

- 150mm Nude Flexible Duct
- 150mm Insulated R1.5 Flexible Duct
- SmartVent BAL225 system
- Y-Branch
- Branch Take Off (BTO)
- Intake & Exhaust Grilla
- Ducted Heatpump/FCU

PARTS LIST

Products required/recommended:

- 1x FAN6939, BAL225 MVHR Core
- 4x DCT2066, 150-125mm Reducer
- 1x DCT4432, 350-350-200mm BTO
- 1x DCT0486, 200-150mm Reducer
- 1x DCT0091, 150-150-150mm BTO
- 1x DCT2184, 150-150-150mm Y-Branch
- 3x DCT2610, 150mm Extract Grill
- 2x DCT0063, 150mm Soffit Grill

- 8x DCT3038, 150mm x 3m R1.5 Insulated duct
- 1x DCT0562, 150mm x 6m Nude duct
- 6xDCT0723, 150mm duct connector

- 1x DCT3527, 150mm x 2.5m PVC tubes (From Unit to the roof space)
- 4x DCT3772, 150mm 90 bends

Additional duct estimate: (As/If required)

DCT3038, 150mm x 3m R1.5 Insulated duct
DCT0787, 150mm Manual Dampers
DCT0037, 125mm duct connector

NOTES

- + This design is developed based on the information provided, and the layout is applicable to the specified products only.
- + For further airflow balancing, barrel dampers are available separately.
- + This layout should be used alongside the duct layout guidelines in the system installation instructions. It is recommended that ducting is taught and as straight as possible, avoiding sharp bends.
- + For the external grill, ensure a minimum separation distance of >1m from the natural ventilation openings and >2m from any fresh air vents.
- + Please note that this design is not to scale.
- + The specified airflow rates are in accordance with AS1668.2 –2002.
- + Firestopping is required where components penetrate fire walls, floors and ceilings.
- + Fans to be accessible for service and maintenance as per Australian Electrical Regulations. All other plant, equipment and components to be accessible for service and maintenance as per AS/NZS 3666.2:2011.-All electrical work to be carried out by a suitably qualified person with current electrical registration as per AS/NZS 3000:2018
- + Systems are plotted to the ideal conditions. The final runs, product codes and install are to be determined/confirmed by the installer, while the system functionality must be confirmed by the client.

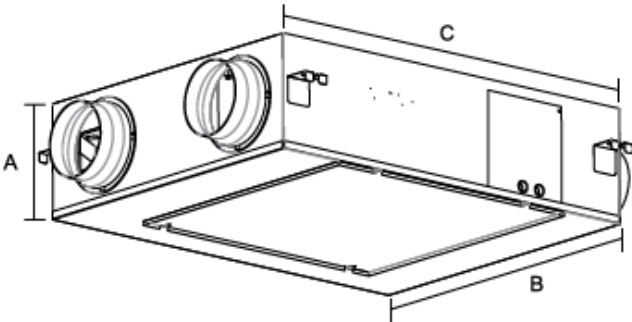
TECHNICAL NOTES

- + Manual balancing dampers and other secondary components to be used as required.
- + The system is designed for continuous extraction rates.
- + All system controls and integrations to be confirmed and arranged by the installer as needed.
- + During ventilation mode the system must set/wired run in conjunction with the air conditioning units fan mode.
- + Necessary electrical components are to be spec'd/quoted by the electrician according to the respective NZBC/AS Standards.
- + The builder must confirm the penetration/flashing details to meet the respective NZBC/AS Standards.
- + Under-door clearance required for make-up air: At least 20-25mm for bathroom/ensuite door.
- + Flexible ducts not to exceed the max runs and the fan noise must be accounted.
- + Necessary fan settings must be undertaken by the installer.

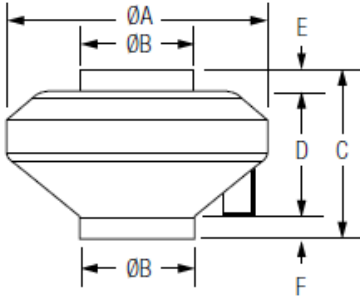
Specifications	SYN1015AD	SYN2025AD	SYN3035AD	BAL225	BAL405
Fan Type	AC Centrifugal			EC Centrifugal	EC Centrifugal
Max. Fan Cores	2			–	–
Spigot Size	150mm			125mm	150mm
Fan Speeds	3			10	
Max. Air Flow per Fan @ 0 Pa	77 l/s, 277m³/hr	97 l/s, 350m³/hr	130 l/s, 468m³/hr	76 l/s, 275m³/hr	136 l/s, 490m³/hr
Max. Air Flow per Fan @ 150 Pa	38 l/s, 137m³/hr	60 l/s, 216m³/hr	90 l/s, 324m³/hr	62 l/s, 223m³/hr	110 l/s, 395m³/hr
Max. Static Pressure per Fan	238 Pa	285 Pa	354 Pa	380 Pa	600 Pa
Power Supply	230–240V AC 50 Hz			220–240V AC 50 Hz	
Total Input Power	120W	178W	280W	128W	173W
Current (A)	0.46A	0.7A	1.1A	0.58A	0.79A
Operating Temp	–10°C to 40°C			–20°C to 45°C	
Sound Level	31.5 dB(A)	34 dB(A)	37 dB(A)	39 dB(A)	

Specifications	SV01P+ SV01P2	SV01L+ SV01L2	SV02AD	SV02P+ SV02P2	SV02L+ SV02L2	SV04AD	SV04P+ SV04P2	SV04L+ SV04L2	SV06AD	SV06P+ SV06P2	SV06L+ SV06L2
House Size	up to 100m²		up to 100m²			up to 280m²			up to 560m²		
Max. Fans	4	2	4	4	2	4	4	2	4	4	2
Fan Type	AC Centrifugal		AC Centrifugal			EC Centrifugal	AC Centrifugal		EC Centrifugal	AC Centrifugal	
Spigot Size	150mm		150mm			200mm			200mm		
Fan Speeds	3		3			Infinitely Variable	3		Infinitely Variable	3	
Max. Air Flow per Fan @ 0 Pa	175 l/s, 630m³/hr		175 l/s, 630m³/hr			284 l/s, 1023m³/hr	296 l/s, 1066m³/hr		284 l/s, 1023m³/hr	296 l/s, 1066m³/hr	
Max. Air Flow per Fan @ 150 Pa	107 l/s, 385m³/hr		107 l/s, 385m³/hr			206 l/s, 742m³/hr	211 l/s, 760m³/hr		206 l/s, 742m³/hr	211 l/s, 760m³/hr	
Max. Static Pressure per Fan	320 Pa		320 Pa			461 Pa	440 Pa		461 Pa	440 Pa	
Power Supply	220–240V AC 50 Hz		220–240V AC 50 Hz			200-240V AC 50 Hz	220–240V AC 50 Hz		200-240V AC 50 Hz	220–240V AC 50 Hz	
Input Power per Fan	57W		57W			85W	105W		85W	105W	
Current (A) per Fan	0.26A		0.26A			0.7A	0.47A		0.7A	0.47A	
Operating Temp	–25°C to 50°C		–25°C to 50°C			–25°C to 50°C			–25°C to 50°C		
Sound Level	47 dB(A)		47 dB(A)			53 dB(A)			53 dB(A)		

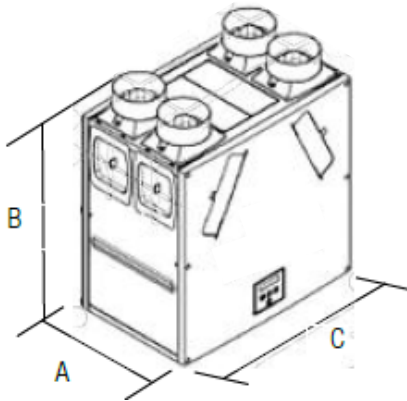
Energy Recovery Core Dimensions (mm)	A	B	C
SYN1015AD	230	690	860
SYN2025AD	230	710	930
SYN3035AD	240	820	1070



Fan Dimensions (mm)	A	B	C	D	E	F
Spigot Size – 150mm	340	150	280	170	50	60
Spigot Size – 200mm	340	200	280	170	50	60



Heat Recovery Core Dimensions (mm)	A	B	C
BAL225	285	650	550
BAL405	524	745	776



FLEXIBLE DUCTING:

