

# Social Housing

## Sonair - Ventilation



# Ventilation

is key to a home's and occupant's health

It is estimated that we can spend more than 92% of our time indoors<sup>1</sup> and this can lead to indoor air being more polluted than outdoor air. As a result of this, a large amount of moisture is exposed and condensation being formed.

Condensation can be formed in two ways; from water vapour that is cooled to its dew point. Or, when the air becomes so saturated with water vapour that it can't hold any more moisture. If there is no where for this moisture to go, then it stays trapped inside a home.

Condensation built up can lead to mould, which can cause ill health. Mould can release spores that produce allergens, irritants, and mycotoxins<sup>2</sup> and exposure to mould spores in the home can exacerbate eczema and asthma.<sup>3</sup>

Condensation is especially common in winter and if not dealt with quickly, can encourage mould growth, with around 1 in 18 households in the UK reported to have experienced some form of mould.<sup>4</sup>

Our everyday activities contribute to moisture within a home. Breathing adds moisture; one sleeping person adds half a pint of water to the air overnight, and at twice that rate when active during the day. To give you some idea of how much moisture can be produced in a day, see example below<sup>5</sup>.



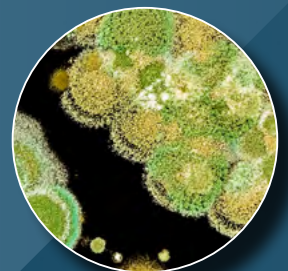
Total amount of moisture produced in your home in 1 day

**= 24 pints**

With homes becoming more airtight, it's important to allow them to breathe, to allow air to flow. Landlords and social housing projects need to 'Ventilate when you insulate' to make sure that tenants have no health issues or building damage is caused further down the line.

#### References:

- 1 - <https://road.cc/content/news/217728-brits-spend-92-all-their-time-indoors>
- 2 - AXA. What causes condensation and how to stop it. Accessed: November 2021. [<https://www.axa.co.uk/home-insurance/tips-and-guides/what-causes-condensation-and-how-to-stop-it/>].
- 3 - Medical News Today. Is mould in your house a problem? What you need to know. Accessed: November 2021. [<https://www.medicalnewstoday.com/articles/288651#mold-and-health>].
- 4 - Metro. How to get rid of mould in a rented home. Accessed: November 2021. [<https://metro.co.uk/2021/10/30/how-to-get-rid-of-mould-in-a-rented-home-15513721/>].
- 5 - <https://www.solihullcommunityhousing.org.uk/images/stories/fleximedia/condensation-leaflet.pdf>





# Sonair 3

## Sound attenuating filtered air supply



## Supply air - Retro fitted through walls

**Sonair 3 provides mechanical input ventilation when switched on, when switched off provides background trickle ventilation which includes a controllable shutter.**

It is designed with sound attenuating features to reduce noise transferring from outside to inside the home

Sonair 3 is a wall mounted input fan featuring a detachable remote control with an LED speed indicator.

- Sonair 3 ventilates and filters the air
- Independently tested for acoustic performance
- Exceptional sound attenuation (up to 58dB)
- Air cleaning
- Low energy

### Performance

Approximate input airflow rate (m<sup>3</sup>/h) – 20-150m<sup>3</sup>/h

Acoustic  $D_{n,e,w}$  (+/- ) –  $D_{n,e,w}$  (C;Ctr) 58(-1;-2)dB\*

Tested to the 'Noise Insulation Regulations'

Background ventilation rate of 2400EA when the unit is switched off, recirculation flap closed and with the shutter open

\*Sound insulating tube D100 required

## Features & Benefits

- Meets guidelines for occupant accessibility
- Increase occupant awareness of system operation
- Discreet design
- power lead is 1.8m long and fitted with a 3 pin plug
- Supplied with a flexible 1.8m long cable with a 13 amp 3 pin plug fitted with a 3 amp fuse

Product	Product Code
Sonair 3 including G4/ISO Coarse 60%	<b>352004</b>
Sonair 3 Filter G4/ISO Coarse 60%	<b>535083</b>
Sonair 3 Sound Insulating Tube D100	<b>110361</b>
100mm dia (non-sound insulating) duct 350mm long	<b>8960097</b>
White external grille	<b>8960105</b>
Brown external grille	<b>8960102</b>
Beige external grille	<b>8960103</b>

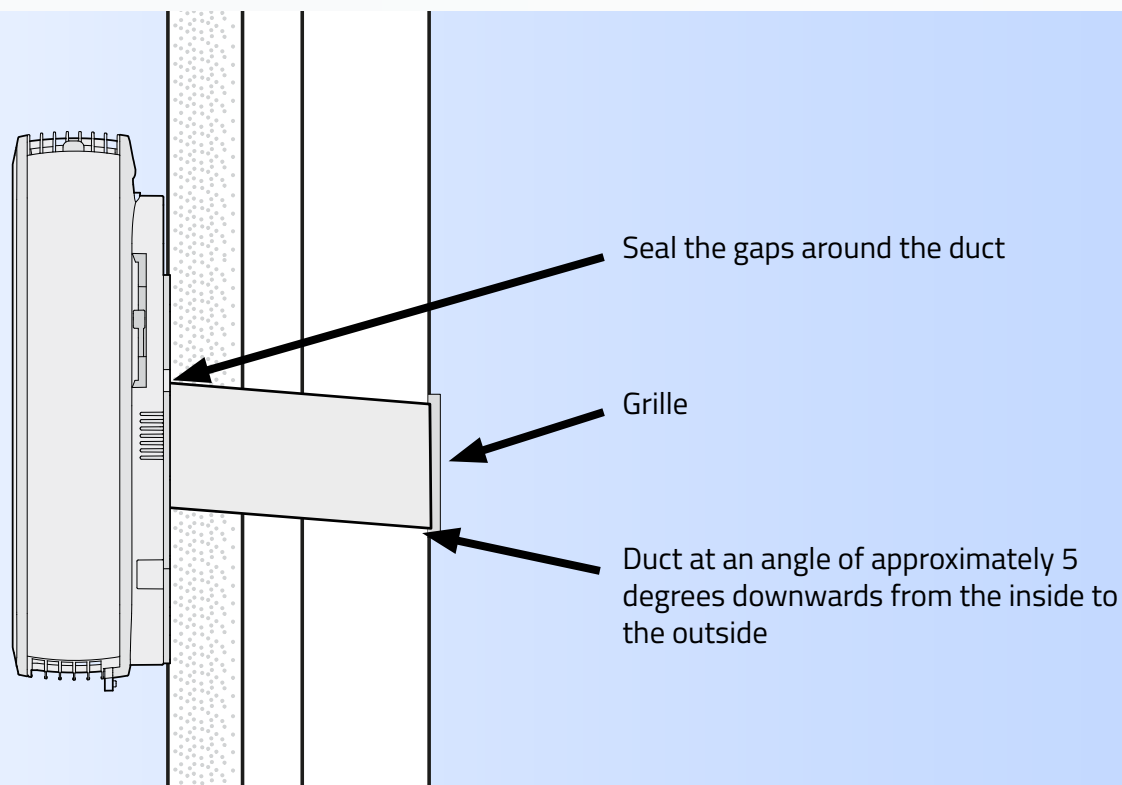
All items supplied separately

### Control

The Sonair 3's portable remote control lets you control the amount of freshly supplied outdoor air. The Sonair 3 has 10 ventilation settings.



## Installation



## Acoustics

As population density increases, acoustics are becoming an increasingly important factor. Consequently, there is a greater need for sound-attenuating ventilators. Standard or acoustic trickle ventilators cannot provide the necessary attenuation levels, so more sophisticated solutions are required. The Sonair 3 meets these requirements by achieving acceptable noise-reducing levels.

## Sound Production

Sound pressure level, LpA; 10 m<sup>2</sup> according to ISO 3741.

Speed Setting	Approximate Capacity	Sonair 3
		G4/ISO Coarse 60%
1	20m <sup>3</sup> /h	<11.3
2	30m <sup>3</sup> /h	<11.8
3	40m <sup>3</sup> /h	<15.3
4	50m <sup>3</sup> /h	20.8
5	60m <sup>3</sup> /h	24.8
6	70m <sup>3</sup> /h	29.3
7	85m <sup>3</sup> /h	33.8
8	105m <sup>3</sup> /h	39.3
9	125m <sup>3</sup> /h	43.8
10	150m <sup>3</sup> /h	49
Sound Attenuation according to ISO 10140-2 and BS EN ISO 717-1**		
	D <sub>n,e,w</sub> (C;Ctr)	58(-1;-2)dB*

\*Sound insulating tube D100 required

\*\*Independently tested by the BRE to requirements of noise insulation regulation

## Dimensions

445 (H) x 340 (W) x 134 (D)

## Housing

Plastic ABS white RAL 9003

## Voltage

220-240V/50 Hz

## Energy Consumption

0.5W at standby to 22.7W at max speed (150m<sup>3</sup>/h)

## Ventilation Capacity

Max is 41.7l/s (150m<sup>3</sup>/h) with ISO Coarse 60% filter

## Duct

Ø100 mm (standard)

## Warranty

2 years

## More information

[www.titon.com](http://www.titon.com) or 01206 814879