

# Frontier® FLOOR MOUNTED™

## Floor Mounted Fume Hood



Floor Mounted Fume Hood  
Model EFF-6UCRVW-8

### Introduction

The Esco Frontier® Floor Mounted™ Fume Hood is a high performance, low flow fume hood engineered for safety, performance and energy efficiency, all combined in one multi-featured product. It is designed to provide comfortable space when users have to deal with tall apparatus and large hazardous containers that require increased height area. Its ability to operate at a reduced face velocity of 0.3 m/s directly translates to more savings for your company.

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.
- Internal liner is constructed of Esco Resinate™, a proprietary composite material specifically designed for use as internal liner for laboratory fume hoods due to its excellent chemical resistance. Its excellent physical properties also provides structural reinforcement for the hood.
- Main body is fabricated of Electrogalvanized steel with Epoxy-polyester hybrid Isocide™ powder coating for long term chemical abrasion and weathering resistance.
- Energy-efficient hood lighting through a pre-wired, electronic ballast. Typical light intensity on work surface is >1076 lux in zero ambient conditions.

### Safety Features

- Shaping vanes designed for improved containment by increasing airflow "sweep" at the critical area at the side wall, most especially if there are quick rapid movements in front of the hood.
- Remote-controlled knobs provide immediate access and control to fixtures inside for convenience and safety.

### Serviceability

- Removable baffle system allows for easy cleaning and servicing.
- 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 service fixtures and electrical outlets.
- Fully configurable optional Esco Sentinel™ XL microprocessor controller for hood performance monitoring and continuous display of face velocity.
- Esco Envirosafe Fume Hood Scrubber for air pollution control of water soluble chemicals present in the exhaust fumes.
- A removable low-height base cabinet can be added for a dual function feature. With the added base cabinet, the Frontier® Floor-Mounted™ fume hood can be reconfigured as a distillation fume hood, which can provide operators with a bench-top hood that has a greater interior height for use of larger apparatus.
- Distillation Grids

### 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

E F F - B W -											
External Width	Code	Internal Depth	Code	Internal Liner	Code	Sash Type	Code	Color	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>	230 VAC, 50/60 Hz	<b>8</b>
1525 mm (60.0")	<b>5U</b>			Resinate Plus	<b>U</b>	Horizontal	<b>H*</b>			110-120 VAC, 50/60 Hz	<b>9</b>
1830 mm (72.0")	<b>6U</b>										
2440 mm (96.0")	<b>8U</b>										

\*Horizontal sash is only offered for 6 feet and 8 feet models only.

### General Specifications, Frontier® Floor Mounted™ Fume Hoods

Model			EFF-4UBRVW-8 2090025	EFF-5UBRVW-8 2090012	EFF-6UBRVW-8 2090026	EFF-8UBRVW-8 2090027
		220-240 VAC, 50/60 Hz, 1ø				EFF-6UBRHW-8 2090028
			EFF-4UBUVW-8 2090342	EFF-5UBUVW-8 2090631	EFF-6UBUVW-8 2090632	EFF-8UBUVW-8
					EFF-6UBUHW-8	EFF-8UBUHW-8
	110-120 VAC, 50/60 Hz, 1ø		EFF-4UBRVW-9 2090272	EFF-5UBRVW-9 2090557	EFF-6UBRVW-9 2090558	EFF-8UBRVW-9 2090559
					EFF-6UBRHW-9	EFF-8UBRHW-9
			EFF-4UBUVW-9 2090273	EFF-5UBUVW-9 2090634	EFF-6UBUVW-9 2090283	EFF-8UBUVW-9 2090635
					EFF-6UBUHW-9	EFF-8UBUHW-9
<b>Nominal Size</b>			1.2 meter ( 4' )	1.5 meter ( 5' )	1.8 meter ( 6' )	2.4 meter ( 8' )
<b>External Dimensions (W x D x H)</b>	Fume Hood unit only		1220 x 965 x 2360 mm (48.0" x 38.0" x 92.9")	1525 x 965 x 2360 mm (60.0" x 38.0" x 92.9")	1830 x 965 x 2360 mm (72.0" x 38.0" x 92.9")	2440 x 965 x 2360 mm (96.1" x 38.0" x 92.9")
	With Exhaust Collar		1220 x 965 x 2405 mm (48.0" x 38.0" x 94.7")	1525 x 965 x 2405 mm (60.0" x 38.0" x 94.7")	1830 x 965 x 2405 mm (72.0" x 38.0" x 94.7")	2440 x 965 x 2405 mm (96.1" x 38.0" x 94.7")
	With Fully-opened Sash		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 (96.1" x 38.0" x 106.0")
<b>Internal Dimensions (W x D x H)</b>			996 x 710 x 2140 mm (39.2" x 28.0" x 84.3")	1301 x 710 x 2140 mm (51.2" x 28.0" x 84.3")	1606 x 710 x 2140 mm (63.2" x 28.0" x 84.3")	2216 x 710 x 2140 mm (87.2" x 28.0" x 84.3")
<b>Exhaust Volume/ Static Pressure Required</b>	<b>Face Velocity</b>	<b>Sash Opening</b>				
	0.4 m/s (80 fpm)	Design Opening: 457 mm (18.0")	1160 cmh at 18 Pa (682 cfm at 0.08" WG)	1507 cmh at 23 Pa (887 cfm at 0.10" WG)	1855 cmh at 28 Pa (1092 cfm at 0.12" WG)	2551 cmh at 20 Pa (1501 cfm at 0.09" WG)
	0.5 m/s (100 fpm)		1449 cmh at 28 Pa (853 cfm at 0.12" WG)	1884 cmh at 36 Pa (1109 cfm at 0.15" WG)	2319 cmh at 44 Pa (1365 cfm at 0.19" WG)	3189 cmh at 31 Pa (1877 cfm at 0.13" WG)
	0.4 m/s (80 fpm)	Full Open: 736 mm (29.0")	1805 cmh at 20 Pa (1062 cfm at 0.09" WG)	2346 cmh at 34 Pa (1381 cfm at 0.15" WG)	2888 cmh at 51 Pa (1700 cfm at 0.22" WG)	3971 cmh at 24 Pa (2337 cfm at 0.10" WG)
	0.5 m/s (100 fpm)		2256 cmh at 31 Pa (1328 cfm at 0.13" WG)	2933 cmh at 52 Pa (1726 cfm at 0.22" WG)	3610 cmh at 80 Pa (2124 cfm at 0.34" WG)	4964 cmh at 38 Pa (2921 cfm at 0.16" WG)
<b>Exhaust Outlet Diameter</b>			305 mm (12.0")			
<b>Number of Exhaust Collars</b>			1			2
<b>Fluorescent Lamp Intensity</b>			975 lux (90 foot-candles)	948 lux (88 foot-candles)	919 lux (85 foot-candles)	971 lux (90 foot-candles)
<b>Controller</b>			Rocker Switches (Option to upgrade to Sentinel™ XL)			
<b>Construction</b>	Main Body		Electrogalvanized steel with Epoxy-polyester hybrid Isocide™ powder coating			
	Internal Liner (default)		Esco Resinate™			
	Worktop (default)		No worktop (Option to purchase low height base cabinet with worktop)			
<b>Sash Specifications</b>	Sash Material		Tempered Laminated and Framed Sash Glass			
	Sash Configuration		Vertical		Vertical / Horizontal	
	Maximum Sash Opening (two vertical sash up)		1647 mm (64.8")			
<b>Electrical</b>	Cabinet Full Load Amps (FLA)		32 A			
	Cabinet Nominal Power		100 W (lighting only)			
<b>Net Weight*</b>			342 Kg (754 lbs)	420 Kg (926 lbs)	497 Kg (1096 lbs)	593 Kg (1307 lbs)
<b>Shipping Weight*</b>			370 Kg (816 lbs)	447 Kg (985 lbs)	530 Kg (1168 lbs)	630 Kg (1389 lbs)
<b>Shipping Dimension, maximum (W x D x H)*</b>			2500 x 1150 x 1300 mm (98.43" x 45.28" x 51.18")	2500 x 1150 x 1300 mm (98.43" x 45.28" x 51.18")	2500 x 1250 x 1000 mm (98.43" x 49.21" x 39.37")	2500 x 1250 x 1000 mm (98.43" x 49.21" x 39.37")

\*Fume hood unit only. Excludes base cabinet/ optional stand.

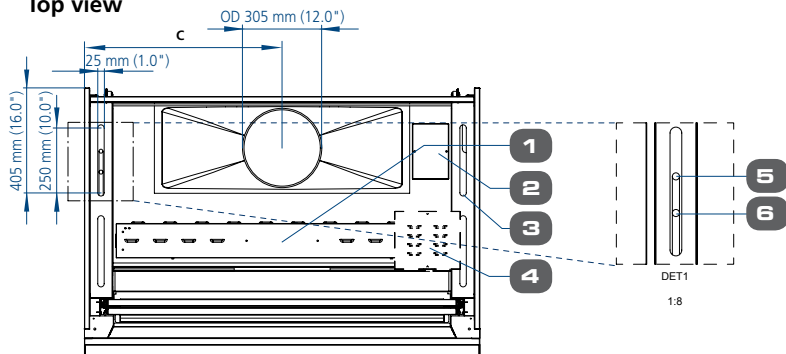
## General Specifications, Frontier® Floor Mounted™ Fume Hoods

Model*	EBF-4UDG-0 2090645	EBF-4UDG-0 2090646	EBF-4UDG-0 2090647	EBF-4UDG-0 2090648
Nominal Size	1.2 meter (4')	1.5 meter (5')	1.8 meter (6')	2.4 meter (8')
External Dimensions (W x D x H)	1220 x 600 x 457 mm (48.0" x 23.6" x 18.0")	1525 x 600 x 457 mm (60.0" x 23.6" x 18.0")	1830 x 600 x 457 mm (72.0" x 23.6" x 18.0")	2440 x 600 x 457 mm (96.1" x 23.6" x 18.0")
Net Weight	76 Kg (168 lbs)	115 Kg (254 lbs)	140 Kg (309 lbs)	160 Kg (353 lbs)
Shipping Weight	110 Kg (243 lbs)	151 Kg (333 lbs)	170 Kg (375 lbs)	190 Kg (419 lbs)
Shipping Dimensions, Maximum (W x D x H)	1350 x 750 x 1150 mm (53.1" x 29.5" x 45.3")	1650 x 750 x 1150 mm (65.0" x 29.5" x 45.3")	1950 x 750 x 1150 mm (76.8" x 29.5" x 45.3")	2590 x 1020 x 1100 mm (102" x 40.2" x 43.3")

\*Model EBF-\_\_DG-0 is low-height base cabinet without MCB/ELCB

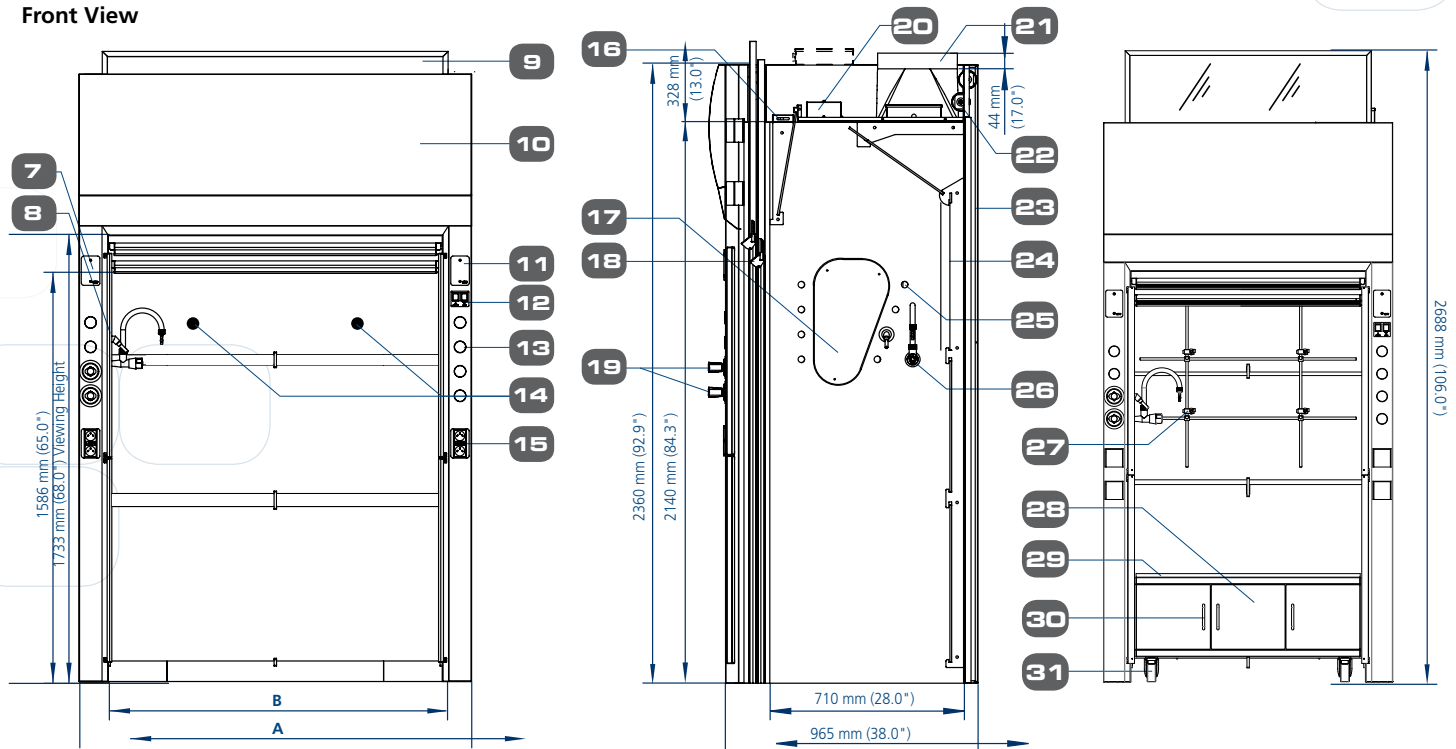
## Model EFF, Technical Specifications of Frontier® Floor Mounted™ Fume Hood

### Top view



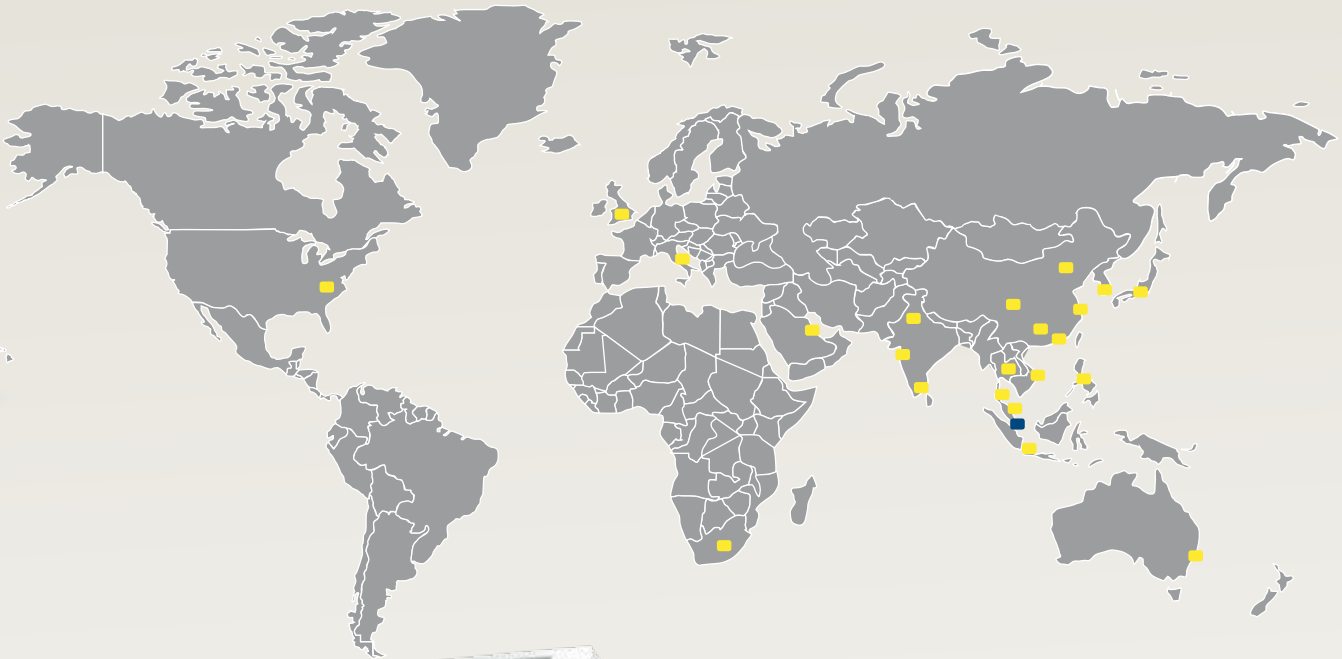
Fume Hood Dimensional Data			
Nominal Width	A	B	C
4 Feet	1220 mm (48.0")	996 mm (39.0")	610 mm (24.0")
5 Feet	1525 mm (60.0")	1301 mm (51.0")	762.5 mm (30.0")
6 Feet	1830 mm (72.0")	1606 mm (63.0")	915 mm (36.0")
8 Feet	2440 mm (96.0")	2216 mm (87.0")	664 mm (26.0")

### Front View



- |   |   |  |
|---|---|--|
| <ul style="list-style-type: none"> <li>1. Light box</li> <li>2. Electrical junction box</li> <li>3. Service Fixture Pass-Through</li> <li>4. Airflow alarm Sentinel™ XL Module (only if optional airflow alarm installed)</li> <li>5. Cold water inlet</li> <li>6. Gas inlet</li> <li>7. Provision for additional nozzle</li> <li>8. Acela™ shaped side vanes</li> <li>9. Vertical rising tempered laminated and framed sash glass</li> <li>10. Curved removable front panel</li> </ul> | <ul style="list-style-type: none"> <li>11. Provision for Sentinel™ XL airflow alarm</li> <li>12. Light and Fan switch</li> <li>13. Provision for additional fixtures</li> <li>14. Provision for Distillation Grids</li> <li>15. Electrical Outlet(s)</li> <li>16. Robust Bypass™</li> <li>17. Side Access Panel</li> <li>18. Sash handle</li> <li>19. Service Fixture for water, gas, nitrogen, vacuum (depends upon request)</li> <li>20. T5 fluorescent lights</li> <li>21. Fiber glass Exhaust Collar</li> </ul> | <ul style="list-style-type: none"> <li>22. Chain drive sash, chain and axle</li> <li>23. Counter weight</li> <li>24. Removable Hot Zone Baffles™</li> <li>25. Fixture fitting holes covered by plastic cover</li> <li>26. Enhanz™ service fixture, powder coat finished CW (cold water) 1 set, gas (gas) 1set, additional fixture order</li> <li>27. Distillation Grids (Optional)</li> <li>28. Base cabinet (Optional)</li> <li>29. Phenolic Work Top</li> <li>30. Base Cabinet Door Handle</li> <li>31. Caster wheels</li> </ul> |
|---|---|--|

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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, fume hoods, ductless fume hoods, laminar flow clean benches, animal containment workstations, cytotoxic cabinets, hospital pharmacy isolators, and PCR cabinets 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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