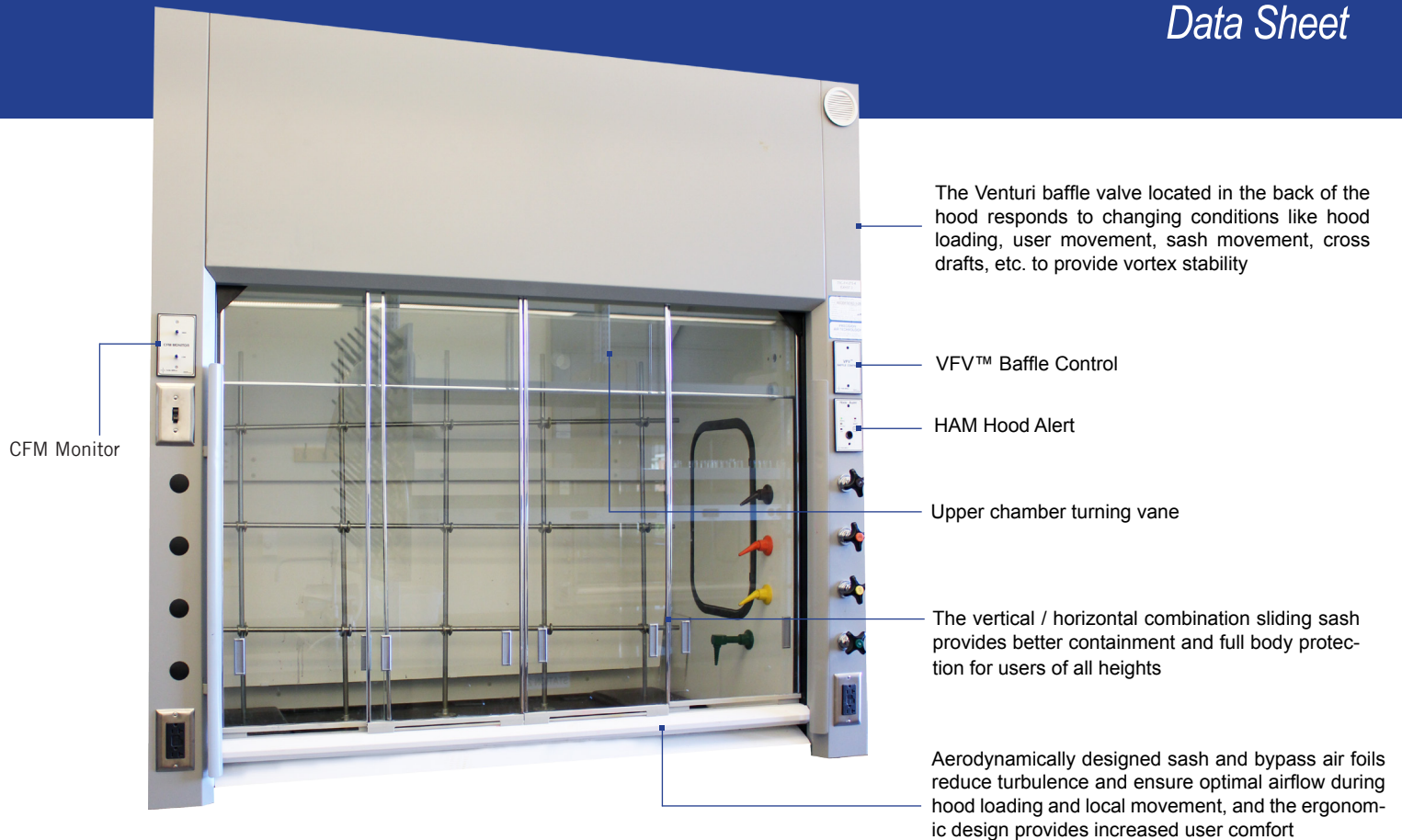


Stable Vortex® II Fume Hood

Data Sheet



The Stable Vortex® II Fume Hood is a high performance, low flow fume hood that delivers a superior level of safety for the user, while providing substantial energy and cost savings for a laboratory facility.

The Stable Vortex® II protects users from dangerous chemical vapors, splashes, and dusts during laboratory experiments, regardless of sash movement or environmental airflow changes.

The design is based on the principle that efficient and stable hood operation is determined by controlling the airflow pattern through the hood and not by the entry velocity of air in the sash opening. The patented design correlates with the intent of the ASHRAE 110 containment test.

Features Include:

- HAM Hood Alert Monitor
- VFV™ Baffle Control
- CFM Monitor for verifying hood exhaust volume
- Vertical / horizontal combination sliding sash
- Quiet when operating, ideal for lecture spaces
- Can be used as part of intrinsically safe labs
- Available in 4', 5', 6', 7', and 8' hood widths
- Easily passes through standard door frames
- Reynolds number and hydraulic diameter optimization

Standard Design Based on 27.5" Vertical Sash Height

Nominal Hood Width Ft. OD	Exhaust Outlet Collar Size Inches Round	MAX Vertical Sash Height Inches	Vertical Sash Width Inches	Vertical Sash Area Ft²	Net Free Area of work Surface Ft²	Horizontal Sash Height Inches	Horizontal Sash Width Inches	Horizontal Sash Area Ft²	Standard Nominal Hood Depth Inches OD	PV	Exhaust Outlet Area 8" Round REV FT²	Calculated 8" REV CFM	Exhaust Outlet Area 10" Round REV FT²	Calculated 10" REV CFM	Static Pressure Loss Inches W.G. (2)	Calculated Average Face Velocity (FPM) Horizontal FO	Calculated Average Face Velocity (FPM) Vertical FO
4'	8	27.5	39	7.45		26.50	18.5	3.40	0	0.140	0.35	375		0	0.35	110	50
4'	8	25	39	6.77		25.00	18.5	3.21	0	0.115	0.35	340		0	0.35	106	50
5'	10	27.5	51	9.74		26.50	24.5	4.51	0	0.100	0	0	0.55	500	0.35	111	51
6'	10	27.5	63	12.03	14.00	26.50	30.5	5.61	39.00	0.150	0	0	0.55	605	0.35	108	50
7'	10	27.5	75	14.32	18.23	26.50	36.5	6.72	42.00	0.210	0	0	0.55	715	0.35	106	50
8'	(2) 8	27.5	87	16.61	22.96	26.50	42.5	7.82	45.00	0.280	0	0	0.55	825	0.35	106	50

Modified Design Based on Various Vertical Sash Heights

Nominal Hood Width Ft. OD	Exhaust Outlet Collar Size Inches Round	MAX Vertical Sash Height Inches	Vertical Sash Width Inches	MAX Vertical Sash Area Ft²	Net Free Area of work Surface Ft²	Vertical Sash Height Inches (with stop)	Vertical Sash Width Inches	Vertical Sash Area Ft² (with stop)	Nominal Hood Depth Inches OD	PV	Exhaust Outlet Area 10" Round REV Ft²	Calculated 10" REV CFM	Static Pressure Loss Inches W.G. (2)	Calculated Average Face Velocity (FPM) Vertical FO
6" bench-top	10	27.5	63	12.03	14.00	25.50	63	11.16	39.00	0.130	0.55	565	0.35	51
6" bench-top	10	27.5	63	12.03	13.56	23.50	63	10.28	38.00	0.110	0.55	520	0.35	51
6" bench-top	10	27.5	63	12.03	13.13	21.50	63	9.41	37.00	0.090	0.55	470	0.35	50
6" bench-top	10	27.5	63	12.03	12.69	20.00	63	8.75	36.00	0.080	0.55	445	0.35	51
7" bench-top	10	27.5	75	14.32	18.23	25.50	75	13.28	42.00	0.180	0.55	665	0.35	50
7" bench-top	10	27.5	75	14.32	17.71	23.50	75	12.24	41.00	0.155	0.55	615	0.35	50
7" bench-top	10	27.5	75	14.32	17.19	21.50	75	11.20	40.00	0.130	0.55	562	0.35	50
7" bench-top	10	27.5	75	14.32	16.67	20.00	75	10.42	39.00	0.110	0.55	520	0.35	50
8" bench-top	(2) 8	27.5	87	16.61	22.96	25.50	87	15.41	45.00	0.240	0.55	767	0.35	50
8" bench-top	(2) 8	27.5	87	16.61	22.35	23.50	87	14.20	44.00	0.210	0.55	716	0.35	50
8" bench-top	(2) 8	27.5	87	16.61	21.15	21.50	87	12.99	42.00	0.170	0.55	643	0.35	50
8" bench-top	(2) 8	27.5	87	16.61	20.54	20.00	87	12.08	41.00	0.150	0.55	607	0.35	50

Notes:

1. Excludes vented base cabinets, add 25 CFM per 2" vent.
2. Does not include static pressure of balancing damper LO Delta P REV= add 0.07 " WC, STD Delta P REV = add 0.17" WC at 65% open.

*Product specifications are subject to change without notice. Visit <http://www.triatek.com/resource-library/data-sheets-manuals-and-pic-statements> for the latest version.

