

Skypod

Roof extract units *for powered and natural ventilation*

- Low silhouette or vertical jet
 - With or without fans
- Curb mounting and profiled bases
 - Low noise units available



The sky's the limit



With sizes from 250mm to 800mm, and fans with 4, 6 and 8 pole motors, Skypod is the definitive range of roof extract units.

The fans are suitable for temperatures up to 70°C, and 100% humidity.

All fans are speed controllable.



The robust GRP housings are suitable for exposed locations. Standard colour is light grey to BS 00 A 05, many other colours available to order.

Roof units supplied with curb mounting base, and low silhouette or vertical jet cowls.

Soaker sheet bases available for all roof profiles.

All units fitted with motor side guards as standard.

All units can be supplied without fans for use as roof terminals.



Options available:

- Fitted birdscreen.
- Backdraft shutters.
- Prewired local isolator.
- Lifting Lugs.

Soaker Sheet Bases



Typical profile



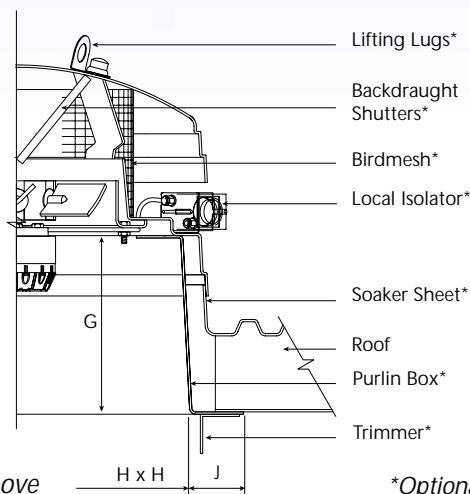
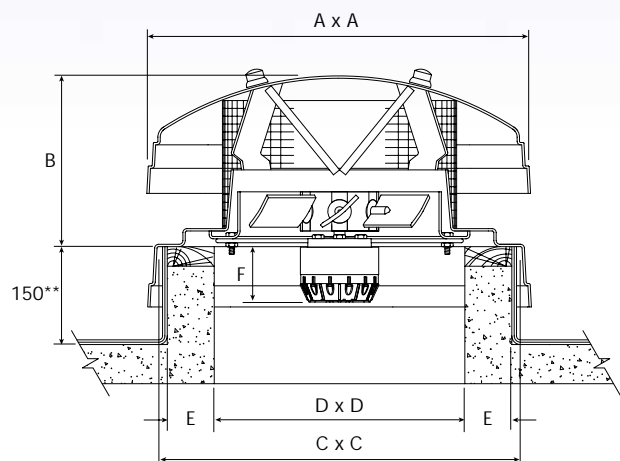
Purlin box viewed from below

A matching purlin box is necessary to support the Skypod unit above the roof. The box is installed through the roof and fixed using trimmers to the purlins, then the soaker sheet is positioned and sealed onto the roof. Finally the Skypod unit is fixed to the purlin box. Full site installation instructions are provided by VES.

Noise Levels

The noise levels stated on page 4 are the absolute maximum at full speed in a free air environment. If lower sound levels are required select an oversized fan and run at low speed using a speed controller. At half speed the reduction in noise level is 15 dB for 4 pole fans, 10 dB for 6 pole fans and 5 dB for 8 pole fans.

SKC low silhouette units

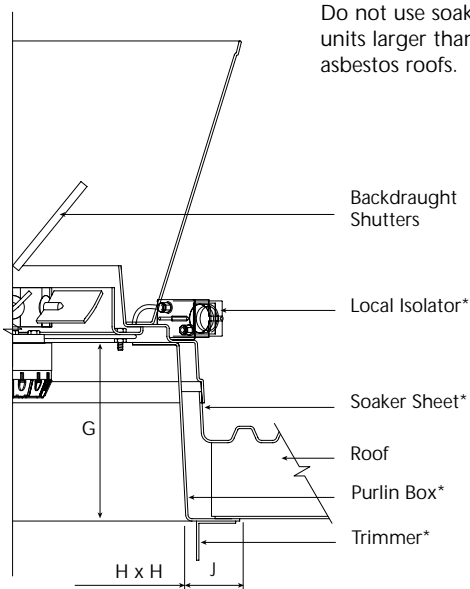
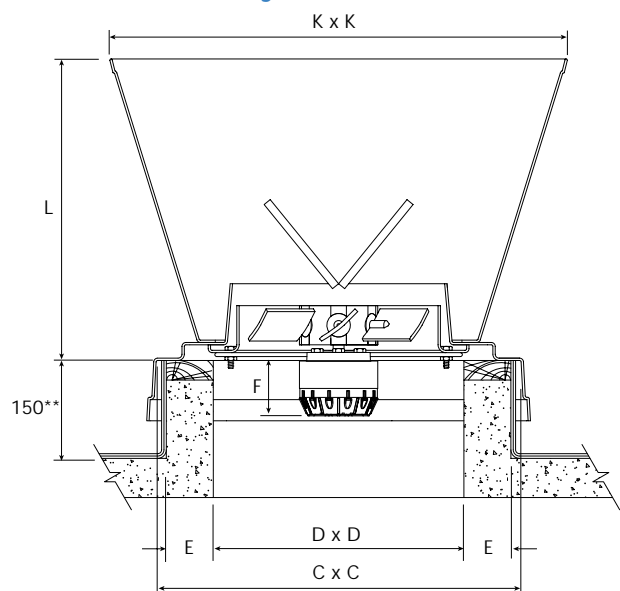


Note: the SKC units without fans have the same dimensions as above

*Optional

**Recommended height

SKV vertical jet units



Note:
Do not use soaker sheet base units larger than size 630 on asbestos roofs.

*Optional

**Recommended height

Skypod Model	A	B	C	D	E	F	G	H	J	K	L	Weight kg	SKC No fan Weight kg
SKC 250/4-1	490	220	460	300	50	45	225	480	50	-	-	9	5
SKC/V 315/4-1	555	250	520	400	50	60	220	515	50	700	385	18	7
SKC/V 355/4-1	675	290	660	450	75	60	240	680	50	790	495	22	9
SKC/V 400/4-1	765	370	755	500	100	60	240	780	50	790	495	22	12
SKC/V 400/6-1	765	370	755	500	100	60	240	780	50	790	495	24	12
SKC/V 450/4-1	765	370	755	500	75	60	240	780	50	790	495	27	12
SKC/V 450/6-1	765	370	755	500	75	60	240	780	50	790	495	27	12
SKC/V 500/4-1	995	430	920	700	100	60	250	910	70	950	570	40	21
SKC/V 500/6-1	995	430	920	700	100	60	250	910	70	950	570	40	21
SKC/V 560/4-1	995	430	920	700	100	60	250	910	70	950	570	46	21
SKC/V 560/4-3	995	430	920	700	100	60	250	910	70	950	570	46	21
SKC/V 560/6-1	995	430	920	700	100	60	250	910	70	950	570	46	21
SKC/V 630/4-3	1115	530	1010	825	75	60	260	950	65	1030	680	52	27
SKC/V 630/6-1	1115	530	1010	825	75	60	260	950	65	1030	680	50	27
SKC/V 630/6-3	1115	530	1010	825	75	60	260	950	65	1030	680	50	27
SKC 630/8-1	1115	530	1010	825	75	60	260	950	65	-	-	50	27
SKC/V 710/6-1	1115	530	1010	850	75	435	260	950	65	1030	680	50	27
SKC/V 710/6-3	1115	530	1010	850	75	435	260	950	65	1030	680	66	27
SKC 710/8-1	1115	530	1010	850	75	435	260	950	65	-	-	66	27
SKC/V 800/6-1	1410	650	1125	950	75	435	280	1150	60	1120	690	88	34
SKC/V 800/6-3	1410	650	1125	950	75	435	280	1150	60	1120	690	88	34
SKC 800/8-1	1410	650	1125	950	75	435	280	1150	60	-	-	88	34
SKC 800/8-3	1410	650	1125	950	75	435	280	1150	60	-	-	88	34

The following table indicates the pressure drop through the roof unit at a given air volume. We recommend that you do not exceed the maximum stated air volume for each size of unit.

Skypod Model	Air Volume m ³ /sec	Pressure Drop Pa
250	0.10	2
	0.20	5
	0.30	10
	0.40	18
	0.50	28
315	0.40	10
	0.50	18
	0.60	25
	0.70	33
	0.80	42
355	0.60	14
	0.70	19
	0.80	25
	0.90	33
	1.00	40
400/450	0.80	10
	1.00	15
	1.20	23
	1.40	29
	1.60	38

Skypod Model	Air Volume m ³ /sec	Pressure Drop Pa
500/560	1.50	15
	1.75	23
	2.00	28
	2.25	34
	2.50	42
630	2.50	18
	2.75	22
	3.00	25
	3.25	29
	3.50	33
800	3.00	13
	3.50	19
	4.00	24
	4.50	30
	5.00	37

These units can be supplied with birdguard, backdraught shutters, profiled soaker sheet bases, purlin boxes and special colour as required.

Skypod Technical Electrical Details

Skypod Model	Fan Speed	Motor kW	FLC 230v	FLC 400v	Max operating temp °C	Speed Controller		SPL dBA @ 3m
						Electronic	Transformer	
SKC 250/4-1	1400	0.04	0.27	-	70	V20	T1	47
SKC/V 315/4-1	1400	0.14	0.67	-	70	V20	T1	54
SKC/V 355/4-1	1400	0.16	0.76	-	70	V20	T1	56
SKC/V 400/4-1	1400	0.25	1.06	-	70	V20	T1	57
SKC/V 400/6-1	900	0.12	0.54	-	70	V20	T1	47
SKC/V 450/4-1	1400	0.45	1.96	-	70	V20	T4	60
SKC/V 450/6-1	900	0.17	0.74	-	70	V20	T1	52
SKC/V 500/4-1	1400	0.72	3.29	-	50	V65	T4	66
SKC/V 500/6-1	900	0.29	1.40	-	50	V20	T4	56
SKC/V 560/4-1	1400	0.90	3.67	-	50	V65	T4	66
SKC/V 560/4-3	1400	1.03	-	1.83	70	SC310SD	-	66
SKC/V 560/6-1	900	0.40	1.83	-	70	V20	T4	58
SKC/V 630/4-3	1400	1.23	-	2.13	40	SC310SD	-	77
SKC/V 630/6-1	900	0.54	2.40	-	70	V65	T4	58
SKC/V 630/6-3	900	0.53	-	1.10	50	SC310SD	-	58
SKC 630/8-1	700	0.28	1.47	-	60	V20	T4	55
SKC/V 710/6-1	900	0.52	4.00	-	50	V65	T4	62
SKC/V 710/6-3	900	0.52	-	1.70	50	SC310SD	-	62
SKC 710/8-1	695	0.25	2.30	-	50	V65	T4	52
SKC 800/6-1	900	1.35	8.70	-	50	-	T8	67
SKC/V 800/6-3	900	1.35	-	3.60	50	SC310SD	-	67
SKC 800/8-1	695	0.65	4.90	-	50	V65	T8	58
SKC 800/8-3	695	0.65	-	2.40	50	SC310SD	-	58

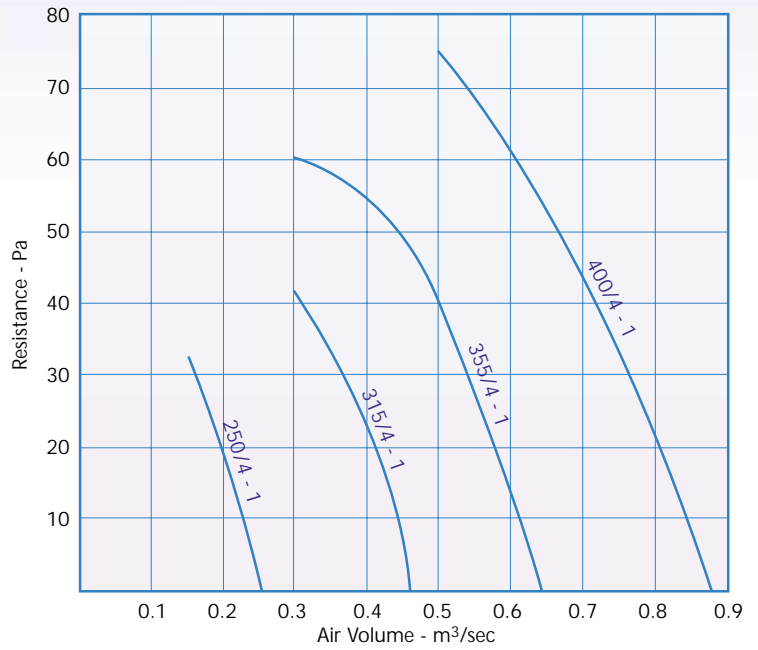
Skypod units with cowl are designated model SKC, vertical jet units are model SKV. Please note the size 250 and 8 pole units are not available vertical jet.

The SC310SD 3 phase speed controller requires the fan to be wired in star/delta connection.

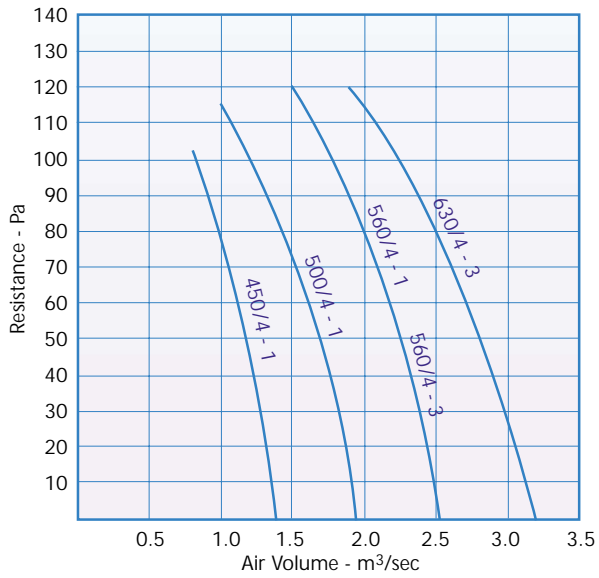
Automatic Fan Speed Control for 1 phase fans:

- The MS 10 speed controller will operate on 0-10 volt providing automatic fan speed control via a signal from BMS, i.e. air quality or temperature sensor.
- The MS 10T is an electronic temperature controlled fan speed control via a sensor. Controller size 200mm wide, 300mm high x 150mm deep.

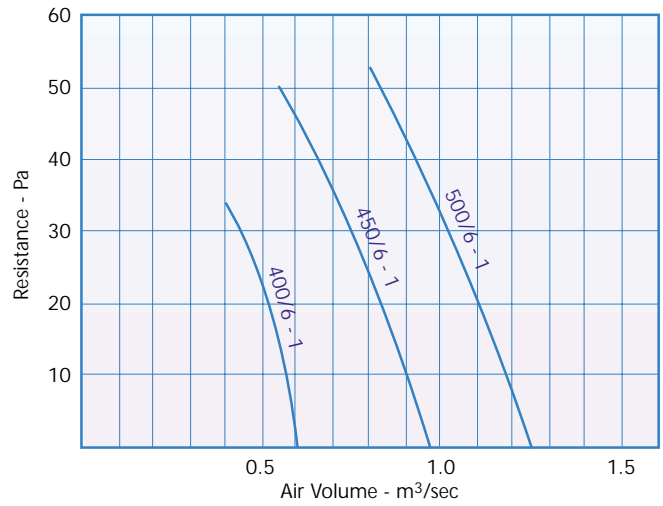
250 - 400mm 4 pole



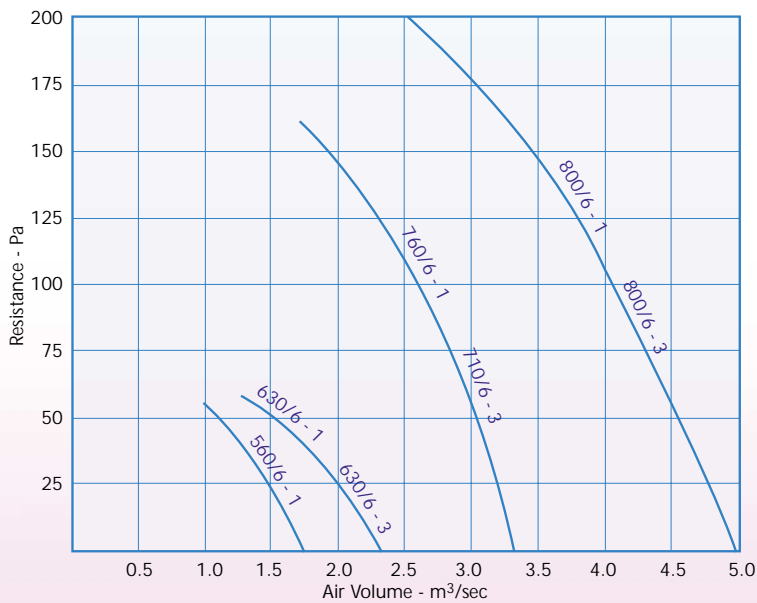
450 - 630mm 4 pole



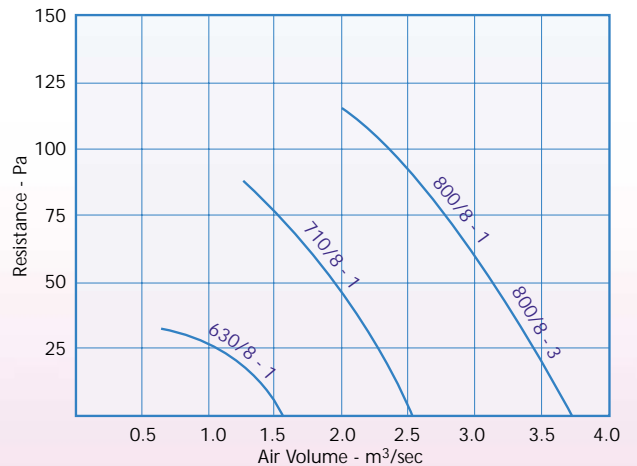
400 - 500mm 6 pole



560 - 800mm 6 pole



630 - 800mm 8 pole



Fans and Motors

Impellor blades for sizes 250 to 630mm diameter are aluminium magnesium alloy. The impellor on size 710mm is aluminium clad steel, and the size 800mm has moulded glass coupled polypropylene aerofoil blades. The fans are statically and dynamically balanced in accordance with UNI ISO 1940. All motors have a die-cast enclosure in aluminium alloy. Up to and including size 630mm the fans have external rotor motors. All motors are insulated to class F with IP 54 protection, and have thermal overload protection. Fan performance is certified in accordance with BS 848 Part 1 or AMCA 210 standard. Up to size 630mm the fans have an aerodynamic steel fan plate, and the impellor, motor and guard are painted black to RAL 9005. The electrical supply is to be 230 volt 50Hz 1 phase or 400 volt 50Hz 3 phase.

Skypod Housings

The Skypod roof unit is supplied with two grp mouldings, cowl and base. The base is designed for mounting on a curb upstand, or on a purlin box when supplied with a profiled soaker sheet base. The grp construction conforms to BS 3532 (type C), but if specified may be supplied to BS 3532 (type E) having Class II fire retardant characteristics in accordance with BS 476 Part 7, 1971. Standard colour light grey to BS 00 A05, most other colours can be supplied to specified colour.

Soaker Sheet Bases

Soaker sheet base length 1800mm, width provides for rain water drainage and a full overlapping corrugation to each side of upstand. Maximum angle for roof installation 30°. The soaker sheet base does not support the Skypod roof unit, this is done by the purlin box. It is possible that the roof profile cannot be identified. VES are able to assist with this to ensure correct selection. Ask Sales Department for Roof Soaker Profile Identification Form. Do not use soaker sheet base units larger than size 630 on asbestos roofs.

Backdraught Shutters

The optional backdraught shutters are vacuum formed high impact polystyrene, which is light yet strong for minimal resistant to airflow. On a pitched roof installation, the shutter hinge should point up the roof incline.

Birdguard

The optional birdguard is manufactured from steel and is recommended for all low silhouette cowl units.

Quality Assurance

VES Andover Ltd is a company of assessed capability by BSI to the requirements of ISO 9001 - 2000, Certificate no Q5375. Units comply with all relevant European directives and are CE marked.

Specify the model required as follows:

Model SKC or SKV plus fan code i.e. SKC 400 / 6 - 1
Optional birdmesh eg. SKC 400 / 6 - 1 / BM
Optional backdraught shutters eg. SKC 400 / 6 - 1 / BS
Optional birdmesh and shutters eg. SKC 400 / 6 - 1 / BM / BS

Basic unit without fan i.e. SKC 400, with birdmesh SKC 400 / BM

Alternative colour grp - state RAL or BS colour:
eg. SKC 400 / 6 - 1 / BS / RAL 9010 (= finish RAL 9010)

Other options include:

- Fitted local isolator
- Lifting lugs
- Profiled soaker sheet base
- Purlin box



VES Andover Limited
Eagle Close, Chandlers Ford Industrial Estate,
Chandlers Ford, Eastleigh, Hampshire SO53 4NF

Tel: 08702 40 43 40
Fax: 08702 40 45 50
e-mail: vesltd@ves.co.uk
www.ves.co.uk

VES reserve the right to amend product specifications and details without notice.

© 2005 VES Andover Ltd.
Issue 1 - 12/2005



ISO 9001-2000
Cert. No. Q5375