

# Frontier<sup>®</sup> FLOOR MOUNTED™



Floor Mounted Fume Hood  
Model EFF-6UCRVW-8

## 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.

- 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.



## 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")	<b>4U</b>	965 mm (38.0")	<b>B</b>	Resinate	<b>R</b>	Vertical	<b>V</b>	Esco White	<b>W</b>	230V, AC, 50/60Hz	<b>8</b>
1525 mm (60.0")	<b>5U</b>			Resinate Plus	<b>U</b>	Horizontal	<b>H</b>			110-120V, AC, 50/60Hz	<b>9</b>
1830 mm (72.0")	<b>6U</b>										
2440 mm (96.0")	<b>8U</b>										

\* Contact Esco for other dimensional requirements.

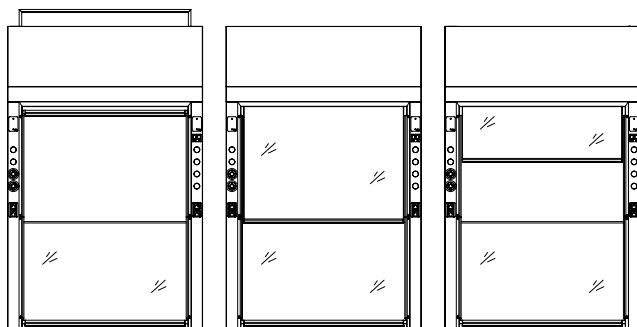
## General Specifications, Frontier Floor Mounted Fume Hoods

Model	EFF-4UB_ _W_ _	EFF-5UB_ _W_ _	EFF-6UB_ _W_ _	EFF-8UB_ _W_ _		
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				
	0.3 m/s (60 fpm)	Design Opening: 457 mm (18.0")	870 cmh @ 10 Pa 512 cfm @ 0.04" WG	1131 cmh @ 13 Pa 665 cfm @ 0.06" WG	1391 cmh @ 16 Pa 819 cfm @ 0.07" WG	1913 cmh @ 11 Pa 1126 cfm @ 0.05" WG
	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 @ 0.08" 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
	0.3 m/s (60 fpm)	Full Open: 50% of maximum sash open	1370 cmh @ 26 Pa 806 cfm @ 0.11" WG	1781 cmh @ 33 Pa 1048 cfm @ 0.14" WG	2192 cmh @ 41 Pa 1290 cfm @ 0.18" WG	3014 cmh @ 27 Pa 1774 cfm @ 0.12" WG
	0.4 m/s (80 fpm)	Full Open: 50% of maximum sash open	1827 cmh @ 46 Pa 1075 cfm @ 0.20" WG	2375 cmh @ 59 Pa 1398 cfm @ 0.25" WG	2923 cmh @ 74 Pa 1720 cfm @ 0.32" WG	4019 cmh @ 50 Pa 2366 cfm @ 0.21" WG
	0.5 m/s (100 fpm)	Full Open: 50% of maximum sash open	2284 cmh @ 72 Pa 1344 cfm @ 0.31" WG	2969 cmh @ 92 Pa 1747 cfm @ 0.39" WG	3654 cmh @ 115 Pa 2151 cfm @ 0.49" WG	5024 cmh @ 78 Pa 2957 cfm @ 0.33" 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.

## Frontier Floor Mounted Fume Hood Sash Configuration

### Vertical Sash

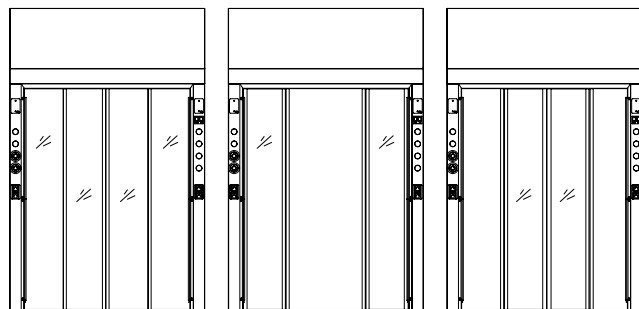


Full Open Position

Full Close Position

Working Position

### Horizontal Sash



Full Close Position

50% Opening  
(Working Position)

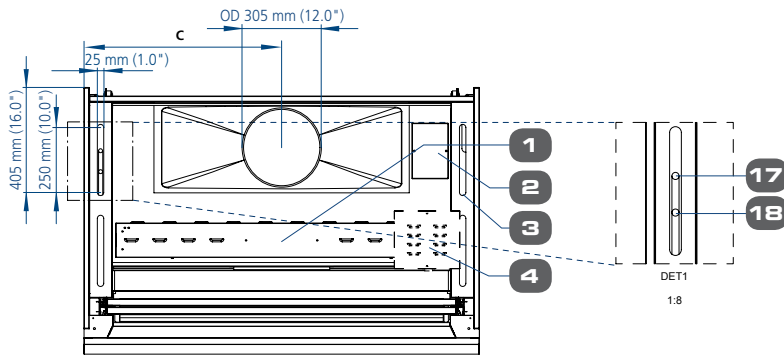
25% - 25% Opening  
(Working Position)

Frontier **FLOOR MOUNTED™**

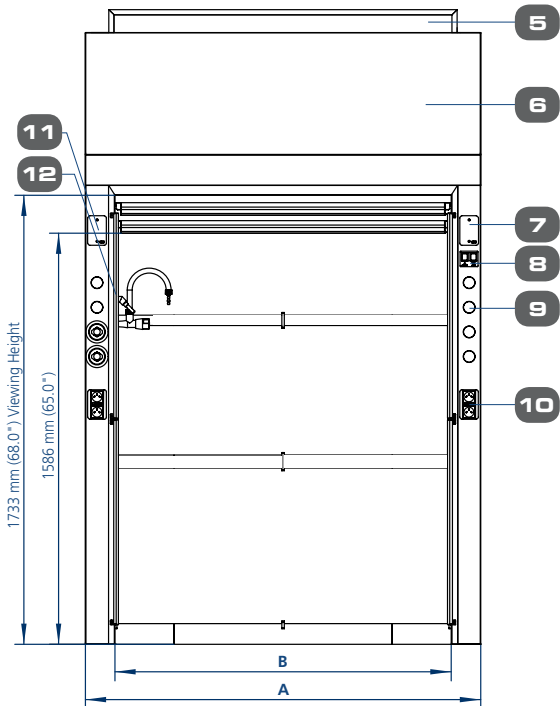
Fume Hood • Frontier Floor Mounted Fume Hood

# Model EFF, Technical Specifications of Frontier Floor Mounted Fume Hood

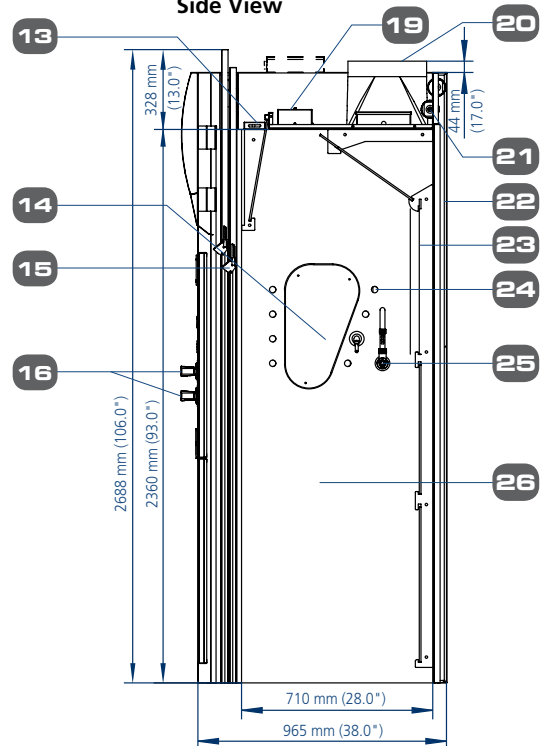
Top view



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) 1set, top plumbed additional fixture order separately
26. Resinate™ internal liner

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



- Biological Safety Products
- Cleanroom Products
- Containment / Pharma Products
- Ductless Fume Hoods / Carbon Filtration
- General Purpose Scientific Equipment
- Industrial Lab Equipment
- In-Vitro Fertilization Products
- PCR Products
- Pharmacy Products
- Lab Animal Research Products
- Lab Thermostatic Products
- Lab Ventilation / Chemical Fume Products / Lab Furniture
- Powder Handling Products

*Since 1978, Esco has emerged as a leader in the development of controlled environment, laboratory and cleanroom equipment solutions. Products sold in more than 100 countries include biological safety cabinets, cleanroom products, 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](http://www.escoglobal.com).*

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