

OVERVIEW

316 Stainless Steel Rounded Corners

- Resistant to solvents and bases
- Subject to attack by some acids
- Recommended for radioisotope and perchloric acid applications
- High tolerance to flame and heat
- Excellent structural strength
- Excellent cleaning characteristics

Phenolic Resin

- White color
- Good resistance to most solvents, bases and acids
- Low flame spread rating
- Strong structural strength

Poly Vinyl Chloride (PVC)

- White color
- Excellent resistance to bases and acids
- Poor tolerance to flame and heat
- Strong structural strength

Epoxy Resin

- Off white color
- Excellent resistance to solvents, bases and acids
- Moderate tolerance to flame and heat
- Moderate structure strength

Exhaust Duct Connections - While most fume hood duct connections are round, please note that some fume hood models are designed with a rectangular duct connection to reduce turbulence inside the hood. If needed, an optional duct transition from rectangular to round can be ordered separately.

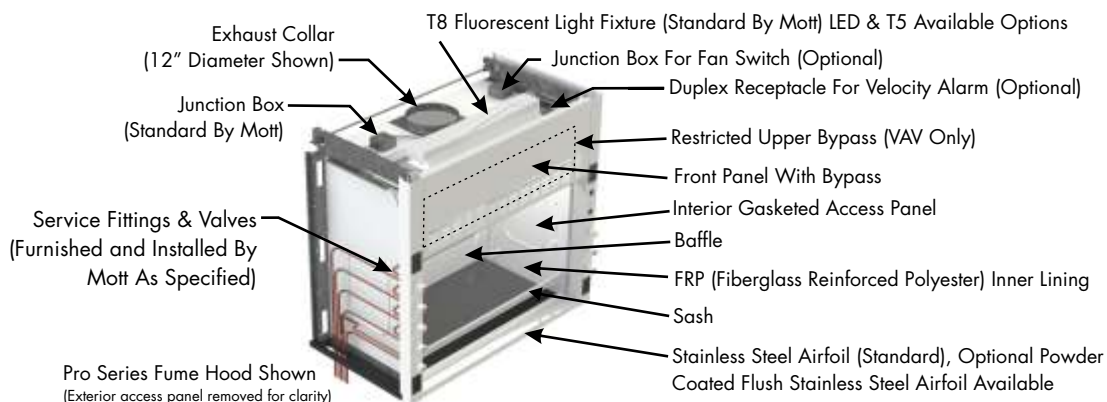
Exhaust Duct Materials - Particular attention should be paid to the exhaust ducting materials to ensure they are resistant to the chemicals which will be used in the lab. Common materials include: stainless steel, galvanized steel, polypropylene, polyethylene, PVC, and, fiberglass reinforced polyester. If the lab work will include extensive use of acids then uncoated galvanized or stainless steel should not be used.

Agency Approvals & Hood Certification - Fume hoods generally require agency approval in order to satisfy local authorities. Accordingly, Mott maintains a UL1805 classification to cover virtually all the standard and special fume hoods we produce. Most models are also CSA certified.

Fume Hood Positioning In The Lab - Fume Hood performance and safety is substantially dependent on the layout of the laboratory and particular attention should be paid to supply air grille location, fume hood location, and escape routes. In general, the laboratory layout and supply air conditions need to ensure that drafts in the area in front of the fume hood are maintained below 1/3 of the fume hood face velocity. In addition, attention should be paid to escape routes keeping in mind that the need to cross in front of a fume hood during an evacuation must be avoided.

Custom Hoods - Mott Manufacturing has provided countless custom and special fume hoods and we have the expertise to assist with solutions to unique fume hood situations.

Features Of A Typical Laboratory Chemical Hood



PRO BENCH - VERTICAL SASH

This general purpose fume hood is designed to meet most laboratory Constant Air Volume (CAV) or Variable Air Volume (VAV) requirements and supplied with an automatic compensating upper by-pass. For VAV, use option S2 for a restricted by-pass plate. Designed to mount on a 30" deep counter top. The Pro bench mounted fume hood is supplied with the following standard features:



Counterbalance Systems - Chain and sprocket system delivers the easiest and most reliable sash operation available with an exceptionally long life span. High quality stainless steel cable system provides economical and reliable operation; tested to 100,000 cycles with no failure.

Stainless Steel Airfoil - Aerodynamic raised design allows air to enter the fume hood even when the sash is closed ensuring efficient fume exhaust. Notches in both corners allow electrical wiring or tubing into the fume hood while still permitting full closure of the sash.

Sash Design - 6mm laminated safety glass is provided with a stainless steel handle and side runners, optional tempered glass or polycarbonate available for special applications. Hood has a vertical sash. 30" viewing height.

Stainless Steel Type 316 Exhaust Collar - Round collar with radiused corners allows for direct connection to exhaust duct to reduce duct transition costs, minimize static pressure losses and exhaust noise levels.

Electrical - Two UL/CSA approved duplex receptacles provided for 120 volt service, one on each corner post. UL/CSA approved fluorescent light fixture and switch provided. T5 fluorescent or LED lighting are available options.

Plumbing - Both corner posts are pre-punched to accept a maximum of five plumbing fittings per post. Factory pre-plumbing is available as well as plumbing fixtures from a variety of manufacturers to meet most plumbing needs.

Access Panels - Interior gasketed access panels provide convenient access and prevent fume leakage outside the hood chamber. Exterior side panels are also removable for ease of access to plumbing and electrical service fixtures.

Agency Approvals - UL 1805 Classified, CSA certified to UL 61010 and tested in accordance with ASHRAE 110. Test results available upon request.

Vertical Raising Sash (Cable Sash System)

Width	FRP	PVC	Epoxy	316 S/S Sq. Cor	316 S/S Rad. Cor
36"	7121000	7123000	7126000	7124000	7125000
48"	7221000	7223000	7226000	7224000	7225000
60"	7321000	7323000	7326000	7324000	7325000
72"	7421000	7423000	7426000	7424000	7425000
96"	7521000	7523000	7526000	7524000	7525000
1000mm	7B21000	7B23000	7B26000	7B24000	7B25000
1513mm	7C21000	7C23000	7C26000	7C24000	7C25000
2000mm	7D21000	7D23000	7D26000	7D24000	7D25000

Vertical Raising Sash (Chain & Sprocket Sash System)

Width	FRP	PVC	Epoxy	316 S/S Sq. Cor	316 S/S Rad. Cor
36"	7121040	7123040	7126040	7124040	7125040
48"	7221040	7223040	7226040	7224040	7225040
60"	7321040	7323040	7326040	7324040	7325040
72"	7421040	7423040	7426040	7424040	7425040
96"	7521040	7523040	7526040	7524040	7525040
1000mm	7B21040	7B23040	7B26040	7B24040	7B25040
1513mm	7C21040	7C23040	7C26040	7C24040	7C25040
2000mm	7D21040	7D23040	7D26040	7D24040	7D25040

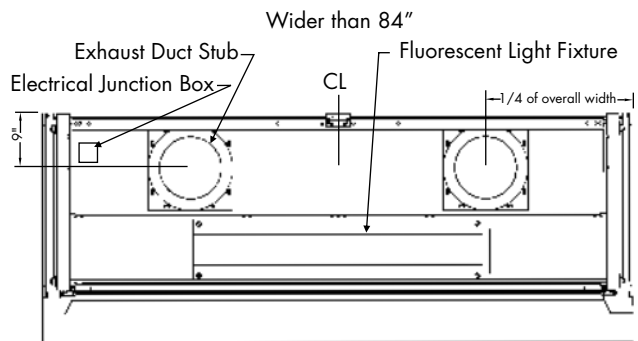
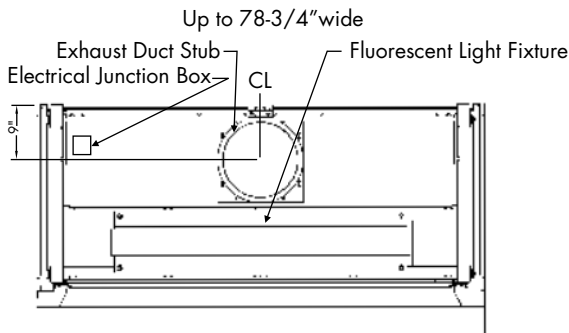
PRO BENCH - VERTICAL SASH

Exhaust Parameters

Hood Size	Duct Dia.	100 FPM 18" Max Sash Opening		100 FPM 28-1/2" Max*		80 FPM 18" Max Sash Opening		80 FPM 28-1/2" Max*	
		CFM	SP	CFM	SP	CFM	SP	CFM	SP
36"	10"	350	0.04	543	0.10	280	0.03	434	0.05
48"	10"	508	0.09	789	0.20	407	0.06	630	0.15
60"	12"	667	0.07	1035	0.20	533	0.05	830	0.15
72"	12"	825	0.11	1280	0.25	660	0.07	1025	0.20
96"	2@10"	1142	0.11	1772	0.25	913	0.07	1418	0.20
1000mm	10"	395	0.05	612	0.15	316	0.04	490	0.10
1513mm	12"	660	0.07	1025	0.20	528	0.05	820	0.15
2000mm	12"	914	0.14	1419	0.30	731	0.09	1135	0.20

* 28-1/2" max sash opening is recommended for set-up and tear down only.

Typical Roof Details



Side Section Details

