

# **USER'S MANUAL UNIVERS MV**

Serial number:

# UNIVERS MV

**GUARANTEES A WORK IN STERILE ENVIRONMENT**  
**GUARANTEES A VOLUME IN CLASS 100 ACCORDING TO FEDERAL STANDARD**

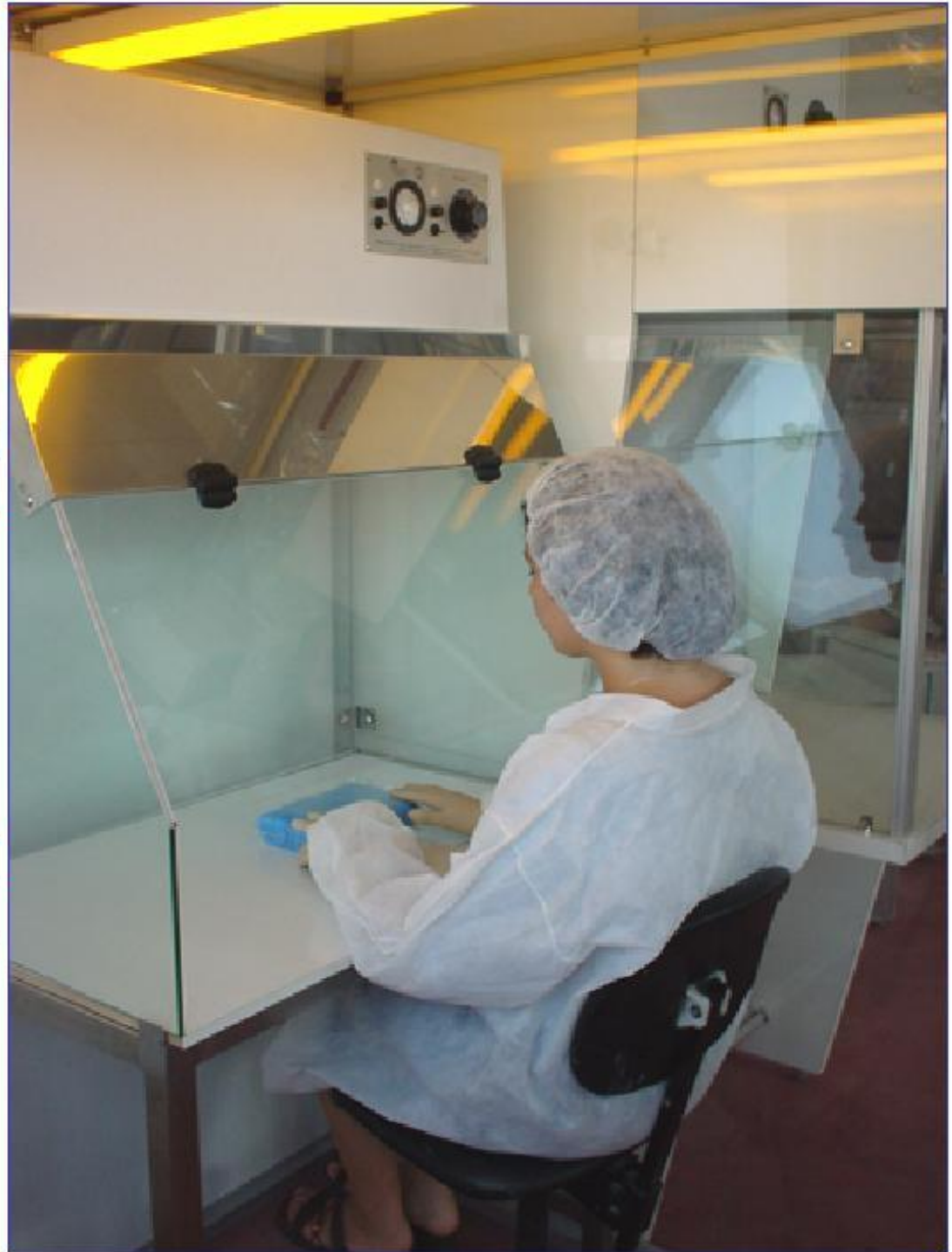
- Security glass work area
- Plexiglas top flip window
- CLASS 100
- 99.999% @ 0.3 $\mu$
- BLUE GEL conception
- Silent
- Extended Height
- Low energy consumption
- Low operating cost
- Easy installation
- Very Economic
- Enhanced comfort

## THEORY

Air is taken from the top thru a G4 pleated prefilter. The air is sucked by a very silent motor / impeller and then blown into a MINIPLEAT ABSOLUTE FILTER H.E.P.A. directly to the glass work area.

## APPLICATIONS

- ✓ HOSPITALS
- ✓ R&D
- ✓ PHARMACEUTIC INDUSTRY
- ✓ OPTICS
- ✓ ELECTRONICS
- ✓ CHIMICAL INDUSTRY
- ✓ FOOD INDUSTRY
- ✓ SPACE INDUSTRY
- ✓ MILITARY EQUIPMENT
- ✓ FINE CHEMISTRY
- ✓ BOTANICS



*UNIVERS MV can be installed on its own stand*

INTERNAL DIMENSIONS 905 x 600 (depth) x 700 (height)

## CONTROL PANEL

- on/off FAN
- on/off LIGHTING
- Fan speed controller
- FAN fuse
- LIGHTING fuse
- MANOMETER



## LIGHTING

Fluorescent lighting provides average of 400-600 lux on the work surface

## SPEED VARIATOR

The speed variation allows for keeping air flow when filter is getting clogged.

## ABSOLUTE FILTER(MINIPLEAT)

- EFFICIENCY 99.999% @ 0.3 $\mu$
- PROTECTION GRID EPOXY PAINTED
- FRAME ANODIZED ALUMINUM
- SEALANT POLYURETHANE
- THIGHTNESS BLUE GEL

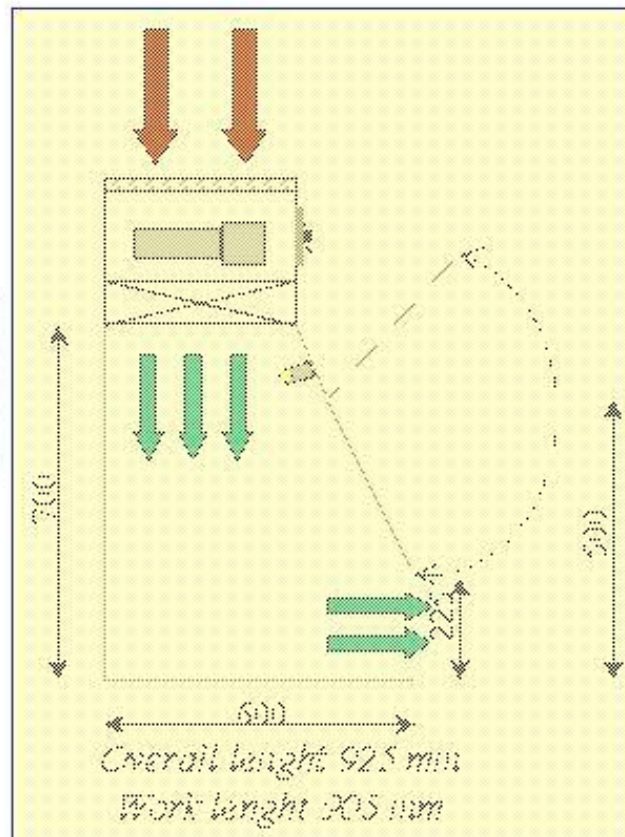


## BLUE GEL THIGHTNESS

The tightness between the filter and the fan unit is ensured by a fluid gasket, well known in the industry. This GEL usually call blue gel because of its colour, guarantees the unit to be leak free. More, the maintenance of the absolute filter is easier, as no tools are needed.

## PREFILTER (W TYPE)

- EFFICIENCY G4 - 95%
- FRAME GRAVIMETRIC DISPOSABLE CARDBOARD



## MAINTENANCE

- PREFILTER: average life time 6 months. Prefilter is on the unit top; direct access
- HEPA FILTER: average life time 3 years.

## DELIVERY

UNIVERS MV is packed into a very rigid cardboard case. Included in the case user manual in English. The unit is provided with international plug compatible with US and Europe states. CE & CEM compatibility.

## FAN

Very robust adjustable fan. No maintenance required thanks to its construction. The static and dynamic balance between the impeller and the motor enable non stop utilisation at very low noise level. The choice of this fan guarantees a constant flow rate during all the absolute filter's life.

## OPTIONS

- METALIC STAND WITH WORK SURFACE
- UV LAMP
- ULPA FILTER



# USER'S MANUAL

## UNIVERS MV

Madam, Sir,

We would like to thank you for choosing the UNIVERS MV.

GUARANTEE:        - a work in a sterile environment.  
                             - Product's protection.

We wish you a good usage of it and we are staying at your disposal for any information and technical support.

Y. BIJAOU



Quality Manager

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# I. STRUCTURE

## 1 - STRUCTURE:

Your UNIVERS MV is made a security glass volume and a very rigid molded motor block unit.

## 2 - LIGHTING:

Fluorescent lighting provides more than 800 lux on the work area.

## 3 – FAN SYSTEM:

Robust centrifugal variable speed fan built in steel. No special maintenance required. Mounted on the top part of the blowing section of the unit, the fan/motor unit is static and dynamically balanced, providing sustained utilization at very low noise level. The speed variation allows to compensate air flow when filter is getting clogged.

## 4 – ABSOLUTE FILTER

Your UNIVERS MV sterile work station has an H.E.P.A panel type filter with minimum efficiency of 99,999% for 0,3 µm particles sizes. Comply with US FEDERAL STANDARD, class 100.

- ◆ Frame of UNIVERS MV filter in anodized aluminum.
- ◆ Filter media in glass fiber.
- ◆ Filter protection in galvanized metal grid, white epoxy painted.
- ◆ Filter flange: loop GEL gasket provides total air tightness between Univers MV sterile air work station and filter unit.

## 5 – PRE FILTER

Pre filter media of synthetic fiber with an efficiency of 90%. Operational life of 3 to 6 months in continuous use.

## 6 –AIR FLOW CONTROL :

A manual regulator can regulate the flow speed whatever the clogging of the absolute filter is. The required speed under the filter should be : 0,4 m/s = 90 fpm.

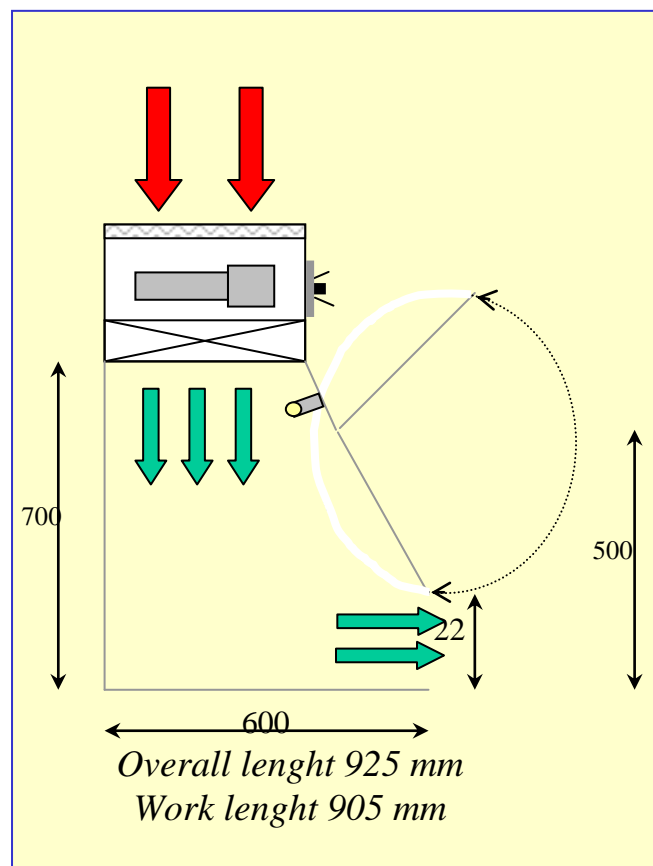
## 7 – OPTIONS

Work bench surface options : stainless steel, Formica, security glass, PVC, PPH. ( Univers is delivered without work surface).

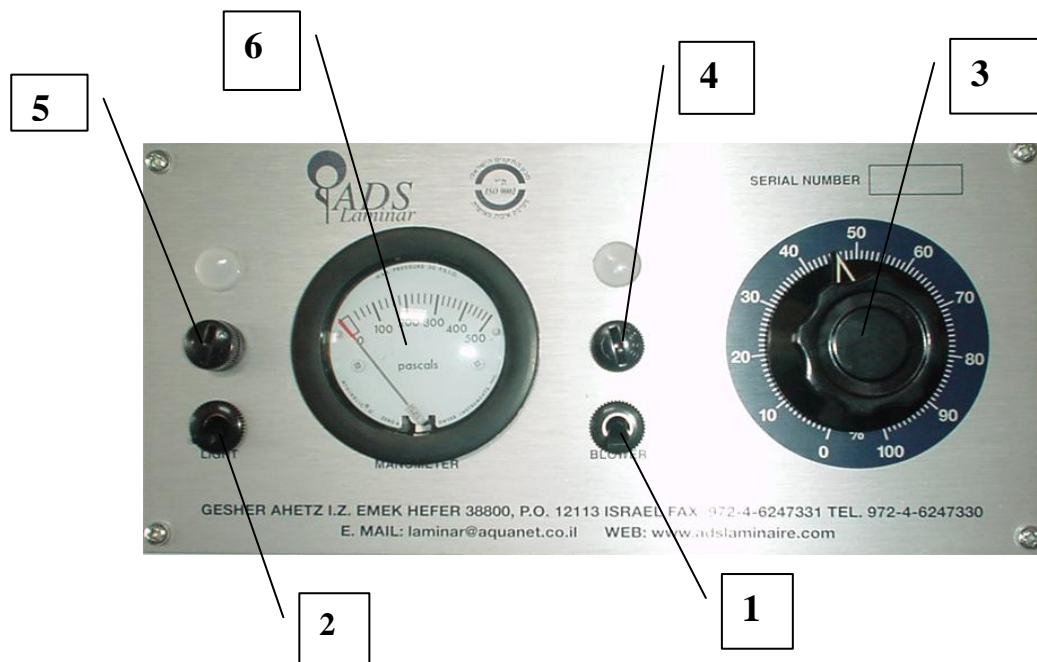
## II. FUNCTIONING PRINCIPLE , SECURITY

### OPERATING PRINCIPLE :

Air flow is pulsed through a H14 absolute filter on top of the work bench surface and provides full protection during work. The working volume is classified class 100 according to Federal Standard 209 or class ISO5 according to ISO 14644-1.



### III. CONTROL PANEL



#### **- The UNIVERS MV control panel :**

1. on/off FAN
2. on/off LIGHTING
3. Fan speed controller
4. Fan fuse
5. LIGHTING fuse
6. MANOMETER (Pa)



## **IV. OPERATING INSTRUCTIONS**

### **DELIVERY :**

UNIVERS MV is packed into a very rigid cardboard case.

### **OPERATING INSTRUCTIONS :**

- Install UNIVERS MV on a horizontal table.
- Connect to standard mono 220 V plug + ground.
- Turn the fan ON.
- Turn the lighting ON.
- Clean the working area with spirit, or alcohol.
- Move the speed controller in order to obtain 0.4m/s air velocity (around 120 Pa on the manometer when the filter is new).

Now, you can start your manipulation.

***For any prolonged interruption, wait 5-10 minutes of operation, before starting manipulation.***

## V. TECHNICAL SPECIFICATIONS

### UNIVERS MV :

	<b>UNIVERS MV</b>
Air flow rate	500 m <sup>3</sup> /h
Electrical power	600 W
Electric supply	Mono 220 V + 50 Hz
Weight	50 Kg
Overall length	925
Work length	905
Overall depth	600
Work depth	590
Overall Height	1000
Work Height	1050
Absolute filter	MLK-14- 3/9 -AL
Prefilter	h 3/7
Fan	RGE 160
Lighting	LUM-FL-T8-18W-60
UV (OPTIONALY)	LUM-UV-45

Type of fuses : **F1** : Power supply fuse : **250 mA**  
**F2** : Lighting fuse. : **1 A**  
**F3** : fan fuse : **1 A**

## VI. MAINTENANCE

The tightness between the filter and the fan unit is ensured by a fluid gasket, well known in the industry. This GEL is usually called Blue gel because of its color, and guarantees that the unit is leak free. More, the maintenance of the absolute filter is easier as no tools are needed.

**Prefilter** : Located on the unit top: remove the prefilter. For the replacement, put the new prefilter . Average life time is 6 months.

**HEPA filter** : As soon as we observe signs that filter lifetime (average is 2 to 3 years) comes to its end, the filter has to be changed. Procedure: Remove the fan unit, disconnecting the lighting, then replace the filter which is simply put on the glass volume. Replace the fan unit without forget connecting the lighting.

**Motor-fan** : no need of specific maintenance.

**Fluorescent lighting** : direct Access under the cover.

**IMPORTANT** : The replacement operation of absolute filters must be executed by a qualified technician and must be followed with validation.

## VII. FILTER ORDER FORM

**To order** :                      **By FAX** :                      +33 (1) 48.44.14.64  
**By Post mail** :                      **ADS LAMINAIRE SA**  
35/37 RUE BAUDIN  
**F-93315 LE PRE ST GERVAIS CEDEX**  
FRANCE

Madam, Sir

I would like to order :

- Prefilters ..... x h 3/7
- HEPA filters .....x MLK 14-3/9 -AL

**COMPANY** : .....

.....

**ADDRESS** : .....

.....

**PHONE** :

.....

**FAX** : .....

**CONTACT PERSON** : .....

**STAMP AND SIGNATURE.**

## VIII. GUARANTEE CONTRACT

One year guarantee for any defective part (except for disposable).

### CONDITIONS OF GUARANTEE :

- During the guarantee period, ADSLAMINAIRE will replace at no charge, parts which are defective and returned to ADS LAMINAIRE within the guarantee period + 15 days.
- The guarantee does not apply to the disposable which need frequent necessary replacement.
- The guarantee does not apply : in case of consecutive damages due to a bad use or due to a defected maintenance (non respect of the maintenance advise) or to those resulting of an exterior cause (robbery, water damage, fire, fall, etc,...please refer to your insurance policy).

## IX. CE / CEM CERTIFICATION

### EC CONFORMITY DECLARATION

The manufacturer:

**ADS LAMINAIRE**  
**35-37 rue Baudin**  
**93315 le Pré-Saint-Gervais cedex**  
**FRANCE**

Declares that: All equipment designated hereafter:

TYPE:           **UNIVERS MV**

Matter: 96 602 1070 59 6600 GA 380/01865801.7R-RN/ma

Conforms to:

- the disposal statutory defined by the annex I of the European directive 89/392 modified. To this day, by the directives 91/368, 93/44 and 93/68.

- To the law n° 92-767 of the 29-07-92 carrying transposition of the European directive 89/392 of September 14th-1989 and 91/368 of June 20th-1991 in regards with the technical regulations and the certification procedures, applicable on it.

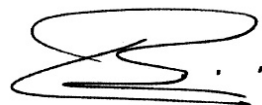
- To the decree n°73/23 CEE - 89/336-has the legislation of an European Union State-member carrying transposition of the European directives (1) mentioned before.

- To the National norms :    **NFC 20.010 / NFC 20.030**

place:           **Pré-Saint-Gervais (93)**                    date:   **28/11/01.**

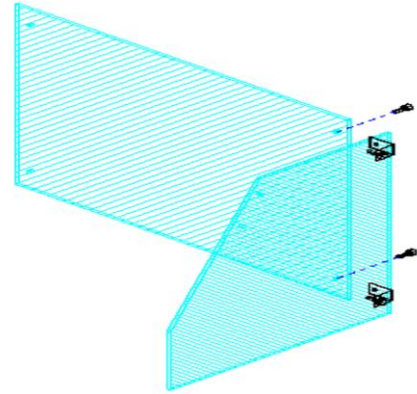
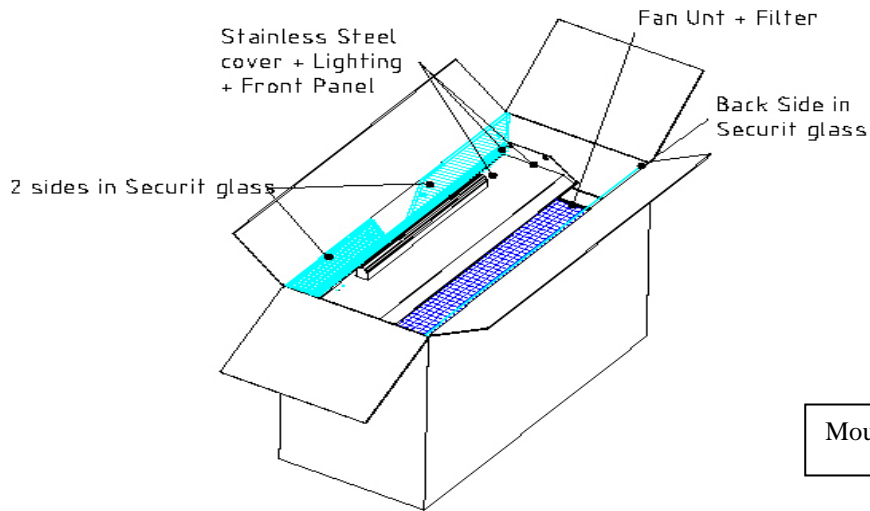
Name and function:   **Bernard BIJAOUI – General Manager -**

signature:

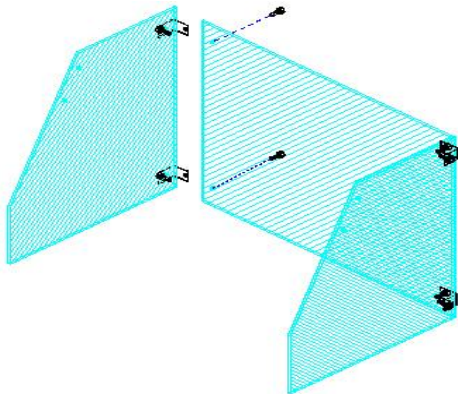


(1) Valid in the case of an exportation and to the request of a State-member only. Then specify the name of the State-member as well as the nature, the title and the date back to the applicable regulatory or statutory acts.

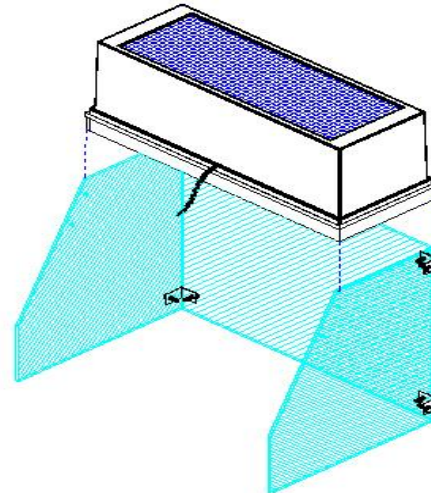
## X. ASSEMBLING NOTICE



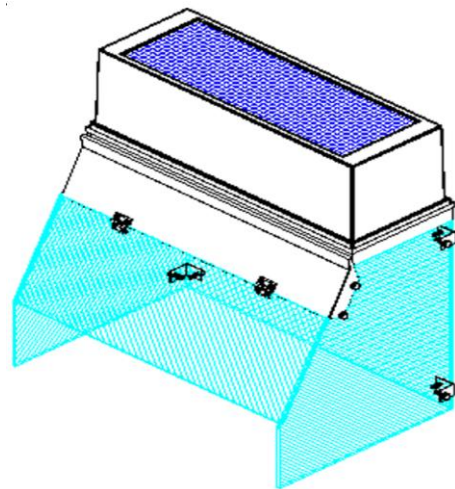
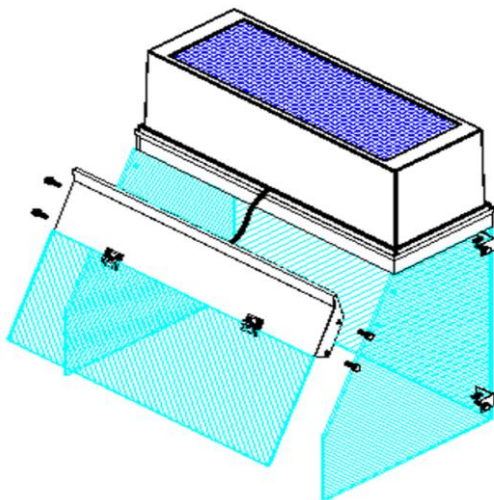
Mount the right side with the back side



Repeat the same assembly for the left side



Put the fan filter unit on the top of the assembly



Connect the fan filter unit with the plug in cable from the fluorescent light (attached with the front glass) and hide the cable between the 2 blocks. Then screw the front glass with the rest of the assembly.