ESCO
LIFESCIENCES

Laminar Airflow Units

Ceiling Laminar Airflow (CLAF)
Standing Laminar Airflow (SLAF)





Laminar Airflow Units (CLAF/SLAF)

Ceiling Laminar Airflow / Standing Laminar Flow

Introduction

Laminar Airflow (LAF) unit is an equipment module using zoned laminar downflow to positively pressurize and purge contaminants, ensuring aseptic environments and process integrity.

Laminar Airflows are customizable units that are:

- CLAF/SLAF units are utilized as open restricted access barriers over filling and capping machines.
- CLAF is a standalone unit mounted via eye bolts and drop rods over specific applications.
- SLAF is a standalone unit mounted over mobile stands for mobile aseptic zones.



Application

- Medical Industry (i.e., operating theatre)
- Filling Line System ISO Class 5 coverage
- Nanotechnology
- High-End Electronics
- Space Industry
- Pharmaceutical Industry
- Research and Development Laboratories

Basic Principles

- Room air drawn via an G4 pre-filter before entering through the perforated diffuser into supply plenum.
- A special baffle system that channels the airflow through the gel-sealed HEPA filters as downflow supply creating an aseptic work zone with low noise.

Standard Features

- Antimicrobial powder-coated steel or easy-to-clean stainless steel construction
- Gel-sealed HEPA filter design
- Sentinel™ Gold microprocessor control with audio/visual alarms for downflow velocity and differential pressurea cross filters
- Ergonomic design
- Energy efficient lighting
- PVC strips curtains
- Emergency stop

Optional Features

- Remote mounted main control panel
- Simple switch controller
- Upgrade to HMI/PLC controller
- Upgrade to gel-sealed ULPA filter design
- Splashproof electrical outlets
- Pressure gauge provision
- Option for hard wall panel

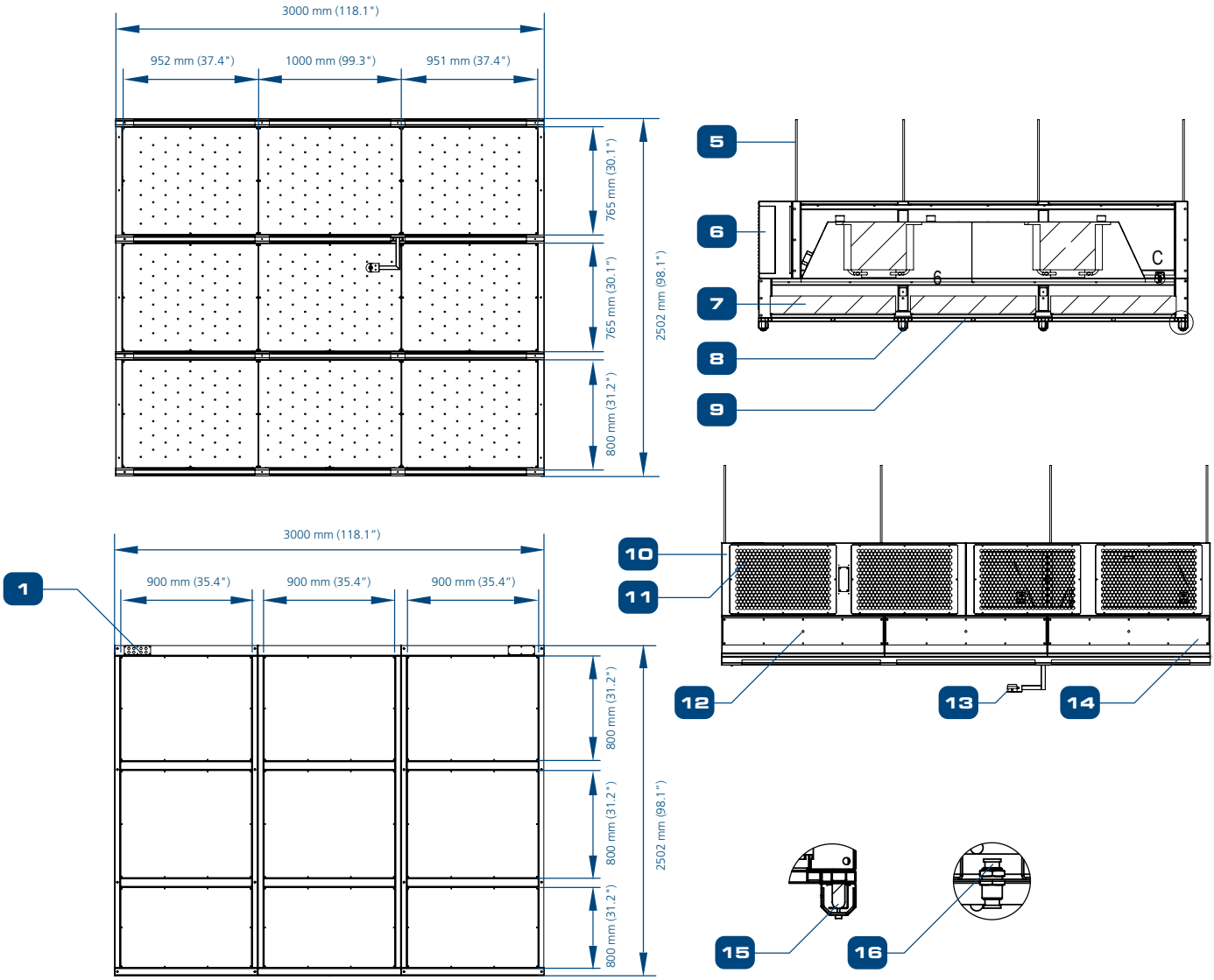
Guide to Models

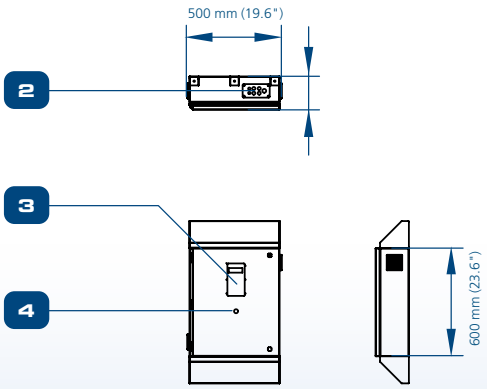
CLAF-PC-1 _ _ _ -AC-H14

Product Code	Materials of Construction	Electrical Code	Internal Width	Internal Dimension	Internal Height	Fan	Filter Type
CLAF **SLAF**	**PC** - Powder coated EG Steel **S1** - Stainless Steel 304 **S2** - Stainless Steel 316 L	**1** - 220-240 VAC 50/60 Hz **2** - 110-130 VAC 50/60 Hz **3** - 100-110 VAC 50/60 Hz	TBD*	TBD*	TBD*	AC EC	H14 Others

** To be discussed according to customers' preference*

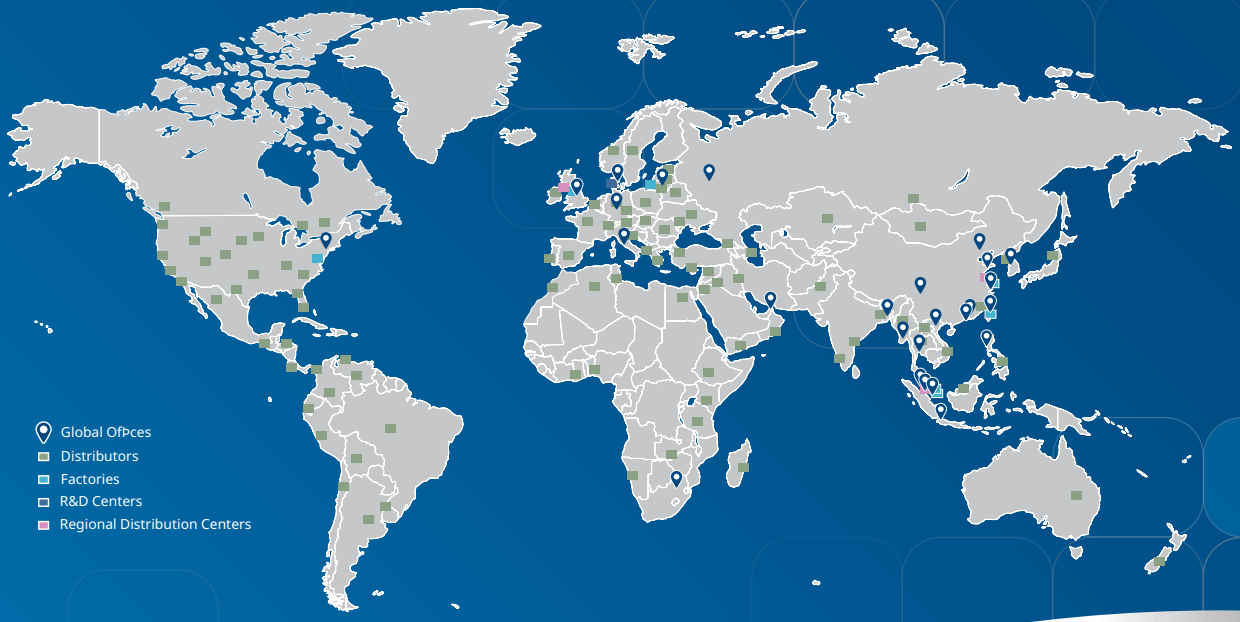
Engineering Drawing





1. *Plenum Tubing and Power Cable Inlet*
2. *Local Operationg Panel (LOP) Tubing and Cable Inlet*
3. *Esco Sentinel™ Gold Microprocessor Controller*
4. *Emergency Stop*
5. *Stainless Steel Threaded Rod*
6. *EC Blowers*
7. *H14 HEPA Filters*
8. *T5 LED Lights*
9. *Perforated Diffusers*
10. *Stainless Steel Plenum*
11. *Stainless Steel Exhaust Grilles*
12. *PAO Sampling Port*
13. *Airflow Sensor*
14. *Stainless Steel Cover Filter Housing*
15. *Lamp Housing*
16. *Upstream Port*

ESCO LIFESCIENCES GROUP NETWORK
42 Locations in 24 Countries All Over the World





Air Shower
Aseptic Containment Isolator (ACTI)
Ceiling Laminar Airflow Units
Cleanroom Transfer Hatch
Containment Barrier Isolator (CBI)
Downflow Booth (DFB)
Dynamic Floor Laminar Hatch
Dynamic Pass Box
Evidence Drying Cabinet
Garment Storage Cabinet
General Processing Platform Isolator (GPPI)
Laminar Flow Horizontal Trolley
Laminar Flow Straddle Units, Single and Double
Laminar Flow Vertical Trolley
Pass Box
Soft Wall Cleanroom
Sputum Booth
Ventilated Balance Enclosure (VBE)
Weighing and Dispensing Containment Isolator (WDCI)

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.

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