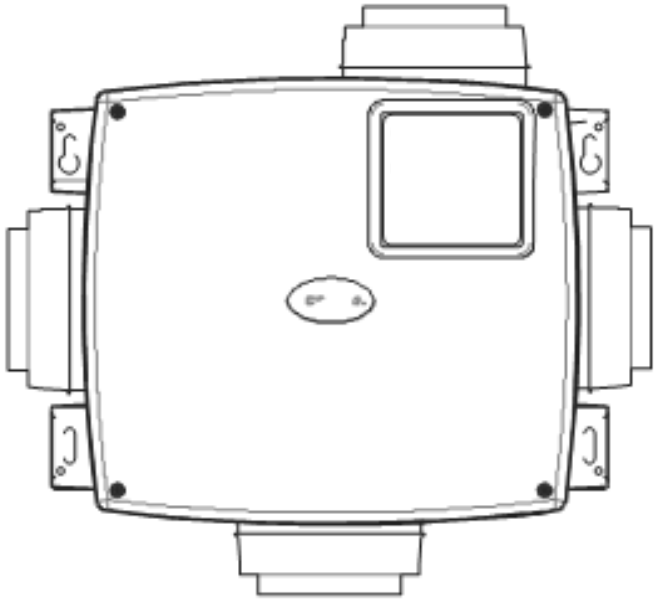
MON-MEVH

Installation and Wiring Instructions



IP22

PLEASE READ INSTRUCTIONS IN CONJUNCTION WITH THE ILLUSTRATIONS.
PLEASE SAVE THESE INSTRUCTIONS

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Installation and Wiring Instructions for the MON-MEVH Extract Fan.

IMPORTANT:

READ THESE INSTRUCTIONS BEFORE COMMENCING THE INSTALLATION

DO NOT install this product in areas where the following may be present or occur:

- Excessive oil or a grease laden atmosphere.
- Corrosive or flammable gases, liquids or vapours.
- Ambient exhaust air temperatures higher than 40°C or less than –5°C.
- Relative humidity above 90%
- Possible obstructions which would hinder the access or removal of the Unit.
- Sudden ductwork bends or transformations close to the Unit.

SAFETY AND GUIDANCE NOTES

A. All wiring must be in accordance with the current I.E.E. Regulations, or the appropriate standards of your country.

B. The Unit should be provided with a local double pole isolator switch having a contact separation of at least 3mm. The fuse rating should be 3A.

C. Ensure that the mains supply (Voltage, Frequency and Phase) complies with the rating label.

D. It is recommended that the connection to the terminal box is made with flexible cable/conduit.

E. The Unit should not be sited within 600mm horizontally of/or 2250mm vertically of a bath/shower tray, in accordance with the current I.E.E. Regulations for bathrooms.

F. When the unit is used to remove air from a room containing a fuel-burning appliance, ensure that the air replacement is adequate for both the fan and the fuel-burning appliance.

G. The installer must ensure that the Unit intake is located a minimum of 600mm from any flue outlet.

H. This Unit is designed as an inline ducted unit to be positioned between lengths of ducting. Short duct runs terminating within 1.5m must incorporate suitable guards unless the unit is mounted higher than 2.3m.

I. This Unit should not be used where it is liable to be subject to direct water spray from hoses etc.

J. This Unit handles moisture-laden air, ensure that a condensation drain is fitted.

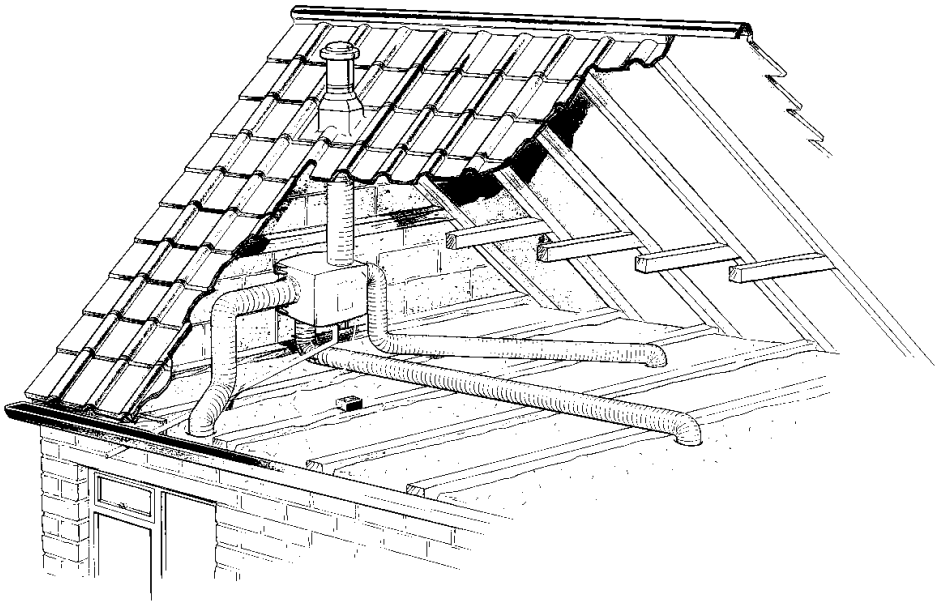
K. This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory and mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved.

L. Children shall not play with the appliance.

M. Certain applications may require the installation of sound attenuation material to achieve the sound levels required.

N. Ducted ventilators must be ducted to the outdoors.

TYPICAL INSTALLATION



INTRODUCTION NOTES.

The MON-MEVH range is designed for simultaneous ventilation for a maximum of up to four separate areas such as bathrooms, kitchens and toilets. The range can be mounted in three different orientations for convenient installation in roof voids with a height of 250mm or greater. An integral humidistat is provided to automatically trigger an increased airflow in order to quickly remove any buildup of humid air caused by showers, cooking etc. The MON-MEVH employs highly efficient backward curved centrifugal motor impeller sets. All models are designed for continuous 24-hour use and should not be used in conjunction with a delay timer.

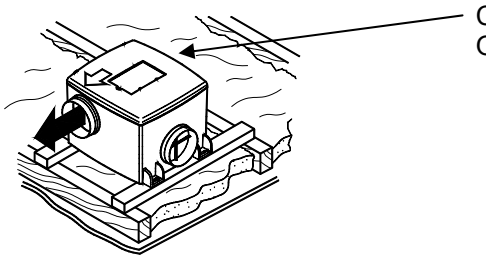
HUMIDISTAT.

The humidity set point is adjustable between 60% and 90% RH with a mid-point potentiometer setting of 75% RH. Once a humidity level is dedicated above the set point value, the MON-MEVH will initiate a fixed airflow boost cycle depending on the initial speed setting of unit when the humidity rise was detected.

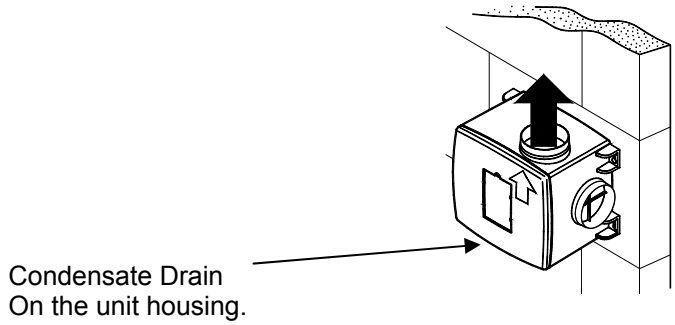
SITING

The MON-MEVH may be mounted in three orientations.

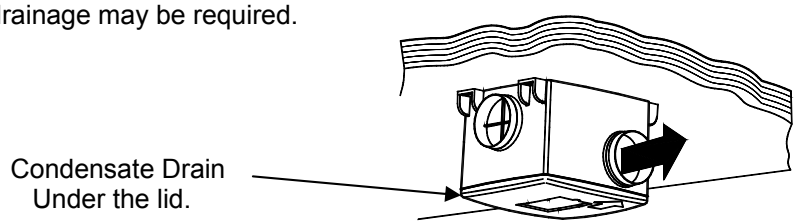
a). **Base mounted Installation** with ducting radiating out horizontally. The Condensate Drain is on the opposite side to the exhaust spigot at the base of the unit.



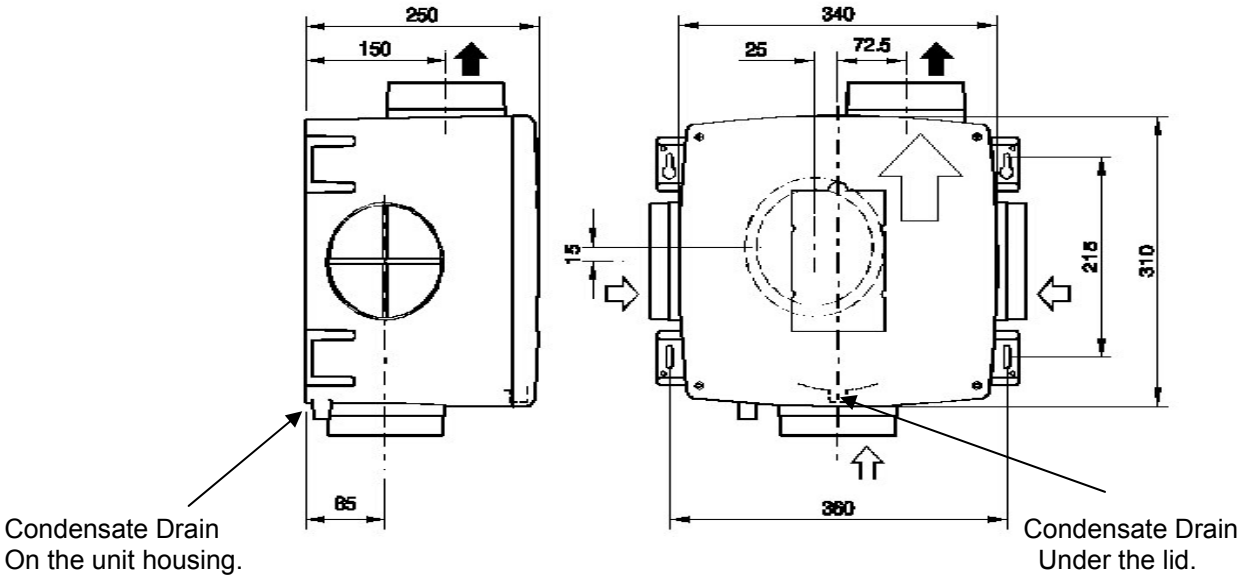
b). **Vertically mounted Installation** with the exhaust spigot at top. The Condensate Drain is opposite to the exhaust spigot at the base of the unit. Additional drainage may be required from the duct connected to the bottom spigot.



c). **Ceiling mounted Installation**. The Condensate Drain is opposite to the exhaust spigot under the lid of the unit. Additional drainage may be required.



See the dimensional details below for the mounting hole positions.



INSTALLATION

1. Position the MON-MEVH, taking into consideration the position of the rooms to be ventilated, the exhaust position, the drainage position and the electrical services. Ensure there is adequate access for installation and maintenance. Securely mount the MON-MEVH through the mounting brackets on the casing using the appropriate anti-vibration mounts, screws, washers, rubber bushes etc.

2. Where the intake and exhaust ducts are to be connected to the MON-MEVH, remove the spigot caps, if 125mm ducting is being used. If 100mm ducting is being used, peel out the center of the cap with a screwdriver as indicated and leave the cap surround in position. To connect ducting to the base intake, use a suitable adaptor attached using the 4 holes provided.

3. Ducting passing through an unheated roof void should be insulated. Ducting runs should be as straight as possible and intake ducting should slope downwards from Under the lid. Connect ducting to the MON-MEVH spigots and to appropriate ceiling terminations.

4. Select the drain spigot required, remove the “Knockout” and connect a suitable drainage system.

WIRING

WARNING: THE MON-MEVH AND ANCILLARY CONTROL EQUIPMENT MUST BE ISOLATED FROM THE POWER SUPPLY DURING THE INSTALLATION / OR MAINTENANCE.

THE MON-MEVH UNIT MUST BE EARTHED.

1. Connect mains supply as (*Fig. 1*).

2. Check that all connections have been made correctly. Ensure that all terminal screws and cable clamps are securely fastened.

3. The cable entry must be made using a suitable grommet or cable gland.

4. After performing the following set-up instructions, switch the mains supply on and check the system is operating correctly.

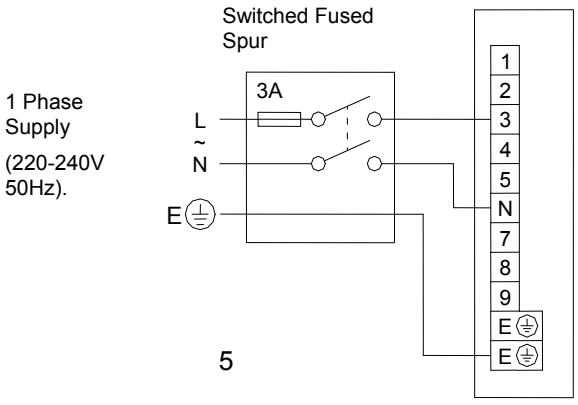
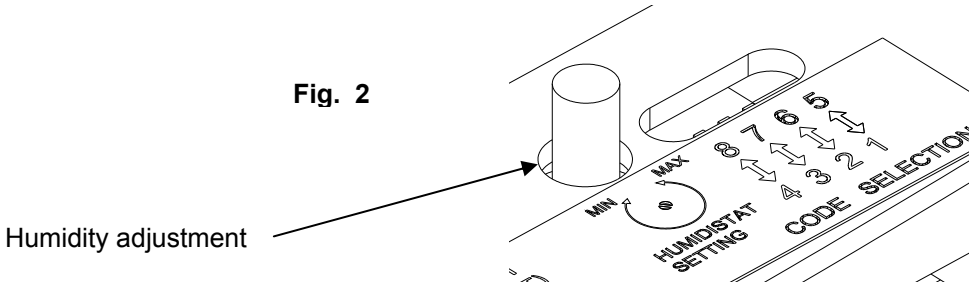


Fig 1

HUMIDITY ADJUSTMENT.

Adjust potentiometer to the required humidistat setting, Fig. 2. To increase the humidistat set point, rotate the adjuster anticlockwise and to decrease the humidistat set point rotate the adjuster clockwise.

Fig. 2



The MON-MEVH reacts automatically to an increase in %RH above the set point value. If high humidity is detected, the fan speed increases to medium for 30 minutes. At the end of this period, if high humidity is still detected, the fan speed increases to high for 15 minutes. At the end of this period, if the humidity is low, the fan returns to its original low setting, but if still high, the fan reverts back to medium speed for 30 minutes and so on.

OVER-HEATING PROTECTION

The MON-MEVH motor is fitted with Standard Thermal Overload Protection. This will automatically switch the fan Off in the event of a fault condition.
If this occurs isolate the MON-MEVH, check for and remove any obstruction, leave for a short time for the motor to cool before reconnecting. If this recurs, Isolate the MON-MEVH and call a service engineer.

HUMIDITY RESPONSE:

The MON-MEVH reacts automatically to an increase in %RH above the set point value and the manner in which this triggers will increase airflow depending on the original speed setting, as follows:

Low Speed Setting:	If high humidity is detected, the fan speed increases to medium for 30 minutes. At the end of this period, if high humidity is still detected, the fan speed increases to high for 15 minutes. At the end of this period, if the humidity is low, the fan returns to its original low setting, but if still high, the fan reverts back to medium speed for 30 minutes and so on.
Medium Speed Setting:	If high humidity is detected, the fan speed stays at medium speed for 30 minutes. At the end of this period if high humidity is still detected, the speed increases to high for 15 minutes and drops back to the original medium speed setting at the end of this period.
High Speed Setting:	If high humidity is detected there is no speed change. However, at the end of 30 minutes the boost time-out will automatically reset the fan speed back to low.

In all the automatic humidity operating modes, it is possible to override any humidity cycles in progress and switch the fan to any other speed. However, if high humidity is still present, the unit will revert back to the appropriate automatic humidity cycle operation.

PRODUCT FICHE

For Residential Ventilation Units (Complying Commission Delegated Regulation (EU) No 1254/2014)

Name:	Monsoon	Monsoon
Model ID (Stock Ref.) :	MON-MEVH	MON-MEVH - LDC
SEC Class	E	C
SEC Value ('Average')	-16.52	-24.69
SEC Value ('Warm')	-4.51	-9.18
SEC Value ('Cold')	-37.49	-51.75
Label Required? (Yes/No=Out of scope)	Yes	Yes
Declared as: RVU or NRVU/UVU or BVU	RVU/UVU	RVU/UVU
Speed Drive	Multi-Speed	Multi-Speed
Type HRS (Recuperative, Regenerative, None)	None	None
Thermal Eff: [(%), NA(if none)]	N/A	N/A
Max. Flow Rate (m3/h)	350.28	350.28
Max. Power Input (W): (@Max.Flow Rate)	81.00	81.00
LWA: Sound Power Level (dB)	51.53	51.53
Ref. Flow Rate (m3/s)	0.06811	0.07
Ref. Pressure Diff. (Pa)	185.00	185.00
SPI [W/(m3/h)]	0.22	0.22
Control Factor & Control Typology: (CTRL/ Typology)		0.00
Control Factor; CTRL	0.85	0.65
Control Typology	Central Demand Control	Local Demand Control
Declared: -Max Internal & External Leakage Rates(%) for BVUs or carry over (for regenerative heat exchangers only), -&Ext. Leakage Rates (%) for Ducted UVUs;	<5% Internal, <5% External	<5% Internal, <5% External
Mixing Rate of Non-Ducted BVUs not intended to be equipped with one duct connection on either supply or extract air side;	N/A	N/A
Position and description of visual filter warning for RVUs intended for use with filters, including text pointing out the importance of regular filter changes for performance and energy efficiency of the unit	N/A	N/A
For UVUs (Instructions Install Regulated Supply/Extract Grilles Façade)	In F&W	In F&W
Internet Address (for Disassembly Instructions)	www.nationalventilation.com	www.nationalventilation.com
Sensitivity p. Variation@+20/-20 Pa: (for Non-Ducted VUs)	N/A	N/A
Air Tightness-ID/OD-(m3/h) (for Non-Ducted VUs)	N/A	N/A
Annual Electricity Consumption: AEC (kWh/a)	2.16	1.45
Annual Heating Saved: AHS (kWh/a)		0.00
AHS: Average	21.93	28.30
AHS: Warm	9.92	12.80
AHS: Cold	42.90	55.36

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