

HX HEAT EXCHANGER

Installation and Maintenance

Introduction

The HX range of Heat Exchangers provide a means of recovering heat from an extract system and transferring this heat to a complimentary air supply system. The unit contains a plate type heat exchanger. An internal drip tray and external drain tube connection is also provided. The HX units are rectangular in section and manufactured in galvanised steel. Circular rigid spigots are fitted at each end. The units are designed for horizontal mounting only. The full sized access panel can be configured for the top or bottom of the unit.

Handling

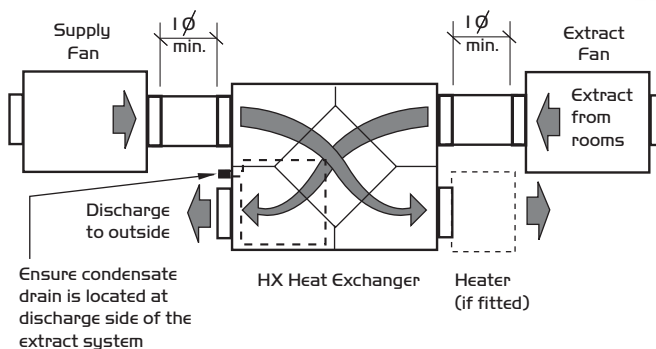
Always handle the units carefully to avoid damage and distortion. If mechanical aids are used to lift the unit, spreaders should be employed and positioned so as to prevent the slings, webbing etc. making contact with the casing.

Installation

Installation must be carried out by competent personnel, in accordance with good industry practice, the appropriate authority and in conformance with all statutory and governing regulations.

Figure 1. System flow diagram.

IMPORTANT
The fans must be situated in the system so that they are both pushing air through the Heat Exchanger. The fans should be located as shown.



HEATERS - Note that when a heater module is used in the system it must be positioned after the HX on the SUPPLY side (see fig. 1). A fan with integral heater must be located as shown (see fig 2).

Units should always be positioned with sufficient space to allow removal of the access cover and subsequent removal of the internal assembly if required.

Note: when the unit is installed into a system, the correct orientation must be observed as indicated by direction labels on the side of the unit case.

With the heat recovery process, condensation will occur under some operating conditions. Therefore the drip tray must be positioned at the discharge side of the extract system and connected to a suitable drainage connection. The drain tube must have a generous downward slope and be detachable for maintenance purposes.

Mounting

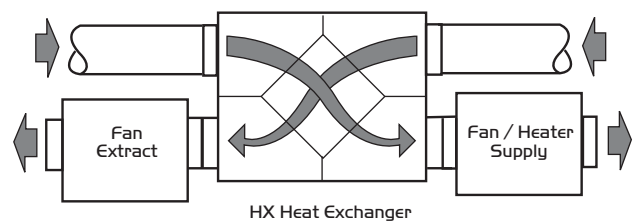
The method of mounting used is the total responsibility of the installer. The units are designed for horizontal mounting only.

Two holes are provided on each end pillar face and angle brackets can be supplied to assist installation if required.

Note: a ducted distance of at least one spigot dia must be allowed between fan and HX spigots to ensure correct airflow into the unit. (See fig. 1).

Fast Clamp duct connectors are available to speed installation, see overpage.

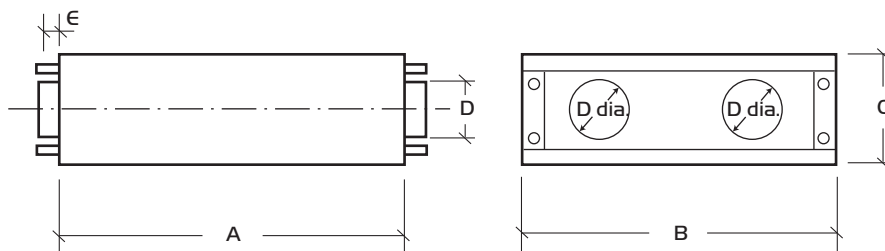
Figure 2. System flow diagram using a fan with integral heater.



FANS WITH HEATERS - When using a fan with an integral heater, both the SUPPLY and EXTRACT units must be arranged to draw air through the Heat Exchanger.

Dimensions (mm)

Code	A	B	C	D	E	Weight
HX100	617	547	166	100	50	11kg
HX125	617	547	191	125	50	11kg
HX150	617	547	216	150	50	12kg
HX200	617	547	266	200	50	13kg
HX250	617	667	316	250	50	20kg
HX315	617	967	381	315	50	24kg
HX400	617	967	464	400	50	26kg

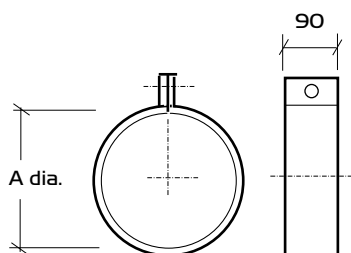


Optional installation items available from Nuairé

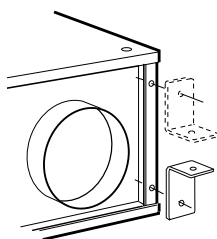
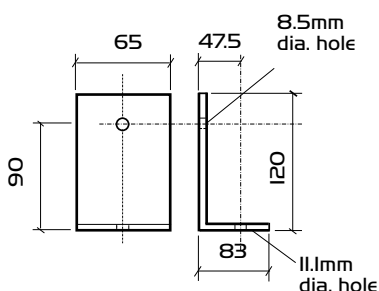
Fast Clamp

Constructed from galvanised steel and fitted with a gasket liner.

Unit Code	Clamp Code	A Dia.
HX100	FC125	125
HX125	FC200	200
HX200	FC200	200
HX250	FC250	250
HX315	FC400	400
HX400	FC400	400



Fixing Kit Brackets Order part No 367011



Optional fixing brackets can be used in either position.

Replacement of Parts

Should any component need replacing Nuairé keep extensive stocks for quick delivery. Ensure that the unit is electrically isolated, before carrying out any work.

When ordering spare parts, please quote the serial number of the unit and the ARC number of the purchase if possible. **(This information will be available on the unit label).**

Warranty

HX Heat Exchanger has a 3 year warranty. The warranty starts from the day of delivery and includes parts and labour for the first year, the remaining years covers replacement parts only.

This warranty is conditional on planned maintenance being undertaken.

Service Enquiries

Nuairé can assist you in all aspects of service. Our service department will be happy to provide any assistance required, initially by telephone and if necessary arrange for an engineer to call.

Telephone 029 2085 8585
Fax 029 2085 8586

Maintenance

Only periodic checks are necessary. After the initial 3 monthly inspection interval, checks can be carried out every 6 months.

Unscrew and remove top access cover.

The unit can be accessed from below by removing the bottom panel. The drain tube must be disconnected prior to removing the panel. NOTE that the drip tray will drop down with the bottom panel.

Remove dust fibres with a soft brush. Take care when cleaning with pressure air that the Heat Exchanger package is not damaged. Keep at a safe distance.

Mild detergent can be used to clean the heat exchanger block.

Ensure the drip tray is kept free of any debris.

Take care that the exchanger is not damaged, neither mechanically or chemically.

- choose harmless cleaning agents.
- clean carefully.

Technical or commercial considerations may, from time to time, make it necessary to alter the design, performance and dimensions of equipment and the right is reserved to make such changes without prior notice.