



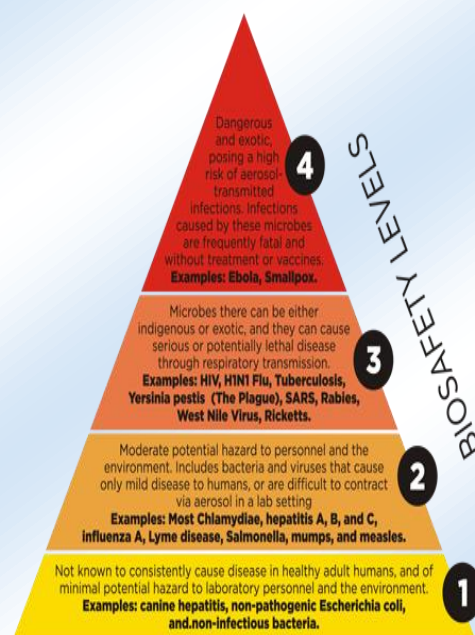
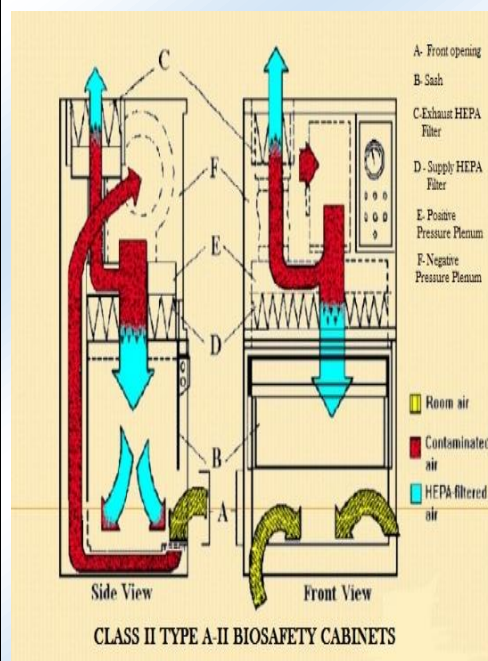
**Cleanair® Bio Safety Cabinet Class II Type A2 (CBS 900 A2)**

Cleanair® Class II A2 Biohazard Safety Cabinets provide personnel, product, and environment protection. Velocity of airflow to the work zone creates an ultra-clean environment for product protection, where the remaining exhaust air is discharged out. Air barrier at the work opening and the contaminated air plenum is under positive pressure. An air barrier between the operator and the work zone is maintained by a flow of room air through a full width grille in the work opening. The barrier air mixes with the laminar flow air in a sump underneath the work surface, and is exhausted to the outside environment through a HEPA filter. Have HEPA filtered down flow air from a common plenum. (I.e. from which a portion of the air is exhausted from the cabinet and the remaining air is supplied to the work area).

|                    |   |  |
|--------------------|---|--|
| Product Code       | CBS 0900 A2   | <p><b>Product Code CBS 0900 A2</b></p>   |
| Air flow pattern   | Vertical - Unidirectional, 70% re-circulation, 30% exhausted in to the room ambient   |  |
| Air Cleanliness    | CLASS 100 as per US FED STD 209 E or CLASS 5 as per ISO 14644-1   |  |
| Inner working size | W 900 x D 600 x H 600 mm<br>(3 x 2 x 2 Feet)  |  |
| Over all dimension | W 1000 x D 750 X H 2050 mm, including removable type support stand  |  |
| Support stand      | under-bench support-stand made of heavy duty square pipes- MS with PU coated finish or IS 304 SS respectively   |  |
| Particle Retention | 0.3 Micron & Above  |  |
| Noise Level        | 65 decibel on "A" scale ± 5   |  |
| Inflow Velocity    | 100 FPM ± 20  |  |
| Downflow Velocity  | 80 FPM ± 20   |  |
| Work table         | Removable type tabletop, made of perforated IS 304 Grade SS with satin finished, underneath provided with drain-pan to collect & dispose of liquid wastes. The front edge of the working table is curve finished and perforated for comfortable arm resting |  |
| Front door         | Made of clear 5 mm Polycarbonate sheet - vertical sliding, while opening the door UV Lamp will be cut "OFF" and while closing   |  |

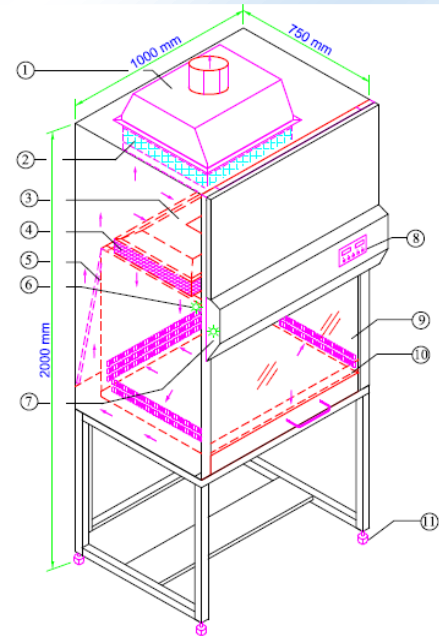
|                                  |   |
|----------------------------------|---|
|                                  | the door UV Lamp will be "ON" automatically.  |
| Side Panels                      | Both the sidewalls are made from double layered outer GI & inner stainless steel or Both in Stainless Steel respectively with return-air plenum in between  |
| U V lamp                         | 3 Feet, 30 Watts, Make - PHILIPS: 1 Nos   |
| Illumination                     | 2 Feet, 20 Watts LED tubes: 1 Nos   |
| Pressure ( $\Delta P$ )          | Digital Display   |
| ON/OFF Controls:                 | Soft touch switch pads provided for blower, UV & Daylight lamp  |
| Power Supply                     | 230V, Single phase, 50 Hz   |
| HEPA Filter Supply Air & Exhaust | Media: Ultra clean glass fiber paper - imported; Type: Mini-Pleated constructions; Retention:0.3Micron; Efficiency 99.997%; Pressure drop :12 mm WG; Grade:H14 rating   |
| PRE Filter                       | Synthetic, non-woven polyester fibers with protective mesh and deep-comb formed into PU coated GI casing. IPD 6mm, Particle Retention: 5 Micron. Efficiency: 95 %.  |
| Material of construction         | The Cabinet made from Galvanized Iron 18 SWG sheet metal with polyurethane paint coated finish (or) The Complete Cabinet in IS 304 grade SS construction with satin finish  |
| Supply Air Blower                | Outer rotor type motor blower, which consists of dynamically & statically balanced aluminum centrifugal impeller driven by Single phase motor, enclosed in a PU coated GI casing & directly connected to the filter chamber inside the cabinet. |
| Exhaust Duct:                    | The exhaust air will be sending out through an exhaust duct made of 150/200 mm dia PVC pipe up to 10 feet length. Suitable canopy will be provided at the end of the duct.  |

### Airflow Pattern



|                       |  |
|-----------------------|--|
| Standard accessories  | 5A power point, power chord with 5 amps plug top, floor leveling screws, castors & gas inlet,  |
| Standards compliance  | US FED STD 209 E, ISO 14644-1, IEST-RP-CC-002-2, EN 12469:2000 & EN 61010-1:2010   |
| Weight before packing | Approximate 250 KG   |
| Weight after packing  | Approximate 400 KG if packed in full wooden crate box  |
| Special Features      | <ol style="list-style-type: none"> <li>Vertical corners are coving finished; for easy cleaning</li> <li>Working table is removal type for easy cleaning</li> <li>Waste liquid collection tray - underneath worktable - for easy dispose off</li> <li>Cabinet will be supplied with chemically treated and SS armrest</li> <li>LCD Display with feather touch switch control displaying following contents ON/OFF, Blower, LED, UV Plug, Settings, Alarm off</li> </ol> |
| Optional if required  | <ol style="list-style-type: none"> <li>Motorized Door</li> <li>Virus Burn Out</li> </ol>   |

**Schematic Drawing**



**LEGENDS**

|    |                              |
|----|------------------------------|
| 1  | EXHAUST VENT                 |
| 2  | EXHAUST HEPA FILTER          |
| 3  | SUPPLY MOTOR BLOWER ASSEMBLY |
| 4  | SUPPLY HEPA FILTER           |
| 5  | PRE FILTER                   |
| 6  | UV LIGHT                     |
| 7  | DAY LIGHT                    |
| 8  | MICRO PROCESSOR CONTROLLER   |
| 9  | P C SHEET DOOR               |
| 10 | HAND REST                    |
| 11 | LEVELING SCREWS              |

**CLEAN AIR SYSTEMS is an ISO 9001-2015 certified company & our products are CE certified**

**NSIC: NSIC/BO(G)/GP/253/2011 UAN: TN02B0098373 CE CERTIFICATION No: CE-1124**

**Contact: No 4, Senthil Nagar, 100 Feet Road, Arumbakkam, Chennai – 600 106 Ph: 044-2362 1476**

**Mob: +91 9841074504 Whatsapp: +919551119111 Website: [www.cleanairindia.com](http://www.cleanairindia.com)**



**Cleanair<sup>®</sup> Bio Safety Cabinet Class II Type B2 (CBS 900 B2)**

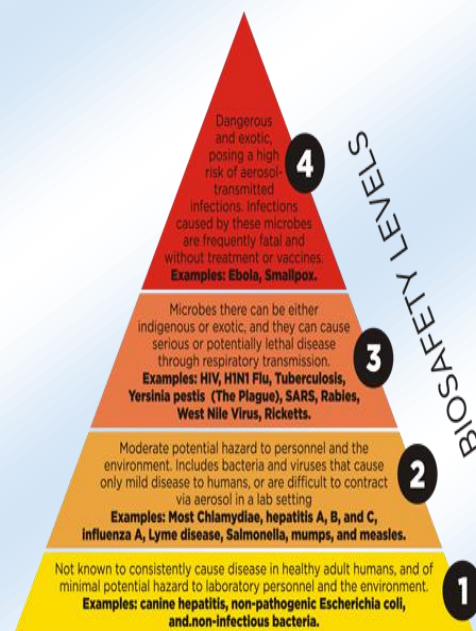
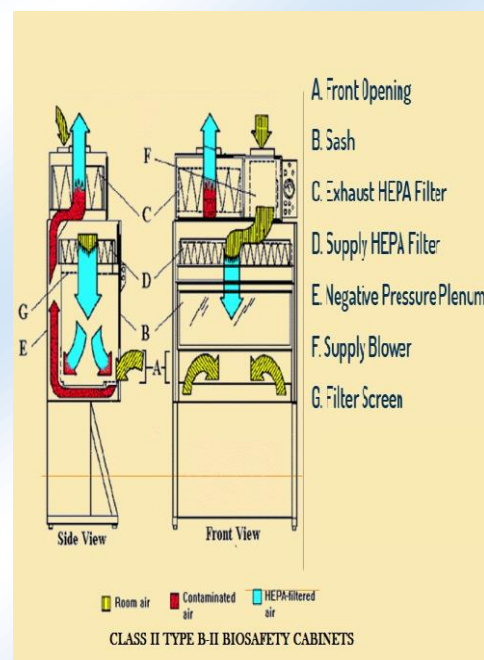
Cleanair<sup>®</sup> Vertical Laminar Flow Class II Type B2 Biohazard Safety Cabinets provide personnel, product, and environmental protection. Laminar airflow enclosures with High Efficiency Particulate Air (HEPA) filtration of exhaust air and an air barrier at the work opening. HEPA-filtered Vertical laminar airflow, which is discharged to the work zone, creates an ultra-clean work environment for product protection. An air barrier between the operator and the work zone is maintained by a flow of room air into a full width grille in the work opening. The barrier air mixes with the laminar flow air in a sump underneath the work surface, and is exhausted to the outside environment via a HEPA filter. To contain potentially hazardous aerosols, negative pressure zones surround all the positive pressure zones and Filter sealing.

|                    |   |  |
|--------------------|---|--|
| Product Code       | CBS 900 B2  | <p><b>Product Code CBS 900 B2</b></p>  |
| Air flow pattern   | Vertical – Unidirectional, 70% re-circulation, 30% exhausted in to the room ambient   |  |
| Air Cleanliness    | CLASS 100 as per US FED STD 209 E or CLASS 5 as per ISO 14644-1   |  |
| Inner working size | W 900 x D 600 x H 600 mm<br>(3 x 2 x 2 Feet)  |  |
| Over all dimension | W 1000 X D 750 X H 2050 mm including support stand  |  |
| Support stand      | under-bench support-stand made of heavy duty square pipes- MS with PU coated finish or IS 304 SS respectively   |  |
| Particle Retention | 0.3 Micron & Above  |  |
| Noise Level        | 65 decibel on "A" scale ± 5   |  |
| Velocity           | 90 FPM ± 20   |  |
| Work table         | Removable type tabletop, made of perforated IS 304 Grade SS with satin finished, underneath provided with drain-pan to collect & dispose of liquid wastes. The front edge of the working table is curve finished and perforated for comfortable arm resting |  |
| Front door         | Made of clear 5 mm Polycarbonate sheet - vertical sliding, while opening the door UV Lamp will be cut "OFF" and while closing the door UV Lamp will be "ON" automatically.  |  |



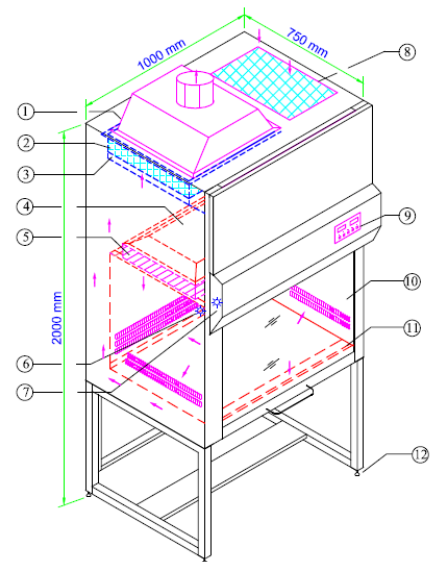
|                                  |  |
|----------------------------------|--|
| Side Panels                      | Both the sidewalls are made from double layered outer GI & inner stainless steel or Both in Stainless Steel respectively with return-air plenum in between Edges are perforated to avoid entry of room air into the work zone and exit of contaminated air in to the room and such contaminated air is sucked through this full height perforation at the edges of the sidewalls |
| U V lamp                         | 1 ½ Feet, 15 Watts, Make - PHILIPS: 1 Nos  |
| Illumination                     | 2 Feet, 20 Watts LED tubes: 1 Nos  |
| Pressure (ΔP)                    | Digital Display Gauge  |
| ON/OFF Controls:                 | Soft touch switch pads provided for blower, UV & Daylight lamp   |
| Power Supply                     | 230V, Single phase, 50 Hz  |
| HEPA Filter Supply Air & Exhaust | Media: Ultra clean glass fiber paper – imported; Type: Mini-Pleated constructions; Retention: 0.3 Micron; Efficiency 99.97%; Pressure drop :12 mm WG; Grade: H14 rating  |
| PRE Filter                       | Synthetic, non-woven polyester fibers with protective mesh and deep-comb formed into PU coated GI casing. IPD 6mm, Particle Retention: 10-15 Micron. Efficiency: 90 %.   |
| Material of construction         | The Cabinet made from Galvanized Iron 18 SWG sheet metal with polyurethane paint coated finish (or) The Complete Cabinet in IS 304 grade SS construction with satin finish   |
| Supply Air Blower                | Outer rotor type motor blower, which consists of dynamically & statically balanced aluminum centrifugal impeller driven by Single phase motor, enclosed in a PU coated GI casing & directly connected to the filter chamber inside the cabinet.  |
| Exhaust Blower                   | Having a displacing capacity of 1360 CMH at a static of 40 mm WG and made of mild steel and directly driven by   |

**Airflow Pattern**



**Schematic Drawing**

|                       |   |
|-----------------------|---|
|                       | Single phase, 1440-RPM motor are provided   |
| Exhaust Duct:         | The exhaust air will be sending out through an exhaust duct made of 150/200 mm dia PVC pipe up to 10 feet length. Suitable canopy will be provided at the end of the duct.  |
| Standard accessories  | 5A power point, power chord with 5 amps plug top, floor leveling screws, castors & gas inlet,   |
| Standards compliance  | US FED STD 209 E, ISO 14644-1, IEST-RP-CC-002-2   |
| Weight before packing | Approximate 250 KG  |
| Weight after packing  | Approximate 400 KG if packed in full wooden crate box   |
| Special Features      | <ol style="list-style-type: none"> <li>3. Vertical corners are coving finished; for easy cleaning</li> <li>4. Working table is removal type for easy cleaning</li> <li>5. Waste liquid collection tray – underneath worktable – for easy dispose off</li> <li>6. Cabinet will be supplied with chemically treated and SS armrest</li> </ol> |
| Optional if required  | <ol style="list-style-type: none"> <li>7. Motorized Door</li> <li>8. LCD Display with feather touch switch control displaying following contents ON/OFF, Blower, LED, UV Plug, Settings, Alarm off</li> <li>9. UV Hour Meter</li> <li>10. Virus Burn Out</li> </ol>   |



**LEGENDS**

|    |                               |
|----|-------------------------------|
| 1  | EXHAUST VENT                  |
| 2  | EXHAUST HEPA FILTER           |
| 3  | EXHAUST MOTOR BLOWER ASSEMBLY |
| 4  | SUPPLY MOTOR BLOWER ASSEMBLY  |
| 5  | SUPPLY HEPA FILTER            |
| 6  | UV LIGHT                      |
| 7  | DAY LIGHT                     |
| 8  | PRE FILTER                    |
| 9  | MICRO PROCESSOR CONTROLLER    |
| 10 | P C SHEET DOOR                |
| 11 | HAND REST                     |
| 12 | LEVELING SCREWS               |

**CLEAN AIR SYSTEMS is an ISO 9001-2015 certified company & our products are CE certified**

**NSIC:** NSIC/BO(G)/GP/253/2011 **UAN:** TN02B0098373

**Contact:** No 4, Senthil Nagar, 100 Feet Road, Arumbakkam, Chennai – 600 106 Ph: 044-2362 1476

Mob: +91 9841074504 Whatsapp: +919551119111 Website: [www.cleanairindia.com](http://www.cleanairindia.com)



**Cleanair<sup>®</sup> Bio Safety Cabinet Class II Type A2 (CBS 1200 A2)**

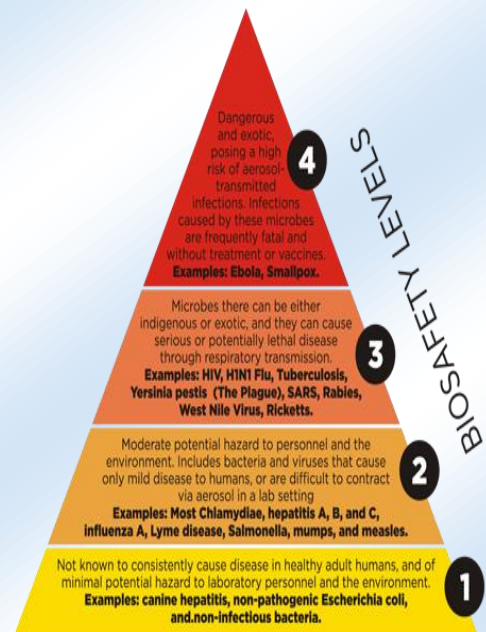
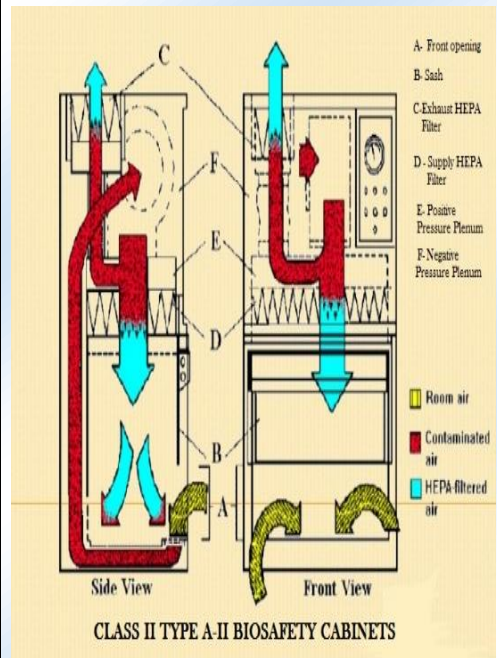
Cleanair<sup>®</sup> Class II A2 Biohazard Safety Cabinets provide personnel, product, and environment protection. Velocity of airflow to the work zone creates an ultra-clean environment for product protection, where the remaining exhaust air is discharged out. Air barrier at the work opening and the contaminated air plenum is under positive pressure. An air barrier between the operator and the work zone is maintained by a flow of room air through a full width grille in the work opening. The barrier air mixes with the laminar flow air in a sump underneath the work surface, and is exhausted to the outside environment through a HEPA filter. Have HEPA filtered down flow air from a common plenum. (I.e. from which a portion of the air is exhausted from the cabinet and the remaining air is supplied to the work area).

|                    |   |  |
|--------------------|---|--|
| Product Code       | CBS 1200 A2   | <p><b>Product Code CBS 1200 A2</b></p>  |
| Air flow pattern   | Vertical - Unidirectional, 70% re-circulation, 30% exhausted in to the room ambient   |  |
| Air Cleanliness    | CLASS 100 as per US FED STD 209 E or CLASS 5 as per ISO 14644-1   |  |
| Inner working size | W 1200 x D 900 x H 600 mm<br>(4 x 3 x 2 Feet)   |  |
| Over all dimension | W 1300 X D 1050 X H 2050 mm, including removable type support stand   |  |
| Support stand      | under-bench support-stand made of heavy duty square pipes- MS with PU coated finish or IS 304 SS respectively   |  |
| Particle Retention | 0.3 Micron & Above  |  |
| Noise Level        | 65 decibel on "A" scale ± 5   |  |
| Inflow Velocity    | 100 FPM ± 20  |  |
| Downflow Velocity  | 80 FPM ± 20   |  |
| Work table         | Removable type tabletop, made of perforated IS 304 Grade SS with satin finished, underneath provided with drain-pan to collect & dispose of liquid wastes. The front edge of the working table is curve finished and perforated for comfortable arm resting |  |
| Front door         | Made of clear 5 mm Polycarbonate sheet - vertical sliding, while opening the door UV Lamp will be cut "OFF" and while closing   |  |



|                                  |  |
|----------------------------------|--|
|                                  | the door UV Lamp will be "ON" automatically.   |
| Side Panels                      | Both the sidewalls are made from double layered outer GI & inner stainless steel or Both in Stainless Steel respectively with return-air plenum in between   |
| U V lamp                         | 3 Feet, 30 Watts, Make - PHILIPS:  |
| Illumination                     | 2 Feet LED tubes of Lux more than 850  |
| Pressure ( $\Delta P$ )          | Digital Display Gauge  |
| ON/OFF Controls:                 | Soft touch switch pads provided for blower, UV & Daylight lamp   |
| Power Supply                     | 230V, Single phase, 50 Hz  |
| HEPA Filter Supply Air & Exhaust | Media: Ultra clean glass fiber paper - imported; Type: Mini-Pleated constructions; Retention: 0.3 Micron; Efficiency 99.97%; Pressure drop :12 mm WG; Grade: H13 rating  |
| PRE Filter                       | Synthetic, non-woven polyester fibers with protective mesh and deep-comb formed into PU coated GI casing. IPD 6mm, Particle Retention: 10-15 Micron. Efficiency: 90 %.   |
| Material of construction         | The Cabinet made from Galvanized Iron 18 SWG sheet metal with polyurethane paint coated finish (or) The Complete Cabinet in IS 304 grade SS construction with satin finish   |
| Supply Air Blower                | Outer rotor type motor blower, which consists of dynamically & statically balanced aluminum centrifugal impeller driven by Single phase DC motor, enclosed in a PU coated GI casing & directly connected to the filter chamber inside the cabinet. |
| Exhaust Duct:                    | The exhaust air will be sending out through an exhaust duct made of 200 mm dia PVC pipe up to 10 feet length. Suitable canopy will be provided at the end of the duct.   |

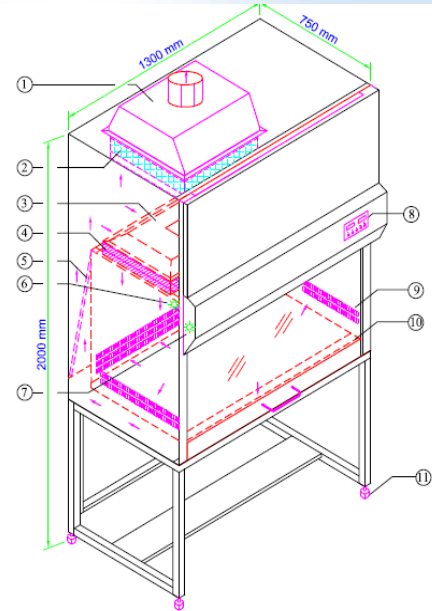
**Airflow Pattern**





|                       |  |
|-----------------------|--|
| Standard accessories  | 5A power point, power chord with 5 amps plug top, floor leveling screws, castors & gas inlet,  |
| Standards compliance  | US FED STD 209 E, ISO 14644-1, IEST-RP-CC-002-2  |
| Weight before packing | Approximate 250 KG   |
| Weight after packing  | Approximate 400 KG if packed in full wooden crate box  |
| Special Features      | <ol style="list-style-type: none"> <li>11. Vertical corners are coving finished; for easy cleaning</li> <li>12. Working table is removal type for easy cleaning</li> <li>13. Waste liquid collection tray – underneath worktable – for easy dispose off</li> <li>14. Cabinet will be supplied with chemically treated and SS armrest</li> </ol>                              |
| Optional if required  | <ol style="list-style-type: none"> <li>15. Motorized Door</li> <li>16. Micro Processor for LCD Display with feather touch switch control displaying following contents ON/OFF, Blower, LED, UV Plug, Settings, Alarm off</li> <li>17. UV Hour Meter</li> <li>18. Virus Burn Out</li> <li>19. H14 Grade HEPA filter for 99.99% Efficiency</li> <li>20. ULPA Filter</li> </ol> |

**Schematic Drawing**



**LEGENDS**

|    |                              |
|----|------------------------------|
| 1  | EXHAUST VENT                 |
| 2  | EXHAUST HEPA FILTER          |
| 3  | SUPPLY MOTOR BLOWER ASSEMBLY |
| 4  | SUPPLY HEPA FILTER           |
| 5  | PRE FILTER                   |
| 6  | UV LIGHT                     |
| 7  | DAY LIGHT                    |
| 8  | MICRO PROCESSOR CONTROLLER   |
| 9  | P.C SHEET DOOR               |
| 10 | HAND REST                    |
| 11 | LEVELING SCREWS              |

**CLEAN AIR SYSTEMS is an ISO 9001-2015 certified company & our products are CE certified**

**NSIC: NSIC/BO(G)/GP/253/2011 UAN: TN02B0098373 CE CERTIFICATION No: CE-16107**

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**Mob: +91 9841074504 Whatsapp: +919551119111 Website: [www.cleanairindia.com](http://www.cleanairindia.com)**



**Cleanair<sup>®</sup> Bio Safety Cabinet Class II Type B2 (CBS 1200 B2)**

Cleanair<sup>®</sup> Vertical Laminar Flow Class II Type B2 Biohazard Safety Cabinets provide personnel, product, and environmental protection. Laminar airflow enclosures with High Efficiency Particulate Air (HEPA) filtration of exhaust air and an air barrier at the work opening. HEPA-filtered Vertical laminar airflow, which is discharged to the work zone, creates an ultra-clean work environment for product protection. An air barrier between the operator and the work zone is maintained by a flow of room air into a full width grille in the work opening. The barrier air mixes with the laminar flow air in a sump underneath the work surface, and is exhausted to the outside environment via a HEPA filter. To contain potentially hazardous aerosols, negative pressure zones surround all the positive pressure zones and Filter sealing.

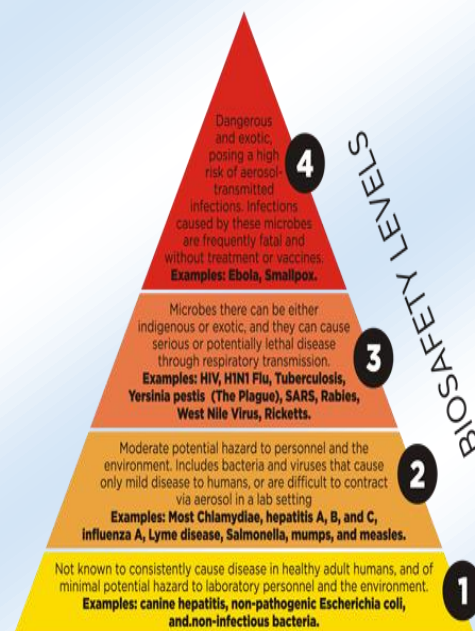
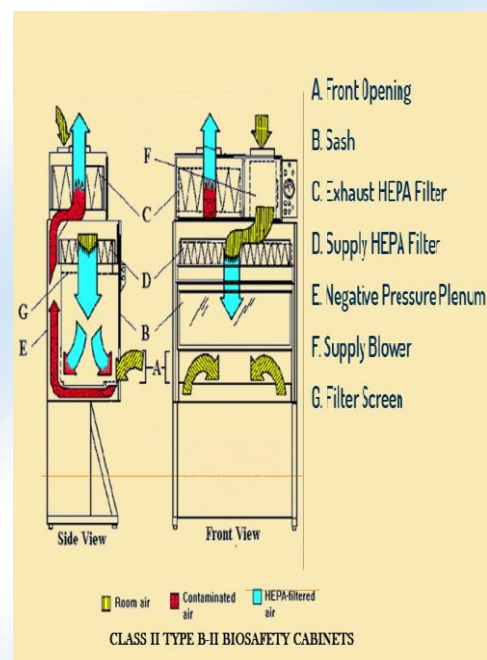
|                    |   |
|--------------------|---|
| Product Code       | CBS 1200 B2   |
| Air flow pattern   | Vertical - Unidirectional, 70% re-circulation, 30% exhausted in to the room ambient   |
| Air Cleanliness    | CLASS 100 as per US FED STD 209 E or CLASS 5 as per ISO 14644-1   |
| Inner working size | W 1200 x D 600 x H 600 mm<br>(4 x 2 x 2 Feet)   |
| Over all dimension | W 1300 X D 750 X H 2050 mm including support stand  |
| Support stand      | under-bench support-stand made of heavy duty square pipes- MS with PU coated finish or IS 304 SS respectively   |
| Particle Retention | 0.3 Micron & Above  |
| Noise Level        | 65 decibel on "A" scale ± 5   |
| Velocity           | 90 FPM ± 20   |
| Work table         | Removable type tabletop, made of perforated IS 304 Grade SS with satin finished, underneath provided with drain-pan to collect & dispose of liquid wastes. The front edge of the working table is curve finished and perforated for comfortable arm resting |
| Front door         | Made of clear 5 mm Polycarbonate sheet - vertical sliding, while opening the door UV Lamp will be cut "OFF" and while closing the door UV Lamp will be "ON" automatically.  |

**Product Code CBS 1200 B2**



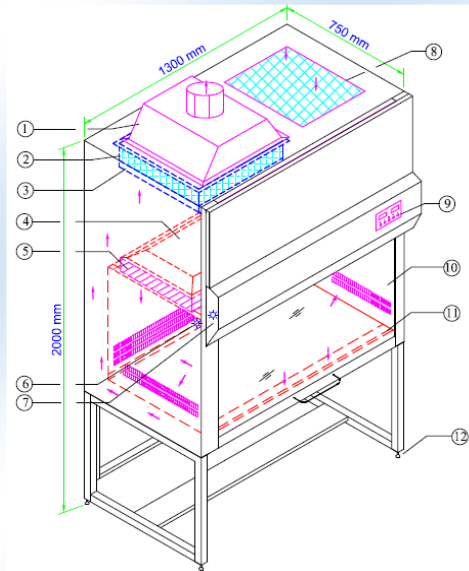
|                                  |  |
|----------------------------------|--|
| Side Panels                      | Both the sidewalls are made from double layered outer GI & inner stainless steel or Both in Stainless Steel respectively with return-air plenum in between Edges are perforated to avoid entry of room air into the work zone and exit of contaminated air in to the room and such contaminated air is sucked through this full height perforation at the edges of the sidewalls |
| U V lamp                         | 3 Feet, 30 Watts, Make – PHILIPS: 1 Nos  |
| Illumination                     | 2 Feet, 20 Watts LED tubes: 1 Nos  |
| Pressure ( $\Delta P$ )          | Digital Display Gauge  |
| ON/OFF Controls:                 | Soft touch switch pads provided for blower, UV & Daylight lamp   |
| Power Supply                     | 230V, Single phase, 50 Hz  |
| HEPA Filter Supply Air & Exhaust | Media: Ultra clean glass fiber paper – imported; Type: Mini-Pleated constructions; Retention: 0.3 Micron; Efficiency 99.97%; Pressure drop : 12 mm WG; Grade: H13  |
| PRE Filter                       | Synthetic, non-woven polyester fibers with protective mesh and deep-comb formed into PU coated GI casing. IPD 6mm, Particle Retention: 5 Micron. Efficiency: 95 %.   |
| Material of construction         | The Cabinet made from Galvanized Iron 18 SWG sheet metal with polyurethane paint coated finish (or) The Complete Cabinet in IS 304 grade SS construction with satin finish   |
| Supply Air Blower                | Outer rotor type motor blower, which consists of dynamically & statically balanced aluminum centrifugal impeller driven by Single phase motor, enclosed in a PU coated GI casing & directly connected to the filter chamber inside the cabinet.  |
| Exhaust Blower                   | Having a displacing capacity of 1360 CMH at a static of 40 mm WG and made of mild steel and directly driven by   |

**Airflow Pattern**



|                       |  |
|-----------------------|--|
|                       | Single phase, 1440-RPM AC motor are provided   |
| Exhaust Duct:         | The exhaust air will be sending out through an exhaust duct made of 150/200 mm dia PVC pipe up to 10 feet length. Suitable canopy will be provided at the end of the duct.   |
| Standard accessories  | 5A power point, power chord with 5 amps plug top, floor leveling screws, castors & gas inlet,  |
| Standards compliance  | US FED STD 209 E, ISO 14644-1, IEST-RP-CC-002-2  |
| Weight before packing | Approximate 250 KG   |
| Weight after packing  | Approximate 400 KG if packed in full wooden crate box  |
| Special Features      | <p>23. Vertical corners are coving finished; for easy cleaning</p> <p>24. Working table is removal type for easy cleaning</p> <p>25. Waste liquid collection tray – underneath worktable – for easy dispose off</p> <p>26. Cabinet will be supplied with chemically treated and SS armrest</p> |
| Optional if required  | <p>27. Motorized Door</p> <p>28. LCD Display with feather touch switch control displaying following contents ON/OFF, Blower, LED, UV Plug, Settings, Alarm off</p> <p>29. UV Hour Meter</p> <p>30. DC Motor 5. Virus Burn Out</p>  |

**Schematic Drawing**



**LEGENDS**

|    |                               |
|----|-------------------------------|
| 1  | EXHAUST VENT                  |
| 2  | EXHAUST HEPA FILTER           |
| 3  | EXHAUST MOTOR BLOWER ASSEMBLY |
| 4  | SUPPLY MOTOR BLOWER ASSEMBLY  |
| 5  | SUPPLY HEPA FILTER            |
| 6  | UV LIGHT                      |
| 7  | DAY LIGHT                     |
| 8  | PRE FILTER                    |
| 9  | MICRO PROCESSOR CONTROLLER    |
| 10 | P C SHEET DOOR                |
| 11 | HAND REST                     |
| 12 | LEVELING SCREWS               |

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**NSIC: NSIC/BO(G)/GP/253/2011 UAN: TN02B0098373 CE CERTIFICATION No: CE-1124**

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Cleanair® Class II A2 Biohazard Safety Cabinets provide personnel, product, and environment protection. Velocity of airflow to the work zone creates an ultra-clean environment for product protection, where the remaining exhaust air is discharged out. Air barrier at the work opening and the contaminated air plenum is under positive pressure. An air barrier between the operator and the work zone is maintained by a flow of room air through a full width grille in the work opening. The barrier air mixes with the laminar flow air in a sump underneath the work surface, and is exhausted to the outside environment through a HEPA filter. Have HEPA filtered down flow air from a common plenum. (I.e. from which a portion of the air is exhausted from the cabinet and the remaining air is supplied to the work area).

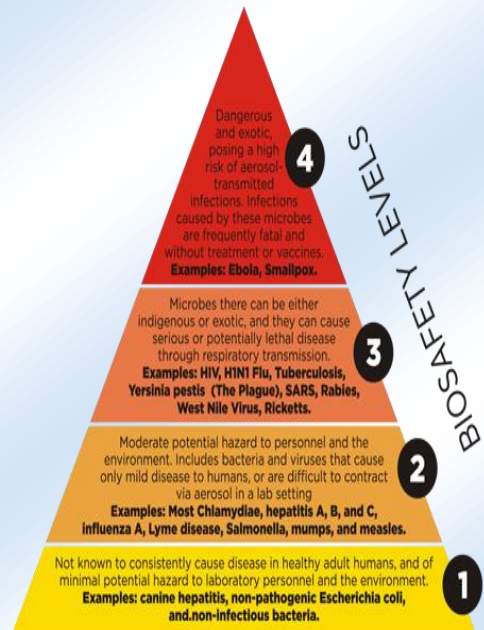
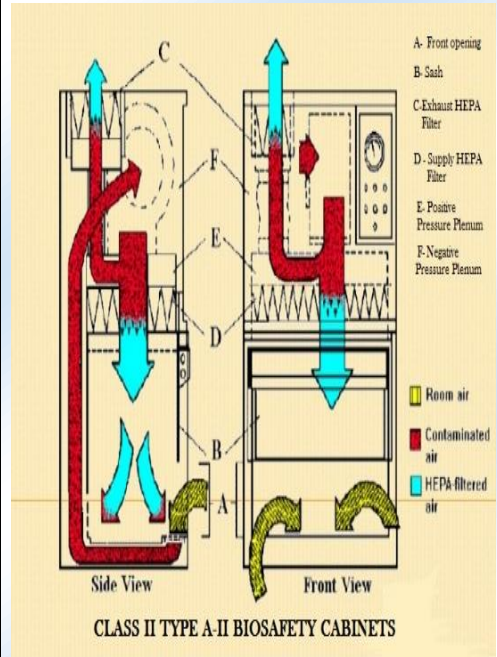
|                    |   |
|--------------------|---|
| Product Code       | CBS 1800 A2   |
| Air flow pattern   | Vertical - Unidirectional, 70% re-circulation, 30% exhausted in to the room ambient   |
| Air Cleanliness    | CLASS 100 as per US FED STD 209 E or CLASS 5 as per ISO 14644-1   |
| Inner working size | W 1800 x D 600 x H 600 mm<br>(6 x 2 x 2 Feet)   |
| Over all dimension | W 1900 X D 750 X H 2050 mm, approx including removable type support stand   |
| Support stand      | under-bench support-stand made of heavy duty square pipes- MS with PU coated finish or IS 304 SS respectively   |
| Particle Retention | 0.3 Micron & Above  |
| Noise Level        | 60 decibel on "A" scale ± 5   |
| Inflow Velocity    | 100 FPM ± 20  |
| Downflow Velocity  | 80 FPM ± 20   |
| Work table         | Removable type tabletop, made of perforated IS 304 Grade SS with satin finished, underneath provided with drain-pan to collect & dispose of liquid wastes. The front edge of the working table is curve finished and perforated for comfortable arm resting |
| Front door         | Made of clear 5 mm Polycarbonate sheet - vertical sliding, while opening the door UV Lamp will be cut "OFF" and while closing   |

**Product Code CBS 1800 A2**



|                                  |   |
|----------------------------------|---|
|                                  | the door UV Lamp will be "ON" automatically.  |
| Side Panels                      | Both the sidewalls are made from double layered outer GI & inner stainless steel or Both in Stainless Steel respectively with return-air plenum in between  |
| U V lamp                         | 3 Feet, 30 Watts, Make - PHILIPS: 1 Nos   |
| Illumination                     | 4 Feet, Watts LED tubes: 1 Nos  |
| Pressure ( $\Delta P$ )          | Digital Display Gauge   |
| ON/OFF Controls:                 | Soft touch switch pads provided for blower, UV & Daylight lamp  |
| Power Supply                     | 230V, Single phase, 50 Hz   |
| HEPA Filter Supply Air & Exhaust | Media: Ultra clean glass fiber paper - imported; Type: Mini-Pleated constructions; Retention: 0.3 Micron; Efficiency: 99.97%; Pressure drop :12 mm WG; Grade: H14 rating  |
| PRE Filter                       | Synthetic, non-woven polyester fibers with protective mesh and deep-comb formed into PU coated GI casing. IPD 6mm, Particle Retention: 5 Micron. Efficiency: 95 %.  |
| Material of construction         | The Cabinet made from Galvanized Iron 18 SWG sheet metal with polyurethane paint coated finish (or) The Complete Cabinet in IS 304 grade SS construction with satin finish  |
| Supply Air Blower                | Outer rotor type motor blower, which consists of dynamically & statically balanced aluminum centrifugal impeller driven by Single phase motor, enclosed in a PU coated GI casing & directly connected to the filter chamber inside the cabinet. |
| Exhaust Duct:                    | The exhaust air will be sending out through an exhaust duct made of 150/200 mm dia PVC pipe up to 10 feet length. Suitable canopy will be provided at the end of the duct.  |

**Airflow Pattern**



|                       |  |  |   |              |   |                     |   |                              |   |                    |   |            |   |          |   |           |   |                            |   |                |    |           |    |                 |
|-----------------------|--|--|---|--------------|---|---------------------|---|------------------------------|---|--------------------|---|------------|---|----------|---|-----------|---|----------------------------|---|----------------|----|-----------|----|-----------------|
| Standard accessories  | 5A power point, power chord with 5 amps plug top, floor leveling screws, castors & gas inlet,  | <p style="text-align: center;"><b>Schematic Drawing</b></p>  |   |              |   |                     |   |                              |   |                    |   |            |   |          |   |           |   |                            |   |                |    |           |    |                 |
| Standards compliance  | US FED STD 209 E, ISO 14644-1, IEST-RP-CC-002-2  |  |   |              |   |                     |   |                              |   |                    |   |            |   |          |   |           |   |                            |   |                |    |           |    |                 |
| Weight before packing | Approximate 185 KG   |  |   |              |   |                     |   |                              |   |                    |   |            |   |          |   |           |   |                            |   |                |    |           |    |                 |
| Weight after packing  | Approximate 280 KG if packed in full wooden crate box  |  |   |              |   |                     |   |                              |   |                    |   |            |   |          |   |           |   |                            |   |                |    |           |    |                 |
| Special Features      | <p>31. Vertical corners are coving finished; for easy cleaning</p> <p>32. Working table is removal type for easy cleaning</p> <p>33. Waste liquid collection tray – underneath worktable – for easy dispose off</p> <p>34. Cabinet will be supplied with chemically treated and SS armrest</p> |  |   |              |   |                     |   |                              |   |                    |   |            |   |          |   |           |   |                            |   |                |    |           |    |                 |
| Optional if required  | <p>35. Motorized Door</p> <p>36. LCD Display with feather touch switch control displaying following contents ON/OFF, Blower, LED, UV Plug, Settings, Alarm off</p> <p>37. UV Hour Meter</p> <p>38. Virus Burn Out</p>  |  |   |              |   |                     |   |                              |   |                    |   |            |   |          |   |           |   |                            |   |                |    |           |    |                 |
|                       |  | <p style="text-align: center;"><b>LEGENDS</b></p> <table border="1"> <tr><td>1</td><td>EXHAUST VENT</td></tr> <tr><td>2</td><td>EXHAUST HEPA FILTER</td></tr> <tr><td>3</td><td>SUPPLY MOTOR BLOWER ASSEMBLY</td></tr> <tr><td>4</td><td>SUPPLY HEPA FILTER</td></tr> <tr><td>5</td><td>PRE FILTER</td></tr> <tr><td>6</td><td>UV LIGHT</td></tr> <tr><td>7</td><td>DAY LIGHT</td></tr> <tr><td>8</td><td>MICRO PROCESSOR CONTROLLER</td></tr> <tr><td>9</td><td>P C SHEET DOOR</td></tr> <tr><td>10</td><td>HAND REST</td></tr> <tr><td>11</td><td>LEVELING SCREWS</td></tr> </table> | 1 | EXHAUST VENT | 2 | EXHAUST HEPA FILTER | 3 | SUPPLY MOTOR BLOWER ASSEMBLY | 4 | SUPPLY HEPA FILTER | 5 | PRE FILTER | 6 | UV LIGHT | 7 | DAY LIGHT | 8 | MICRO PROCESSOR CONTROLLER | 9 | P C SHEET DOOR | 10 | HAND REST | 11 | LEVELING SCREWS |
| 1                     | EXHAUST VENT   |  |   |              |   |                     |   |                              |   |                    |   |            |   |          |   |           |   |                            |   |                |    |           |    |                 |
| 2                     | EXHAUST HEPA FILTER  |  |   |              |   |                     |   |                              |   |                    |   |            |   |          |   |           |   |                            |   |                |    |           |    |                 |
| 3                     | SUPPLY MOTOR BLOWER ASSEMBLY   |  |   |              |   |                     |   |                              |   |                    |   |            |   |          |   |           |   |                            |   |                |    |           |    |                 |
| 4                     | SUPPLY HEPA FILTER   |  |   |              |   |                     |   |                              |   |                    |   |            |   |          |   |           |   |                            |   |                |    |           |    |                 |
| 5                     | PRE FILTER   |  |   |              |   |                     |   |                              |   |                    |   |            |   |          |   |           |   |                            |   |                |    |           |    |                 |
| 6                     | UV LIGHT   |  |   |              |   |                     |   |                              |   |                    |   |            |   |          |   |           |   |                            |   |                |    |           |    |                 |
| 7                     | DAY LIGHT  |  |   |              |   |                     |   |                              |   |                    |   |            |   |          |   |           |   |                            |   |                |    |           |    |                 |
| 8                     | MICRO PROCESSOR CONTROLLER   |  |   |              |   |                     |   |                              |   |                    |   |            |   |          |   |           |   |                            |   |                |    |           |    |                 |
| 9                     | P C SHEET DOOR   |  |   |              |   |                     |   |                              |   |                    |   |            |   |          |   |           |   |                            |   |                |    |           |    |                 |
| 10                    | HAND REST  |  |   |              |   |                     |   |                              |   |                    |   |            |   |          |   |           |   |                            |   |                |    |           |    |                 |
| 11                    | LEVELING SCREWS  |  |   |              |   |                     |   |                              |   |                    |   |            |   |          |   |           |   |                            |   |                |    |           |    |                 |

**CLEAN AIR SYSTEMS is an ISO 9001-2015 certified company & our products are CE certified**

**NSIC: NSIC/BO(G)/GP/253/2011 UAN: TN02B0098373 CE CERTIFICATION No: CE-1124**

**Contact: No 4, Senthil Nagar, 100 Feet Road, Arumbakkam, Chennai – 600 106 Ph: 044-2362 1476**

Mob: +91 9841074504 Whatsapp: +919551119111 Website: [www.cleanairindia.com](http://www.cleanairindia.com)



**Cleanair® Bio Safety Cabinet Class II Type B2 (CBS 1800 B2)**

Cleanair® Vertical Laminar Flow Class II Type B2 Biohazard Safety Cabinets provide personnel, product, and environmental protection. Laminar airflow enclosures with High Efficiency Particulate Air (HEPA) filtration of exhaust air and an air barrier at the work opening. HEPA-filtered Vertical laminar airflow, which is discharged to the work zone, creates an ultra-clean work environment for product protection. An air barrier between the operator and the work zone is maintained by a flow of room air into a full width grille in the work opening. The barrier air mixes with the laminar flow air in a sump underneath the work surface, and is exhausted to the outside environment via a HEPA filter. To contain potentially hazardous aerosols, negative pressure zones surround all the positive pressure zones and Filter sealing.

|                    |   |
|--------------------|---|
| Product Code       | CBS 1800 B2   |
| Air flow pattern   | Vertical - Unidirectional, 100% exhaust and 0% recirculation  |
| Air Cleanliness    | CLASS 100 as per US FED STD 209 E or CLASS 5 as per ISO 14644-1   |
| Inner working size | W 1800 x D 600 x H 600 mm<br>(6 x 2 x 2 Feet)   |
| Over all dimension | W 1880 X D 750 X H 2050 mm including support stand  |
| Support stand      | under-bench support-stand made of heavy duty square pipes- MS with PU coated finish or IS 304 SS respectively   |
| Particle Retention | 0.3 Micron & Above  |
| Noise Level        | 65 decibel on "A" scale ± 5   |
| Velocity           | 90 FPM ± 20   |
| Work table         | Removable type tabletop, made of perforated IS 304 Grade SS with satin finished, underneath provided with drain-pan to collect & dispose of liquid wastes. The front edge of the working table is curve finished and perforated for comfortable arm resting |
| Front door         | Made of clear 5 mm Polycarbonate sheet - vertical sliding, while opening the door UV Lamp will be cut "OFF" and while closing the door UV Lamp will be "ON" automatically.  |

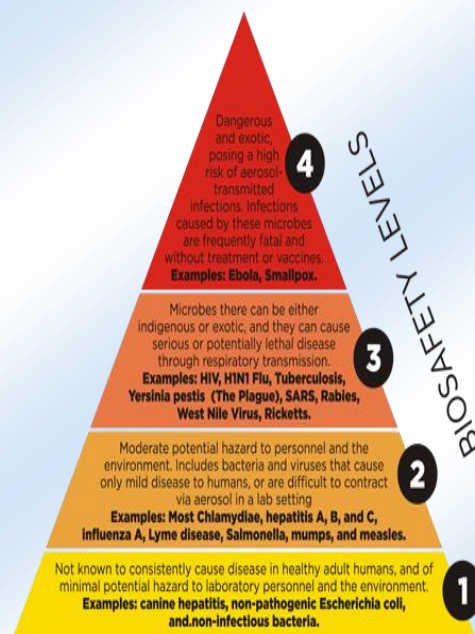
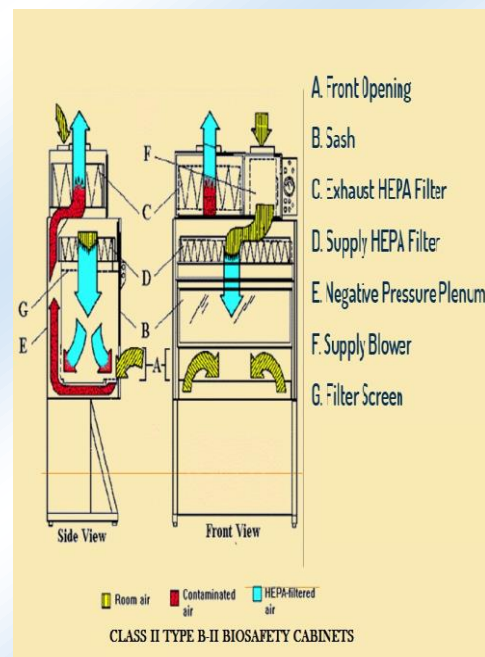
**Product Code CBS 1800 B2**





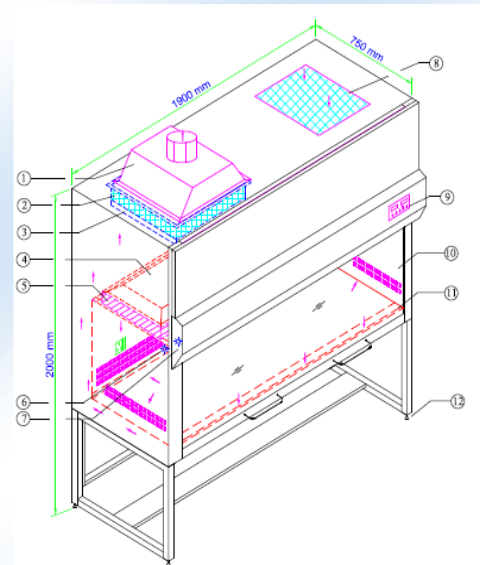
|                                  |  |
|----------------------------------|--|
| Side Panels                      | Both the sidewalls are made from double layered outer GI & inner stainless steel or Both in Stainless Steel respectively with return-air plenum in between Edges are perforated to avoid entry of room air into the work zone and exit of contaminated air in to the room and such contaminated air is sucked through this full height perforation at the edges of the sidewalls |
| U V lamp                         | 3 Feet, 30 Watts, Make – PHILIPS: 1 Nos  |
| Illumination                     | 4 Feet, LED tubes: 1 Nos   |
| Pressure ( $\Delta P$ )          | Digital Display Gauge  |
| ON/OFF Controls:                 | Soft touch switch pads provided for blower, UV & Daylight lamp   |
| Power Supply                     | 230V, Single phase, 50 Hz  |
| HEPA Filter Supply Air & Exhaust | Media: Ultra clean glass fiber paper – imported; Type: Mini-Pleated constructions; Retention: 0.3 Micron; Efficiency 99.97%; Pressure drop :12 mm WG; Grade: H14 rating  |
| PRE Filter                       | Synthetic, non-woven polyester fibers with protective mesh and deep-comb formed into PU coated GI casing. IPD 6mm, Particle Retention: 10-15 Micron. Efficiency: 90 %.   |
| Material of construction         | The Cabinet made from Galvanized Iron 18 SWG sheet metal with polyurethane paint coated finish (or) The Complete Cabinet in IS 304 grade SS construction with satin finish   |
| Supply Air Blower                | Outer rotor type motor blower, which consists of dynamically & statically balanced aluminum centrifugal impeller driven by Single phase motor, enclosed in a PU coated GI casing & directly connected to the filter chamber inside the cabinet.  |
| Exhaust Blower                   | Having a displacing capacity of 1360 CMH at a static of 40 mm WG and made of mild steel and directly driven by   |

### Airflow Pattern



|                       |  |
|-----------------------|--|
|                       | Single phase, 1440-RPM motor are provided  |
| Exhaust Duct:         | The exhaust air will be sending out through an exhaust duct made of 150/200 mm dia PVC pipe up to 10 feet length. Suitable canopy will be provided at the end of the duct.   |
| Standard accessories  | 5A power point, power chord with 5 amps plug top, floor leveling screws, castors & gas inlet,  |
| Standards compliance  | US FED STD 209 E, ISO 14644-1, IEST-RP-CC-002-2  |
| Weight before packing | Approximate 250 KG   |
| Weight after packing  | Approximate 400 KG if packed in full wooden crate box  |
| Special Features      | <p>39. Vertical corners are coving finished; for easy cleaning</p> <p>40. Working table is removal type for easy cleaning</p> <p>41. Waste liquid collection tray – underneath worktable – for easy dispose off</p> <p>42. Cabinet will be supplied with chemically treated and SS armrest</p> |
| Optional if required  | <p>43. Motorized Door</p> <p>44. LCD Display with feather touch switch control displaying following contents ON/OFF, Blower, LED, UV Plug, Settings, Alarm off</p> <p>45. UV Hour Meter</p> <p>46. Virus Burn Out</p>  |

**Schematic Drawing**



**LEGENDS**

|    |                               |
|----|-------------------------------|
| 1  | EXHAUST VENT                  |
| 2  | EXHAUST HEPA FILTER           |
| 3  | EXHAUST MOTOR BLOWER ASSEMBLY |
| 4  | SUPPLY MOTOR BLOWER ASSEMBLY  |
| 5  | SUPPLY HEPA FILTER            |
| 6  | UV LIGHT                      |
| 7  | DAY LIGHT                     |
| 8  | PRE FILTER                    |
| 9  | MICRO PROCESSER CONTROLER     |
| 10 | P C SHEET DOOR                |
| 11 | HAND REST                     |
| 12 | LEVELING SCREWS               |

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