

# FRPRO DATASHEET

As the airtightness of homes continues to improve - the risk of excessive moisture level build-up within wet rooms can lead to a reduction in air quality. Excessive moisture/humidity caused by insufficient ventilation can reduce the strength of your building - including your own health and vitality. The ProAir FRPRO Mechanical Extract Ventilation Unit (MEV) offers the solution to your home.

## ABOUT THE FRPRO

Mechanical extract ventilation (MEV) means continuous extraction of stale interior air from wet rooms and kitchen, this stale is replaced by the fresh air through humidity-controlled wall vents. Your home is ventilated even when the windows are closed. You can open them whenever you prefer but in seasons when it is desirable to maintain thermal energy inside, your family can still enjoy fresh air without any condensation risk thanks to the FRPRO. The FRPRO System automatically adapt the ventilation rate to meet the requirements for indoor air quality based on the information provided by the sensors installed (temperature, humidity and TVOC)

### AUTONOMOUS OPERATION

The unit automatically adapts the ventilation level to information from humidity, temperature and TVOC sensors



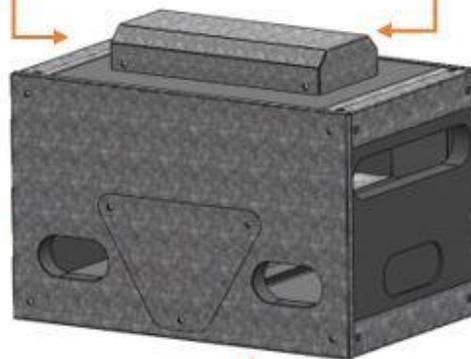
### EASY CONTROL

FRPRO can be easily controlled by the FCVCF-R controls and LEDs indicates the running status of the unit all the time



### GENEROUS STANDARD EQUIPMENT

The standard price offers above-standard equipment. FRPRO creates healthier and fresh living environment



### REAL INDOOR COMFORT WITHOUT CONDENSATION

The unit will automatically remove the excess moisture/humidity from all the wet rooms simultaneously

### EFFICIENT SYSTEM

FRPRO consumes low energy, low maintenance cost and runs at low operating cost. Can be ideal for apartments where possibly one exterior wall.

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The MEV unit represents the lungs of your home, and it works in the same manner. It ensures the exchange of indoor stale air and maintains the optimum humidity and air quality inside your home. In today's market, there are many high-quality MEV Units, and you are free to compare them. We neither promise a magic box nor make overstated claims. We simply use the laws of physics to ensure perfect indoor air quality. This is what makes our FRPRO Mechanical Extract Ventilation Unit different in so many ways.

### SFP (SPECIFIC FAN POWER)

Variable	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6
Test Points - kitchen plus (No.) wet rooms	1	2	3	4	5	6
Fan Speed Setting	30%	34%	36%	39%	42%	46%
Exhaust air flow rate (l/s)	21.0	29.0	37.0	45.0	53.0	61.0
Pressure (Pa)	-35	-38	-36	-36	-35	-39
Total measured electrical power (W)	6.49	8.72	10.29	12.85	15.82	20.44
Calculated SFP (W/l/s)	<b>0.31</b>	<b>0.30</b>	<b>0.28</b>	<b>0.29</b>	<b>0.30</b>	<b>0.34</b>

**Note: The MEV unit is best suitable for the dwelling under 150m<sup>2</sup>.**

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PRODUCT FICHE ACCORDING TO COMMISSION REGULATION (EU) 1254/2014

Supplier name	ProAir		
Model	FRPRO		
Specific energy consumption and SEC class	Cold	Average	Warm
SEC (kWh/m <sup>2</sup> . a)	-53.51	-26.5	-10.94
SEC Class	+A	B	E
RVU or NRVU / Unidirectional or bidirectional	RVU / Unidirectional		
Type of drive (multi-speed drive or variable speed drive)	Variable speed drive		
Type of heat recovery system (recuperative, regenerative, none)	None		
Thermal efficiency of heat recovery	N/A		
Maximum flow rate (m <sup>3</sup> /h)	637 m <sup>3</sup> /h @ 100 Pa		
Electric power input of the fan drive at maximum flow rate (W)	163 W		
Sound power level (L <sub>WA</sub> )	55 dB @ 363 m <sup>3</sup> /h, 65 dB @ 637 m <sup>3</sup> /h		
Reference flow rate (m <sup>3</sup> /s)	0.124		
Reference pressure difference (Pa)	50		
Specific power input (SPI) (W/ (m <sup>3</sup> /h))	0.14		
Control factor and control typology	0.65 and local demand control		
Maximum external leakage rates (%)	≤ 3		
Mixing rate of non-ducted bidirectional ventilation units not intended to be equipped with one duct connection on either supply or extract air side	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	Refer to installation and maintenance instructions supplied with the unit		
For unidirectional ventilation systems, instructions to install regulated supply/exhaust grilles in the façade for natural air supply/extraction	For any design air permeability, controllable background ventilators having a minimum equivalent area of 2500mm <sup>2</sup> should be fitted in each room except wet room, from which air is extracted. As an alternative, where the designed air permeability is leakier than 5m <sup>3</sup> /h.m <sup>2</sup> at 50 Pa, background ventilators are not necessary.		
Internet address for pre-/dis-assembly instructions	N/A		
For non-ducted units only: the airflow sensitivity to pressure variations at + 20 Pa and – 20 Pa	N/A		
For non-ducted units only: the indoor/outdoor air tightness in m <sup>3</sup> /h	N/A		
The annual electricity consumption (AEC) (in kWh electricity/a)	0.74		
The annual heating saved (AHS) (in kWh primary energy/a)	Cold	Average	Warm
	55.4	28.3	12.8

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## FOAM SPECIFICATION

Material	Impregnated fire-proof polyurethane foam
Density	95 ± 7% kg/m <sup>3</sup>
Tensile strength	70 KPa
Elongation	115%
Thermal conductivity	0.044 W/m K
Temperature range	-30 to 130 °C

## Filters

The filters installed in this product are G4 on extract side, with an option to install a higher grade relative to the application. Access to the filters is by removing access hatches that are secured with thumb screws. No tools are required to inspect or change the filters.

## Fans

The fans are high efficiency backward curved 190mm diameter light-weight plastic impellers mounted on external rotor, electronically commutated modbus, medium voltage, EC motors, all fitted into a customised sound absorbent dense polyurethane open-scroll enclosure.

## FRPRO MEV unit – dimensions (mm)

