



## Air Handling Units ECOBOX - ECO

### 1.1 General

A. Provide a ventilation plate heat exchanger unit to meet the performance and configuration as indicated in the schedule and detail drawings. The unit shall be the ECOBOX - ECO plate heat exchanger type as manufactured by VES Andover Ltd a company accredited with BS EN ISO 9001:2008.

### 1.2 Unit Construction

A. The unit shall be supplied pre-assembled consisting of a single-skinned heavy gauge galvanised steel case, rectangular duct spigots, and plastic plate cross flow heat exchanger.

B. The unit shall be available in plantroom or weatherproof construction as indicated in the schedule and detail drawings. Weatherproof units shall have a sloped lid supplied fitted as standard.

C. The unit shall be available with optional pleated panel filters.

D. The unit shall be available with optional built-in galvanized sheet steel condensate drain pan.

E. The unit shall incorporate high quality leak resistant neoprene gaskets on service doors and panels.

F. The unit shall be supplied with rectangular spigots, fitted with 20mm MEZ flanges.

G. The unit shall be internally lined with thermal & acoustic insulation foam as standard.

H. The casework shall incorporate mounting brackets compatible with drop-rod systems.

I. Access for maintenance shall be via removable service panels, allowing access for the cleaning or removal of internal components where permitted by unit construction. Access space requirements shall be as indicated in the detail drawings.

J. Plantroom unit casework shall be supplied naturally finished in high quality galvanised steel as standard. Optional powder coat colour as indicated in the schedule.

K. Weatherproof units shall be supplied powdercoated signal grey RAL7004 as standard. Colour according to schedule.

L. The unit shall be designed to be secured to a suitable base, wall or ceiling, ensuring the use of correct fixings for the application and taking into account individual unit weight as indicated in the schedule and detail drawings.

### 1.3. Plate Heat Exchanger

A. The unit shall be supplied with a full PVC plate heat exchanger with a minimum efficiency of 50%.

B. The plate heat exchanger shall incorporate a 100% recycled exchange matrix and heavy gauge PVC framework as standard.

C. The plate heat exchanger matrix shall be aerodynamically designed, with built-in spacers ensuring a constant plate separation.

D. The plate heat exchanger shall be available with optional virgin plastic exchange matrix for corrosive environments as indicated in the schedule.



## 1.4. Optional Drain Pan

- A. The optional drain pan shall be situated on the extract air off side of the Heat Exchanger as standard.
- B. The drain pan shall be designed for on-site positioning to suit schedule.
- C. The drain pan discharge connection shall be 15mm plain PVC stub type.
- D. The drain pan shall be manufactured in galvanised sheet steel & finished in natural uncoated finish as standard.

## 1.5. Optional Filtration

- A. The optional filters shall be 98mm pleated filter media as standard, with rigid wax treated cardboard moisture resistant frame.
- B. The filters shall be fitted prior to the exchanger matrix on the supply & extract sides.
- C. The filters shall be to BS EN 779 Classification Grade G4 as standard, grade as indicated in the schedule and detail drawings.

## 1.6. Operation Environment

- A. The unit shall be designed to operate in ambient temperatures from -30 °C up to 50 °C, and can be used continuously at up to 95% humidity level with a correctly installed drain pan.

Download specification from [www.ves.co.uk/information-centre](http://www.ves.co.uk/information-centre)