



# OVERVIEW

What Is A Fume Hood - A laboratory chemical fume hood is first and foremost a safety device. Users need to be able to rely on their fume hood as a primary containment device to protect them from the hazards within. It is connected to a remote exhaust system and provides operator protection by drawing air around the operator and into the hood chamber through the working opening. When the sash is closed, the exhaust system continues to operate to maintain the working chamber and exhaust ducting at negative pressure and provide containment of fumes and vapors. Fume hoods are generally served by either constant air volume (CAV) or variable air volume (VAV) exhaust systems.

**Automatic Compensating By-Pass** - A typical by-pass fume hood can be used on a constant volume system. This is due to an alternate path being created to allow air to enter the fume hood when the sash is closed. Automatic compensating by-pass hoods can be manufactured with vertically rising sashes only.

Certain types of fume hoods can't be made in an automatic compensating by-pass configuration. Such cases include fume hoods that include horizontally sliding panels as well as double hung vertically rising sashes. While the velocity increase is more noticeable as the sash is closed, such hoods can be used successfully with a CAV exhaust system.

**Restricted By-Pass** - A restricted by-pass hood is needed when using a hood with a VAV exhaust system. When the sash is closed, a smaller alternate opening is provided to allow for the minimum required airflow.

The Cost Of Safety - Fume hoods and other exhaust devices are the single largest energy consumer in a typical laboratory. It is therefore essential to explore options to minimize the energy consumption. When seeking to lower the energy consumption of fume hoods there are, broadly speaking, three approaches:

- Reduce the size of the working sash opening while maintaining a conventional face velocity of 80 - 100 feet/ minute.
- Reduce the face velocity to 50 60 feet/minute while maintaining a generous working opening.
- Implement usage-based controls such as VAV so that energy consumption is minimized while the fume hood is not in use.

Mott supports all these options with our product range which includes restricted by-pass hoods for VAV use, high performance hoods that operate at 50-60 feet/minute and the Low Volume model which features a reduced size working opening.

Mott also offers auto lowering sashes in both spring return and motorized versions that can help conserve energy and provide increased safety.

### **Types Of Fume Hoods**

**General Purpose Bench Top** - The most common type of fume hood utilized in most types of labs. The liner selected is generally fiberglass reinforced polyester (FRP) which has a broad applications.

**General Purpose Floor Mount** - Floor mounted hoods are used where the dimensions of the apparatus exceed what can be accommodated in a bench mounted fume hood or where the weight involved precludes placing the apparatus on a bench top.

**High Performance Hoods** - High Performance fume hoods are capable of providing containment with the sash fully open and the face velocity lowered to 60 feet per minute or less. They allow greatly reduced face velocities at full working height, resulting in a 40-50% reduction in energy use as compared to a general purpose hood. These are generally restricted to common bench top general purpose applications, suitable for VAV or CAV use.

Student Workstations - Student workstations are generally deployed in undergraduate teaching lab settings and are used by students while under supervision by an instructor. Accordingly, materials of construction are adjusted to suit less demanding chemical resistance needs. Glass side and back windows are often provided. Often these hoods are placed on an island and are manufactured in a back-to-back configuration with two working chambers.

**Acid Digestion Hoods** - For operations involving heating and evaporation of acids, special materials are used in the construction of the hood interior. The principle changes include a PVC or polypropylene liner, polytetrafluoroethylene (PTFE) coated sash frame, lower airfoil and exhaust connection. In addition, if the hood will be used with hydrofluoric acid, then the sash glass and light lens is changed from glass to polycarbonate.

Perchloric Acid Hoods - For operations involving heating and evaporation of perchloric acid, special fume hoods are produced. These hoods are always bench top models with the addition of a wash-down system and drain trough to remove hazardous perchlorate residues from the hood interior. Perchloric acid hoods are always connected to a dedicated exhaust system which is also equipped with a water wash system. Perchloric acid hoods can be equipped with a stainless steel liner if they will be used with perchloric acid only or a PVC liner if they will be used with other acids as well.

Radioisotope Hoods - Radioisotope hoods are designed for use with radioactive materials and have a smooth coved stainless steel liner with an integral dished work surface. The work surface is reinforced to support the weight of heavy shielding which may need to be utilized by the user.





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Other Exhaust Devices - While canopy hoods are not generally considered fume hoods and do not provide containment, they do have application in laboratories where large quantities of heat or nuisance odors need to be removed. The Oval Air Station ventilated island bench is useful in undergraduate labs where potential hazards are low and normal fume hoods are not needed.

Fume Hood Sash Types - Mott provides fume hoods with a variety of sash configurations. The most common type for bench hoods is the vertically rising sash. This sash travels up and down only and generally provides maximum protection for the operators face when it is used approximately half open. The combination sash is essentially a vertically rising sash frame with smaller inset horizontally sliding panels. In general this should be reserved for operations that require frequent access to the upper portion of the fume hood chamber. Larger floor mount fume hoods can be provided with double hung vertically rising sashes or top hung horizontally sliding panels. Various combinations of the above sashes can be specifically designed to meet your exact needs.

**Plumbing Types & Materials** - Fume hoods can be preplumbed in the factory as required. Mott uses the following materials unless otherwise specified:

Non-flammable gases including vacuum and water -0.375" OD, ASTM B280 refrigeration copper with all joints made up using double ferrule instrument grade swage type fittings. Burning gas -3/8" schedule 40 black pipe with threaded joints (USA), 0.375" type G copper with double ferrule swage fittings (Canada and overseas).

Pure Water -0.375" OD polypropylene with polypropylene compression fittings.

**Counter Top Materials** - Counter tops can be provided for hoods in either stainless steel (note limitations in liner section) or cast epoxy resin. Epoxy is most commonly selected due to its very broad chemical resistance.

**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.

Fume Hood Liner Materials - Fume hoods must have a liner appropriate to the task. For the vast majority of applications Mott recommends the fiberglass reinforced polyester (FRP) liner which provides excellent resistance to chemical and physical damage and is a Class A fire rated material with a flame spread rating below 25. In addition, we provide other liner materials to suit specific applications including polyvinyl chloride (PVC) for Acid use and stainless steel for solvent and wet applications. It is important to keep the limitations of hood liners in mind when selecting materials. Stainless steel, for example, is never recommended for general acid use and is also vulnerable to chlorides.

#### **FRP**

- · White color, excellent general purpose liner
- Good resistance to most solvents, bases and acids
- · Low flame spread rating
- Strong structural strength

#### 316 Stainless Steel Square Corners

- · Resistant to solvents and bases
- · Subject to attack by some acids
- · High tolerance to flame and heat
- · Excellent structural strength

#### 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
- Integral work surface

### 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





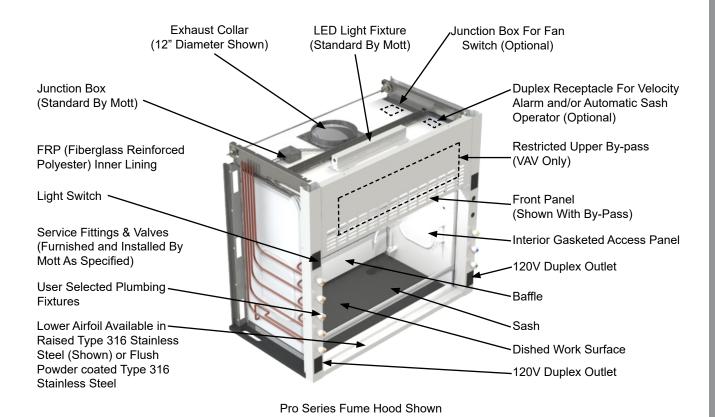
# OVERVIEW

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.

**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. Custom hoods require performance testing before use. Testing should be performed on-site after installation and in some cases a factory test will also be required. Exceptionally special hood will require an electrical inspection.

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/diffuser 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.

# **Features Of A Typical Laboratory Fume Hood**



(Exterior access panel removed for clarity)





# 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 LED light module and switch provided.

**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 Rais	Vertical Raising Sash (Cable Sash System)										
Width	FRP	PVC	Ероху	316 S/S Square Corners	316 S/S Radius Corners						
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						

<b>Vertical Raisi</b>	Vertical Raising Sash (Chain & Sprocket Sash System)										
				316 S/S	316 S/S						
Width	FRP	PVC	Ероху	Square Corners	Radius Corners						
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						





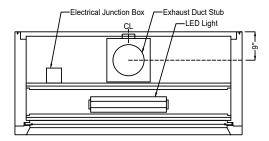
# PRO BENCH - VERTICAL SASH

# **Exhaust Parameters**

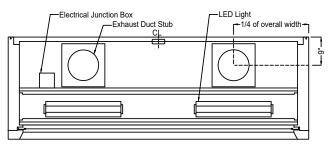
Hood Size	Duct Diameter	100 FPM 18" Max Sash Opening CFM SP		100 FPM 28-1/2" Max* Sash Opening CFM SP		80 FPM 18" Max Sash Opening CFM SP			M '" Max* Opening SP
36"	10"	350	0.04	543	0.10	280	0.03	434	0.05
48"	10"	508	0.09	789	0.20	407	0.06	630	0.16
60"	12"	667	0.07	1035	0.20	533	0.05	830	0.15
72"	12"	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

<sup>\* 28-1/2&</sup>quot; max sash opening is recommended for set-up and tear down only

# **Typical Roof Details**

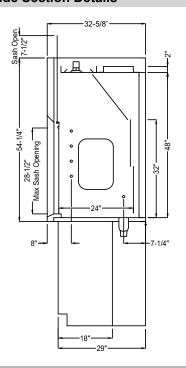


Single Collar Rough-In



**Dual Collar Rough-In** 

# **Side Section Details**







# PRO RESTRICTED BY-PASS BENCH - VERTICAL SASH

This general purpose fume hood is designed to meet most laboratory Variable Air Volume (VAV) requirements and supplied with a restricted upper by-pass. 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 LED light module and switch provided.

**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 Raisi	ng Sash (Cab	le Sash Syste	em)		
Width	FRP	PVC	Ероху	316 S/S Square Corners	316 S/S Radius Corners
				•	
36"	7121000-S2	7123000-S2	7126000-S2	7124000-S2	7125000-S2
48"	7221000-S2	7223000-S2	7226000-S2	7224000-S2	7225000-S2
60"	7321000-S2	7323000-S2	7326000-S2	7324000-S2	7325000-S2
72"	7421000-S2	7423000-S2	7426000-S2	7424000-S2	7425000-S2
96"	7521000-S2	7523000-S2	7526000-S2	7524000-S2	7525000-S2
1000mm	7B21000-S2	7B23000-S2	7B26000-S2	7B24000-S2	7B25000-S2
1513mm	7C21000-S2	7C23000-S2	7C26000-S2	7C24000-S2	7C25000-S2
2000mm	7D21000-S2	7D23000-S2	7D26000-S2	7D24000-S2	7D25000-S2

<b>Vertical Raisin</b>	Vertical Raising Sash (Chain & Sprocket Sash System)										
		D) (0	_	316 S/S	316 S/S						
Width	FRP	PVC	Ероху	Square Corners	Radius Corners						
36"	7121040-S2	7123040-S2	7126040-S2	7124040-S2	7125040-S2						
48"	7221040-S2	7223040-S2	7226040-S2	7224040-S2	7225040-S2						
60"	7321040-S2	7323040-S2	7326040-S2	7324040-S2	7325040-S2						
72"	7421040-S2	7423040-S2	7426040-S2	7424040-S2	7425040-S2						
96"	7521040-S2	7523040-S2	7526040-S2	7524040-S2	7525040-S2						
1000mm	7B21040-S2	7B23040-S2	7B26040-S2	7B24040-S2	7B25040-S2						
1513mm	7C21040-S2	7C23040-S2	7C26040-S2	7C24040-S2	7C25040-S2						
2000mm	7D21040-S2	7D23040-S2	7D26040-S2	7D24040-S2	7D25040-S2						





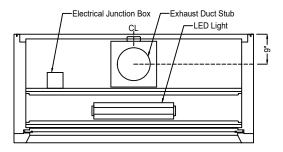
# PRO RESTRICTED BY-PASS BENCH - VERTICAL SASH

#### **Exhaust Parameters**

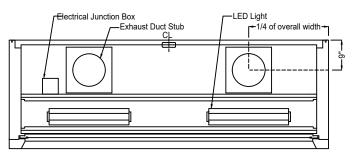
Hood Size	Duct Size	18" M	100 FPM 18" Max Sash Opening CFM SP		PM !" Max* Opening SP	80 FPM 18" Max Sash Opening CFM SP		80 FPM 28-1/2 Sash ( CFM	
36"	10"	350	0.04	543	0.10	280	0.03	434	0.05
48"	10"	508	0.09	789	0.20	407	0.06	630	0.16
60"	12"	667	0.07	1035	0.20	533	0.05	830	0.15
72"	12"	825	0.11	1280	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

<sup>\* 28-1/2&</sup>quot; max sash opening is recommended for set-up and tear down only

# **Typical Roof Details**

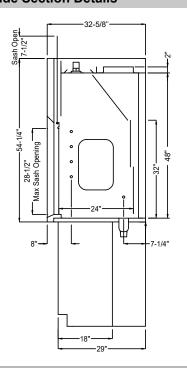


Single Collar Rough-In



**Dual Collar Rough-In** 

# **Side Section Details**







# PRO RESTRICTED BY-PASS BENCH WITH VISION PANEL - VERTICAL SASH

This general purpose fume hood is designed to meet most laboratory Variable Air Volume (VAV) requirements and supplied with a restricted upper by-pass. Designed to mount on a 30" deep counter top. The Pro bench mounted fume hood is supplied with the following standard features:



**Counterbalance System** - 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. Hoods are supplied with a vertical rising sash. 44" 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 LED light module and switch provided.

**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 Ra	Vertical Raising Sash (Cable Sash System)										
\A/: d4b	FRP	PVC	Energy	316 S/S	316 S/S Radius Corners						
Width	FKP	PVC	Epoxy	Square Corners	Radius Corners						
36"	7151000	7153000	7156000	7154000	7155000						
48"	7251000	7253000	7256000	7254000	7255000						
60"	7351000	7353000	7356000	7354000	7355000						
72"	7451000	7453000	7456000	7454000	7455000						
96"	7551000	7553000	7556000	7554000	7555000						
1000mm	7B51000	7B53000	7B56000	7B54000	7B55000						
1513mm	7C51000	7C53000	7C56000	7C54000	7C55000						
2000mm	7D51000	7D53000	7D56000	7D54000	7D55000						

<b>Vertical Rais</b>	Vertical Raising Sash (Chain & Sprocket Sash System)										
Width	FRP	PVC	Ероху	316 S/S Square Corners	316 S/S Radius Corners						
36"	7151040	7153040	7156040	7154040	7155040						
48"	7251040	7253040	7256040	7254040	7255040						
60"	7351040	7353040	7356040	7354040	7355040						
72"	7451040	7453040	7456040	7454040	7455040						
96"	7551040	7553040	7556040	7554040	7555040						
1000mm	7B51040	7B53040	7B56040	7B54040	7B55040						
1513mm	7C51040	7C53040	7C56040	7C54040	7C55040						
2000mm	7D51040	7D53040	7D56040	7D54040	7D55040						





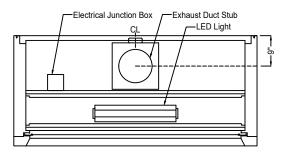
# PRO RESTRICTED BY-PASS BENCH WITH VISION PANEL - VERTICAL SASH

#### **Exhaust Parameters**

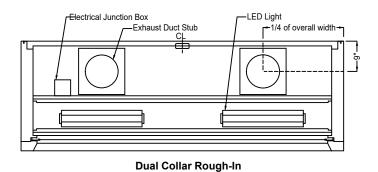
Hood Size	Duct Diameter	100 FPM 18" Max Sash Opening CFM SP		100 FPM 28-1/2" Max* Sash Opening CFM SP		80 FPM 18" Max Sash Opening CFM SP			M " Max* Opening SP
36"	10"	350	0.04	543	0.10	280	0.03	434	0.05
48"	10"	508	0.09	789	0.20	407	0.06	630	0.16
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72"	12"	825	0.11	1280	0.25	660	0.07	1025	0.20
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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

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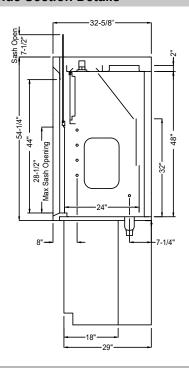
# **Typical Roof Details**



Single Collar Rough-In



**Side Section Details** 







# PRO BENCH - COMBINATION SASH

This general purpose fume hood is designed to meet most laboratory This hood is designed to meet most laboratory Constant Air Volume (CAV) or Variable Air Volume (VAV) requirements and includes restricted by-pass panel. Designed to mount on a 30" deep counter top. The Pro bench mounted fume hood is supplied with the following standard features:



**Counterbalance System** - 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. Hoods are supplied with a combination vertical rising and horizontal sliding sashes. 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 LED light module and switch provided.

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.

Combina	Combination Sash (Cable Sash System)  Horizontal Glass Panels  And Combination Sash (Cable Sash System)											
Width	FRP	PVC	Ероху	316 S/S Square Corners	316 S/S Radius Corners	Panel Width	Width Opening	Height Opening	Number of Panels			
48"	7221010	7223010	7226010	7224010	7225010	9-3/4"	16"	28"	4			
60"	7321010	7323010	7326010	7324010	7325010	12-3/4"	22"	28"	4			
72"	7421010	7423010	7426010	7424010	7425010	15-3/4"	28"	28"	4			
96"	7521010	7523010	7526010	7524010	7525010	14-13/16"	38-7/8"	28"	6			
1513mm	7C21010	7C23010	7C26010	7C24010	7C25010	12-5/8"	21-13/16"	28"	4			
2000mm	7D21010	7D23010	7D26010	7D24010	7D25010	11-15/16"	30-1/4"	28"	6			

Combina	Combination Sash (Chain & Sprocket Sash System) Horizontal Glass Panels										
				316 S/S	316 S/S	Panel	Width	Height	Number		
Width	FRP	PVC	Epoxy	Square Corners	Radius Corners	Width	Opening	Opening	of Panels		
48"	7221050	7223050	7226050	7224050	7225050	9-3/4"	16"	28"	4		
60"	7321050	7323050	7326050	7324050	7325050	12-3/4"	22"	28"	4		
72"	7421050	7423050	7426050	7424050	7425050	15-3/4"	28"	28"	4		
96"	7521050	7523050	7526050	7524050	7525050	14-13/16"	38-7/8"	28"	6		
1513mm	7C21050	7C23050	7C26050	7C24050	7C25050	12-5/8"	21-13/16"	28"	4		
2000mm	7D21050	7D23050	7D26050	7D24050	7D25050	11-15/16"	30-1/4"	28"	6		



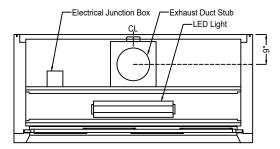


# PRO BENCH - COMBINATION SASH

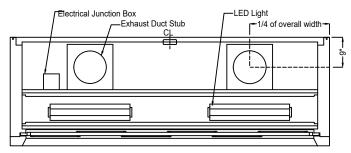
#### **Exhaust Parameters**

Hood Size	Hood Size Duct Diameter		100 FPM 18" Max Sash Opening CFM SP		100 FPM 1/2 Sliding Door Opening CFM SP		80 FPM 18" Max Sash Opening CFM SP		M iding Opening SP
48"	10"	508	0.09	394	0.05	407	0.06	315	0.05
60"	12"	667	0.07	517	0.05	533	0.05	414	0.05
72"	12"	825	0.11	640	0.10	660	0.07	512	0.05
96"	2 @ 10"	1142	0.11	886	0.10	913	0.07	709	0.05
1513mm	12"	660	0.07	513	0.10	528	0.05	410	0.05
2000mm	12"	914	0.14	709	0.10	731	0.09	567	0.05

# **Typical Roof Details**

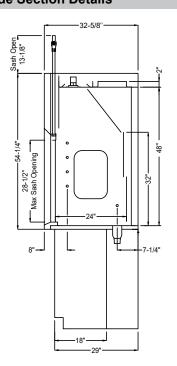


Single Collar Rough-In



Dual Collar Rough-In

# **Side Section Details**







# PRO CONSTANT VOLUME BENCH - SPLIT SASH/POSTLESS

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 is supplied with two independently operated vertical rising sashes. 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 LED light module and switch provided.

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 Ra	Vertical Raising Sash (Cable Sash System)											
Width	FRP	PVC	316 S/S Square Corners	316 S/S Radius Corners								
72"	7421030	7423030	7426030	7424030	7425030							
96"	7521030	7523030	7526030	7524030	7525030							
120"	7621030	7623030	7626030	7624030	7625030							
144"	7H21030	7H23030	7H26030	7H24030	7H25030							
2000mm	7D21030	7D23030	7D26030	7D24030	7D25030							

<b>Vertical Rais</b>	ing Sash (Ch	ain & Sprock	et Sash System	)	
Width	FRP	PVC	Ероху	316 S/S Square Corners	316 S/S Radius Corners
72"	7421080	7423080	7426080	7424080	7425080
96"	7521080	7523080	7526080	7524080	7525080
120"	7621080	7623080	7626080	7624080	7625080
144"	7H21080	7H23080	7H26080	7H24080	7H25080
2000mm	7D21080	7D23080	7D26080	7D24080	7D25080

**Note:** Split postless sashes can be opened independently. Often this allows two users to share the same fume hood. It also can reduce the air exhaust if only one half needs to be open rather than a single larger sash. When both sashes are open there is no center post which allows for a fully open width for setup of larger equipment.





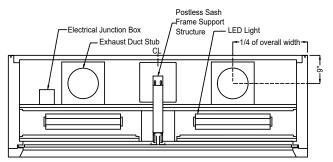
# PRO CONSTANT VOLUME BENCH - SPLIT SASH/POSTLESS

#### **Exhaust Parameters**

Hood Size	Duct Diameter	100 FF 18" M Sash ( CFM		100 FF 28-1/2 Sash ( CFM		80 FP 18" M Sash CFM			M ." Max* Opening SP
72"	2 @ 10"	825	0.06	1280	0.15	660	0.05	1025	0.10
96"	2 @ 10"	1142	0.11	1772	0.25	913	0.07	1418	0.20
120"	2 @ 12"	1458	0.09	2264	0.20	1167	0.06	1811	0.15
144"	2 @ 12"	1775	0.13	2755	0.30	1420	0.08	2205	0.20
2000mm	2 @ 10"	914	0.07	1419	0.17	731	0.05	1135	0.11

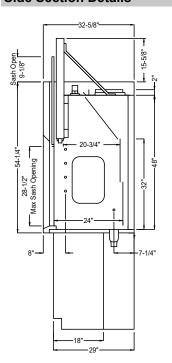
<sup>\* 28-1/2&</sup>quot; max sash opening is recommended for set-up and tear down only.

# **Typical Roof Details**



**Dual Collar Rough-In** 

# **Side Section Details**







# NOVAGUARD™ BENCH - VERTICAL SASH

Designed to deliver competitive containment performance and energy efficiency, the NovaGuard<sup>™</sup> operates with exhaust volumes significantly lower than conventional hoods. Providing the operator with a secure and reliable operation environment while providing considerable capital and operating cost savings. Suitable for Constant Air Volume (CAV) and Variable Air Volume (VAV) requirements. The NovaGuard<sup>™</sup> bench mounted fume hood is supplied with the following standard features:



**Face Velocities** - Tested to both standard and modified ASHRAE procedures at face velocities as low as 50 fpm with a full open sash and meeting the definition of "high performance".

**Baffle Design** - Downflow rear baffle is biased to the bottom, drawing fumes downward away from the user and counteracts the normal upward flow of vapors and prevents contaminated air build up behind the closed sash.

**Exhaust System** - Suitable for use in either Variable Volume or Constant Volume applications.

**Chain Drive Sash** - Chain and sprocket mechanism that delivers the easiest and most reliable sash operation available with an exceptionally long life span.

**Full Viewing Area** - Provides a clear and unobstructed side to side view of fume hood interior, with a 44-1/2" high viewing area. Rear mounted fixed tinted visor included.

**Self-Lowering Sash System** - Sash latch temporarily secures the sash in the full open position for setup and tear down operations. When the sash is freed, it automatically re-

turns to the 18" open operational position which offers extra protection to the operator and helps reduce energy consumption. Below 18" the sash is equally balanced.

**Alcoves** - Both hood sidewalls are recessed creating alcoves, providing significant gains in interior space over traditional fume hoods. Alcoves can have optional side glass windows and/or optional shelves.

**Flush Airfoil** - Low-profile, hinged, type 316 powder coated stainless steel airfoil is flush with the work surface to provide ergonomic and unobstructed access to the interior. Power cords can be run through the sill to the electrical outlets on the hood posts.

**Spill Trough** - Designed to provide secondary containment in the event a spill escapes the primary containment work top. **Electrical and Plumbing** - Two UL/CSA approved duplex receptacles provided for 120 volt service. UL/CSA approved LED light module and switch provided. Fixture holes are not pre-punched and punched only as ordered (front post can accept five front load fixtures per side). Factory pre-plumbing is an available option as well as plumbing fixtures from a variety of manufacturers to meet most plumbing needs.

Removable Panels - Side panels are easily removed to access interior electrical or plumbing fixtures.

Stainless Steel Exhaust Collar - Wide rectangular exhaust duct connection improves airflow distribution across hood width. **Agency Approvals** - UL 1805 Classified, CSA certified to UL 61010 and tested in accordance with ASHRAE 110-2016. Test results available upon request.

Vertical Raising Sash (Chain Sash System)											
Width	FRP	PVC	Ероху	316 S/S Square Corners							
48"	72A1040	72A3040	72A6040	72A4040							
60"	73A1040	73A3040	73A6040	73A4040							
72"	74A1040	74A3040	74A6040	74A4040							
96"	75A1040	75A3040	75A6040	75A4040							

Exhaust Transition											
Width	Item Number	Duct Size	Base Size								
48" with SM option	EXT0324	10"	3" x 24"								
48"	EXT0036	10"	3" x 36"								
60"	EXT0036	10"	3" x 36"								
72"	EXT0036	10"	3" x 36"								
96"	EXT2336	12"	3" x 36"								

# **Exhaust Transition**

- Fits over exhaust collar on NovaGuard™ hoods
- Exhaust transitions (rectangular duct to round duct) are available in 18 gauge, type 316 stainless steel and fits over exhaust collar
- SM option code: Automatic Sash Operator 2 Plus (ASO2 Plus)





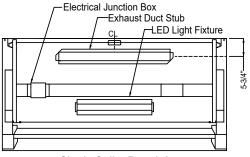
# NOVAGUARD™ BENCH - VERTICAL SASH

### **Exhaust Parameters**

Hood Size	Duct Diameter			80 FPN 18" Ma Sash C CFM	-	80 FPN 28-1/2" Sash C CFM	-	60 FPI 18" Ma Sash ( CFM		60 FPN 28-1/2" Sash C CFM	-	50 FPM 18" Ma Sash C		50 FPM 28-1/2' Sash C	
48"	3" x 36"	481	80.0	385	0.05	610	0.07	289	0.04	457	0.06	241	0.03	381	0.05
60"	3" x 36"	631	0.13	505	0.05	800	0.11	379	0.04	600	0.06	316	0.03	500	0.05
72"	3" x 36"	781	0.11	625	0.07	990	0.17	469	0.04	742	0.10	391	0.03	618	0.07
96"	3" x 36"	1081	0.21	865	0.13	1370	0.33	649	0.07	1027	0.19	541	0.05	856	0.13

<sup>\* 28-1/2&</sup>quot; max sash opening is recommended for set-up and tear down only.

# **Typical Roof Details**

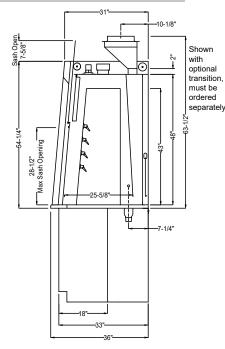


Single Collar Rough-In

# 

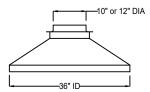
**Dual Collar Rough-In** 

# **Side Section Details**



Note: The above side section detail drawing is shown with the optional transition, this must be ordered separately.

# **Optional Exhaust Transition Details**



# **Side Window Option**



WL - Glass end panels on left side replaces solid end panel on left

**WR** - Glass end panel on right side - replaces solid end panel on right

**WB** - Glass end panels on both sides - replaces both solid end panels



# **Alcove Shelving Option**



**Alcove Shelving:** Type 316, powder coated, perforated stainless steel

**ASL** - Alcove shelf on left side

ASR - Alcove shelf on right side

**ASB** - Alcove shelf on both sides

**Note:** Depending on shelf position, available plumbing service locations will be reduced. Contact Mott for details.

<sup>\*\*</sup> Does not include transition.





# NOVAGUARD™ BENCH - COMBINATION SASH

Designed to deliver competitive containment performance and energy efficiency, the NovaGuard<sup>™</sup> operates with exhaust volumes significantly lower than conventional hoods. Providing the operator with a secure and reliable operation environment while providing considerable capital and operating cost savings. This hood is designed to meet most laboratory Constant Air Volume (CAV) or Variable Air Volume (VAV) requirements and includes restricted by-pass panel. The NovaGuard<sup>™</sup> bench mounted fume hood is supplied with the following standard features:



**Face Velocities** - Tested to both standard and modified ASHRAE procedures at face velocities as low as 50 fpm with a full open sash and meeting the definition of "high performance".

**Baffle Design** - Downflow rear baffle is biased to the bottom, drawing fumes downward away from the user and counteracts the normal upward flow of vapors and prevents contaminated air build up behind the closed sash.

**Exhaust System** - Suitable for use in either Variable Volume or Constant Volume applications.

**Chain Drive Sash** - Chain and sprocket mechanism that delivers the easiest and most reliable sash operation available with an exceptionally long life span.

**Full Viewing Area** - Provides a clear and unobstructed side to side view of fume hood interior, with a 34-1/2" high viewing area. Rear mounted fixed tinted visor included. Hoods are supplied with a combination vertical rising and horizontal sliding sashes.

Self-Lowering Sash System - Sash latch temporarily se-

cures the sash in the full open position for setup and tear down operations. When the sash is freed, it automatically returns to the 18" open operational position which offers extra protection to the operator and helps reduce energy consumption. Below 18" the sash is equally balanced.

**Alcoves** - Both hood sidewalls are recessed creating alcoves, providing significant gains in interior space over traditional fume hoods. Alcoves can have optional side glass windows and/or optional shelves.

**Flush Airfoil** - Low-profile, hinged, type 316 powder coated stainless steel airfoil is flush with the work surface to provide ergonomic and unobstructed access to the interior. Power cords can be run through the sill to the electrical outlets on the hood posts.

**Spill Trough** - Designed to provide secondary containment in the event a spill escapes the primary containment work top. **Electrical and Plumbing** - Two UL/CSA approved duplex receptacles provided for 120 volt service. UL/CSA approved LED light module and switch provided. Fixture holes are not pre-punched and punched only as ordered (front post can accept five front load fixtures per side). Factory pre-plumbing is an available option as well as plumbing fixtures from a variety of manufacturers to meet most plumbing needs.

Removable Panels - Side panels are easily removed to access interior electrical or plumbing fixtures.

Stainless Steel Exhaust Collar - Wide rectangular exhaust duct connection improves airflow distribution across hood width. **Agency Approvals** - UL 1805 Classified, CSA certified to UL 61010 and tested in accordance with ASHRAE 110-2016. Test results available upon request.

Combin	ation Sash	(Chain & S	procket S	ash System)	Horizontal Glass Panels					
Width	FRP	PVC	Ероху	316 S/S Square Corners	Panel Width	Width Opening	Height Opening	Number of Panels		
48"	72A1050	72A3050	72A6050	72A4050	9-3/4"	16"	32"	4		
60"	73A1050	73A3050	73A6050	73A4050	12-3/4"	22"	32"	4		
72"	74A1050	74A3050	74A6050	74A4050	15-3/4"	28"	32"	4		
96"	75A1050	75A3050	75A6050	75A4050	14-13/16"	38-7/8"	32"	6		

<b>Exhaust Transition</b>									
Width	Item Number	<b>Duct Size</b>							
48"	EXT0036	10"							
60"	EXT0036	10"							
72"	EXT0036	10"							
96"	EXT2336	12"							

#### **Exhaust Transition**

- Fits over exhaust collar on NovaGuard<sup>™</sup> hoods
- Exhaust transitions (rectangular duct to round duct) are available in 18 gauge, type 316 stainless steel and fits over exhaust collar
- Base size 3" x 36"





# NOVAGUARD™ BENCH - COMBINATION SASH

#### **Exhaust Parameters**

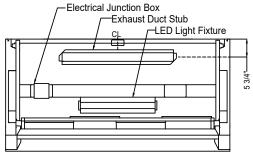
Hood Size	Duct Size	100 FP 18" Ma Sash C CFM		100 FP Sash C Horizon CFM		80 FPM 18" Mai Sash O CFM	x	80 FPM Sash C Horizo CFM	-
48"	3" x 36"	481	0.08	457	0.05	385	80.0	363	0.04
60"	3" x 36"	631	0.13	600	0.07	505	0.05	483	0.04
72"	3" x 36"	781	0.11	742	0.10	625	0.07	603	0.06
96"	3" x 36"	1081	0.21	1027	0.20	865	0.13	843	0.13

<sup>\* 28-1/2&</sup>quot; max sash opening is recommended for set-up and tear down only.

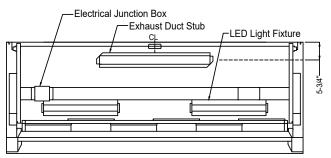
\*\* Does not include transition.

Hood Size	Duct Size	60 FPM 18" Ma Sash 0 CFM		60 FPN Sash C Horizo CFM	-	60 FPM 28-1/2' Sash C	Max*	50 FPI 18" Ma Sash ( CFM		50 FPN Sash C Horizo CFM	-	50 FPN 28-1/2' Sash C	Max*
48"	3" x 36"	289	0.02	289	0.02	457	0.05	241	0.03	227	0.03	408	0.04
60"	3" x 36"	379	0.03	379	0.03	600	0.07	316	0.03	302	0.03	535	0.05
72"	3" x 36"	469	0.04	469	0.04	742	0.10	391	0.03	377	0.04	662	0.08
96"	3" x 36"	649	0.08	649	0.08	1027	0.20	541	0.05	527	0.05	916	0.15

# **Typical Roof Details**

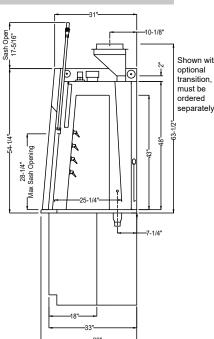


Single Collar Rough-In



**Dual Collar Rough-In** 

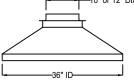
### **Side Section Details**



# Shown with optional transition,

panels

# -10" or 12" DIA



**Optional Exhaust Transition Details** 

# **Side Window Option**



WL - Glass end panels on left side replaces solid end panel on left WR - Glass end panel on right side replaces solid end panel on right WB - Glass end panels on both

sides - replaces both solid end

# **Alcove Shelving Option**



Alcove Shelving: Type 316, powder coated, perforated stainless steel

ASL - Alcove shelf on left side

ASR - Alcove shelf on right side

ASB - Alcove shelf on both sides

Note: Depending on shelf position, available plumbing service locations will be reduced. Contact Mott for details.

Note: The above side section detail drawing is shown with the optional transition, this must be ordered separately.





# RFV2™ BENCH - VERTICAL SASH

Designed to deliver competitive containment performance and energy efficiency, the RFV2™ operates with exhaust volumes significantly lower than conventional fume hoods. Providing the fume hood operator with a secure and reliable operation environment while providing considerable capital and operating cost savings. This hood is designed to meet most laboratory Constant Air Volume (CAV) or Variable Air Volume (VAV) requirements and includes restricted by-pass panel. The RFV2™ bench mounted fume hood is supplied with the following standard features:



**Face Velocities** - Tested to both standard and modified ASHRAE procedures at face velocities as low as 50 fpm.

**Baffle Design** - Downflow rear baffle is biased to the bottom, drawing fumes downward away from the user and counteracts the normal upward flow of vapors and prevents contaminated air build up behind the closed sash. Supplementary mechanical fans not required.

**Chain Drive Sash** - Chain and sprocket mechanism that delivers the easiest and most reliable sash operation available with an exceptionally long life span.

**Full Viewing Sash** - Provides a clear and unobstructed side to side view of fume hood interior, with a 34" high viewing area. 6mm laminated safety glass is provided with a stainless steel handle and side runners, optional tempered glass or polycarbonate available for special applications.

**Performance Sash Handle** - Powder coated stainless steel handle incorporates an airfoil design and provides improved airflow along the lower edge of the sash to prevent turbulence from resulting in a hazardous release.

**Self-Lowering Sash System** - Sash latch temporarily secures the sash in the full open position for setup and tear down operations. When the sash is freed, it automatically returns to the 18" open operational position which offers extra protection to the operator and helps reduce energy consumption. Below 18" the sash is equally balanced.

**Flush Airfoil** - Low-profile, hinged, type 316 powder coated stainless steel airfoil is flush with the work surface to provide ergonomic and unobstructed access to the interior. Power cords can be run through the sill to the electrical outlets on the hood posts.

**Spill Trough** - Designed to provide secondary containment in the event a spill escapes the primary containment work top. **Electrical** - Two UL/CSA approved duplex receptacles provided for 120 volt service. UL/CSA approved LED light module and switch provided.

**Plumbing** - Front post is pre-punched to accept four fixtures per side. 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.

Stainless Steel Exhaust Collar - Wide rectangular exhaust duct connection improves airflow distribution across hood width. **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 (Chain & Sprocket Sash System)										
Width	FRP	PVC	Ероху	316 S/S Square Corners	316 S/S Radius Corners					
48"	72F1040	72F3040	72F6040	72F4040	72F5040					
60"	73F1040	73F3040	73F6040	73F4040	73F5040					
72"	74F1040	74F3040	74F6040	74F4040	74F5040					
96"	75F1040	75F3040	75F6040	75F4040	75F5040					

Exhaust Transition											
Width	Item Number	Duct Size	Base Size								
48" with SM option	EXT0324	10"	3" x 24"								
48"	EXT0036	10"	3" x 36"								
60"	EXT0036	10"	3" x 36"								
72"	EXT0036	10"	3" x 36"								
96"	EXT2336	12"	3" x 36"								

#### **Exhaust Transition**

- Fits over exhaust collar on RFV2™ hoods
- Exhaust transitions (rectangular duct to round duct) are available in 18 gauge, type 316 stainless steel and fits over exhaust collar
- SM option code: Automatic Sash Operator 2 Plus (ASO2 Plus)





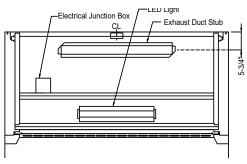
# RFV2™ BENCH - VERTICAL SASH

# **Exhaust Parameters**

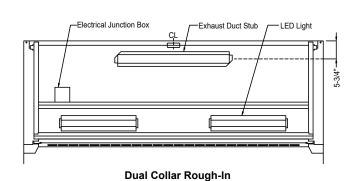
Hood Size	Duct Diameter			80 FPM 18" Ma Sash C CFM	x	80 FPM 28-1/2" Sash O CFM	Max*	60 FPM 18" Ma Sash C		60 FPM 28-1/2" Sash C CFM		50 FPM 18" Ma Sash C CFM	="	50 FPN 28-1/2" Sash C CFM	
48"	3" x 36"	481	80.0	385	0.05	610	0.07	289	0.04	457	0.06	241	0.03	381	0.05
60"	3" x 36"	631	0.13	505	0.05	800	0.11	379	0.04	600	0.06	316	0.03	500	0.05
72"	3" x 36"	781	0.11	625	0.07	990	0.17	469	0.04	742	0.10	391	0.03	618	0.07
96"	3" x 36"	1081	0.21	865	0.13	1370	0.33	649	0.07	1027	0.19	541	0.05	856	0.13

<sup>\* 28-1/2&</sup>quot; max sash opening is recommended for set-up and tear down only

# **Typical Roof Details**

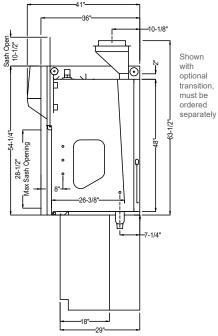




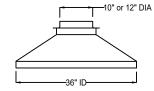


# Side Section Details

# **Optional Exhaust Transition Details**









<sup>\*\*</sup> Does not include transition





# RFV2™ BENCH - COMBINATION SASH

Designed to deliver competitive containment performance and energy efficiency, the RFV2<sup>TM</sup> operates with exhaust volumes significantly lower than conventional fume hoods. Providing the fume hood operator with a secure and reliable operation environment while providing considerable capital and operating cost savings. This hood is designed to meet most laboratory Constant Air Volume (CAV) or Variable Air Volume (VAV) requirements and includes restricted by-pass panel. The RFV2<sup>TM</sup> bench mounted fume hood is supplied with the following standard features:



**Face Velocities** - Tested to both standard and modified ASHRAE procedures at face velocities as low as 50 fpm.

**Baffle Design** - Downflow rear baffle is biased to the bottom, drawing fumes downward away from the user and counteracts the normal upward flow of vapors and prevents contaminated air build up behind the closed sash. Supplementary mechanical fans not required.

**Full Viewing Sash** - Provides a clear and unobstructed side to side view of fume hood interior, with a 34" high viewing area. 6mm laminated safety glass is provided with a stainless steel handle and side runners, optional tempered glass or polycarbonate available for special applications. Hoods are supplied with a combination vertical rising and horizontal sliding sashes.

**Chain Drive Sash** - Chain and sprocket mechanism that delivers the easiest and most reliable sash operation available with an exceptionally long life span.

**Performance Sash Handle** - Powder coated stainless steel handle incorporates an airfoil design and provides improved

airflow along the lower edge of the sash to prevent turbulence from resulting in a hazardous release.

**Self-Lowering Sash System** - Sash latch temporarily secures the sash in the full open position for setup and tear down operations. When the sash is freed, it automatically returns to the 18" open operational position which offers extra protection to the operator and helps reduce energy consumption. Below 18" the sash is equally balanced.

**Flush Airfoil** - Low-profile, hinged, type 316 powder coated stainless steel airfoil is flush with the work surface to provide ergonomic and unobstructed access to the interior. Power cords can be run through the sill to the electrical outlets on the hood posts.

Spill Trough - Designed to provide secondary containment in the event a spill escapes the primary containment work top. Electrical - Two UL/CSA approved duplex receptacles provided for 120 volt service. UL/CSA approved LED light module and switch provided.

**Plumbing** - Front post is pre-punched to accept four fixtures per side. 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.

Stainless Steel Exhaust Collar - Wide rectangular exhaust duct connection improves airflow distribution across hood width

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

Combination Sash (Chain & Sprocket Sash System) Horizontal Glass Panels										
Width FRP PVC Epoxy			Epoxy	316 S/S Square Corners	316 S/S Radius Corners	Panel Width	Width Opening	Height Opening	Number of Panels	
48"	72F1050	72F3050	72F6050	72F4050	72F5050	9-3/4"	16"	32"	4	
60"	73F1050	73F3050	73F6050	73F4050	73F5050	12-3/4"	22"	32"	4	
72"	74F1050	74F3050	74F6050	74F4050	74F5050	15-3/4"	28"	32"	4	
96"	75F1050	75F3050	75F6050	75F4050	75F5050	14-13/16"	38-7/8"	32"	6	

Exhaust	Exhaust Transition										
Width	Item Number	Duct Size									
48"	EXT0036	10"									
60"	EXT0036	10"									
72"	EXT0036	10"									
96"	EXT2336	12"									

#### **Exhaust Transition**

- Fits over exhaust collar on RFV2™ hoods
- Exhaust transitions (rectangular duct to round duct) are available in 18 gauge, type 316 stainless steel and fits over exhaust collar
- Base size 3" x 36"





# RFV2™ BENCH - COMBINATION SASH

#### **Exhaust Parameters**

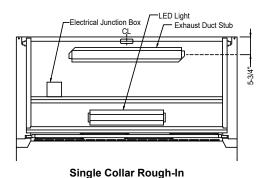
Hood Size	Duct Diameter	18" Max Sash Opening		Sash O	Sash Open Horizontal Only		80 FPM 18" Max Sash Opening CFM SP**		80 FPM Sash Open Horizontal Only CFM SP**	
48"	3" x 36"	481	0.08	457	0.05	385	80.0	363	0.04	
60"	3" x 36"	631	0.13	600	0.07	505	0.05	483	0.04	
72"	3" x 36"	781	0.11	742	0.10	625	0.07	603	0.06	
96"	3" x 36"	1081	0.21	1027	0.20	865	0.13	843	0.13	

<sup>\* 28-1/2&</sup>quot; max sash opening is recommended for set-up and tear down only

\*\* Does not include transition

Hood Size	Duct Diameter			60 FPM Sash O Horizon CFM	pen	60 FPM 28-1/2" Max* nly Sash Opening CFM SP**		50 FPM 18" Max Sash Opening CFM SP**		50 FPM Sash Open Horizontal Only CFM SP*		50 FPM 28-1/2" Max* Sash Opening CFM SP**	
48"	3" x 36"	289	0.02	289	0.02	457	0.05	241	0.03	227	0.03	408	0.04
60"	3" x 36"	379	0.03	379	0.03	600	0.07	316	0.03	302	0.03	535	0.05
72"	3" x 36"	469	0.04	469	0.04	742	0.10	391	0.03	377	0.04	662	0.08
96"	3" x 36"	649	80.0	649	0.08	1027	0.20	541	0.05	527	0.05	916	0.15

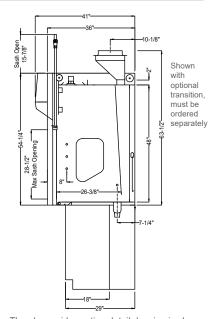
# **Typical Roof Details**

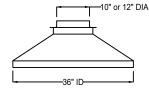


-LED Light -Electrical Junction Box Exhaust Duct Stub **Dual Collar Rough-In** 

**Side Section Details** 

#### **Optional Exhaust Transition Details**







Note: The above side section detail drawing is shown with the optional transition, this must be ordered separately.





# SAFEGUARD™ BENCH - VERTICAL SASH

The SafeGuard<sup>™</sup> fume hood was developed to meet the challenging safety, energy conservation, and operational requirements of today's laboratory. Designed for 80-100 feet per minute face velocities, this hood is suitable for use in either Constant Air Volume (CAV) or Variable Air Volume (VAV) requirements with optional restricted by-pass panel. The SafeGuard<sup>™</sup> bench mounted fume hood is supplied with the following standard features:



**Downflow Upper By-Pass** - In CAV configurations, air flows through the downwardly directed by-pass preventing contaminated air build up behind the closed sash.

**Chain Drive Sash** - Chain and sprocket mechanism that delivers the easiest and most reliable sash operation available with an exceptionally long life span.

**Exhaust System** - Optional restricted upper by-pass is required for VAV use.

**Fixed Baffle Area** - The baffle system needs no adjustment and improves airflow through the fume hood.

**Full Viewing Sash** - Provides a clear and unobstructed side to side view of fume hood interior, with a 34" high viewing area.

**Self-Lowering Sash System** - Sash latch temporarily secures the sash in the full open position for setup and tear down operations. When the sash is freed, it automatically returns to the 18" open operational position offering extra protection to the operator and helps reduce energy consumption. Below 18", sash is equally balanced.

Flush Airfoil - Low-profile, hinged, type 316 powder coated

stainless steel airfoil is flush with the work surface to provide ergonomic and unobstructed access to the interior. Power cords can be run through the sill to the electrical outlets on the hood posts.

**Spill Trough** - Designed to provide secondary containment in the event a spill escapes the primary containment work top. **Electrical** - Two UL/CSA approved duplex receptacles provided for 120 volt service. UL/CSA approved LED light module and switch provided.

**Plumbing** - Front post is pre-punched to accept four fixtures per side. Factory pre-plumbing is available as well as plumbing fixtures from a variety of manufacturers to meet most plumbing needs.

**Access Panels** - Front and side panels are easily removed to access interior electrical or plumbing fixtures. Interior gasketed access panels provide convenient access and prevent fume leakage outside the hood chamber.

**Stainless Steel Exhaust Collar** - Wide round exhaust duct connection improves airflow distribution across the hood width. **Approvals & ASHRAE** - UL 1805 Classified, CSA certified to UL 61010 and tested in accordance with ASHRAE 110. Test results available upon request.

32-5/8" Vertic	32-5/8" Vertical Raising Sash (Chain & Sprocket Sash System)											
				316 S/S	316 S/S							
Width	FRP	PVC	Ероху	Square Corners	Radius Corners							
48"	7271040	7273040	7276040	7274040	7275040							
60"	7371040	7373040	7376040	7374040	7375040							
72"	7471040	7473040	7476040	7474040	7475040							
96"	7571040	7573040	7476040	7574040	7575040							

38-5/8" Vertic	38-5/8" Vertical Raising Sash (Chain & Sprocket Sash System)											
Width	FRP	PVC	Energy	316 S/S	316 S/S Radius Corners							
wiatii	FRF	PVC	Epoxy	Square Corners	Raulus Corners							
48"	7271040-ED	7273040-ED	7276040-ED	7274040-ED	7275040-ED							
60"	7371040-ED	7373040-ED	7376040-ED	7374040-ED	7375040-ED							
72"	7471040-ED	7473040-ED	7476040-ED	7474040-ED	7475040-ED							
96"	7571040-ED	7573040-ED	7476040-ED	7574040-ED	7575040-ED							



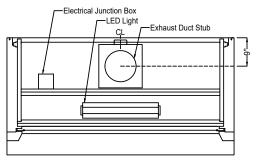


# SAFEGUARD™ BENCH - VERTICAL SASH

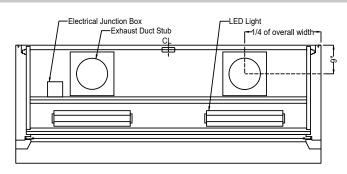
#### **Exhaust Parameters**

Hood Size	Duct Diameter			80 FP 18" M Sash ( CFM	
oou size 3"	10"	481	0.08	385	0.05
60"	12"	631	0.07	505	0.04
72"	12"	781	0.10	625	0.06
96"	2 @ 10"	1082	0.10	865	0.06

# **Typical Roof Details**

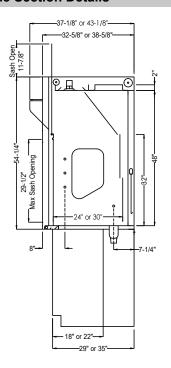


Single Collar Rough-In



**Dual Collar Rough-In** 

# **Side Section Details**







# SAFEGUARD™ BENCH - COMBINATION SASH

The SafeGuard™ fume hood was developed to meet the challenging safety, energy conservation, and operational requirements of today's laboratory. Designed for 80-100 feet per minute face velocities, This hood is designed to meet most laboratory Constant Air Volume (CAV) or Variable Air Volume (VAV) requirements and includes restricted by-pass panel. The SafeGuard™ bench mounted fume hood is supplied with the following standard features:



Restricted Upper By-Pass - Combination sash fume hoods have a restricted by-pass as standard. Limited by-pass air flows through the downwardly directed by-pass preventing contaminated air build up behind the closed sash.

**Exhaust System** - Restricted upper by-pass allows use with both VAV and CAV exhaust systems.

**Chain Drive Sash** - Chain and sprocket mechanism that delivers the easiest and most reliable sash operation available with an exceptionally long life span.

**Combination Sash** - Top hung frameless combination sash operates smoothly while offering increased visibility with its reduced frame profile.

**Full Viewing Area** - Provides a clear and unobstructed side to side view of fume hood interior, with a 34" high viewing area. Rear mounted visor included.

**Self-Lowering Sash System** - Sash latch temporarily secures the sash in the full open position for setup and tear down operations. When the sash is freed, it automatically returns to the 18" open operational position which offers extra

protection to the operator and helps reduce energy consumption. Below 18" the sash is equally balanced.

Fixed Baffle System - The baffle system needs no adjustment and improves airflow through the fume hood.

**Flush Airfoil** - Low-profile, hinged, type 316 powder coated stainless steel airfoil is flush with the work surface to provide ergonomic and unobstructed access to the interior. Power cords can be run through the sill to the electrical outlets on the hood posts.

**Spill Trough** - Designed to provide secondary containment in the event a spill escapes the primary containment work top. **Electrical** - Two UL/CSA approved duplex receptacles provided for 120 volt service. UL/CSA approved LED light module and switch provided.

**Plumbing** - Front post is pre-punched to accept four fixtures per side. Factory pre-plumbing is available as well as plumbing fixtures from a variety of manufacturers to meet most plumbing needs.

**Access Panels** - Front and side panels are easily removed to access interior electrical or plumbing fixtures. Interior gasketed access panels provide convenient access and prevent fume leakage outside the hood chamber.

**Stainless Steel Exhaust Collar** - Wide round exhaust duct connection improves airflow distribution across the hood width. **Approvals & ASHRAE** - UL 1805 Classified, CSA certified to UL 61010 and tested in accordance with ASHRAE 110. Test results available upon request.

32-5/8"	Deep Comb	oination Sa	sh (Chain	Horizontal Glass Panels					
Width	FRP	PVC	Ероху	316 S/S Square Corners	316 S/S Radius Corners	Panel Width	Width Opening	Height Opening	Number of Panels
48"	7271050	7273050	7276050	7274050	7275050	9-3/4"	16"	29"	4
60"	7371050	7373050	7376050	7374050	7375050	12-3/4"	22"	29"	4
72"	7471050	7473050	7476050	7474050	7475050	15-3/4"	28"	29"	4
96"	7571050	7573050	7576050	7574050	7575050	14-13/16"	38-7/8"	29"	6

38-5/8"	Deep Combina	tion Sash (Ch	Horizontal Glass Panels						
Width	idth FRP PVC Epoxy				316 S/S Radius Corners	Panel Width	Width Opening	Height Opening	Number of Panels
48"	7271050-ED	7273050-ED	7276050-ED	7274050-ED	7275050-ED	9-3/4"	16"	29"	4
60"	7371050-ED	7373050-ED	7376050-ED	7374050-ED	7375050-ED	12-3/4"	22"	29"	4
72"	7471050-ED	7473050-ED	7476050-ED	7474050-ED	7475050-ED	15-3/4"	28"	29"	4
96"	7571050-ED	7573050-ED	7576050-ED	7574050-ED	7575050-ED	14-13/16"	38-7/8"	29"	6





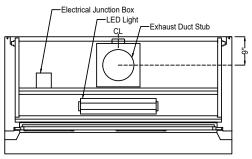
# SAFEGUARD™ BENCH - COMBINATION SASH

#### **Exhaust Parameters**

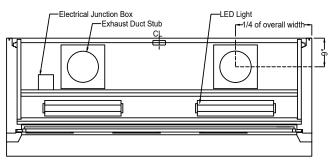
Hood Size	Duct Diameter	100 FPM 18" Max Sash Opening CFM SP		Comb	100 FPM Combo Sash Horizontal Only CFM SP		80 FPM 18" Max Sash Opening CFM SP		M o Sash ontal Only SP
48"	10"	481	0.08	376	0.05	385	0.05	305	0.03
60"	12"	631	0.07	495	0.04	505	0.04	400	0.03
72"	12"	781	0.10	613	0.06	625	0.06	495	0.04
96"	2 @ 10"	1082	0.10	856	0.06	865	0.06	685	0.04

<sup>\* 28-1/2&</sup>quot; max sash opening is recommended for set-up and tear down only.

# **Typical Roof Details**

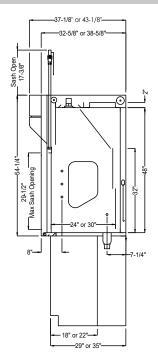


Single Collar Rough-In



**Dual Collar Rough-In** 

# **Side Section Details**







# PRO LOW VOLUME BENCH - COMBINATION SASH

This low flow hood is designed to be used on a Low Constant Volume (LCV) system and supplied with restricted upper by-pass. Designed to mount on a 30" deep counter top. The Pro bench mounted fume hood is supplied with the following standard features all which reduces air (energy) consumption by approximately 75%:



**Counterbalance System** - 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. Hoods are supplied with a combination vertical rising and horizontal sliding sashes with keyed lock down mechanism. Laminated safety glass shield integral to the sash. 30" viewing height.

**Stainless Steel Type 316 Exhaust Collar** - Round collar with radiused corners allows for direct connection to exhaust duct to 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 LED light module and switch provided.

**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.

Combina	tion Sash (Ca	ble Sash Syst	Horizontal Glass Panels						
Width	idth FRP PVC Epoxy			316 S/S Square Corners	316 S/S Radius Corners	Panel Width	Width Opening	Height Opening	Number of Panels
48"	7221010-LV	7223010-LV	7226010-LV	7224010-LV	7225010-LV	9-3/4"	16"	17"	4
60"	7321010-LV	7323010-LV	7326010-LV	7324010-LV	7325010-LV	12-3/4"	22"	17"	4
72"	7421010-LV	7423010-LV	7426010-LV	7424010-LV	7425010-LV	15-3/4"	28"	17"	4
96"	7521010-LV	7523010-LV	7526010-LV	7524010-LV	7525010-LV	14-13/16"	38-7/8"	17"	6
1513mm	7C21010-LV	7C23010-LV	7C26010-LV	7C24010-LV	7C25010-LV	12-5/8"	21-13/16"	17"	4
2000mm	7D21010-LV	7D23010-LV	7D26010-LV	7D24010-LV	7D25010-LV	11-15/16"	30-1/4"	17"	6

Combina	ation Sash (Ch	ain & Sprocke	et Sash Syster	n)		Horizonta	l Glass Panel	s	
Width	FRP	PVC	Ероху	316 S/S Square Corners	316 S/S Radius Corners	Panel Width	Width Opening	Height Opening	Number of Panels
48"	7221050-LV	7223050-LV	7226050-LV	7224050-LV	7225050-LV	9-3/4"	16"	17"	4
60"	7321050-LV	7323050-LV	7326050-LV	7324050-LV	7325050-LV	12-3/4"	22"	17"	4
72"	7421050-LV	7423050-LV	7426050-LV	7424050-LV	7425050-LV	15-3/4"	28"	17"	4
96"	7521050-LV	7523050-LV	7526050-LV	7524050-LV	7525050-LV	14-13/16"	38-7/8"	17"	6
1513mm	7C21050-LV	7C23050-LV	7C26050-LV	7C24050-LV	7C25050-LV	12-5/8"	21-13/16"	17"	4
2000mm	7D21050-LV	7D23050-LV	7D26050-LV	7D24050-LV	7D25050-LV	11-15/16"	30-1/4"	17"	6



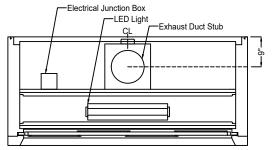


# PRO LOW VOLUME BENCH - COMBINATION SASH

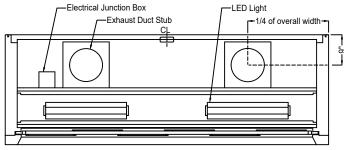
#### **Exhaust Parameters**

Hood Size	Duct Diameter		PM ng Position (Locked Dow SP	vn) Sa	ash (L	g Position .ocked Down) SP
48"	10"	190	0.02	15	52	0.02
60"	12"	260	0.02	20	8	0.02
72"	12"	330	0.02	26	64	0.02
96"	2 @ 10"	472	0.02	37	'8	0.02
1000mm	10"	160	0.02	12	28	0.02
1513mm	12"	266	0.02	21	3	0.02
2000mm	12"	639	0.02	51	1	0.02

# **Typical Roof Details**

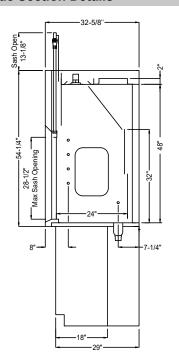


Single Collar Rough-In



Dual Collar Rough-In

# **Side Section Details**



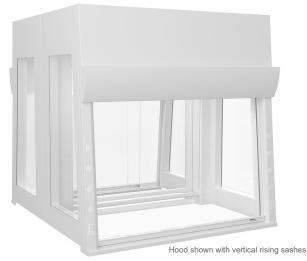






# OBSERVATION2™ PLUS - CONSTANT VOLUME DOUBLE-FACED BENCH

Observation2<sup>™</sup> Plus double-faced fume hoods are designed to provide the greatest visibility with full viewing side and back glass panels. This allows the instructor or supervisor to spot any hazardous situations that may occur. This hood is suitable for Constant Air Volume (CAV) requirements only. The Observation2<sup>™</sup> Plus bench mounted fume hood is supplied with the following standard features:



**Face Velocities** - Tested to both standard and modified ASHRAE procedures at face velocities as low as 60 fpm.

**Interior Liner** - Powder coated galvannealed steel interior liner. Not suitable for highly corrosive situations.

**Baffle Design** - Downflow baffles are biased towards the work surface, drawing fumes downwards away from the user, counteracting the normal upward flow of vapors and preventing contaminated air buildup behind the sash.

Full Viewing Area - Provides a clear and unobstructed side to side view of fume hood interior, with a 36" high viewing area. Narrow post design allows for more usable interior width. 6mm laminated safety glass is provided on center, side sash panels with a stainless steel handle and side runners; optional tempered glass available. Hoods supplied with two vertical rising sashes or two combination vertical rising and horizontal sliding sashes. Combination sashes have glass visor panel on upper portion to restrict opening to 28" high.

Chain & Sprocket Sash - Chain and sprocket mechanism

that delivers the easiest and most reliable sash operation available with an exceptionally long life span. **Performance Sash Handle** - Powder coated stainless steel handle incorporates an airfoil design and provides improved airflow along the lower edge of the sash to prevent turbulence from resulting in a hazardous release.

**Self-Lowering Sash System** - Sash latch temporarily secures the sash in the full open position for setup and tear down operations. When the sash is freed, it automatically returns to the 18" open operational position which offers extra protection to the operator and helps reduce energy consumption. Below 18" the sash is equally balanced.

**Flush Airfoil** - Low-profile, hinged, type 316 powder coated stainless steel airfoil is flush with the work surface to provide ergonomic and unobstructed access to the interior. Power cords can be run through the sill to the electrical outlets on the hood posts.

**Spill Trough** - Designed to provide secondary containment in the event a spill escapes the primary containment work top. **Electrical** - Two white (one set on each face) UL/CSA approved combination USB charger/duplex receptacles for 120 volt service on one corner post and two white (one set on each face) UL/CSA approved combination light switch/receptacles for 120 volt service provided on the other corner post. Energy efficient UL/CSA approved LED lights provided.

**Plumbing** - All corner posts pre-punched to accept a maximum of four front load plumbing fittings per side. If more than four plumbing fixtures per side, service controls will need to be base cabinet mounted and services will ship loose. Standard fixtures are pre-plumbed with high-density polyethylene to the top of the fume hood. Water is plumbed using cross-linked polyethylene, and 3/8" OD stainless steel tubing is provided for natural gas in USA (confirm this is acceptable to local authorities) (In Canada: type G copper). Insulated tubing and black pipe not an available option with this hood. This hood offers limited service space for pipes. Contact Mott if running supply lines from above to verify available space.

**Removable Glass Baffles** - The tempered glass allows baffles to be thinner and lighter are easy to remove for cleaning. Hoods 60" wide and less, receive two glass sections, hoods 72"W receive three glass sections.

Access Panels - Snap-off front access panel with no exposed fasteners allows quick access to light fixtures for re-lamping. Exhaust Collar - Wide rectangular exhaust duct connection improves airflow distribution across hood width.

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

Note: Observation2™ Plus Double-Faced Bench fume hood ships in three pieces to pass through doors.

	Vertical Sash	Combination Sash	Horizon Panel	tal Glass P Width	anels Height	Number	Exhaust Trans	ition
Width	Part Number	Part Number	Width	Opening	Opening	of Panels	Item Number	Duct Size
48"	72CV042	72CV052	10-3/8"	17-1/4"	28-3/16"	4	EXT2624	12"
60"	73CV042	73CV052	13-3/8"	23-1/4"	28-3/16"	4	EXT2624	12"
72"	74CV042	74CV052	16-3/8"	29-1/4"	28-3/16"	6	EXT2624	12"

- One exhaust transition required for this model and fits over vent collar on Observation2™ Plus fume hoods. Base Size 6" x 24".
- Exhaust transitions (rectangular duct to round duct) fits over vent collar.







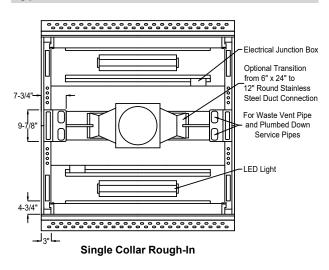
# OBSERVATION2™ PLUS - CONSTANT VOLUME DOUBLE-FACED BENCH

#### **Exhaust Parameters**

Hood Size	Duct Size	100 FP 18" Ma Sash C CFM		100 FPM Combo S Open Hor CFM		80 FPN 18" Ma Sash C CFM	-	80 FPM Combo S Open Hor CFM		60 FPM 18" Ma Sash 0 CFM	
48"	6" x 24"	1050	0.35	816	0.30	840	0.30	653	0.25	630	0.20
60"	6" x 24"	1350	0.40	1050	0.35	1080	0.35	840	0.30	810	0.25
72"	6" x 34"	1650	0.45	1284	0.40	1320	0.40	1028	0.35	990	0.30

Note: See page P30 and P31 for Double-faced bench VAV applications. Listed airflow is the total required for both sides of the fume hood Note: Observation2™ Plus Double-Faced Bench fume hood ships in three pieces to pass through doors

# **Typical Roof Details**



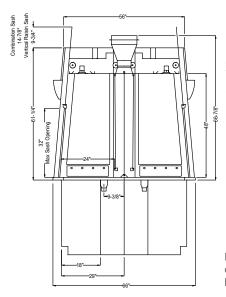
# **End Panel Options**

H1 - Solid End Panels on Left Side of Double-Faced Fume Hood - replaces glass end panels on left with solid end panels when hood is located against a wall.

H2 - Solid End Panels on Right Side of Double-Faced Fume Hood - replaces glass end panels on right with solid end panels when hood is located against a wall.

Use both option codes H1 and H2 if both solid end panels are required.

# **Side Section Details**



Shown with optional transition, must be ordered separately

# **Optional Exhaust Transition Details**





Note: When a 22" deep cabinet is required with a cup sink, a sink cabinet with a regular cup sink or a control panel cabinet with a low profile cup sink must be ordered.

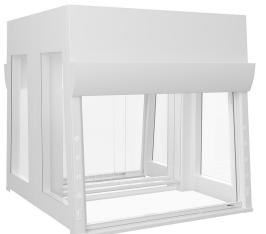
<sup>\*</sup> Does not include transition





# OBSERVATION2™ PLUS - VARIABLE AIR VOLUME DOUBLE-FACED BENCH

Double-faced island fume hoods are designed to provide the greatest visibility with full viewing side and back glass panels. This allows the instructor or supervisor to spot any hazardous situations that may occur. This hood is designed to meet most laboratory Variable Air Volume (VAV) requirements and supplied with a restricted upper by-pass. The Observation2™ Plus bench mounted fume hood is supplied with the following standard features:



Hood shown with vertical rising sashes.

**Face Velocities** - Tested to both standard and modified ASHRAE procedures at face velocities as low as 60 fpm.

**Interior Liner** - Powder coated galvannealed steel interior liner. Not suitable for highly corrosive situations.

**Baffle Design** - Downflow baffles are biased towards the work surface, drawing fumes downwards away from the user, counteracting the normal upward flow of vapors and preventing contaminated air buildup behind the sash.

**Full Viewing Area** - Provides a clear and unobstructed side to side view of fume hood interior, with a 36" high viewing area. Narrow post design allows for more usable interior width. 6mm laminated safety glass is provided on center, side sash panels with a stainless steel handle and side runners; optional tempered glass available. Hoods supplied with two vertical rising sashes or two combination vertical rising and horizontal sliding sashes. Combination sashes have glass visor panel on upper portion to restrict opening to 28" high.

Chain & Sprocket Sash - Chain and sprocket mechanism

that delivers the easiest and most reliable sash operation available with an exceptionally long life span.

**Performance Sash Handle** - Powder coated stainless steel handle incorporates an airfoil design and provides improved airflow along the lower edge of the sash to prevent turbulence from resulting in a hazardous release.

**Self-Lowering Sash System** - Sash latch temporarily secures the sash in the full open position for setup and tear down operations. When the sash is freed, it automatically returns to the 18" open operational position which offers extra protection to the operator and helps reduce energy consumption. Below 18" the sash is equally balanced.

**Flush Airfoil** - Low-profile, hinged, type 316 powder coated stainless steel airfoil is flush with the work surface to provide ergonomic and unobstructed access to the interior. Power cords can be run through the sill to the electrical outlets on the hood posts.

**Spill Trough** - Designed to provide secondary containment in the event a spill escapes the primary containment work top. **Electrical** - Two white (one set on each face) UL/CSA approved combination USB charger/duplex receptacles for 120 volt service on one corner post and two white (one set on each face) UL/CSA approved combination light switch/receptacles for 120 volt service provided on the other corner post. Energy efficient UL/CSA approved LED lights provided.

**Plumbing** - All corner posts pre-punched to accept a maximum of four front load plumbing fittings per side. If more than four plumbing fixtures per side, service controls will need to be base cabinet mounted and services will ship loose. Standard fixtures are pre-plumbed with high-density polyethylene to the top of the fume hood. Water is plumbed using cross-linked polyethylene, and 3/8" OD stainless steel tubing is provided for natural gas in USA (confirm this is acceptable to local authorities) (In Canada: type G copper). Insulated tubing and black pipe not an available option with this hood. This hood offers limited service space for pipes. Contact Mott if running supply lines from above to verify available space.

**Access Panels** - Snap-off front access panel with no exposed fasteners allows quick access to light fixtures for re-lamping. **Removable Glass Baffles** - The tempered glass allows baffles to be thinner and lighter are easy to remove for cleaning. Hoods 60" wide and less, receive two glass sections, hoods 72"W receive three glass sections.

**Exhaust Collar** - Two wide rectangular exhaust duct collars and divided plenums supplied. Rectangular connection improves airflow distribution across hood width.

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

**Note:** Observation2<sup>™</sup> Plus Double-Faced Bench fume hood ships in three pieces to pass through doors.

			Horizon	ital Glass P	anels		Exhaust Transit	tion
Width	Vertical Sash Part Number	Combination Sash Part Number	Panel Width	Width Opening	Height Opening	Number of Panels	Item Number	Duct Size
48"	72CA042	72CA052	10-3/8"	17-1/4"	28-3/16"	4	EXT0324	10"
60"	73CA042	73CA052	13-3/8"	23-1/4"	28-3/16"	4	EXT0324	10"
72"	74CA042	74CA052	16-3/8"	29-1/4"	28-3/16"	6	EXT0324	10"

- Two exhaust transitions required for this model and fits over vent collar on Observation2™ Plus fume hoods. Base Size 3" x 24".
- Exhaust transitions (rectangular duct to round duct) fits over vent collar.





# OBSERVATION2™ PLUS - VARIABLE AIR VOLUME DOUBLE-FACED BENCH

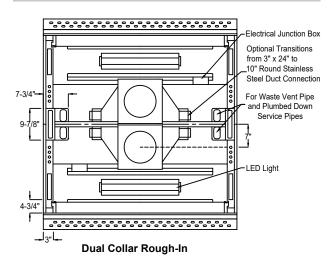
#### **Exhaust Parameters**

Hood Size	Duct Size	100 FPN 18" Max Sash Op CFM		100 FPM Combo Sa Open Hor CFM		80 FPM 18" Max Sash Op CFM		80 FPM Combo Sa Open Hor CFM		60 FPM 18" Max Sash Ope CFM	ning SP*
48"	2 @ 3" x 24"	2@ 525	2@ 0.35	2@ 408	2@ 0.30	2@ 420	2@ 0.30	2@ 327	2@ 0.25	2@ 315	2@ 0.20
60"	2 @ 3" x 24"	2@ 675	2@ 0.40	2@ 525	2@ 0.35	2@ 540	2@ 0.35	2@ 420	2@ 0.30	2@ 405	2@ 0.25
72"	2 @ 3" x 34"	2@ 825	2@ 0.45	2@ 642	2@ 0.40	2@ 660	2@ 0.40	2@ 514	2@ 0.35	2@ 495	2@ 0.30

Note: See page P28 and P29 for Double-faced bench CAV applications. Listed airflow is the total required for both sides of the fume hood. Note: Observation2™ Plus Double-Faced Bench fume hood ships in three pieces to pass through doors.

transition, must

# **Typical Roof Details**



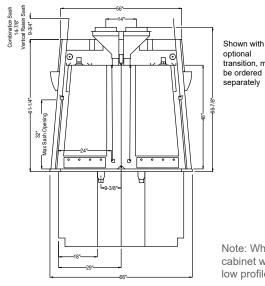
### **End Panel Options**

H1 - Solid End Panels on Left Side of Double-Faced Fume Hood - replaces glass end panels on left with solid end panels when hood is located against a wall.

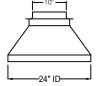
H2 - Solid End Panels on Right Side of Double-Faced Fume Hood - replaces glass end panels on right with solid end panels when hood is located against a wall.

Use both option codes H1 and H2 if both solid end panels are required.

# **Side Section Details**



# **Optional Exhaust Transition Details**





Note: When a 22" deep cabinet is required with a cup sink, a sink cabinet with a regular cup sink or a control panel cabinet with a low profile cup sink must be ordered.

<sup>\*</sup> Does not include transition.





# OBSERVATION2™ PLUS - CONSTANT VOLUME SINGLE-FACED BENCH

This single-faced fume hood is designed to provide the greatest visibility with full viewing side panels. This allows the instructor or supervisor to spot any hazardous situations that may occur. This hood is suitable for Constant Air Volume (CAV) requirements only. The Observation2™ Plus bench mounted fume hood is supplied with the following standard features:



**Face Velocities** - Tested to both standard and modified ASHRAE procedures at face velocities as low as 60 fpm. **Interior Liner** - Powder coated galvannealed steel interior liner. Not suitable for highly corrosive situations.

**Baffle Design** - Downflow baffles are biased towards the work surface, drawing fumes downwards away from the user, counteracting the normal upward flow of vapors and preventing contaminated air buildup behind the sash.

Full Viewing Area - Provides a clear and unobstructed side to side view of fume hood interior, with a 36" high viewing area. Narrow post design allows for more usable interior width. 6mm laminated safety glass is provided on center, side sash panels with a stainless steel handle and side runners; optional tempered glass available. Hoods supplied with vertical rising sash or combination vertical rising and horizontal sliding sash. Combination sashes have glass visor panel on upper portion to restrict opening to 28" high.

**Chain & Sprocket Sash** - Chain and sprocket mechanism that delivers the easiest and most reliable sash operation available with an exceptionally long life span.

**Performance Sash Handle** - Powder coated stainless steel handle incorporates an airfoil design and provides improved airflow along the lower edge of the sash to prevent turbulence from resulting in a hazardous release.

**Self-Lowering Sash System** - Sash latch temporarily secures the sash in the full open position for setup and tear down operations. When the sash is freed, it automatically returns to the 18" open operational position which offers extra protection to the operator and helps reduce energy consumption. Below 18" the sash is equally balanced.

**Flush Airfoil** - Low-profile, hinged, type 316 powder coated stainless steel airfoil is flush with the work surface to provide ergonomic and unobstructed access to the interior. Power cords can be run through the sill to the electrical outlets on the hood posts.

**Spill Trough** - Designed to provide secondary containment in the event a spill escapes the primary containment work top. **Electrical** - One white UL/CSA approved combination USB charger/duplex receptacles for 120 volt service on one corner post and one white UL/CSA approved combination light switch/receptacles for 120 volt service provided on the other corner post. Energy efficient UL/CSA approved LED lights provided.

**Plumbing** - All corner posts pre-punched to accept a maximum of four front load plumbing fittings per side. If more than four plumbing fixtures per side, service controls will need to be base cabinet mounted and services will ship loose. Standard fixtures are pre-plumbed with high-density polyethylene to the top of the fume hood. Water is plumbed using cross-linked polyethylene, and 3/8" OD stainless steel tubing is provided for natural gas in USA (confirm this is acceptable to local authorities) (In Canada: type G copper). Insulated tubing and black pipe not an available option with this hood. This hood offers limited service space for pipes. Contact Mott if running supply lines from above to verify available space.

**Access Panels** - Snap-off front access panel with no exposed fasteners allows quick access to light fixtures for re-lamping. **Removable Solid Baffles** - FRP baffles are easy to remove. Hoods 60" wide and less, receive two FRP sections, hoods 72"W receive three FRP sections.

**Exhaust Collar** - Wide rectangular exhaust duct collar connection improves airflow distribution across hood width. **Agency Approvals** - UL 1805 Classified, CSA certified to UL 61010 and tested in accordance with ASHRAE 110. Test results available upon request.

			Horizon	tal Glass P	anels		Exhaust Transi	tion
Width	Vertical Sash Part Number	Combination Sash Part Number	Panel Width	Width Opening	Height Opening	Number of Panels	Item Number	Duct Size
48"	72CV040	72CV050	10-3/8"	17-1/4"	28-3/16"	4	EXT0324	10"
60"	73CV040	73CV050	13-3/8"	23-1/4"	28-3/16"	4	EXT0324	10"
72"	74CV040	74CV050	16-3/8"	29-1/4"	28-3/16"	6	EXT0324	10"

- One exhaust transition required for this model and fits over vent collar on Observation2™ Plus fume hoods. Base Size 3" x 24".
- Exhaust transitions (rectangular duct to round duct) fits over vent collar.





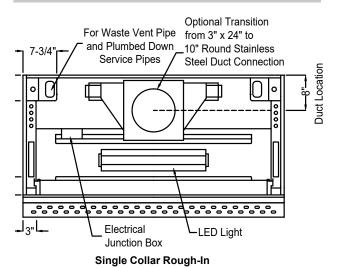
# OBSERVATION2™ PLUS - CONSTANT VOLUME SINGLE-FACED BENCH

#### **Exhaust Parameters**

Hood Size	Duct Size	100 FPI 18" Ma: Sash O CFM	X	100 FPM Combo Open H CFM		80 FPI 18" Ma Sash 0 CFM			M o Sash Horizontally SP*	60 FPM 18" Ma Sash 0 CFM	-
48"	3" x 24"	525	0.35	408	0.30	420	0.30	327	0.25	315	0.20
60"	3" x 24"	675	0.40	525	0.35	540	0.35	420	0.30	405	0.25
72"	3" x 24"	825	0.45	642	0.40	660	0.40	514	0.35	495	0.30

Note: See page P34 and P35 for Single-faced bench VAV applications.

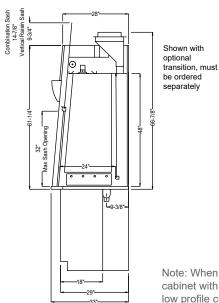
### **Typical Roof Details**



### **End Panel Options**

- H3 Solid End Panel on Left Side of Single-Faced Fume Hood replaces glass end panel on left with solid end panel when hood is located against a wall.
- H4 Solid End Panel on Right Side of Single-Faced Fume Hood - replaces glass end panel on right with solid end panel when hood is located against a wall.
- GB Rear viewing window with removable tempered glass back viewing baffles; the glass baffles lift off for cleaning.

#### **Side Section Details**



# **Optional Exhaust Transition Details**





Note: When a 22" deep cabinet is required with a cup sink, a sink cabinet with a regular cup sink or a control panel cabinet with a low profile cup sink must be ordered.

<sup>\*</sup> Does not include transition.





# OBSERVATION2™ PLUS - VARIABLE AIR VOLUME SINGLE-FACED BENCH

This single-faced fume hood is designed to provide the greatest visibility with full viewing side panels. This allows the instructor or supervisor to spot any hazardous situations that may occur. This hood is designed to meet most laboratory Variable Air Volume (VAV) requirements and supplied with a restricted upper by-pass. The Observation2™ Plus bench mounted fume hood is supplied with the following standard features:



**Face Velocities** - Tested to both standard and modified ASHRAE procedures at face velocities as low as 60 fpm. **Interior Liner** - Powder coated galvannealed steel interior lin-

er. Not suitable for highly corrosive situations.

**Baffle Design** - Downflow baffles are biased towards the work surface, drawing fumes downwards away from the user, counteracting the normal upward flow of vapors and preventing contaminated air buildup behind the sash.

**Full Viewing Area** - Provides a clear and unobstructed side to side view of fume hood interior, with a 36" high viewing area. Narrow post design allows for more usable interior width. 6mm laminated safety glass is provided on center, side sash panels with a stainless steel handle and side runners; optional tempered glass available. Hoods supplied with vertical rising sash or combination vertical rising and horizontal sliding sash. Combination sashes have glass visor panel on upper portion to restrict opening to 28" high.

**Chain & Sprocket Sash** - Chain and sprocket mechanism that delivers the easiest and most reliable sash operation available with an exceptionally long life span.

**Performance Sash Handle** - Powder coated stainless steel handle incorporates an airfoil design and provides improved airflow along the lower edge of the sash to prevent turbulence from resulting in a hazardous release.

**Self-Lowering Sash System** - Sash latch temporarily secures the sash in the full open position for setup and tear down operations. When the sash is freed, it automatically returns to the 18" open operational position which offers extra protection to the operator and helps reduce energy consumption. Below 18" the sash is equally balanced.

**Flush Airfoil** - Low-profile, hinged, type 316 powder coated stainless steel airfoil is flush with the work surface to provide ergonomic and unobstructed access to the interior. Power cords can be run through the sill to the electrical outlets on the hood posts.

**Spill Trough** - Designed to provide secondary containment in the event a spill escapes the primary containment work top. **Electrical** - One white UL/CSA approved combination USB charger/duplex receptacles for 120 volt service on one corner post and one white UL/CSA approved combination light switch/receptacles for 120 volt service provided on the other corner post. Energy efficient UL/CSA approved LED lights provided.

**Plumbing** - All corner posts pre-punched to accept a maximum of four front load plumbing fittings per side. If more than four plumbing fixtures per side, service controls will need to be base cabinet mounted and services will ship loose. Standard fixtures are pre-plumbed with high-density polyethylene to the top of the fume hood. Water is plumbed using cross-linked polyethylene, and 3/8" OD stainless steel tubing is provided for natural gas in USA (confirm this is acceptable to local authorities) (In Canada: type G copper). Insulated tubing and black pipe not an available option with this hood. This hood offers limited service space for pipes. Contact Mott if running supply lines from above to verify available space.

**Access Panels** - Snap-off front access panel with no exposed fasteners allows quick access to light fixtures for re-lamping. **Removable Solid Baffles** - FRP baffles are easy to remove. Hoods 60" wide and less, receive two FRP sections, hoods 72"W receive three FRP sections.

Exhaust Collar - Wide rectangular exhaust duct collar connection improves airflow distribution across hood width.

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

			Horizor	ntal Glass P	anels		Exhaust Trans	ition
Width	Vertical Sash Part Number	Combination Sash Part Number	Panel Width	Width Opening	Height Opening	Number of Panels	Item Number	Duct Size
48"	72CA040	72CA050	10-3/8"	17-1/4"	28-3/16"	4	EXT0324	10"
60"	73CA040	73CA050	13-3/8"	23-1/4"	28-3/16"	4	EXT0324	10"
72"	74CA040	74CA050	16-3/8"	29-1/4"	28-3/16"	6	EXT0324	10"

- One exhaust transition required for this model and fits over vent collar on Observation2™ Plus fume hoods. Base Size 3" x 24".
- · Exhaust transitions (rectangular duct to round duct) fits over vent collar.





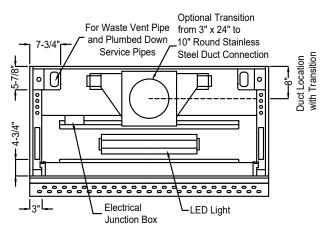
# OBSERVATION2™ PLUS - VARIABLE AIR VOLUME SINGLE-FACED BENCH

#### **Exhaust Parameters**

Hood Size	Duct Size	100 FPI 18" Max Sash O CFM	(	100 FPI Combo Open H CFM		80 FPI 18" M Sash CFM			M o Sash Horizontally SP*	60 FPM 18" Ma Sash 0 CFM	
48"	3" x 24"	525	0.35	408	0.30	420	0.30	327	0.25	315	0.20
60"	3" x 24"	675	0.40	525	0.35	540	0.35	420	0.30	405	0.25
72"	3" x 24"	825	0.45	642	0.40	660	0.40	514	0.35	495	0.30

Note: See page P32 and P33 for Single-faced bench CAV applications.

# **Typical Roof Details**

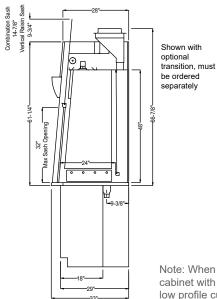


Single Collar Rough-In

# **End Panel Options**

- H3 Solid End Panel on Left Side of Single-Faced Fume Hood - replaces glass end panel on left with solid end panel when hood is located against a wall.
- H4 Solid End Panel on Right Side of Single-Faced Fume Hood - replaces glass end panel on right with solid end panel when hood is located against a wall.
- GB Rear viewing window with removable tempered glass back viewing baffles; the glass baffles lift off for cleaning.

# **Side Section Details**



# **Optional Exhaust Transition Details**





Note: When a 22" deep cabinet is required with a cup sink, a sink cabinet with a regular cup sink or a control panel cabinet with a low profile cup sink must be ordered.

<sup>\*</sup> Does not include transition.





# PRO DEMONSTRATION BENCH - VERTICAL SASH

Designed to permit demonstration and observation from both sides and meets most laboratory Constant Air Volume (CAV) or Variable Air Volume (VAV) requirements and supplied with a restricted upper by-pass. Can be used either free standing or positioned within a wall between a classroom and a prep room . Mounts on a 30" deep counter top. The Pro bench mounted fume hood is supplied with the following standard features:



**Counterbalance System** - High quality stainless steel cable system provides economical and reliable operation; tested to 100,000 cycles with no failure.

Stainless Steel Airfoils - Aerodynamic raised design allows air to enter the fume hood even when the sash is closed ensuring efficient fume exhaust. Notches in all 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. Hoods are supplied with two vertical rising sashes. 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** - Four UL/CSA approved duplex receptacles provided for 120 volt service, one on each corner post. UL/CSA approved LED light module and switch provided.

**Plumbing** - Two corner posts pre-punched to accept a maximum of 5 plumbing fittings per post, at one end, opposite end reserved for counter weights. 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 panel is on the same side wall as the plumbing and provides 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.

**Note:** Special airflow consideration required when installing between two rooms - Please contact Mott Manufacturing for more information. If alarm is required, mounting is recommended on end with plumbing.

Vertical Rais Width	ing Sash (Cable Sash System) FRP	
36"	7121002	
48"	7221002	
60"	7321002	
72"	7421002	
96"	7521002	
1000mm	7B21002	
1513mm	7C21002	
2000mm	7D21002	

#### **Options**

\$8 - Sash Interlock - Allows only one sash to be opened at a time.

S9 - Sash Key Lock On Both Doors - Sash stop with key to lock sash in place.

W1 - End Window - One end only. Note services must be work surface mounted.





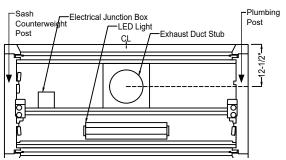
# PRO DEMONSTRATION BENCH - VERTICAL SASH

# **Exhaust Parameters**

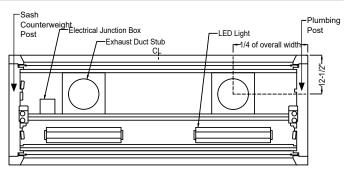
Hood Size	Duct Diameter	100 FI 18" M Sash ( CFM		100 FF 28-1/2 Sash ( CFM		80 FP 18" Ma Sash ( CFM			M ." Max Opening SP
36"	10"	350	0.04	543	0.10	280	0.03	434	0.05
48"	10"	508	0.09	789	0.20	407	0.06	630	0.16
60"	12"	667	0.07	1035	0.20	533	0.05	830	0.15
72"	12"	825	0.11	1280	0.25	660	0.07	1025	0.20
96"	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

Note: Only one sash is open in CFM calculations. Special airflow consideration required when installing between two rooms, contact Mott for more information.

# **Typical Roof Details**

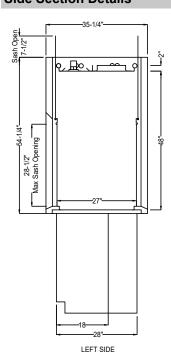


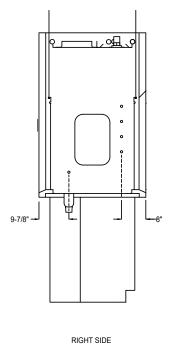
Single Collar Rough-In



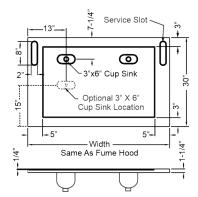
**Dual Collar Rough-In** 

# **Side Section Details**





# **Work Surface Details**



Typical fume hood work top showing optional cup sinks located for 18" deep cabinets.

Optional cup sink location if sink cabinet is located below fume hood.

Cup sink location suits a gooseneck only.





# OPTIMA™ - VERTICAL SASH

Optima<sup>™</sup> fume hoods have been specifically designed to meet the demanding safety, operational and ergonomic requirements of the modern laboratory. This hood is designed to meet most laboratory Constant Air Volume (CAV) and Variable Air Volume (VAV) requirements and supplied with an automatic compensating upper by-pass. For VAV, use option S2 for restricted by-pass plate. The Optima<sup>™</sup> fume hood is supplied with the following standard features:



**Face Velocities** - Designed for 80-100 feet per minute face velocities.

Adjustable Height Work Surface - Electro-hydraulic height adjustable work surface (work top included) with electric motor has the flexibility to be raised or lowered from 30" to 36" to accommodate the requirements for individual users, different procedures or equipment. Ideal for ADA applications.

**Self-Supporting Structure** - The self supporting structure allows for slide-in or mobile cabinets allowing for easy reconfiguration.

**Optimized Interior Working Area** - Achieved through narrow side posts and a minimized frame.

**Chain Drive Sash** - Chain and sprocket system delivers the easiest and most reliable sash operation available with an exceptionally long life span.

**Baffle System** - Baffle system that adjusts with the work surface movement.

**Chemical Resistant Liner** - Standard fiberglass reinforced polyester liner has excellent strength and chemical resistance; additional liner materials are also available.

**Flush Airfoil** - Low-profile, hinged, type 316 powder coated stainless steel airfoil is flush with the work surface to provide ergonomic and unobstructed access to the interior. Power cords can be run through the sill to the electrical outlets on the moving apron.

**Spill Trough** - Designed to provide secondary containment in the event a spill escapes the primary containment work top. **Performance Sash Handle** - Powder coated stainless steel handle incorporates an airfoil design providing improved airflow along the lower edge of the sash to prevent turbulence from disturbing the process or user.

**Sash Design** - 6mm laminated safety glass is provided with powder coated stainless steel handle and side runners. Hoods are supplied with a vertical rising sash. 38" to 45" viewing height.

**Self-Lowering Sash System** - Sash latch temporarily secures the sash in the full open position for setup and tear down operations. When the sash is freed, it automatically returns to the operational position which offers extra protection to the operator and helps reduce energy consumption.

**Electrical** - Controls are conveniently located in the recessed apron pockets. Two UL/CSA approved duplex receptacles provided for 120 volt service. UL/CSA approved LED light module and switch provided.

**Plumbing** - Fixture holes are not pre-punched and punched only as ordered. For ADA applications a maximum of three fixtures per side only if the bottom fixture is for cold water. For standard applications corner posts can accept a maximum of five fixtures per side. 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.

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

**Work Surface** - Standard white dished epoxy work top with optional cup sink; additional work surface materials are also available. If cup sink is required, telescoping drain with a fixed drain cover is provided. Note: ensure plumbing method meets local plumbing codes.

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

<b>Vertical Ra</b>	ising Sash (Chain & Sprocket Sash System)
Width	FRP
48"	72D1040
60"	73D1040
72"	74D1040





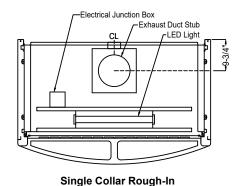
# OPTIMA™ - VERTICAL SASH

# **Exhaust Parameters**

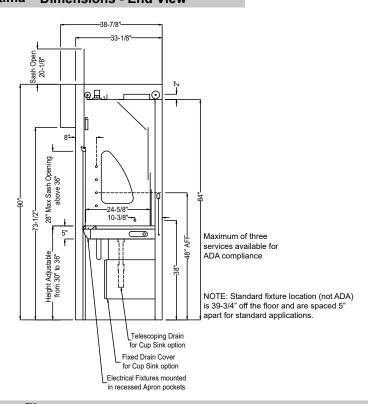
Hood Size	Duct Diameter	100 FP 18" Ma Sash C CFM		80 FPM 18" Mai Sash O CFM	
48"	10"	581	0.11	465	0.07
60"	10"	739	0.18	591	0.11
72"	12"	897	0.27	718	0.18

Note: Fully open sash is for set-up and tear down of experiments only. Work should not be performed in the set-up position.

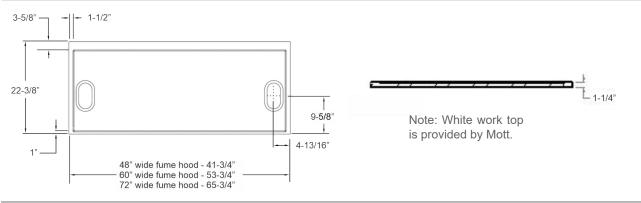
# **Typical Roof Details**



# Optima™ Dimensions - End View



# Optima™ Work Top Dimensions Shown With Optional Cup Sink Location







# OPTIMA™ - COMBINATION SASH

Optima<sup>™</sup> fume hoods have been specifically designed to meet the demanding safety, operational and ergonomic requirements of the modern laboratory. This hood is designed to meet most laboratory Constant Air Volume (CAV) and Variable Air Volume (VAV) requirements and supplied with a restricted upper by-pass. The Optima<sup>™</sup> fume hood is supplied with the following standard features:



**Face Velocities** - Designed for 80-100 feet per minute face velocities.

Adjustable Work Surface - Electro-hydraulic height adjustable work surface (work top included) with electric motor has the flexibility to be raised or lowered from 30" to 36" to accommodate the requirements for individual users, different procedures or equipment. Ideal for ADA applications.

**Self-Supporting Structure** - The self supporting structure allows for slide-in or mobile cabinets allowing for easy reconfiguration.

**Optimized Interior Working Area** - Achieved through narrow side posts and a minimized frame.

**Chain Drive Sash** - Chain and sprocket system delivers the easiest and most reliable sash operation available with an exceptionally long life span.

Baffle System - Baffle system that adjusts with the work surface movement for improved airflow through the fume hood. Chemical Resistant Liner - Standard fiberglass reinforced polyester liner has excellent strength and chemical resistance; additional liner materials are also available.

**Flush Airfoil** - Low-profile, hinged, type 316 powder coated stainless steel airfoil is flush with the work surface to provide ergonomic and unobstructed access to the interior. Power cords can be run through the sill to the electrical outlets on the moving apron.

**Spill Trough** - Designed to provide secondary containment in the event a spill escapes the primary containment work top. **Performance Sash Handle** - Powder coated stainless steel handle incorporates an airfoil design providing improved airflow along the lower edge of the sash to prevent turbulence from disturbing the process or user.

**Sash Design** - Sash is 6mm laminated safety glass. Hood are supplied with top hung frameless combination vertical rising and horizontal sliding sash to optimize energy efficiency and maximize operator safety. 38" to 45" viewing height.

**Self-Lowering Sash System** - Sash latch temporarily secures the sash in the full open position for setup and tear down operations. When the sash is freed, it automatically returns to the operational position which offers extra protection to the operator and helps reduce energy consumption.

**Electrical** - Controls are conveniently located in the recessed apron pockets. Two UL/CSA approved duplex receptacles provided for 120 volt service. UL/CSA approved LED light module and switch provided.

**Plumbing** - Fixture holes are not pre-punched and punched only as ordered. For ADA applications a maximum of three fixtures per side only if the bottom fixture is for cold water. For standard applications corner posts can accept a maximum of five fixtures per side. 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.

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

**Work Surface** - Standard white dished epoxy work top with optional cup sink; additional work surface materials are also available. If cup sink is required, telescoping drain with a fixed drain cover is provided. Note: ensure plumbing method meets local plumbing codes.

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

	ition Sash (Chain & Sprocket Sash System)	Horizontal GI			Number
Width	FRP	Panel Width	Width Opening	Height Opening	of Panels
48"	72D1050	10-9/16"	17-1/2"	43-1/8"	4
60"	73D1050	13-9/16"	23-3/4"	43-1/8"	4
72"	74D1050	16-9/16"	29-3/4"	43-1/8"	4





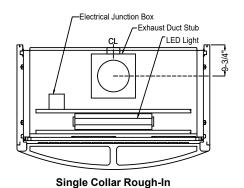
# OPTIMA™ - COMBINATION SASH

# **Exhaust Parameters**

		100 FI 18" M Sash		100 FP Sash C Horizoi	
<b>Hood Size</b>	<b>Duct Diameter</b>	CFM	SP	CFM	SP
48"	10"	555	0.11	585	0.12
60"	10"	713	0.17	750	0.19
72"	12"	871	0.12	917	0.14

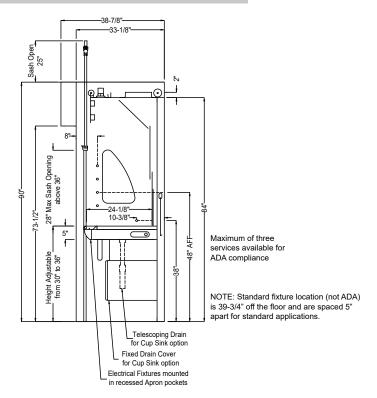
Note: Fully open sash is for set-up and tear down of experiments only. Work should not be performed in the set-up position.

# **Typical Roof Details**

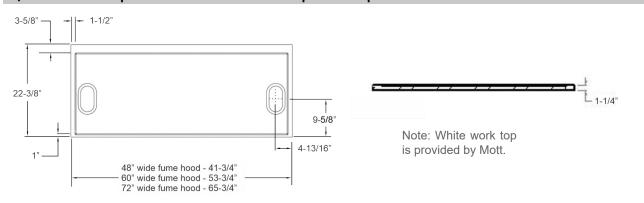


## omgic o

# Optima™ Dimensions - End View



# Optima™ Work Top Dimensions Shown With Optional Cup Sink Location







# PRO PERCHLORIC ACID BENCH - VERTICAL SASH

Designed to meet the stringent requirements of perchloric acid applications, suitable for Constant Air Volume (CAV) requirements only and supplied with an automatic compensating upper by-pass. Complete with seamlessly welded stainless steel or PVC coved corner integral worktop, liner, and drain trough. The Pro Perchloric Acid bench mounted fume hood is supplied with the following standard features:



**Counterbalance System** - 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. Hoods are supplied with a vertical rising sash. 30" viewing height.

Baffle System - Three piece removable baffles.

**Chemical Resistant Liner** - Type 316 stainless steel liner and worktop are suitable for straight perchloric acid only. For other acids, PVC is available. Contact Mott for chemical resistance details.

**Stainless Steel Type 316 Exhaust Collar** - Round collar with radiused corners allows for direct connection to exhaust duct to 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 LED light module and switch provided.

**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.

**Water Wash Down System** - Pre-plumbed internal wash down system with rear spray bar, control valve, trough, and drain. **Access Panels** - Exterior side panels are 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.

Note: Perchloric acid hood must be connected to a dedicated exhaust system designed specifically for perchloric acid use.

aising Sash (Cable Sash Sy	stem)	Vertical R	aising Sash (Chain & Sproc	ket Sash System)
316 S/S Radius Corners	PVC Radius Corners	Width	316 S/S Radius Corners	PVC Radius Corners
7127000	7129000	36"	7127040	7129040
7227000	7229000	48"	7227040	7229040
7327000	7329000	60"	7327040	7329040
7427000	7429000	72"	7427040	7429040
7527000	7529000	96"	7527040	7529040
7B27000	7B29000	1000mm	7B27040	7B29040
7C27000	7C29000	1513mm	7C27040	7C29040
7D27000	7D29000	2000mm	7D27040	7D29040
	316 S/S Radius Corners 7127000 7227000 7327000 7427000 7527000 7B27000 7C27000	7227000     7229000       7327000     7329000       7427000     7429000       7527000     7529000       7B27000     7B29000       7C27000     7C29000	316 S/S Radius Corners         PVĆ Radius Corners         Width           7127000         7129000         36"           7227000         7229000         48"           7327000         7329000         60"           7427000         7429000         72"           7527000         7529000         96"           7B27000         7B29000         1000mm           7C27000         7C29000         1513mm	316 S/S Radius Corners         PVĆ Radius Corners         Width         316 S/S Radius Corners           7127000         7129000         36"         7127040           7227000         7229000         48"         7227040           7327000         7329000         60"         7327040           7427000         7429000         72"         7427040           7527000         7529000         96"         7527040           7B27000         7B29000         1000mm         7B27040           7C27000         7C29000         1513mm         7C27040





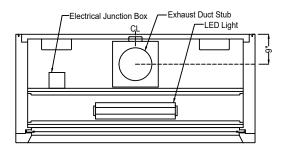
# PRO PERCHLORIC ACID BENCH - VERTICAL SASH

# **Exhaust Parameters**

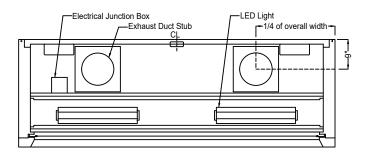
36" 10" 350 0.04 543 0.10 280 0.03 434 0.05
48" 10" 508 0.09 789 0.20 407 0.06 630 0.16
60" 12" 667 0.07 1035 0.20 533 0.05 830 0.15
72" 12" 825 0.11 1280 0.25 660 0.07 1025 0.20
6" 2 @ 10" 1142 0.11 1772 0.25 913 0.07 1418 0.20
000mm 10" 395 0.05 612 0.15 316 0.04 490 0.10
1513mm 12" 660 0.07 1025 0.20 528 0.05 820 0.15
2000mm 12" 914 0.14 1419 0.30 731 0.09 1135 0.20

<sup>\* 28-1/2&</sup>quot; max sash opening is recommended for set-up and tear down only.

# **Typical Roof Details**

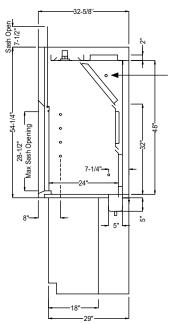


Single Collar Rough-In



**Dual Collar Rough-In** 

# **Side Section Details**



Note: 1/2" MPT Spray bar with equally spaced cone-spray nozzles For more details, contact Mott.

Washdown control valve located on front of fume hood, location depends on other plumbing ordered.





# PRO RADIOISOTPE BENCH - VERTICAL SASH

Designed to meet the stringent requirements of radioisotope applications and 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 restricted by-pass panel. Complete with seamlessly welded stainless steel coved corner liner with integral worktop. The Pro Radioisotope 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. Hoods are supplied with a vertical rising sash. 30" viewing height.

**Chemical Resistant Liner** - Type 316 stainless steel liner suitable for radioisotope applications. All weld joints ground smooth and polished.

**Stainless Steel Type 316 Exhaust Collar** - Round collar with radiused corners allows for direct connection to exhaust duct to 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 LED light module and switch provided.

**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 - 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.

Worksurface: Integral type 316 dished stainless steel work surface reinforced with hat channel construction.

Vertical Raisi Width	ng Sash (Cable Sash System) 316 S/S Radius Corners	Vertical Raisir Width	g Sash (Chain & Sprocket Sash System) 316 S/S Radius Corners
36"	7128000	36"	7128040
48"	7228000	48"	7228040
60"	7328000	60"	7328040
72"	7428000	72"	7428040
96"	7528000	96"	7528040
1000mm	7B28000	1000mm	7B28040
1513mm	7C28000	1513mm	7C28040
2000mm	7D28000	2000mm	7D28040





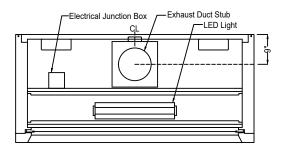
# PRO RADIOISOTOPE BENCH - VERTICAL SASH

# **Exhaust Parameters**

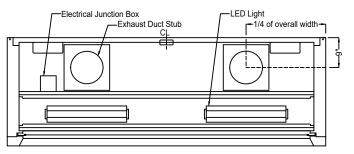
Hood Size	Duct Diameter	100 FF 18" Ma Sash ( CFM			PM " Max* Opening SP	80 FP 18" M Sash CFM			M 2" Max* Opening SP
36"	10"	350	0.04	543	0.10	280	0.03	434	0.05
48"	10"	508	0.09	789	0.20	407	0.06	630	0.16
60"	12"	667	0.07	1035	0.20	533	0.05	830	0.15
72"	12"	825	0.11	1280	0.25	660	0.07	1025	0.20
96"	2 @ 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

<sup>\* 28-1/2&</sup>quot; max sash opening is recommended for set-up and tear down only.

# **Typical Roof Details**

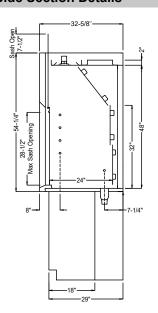


Single Collar Rough-In



**Dual Collar Rough-In** 

# **Side Section Details**



Note: Most national guidelines require minimum 100 FPM for hood used for radioisotope work.





# 32-5/8" DEEP FULLY ACCESSIBLE - COMBINATION SASH

This fume hood is designed to be accessed from standing and sitting positions. This hood is designed to meet most laboratory Constant Air Volume (CAV) or Variable Air Volume (VAV) requirements and includes restricted by-pass panel. 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 design allows air to enter the 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.

**Flush Airfoil** - Low-profile, hinged, type 316 powder coated stainless steel airfoil is flush with the work surface to provide ergonomic and unobstructed access to the interior. Power cords can be run through the sill to the electrical outlets on the hood posts.

Spill Trough - Designed to provide secondary containment in the event a spill escapes the primary containment work top. 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.

**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. Hoods are supplied with a combination vertical rising and horizontal sliding sashes and a front mounted safety glass shield.

**Sash Safety** - Sash stops are provided at 18" and 0" to shield the operator while improving fume containment and reducing energy consumption. 37-1/2" viewing height.

**Electrical** - Two UL/CSA approved duplex receptacles provided for 120 volt service, one on each corner post. UL/CSA approved LED light module and switch provided.

**Plumbing** - Both corner posts are pre-punched to accept two 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

Combination	n Sash (Cabl	e Sash Sys	tem)			Horizonta	l Glass Pan	els	
Width	FRP	PVC	Ероху	316 S/S Square Corners	316 S/S Radius Corners	Panel Width	Width Opening	Height Opening	Number of Panels
48"	7241010	7243010	7246010	7244010	7245010	9-3/4"	16"	27"	4
60"	7341010	7343010	7346010	7344010	7345010	12-3/4"	22"	27"	4
72"	7441010	7443010	7446010	7444010	7445010	15-3/4"	28"	27"	4
96"	7541010	7543010	7546010	7544010	7545010	14-13/16"	38-7/8"	27"	6
1513mm	7C41010	7C43010	7C46010	7C44010	7C45010	12-5/8"	21-13/16"	27"	4
2000mm	7D41010	7D43010	7D46010	7D44010	7D45010	11-15/16"	30-1/4"	27"	6

Combination	Sash (Chai	n & Sprock	et Sash Syste	m)		Horizonta	l Glass Pane	ls	
Width	FRP	PVC	Ероху	316 S/S Square Corners	316 S/S Radius Corners	Panel Width	Width Opening	Height Opening	Number of Panels
48"	7241050	7243050	7246050	7244050	7245050	9-3/4"	16"	27"	4
60"	7341050	7343050	7346050	7344050	7345050	12-3/4"	22"	27"	4
72"	7441050	7443050	7446050	7444050	7445050	15-3/4"	28"	27"	4
96"	7541050	7543050	7546050	7544050	7545050	14-13/16"	38-7/8"	27"	6
1513mm	7C41050	7C43050	7C46050	7C44050	7C45050	12-5/8"	21-13/16"	27"	4
2000mm	7D41050	7D43050	7D46050	7D44050	7D45050	11-15/16"	30-1/4"	27"	6

results available upon request.



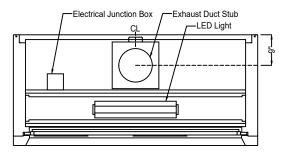


# 32-5/8" DEEP FULLY ACCESSIBLE - COMBINATION SASH

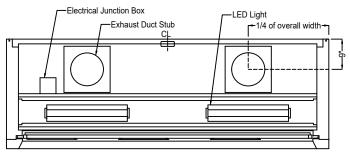
# **Exhaust Parameters**

Hood Size	Duct Diameter	100 FF 18" Ma Sash ( CFM		100 FF 28-1/2 Sash ( CFM		80 FP 18" M Sash CFM			M " Max Opening SP
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
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

# **Typical Roof Details**

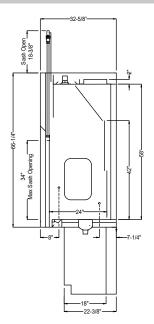


Single Collar Rough-In



**Dual Collar Rough-In** 

# **Side Section Details**

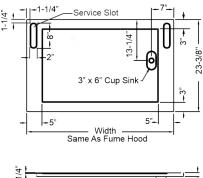


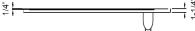
Note: Included with the hood is a 2" higher spacer which is required between counter top and base cabinet.

To meet ADA requirements, unit underneath he hood must be 28-3/4" high and kneespace depth and width requirements must be met. Contact Mott for details.

Only bottom two plumbing fixture locations are ADA compliant.

# **Work Surface Details**









QUALITY BY DESIGN

# 39-1/4" DEEP FULLY ACCESSIBLE - COMBINATION SASH

This fume hood is designed to be accessed from standing and sitting positions. This hood is designed to meet most laboratory Constant Air Volume (CAV) or Variable Air Volume (VAV) requirements and includes restricted by-pass panel. Designed to mount on a 30" deep counter top. The 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 design allows air to enter the 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.

**Flush Airfoil** - Low-profile, hinged, type 316 powder coated stainless steel airfoil is flush with the work surface to provide ergonomic and unobstructed access to the interior. Power cords can be run through the sill to the electrical outlets on the hood posts.

**Spill Trough** - Designed to provide secondary containment in the event a spill escapes the primary containment work top. **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.

**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. Hoods are supplied with a combination vertical rising and horizontal sliding sashes and a front mounted safety glass shield.

**Sash Safety** - Sash stops are provided at 18" and 0" to shield the operator while improving fume containment and reducing energy consumption. 37-1/2" viewing height.

**Electrical** - Two UL/CSA approved duplex receptacles provided for 120 volt service, one on each corner post. UL/CSA approved LED light module and switch provided.

**Plumbing** - Both corner posts are pre-punched to accept two 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.

Combination	n Sash (Cabl	e Sash Sys	tem)			Horizonta	Horizontal Glass Panels				
Width	FRP	PVC	Ероху	316 S/S Square Corners	316 S/S Radius Corners	Panel Width	Width Opening	Height Opening	Number of Panels		
48"	7291010	7293010	7296010	7294010	7295010	9-3/4"	16"	27"	4		
60"	7391010	7393010	7396010	7394010	7395010	12-3/4"	22"	27"	4		
72"	7491010	7493010	7496010	7494010	7495010	15-3/4"	28"	27"	4		
96"	7591010	7593010	7596010	7594010	7595010	14-13/16"	38-7/8"	27"	6		
1513mm	7C91010	7C93010	7C96010	7C94010	7C95010	12-5/8"	21-13/16"	27"	4		
2000mm	7D91010	7D93010	7D96010	7D94010	7D95010	11-15/16"	30-1/4"	27"	6		

Combinatio	n Sash (Chai	n & Sprock	et Sash Syst	em)		Horizonta	Horizontal Glass Panels				
Width	FRP	PVC	Ероху	316 S/S Square Corners	316 S/S Radius Corners	Panel Width	Width Opening	Height Opening	Number of Panels		
48"	7291050	7293050	7296050	7294050	7295050	9-3/4"	16"	27"	4		
60"	7391050	7393050	7396050	7394050	7395050	12-3/4"	22"	27"	4		
72"	7491050	7493050	7496050	7494050	7495050	15-3/4"	28"	27"	4		
96"	7591050	7593050	7596050	7594050	7595050	14-13/16"	38-7/8"	27"	6		
1513mm	7C91050	7C93050	7C96050	7C94050	7C95050	12-5/8"	21-13/16"	27"	4		
2000mm	7D91050	7D93050	7D96050	7D94050	7D95050	11-15/16"	30-1/4"	27"	6		





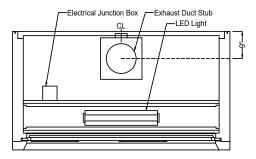
QUALITY BY DESIGN

# 39-1/4" DEEP FULLY ACCESSIBLE - COMBINATION SASH

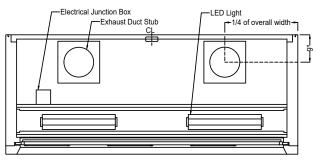
# **Exhaust Parameters**

Hood Size	Duct Diameter	18" M	100 FPM 18" Max Sash Opening CFM SP		100 FPM 28-1/2" Max Sash Opening CFM SP		80 FPM 18" Max Sash Opening CFM SP		80 FPM 28-1/2" Max Sash Opening CFM SP	
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	
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	

# **Typical Roof Details**

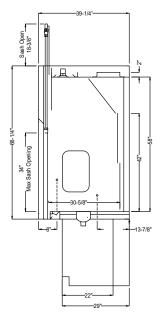


Single Collar Rough-In



**Dual Collar Rough-In** 

# **Side Section Details**

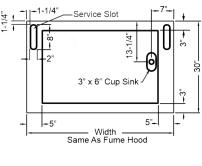


Note: Included with the hood is a 2" higher spacer which is required between counter top and base cabinet.

To meet ADA requirements, unit underneath he hood must be 28-3/4" high and kneespace depth and width requirements must be met. Contact Mott for details.

Only bottom two plumbing fixture locations are ADA compliant.

# **Work Surface Details**









# PRO FLOOR MOUNTED - DUAL VERTICAL SASH

This general purpose fume hood is designed to meet most laboratory Constant Air Volume (CAV) and Variable Air Volume (VAV) requirements and supplied with a restricted upper by-pass panel. Designed to sit directly on the laboratory floor. The Pro floor 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.

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. Hoods are supplied with dual vertical rising sashes. Floor mounted fume hoods are designed to operate with only one sash open. Sash closes 1" above the floor.

**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 LED light module and switch provided.

**Plumbing** - Both corner posts are pre-punched to accept 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 good chamber. Exterior side panels are also removable for ease

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 110-2016. Test results available upon request.

Vertical Rais	ing Sash (Ch	ain & Sprock	et Sash Systen	n)		
Width	FRP	PVC	Enovy	316 S/S Square Corners	316 S/S Radius Corners	
			Epoxy	•		
36"	7121041	7123041	7126041	7124041	7125041	
48"	7221041	7223041	7226041	7224041	7225041	
60"	7321041	7323041	7326041	7324041	7325041	
72"	7421041	7423041	7426041	7424041	7425041	
96"	7521041	7523041	7526041	7524041	7525041	
1000mm	7B21041	7B23041	7B26041	7B24041	7B25041	
1513mm	7C21041	7C23041	7C26041	7C24041	7C25041	
2000mm	7D21041	7D23041	7D26041	7D24041	7D25041	





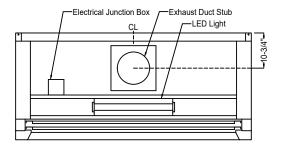


# PRO FLOOR MOUNTED - DUAL VERTICAL SASH

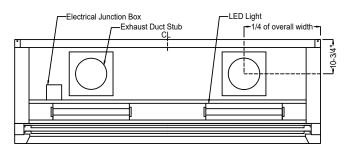
# **Exhaust Parameters**

Hood Size	Duct Diameter	18" M	18" Max, Upper Sash Opening		Sash Opening CFM SP		80 FPM 18" Max, Upper Sash Opening CFM SP		M " Max Opening 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	0.16
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

# **Typical Roof Details**

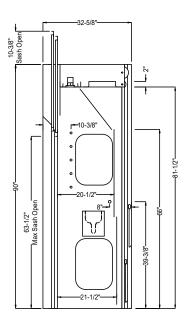


Single Collar Rough-In



Dual Collar Rough-In

# **Side Section Details**



Fume Hoods



results available upon request.



# PRO FLOOR MOUNTED DUAL VERTICAL SASH WITH UPPER COMBINATION SASH

This general purpose fume hood is designed to meet most laboratory Constant Air Volume (CAV) and Variable Air Volume (VAV) requirements and supplied with a restricted upper by-pass panel. Designed to sit directly on the laboratory floor. The Pro floor 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.

**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. Hoods are supplied with dual vertical rising sashes with upper combination sash. Floor mounted fume hoods are designed to operate with only one sash open. Sash closes within 1" off the floor.

**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 LED light module and switch provided.

**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

Vertical Sas	sh With Uppe	r Combinati	Horizontal Glass Panels						
Width	FRP	PVC	Ероху	316 S/S Square Corners	316 S/S Radius Corners	Panel Width	Width Opening	Height Opening	Number of Panels
48"	7221051	7223051	7226051	7224051	7225051	9-3/4"	16"	32-3/4"	4
60"	7321051	7323051	7326051	7324051	7325051	12-3/4"	22"	32-3/4"	4
72"	7421051	7423051	7426051	7424051	7425051	15-3/4"	28"	32-3/4"	4
96"	7521051	7523051	7526051	7524051	7525051	14-13/16"	38-7/8"	32-3/4"	6
1513mm	7C21051	7C23051	7C26051	7C24051	7C25051	12-5/8"	21-13/16"	32-3/4"	4
2000mm	7D21051	7D23051	7D26051	7D24051	7D25051	11-15/16"	30-1/4"	32-3/4"	6





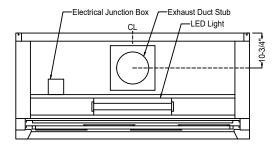
# PRO FLOOR MOUNTED DUAL VERTICAL SASH WITH UPPER COMBINATION SASH

# **Exhaust Parameters**

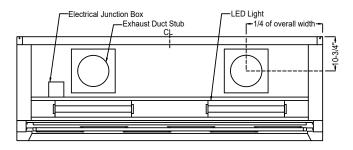
Hood Size	Duct Diameter	100 FPM 18" Max, Upper Sash Opening CFM SP		Upper	-		80 FPM 18" Max Sash Opening CFM SP		M r Door I/2 Open SP
48"	10"	508	0.09	394	0.05	407	0.06	315	0.05
60"	12"	667	0.07	517	0.05	533	0.05	414	0.05
72"	12"	825	0.11	640	0.10	660	0.07	512	0.05
96"	2 @ 10"	1142	0.11	886	0.10	913	0.07	709	0.05
1513mm	12"	660	0.07	513	0.10	528	0.05	410	0.05
2000mm	10"	914	0.14	709	0.10	731	0.09	567	0.05

Note: Exhaust parameters are based on lower sash door closed during active use.

# **Typical Roof Details**

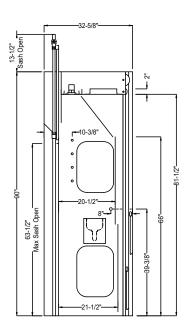


Single Collar Rough-In



**Dual Collar Rough-In** 

# **Side Section Details**







# PRO FLOOR MOUNTED - HORIZONTAL SLIDING SASH

This general purpose fume hood is designed to meet most laboratory Constant Air Volume (CAV) and Variable Air Volume (VAV) requirements and supplied with a restricted upper by-pass panel. Designed to sit directly on the laboratory floor. The Pro floor mounted fume hood is supplied with the following standard features:



Sash Design - 6mm laminated safety glass, optional tempered glass or polycarbonate available for special applications. Hoods are supplied with horizontal sliding sashes. See page P62 for information on the optional Pivot™ Tri-Access Door System, which offers unparalleled fume hood chamber access and efficiency in equipment set-up and teardown situations.

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 LED light module and switch provided.

**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.

Horizontal S	Sliding Sash			316 S/S	316 S/S	Horizontal Glass Panels				
Width	FRP	PVC	Ероху	Square Corners	Radius Corners	Panel Width	Width Opening	Height Opening	Number of Panels	
48"	7221021	7223021	7226021	7224021	7225021	19-3/4"	18-3/4"	68-1/8"	2	
60"	7321021	7323021	7326021	7324021	7325021	13-3/8"	23-11/16"	68-1/8"	4	
72"	7421021	7423021	7426021	7424021	7425021	16-3/8"	29-11/16"	68-1/8"	4	
96"	7521021	7523021	7526021	7524021	7525021	22-3/8"	41-11/16"	68-1/8"	4	
120"	7621021	7623021	7626021	7624021	7625021	19-1/4"	52-5/8"	68-1/8"	6	
144"	7H21021	7H23021	7H26021	7H24021	7H25021	23-1/4"	64-5/8"	68-1/8"	6	
1513mm	7C21021	7C23021	7C26021	7C24021	7C25021	13-3/8"	23-1/2"	68-1/8"	4	
2000mm	7D21021	7D23021	7D26021	7D24021	7D25021	18-1/8"	33-1/16"	68-1/8"	4	



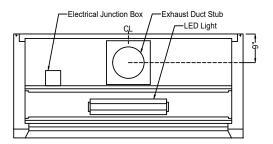


# PRO FLOOR MOUNTED - HORIZONTAL SLIDING SASH

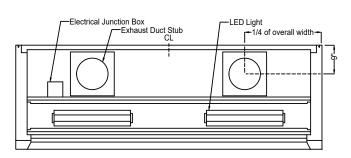
# **Exhaust Parameters**

Hood Size	Duct Diameter	100 FP 1/2 Slic Doors CFM	ding	80 FPN 1/2 Slid Doors CFM	ling
48"	10"	849	0.25	680	0.20
60"	12"	1113	0.20	890	0.15
72"	12"	1378	0.35	1102	0.20
96"	2 @ 10"	1907	0.35	1525	0.20
120"	2 @ 12"	2436	0.25	1950	0.15
144"	2 @ 12 "	2965	0.35	2373	0.25
1513mm	12"	1104	0.20	884	0.15
2000mm	12"	1527	0.40	1221	0.25

# **Typical Roof Details**

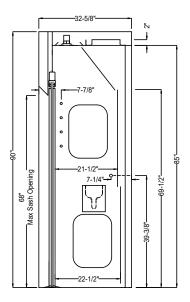


Single Collar Rough-In



**Dual Collar Rough-In** 

# **Side Section Details**







# PRO DISTILLATION FUME HOOD - DUAL VERTICAL SASH

This general purpose hood is designed to meet most laboratory Constant Air Volume (CAV) or Variable Air Volume (VAV) requirements and includes restricted by-pass panel. 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. Hoods are supplied with dual vertical rising sashes. 58-1/2" 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 LED light module and switch provided.

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 Na	ising basii (Cii	анга эргоск	et Sash Systen	316 S/S	316 S/S
Width	FRP	PVC	Epoxy	Square Corners	Radius Corners
36"	7121044	7123044	7126044	7124044	7125044
48"	7221044	7223044	7226044	7224044	7225044
60"	7321044	7323044	7326044	7324044	7325044
72"	7421044	7423044	7426044	7424044	7425044
96"	7521044	7523044	7526044	7524044	7525044
1000mm	7B21044	7B23044	7B26044	7B24044	7B25044
1513mm	7C21044	7C23044	7C26044	7C24044	7C25044
2000mm	7D21044	7D23044	7D26044	7D24044	7D25044





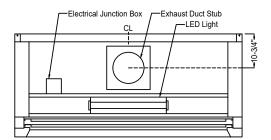
# PRO DISTILLATION FUME HOOD - DUAL VERTICAL SASH

# **Exhaust Parameters**

		1 Sash @	100 FPM 1 Sash @ 18" Sash Opening		100 FPM 1 Sash @ 28-1/2"* Sash Opening		@ 18" pening	80 FPM 1 Sash @ 28-1/2"* Sash Opening	
<b>Hood Size</b>	<b>Duct Diameter</b>	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	0.16
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"	904	0.14	1419	0.30	731	0.09	1135	0.20

<sup>\* 28-1/2&</sup>quot; sash opening is recommended for set-up and tear down only.

# **Typical Roof Details**

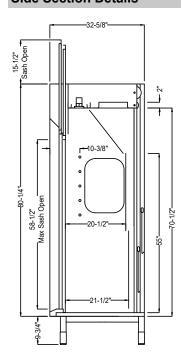


Single Collar Rough-In

# Electrical Junction Box Exhaust Duct Stub C C T/4 of overall width

Dual Collar Rough-In

# **Side Section Details**



# **Distillation Table**



Width	Item Number
36"	DTF1036
48"	DTF1048
60"	DTF1060
72"	DTF1072
96"	DTF1096
1000mm	DTF100B
1513mm	DTF100C
2000mm	DTF100D
	0.0/471111 0.0711 1.11 0.07

- Fully welded tables are 9-3/4" high x 29" deep with 2" square tube legs and supplied with leveling glides
- Tables larger than 48" wide are supplied with six legs (48" wide unit shown)
- Tables will support an 1800lb load
- Comes with PVC boots and levelers



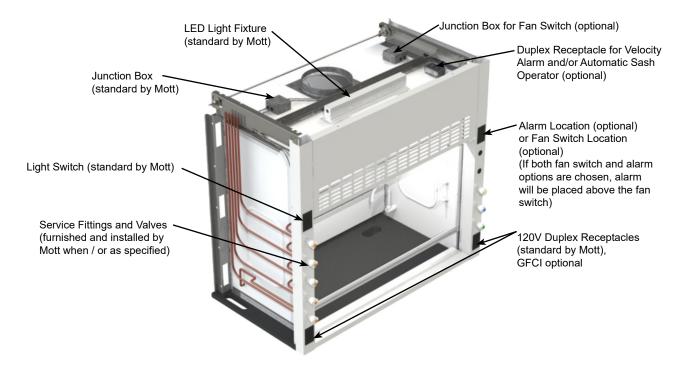


# **FUME HOOD ELECTRICAL DETAILS**

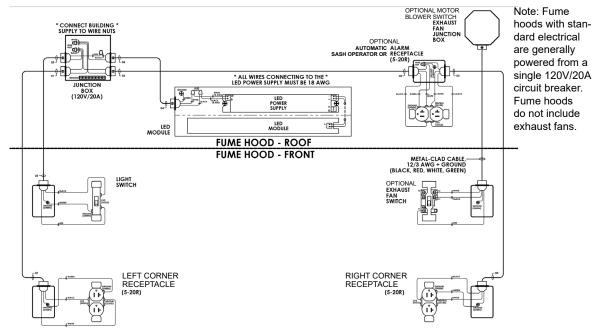
A full line of fume hood electrical fixtures are available to complete the installation of your new fume hood. Please refer to specific fume hoods to identify which fixtures are right for your hood. Fume hoods can be configured with additional options such as electrically classified lights, polarized and GFCI duplexes, switches and receptacles with various voltage requirements, variable transformers, kill switches and more. For area classifications, anti-arcing devices are available. Specify NEMA code when ordering. For more information please contact Mott Manufacturing.

# **Typical Fume Hood Electrical Details**

This information applies to all fume hoods unless otherwise noted on the specific fume hood page



Typical fume hood wiring diagram showing optional fan switch and velocity alarm duplex.







# **FUME HOOD SERVICE FIXTURES**

A full line of fume hood fixtures are available from most manufacturers to complete the installation of your new fume hood. Service fixtures can be pre-plumbed at the factory, they can also be ordered loose to be implemented in existing hoods.

Front loaded and rod driven remote control valves with various outlet fittings are available with accessibility and safety features. Common services are: air, vacuum, nitrogen, argon, CO², oxygen, and natural gas with many others available. Natural gas is not available in all hoods and in all jurisdictions depending on code requirements. Contact Mott for more information.

# **Typical Piping Supply Lines**

.375" OD copper tubing for all services.

.375" schedule 40 black pipe for natural gas in USA only.

Note: .375" OD copper tube for Gas in Canada.

# **Service Fitting Colors & Index Symbols**

Service	Index Color	Index Symbol
Air	Orange	AIR
Carbon Dioxide	Pink	CO2
Cold Water	Green	CW
Deionized Water	White	DW
Distilled Water	White	DI
Gas	Blue	GAS
Hot Water	Red	HW
Nitrogen	Brown	NIT
Oxygen	Lt. Green	OXY
Steam	Black	STM
Vacuum	Yellow	VAC

# **Typical Fume Hood Plumbing Details**



Plumbing pre-piped down to bottom, routed to the rear of the fume hood.



Plumbing pre-piped up to top, routed to the rear of the fume hood.

# Fume Hood Fixture Hole Covers



Front Load & Rod Type Exterior Plug Available In: Black or White



Front Load & Rod Type Exterior Plug Available In: Stainless Steel or Painted Stainless Steel

Part Number	Hole Size / Diameter	Front Load Exterior Application
HCBFE00	1-1/4"	Black Plug for Plumbing Holes
HCWFE00	1-1/4"	White Plug for Plumbing Holes
HCSFE00	1-1/4"	Stainless Plug for Plumbing Holes
HCPFE00	1-1/4"	Painted Stainless Plug for Plumbing Holes

 These plugs are used to cover exterior fixture plumbing holes in various materials on a fume hood plumbed with front load fixtures

Part Number	Hole Size / Diameter	Rod Type Exterior Application
HCBRE00	11/16"	Black Plug for Plumbing Holes
HCWRE00	11/16"	White Plug for Plumbing Holes
HCSRE00	11/16"	Stainless Plug for Plumbing Holes
HCPRE00	11/16"	Painted Stainless Plug for Plumbing Holes

 These plugs are used to cover exterior fixture plumbing holes in various materials on a fume hood plumbed with rod type fixtures



Interior Plug Available In: White



Interior Plug Available In: Stainless Steel or Painted Stainless Steel

Part Number	Hole Size / Diameter	Interior Application
HCWN100	3/4"	White Plug for Plumbing Holes
HCWA100	1"	White Plug for Alarm Holes
HCSN100	3/4" - 1"	Stainless Plug for Plumbing or Alarm Holes
HCPN100	3/4" - 1"	Painted Stainless Plug for Plumbing or Alarm Holes

 These plugs are used to cover interior fixture plumbing and alarm holes in various materials on any fume hood





# **FUME HOOD OPTIONS**

# Tri-Access Door System For Floor Mounted Fume Hoods

The Mott Pivot™ tri-access door system for floor mounted fume hoods offers unprecedented access to the fume hood chamber.



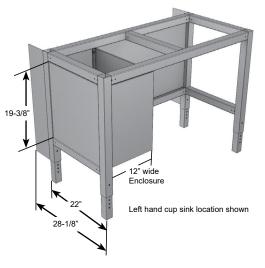




- The Mott Pivot™ offers unparalleled fume hood chamber access and efficiency in equipment set-up and tear-down situations.
- Designed for Pro Series floor mounted fume hoods with horizontal sliding sashes (see pages P54 and P55)
- 72" wide and larger receive two hinged doors; maximum hood width 120" wide
- · Traditional horizontal sliding sashes and additional smaller horizontal sashes in each glass panel
- Slide one horizontal sash fully to the side of the hood. Disengage the quick release latch and the door pivots to a fully
  open condition. Repeat with the second horizontal sash. Both doors slide to one side of hood before opening. Specify
  right or left configuration.
- · Contact Mott for more information on this option including airflow details

# ADA Fume Hood Table

Width	With Left Hand ADA Sink Enclosure	With Right Hand ADA Sink Enclosure	No Enclosure Table Only
48"	HTL2148	HTR2148	HTP0148
60"	HTL2160	HTR2160	HTP0160
72"	HTL2172	HTR2172	HTP0172



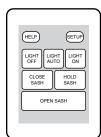
- Fully welded "U" frame table with plumbing enclosure (unless 'Table Only' part chosen), modesty panel and end filler panels
- For use at wall conditions only
- Height adjustable from 28-3/4" to 34-3/4" in 1" increments
- 2" x 2" tube construction
- Table fits standard depth (32-5/8"deep) fume hoods
- · Snap off access panel on inside of plumbing enclosure
- Maximum load rating is 1000lbs





# **FUME HOOD OPTIONS**

# Automatic Sash Operator 2 Plus (ASO2 Plus)



# **Option Code**

### SM

- Works independently in conjunction with Variable Air Volume (VAV) systems to maximize energy efficiency and laboratory safety. No connections to VAV system required.
- · LCD touch screen control system operates and displays all system functions
- · Motion sensor and a motorized operated sash that automatically closes when the fume hood is left unattended
- Obstruction sensing feature with optional light curtain
- · Factory installed on a bench chain drive single sash hood, up to 8' wide

# Audio/Visual Fume Hood Alarm

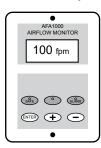


# Item Number

### ALARM05

 The fume hood velocity alarm is used to make sure that the face velocity does not drop below an unsafe level

# Audio/Visual Fume Hood Alarm With Face Velocity Display



# Item Number

## ALARM04

- The fume hood velocity alarm is used to alert the user that the face velocity has dropped below the lower limit
- Digital display of face velocity

# Plastic Sash Stop

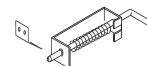


# **Item Number**

# PLSHSTP

- The sash stop is designed to stop the sash at a pre-determined height
- Can be manually overridden for apparatus setup
- Sash stop is placed behind sash handle
- Standard when option code S3 or S4 are selected

# Stainless Steel Sash Stop



## **Item Number**

# SASHSTP

- The sash stop is designed to stop the sash at a predetermined height
- Can be manually overridden for apparatus setup
- Sash stop is hidden behind sash handle when factory installed





# **FUME HOOD ENCLOSURE & FILLER PANELS**

# Finished Back Panels



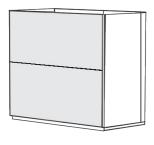


Larger than 48"wide			

Width	Fume Hood Height 54-1/4"	Fume Hood Height 66-1/4"	Fume Hood Height 90"	Optima™ Fume Hood
36"	FBP3036	FBP4036	FBP5036	-
48"	FBP3048	FBP4048	FBP5048	FBP7048
60"	FBP3060	FBP4060	FBP5060	FBP7060
72"	FBP3072	FBP4072	FBP5072	FBP7072
96"	FBP3096	FBP4096	FBP5096	-
1000mm	FBP300B	FBP400B	FBP500B	-
1513mm	FBP300C	FBP400C	FBP500C	-
2000mm	FBP300D	FBP400D	FBP500D	-

- · Finished back panels are used to close off the back of a fume hood when the back is in plain view (ex: island applications)
- Actual panel height is 53". 65" or 90"
- Finished Back Panels are held in place with screws

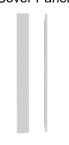
# Structural Finished Back Panels



Width	Fume Hood Height 54-1/4"	Fume Hood Height 66-1/4"	Fume Hood Height 90"	Optima™ Fume Hood
36"	EBP3036	EBP4036	EBP5036	-
48"	EBP3048	EBP4048	EBP5048	EBP7048
60"	EBP3060	EBP4060	EBP5060	EBP7060
72"	EBP3072	EBP4072	EBP5072	EBP7072
96"	EBP3096	EBP4096	EBP5096	-
120"	EBP3120	EBP4120	EBP5120	EBP7072
144"	EBP3144	EBP4144	EBP5144	-
1000mm	EBP300B	EBP400B	EBP500B	-
1513mm	EBP300C	EBP400C	EBP500C	-
2000mm	EBP300D	EBP400D	EBP500D	-

- · Finished back panels are used to close off the back of a fume hood when the back is in plain view (ex: island applications)
- Structural Finished Back Panel adds 1" to the overall depth of the fume hood and is supplied in two pieces (if panels are over 96" in width, they may be supplied in more than two pieces)
- · Mounting screws are concealed under plastic plugs
- Actual panel height is 53", 65" or 90"

# **End Cover Panel Scribes**



- · The End Cover Panel Scribes are used to close spaces between the back of a fume hood and a wall
- · The Scribe feature allows for easy width adjustment in the field
- 54-1/4" high

Width	Item Number
1"	ECS6001
2"	ECS6002
3"	ECS6003
4"	ECS6004
5"	ECS6005
6"	ECS6006
7"	ECS6007

# **End Cover Channels**



- · The End Cover Channel performs the same task as the End Cover Panel Scribe but is of a fixed width
- 54-1/4" high

Width	Item Number
1"	ECC6001
2"	ECC6002
3"	ECC6003
4"	ECC6004
5"	ECC6005
6"	ECC6006
7"	ECC6007



Recommendation For Installation: When ceilings are suspended, it is recommended that the fur installation and assembly extend to the underside of the ceiling. The floating ceiling should extend about the type of the property of the HVAC system.

# **FUME HOOD FURRING PANELS**

Fume hood furring panels are used to close off the area between the top of a fume hood and the ceiling. Our Panels are based on a 108" ceiling height and when hoods are supported on a 34-3/4" high cabinet with a 1-1/4" thick work top.

# **Furring Panels**



- Suitable for 32-5/8" deep Pro or SafeGuard™ hood
- Furring panels may be ordered with only one side panel or both
- Furring panel is 19" high

Front & Side Panel					
Width	Both	Left	Right	Front Only	
36"	FPS9036	FPL9036	FPR9036	FPF9036	
48"	FPS9048	FPL9048	FPR9048	FPF9048	
60"	FPS9060	FPL9060	FPR9060	FPF9060	
72"	FPS9072	FPL9072	FPR9072	FPF9072	
96"	FPS9096	FPL9096	FPR9096	FPF9096	
120"	FPS900L	FPL900L	FPR900L	FPF900L	
144"	FPS900H	FPL900H	FPR900H	FPF900H	

# Furring Panels with Hinged Access



- Suitable for 32-5/8" deep Pro or SafeGuard™ hood
- Furring panels may be ordered with only one side panel or both
- Furring panel is 19" high
- Hinged access panel is 12" high

Front & Side Panel					
Width	Both	Left	Right	Front Only	
36"	FPS9236	FPL9236	FPR9236	FPF9236	
48"	FPS9248	FPL9248	FPR9248	FPF9248	
60"	FPS9260	FPL9260	FPR9260	FPF9260	
72"	FPS9272	FPL9272	FPR9272	FPF9272	
96"	FPS9296	FPL9296	FPR9296	FPF9296	
120"	FPS920L	FPL920L	FPR920L	FPF920L	
144"	FPS920H	FPL920H	FPR920H	FPF920H	

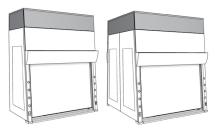
# Furring Panels with Finished Back



- Suitable for 32-5/8" deep Pro Series and 32-5/8" deep SafeGuard™ fume hoods with finished backs
- Furring panels are 19" high, 32-5/8" deep
- If Access Panel option is chosen one access panel is supplied (not shown)

Width	Without Access Panel	With Hinged Access Panel
36"	FPP9036	FPP9236
48"	FPP9048	FPP9248
60"	FPP9060	FPP9260
72"	FPP9072	FPP9272
96"	FPP9096	FPP9296

# Observation2<sup>™</sup> Plus Furring Panels



- Snap off front access panel with no exposed fasteners, mounts to top of the hood
- Furring panels are 12" high; the assembly matches the angled face of Observation2™ Plus hood. Refer to engineering drawings for details

	Double-Faced		
Width	4 Sided Furring Panel	4 Sided Furring Panel	
48"	FNV9248	FNV9448	FNV9048
60"	FNV9260	FNV9460	FNV9060
72"	FNV9272	FNV9472	FNV9072

# **Demonstration Furring Panels**



- Suitable for 35-1/4" deep double-faced Demonstration hoods
- Furring panels are 19" high, 35-1/4" deep, and has four sides
- If Access Panel option is chosen one access panel is supplied (not shown)

	Without	With Hinged
Width	Access Panel	Access Panel
36"	FPD9036	FPD9236
48"	FPD9048	FPD9248
60"	FPD9060	FPD9260
72"	FPD9072	FPD9272
96"	FPD9096	FPD9296



Recommendation For Installation: When ceilings are suspended, it is recommended that the further and assembly extend to the underside of the ceiling. The floating ceiling should extend above the top of the fume hood and be gut around the mechanical connections to make certain compared to the function of the function

laboratory furniture systems

QUALITY BY DESIGN

# FUME HOOD FURRING PANELS

Fume hood furring panels are used to close off the area between the top of a fume hood and the ceiling. Our Panels are based on a 108" ceiling height and when hoods are supported on a 34-3/4" hight cabinet with a 1-1/4" thick work top.

# NovaGuard™ Furring Panels



- Snap off front access panel with no exposed fasteners, mounts to top of the hood
- Furring panels are 19" high, and fits on a standard depth NovaGuard™ hood
- The assembly matches the angled face of NovaGuard<sup>™</sup> hood. Refer to engineering drawings for details.

Width	4 Sided Furring Panel	Front & Both Side Panels	
48"	FPN9448	FPN9348	
60"	FPN9460	FPN9360	
72"	FPN9472	FPN9372	
96"	FPN9496	FPN9396	

# RFV2™ Furring Panels



- Furring panels may be ordered with only one side panel or both
- Furring panel is 19" high, 36" deep

Front & Side Panel							
Width	Both	Left	Right	Front Only			
48"	F2V9048	F2L9048	F2L9048	F2F9048			
60"	F2V9060	F2L9060	F2L9060	F2F9060			
72"	F2V9072	F2L9072	F2L9072	F2F9072			
96"	F2V9096	F2L9096	F2L9096	F2F9096			

# RFV2™ Furring Panels with Hinged Access



- Furring panels may be ordered with only one side panel or both
- Furring panel is 19" high, 36" deep Hinged access panel is 12" high

Front & Side Panel							
Width	Both	Left	Right	Front Only			
48"	F2V9248	F2L9248	F2L9248	F2F9248			
60"	F2V9260	F2L9260	F2L9260	F2F9260			
72"	F2V9272	F2L9272	F2L9272	F2F9272			
96"	F2V9296	F2L9296	F2L9296	F2F9296			

# Furring Panel with Front Snap Off Panel



- Snap off front access panel with no exposed fasteners, mounts to top of the hood
- 3 sided furring panel includes rear wall mounting angles

Furring panels shown on Pro Series

3 Sided Furring Panel					
			SafeGuard™	SafeGuard™	
Width	Pro Series	RFV2™	32-5/8"	38-5/8"	
36"	FPM9336	-	-	-	
48"	FPM9348	FPC9348	FPU9348	FPV9348	
60"	FPM9360	FPC9360	FPU9360	FPV9360	
72"	FPM9372	FPC9372	FPU9372	FPV9372	
96"	FPM9396	FPC9396	FPI 19396	FPV9396	

- 4 Sided Furring Panels: Demonstration hoods have snap off front and back access panels
- All other hoods are supplied with snap off front access only

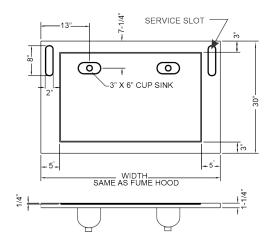
4 Sided	4 Sided Furring Panel					
	_			SafeGuard™	SafeGuard™	
Width	Pro Series	Demonstration	RFV2™	32-5/8"	38-5/8"	
36"	FPG9436	-	-	-	-	
48"	FPG9448	FPH9448	FPT9448	FPU9448	FPV9448	
60"	FPG9460	FPH9460	FPT9460	FPU9460	FPV9460	
72"	FPG9472	FPH9472	FPT9472	FPU9472	FPV9472	
96"	FPG9496	FPH9496	FPT9496	FPU9496	FPV9496	





# **FUME HOOD WORK SURFACES**

# Pro Series & NovaGuard™ Work Surfaces

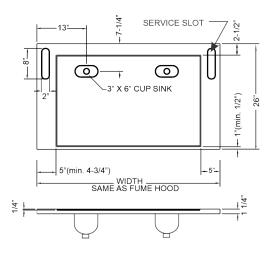


Fume Hood 316-4 Stainless Steel Work Surface					
Width	Plain	Left Cup Sink	Twin Cup Sink	<b>Right Cup Sink</b>	
36"	FTP0136	FTL0136	FTT0136	FTR0136	
48"	FTP0148	FTL0148	FTT0148	FTR0148	
60"	FTP0160	FTL0160	FTT0160	FTR0160	
72"	FTP0172	FTL0172	FTT0172	FTR0172	
96"	FTP0196	FTL0196	FTT0196	FTR0196	
1000mm	FTP010B	FTL010B	FTT010B	FTR010B	
1513mm	FTP010C	FTL010C	FTT010C	FTR010C	
2000mm	FTP010D	FTL010D	FTT010D	FTR010D	

Fume Hood Black Epoxy Work Surface					
Width	Plain	Left Cup Sink	Twin Cup Sink	Right Cup Sink	
36"	EFP3036	EFL3036	EFT3036	EFR3036	
48"	EFP3048	EFL3048	EFT3048	EFR3048	
60"	EFP3060	EFL3060	EFT3060	EFR3060	
72"	EFP3072	EFL3072	EFT3072	EFR3072	
96"	EFP3096	EFL3096	EFT3096	EFR3096	
1000mm	EFP300B	EFL300B	EFT300B	EFR300B	
1513mm	EFP300C	EFL300C	EFT300C	EFR300C	
2000mm	EFP300D	EFL300D	EFT300D	EFR300D	

- Work surfaces suitable for Pro Series and NovaGuard<sup>™</sup> hoods only
- Cup sinks are located for 18" deep fume hood base cabinets and suits a gooseneck only
- Stainless steel work surfaces are type 316, flat with square edges
- Epoxy work surfaces with 1/8" [3mm] beveled edges are 1-1/4" thick
- The service slots are not beveled
- These part numbers are for separate work surfaces and are not required for integral stainless steel coved corner liners

# RFV2<sup>™</sup> Work Surfaces



<b>Fume Hoo</b>	Fume Hood 316-4 Stainless Steel Work Surface				
Width	Plain	Left Cup Sink	Twin Cup Sink	Right Cup Sink	
36"	RTP0236	RTL0236	RTT0236	RTR0236	
48"	RTP0248	RTL0248	RTT0248	RTR0248	
60"	RTP0260	RTL0260	RTT0260	RTR0260	
72"	RTP0272	RTL0272	RTT0272	RTR0272	
96"	RTP0296	RTL0296	RTT0296	RTR0296	
1000mm	RTP020B	RTL020B	RTT020B	RTR020B	
1513mm	RTP020C	RTL020C	RTT020C	RTR020C	
2000mm	RTP020D	RTL020D	RTT020D	RTR020D	

Fume Hood Black Epoxy Work Surface				
Width	Plain	Left Cup Sink	Twin Cup Sink	Right Cup Sink
36"	RFP2636	RFL2636	RFT2636	RFR2636
48"	RFP2648	RFL2648	RFT2648	RFR2648
60"	RFP2660	RFL2660	RFT2660	RFR2660
72"	RFP2672	RFL2672	RFT2672	RFR2672
96"	RFP2696	RFL2696	RFT2696	RFR2696
1000mm	RFP260B	RFL260B	RFT260B	RFR260B
1513mm	RFP260C	RFL260C	RFT260C	RFR260C
2000mm	RFP260D	RFL260D	RFT260D	RFR260D

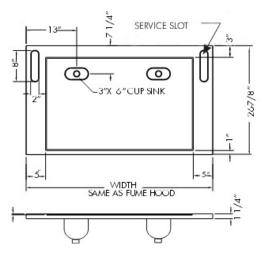
- Work surfaces suitable for RFV2™ fume hoods only
- Cup sinks are located for 18" deep fume hood base cabinets and suits a gooseneck only
- Stainless steel work surfaces are type 316, flat with square edges
- Epoxy work surfaces with 1/8" [3mm] beveled edges are 1-1/4" thick
- The service slots are not beveled
- These part numbers are for separate work surfaces and are not required for integral stainless steel coved corner liners





# **FUME HOOD WORK SURFACES**

# SafeGuard™ Work Surfaces for 32-5/8" Deep Hood

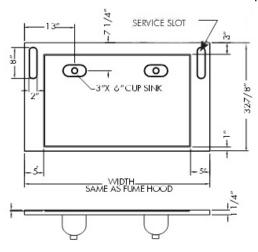


Fume Hood 316-4 Stainless Steel Work Surface							
Width	Plain	Left Cup Sink	Twin Cup Sink	Right Cup Sink			
36"	STP0336	STL0336	STT0336	STR0336			
48"	STP0348	STL0348	STT0348	STR0348			
60"	STP0360	STL0360	STT0360	STR0360			
72"	STP0372	STL0372	STT0372	STR0372			
96"	STP0396	STL0396	STT0396	STR0396			
1000mm	STP030B	STL030B	STT030B	STR030B			
1513mm	STP030C	STL030C	STT030C	STR030C			
2000mm	STP030D	STL030D	STT030D	STR030D			

<b>Fume Hoo</b>	Fume Hood Black Epoxy Work Surface							
Width	Plain	Left Cup Sink	Twin Cup Sink	Right Cup Sink				
36"	SFP2736	SFL2736	SFT2736	SFR2736				
48"	SFP2748	SFL2748	SFT2748	SFR2748				
60"	SFP2760	SFL2760	SFT2760	SFR2760				
72"	SFP2772	SFL2772	SFT2772	SFR2772				
96"	SFP2796	SFL2796	SFT2796	SFR2796				
1000mm	SFP270B	SFL270B	SFT270B	SFR270B				
1513mm	SFP270C	SFL270C	SFT270C	SFR270C				
2000mm	SFP270D	SFL270D	SFT270D	SFR270D				

- Work surfaces suitable for SafeGuard<sup>™</sup> fume hoods only
- Cup sinks are located for 18" deep fume hood base cabinets and suits a gooseneck only
- Stainless steel work surfaces are type 316, flat with square edges
- Epoxy work surfaces with 1/8" [3mm] beveled edges are 1-1/4" thick
- · The service are not beveled
- These part numbers are for separate work surfaces and are not required for integral stainless steel coved corner liners

# SafeGuard™ Work Surfaces for 38-5/8" Deep Hood



Fume Hood 316-4 Stainless Steel Work Surface							
Width	Plain	Left Cup Sink	Twin Cup Sink	Right Cup Sink			
36"	STP0436	STL0436	STT0436	STR0436			
48"	STP0448	STL0448	STT0448	STT0448			
60"	STP0460	STL0460	STT0460	STT0460			
72"	STP0472	STL0472	STT0472	STT0472			
96"	STP0496	STL0496	STT0496	STT0496			
1000mm	STP040B	STL040B	STT040B	STT040B			
1513mm	STP040C	STL040C	STT040C	STT040C			
2000mm	STP040D	STI 040D	STT040D	STT040D			

Fume Hood Black Epoxy Work Surface								
Width	Plain	Left Cup Sink	Twin Cup Sink	Right Cup Sink				
36"	SFP3336	SFL3336	SFT3336	SFR3336				
48"	SFP3348	SFL3348	SFT3348	SFR3348				
60"	SFP3360	SFL3360	SFT3360	SFR3360				
72"	SFP3372	SFL3372	SFT3372	SFR3372				
96"	SFP3396	SFL3396	SFT3396	SFR3396				
1000mm	SFP330B	SFL330B	SFT330B	SFR330B				
1513mm	SFP330C	SFL330C	SFT330C	SFR330C				
2000mm	SFP330D	SFL330D	SFT330D	SFR330D				
2000111111	311 3300	OI L000D	OI 1000D	31 1330D				

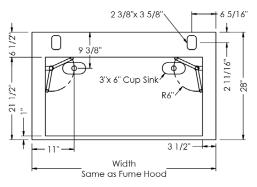
- Work surfaces suitable for SafeGuard<sup>™</sup> fume hoods only
- Cup sinks are located for 18" deep fume hood base cabinets and suits a gooseneck only
- Stainless steel work surfaces are type 316, flat with square edges
- Epoxy work surfaces with 1/8" [3mm] beveled edges are 1-1/4" thick
- · The service slots are not beveled
- These part numbers are for separate work surfaces and are not required for integral stainless steel coved corner liners





# **FUME HOOD WORK SURFACES**

# Observation2™ Plus Single-Faced Work Surfaces



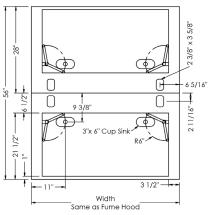
 One piece epoxy work surface, contact Mott for epoxy top ordering details.

Fume Hood 316-4 Stainless Steel Work Surface							
Width	Plain	Left Cup Sink	Twin Cup Sink	Right Cup Sink			
48"	BTP0148	BTL0148	BTT0148	BTR0148			
60"	BTP0160	BTL0160	BTT0160	BTR0160			
72"	BTP0172	BTL0172	BTT0172	BTR0172			

Fume Hood Black Epoxy Work Surface							
Width	Plain	Left Cup Sink	Twin Cup Sink	Right Cup Sink			
48"	BFP0148	BFL0148	BFT0148	BFR0148			
60"	BFP0160	BFL0160	BFT0160	BFR0160			
72"	BFP0172	BFL0172	BFT0172	BFR0172			

- Work surfaces suitable for Single-Faced Observation2™ Plus fume hoods only
- Cup sinks are located for 22" deep sink cabinets and suits a gooseneck only
- Stainless steel work surfaces are type 316, flat with square edges
- Epoxy work surfaces with 1/8" [3mm] beveled edges are 1-1/4" thick
- · The service slots are not beveled

# Observation2<sup>™</sup> Plus Double-Faced Work Surfaces



 Two piece counter top, contact Mott for epoxy top ordering details.

Fume Hood 316-4 Stainless Steel Work Surface							
Width Plain Left Cup Sink Twin Cup Sink Right Cu							
48"	BTP0248	BTL0248	BTT0248	BTR0248			
60"	BTP0260	BTL0260	BTT0260	BTR0260			
72"	BTP0272	BTL0272	BTT0272	BTR0272			

Fume Hood Black Epoxy Work Surface							
Width	Plain	Left Cup Sink	Twin Cup Sink	Right Cup Sink			
48"	BFP0248	BFL0248	BFT0248	BFR0248			
60"	BFP0260	BFL0260	BFT0260	BFR0260			
72"	BFP0272	BFL0272	BFT0272	BFR0272			

- Work surfaces suitable for Double-Faced Observation2<sup>™</sup> Plus fume hoods only
- Cup sinks are located for 18" deep fume hood base cabinets and suits a gooseneck only
- Cup sink location (left or right) is determined when facing the front of the sash for each top
- · Stainless steel work surfaces are type 316, flat with square edges
- Epoxy work surfaces with 1/8" [3mm] beveled edges are 1-1/4" thick
- · The service slots are not beveled

# Black Polypropylene Cup Sink & Cover





# Black Polypropylene Cup Sink 3" x 6" Oval

EFC1000

# Black Polypropylene Epoxy Cup Sink Cover

EFC0000

· Black polypropylene cup sink cover fits over cup sink

# Polyolefin Vent Sets



Description	Item Number
Polyolefin Vent Set for Field Retrofit	PVSA
Polyolefin Vent Set	PVSS

- For venting acid cabinets (not for flammable storage cabinets)
- Flexible corrugated vent tube is 8 feet long and comes with fitting to attach to rear of cabinet





# GLASSGUARD™ VENTILATION STATION

The GlassGuard<sup>™</sup> table top ventilation station is a compact, easy to install solution for less demanding laboratory activities which require ventilation. It may be used for a variety of smaller scale activities including weighing and dispensing, package opening and various instructional activities.

The ventilation station uses considerably less exhaust air than a full-size chemical fume hood. Designed to mount on a suitable depth counter top. The GlassGuard™ is supplied with the following standard features:



**Assembly** - Table top fume hood is 32" high by 30" deep. Exhaust Collar - 6" round plastic exhaust duct for connection to laboratory exhaust system or remote fan (not included).

**Duct Connection** - Exhaust duct connection may be chang ed on site to be exhausted up or down.

**Pivoting Sash** - The sash pivots upward to access work chamber providing a vertical opening height of 19".

**User Friendly** - Upward pivoting sash is sloped 20° to allow user to overlook the working area.

**Laminated Safety Glass** - Sides, top and sash provide a well-lit workspace with excellent visibility and impact resistance.

**Sash Opening** - When the sash is down for operation, the opening is 9".

**Interior Workspace** - Usable interior workspace depth is 23". Work top not included.

Airfoil - Compact raised airfoil across front of countertop directs air rearward.

**Cord Pass-Through** - Two utility ports allow equipment cords to pass through and be plugged in elsewhere.

**Lighting** - Optional LED lighting powered by an external low voltage power supply, delivers bright light to the workspace.

**Base Configurations** - Place on any suitably sized flat benchtop; Mott offers a full line of cabinets and tables that are designed as perfect base assemblies.

Performance - Factory tested to ASHRAE 110-2016 and exceeds industry standards for containment.

	Part Numbers			
Width	With No Lights	With LED Lighting	Exhaust Volume*	Static Pressure
24"	GVS0024	GVS1024	160 CFM	0.15
30"	GVS0030	GVS1030	200 CFM	0.20
36"	GVS0036	GVS1036	250 CFM	0.25
48"	GVS0048	GVS1048	330 CFM	0.35

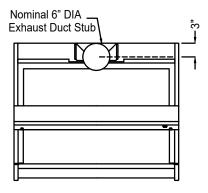
<sup>\*</sup> Based on a face velocity of 100 FPM



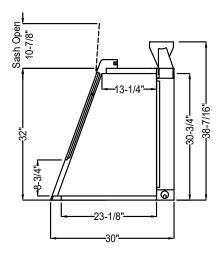


# GLASSGUARD™ VENTILATION STATION

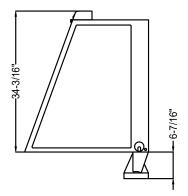
# **Typical Roof Details**



# **Side Section Details - Duct Connection Up**



# **Side View Details Duct Connection Down**



Note: Duct connection ships loose when duct connection is down.





# SELECT VENTILATED WORKSTATION - VERTICAL SASH EXHAUST DEVICE

This cost effective ventilation workstation is designed to meet the requirements of some non-hazardous laboratory applications. Designed to mount on a 30" deep counter top. This hood meets basic laboratory Constant Air Volume (CAV) or Variable Air Volume (VAV) requirements. For VAV, use option S2 for restricted by-pass panel. The Select Ventilated bench mounted workstation is supplied with the following standard features:



**Construction** - 2" wide space saving thin wall construction. Counterbalance System - High quality stainless steel cable system provides economical and reliable operation; tested to 100,000 cycles with no failure.

**Sash Design** - 6mm laminated safety glass is provided with a stainless steel handle and side runners. Hoods are provided with a vertical rising sash. Note: sash closes 1" above the counter top.

**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** - UL/CSA approved LED light module and switch provided.

Access Panels - Exterior side panels are removable.

Note: Unit is not UL or CSA approved.

Vertical Raising Sash Width Part Number						
36"	VWS0036					
48"	VWS0048					
60"	VWS0060					
72"	VWS0072					
96"	VWS0096					
1000mm	VWS000B					
1513mm	VWS000C					

**Side Section Details** 

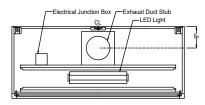
# **Exhaust Parameters**

Hood Size	Duct Diameter	100 FP 18" Ma Sash ( CFM			PM " Max* Opening SP	80 FP 18" Ma Sash 0 CFM		80 FPM 28-1/2 <sup>3</sup> Sash C CFM	
36"	10"	400	0.05	633	0.14	320	0.04	507	0.09
48"	10"	550	0.10	871	0.25	440	0.06	697	0.17
60"	12"	700	80.0	1109	0.20	560	0.05	887	0.13
72"	12"	850	0.12	1346	0.30	680	80.0	1077	0.19
96"	2 @ 10"	1150	0.12	1821	0.28	920	0.07	1457	0.18
1000mm	10"	442	0.07	700	0.17	354	0.05	560	0.10
1513mm	12"	693	80.0	1099	0.20	555	0.05	879	0.13

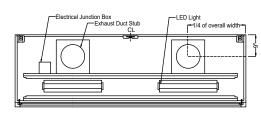
<sup>\* 28-1/2&</sup>quot; max sash opening is recommended for set-up and tear down only.

# 28-1/2" 54-1/4" Sash Open Rax Sash Opening 28-1/2" Ax Sash Opening 4 32" 48"

# **Typical Roof Details**

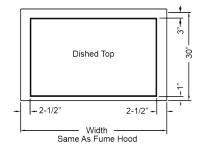


Single Collar Rough-In



**Dual Collar Rough-In** 

# **Work Surface Details**



All dimensions and sizes shown are nominal unless otherwise noted.

Specifications and details are based on product information at the time of printing and may change at any time without notice.







# SPRAY BOOTH

# EXHAUST DEVICE

This spray booth is designed for simple nontoxic exhaust operations. Designed to mount on a 24" deep counter top, the hood is designed to be used with a Constant Air Volume exhaust system and does not include a fan. The spray booth bench mounted unit is supplied with the following standard features:



**Construction** - Steel, thin wall construction with laboratory grade powder coating. Supplied with integrated steel bottom for easier cleaning. Air filter provided.

Steel Exhaust Collar - Round collar allows for direct connection to exhaust duct.

**Electrical** - UL/CSA approved LED light module (24" wide unit supplied with a globe style LED light fixture). To be field wired to remote switch.

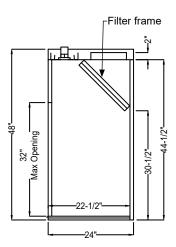
Note: Unit is not UL or CSA approved.

Spray Booth Width	Part Number
24"	8101000
30"	8201000
36"	8301000
48"	8401000
60"	8501000

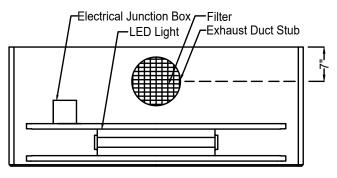
# Exhaust Parameters 100 FPM 33" Max Opening

Hood Size	Duct Diameter	33" Ma Openir CFM	x	
24"	10"	505	0.05	
30"	10"	642	0.80	
36"	10"	780	0.80	
48"	10"	1055	1.00	
60"	10"	1330	1.00	

# **Side Section Details**



# **Typical Roof Details**



Single Collar Rough-In

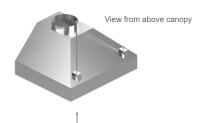


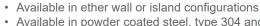


# WALL & ISLAND CANOPIES

# EXHAUST DEVICE

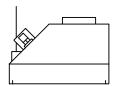
Exhaust canopies are primarily used to exhaust steam, odors, and heat in a work area where the expense and capabilities of a fume hood are not justified.





- Available in powder coated steel, type 304 and 316 stainless steel
- · Integrally welded construction
- · Integral continuous condensation catch edge
- · Integral duct stub
- · Steel rod suspension
- · Standard baffle is suspended on rods and is even with the bottom of the canopy providing a 2" wide perimeter airflow gap (not available with LED light option)
- · Actual exhaust requirements should be calculated in accordance with ACGIH, taking into account the heat load and type of vapor being generated

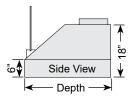


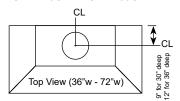


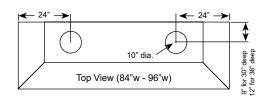
# **Optional Light Fixture**

- Use option code E6 for UL/CSA approved canopy LED light
- Baffle not available when ordering LED light
- Wire from light to junction box is not concealed

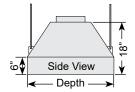
Well Conom	v. Haada		
Wall Canop Width	Duct Diameter	30" Deep	36" Deep
36"	10"	CWP1236	CWP1336
48"	10"	CWP1248	CWP1348
60"	12"	CWP1260	CWP1360
72"	12"	CWP1272	CWP1372
84"	2 @ 10"	CWP1284	CWP1384
96"	2 @ 10"	CWP1296	CWP1396
1000mm	10"	CWP120A	CWP130A
1513mm	12"	CWP120B	CWP130B
2000mm	12"	CWP120C	CWP130C

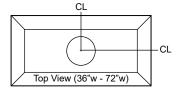


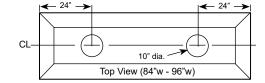




<b>Island Canor</b>	py Hoods		
Width	<b>Duct Diameter</b>	30" Deep	36" Deep
36"	10"	CIP1236	CIP1336
48"	10"	CIP1248	CIP1348
60"	12"	CIP1260	CIP1360
72"	12"	CIP1272	CIP1372
84"	2 @ 10"	CIP1284	CIP1384
96"	2 @ 10"	CIP1296	CIP1396
1000mm	10"	CIP120A	CIP130A
1513mm	12"	CIP120B	CIP130B
2000mm	12"	CIP120C	CIP130C











# **OVAL AIR STATION**

# **EXHAUST DEVICE**

Oval Air Stations provide a ventilated downdraft workstation for student experiments. Workstations pull air, odors, vapors, and aerosols when connected to a building exhaust system.

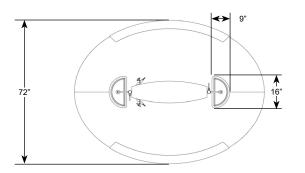


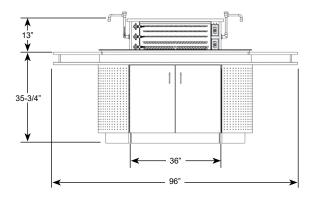
A HED vision, engineered by Mott

# **Exhaust Parameters**

<b>Duct Size</b>	CFM	SP	
3" x 10"	35	0	0.2

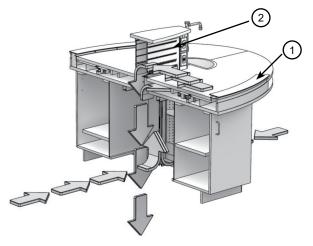
# **Details**





# Item Number OAS1096

- Overall assembly is 96" wide x 72" deep x 48-3/4" high with work surface located at 35-3/4" high
- Two 36" wide Maple (with Natural stain) Full Flush Overlay door cabinets with removable backs provided. Each cabinet has one adjustable shelf. Stainless steel wire pulls and hinges provided. Powder coated steel cabinets are an available option.
- Push fan provides constant airflow and is housed in a drawer which is removable with push pin locks to allow for easy cleaning in case of a spill
- Removable type 304 stainless steel perforated access panels for easy accessibility to electrical and plumbing components, makes installation and maintenance easy
- Three fixtures (Vacuum, Air and Gas), plus cold water provided per side.
- Factory pre-wiring and pre-piping down is standard to utilities below
- 3 circuits is standard, one per 2 duplexes per side and one dedicated to the fans
- Two UL/CSA approved GFI 120v/20amp duplex receptacles provided per side; data an available option
- · Indicator to alert users if main exhaust system shuts off
- Two single 16" long x 9" wide x 8" deep (ID), "D" shaped compartment sinks and two-tiered 1" thick black epoxy work surfaces provided
- 3" x 10" rectangular exhaust collar (exhaust transitions and dampers by others)
- · Shipped unassembled



The push drawer (1) and exhaust housing (2) work together to capture fumes. The internal fan pushes air across the work surface towards the exhaust housing, then the exhaust housing pulls the supplied air down into the building exhaust system.





# **FORENSICS CABINET**

# **EXHAUST DEVICE**

Forensic cabinets provide protection from harmful fumes and odors generated during the treatment of evidence material. These cabinets provide a controlled environment for the processing of latent fingerprints on most nonporous surfaces while eliminating personnel exposure to hazardous cyanoacrylate fumes. The cabinets contain individually vented chambers of various sizes designed to minimize airflow. Reducing airflow makes the fuming process more effective.



Construction Material - 45lb. density particle board core with chemical resistant high-pressure plastic laminate interior and exterior

**Processing Chambers** - Both counter top unit and floor mounted unit provide three chambers, each chamber can be operated separately

**Security** - Tamper proof self-latching stainless steel handles, type 304 stainless steel piano hinges and padlock hasp to protect evidence during the processing

**Electrical** - Cabinets are pre-wired to junction box located at top of unit. Four CSA/UL approved electrical outlets 120V 20AMP and one light switch. Power cord pass-throughs are provided in each chamber.

Lighting - Vapor proof LED lights

Safety - Chamber doors include laminated safety glass and vapor proof light fixtures in each chamber

**Exhaust Venting** - Counter top unit is provided with a 1-1/2" I.D outlet and the floor unit is provided with a 2" I.D. outlet. Vent outlet protrudes 4" above the top of both cabinets at rear.

**Convenience** - Both cabinets include one adjustable type 304 stainless steel perforated shelf in larger chamber and a hanging rod in each chamber



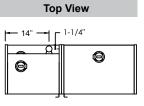


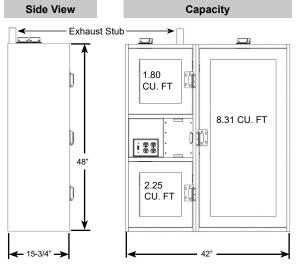
# **FORENSICS CABINET**

# **EXHAUST DEVICE**

<b>Counter Top Unit</b>			
Item Number	Capacity	Exhaust Volume	Exhaust Outlet Diameter
56F0030W	13 Cubic Feet	14 CFM	1.5" I.D.

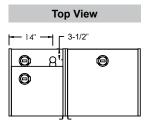


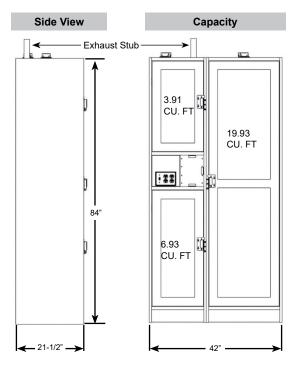




Floor Mounted U	nit		
Item Number	Capacity	Exhaust Volume	Exhaust Outlet Diameter
66F0030W	31 Cubic Feet	31 CFM	2" I.D.











# **FUME HOOD OPTION CODES**

Option	Description
46	Tempered glass
53	Entire exterior, galvenneal steel construction (Sigma Barrier™)*
A1	Alarm - see data sheet
A2	Alarm cutout only
A5	VAV control installed (customer supplied)*
A6	VAV control duplex receptacle on top of fume hood*
A7	Customer supplied alarm, Mott installed*
ASB	NovaGuard™ alcove shelves on both sides **
ASL	NovaGuard™ alcove shelf on left side**
ASR	NovaGuard™ alcove shelf on right side**
B2	Baffle - remote control adjustable top, fixed sides and center
E3	Explosion proof wiring (for Class 1 Div 1 or Class 1 Div 2 rooms)
E5	Motor/blower switch
E6	Canopy hood LED lighting module
G1	Finished back panel on fume hood (shipped assembled on the fume hood)
G2	Fire extinguisher
G3	Partially crated (for full crating please contact Mott Manufacturing)
G4	Fume hood exterior type 304 stainless steel
G5	Fume hood exterior type 316 stainless steel
KD	Knocked-down with assembly instructions and photos
LA	Bilingual label (English/French)*
LV	Self lowering sash mechanism - automatically lowers the sash to the chosen working height (for chain drive only)

Option	Description		
P1	Plumbing - mount only		
P2	Factory pre-piped up		
P3	Factory pre-piped down		
P4	Customer installed plumbing*		
P5	Cup sink right hand side (seamless hoods only)		
P6	Cup sink left hand side (seamless hoods only)		
S2	Restricted by-pass damper panel for VAV applications (vertical sashes only)		
S3	Sash stop at 18"		
S4	Sash stop at specified height		
S5	Sash box enclosure		
S6	Stainless steel baffle screen (tissue screen)*		
S7	No electrical cut outs in air foil*		
S9	Keyed sash lock		
sc	Self lowering sash mechanism - automatically lowers the sash to the chosen working height (for chain drive only)		
SK	Skid item		
SM	Automatic Sash Operator 2 Plus (for chain drive fume hoods only)		
VA	Variable air for Optima™ fume hoods		
W1	Window (in one side wall only) available for all hoods except Perchloric, Radioisotope and NovaGuard™ hoods		
WB	NovaGuard™ glass end panels - both sides		
WL	NovaGuard™ glass end panel - left side		
WR	NovaGuard™ glass end panel - right side		

<sup>\*</sup> Order by comment on notes section of the fume hood datasheet.

<sup>\*\*</sup> Depending on shelf position, available plumbing service locations will be reduced. Contact Mott for details.