

Frontier® PPH™



Esco Frontier PPH Fume Hood
Model PPH-5UDPWW-8

Frontier PPH Fume Hood

Introduction

The Frontier PPH® Fume Hood provides the highest levels of protection and containment against highly corrosive chemicals. Its full polypropylene interior and exterior makes it metal-free, therefore suitable for sensitive work such as trace metal analysis.

Structure

- Wall: Constructed from 8mm stress-relieved, acid resistant, non-corrosive, bend-resistant ivory white polypropylene and welded with homogeneous PP rods in the same colour.
- Inner Liner: 8mm anti-corrosion PP board which is easy to clean.
- Work top: 20mm PP board, excellent acid and alkali erosion endurance, high heat and decoloration resistance.
- Sash: 6mm thick laminated tempered safety polycarbonate, which can be fully opened or closed and set in any working position in between. The sash position is maintained by a robustly designed counter balance system.
- Base Cabinet: Double-door with internal spaces for storage and Water pipeline installation, one shelf fixed in the left cabinet to prevent liquid leakage.

Features

- Operates safely at 0.5m/s at 18" (457mm) or full open sash position, constant volume concept eliminates the need for complex VAV systems.
- Optional Sentinel XL Airflow Monitor accurately monitors face velocity and alarms when inflow decreases to unsafe levels.
- 1 remote control water fixture and 1 gas fixture are factory installed and plumbed, Up to 4 services may be factory or field installed.
- The tapered PP exhaust collar reduces airflow turbulence, static pressure loss, noise level and increases face velocity uniformity.
- Perforated Baffles: Chemical fumes are drawn out of work zone in a single pass air displacement to improve capture efficiency.
- Air Foil: Used to streamline airflow into the hood, maximum

airflow "sweep" on the critical boundary layer near to the work surface level to reduce turbulence and eliminate backflow.

- Lighting: Pre-wired, electronically ballasted, energy efficient, Instant-start, long-lasting T5 lighting used. Typical light intensity on work surface is >1076 Lux in zero ambient conditions.

Aesthetics and Ergonomics Design

- Perfect Pitch Profile™: 5° Angled Front, allows users to lean forward and also minimizes glare and reflections. The gentle pitch of the hood profile enhances visibility and maximizes operator comfort.
- Coordinated color scheme (ivory white) blends the hood with any casework, metal or wood.

Precisely Tuned Aerodynamics

Computational fluid dynamics(CFD) is employed in the development of Frontier PP Fume Hoods. Airflow patterns, pressurizations and possible areas of turbulence are simulated.

Serviceability

- Baffles are removable without tools, for cleaning.
- Gasketed, air-tight removable panel on internal side wall (both sides). Allows for easy access to the services and plumbing, especially when fume hoods are installed side by side.
- Removable rear access panel at back of base cabinet to allow convenient installation and maintenance of filler panels and drainage system.
- All Esco products are under rigorously tests, having a quick installation property, using bulk transport to reduce transportation costs.
- Optional ventilation kit allows air to be drawn out of base cabinet when the hood is switched on.
- Each PPH Hood has provisions easy maneuvering with a forklift.

Warranty

Esco Frontier PPH Fume Hood is warranted for 1 year excluding consumable parts and accessories. Please contact your local sales representative for specific warranty details.

Safety Certified and Tested

Test in house in accordance to the ASHRAE-110 and EN14175-3 test protocols.

Standard Configuration

- Rocker switches, one for light, one for fan.

- 1 remote control gas fixture and 1 remote control water fixture, factory-plumbed.
- 4 single electrical outlet.

Field-Installed Accessories

Wide range of optional field installed accessories:

- Sentinel XL airflow monitor (discussed above).
- Additional service fixtures and electrical outlets.
- Exhaust blower.

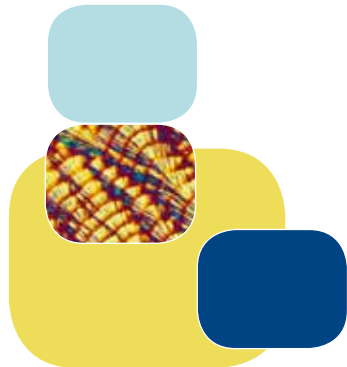
General Specifications, Frontier PP Fume Hood

Model	PPH-4UDP_W-_	PPH-5UDP_W-_	PPH-6UDP_W-_	
Nominal Size	1.2 m (4')	1.5 m (5')	1.8 m (6')	
External Dimensions (W x D x H)	1200x900x2350mm 47.2"x35.4"x92.5"	1500x900x2350mm 59.0"x35.4"x92.5"	1800x900x2350mm 70.8"x35.4"x92.5"	
Internal Work Area (W x D x H)	980x665x1925mm 38.5"x26.1"x75.7"	1280x665x1925mm 50.3"x26.1"x75.7"	1580x665x1925mm 62.2"x26.1"x75.7"	
Exhaust Outlet Diameter	250mm	300mm	300mm	
Maximum Sash Opening	740mm (29.1")			
Exhaust Volume/Static Pressure Required at 0.5m/s (100fpm) at Full Open Sash	1305cmh @ 73Pa 768cfm @ 0.29"WG	1705cmh @ 95Pa 1004cfm @ 0.38"WG	2105cmh @ 117Pa 1239cfm @ 0.47"WG	
Electrical Requirements	230V, AC, 50/60Hz	PPH-4UDPVW-8 PPH-4UDPCW-8	PPH-5UDPVW-8 PPH-5UDPCW-8	PPH-6UDPVW-8 PPH-6UDPCW-8
	110-120V, AC, 50/60Hz	PPH-4UDPVW-9 PPH-4UDPCW-9	PPH-5UDPVW-9 PPH-5UDPCW-9	PPH-6UDPVW-9 PPH-6UDPCW-9

Guide to Models

PPH-4UDPVW-8

External Width	Code	External Depth	Code	Internal Liner	Code	Sash Type	Code	Color Code	Code	Electrical Code	Code
1220 mm (48.0")	4U	900 mm (35.4")	D	Esco PP	P	Vertical	V	Esco White	W	230V, AC, 50/60Hz	8
1525 mm (60.0")	5U					Combination	C			110-120V, AC, 50/60Hz	9
1800 mm (70.8")	6U										



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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
us.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

Esco Global Offices | Beijing, China | Chengdu, China | Kuala Lumpur, Malaysia | Manama, Bahrain | Guangzhou, China | Hanoi, Vietnam | Melaka, Malaysia | Mumbai, India | Philadelphia, PA, USA | Salisbury, UK | Shanghai, China | Seoul, Korea | Delhi, India | Osaka, Japan | Manila, Philippines | Midrand, South Africa | Jakarta, Indonesia | Singapore