

Frontier[®] FLOOR MOUNTED™

Floor Mounted Fume Hood

Introduction

Esco Frontier Floor Mounted Fume Hood is designed to provide comfortable space when users have to deal with large apparatus and hazardous containers. This fume hood is built with horizontal or vertical sliding sashes for ease of access when transporting apparatus into the hood. Although this type of fume hood is sometimes denoted as a walk-in fume hood, it is a misnomer. The user must not enter the hood while an activity generating hazardous fumes exists or when suspected concentration of fumes exists inside the chamber.

Superstructure

- Tri-wall construction for maximum robustness.
- Chain and Sprocket Sash support system.
- Hood lighting is pre-wired. Lighting is electronically ballasted, energy efficient, instant start. Typical light intensity on work surface is > 1076 lux in zero ambient conditions.

Safety Features

- Shaping vanes increase airflow "sweep" at the critical area at the sidewall to improve containment, especially when laboratory personnel walk fast in front of the hood.

Serviceability

- Removable baffle system allows for thorough cleaning inside the hood.
- Chain and sprocket system requires minimal service.

Safety Certified and Tested

All Esco fume hoods are manufactured for the most demanding laboratory applications.

- Each Frontier Floor Mounted Fume Hood is tested to comply with ASHRAE 110:1995 Standard.

- Each Frontier Floor Mounted Fume Hood is tested to comply with the European Standard EN 14175-3.
- Sash is clearly labeled with operating instructions and illustrations.

Accessories and Options

- Esco offers a variety of options and accessories to meet application requirements.
- Additional services and electrical outlets.
- Custom sizes available.

Warranty

The Frontier Floor Mounted Fume Hood is warranted for 1 year excluding consumable parts and accessories. Contact your local sales representative for specific warranty details.



Floor Mounted Fume Hood
Model EFF-6UCRVW-8



Guide to Models

EFF - 4 U B R V W - 8

External Width	Code	Internal Depth	Code	Internal Liner	Code	Sash Type	Code	Color Code	Code	Electrical Code	Code
1220 mm (48.0")	4U	965 mm (38.0")	B	Resinate	R	Vertical	V	Esco White	W	230V, AC, 50/60Hz	8
1525 mm (60.0")	5U			Resinate Plus	U					110-120V, AC, 50/60Hz	9
1830 mm (72.0")	6U										
2440 mm (96.0")	8U										

* Contact Esco for other dimensional requirements.

General Specifications, Frontier Floor Mounted Fume Hoods

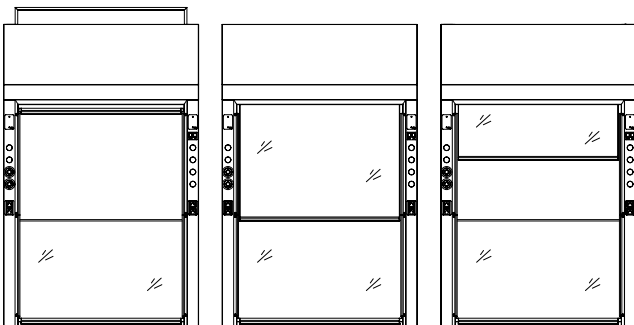
Model			EFF-4UB_VW_	EFF-5UB_VW_	EFF-6UB_VW_	EFF-8UB_VW_
Nominal Size			1.2 meters (4')	1.5 meters (5')	1.8 meters (6')	2.4 meters (8')
External Dimensions * (W x D x H)			1220 x 965 x 2688 mm 48.0" x 38.0" x 106.0"	1525 x 965 x 2688 mm 60.0" x 38.0" x 106.0"	1830 x 965 x 2688 mm 72.0" x 38.0" x 106.0"	2440 x 965 x 2688 mm 96.0" x 38.0" x 106.0"
Internal Dimensions (W x D x H)			996 x 710 x 1586 mm 39.2" x 28.0" x 65.0"	1301 x 710 x 1586 mm 51.2" x 28.0" x 65.0"	1606 x 710 x 1586 mm 63.2" x 28.0" x 65.0"	2216 x 710 x 1586 mm 87.2" x 28.0" x 65.0"
Maximum Sash Opening (two Vertical Sash up)			1647 mm (64,8")			
Sash Type			Vertical	Vertical	Vertical / Horizontal	Vertical / Horizontal
Exhaust Volume/ Static Pressure Required	Face Velocity	Sash Opening				
	0.4 m/s (80 fpm)	Design Opening: 457 mm (18.0")	1160 cmh @ 18 Pa 682 cfm @ 0.08" WG	1507 cmh @ 23 Pa 887 cfm @ 0.10" WG	1855 cmh @ 28 Pa 1092 cfm @ 0.12" WG	2551 cmh @ 20 Pa 1501 cfm @ 0.09" WG
	0.5 m/s (100 fpm)	Design Opening: 457 mm (18.0")	1449 cmh @ 28 Pa 853 cfm @ 0.12" WG	1884 cmh @ 36 Pa 1109 cfm @ 0.15" WG	2319 cmh @ 44 Pa 1365 cfm @ 0.19" WG	3189 cmh @ 31 Pa 1877 cfm @ 0.13" WG
	0.4 m/s (80 fpm)	Full Open: 736 mm (29.0")	1805 cmh @ 20 Pa 1062 cfm @ 0.09" WG	2346 cmh @ 34 Pa 1381 cfm @ 0.15" WG	2888 cmh @ 51 Pa 1700 cfm @ 0.22" WG	3971 cmh @ 24 Pa 2337 cfm @ 0.10" WG
0.5 m/s (100 fpm)	Full Open: 736 mm (29.0")	2256 cmh @ 31 Pa 1328 cfm @ 0.13" WG	2933 cmh @ 52 Pa 1726 cfm @ 0.22" WG	3610 cmh @ 80 Pa 2124 cfm @ 0.34" WG	4964 cmh @ 38 Pa 2921 cfm @ 0.16" WG	
Exhaust Outlet Diameter			305 mm (12.0")			
Number of Exhaust Collars			1	1	1	2

* When sash is in full open position, total height of fume hood is 2688 mm (106.0"). Please ensure sufficient ceiling height clearance is available.

- All Frontier Floor Mounted Fume Hoods are shipped unassembled to site.
- Service fixtures are plumbed on-site by end user

Frontier Floor Mounted Fume Hood Sash Configuration

Vertical Sash



Full Open Position

Full Close Position

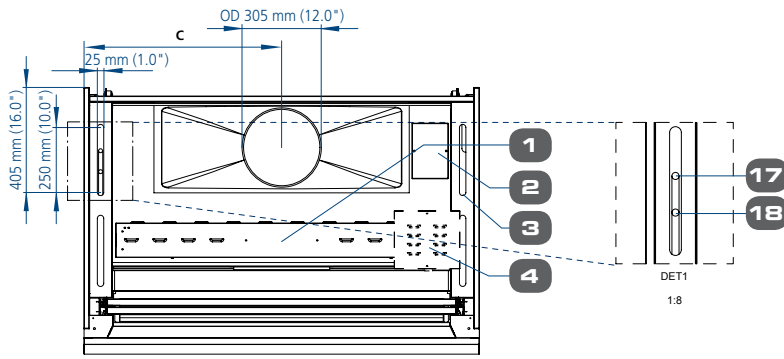
Working Position

Frontier **FLOOR MOUNTED™**

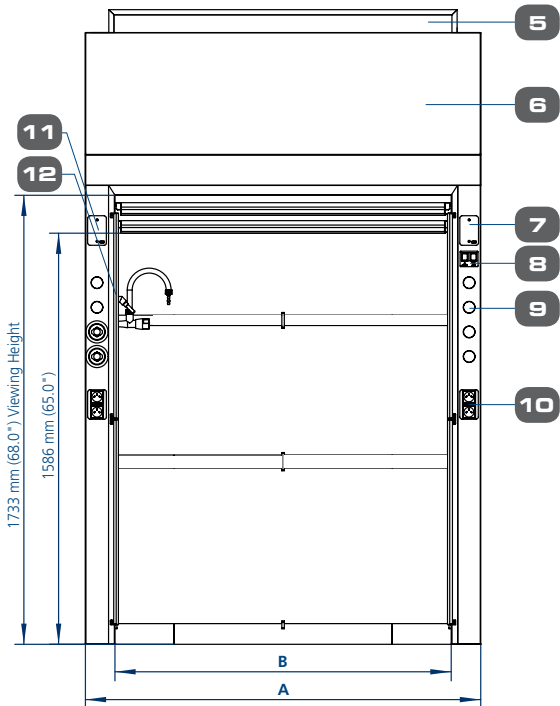
Fume Hood • Frontier Floor Mounted Fume Hood

Model EFF, Technical Specifications of Frontier Floor Mounted Fume Hood

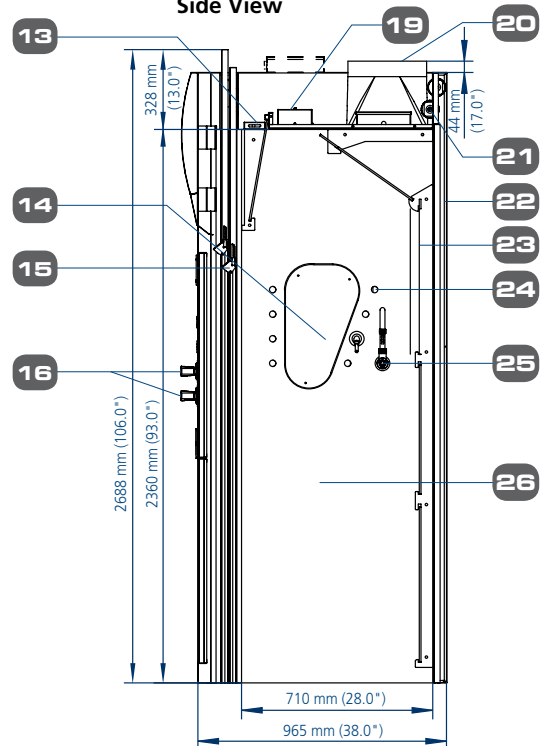
Top view



Front View



Side View



1. Light box
2. Electrical wiring junction box
3. Service fixture pass thru
4. Airflow alarm sentinel XL™ module (only if optional airflow alarm installed)
5. Vertical rising tempered laminated and framed sash glass, replaceable from front of hood
6. Curved removable front panel
7. Provision for air flow fixture Sentinel XL™
8. Light and fan switch
9. Provision for additional fixtures
10. Factory installed electrical outlet(s) total 16 amp. Specify type and quality when ordering
11. Provision for additional nozzle
12. Acela shaped side vanes
13. Functionally robust bypass™, minimizes contaminants behind sash (field convertible to VAV)
14. Service fixture side access
15. Aerodynamic full length sash handle
16. Service fixture for water gas, nitrogen, vacuum (dependent upon request)
17. Cold water inlet, 3/8" copper pipe
18. Gas inlet, 3/8" copper pipe
19. Energy-efficient T5 fluorescent lights in sealed explosion relief enclosure
20. Tapered, low noise/pressure drop, fiberglass exhaust collar
21. Chain drive sash, chain and axle
22. Counter weight, weight field adjustable
23. Hot zone baffles™ minimize roll, removable
24. Fixture fitting holes covered by plastic cover
25. Enhanz™ service fixture, powder coat finished CW (cold water) 1 set, gas (gas) 1 set, additional fixture order separately

Fume Hood Dimensional Data			
Model	A	B	C
EFF-4UB_W_	1220 mm (48.0")	996 mm (39.0")	610 mm (24.0")
EFF-5UB_W_	1525 mm (60.0")	1301 mm (51.0")	762.5 mm (30.0")
EFF-6UB_W_	1830 mm (72.0")	1606 mm (63.0")	915 mm (36.0")
EFF-8UB_W_	2440 mm (96.0")	2216 mm (87.0")	664 mm (26.0")

Fume Hood Installation Requirements

- Proper location (refer to Esco recommendations)
- Exhaust system capable of delivering airflow and pressure drop requirements
 - Exhaust ductwork and connection accessories
 - Exhaust blower (or building exhaust system)
- Contactors (if applicable)
- Means of adjusting exhaust flow (damper or frequency inverter)
- Sufficient laboratory supply air
- Plumbing and electrical hook-up
- Unless otherwise specified, items and services specified above are not provided by Esco



- ART Equipment
- Biological Safety Cabinets
- CO₂ Incubators
- Compounding Pharmacy Equipment
- Containment / Pharma Products
- Ductless Fume Hoods
- Lab Animal Research Products
- Laboratory Fume Hoods
- Laboratory Ovens and Incubators
- Laminar Flow Clean Benches
- PCR Cabinets
- PCR Thermal Cyclers
- Powder Weighing Balance Enclosures
- Ultra-low Freezers

Since 1978, Esco has emerged as a leader in the development of controlled environment, laboratory and pharmaceutical equipment solutions. Products sold in more than 100 countries include biological safety cabinets, compounding pharmacy equipment, containment / pharma products, ductless fume hoods, in vitro fertilization workstations, lab animal research products, laboratory fume hoods, laboratory ovens and incubators, laminar flow clean benches and PCR products and instrumentation. With the most extensive product line in the industry, Esco has passed more tests, in more languages, for more certifications, throughout more countries than any biosafety cabinet manufacturer in the world. Esco remains dedicated to delivering innovative solutions for the clinical, life science, research and industrial laboratory community. www.escoglobal.com.

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Esco Technologies, Inc. • 2940 Turnpike Drive, Units 15-16 • Hatboro, PA 19040, USA
 Toll-Free USA and Canada 877-479-3726 • Tel 215-441-9661 • Fax 215-441-9660
www.escoglobal.com • usa@escoglobal.com

Esco Micro Pte. Ltd. • 21 Changi South Street 1 • Singapore 486 777
 Tel +65 6542 0833 • Fax +65 6542 6920 • mail@escoglobal.com
www.escoglobal.com

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