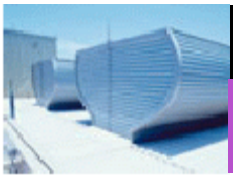
Robertson

Exhaust Guide

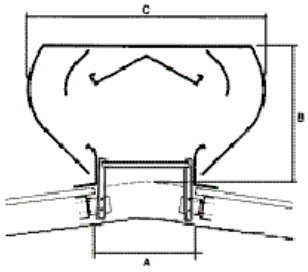


Ultra-Flow ridge ventilators

Coefficient of Discharge 0.65
Throat Size: 750 mm to 3000 mm

The Ultra-Flow Continuous Gravity Ventilator is the most aerodynamically efficient in the RVI range of exhaust ventilators.

The Ultra-Flow provides an energy and cost effective means of air exhaust for severe heat and fume problems. Ideally suited to application in aluminium smelters, steel mills, boiler houses, glass plants and general industrial manufacturing facilities.



Typical Cross Section

Design Features

- Coefficient of Discharge: As determined by independent tests is a minimum of 0.65
- Unobtrusive: Designed to meet architectural requirements of low silhouette and modern design and provide minimum resistance to wind forces.
- Guiding vanes: Facilitate redirection of exhausted air to provide for a more uniform velocity distribution at top of ventilator opening, allowing for a greater capacity discharge for a given size.
- Diaphragms: Wind jump diaphragms ensure efficient exhaust even when wind direction parallels the ventilator opening.
- Welded: frames make for reduced erection costs and lower supporting steel costs, in addition to providing greater overall strength.
- Materials: Can be supplied in a wide range of cladding materials including Versacor coated sheeting.
- Acoustics: Can be acoustically treated to suit specific project requirements.

Dimensions and Mass:

Dimensions (mm)			Approximate Mass per Linear Metre (kg)		Approximate Mass Pair of ends (kg)	
A	B	C	Versacor	Zincalume	Versacor	Zincalume
750	1100	1900	70	64	116	110
1000	1330	2350	100	92	168	159
1500	1800	3450	124	112	285	269
2000	2270	4550	154	134	450	406
2500	2820	5670	217	200	637	600
3000	3300	6850	290	270	1033	975

NOTE: Mass per metre run related to ventilators with standard 3,000 mm frame spacing.

Exhaust Capacity Table: (cubic metres per second per metre run)

Temp. Diff x Eff. Ht. (△T degC x metres)	CLEAR OPENING (mm)					
	750	1000	1500	2000	2500	3000
30	0.398	0.530	0.795	1.060	1.325	1.590
40	0.459	0.612	0.918	1.224	1.530	1.836
50	0.513	0.684	1.027	1.369	1.711	2.053
60	0.562	0.750	1.125	1.499	1.874	2.249
70	0.607	0.810	1.215	1.620	2.024	2.429
80	0.649	0.866	1.299	1.731	2.164	2.597
90	0.689	0.918	1.377	1.836	2.296	2.755
100	0.726	0.968	1.452	1.936	2.420	2.904
110	0.761	1.015	1.523	2.030	2.538	3.045
120	0.795	1.060	1.590	2.121	2.651	3.181
130	0.828	1.104	1.655	2.207	2.759	3.311
140	0.859	1.145	1.718	2.290	2.863	3.436
150	0.889	1.185	1.778	2.371	2.964	3.556
175	0.960	1.280	1.921	2.561	3.201	3.841
200	1.027	1.369	2.053	2.738	3.422	4.106
250	1.148	1.530	2.296	3.061	3.826	4.591
300	1.257	1.676	2.515	3.353	4.191	5.029
400	1.452	1.936	2.904	3.872	4.839	5.807
500	1.623	2.164	3.246	4.329	5.411	6.493
600	1.778	2.371	3.556	4.742	5.927	7.112

NOTE:
a) The above exhaust capacity table is based upon zero wind velocity. Wind velocity will increase the vent's exhaust capacity.
b) This table is based upon a ratio of free area of inlet openings to exhaust openings of 1.5:1.0