
 ALL VENTILATION UNITS MUST BE INSTALLED IN ACCORDANCE WITH THE DOMESTIC VENTILATION COMPLIANCE GUIDE AND IN CONJUNCTION WITH THE RELEVANT INSTALLATION INSTRUCTIONS.  
 THE DESIGN ASSUMES THAT THE CEILING VOIDS ARE SUFFICIENT TO ACCOMMODATE THE DUCTING.  
 IF NOT USING VENT-AXIA EXTERNAL TERMINATIONS THE FREE AREA MUST BE MIN. 14,000mm<sup>2</sup> FOR THE KINETIC PLUS OR THE INTEGRA PLUS, 10,000mm<sup>2</sup> FOR ANY OTHER SYSTEM AT THE TERMINALS TIGHTEST POINT.



Legend	
NBR dMEV C 100/125 Fan	
100/125mm Circular PVC Flexible Ducting	
100/125mm Pre-insulated Flexible ducting	
100/125mm Circular Ducting (Pre-insulated in cold space)	
NBR Coolbox 30 Kit	
100/125mm Louvre Grille	

Rev	Date	By	Description

**Vent-Axia**  
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Project  
**Hermitage Park**

Drawing  
**L553 Denford**

Date	Scale	Design
08/07/25	1 : 75 @A3	JV

Drawing No. CAS 21081 _14	Rev
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\*DRAWING ONLY TO BE USED FOR THE PURPOSE OF VENTILATION INSTALLATION