



# Frontier® ACELA XP

## High Performance Explosion Proof Fume Hood

### Introduction

The Frontier Acela® XP Series Fume Hood is an explosion proof fume hood designed and fitted with ATEX / IECEx Zone 1 rated electrical components. It provides the highest level of chemical containment and almost no possibility of sparks in the workzone.\*

Suitable for applications or rooms which have presence of highly flammable or explosive gases and vapours especially in the Oil & Gas industry

### Structure

- Tri-wall construction for maximum robustness
- Robust chain and sprocket sash support system
- Can be customised to fit any models of furnaces

### Ergonomics

- 5° Angled Front or the Perfect Pitch Profile™ allows users to lean forward and also minimizes glare and reflections. The gentle pitch of the hood profile enhances visibility and maximizes operator comfort.

### Safety

- Compliant to both ASHRAE110 and EN14175 standards for fume hood safety
- Perforated lower baffle improves overall containment of the fume hood
- Aerodynamic designs of the airfoil, shaping vanes and sash handle guards the entire perimeter of the sash opening ensuring airflow turbulence is minimized
- Sash stop limits sash movement beyond 457mm (18"), encouraging users to work at safe positions
- Esco's sash Creep-Down mechanism automatically lowers the sash to a safe position whenever it is temporarily raised above the sash height limit of 457mm (18")
- Sash is made from 6mm tempered safety glass

### Energy Efficiency

- Operates safely at face velocities as low as 0.3 m/s (60 fpm)
- Exhaust volume reductions of up to 58% can be achieved without compromising safety.

### Serviceability

- Removable baffle design allows for periodic cleaning of hood's rear wall. This helps eliminate potential clogs in this area that can reduce containment
- Internal access panels on the side walls facilitate access to plumbing connections

### Standard Explosion Proof Accessories

- Explosion Proof Light Fixture
- Explosion Proof Electrical Socket Outlet
- Explosion Proof ON-OFF Light Switch
- Explosion Proof Junction Box

### Optional Accessories

- Remote control fixtures for water and special gases
- Large sinks
- Support stand
- Base storage cabinet
- Airflow monitor alarm can be added as a customization

### Warranty

- Contact your local sales representative or visit <https://www.escolifesciences.com/services/product-appendix> for specific warranty details.

\*Disclaimer: The Frontier Acela® XP Fume Hood not designed or independently tested to comply to any Explosion Proof Rating Standards such as ATEX/IECEx at system level. If required, the user is responsible for certification of the fume hood according to the ATEX/IECEx rating.

Ordering Code	Description	
EXP-001	<b>Explosion Proof Light Box</b> • 1 piece for 4/5 ft, 2 pieces for 6/8 ft	
EXP-002	<b>Electrical Socket Outlet</b> • 1 on left side post and 1 on right side post: total of 2 pcs EO	
EXP-003	<b>Installation ON-OFF Light Switch - 8040</b> • Available as 2 pole OFF switch or changeover switch • Enclosure made of optical fiber reinforced polyester resin • Degree of protection IP66 according to IEC/EN 60529 • Clear position indicator 0/1 or ON/OFF • Only 1 per fume hood	
EXP-004	<b>Explosion Proof Junction Box</b> • Only 1 per fume hood	

### Guide to Models

## EFA - 4 U D R V W 8 - X P

External Width Code		Internal Depth Code	Internal Liner Code		Sash Type Code		Color Code		Electrical Code		
1220 mm (48.0")	<b>4U</b>	900 mm (35.4")	<b>D</b>	Esco Resinate™	<b>R</b>	Vertical	<b>V</b>	Esco	<b>W</b>	230 V, AC, 50 / 60Hz	<b>8</b>
1525 mm (60.0")	<b>5U</b>					Combination	<b>C</b>			110-120 V, AC, 50 / 60Hz	<b>9</b>
1830 mm (72.0")	<b>6U</b>										
2440 mm (96.0")	<b>8U</b>										

### General Specifications, Frontier Acela® XP Series Fume Hood

Model	EFA-4UDR_W_-XP	EFA-5UDR_W_-XP	EFA-6UDR_W_-XP	EFA-8UDR_W_-XP	
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 900 x 1521 mm 48.0" x 35.4" x 59.9"	1525 x 900 x 1521 mm 60.0" x 35.4" x 59.9"	1830 x 900 x 1521 mm 72.0" x 35.4" x 59.9"	2440 x 900 x 1521 mm 96.0" x 35.4" x 59.9"	
Internal Work Area (W x D x H)	996 x 675x 1230 mm 39.2" x 26.6" x 48.4"	1301 x 675x 1230 mm 51.2" x 26.6" x 48.4"	1606 x 675x 1230 mm 63.2" x 26.6" x 48.4"	2216 x 675x 1230 mm 87" x 26.6" x 48.4"	
Maximum Sash Opening	740 mm (29.1")				
Face Velocity	Sash Opening				
0.3 m/s (60 fpm)	457 mm (18.0")	541 cmh at 14.3 Pa 316 cfm at 0.06" WG	777 cmh at 14.6 Pa 457 cfm at 0.06" WG	872 cmh at 19.9 Pa 513 cfm at 0.08" WG	1203 cmh at 14.2 Pa 708 cfm at 0.06" WG
0.4 m/s (80 fpm)		721 cmh at 19.7 Pa 424 cfm at 0.08" WG	942 cmh at 23.7 Pa 554 cfm at 0.10" WG	1163 cmh at 28.8 Pa 684 cfm at 0.12" WG	1604 cmh at 26.4 Pa 944 cfm at 0.11" WG
0.5 m/s (100 fpm)		901 cmh at 31.8 Pa 530 cfm at 0.13" WG	1177 cmh at 34.7 Pa 692.8 cfm at 0.14" WG	1453 cmh at 41.8 Pa 855 cfm at 0.17" WG	2005 cmh at 32.3 Pa 1180 cfm at 0.13" WG
0.3 m/s (60 fpm)	736 mm (29.0")	899 cmh at 22.1 Pa 526 cfm at 0.09" WG	1175 cmh at 28.7 Pa 691 cfm at 0.12" WG	1450 cmh at 36.1 Pa 848 cfm at 0.15" WG	1819 cmh at 27.3 Pa 1070 cfm at 0.11" WG
0.4 m/s (80 fpm)		1199 cmh at 36.7 Pa 701 cfm at 0.15" WG	1556 cmh at 49.3 Pa 922 cfm at 0.20" WG	1933 cmh at 61.4 Pa 1138 cfm at 0.25" WG	2668 cmh at 48.3 Pa 1570 cfm at 0.19" WG
0.5 m/s (100 fpm)		1499 cmh at 66.6 Pa 877 cfm at 0.27" WG	1958 cmh at 76.6 Pa 1152 cfm at 0.31" WG	2197 cmh at 94.7 Pa 1285 cfm at 0.38" WG	3335 cmh at 74.3 Pa 1962 cfm at 0.30" WG
Exhaust Outlet Diameter	305 mm (12.0")				
Number of Exhaust Collars	1			2	

\* When sash is in full open position, total height of fume hood is 1731 mm (68.2"). Please ensure sufficient ceiling height clearance is available.

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