

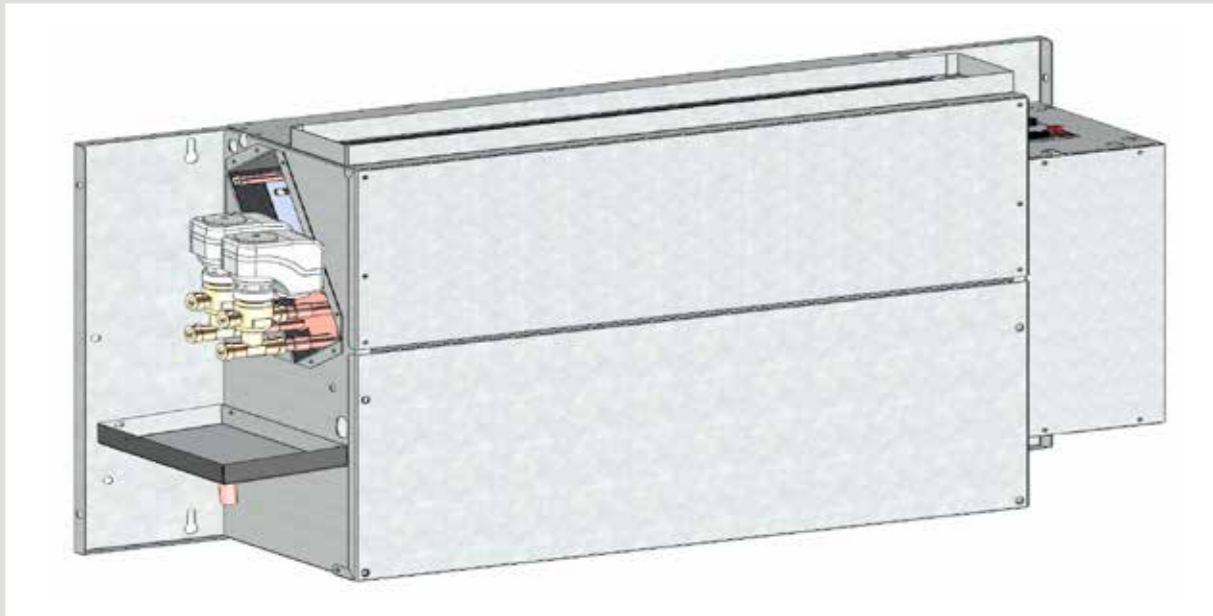


specification & selection guide

EVO VERT

evo fan coil system

EVO VERT



The EVO VERT fan coil completes the range and continues to use the same market leading EC/DC motor technology used throughout the EVO family, but in a vertically orientated unit.

The range of EVO VERT wall mounted Fan Coils are every bit as capable as their horizontal stable mates, supplying an efficient and flexible solution for any project. Again, the EVO VERT is available with pressure independent valves, variable air volume fan speed strategies and a number of features unique to Ability.

However, the unit really comes together when it is complemented with Ability's own BACnet controller and control strategy. This gives the ultimate in flexibility for both today and the future.

All the features of the units in the EVO range can be remotely accessed using the Ability BACnet software tools, any changes are simply made without access to the unit being necessary. Any Facility Manager, once the project is in the client's hands, will have the capability to fine tune, update or conduct quite in depth investigations into the working environment, even on daily basis.

Product Specification

> Casings

Chassis panels all 'In House' manufactured from nominally 1.2mm Galvanised steel. Where at all possible, flanges are formed inward facing to prevent exposure to bare metal edges. Sufficient forms and folds are incorporated to provide a vibration free, robust structure. This access panel is retained by easily removable screws.

> Access

Access is generally provided through a single panel. This covers the fan and motor assemblies, the coil and the condensate tray. The access panel screws in place.

> Fans

Fans are direct drive, forward curved, double inlet centrifugal type. Both the impellers & impeller housings are of galvanised steel. Fan & motor assemblies are mounted separately to the fan deck assembly using M6 Machine screws into captive "Nutserts" and can be removed individually for non routine servicing or replacement. Each fan is connected to the fan wiring loom by a 'quick connector'. Motor & impeller assemblies are statically and dynamically balanced in twin planes.

> Coils

Coils are manufactured from seamless 3/8" copper tube, mechanically expanded onto aluminium fins. Fins are punched with die formed collars to afford maximum heat transfer surface area with the tubes. All coils are circuited for maximum output and from bottom to top ensuring free venting and draining. Vents and drains are slotted type. Coils are handed. Handing is notated against direction of airflow. Coil terminations are 15mm dia' plain copper at 40mm centres through a copper support plate for rigidity. Every coil is leak tested using dry air under water to 15 bar.

> Condensate Tray / Fan Deck

The Condensate Tray / Fan Deck covers the entire coil and has a positive fall to the 15mm drain point. The pan is manufactured from galvanised steel and insulated externally with 'faced' insulation, the corners are brazed and the termination is silver soldered into position. The main Condensate Tray / Fan Deck drains into an auxiliary tray which covers the valve area. Stainless steel pans are available as an option.

> Insulation

Insulation is used throughout for both thermal and acoustic damping. Insulation is open cell, class 'O', CFC and HFC free expanded foam. Foam complies with CAA airport and London Borough flammability and toxicity requirements. Adhesive has light, ageing and temperature tolerance.

> Spigot

Discharge Spigot as standard is rectangular and manufactured from galvanised steel. This is located on either the top or the front of the chassis panel work depending upon your requirement. Alternative spigot sizes to the standard shown on our fan coil layout drawing can be incorporated by special arrangement.

> Controls Enclosure

All controls are, as standard, fitted to a control back plate which is mounted into the electrical enclosure. The enclosure has dual access from both the front and the side. The whole electrical enclosure including all the switches shall be within the overall profile of the unit to prevent damage.

> Filter

Filters are EU2 or EU3 media secured to a wire metal frame, easily removable for routine maintenance, cleaning or replacement.

> Ancillaries

Electric heating, condensate pumps and many other options are all available on request.

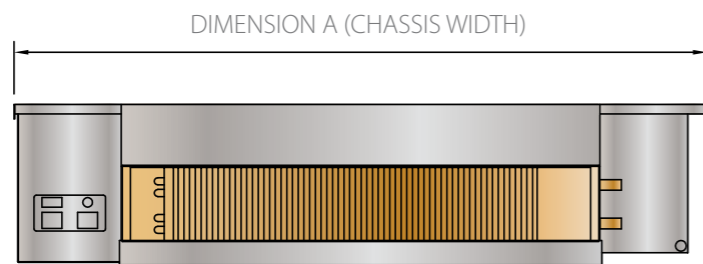
> Cased units

Cased versions of the EVO VERT are available upon request.

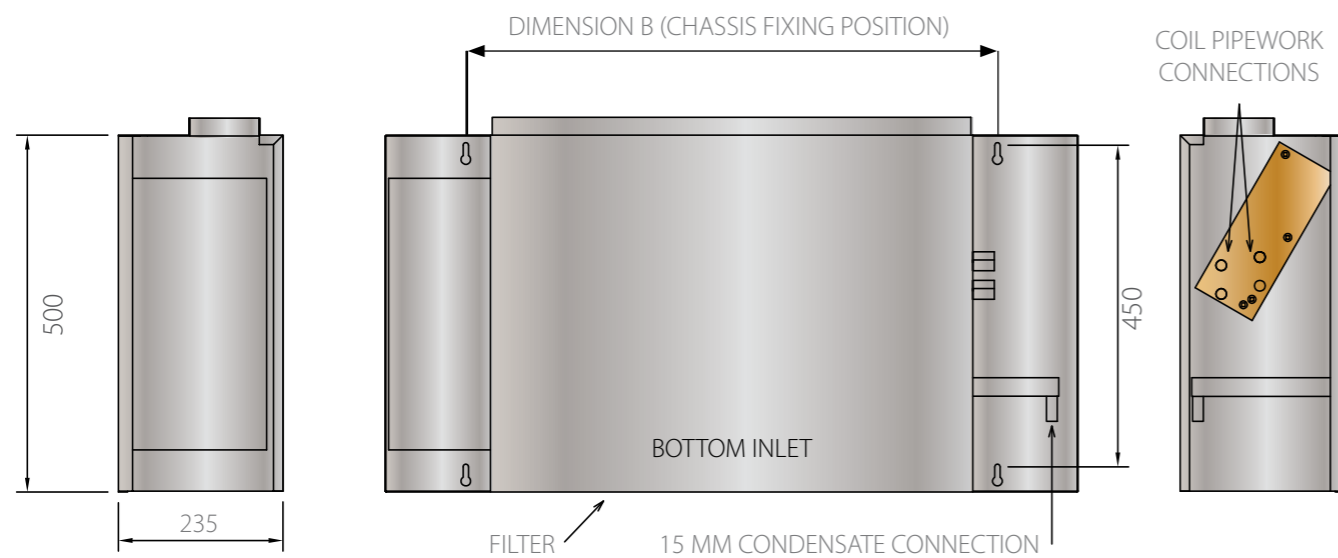
EVO VERT - Vertical Chassis Schematic

Size	Weight in Kg	Dimension A Chassis Width	Dimension B Chassis Fixing Pos.N
100	37	970	745
200 / 250	48/52	1270	1045
300	60	1570	1345
400	78	1870	1645
500 / 550	86/92	2170	1945

MODEL 100
RIGHT HAND UNIT



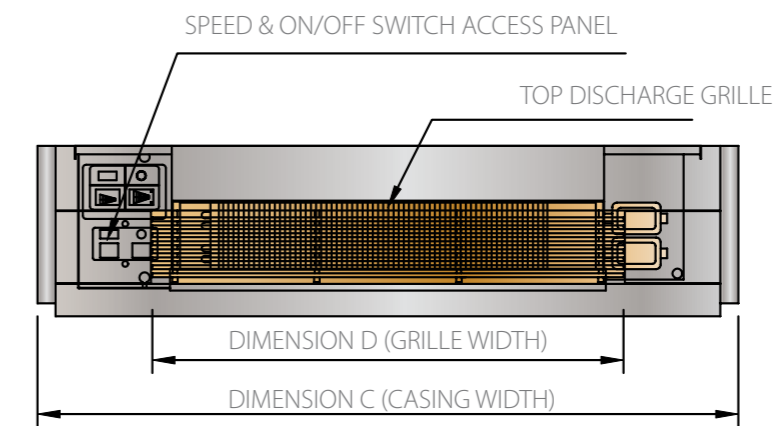
Front discharge and/or front intake are available as options



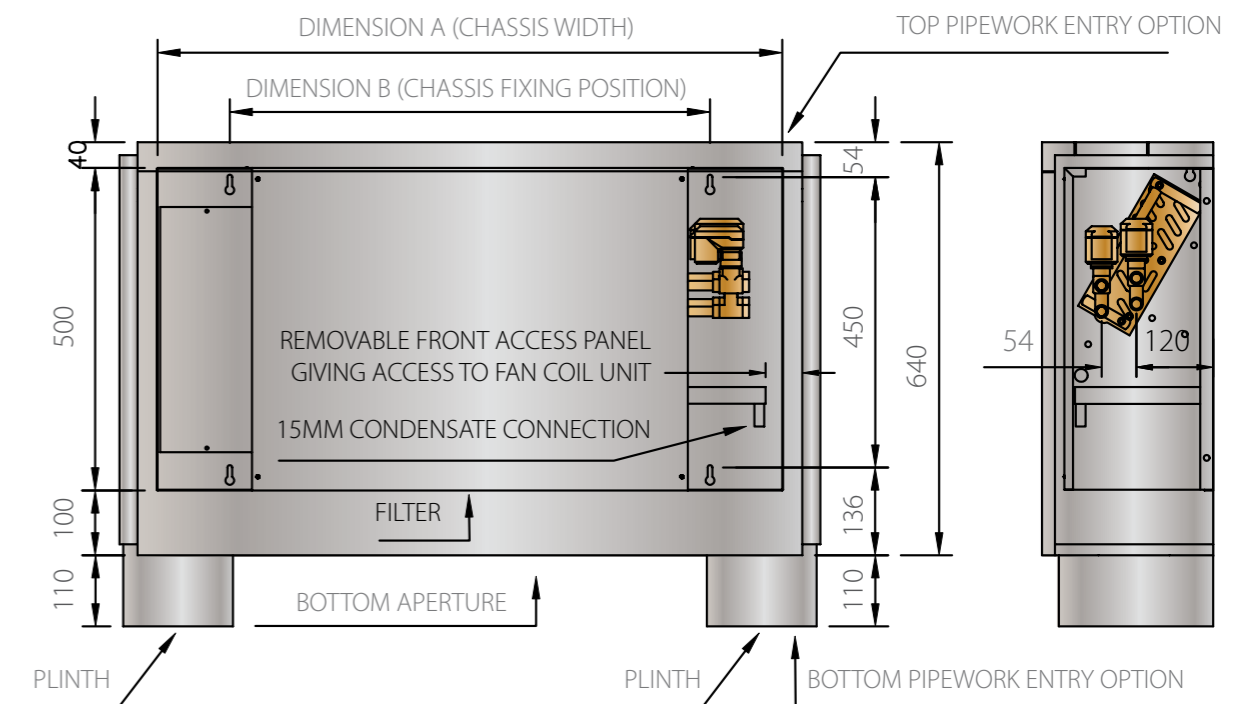
EVO VERT - Vertical Cased Schematic (Low Level)

Size	Dimension A iChassis Width	Dimension B Chassis Fixing Pos.N	Dimension C Casing Width	Dimension D Grille Width
100	970	745	1086	730
200 / 250	1270	1045	1386	1030
300	1570	1345	1686	1330
400	1870	1645	1986	1630
500 / 550	2170	1945	2286	1930

This is a low level wall mounted Fan Coil Unit (Casings & plinths are not load bearing)



MODEL 100
RIGHT HAND UNIT



These drawings are for illustration purposes. When you require more detail, please contact the office or visit the website, where you will be able to obtain fully dimensioned general arrangements

Acoustic Guide

> NR Guides

Ability NR Levels should only be used as guides. Only you will have sufficient room data for all areas of your project upon which to base project specific calculations. We have however, conducted numerous tests within our own facilities and on completed projects so, providing your building is similar to the descriptions below, our NR guides will be reasonably accurate and useful.

If your site differs from the descriptions we have provided, it is in your best interests to either ask us for our view on the differences or seek independent advice.

Our NR levels are based upon the following room criteria:

- A reverberation time of 0.7 seconds or less
- A Fan Coil installation density of 110W/m² Sensible cooling
- At least 2.6m from Finished floor level to suspended ceiling
- No allowance for any contribution from background noise sources, including other plant / equipment
- Units are installed in accordance with our Installation Instructions, the latest CIBSE guide lines and general good practice.



The Fulcrum, 2-3 Vantage Way,
Poole, Dorset, United Kingdom
BH12 4NU

T - 01202 305800
F - 01202 734470

sales@abilityprojects.com

www.abilityprojects.com