MICROVOID® 4F-55 LAMINAR FLOW FUME HOOD

The Microvoid@ Model 4F-55 Vertical Laminar Flow Clean Air Work Stations with exhaust capability are ideal for the laboratory or the production line and are being used for a myriad of etching and cleaning operations throughout the electronic and pharmaceutical industries. They provide outstanding resistance to corrosion from the strongest acids, bases and most organic solvents. The 4F-55 provides ultra-clean conditions for critical processes and provides effective protection for operators from hazardous fumes.

The standard design offers full eye protection for operators and continuous, easy access to the hood interior, while meeting OSHA, ASHRAE 110-1995, and SEFA 1-2002 exhaust requirements.

- Class 100 or cleaner Laminar Air Flow
- Wet process capability
- Counter-weighted full closure sash
- Construction options:
  Polypropylene
  Corzan (FM4910)
  CP7D
  Stainless Steel
- Safety Features:
  Full exhaust capability
  Exhaust failure system
  Emergency power off
  Secondary containment

Polypropylene non-metalic model used for trace metals analysis.

Microvoid® Model 4F-55 Vertical Laminar Flow Work Station Product specifications:

- All polypropylene construction, in 3/8 and 1/2 inch white stress-relieved material.
- 4, 6, and 8 feet wide (optional other sizes available), 36 inches deep, and 81 inches high overall.
- Backward curved, energy efficient motorized impeller/blower(s) to maintain air velocity of 90 lfm ± 20% with solid state variable speed control.
- Front removable final HEPA filter, 99.99% efficient on particles 0.3 micron diameter or greater, to provide Class 100 laminar flow clean air (Fed. Std. 209E). HEPA filter size 24 inches deep x 3-1/16 inches high x width to fit unit width.
- Top located prefilter(s), non-woven polyester and cotton-blended media, disposable, 16 x 20 x 1 inches.
- Minihelic pressure gauge installed to monitor HEPA filter(s) loading.
- Solid polypropylene work surface located at 35 inches from the floor, 32 inches deep with 1 inch drip lip to prevent spills to the floor.
- Across the work surface exhaust with adjustable louvered shutters and a rear located exhaust plenum terminating in 4 x 24 inch rectangular stacks with optional round collar(s).
- Various exhaust transition stacks may be customized.
- Photohelic exhaust failure electrical system and intake blower shut-down, with manual reset.
- Emergency power off with red mushroom button, manual reset.
- Base cabinet vented storage area behind hinged polypropylene access doors. Base includes a leak-tight floor.
- Self-contained white fluorescent lighting in a flow-through compartment, switch on instrument panel and plastic diffuser installed under lights.
- Counterweight vertical sliding eyeshield, acrylic construction, full closure.
- Plumbing and electrical termination at rear of unit.
- Fume hood height, eyeshield dinlensions, and access opening height are chosen for comfortable standup operation with full eye protection by the taller 80% of all adult females or the shorter 50% of all adult males, according to anthropometric tables.
- A full-length tub beneath a perforated work surface, or lip exhausted etch tanks. The tub is bottom sloped toward a 1-1/2 inch drain plumbed to the rear with

The Microvoid® 4F-55 Laminar Flow Fume Hood is custom manufactured to your specifications, yet priced as a standard unit.

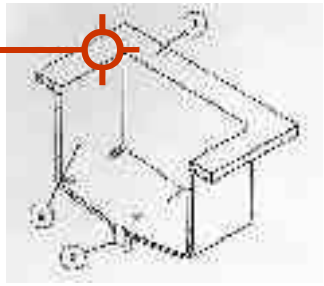
Air Control is prepared to work with your engineers to specify completely instrumented semi-automated systems, matched to their present process and adaptable to their future process. An investment in a Microvoid® is truly an investment in the future.

Below are just some of the options that can be incorporated into your Microvoid® 4F-55 Laminar Flow Fume Hood:

Control panel located to your specifications.

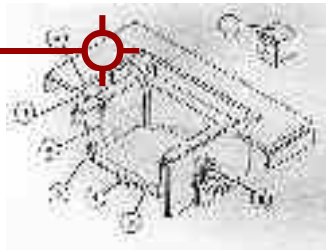
The 4F-55 can feature a full-length tub beneath a work surface tailored to your process.

Options and Accessories



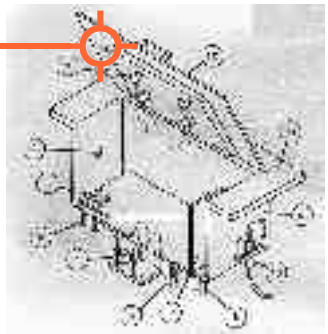
General Purpose Polypro Sink – T-995

1. Work surface segment 1/2” thick.
2. Fabricated from 1/4” white polypropylene. Formed tank bottom sloped to center drain, insures easy cleaning and complete drainage.
3. 1” drain.
4. Any size available.



Etch Tank–High Temperature to 200° C – T921

1. Digital readout temperature controller with proportional control, accuracy of ± 0.25% of span.
2. Cut out in work surface.
3. Lip exhaust
4. Teflon sleeved thermocouple.
5. Molded P.F.A. teflon tank.
5. Drain (optional).
6. Bottom located teflon encapsulated immersion heater.
7. Liquid level sensor and heater cut-off



Mult-Wash System with Transparent Lid – T985

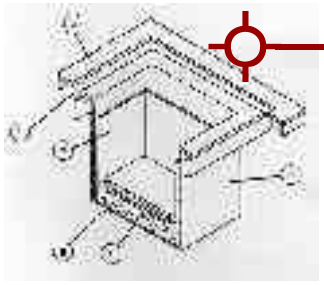
1. Spray nozzels.
2. Low flow DI reclaim port.
3. Perforated stand-off shelf.
4. DI water inlet fast/slow flow.
5. Pneumatic quick dump valve.
6. Nitrogen inlet for agitation.
7. Overflow weir.
8. Tank drain.
9. Fabricated from 1/4” white polypropylene with formed tank bottom.
10. Resistivity probe (optional).
11. Work surface segment 1/2” thick.

Options and Accessories

The 4F-55 installed in a Class 100 clean room with Air Control polyproLABS® casework.

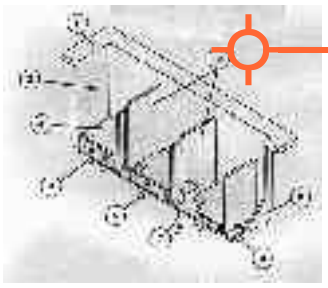
- Non-metalic construction for trace metals analysis.
- Process baths.
- Sinks and rinse tanks.
- DI Loop systems.
- Glassware drying racks.
- Hot plates.
- DI, gas and electrical fixtures.
- Aspirators and drain carboys.
- Class 100 ULPA filters.
- Ionizers.
- Fire supression.
- UL listing.

See www.AirControl-Inc.com for more options and accessories.



Hot Plate Well – T-950

1. Lip exhaust (optional).
2. Work surface segment 1/2” thick.
3. Replaceable radiant heat baffle.
4. Open bottom drain (tub units only).
5. Hot plate with remote controls.
6. Fabricated from 1/4” white flame retardant polypropylene.

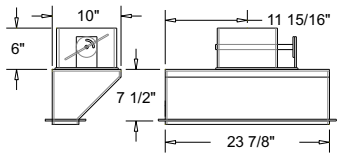


Cascade Rinse Tank – T-980

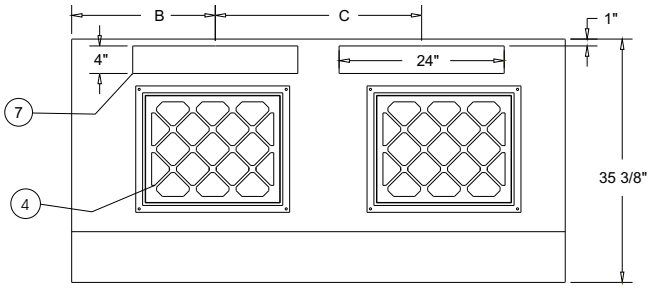
1. Work surface segment 1/2” thick.
2. Double weir configuration.
3. Low flow DI reclaim port (optional).
4. Perforated stand-off shelf.
5. DI water inlet fast/slow flow.
6. Nitrogen inlet for agitation typical (3) compartments.
7. Resistivity probe (optional).
8. Overflow drain.
9. Fabricated from 1/4” white polypropylene with formed tank bottom.

Acid Recirculating Filtration System – T-925

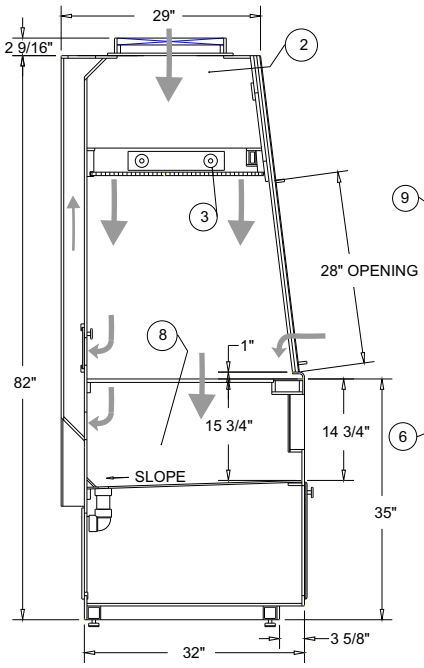
1. Process tank.
2. Overflow weir.
3. Tank drain.
4. Inlet.
5. Storage tank.
6. Fill cap.
7. Ball valve to drain storage tank.
8. Removable cover.
9. Pump.
10. Vent to exhaust system.
11. Filter housing.
12. Storage tank drain.
13. Three-way ball valve.



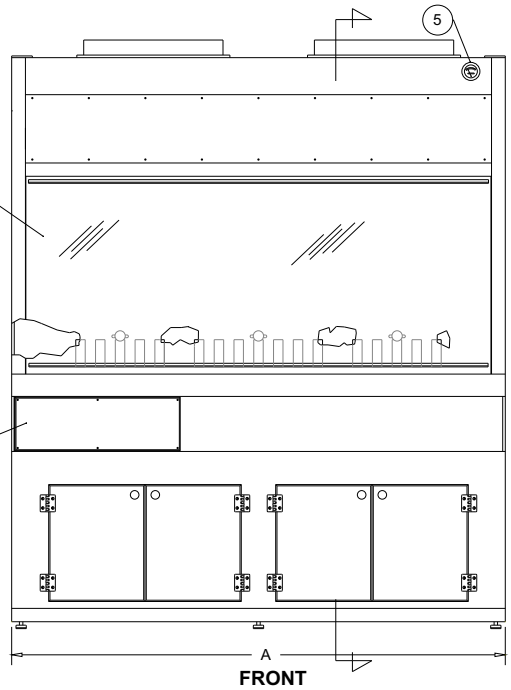
EXHAUST TRANSITION
(OPTIONAL)



TOP



SECTION



FRONT

NOTES:

1. STANDARD MATERIAL WHITE STRESS RELIEVED POLYPROPYLENE.
2. BLOWER/ HEPA FILTER PLENUM
3. HIGH OUTPUT FLUORESCENT LIGHT FIXTURE.
4. DROP IN 16" X 20" X 1" PLEATED PREFILTERS.
5. MINIHELIC PRESSURE GAUGE.
6. ELECTRICAL CONTROL PANEL
7. EXHAUST CONNECTION
8. SUB-PLENUM/TUB
9. CLEAR ACRYLIC SLIDING COUNTERWEIGHT SASH.
10. PERFORATED WORK SURFACE

WIDTH	A	B	C	Exhaust Connection	Exhaust (cfm)
4 FT.	53 1/4"	26 5/8"	__	4" x 24"	865
5 FT.	59 3/4"	28 7/8"	__	4" x 24"	1080
6 FT.	71 3/4"	20 7/8"	30"	(2)4" x 24"	1295
8 FT.	101 3/4"	26 5/8"	48 1/2"	(2)4" x 24"	1730
10 FT.	120 1/4"	30 1/8"	60 7/8"	(2)4" x 24"	2160

AIR CONTROL, INC.
237 RALEIGH ROAD, HENDERSON, NC 27536

SCALE	ENGINEER APPRV.	REV.	DRAWN BY: BDR
		DATE	DATE 12/10/01

NAME: MICROVOID MODEL 4F-55-PP — PAGE

CUSTOMER	JOB NO.	DWG. NO.
CUST. PO. NO.		

makes air clean

AIR CONTROL, INC.

P.O. Box 1738
237 Raleigh Road
Henderson, NC 27536, USA
252 · 492 · 2300 TEL / 252 · 492 · 9225 FAX

www.AirControl-Inc.com