# Installation & Maintenance Manual MORI WMF

Weatherproof Multi-Functional Subfloor Ventilation Fan



This product was constructed up to standard and in compliance with regulations relating to electrical equipment and must be installed by technically qualified personnel in accordance with all regulatory requirements. The manufacturer assumes no responsibility for damage to persons or property resulting from failure to observe the instructions contained in this booklet.



# PRECAUTIONS FOR INSTALLATION, USE & MAINTENANCE

- The device should not be used for applications other than those specified in this manual.
- After removing the product from its packaging, verify its condition. In case of doubt, contact a qualified technician. Do not leave packaging within the reach of small children or people with disabilities.
- Do not touch the appliance with wet or damp hands/feet.
- Children should be supervised to ensure they do not play with the device.
- WARNING: Never operate the fan without the weatherproof front cover/grille.
- WARNING: Never allow the weatherproof front cover/grille to become blocked.
- WARNING: Never position the fan unit in a location where any part of it could become submerged in water.
- Do not use the product in the presence of inflammable vapours, such as alcohol, insecticides, gasoline, etc.
- If any abnormalities in operation are detected, disconnect the device from the mains supply and contact a qualified technician immediately. Use original spare parts only for repairs.
- The electrical system to which the device is connected must comply with regulations.
- Before connecting the product to the power supply or the power outlet, ensure that:
- the data plate (voltage and frequency) correspond to those of the electrical mains
- - the electrical power supply/socket is adequate for maximum device power.
- If not, contact a qualified technician.
- The device should not be used as an activator for water heaters, stoves, etc., nor should it discharge into hot air/fume vent ducts deriving from any type of combustion unit.
- Operating temperature: -20°C up to +50°C.
- The device is designed to supply or extract clean air only, i.e. without grease, soot, chemical or corrosive agents, or flammable or explosive mixtures.
- Do not immerse the device or its parts in water or other liquids.
- Only turn off the power supply to the unit whenever a malfunction is detected or in the case of inspection, cleaning or maintenance. Prolonged and/or repeated power interruption to the unit (any period more than 72 hours) can create a health and safety hazard, damage components and will invalidate any warranty.
- For installation an omnipolar switch should be incorporated in the fixed wiring, in accordance with the wiring regulations, to provide a full disconnection under overvoltage category III conditions (contact opening distance equal to or greater than 3mm).
- The fan should be RCD (Residual Circuit Device) protected.
- Ensure adequate air return/discharge into/from the area the fan is ventilating in compliance with existing regulations in order to ensure proper device operation.
- If the environment in which the product is installed also houses a fuel-operating device (water heater, methane stove etc., that is not a "sealed chamber" type), it is essential to ensure adequate air intake, to ensure good combustion and proper equipment operation.

#### INTRODUCTION

The MORI WMF is a weatherproof, multi-functional fan unit for use when an externally mountable, continuously running ventilation fan is required e.g. to provide sub-floor ventilation.

The data which follows later in this document shows that the fan is very quiet in operation and consumes very little electricity. Bothe of these factors being very important for continuously operating ventilation equipment.

The integral controls provided as standard allow for the fan to be set at installation stage to operate at 3 different speeds/airflows and, at each speed/airflow, to operate in supply mode, extract mode or alternate flow mode with the fan automatically switching itself between supply and extract modes every 70 seconds.

When set up to provide automatic alternate flow, the fan can be set to start on either supply or extract mode when connected to the mains power. This allows multiple units to be "synchronised" with each other if required to ensure as one or more units supplies air, the other unit or units extract air, with operating modes of each fan alternating every 70 seconds.

The combination of wide airflows and various control modes provides the ventilation system designer much choice and flexibility.

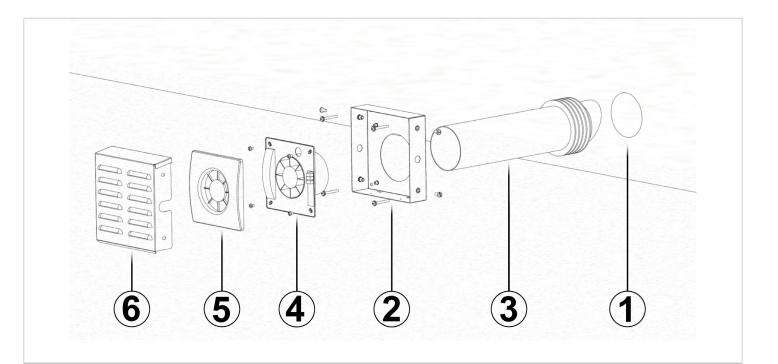
#### **TECHNICAL SPECIFICATIONS**

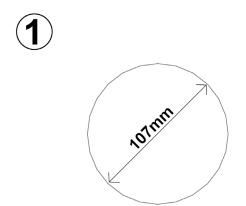
- External removable cowl/louvre material: long lasting polyester powder coated galvanised steel.
- External permanently fixed wall baseplate material: long lasting galvanised steel.
- Inner ventilation unit material: high quality, impact and UV-resistant ABS colour RAL 9010.
- · Main fan assembly easily electrically and mechanically disconnected and withdrawn to allow for cleaning and maintenance.
- High efficiency aerodynamic fan with "winglet" blades to optimise quietness and efficiency.
- Single phase EC reversible Brushless motor with integral thermal protection.
- Motor mounted on high quality ball bearings.
- 3 speed/airflow settings.
- 3 control mode settings i.e. extract only, supply only or alternate flow.
- Power supply 220V to 240V~ 50Hz

# **PERFORMANCE DATA (PER FAN)**

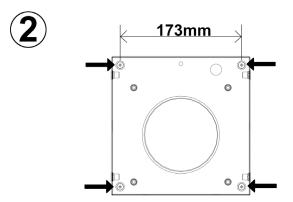
Operation temperature range of -20°C to 50°C	Speed 1	Speed 2	Speed 3
Extract Max I/s	4	7	12
Supply Max I/s	4	6	10
Extract Max Power W	1.5	1.7	2.7
Supply Max Power W	1.5	1.7	2.9
Extract dB(A) @ 3 metres	< 9	< 15	< 29
Supply dB(A) @ 3 metres	<9	< 15	< 29
Extract Only Annual Electrical Running Cost in £ @ 17 pence/kWh	2.23	2.53	4.02
Supply Only Annual Electrical Running Cost in £ @ 17 pence/kWh	2.23	2.53	4.32
Alternate Flow Annual Electrical Running Cost in £ @ 17 pence/kWh	2.23	2.53	4.17

# **INSTALLATION**



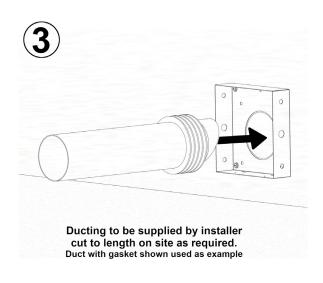


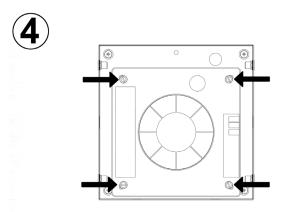
Core cut hole through wall into subfloor area



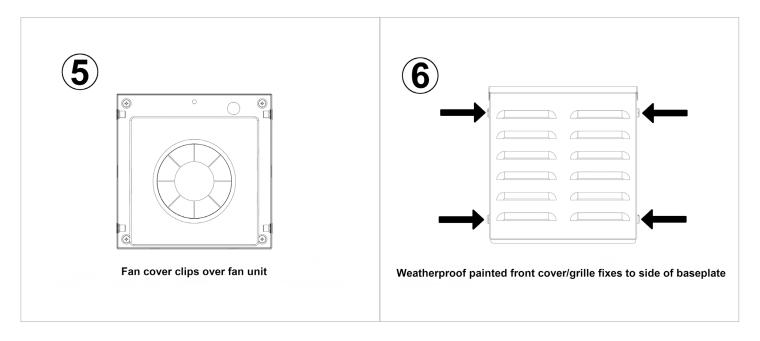
Fix baseplate to the wall ensuring foam strip creates a weatherproof seal with the wall.

Silicone sealant can be used for added protection.

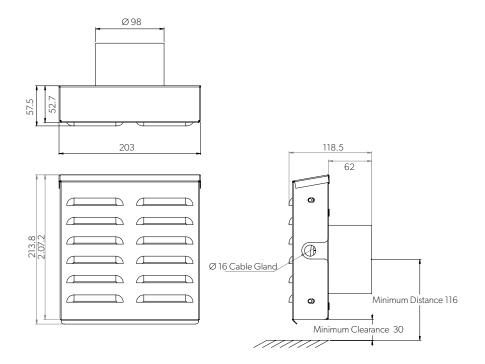




Main fan unit secured to baseplate, electrical connection made and unit controls set up in line with wiring diagram 152-MORI WMF

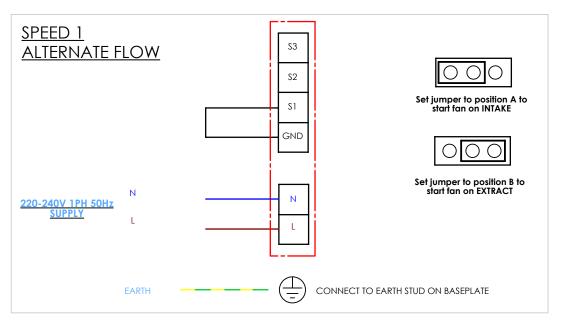


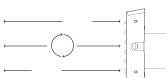
# **DIMENSIONS**

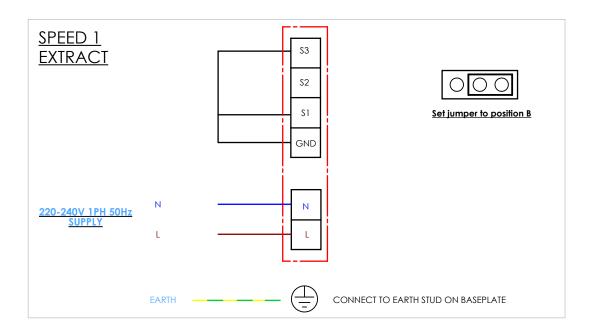


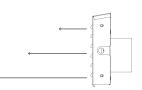
Dimensions are in mm.

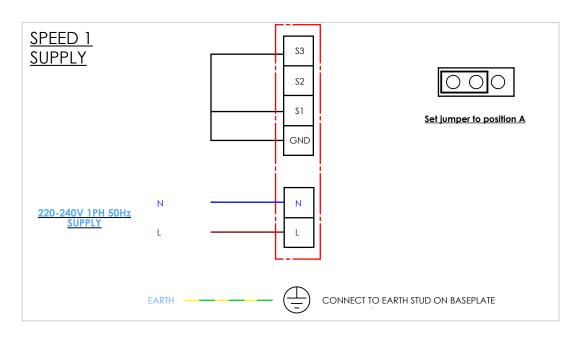
# **ELECTRICAL WIRING**

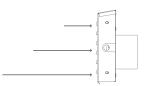


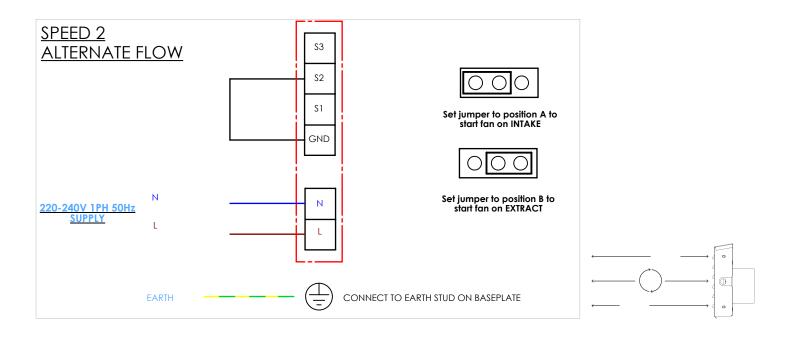


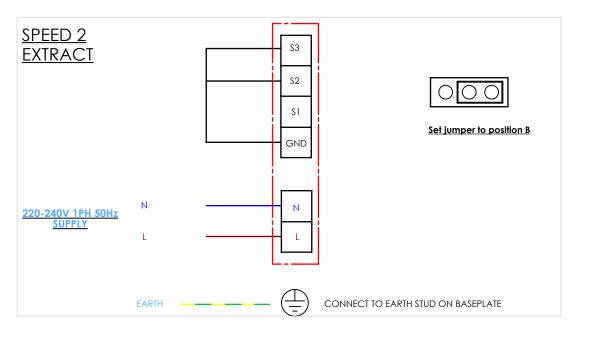


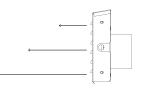


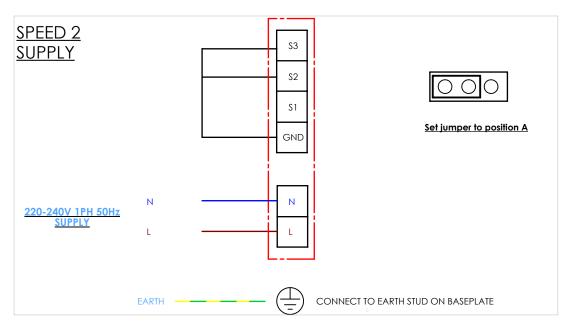


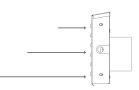


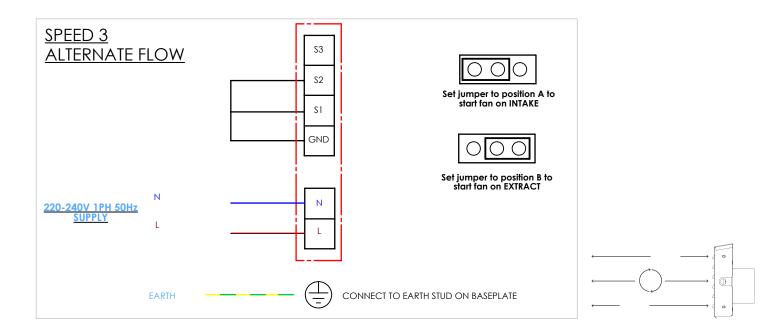


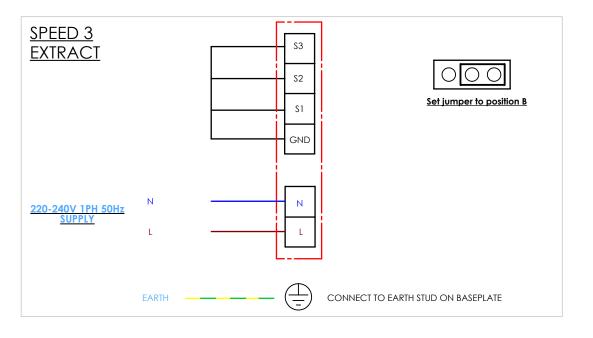


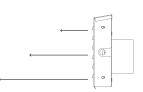


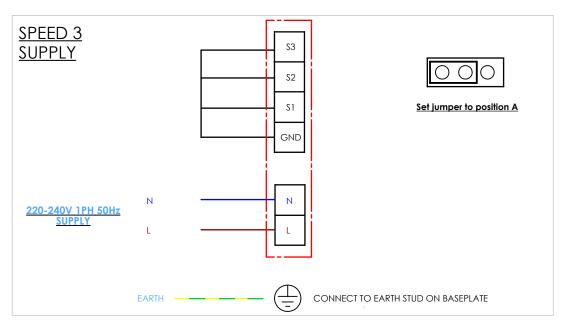


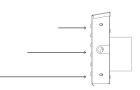


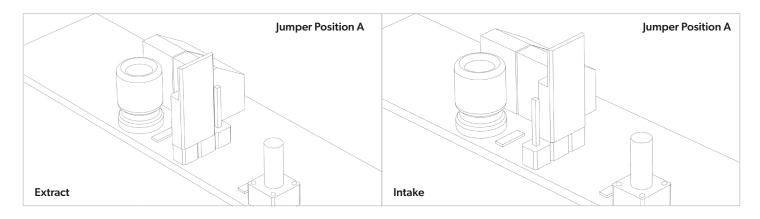












#### **MAINTENANCE**

Please refer to the diagrams on pages 3 and 4.

The following maintenance regime should be carried out at intervals not exceeding 6 months.

Make sure that the unit is electrically isolated before removing the weatherproof front cover/grille (6).

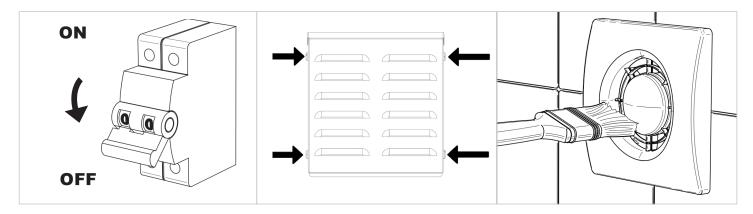
Remove the weatherproof front cover/grille (6) and make sure all of the louvres are clean and clear of all dirt, dust and debris that may restrict airflow.

Carefully remove any material that may have entered the unit and carefully use a soft brush to clear any dirt, dust and debris from the front of the fan cover (5).

If a more extensive clean is required of the main fan unit (4), the fan cover (5) can be removed (using the special tool provided to unclip it at the bottom) and the main fan unit (4) can then be mechanically and electrically disconnected and carefully withdrawn from the baseplate (2) which remains permanently fixed to the structure. The ducting penetrating the structure (3) may also be inspected and cleaned at this stage where it is accessible.

On completion of maintenance, parts should be put back together in the reverse to how they were removed.

The electrical power supply to the unit should only be switched back on when the complete unit has been re-assembled.



### STANDARD CONFORMITY

2014/35/EU Low Voltage Directive (LVD)

2014/30/EU Electromagnetic Compatibility (EMC), in conformity with the following standards:

Electrical Safety: EN60335-1(2012)+A11+A13; EN 60335-2-80(2003)+A1+A2

Electromagnetic Compatibility: EN 55014-1(2017); EN 55014-2(2015); EN 61000-3-2(2014); EN 61000-3-3(2013).

# **ErP Directive - Regulations 1253/2014 - 1254/2014**

-1	Mark		Homevent	
a)				
b)	Model	-	MORI WMF	
с)	SEC class	-	E	
c1)	SEC warm climates	kWh/m2.a	-5.4	
c2)	SEC average climates	kWh/m2.a	-14.3	
c3)	SEC cold climates	kWh/m2.a	-25.3	
	Energy label	-	Yes	
d)	Unit typology	-	Residential - bidirectional	
e)	Type of drive	-	Multi-speed drive	
f)	Type of Heat Recovery System	-	N/A	
g)	Thermal efficiency of heat recovery	%	N/A	
h)	Maximum flow rate	m3/h	25	
i)	Electric power input at maximum flow rate	W	2.6	
j)	Sound power level (L <sub>WA</sub> )	dBA	35	
k)	Reference flow rate	m3/h	12	
I)	Reference pressure difference	Pa	10	
m)	Specific power input (SPI)	W/m3/h	0.071	
n1)	Control factor	-	1	
n2)	Control typology	-	Manual control (no DCV)	
o1)	Maximum internal leakage rate	%	N/A	
o2)	Maximum external leakage rate	%	1	
p1)	Internal mixing rate	%	N/A	
p2)	External mixing rate	%	N/A	
q)	Visual filter warning	-	N/A	
r)	Instructions to install regulated grilles	-	N/A	
s)	Internet address for preassembly/disassembly instructions	-	www.homevent.co.uk	
t)	Airflow sensitivity to pressure variations	%	N/A	
u)	Indoor/outdoor air tightness	m3/h	N/A	
v1)	AEC - Annual electricity consumption - warm climates	kWh	1	
v2)	AEC - Annual electricity consumption - average climates	kWh	1	
v3)	AEC - Annual electricity consumption - cold climates	kWh	1	
w1)	AHS - Annual heating saved - warm climates	kWh	N/A	
w2)	AHS - Annual heating saved - average climates	kWh	N/A	
w3)	AHS - Annual heating saved - cold climates	kWh	N/A	
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# **WARRANTY**

Our 1 year warranty is provided only to customers who purchased directly from us. If you purchased elsewhere then please contact them directly and they will let you know their warranty procedure. Our warranty covers repair or replacement of defective goods only. It does not cover any labour costs associated with defective product or component removal or installation, nor does it cover the cost of sending goods back to us for inspection. Our warranty is subject to storage, installation, commissioning, inspection and maintenance having been carried out in accordance with our Installation and Maintenance Instructions (supplied with each product) and which are also available to view, save or print from our website.

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