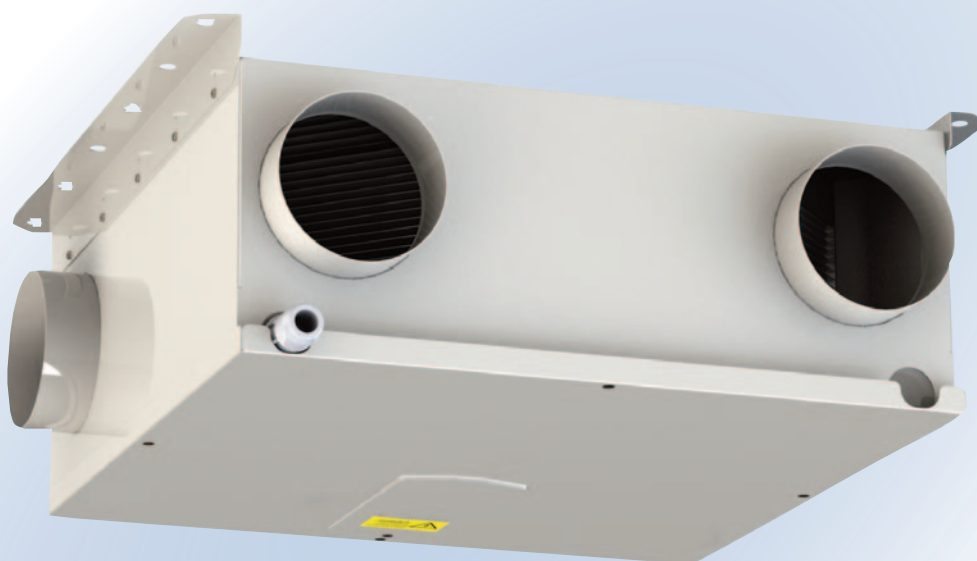




## Studio



### Studio

- with summer bypass and frost-stat
- efficient, low energy solution to controlling condensation and pollution in residential properties up to 100m<sup>2</sup>
- up to 80% heat exchange efficiency
- variable choice of low (trickle), boost and purge speed at installation
- for ceiling, loft or void installation
- low noise levels
- low running costs
- complies with Building Regulations
- manufactured in UK to ISO 9001:2015 and 14001:2015
- accurate commissioning via remote LCD commissioning unit
- \* non-bypass models available



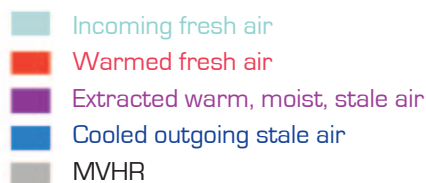
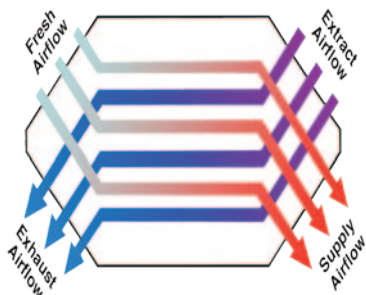
## Studio

### GENERAL FEATURES

- for 1 or 2 bedroom apartments, hotel rooms, student accommodation, extra care facilities, multi-occupancy establishments etc
- Up to 55 litre/sec at 50Pa - max 59 litre/sec capacity
- sfp down to 0.87 W/l/s
- summer bypass which allows the airflow to bypass the heat exchanger automatically when internal and external temperatures are between adjustable setpoints.
- frost-stat - proportionally reduces intake motor speed as temperature falls - activated when the outside temperature between +3°C and -8°C..
- run-time and power outage counters
- easy to install and maintain
- for ceiling, loft or void in-line installation
- variable low (trickle), boost and purge options for each motor
- boost speed can be activated by a 230V switched live from:
  - A light switch (if more than one light switch is used, each one must be a double pole switch)
  - Remote humidistat (230V - DRH240)
  - Passive infra red (230V - PIRFF)
  - Thermostat (230V - THM)
  - Remote switch/pull cord - 230V
- very low noise levels
- low running costs
- 5 year warranty - 1 year parts and labour, 4 years parts only

### TECHNICAL FEATURES

- compact low profile unit with galvanised sheet steel casing
- thermo-acoustic lining
- pre-wired for easy electrical connection
- low energy EC brushless motor with single width, single inlet, direct drive, backward curved impellers
- operates in temperature up to 50°C
- easy to access standard, disposable G3 filters
- counter flow heat exchanger
- all models bottom access only with right or left drain



### MODELS AVAILABLE:

- Studio LB - left drain, bypass
- Studio RB - right drain, bypass
- Studio LBH - left drain, bypass, humidistat
- Studio RBH - right drain, bypass, humidistat
- Studio L - left drain
- Studio R - right drain
- Studio LH - left drain, humidistat
- Studio RH - right drain, humidistat

### CONTROL FEATURES - STANDARD

- independent variable speed adjustment for each motor for trickle, boost and purge speeds.
- adjustable boost speed over-run timer from 0 to 90 minutes.
- adjustable boost speed delay from 0 to 5 minutes
- remote purge cable connection on circuit board (for optional purge facility)
- adjustable night time boost and purge inhibitor
- integral frost-stat - proportionally reduces intake motor speed as temperature falls
- automatic summer bypass

### CONTROL FEATURES - FACTORY SET

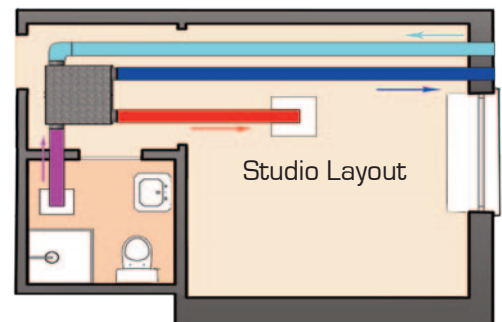
- change of ductwork handing on humidistat version (humidity threshold can be set at manufacture)
- integral humidistat - proportionally increases motor speeds with rising humidity
- 0-10V connections can be added for:
  - BMS - for remote motor shut-off
  - CO<sub>2</sub> detector
  - home automation system
- relay for external pre-heater
- 3 speed selector switch
- optional remote purge cable - factory connected - adjustable over-run timer from 0 to 250 minutes, Pre-set to 15 minutes (adjustable at factory)
- holiday mode for reduced speeds when property is unoccupied (factory set option) - default setting is 50% of trickle speed
- run-time and power outage counters downloadable via QR code.

### COMPLIES WITH

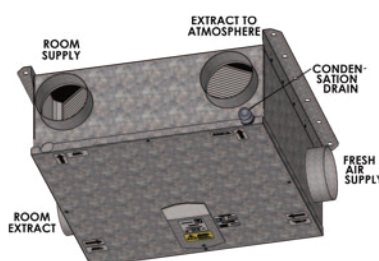
- Building Regulations for enhanced energy saving capability
- Building Regulations for reliable, efficient ventilation
- EU RoHS Directive Compliant.
- Complies with IEC60335-2-80, LVD2006/95/CE and EMC2014/30/UE (European Directive against radio interference and electro-magnetic compatibility)
- manufactured in UK to ISO 9001:2015 and 14001:2015
- CE marked
- SAP PCDB Listed

### TYPICAL SPECIFICATION AVAILABLE AT

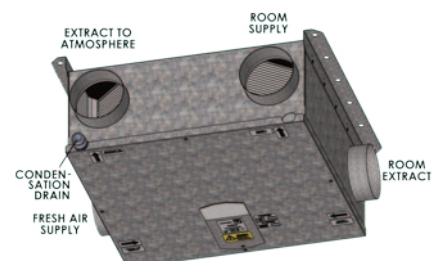
<http://www.vectaire.co.uk/downloads>



### STUDIO - OPTION 1 (RIGHT HAND DRAIN)



### STUDIO - OPTION 2 (LEFT HAND DRAIN)





# Studio

## TECHNICAL CHARACTERISTICS

Model	Airflow l/sec					Total Power - Watts					Operating Current (Amps)
	100%	80%	60%	40%	20%	100%	80%	60%	40%	20%	
Studio	59	45	30	17	6	100	57	25	10	2	0.93

Studio		Sound Power Levels, $L_w$ [dB] - Octave Bands Frequency Hz.								Sound Pressure dBA @ 3m
Curve Ref		63	125	250	500	1k	2k	4k	8k	
100% (59 l/sec)	Extract	63	65	66	66	62	59	57	49	36.3
	Supply	68	70	71	71	67	64	62	54	
	Breakout	66	63	58	52	42	33	25	15	
80% (45 l/sec)	Extract	59	62	61	61	57	54	50	42	31.8
	Supply	64	67	66	66	62	59	55	47	
	Breakout	62	60	53	47	37	28	18	8	
60% (30 l/sec)	Extract	53	57	55	55	50	47	41	32	26.1
	Supply	58	62	60	60	55	52	46	37	
	Breakout	56	55	47	41	30	24	9	< 5	
40% (17 l/sec)	Extract	46	50	47	47	41	37	30	18	18.4
	Supply	51	55	52	52	46	42	35	23	
	Breakout	49	48	39	33	21	11	< 5	< 5	
20% 6 l/sec)	Extract	34	38	33	33	27	22	12	3	<10.0
	Supply	39	43	38	38	32	27	17	8	
	Breakout	37	36	25	19	7	< 5	< 5	< 5	
The breakout dB(A) sound pressure values are given for hemispherical free field propagation at a distance of 3m from the unit										
Extract and Supply values are in-duct sound power levels										

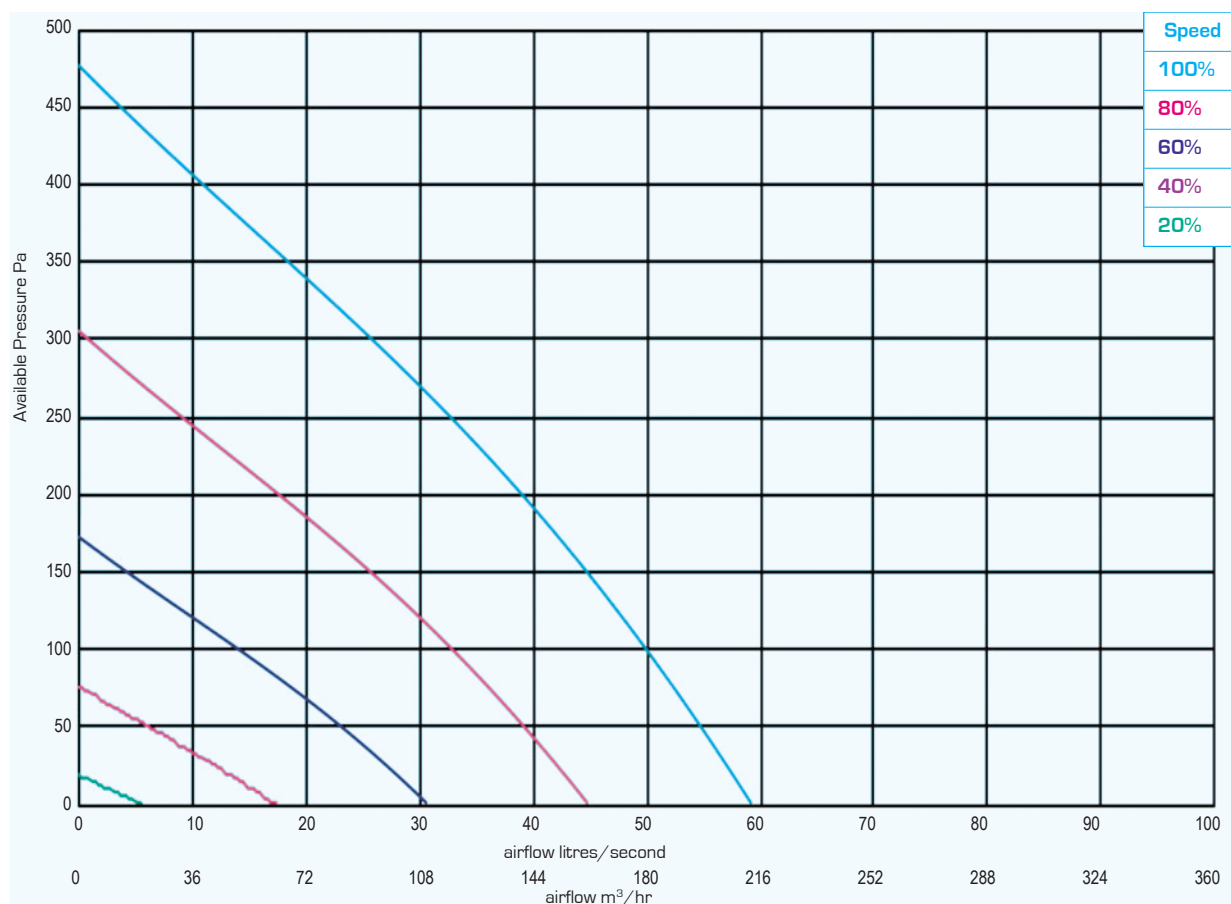
## RESULTS for SAP CALCULATIONS

### ENERGY LEVEL PERFORMANCE - using rigid ducting only

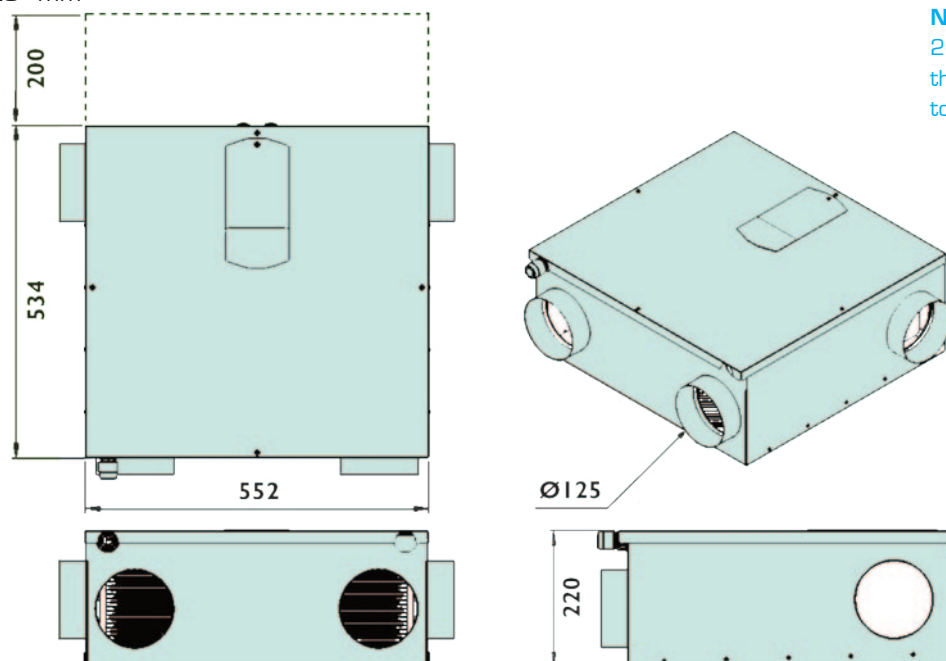
	2009 Data		2012 Data		SAP 10 Data	
Exhaust Terminal Configuration	Specific Fan Power [W/l/sec]	Heat Exchange Efficiency	Specific Fan Power [W/l/sec]	Heat Exchange Efficiency	Specific Fan Power [W/l/sec]	Heat Exchange Efficiency
Kitchen + 1 additional wet room	0.87	80%	0.93	79%	0.93	79%
Kitchen + 2 additional wet rooms	0.89	79%	1.09	78%	1.09	78%
Kitchen + 3 additional wet rooms	1.02	78%	1.36	77%	1.36	77%
Kitchen + 4 additional wet rooms	1.21	77%				
Kitchen + 5 additional wet rooms	1.43	77%				
Figures at minimum flow rate conditions						

Vectaire Ltd can supply all accessories for use with these units, including product filters, air filter cassettes, silencers, fire dampers, air valves, ducting, outside grilles and wall cowls. Additionally, Vectaire offers a design service to ensure that the unit installed is the best possible to provide efficient, effective, low energy and low running cost ventilation. Vectaire can also organise installation, commissioning and maintenance of these products.

### PERFORMANCE (curves are for guidance only)



### DIMENSIONS - mm



**N.B** a clearance of at least 200 mm should be allowed at the back of the unit for access to the filters,