



<b>Optional Accessories for Esco Laminar Flow and Biosafety Cabinets</b>
<b>Ergonomic Accessories for Esco Laminar Flow and Biosafety Cabinets</b>
<b>Optional Accessories for Esco Biosafety Cabinets</b>

## Support Stands for Esco laminar flow and biohazard safety cabinets

All Esco laminar flow and biohazard safety cabinets are benchtop / tabletop units designed to be placed on a suitable table or stand in your laboratory for operation. When desired, Esco offers an optional support stand that can be used with all Esco laminar flow and biohazard safety cabinets to provide a complete floor-standing mobile system. Our support stands are fabricated of powder-coated steel and shipped unassembled. Assembly is simple and all required tools are provided with the support stand.

Support stands with levelling feet are recommended for biosafety cabinets, as they prevent the cabinet from being relocated or moved without authorization. As any relocation or movement of a biosafety cabinet may alter the cabinet's performance due to the changes in its environment, recertification of the cabinet is recommended.

Support stands with "A"-code height (range: 28"-29" / 710 - 737 mm) are designed for a seated operator, while "B"-code height (range: 34"-37" / 838 - 860 mm) support stands are suited for standing operators.



### Support Stand with Levelling Feet

- Recommended for Biohazard safety cabinets: prevents the cabinet from being relocated/moved without authorization. Recertification of the cabinet is recommended every time the cabinet is relocated/moved.
- Heavy duty stainless steel legs
- Maximum weight supported: 500 kgs / 1,100 lbs in total
- +/-1.5" / 38 mm adjustment range for each leg
- White oven-baked epoxy powder-coated finish
- Available in two standard sizes:
  - 29.0" / 737 mm (+/-1.5"/38 mm)
  - 33.0" / 838 mm (+/-1.5"/38 mm)
- Cabinet can be bolted on to stand for increased stability.

Ordering Codes for Support Stand with Levelling Feet					
Available Support Stand Heights	Cabinet Sizes				
	2ft/0.6m model	3ft/0.9m model	4ft/1.2m model	5ft/1.5m model	6ft/1.8m model
29.0" / 737 mm height	<b>SPL-2A0</b>	<b>SPL-3A0</b>	<b>SPL-4A0</b>	<b>SPL-5A0</b>	<b>SPL-6A0</b>
33.0" / 838 mm height	<b>SPL-2B0</b>	<b>SPL-3B0</b>	<b>SPL-4B0</b>	<b>SPL-5B0</b>	<b>SPL-6B0</b>

### Support Stand with Castor Wheels

- Durable polyurethane castor wheels with 360 degree horizontal rotation for convenient relocation and movement of a cabinet
- White oven-baked epoxy powder-coated finish
- Total brake system on front wheels
- Maximum weight tolerance: 600kgs / 1323lbs in total
- Available for all standard cabinet sizes
- Available in two standard heights:
  - 28" / 710mm and 34" / 860mm.
- Cabinet can be bolted on to stand for increased stability.



Ordering Codes for Support Stand with Castor Wheels					
Available Support Stand Heights	Cabinet Sizes				
	2ft/0.6m model	3ft/0.9m model	4ft/1.2m model	5ft/1.5m model	6ft/1.8m model
28.0" / 710 mm height	<b>SPC-2A0</b>	<b>SPC-3A0</b>	<b>SPC-4A0</b>	<b>SPC-5A0</b>	<b>SPC-6A0</b>
34.0" / 860 mm height	<b>SPC-2B0</b>	<b>SPC-3B0</b>	<b>SPC-4B0</b>	<b>SPC-5B0</b>	<b>SPC-6B0</b>



### Germicidal UV Lamps

The ultraviolet lamp is also used as a germicidal lamp and is capable of producing a strong ultraviolet ray of 253.7 nanometers. It is commonly used to sterilize the interior of Escso Laminar Flow and Biohazard Safety Cabinets.

**NOTE:** Observe personnel safety precautions when using UV lamps.

UV lamp is not a substitute for good cleaning practices, and its effective lifespan is limited to approx. 12 months depending on the total number of hours in usage. Replace UV lamp every 12 months.

Cabinet Sizes	UV Lamp Ordering Codes
2 ft (0.6m) & 3 ft (0.9m) size models	<b>UV-15A</b> (1.5ft UV lamp)
4ft (1.2m), 5 ft (1.5m) & 6ft (1.8m) size models	<b>UV-30A</b> (3ft UV lamp)

### Ultraviolet Energy Levels at 2537 Angstrom Units Wavelength (Microwatt-Seconds Per Square Centimeter)

#### Bacteria

Agrobacterium tumefaciens	8500
Bacillus anthracis	8700
Bacillus megaterium (vegetative)	2500
Bacillus megaterium (spores)	52000
Bacillus subtilis (vegetative)	11000
Bacillus subtilis (spores)	58000
Clostridium tetani	22000
Corynebacterium diphtheriae	6500
Escherichia coli	7000
Legionella bozemanii	3500
Legionella dumoffii	5500
Legionella gormanii	4900
Legionella micdadei	3100
Legionella longbeachae	2900
Legionella pneumophila	3800
Leptospira Interrogans (infectious jaundice)	6000
Mycobacterium tuberculosis	10000
Neisseria catarrhalis	8500
Proteus vulgaris	6600
Pseudomonas aeruginosa (laboratory stain)	3900
Pseudomonas aeruginosa (environmental strain)	10500
Rhodospirillum rubrum	6200
Salmonella enteritidis	7600
Salmonella paratyphi (enteric fever)	6100
Salmonella typhimurium	15200
Salmonella typhosa (typhoid fever)	6000
Sarcina lutea	26400
Serratia marcescens	6200
Shigella dysenteriae (dysentery)	4200
Shigella flexneri (dysentery)	3400
Shigella sonnei	7000
Staphylococcus epidermidis	5800
Staphylococcus aureus	7000
Streptococcus faecalis	10000
Streptococcus hemolyticus	5500

Streptococcus lactis	8800
Viridans streptococci	3800
Vibrio cholerae	6500

#### Mold Spores

Aspergillus flavus (yellowish green)	99000
Aspergillus glaucus (bluish green)	88000
Aspergillus niger (black)	330000
Mucor ramosissimus (white grey)	35200
Penicillium digitatum (olive)	88000
Penicillium expansum (olive)	22000
Penicillium roqueforti (green)	26400
Rhizopus nigricans (black)	220000

#### Algae

Chlorella vulgaris (algae)	22000
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#### Protozoa

Nematode eggs	92000
Paramecium	200000

#### Viruses

Bacteriophage (E.coli.)	6600
Hepatitis virus	8000
Influenza virus	6600
Poliovirus (Poliomyelitis)	21000
Rotavirus	24000
Tobacco mosaic virus	440000

#### Yeast

Baker's yeast	8800
Brewer's yeast	6600
Common yeast cake	13200
Saccharomyces var. eltipsoideus	13200
Saccharomyces sp	17600

Required for 99.9% Destruction of Various Microorganisms

## ESCO Laminar Flow and Biosafety Cabinets : Optional Accessories

### UV-Interlock Kit

#### UV-Interlock Kit Ordering Code

- Magnetic UV-Interlock Kit Upgrade for Esco Labculture® laminar flow cabinets.

**FC-ITRLOCK**

### Front Covers for Laminar Flow Cabinets

- Polycarbonate front covers for Airstream® and Labculture® range Horizontal and Vertical Laminar Flow cabinets.
- Protects the user from UV radiation during UV sterilization of cabinet workzone.



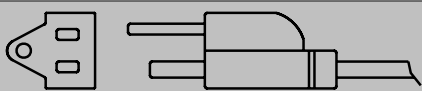

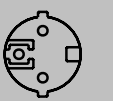
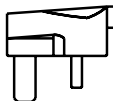
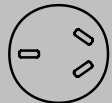
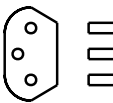
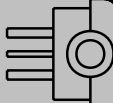
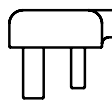

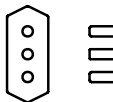
Front Cover Ordering Codes					
Laminar Flow Cabinet Models	Laminar Flow Cabinet Sizes				
	2ft / 0.6m	3ft / 0.9m	4ft / 1.2m	5ft / 1.5m	6ft / 1.8m
Airstream Horizontal (AHC-XAX)	FC-AHC2A	FC-AHC3A	FC-AHC4A	FC-AHC5A	FC-AHC6A
Airstream Vertical (AVC-XAX)	FC-AVC2A	FC-AVC3A	FC-AVC4A	FC-AVC5A	FC-AVC6A
Labculture Horizontal (LHC-XAX)	FC-LHC2A	FC-LHC3A	FC-LHC4A	FC-LHC5A	FC-LHC6A
Labculture Vertical (LVC-XAX)	FC-LVC2A	FC-LVC3A	FC-LVC4A	FC-LVC5A	FC-LVC6A

### Electrical Socket Outlets

- Provides a convenient power source for small devices or equipment used within the cabinet
- All outlets come with splashproof covers
- Choice of 10 different types of socket available for different plug-types. Specify type when ordering. (refer to table below)
- **NOTE:** 2ft,3ft cabinets have provision for 1 kit; 4ft,5ft,6ft cabinet have provisions for 2 kits.



Electrical Socket Outlet Ordering Codes	Description
<b>EO-GFCI</b>	Duplex GFCI Electrical Outlet Kit, Code A (only available for 110-130VAC cabinets)
<b>EO-X</b>	Panel Mounted Single Electrical Outlet Kit, Code X --X is alphabet from A to J (for all other cabinets)
<b>EO-HX</b>	Direct Mounted Single Electrical Outlet Kit, Code X -- X is alphabet A to J (for LA2 230VAC cabinets only)

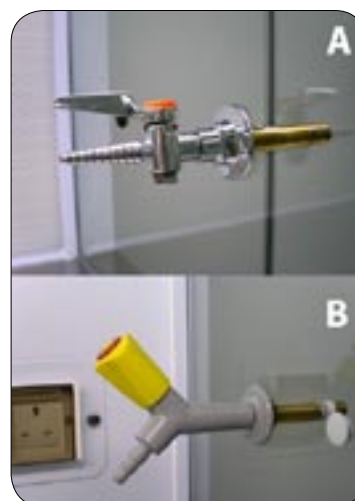
Ordering Information for Plugs / Electrical Outlets			 North America Plug / Outlet Order Code: A
 Japan Plug / Outlet Order Code: B	 Continental Europe Plug / Outlet Order Code: C	 United Kingdom Plug / Outlet Order Code: D	
 Australia Plug / Outlet Order Code: E	 Switzerland Plug / Outlet Order Code: F	 Israel Plug / Outlet Order Code: G	
 India Plug / Outlet Order Code: H	 Denmark Plug / Outlet Order Code: I	 Italy, Chile Plug / Outlet Order Code: J	

## Service Fixtures

- Convenient source for Gas/Vacuum/Air/Water supplies within the working area
- Available types: A: American style; B: European style
- European style fixtures manufactured according to DIN 12898, DIN 12919 and DIN 3537

Service Fixture Type	Ordering Codes
European-Style Fitting for Gas*	<b>SF-1G</b>
European-Style Fitting for Vacuum*	<b>SF-1V</b>
European-Style Fitting for Nitrogen*	<b>SF-1N</b>
European-Style Fitting for Air*	<b>SF-1A</b>
European-Style Fitting for Water*	<b>SF-1W</b>
American-Style Universal Service Fitting for Air/Gas/Vacuum/Nitrogen	<b>SF-2U</b>

\*DIN Standard 12920, DIN12898 compliant



## IV bar with hooks

For medical intravenous bag filling applications, a built-in intravenous bar provides a convenient means to hang and store intravenous bags during work. Apart from convenience, the IV bar increases the effective cabinet working zone.

- Stainless Steel IV bar with 6 hooks for IV-bags
- Available for all standard size Esco cabinets

IV-Bar Ordering Codes					
Cabinet Sizes	Ordering Codes	Cabinet Sizes	Ordering Codes	Cabinet Sizes	Ordering Codes
AHC-2	<b>IV-570</b>	LHC-2	<b>IV-620</b>	AC2-2	<b>IV-650</b>
AHC-3	<b>IV-875</b>	LHC-3	<b>IV-925</b>	AC2-3	<b>IV-955</b>
AHC-4	<b>IV-1180</b>	LHC-4	<b>IV-1230</b>	AC2-4	<b>IV-1260</b>
AHC-5	<b>IV-1485</b>	LHC-5	<b>IV-1535</b>	AC2-5	<b>IV-1565</b>
AHC-6	<b>IV-1790</b>	LHC-6	<b>IV-1840</b>	AC2-6	<b>IV-1870</b>
AVC-2	<b>IV-640</b>	LVC-2	<b>IV-620</b>	LA2-3	<b>IV-955</b>
AVC-3	<b>IV-945</b>	LVC-3	<b>IV-925</b>	LA2-4	<b>IV-1260</b>
AVC-4	<b>IV-1250</b>	LVC-4	<b>IV-1230</b>	LA2-6	<b>IV-1870</b>
AVC-5	<b>IV-1555</b>	LVC-5	<b>IV-1535</b>	LA2-3	<b>IV-955</b>
AVC-6	<b>IV-1860</b>	LVC-6	<b>IV-1840</b>	LA2-4	<b>IV-1260</b>
				LA2-6	<b>IV-1870</b>



## Ergonomic Labchair

- Designed for laboratory usage
- Meets cleanliness Class 100
- Alcohol resistant PVC
- Adjustable height to suit users of all heights
- Seat height range: 395~490 mm
- Caster wheels
- Attractive, chrome plated frame
- Chrome steel pipe leg
- Adjustable angle back rest
- Available in blue
- Can be disinfected with alcohol

<b>Ergonomic Lab Chair Ordering Code</b>	<b>LDAR360</b>
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### Motorized Hydraulic Support Stand

- Motorized and hydraulic support stand
- Adjustable height range: 710~863 mm / 28"~34"
- Maximum weight supported: 500 kgs / 1,100 lbs
- Available with: **castor wheels** or **levelling feet**
- White oven-baked epoxy powder-coated finish

**Ordering Codes for Motorized Hydraulic Support Stand**

Power Supply Options	Cabinet Sizes				
	2ft/0.6m model	3ft/0.9m model	4ft/1.2m model	5ft/1.5m model	6ft/1.8m model
220-240VAC 50HZ, 1 phase	<b>SPM-2A1</b>	<b>SPM-3A1</b>	<b>SPM-4A1</b>	<b>SPM-5A1</b>	<b>SPM-6A1</b>
110-130VAC 60HZ, 1 phase	<b>SPM-2A2</b>	<b>SPM-3A2</b>	<b>SPM-4A2</b>	<b>SPM-5A2</b>	<b>SPM-6A2</b>
220-240VAC 60HZ, 1 phase	<b>SPM-2A3</b>	<b>SPM-3A3</b>	<b>SPM-4A3</b>	<b>SPM-5A3</b>	<b>SPM-6A3</b>
110-130VAC 50HZ, 1 phase	<b>SPM-2A4</b>	<b>SPM-3A4</b>	<b>SPM-4A4</b>	<b>SPM-5A4</b>	<b>SPM-6A4</b>
100-110VAC 50HZ / 60HZ, 1 phase	<b>SPM-2A5</b>	<b>SPM-3A5</b>	<b>SPM-4A5</b>	<b>SPM-5A5</b>	<b>SPM-6A5</b>

**NOTE:** Standard model comes with castor wheels. For levelling feet, specify when ordering

### PVC Armrest

- Soft padding enhances operator arm comfort during extended usage of the cabinet
- Standard black colour blends well with Esco standard stainless steel work surfaces
- Chemically treated PVC has all smooth surfaces without any contamination trapping pores or joints
- Non permanent, may be freely placed within the work zone and removed for decontamination
- Easily cleanable with mild detergent and water
- Standard "one size fits all" design, 712 mm / 28", one piece per operator recommended
- NB: not suitable for use with 2ft cabinets since armrest length exceeds the width of a 2ft cabinet
- Do not use alcohol to clean PVC armrest
- Avoid exposing PVC armrest to UV



**PVC Armrest Ordering Code**

**ME-W-REST**



### Ergonomic footrest

- Provides lumbar support and encourages better user posture
- Adjustable height range: 10~30mm
- Floor mounted and free-standing.
- Angled footrest portion
- Anti-skid coating
- Solid steel frame finished in a chemically resistant powder coated finish

**Ergonomic Footrest Ordering Code**

**F-REST**



## Exhaust Collar for Thimble Ducting

Thimble-ducting of biosafety cabinets is recommended when protection is required from chemical vapours (in trace amounts) which may be generated inside the cabinet.

NOTE: Properly installed dedicated exhaust ducting system is essential.

■ Exhaust collar for non-airtight thimble ducting of the following Esco biosafety cabinets:

- Airstream® Class II Biosafety Cabinet
- Airstream® Class III Biosafety Cabinet
- Labculture® Class II Type A2 Biosafety Cabinet

■ For exhausting trace amounts of volatile toxic chemicals from outside the lab

■ Exhaust fan / ductwork not included



Exhaust Collar Ordering Codes

Models	Cabinet Sizes			
	3ft/0.9m model	4ft/1.2m model	5ft/1.5m model	6ft/1.8m model
Airstream® Class II Biosafety Cabinet	<b>ECO-AC23A</b>	<b>ECO-AC24A</b>	<b>ECO-AC25A</b>	<b>ECO-AC26A</b>
Airstream® Class III Biosafety Cabinet	<b>ECO-AC33A</b>	<b>ECO-AC34A</b>	<b>ECO-AC35A</b>	<b>ECO-AC36A</b>
Labculture® Class II Type A2 Biosafety Cabinet	<b>ECO-LA23A</b>	<b>ECO-LA24A</b>	<b>ECO-LA25A</b>	<b>ECO-LA26A</b>



## Esco Formalin Vaporizer for Decontamination of Biosafety Cabinets

- Designed for decontamination of biosafety cabinets
- Microprocessor control that executes the decontamination cycles automatically
- No manual intervention needed: optimum safety!
- Uses formalin and ammonia solutions
- LCD display for constant status monitoring
- Cycle timers are adjustable
- Password control feature to prevent access to the menu functions by unauthorized personnel
- Audible and visual alarms in cases of overheating
- Durable, heavy-duty full stainless steel structure with side-mounted handles
- Thermostats for the formalin and ammonia chambers to prevent overheating

Power Supply Options	220-240VAC 50HZ / 60HZ, 1 phase	100-130VAC 50HZ / 60HZ, 1 phase
Formalin Vaporizer Ordering Codes	<b>FV-001</b>	<b>FV-002</b>



**PE-bags for decontamination of Esco biosafety cabinets.** Available for all Esco cabinet sizes.

Decontamination Bag Ordering Codes

Cabinet Sizes	With Support Stand	Without Support Stand
3 ft (0.9m) & 4 ft (1.2m) size models	<b>DCN-BAG1</b> 168 x 106 x 317 cm	<b>DCN-BAG2</b> 168 x 106 x 190 cm
5 ft (1.5m) & 6ft (1.8m) size models	<b>DCN-BAG3</b> 199 x 106 x 317 cm	<b>DCN-BAG4</b> 199 x 106 x 190 cm



## Secondary Exhaust Filter Module

- For Labculture® Class II Type A2 and Airstream® Class II biosafety cabinets
- Provides additional safety for the above recirculating biosafety cabinets
- Available with either ULPA Filter or Activated Carbon Filter

Secondary Exhaust Filter Module Ordering Codes				
Models / Secondary Exhaust Filter Type	Cabinet Sizes			
	3ft/0.9m model	4ft/1.2m model	5ft/1.5m model	6ft/1.8m model
Airstream® Class II Biosafety Cabinet / ULPA filter	SEF-AC23AU	SEF-AC24AU	SEF-AC25AU	SEF-AC26AU
Airstream® Class II Biosafety Cabinet / Activated Carbon filter	SEF-AC23AC	SEF-AC24AC	SEF-AC25AC	SEF-AC26AC
Labculture® Class II Type A2 Biosafety Cabinet / ULPA Filter	SEF-LA23AU	SEF-LA24AU	SEF-LA25AU	SEF-LA26AU
Labculture® Class II Type A2 Biosafety Cabinet / Activated Carbon Filter	SEF-LA23AC	SEF-LA24AC	SEF-LA25AC	SEF-LA26AC



## Exhaust Filter Guard

- For Airstream® Class II Biosafety Cabinet and Esco Animal Handling Workstation
- Perforated, powder-coated exhaust filter guard
- Colour-coded red for caution
- Protects the exhaust HEPA/ULPA filter from damage

Exhaust Filter Guard Ordering Codes		
Model	Cabinet Sizes	
	2, 3 & 4 ft (0.6, 0.9 & 1.2m)	5 & 6 ft (1.5 & 1.8m)
Airstream® Class II Biosafety Cabinet	CRF/EFG-1AC2	CRF/EFG-2AC2

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