

Low Profile Energy Efficient Fine Tuned Air Flow

SAM MicroSound Fan Filter Units include a 99.99% efficient HEPA filter, 30% ASHRAE pleated type prefilter, seismic clip suspension points, safety switch which disables the unit while servicing, and solid state variable speed control with RFI suppression, allowing the airflow to be fine tuned.

Housings are fabricated from steel with a white powdercoat finish and include seismic clip suspension points.

The energy efficient N310 motor blower is a low watt backward curved impeller, single phase, permanent split capacitor type motor blower assembly with thermal overload protection. Units are available in 115 Volt (60 Hz), 208-230 Volt (50/60 Hz) and 277 Volt (60 Hz).

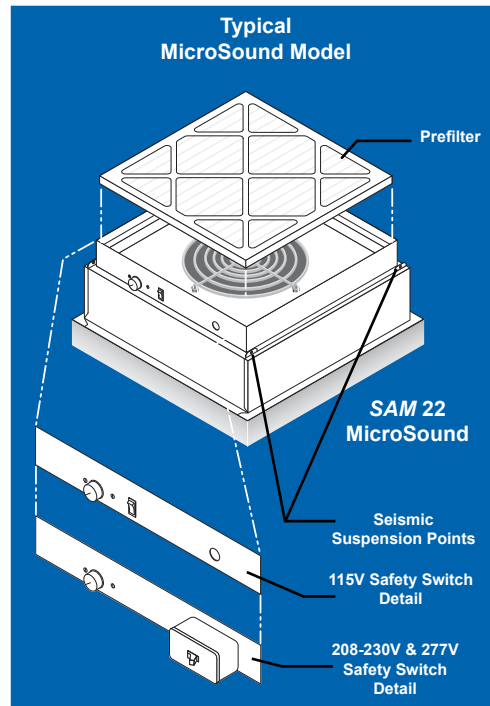
Final filters are protected with a white epoxy diamond pattern grille and are tested according to accepted procedures as described by the Institute of Environmental Sciences (IEST) and/or ISO standards. The standard HEPA filter is 99.99% eff. and an ULPA grade 99.9995% eff. filter is available as an option.

Other popular options include an 8' power cord (115 Volt only), 99.9995% eff. ULPA grade final filter, UL 900 filters and duct collar adapters. Refer to the back of this section for more options and accessories.

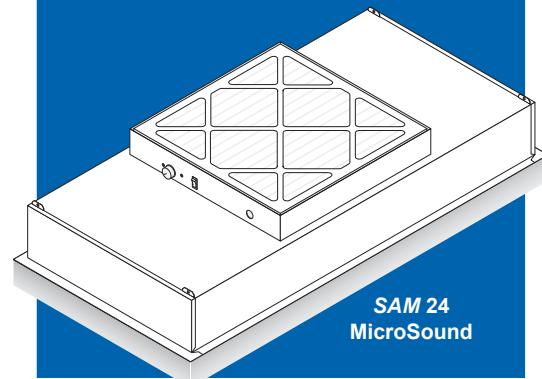
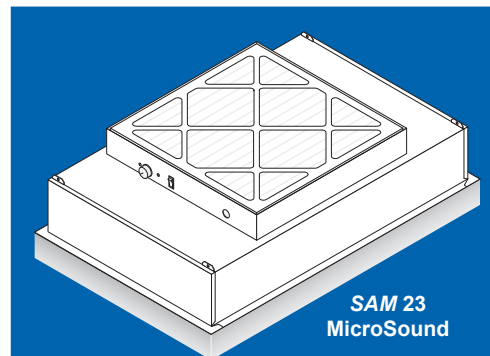
For horizontal flow applications consult with one of our cleanroom experts in your area, or call the factory for more information.

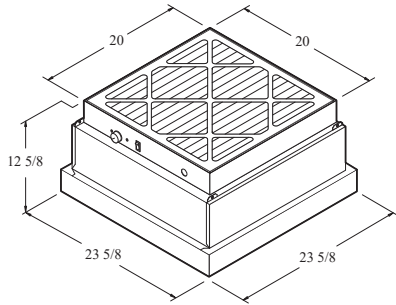


SAM is a registered trademark owned by Clean Rooms International

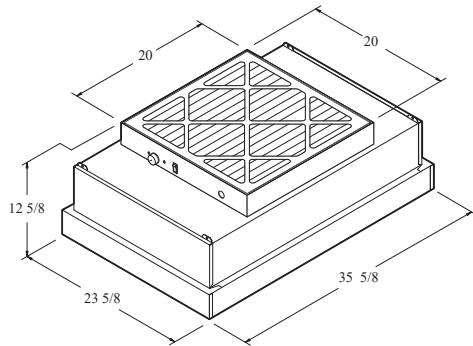


- **Energy Efficient Motor:** Operating Amps Low As .6 For 277 Volt And 1.6 For 115 Volt
- **Safety Switch:** Disables Unit While Servicing
- **Variable Speed Control:** Allows Air Flow To Be Fine Tuned For Room Requirements

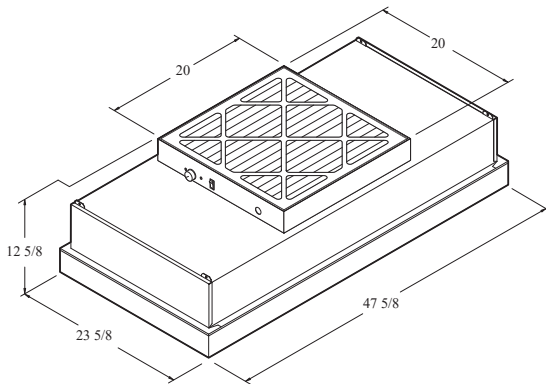




SAM 22 MicroSound



SAM 23 MicroSound



SAM 24 MicroSound

NCR Style Filter Data: The HEPA Filters are designed for 90 FPM average face velocity @ initial 0.47 w.g. and have a rated efficiency of 99.99% @ 0.3 micron or larger. An anodized aluminum frame holds the 53mm media which is protected by a diamond pattern white epoxy coated steel grille.

Final filters can be replaced by removing unit from ceiling, placing on a bench, removing and replacing the filter and re-installing unit in ceiling.

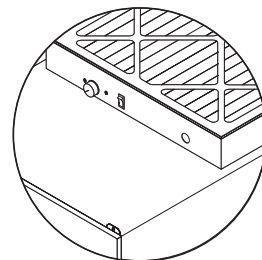
Low Profile: All SAM MicroSound NCR Style Models are 12-5/8" high.

Standard Ceiling Size: All 2' x 4' models are designed to fit a nominal 2' x 4' ceiling grid with a 22.5" x 46.5" standard opening.

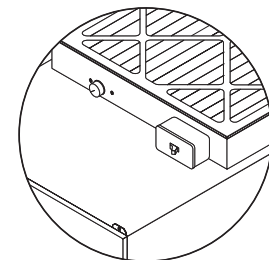
Air Flow: Airflow ranges from 400 to 750 CFM for a 2 x 4 unit and 250 to 400 CFM for a 2 x 2 unit. At 90 FPM, CFM is nominal 632 on a 2 x 4 and 300 on a 2 x 2 unit respectively. Airflow for units running at 50 Hz will be about 20% less.

Sound Level: At average face velocity of 90 FPM measured 30" from face of filter, sound level is approximately 54 dba with less than 45 dba ambient sound level. Field conditions, voltage and method of testing could produce different results.

Popular Options: Refer to next page for a list of popular options.



**Safety Switch Detail
115V**



**Safety Switch Detail
208-230/277V**

Motor Data					
Motor	Voltage	Hz	Watts	Running Amps	Start-Up Amps
N310	115	60	185	1.6	4.1
N310	208-230	50/60	165	0.8-0.7 ⁽¹⁾	1.5 ⁽²⁾
N310	277	60	165	.6	1.5
(1) Running amps will be less on 50Hz					
(2) Line voltage can affect actual start-up amperage					

Replacement Filters	
Mfg. Code	Description
302070	2 x 2 NCR Style HEPA Filter, 99.99% eff. @ 0.3 micron
302071	2 x 2 NCR Style ULPA Filter, 99.9995% eff. @ 0.12 micron
302013	2 x 3 NCR Style HEPA Filter, 99.99% eff. @ 0.3 micron
302015	2 x 3 NCR Style ULPA Filter, 99.9995% eff. @ 0.12 micron
302090	2 x 4 NCR Style HEPA Filter, 99.99% eff. @ 0.3 micron
302100	2 x 4 NCR Style ULPA Filter, 99.9995% eff. @ 0.12 micron
302190	Prefilter 20" x 20" x 1", 30% ASHRAE efficient, pleated type

Base Model (Ordering Information)								
Mfg. Code	Model or Description	Style	Size	Voltage	Motor	Variable Speed Control	HEPA Filter	Weight
12100*	SAM 22 MS NCR	NCR	2 x 2	115	N310	703084	302070	53 lbs. (24.0 kg.)
12101	SAM 22 MS NCR	NCR	2 x 2	208-230	N310	703912	302070	53 lbs. (24.0 kg.)
12102*	SAM 22 MS NCR	NCR	2 x 2	277	N310	703915	302070	53 lbs. (24.0 kg.)
12150*	SAM 23 MS NCR	NCR	2 x 3	115	N310	703084	302013	57 lbs. (25.9 kg.)
12251	SAM 23 MS NCR	NCR	2 x 3	208-230	N310	703912	302013	57 lbs. (25.9 kg.)
12252*	SAM 23 MS NCR	NCR	2 x 3	277	N310	703915	302013	57 lbs. (25.9 kg.)
12261*	SAM 24 MS NCR	NCR	2 x 4	115	N310	703084	302090	60 lbs. (27.2 kg.)
12262	SAM 24 MS NCR	NCR	2 x 4	208-230	N310	703912	302090	60 lbs. (27.2 kg.)
12263*	SAM 24 MS NCR	NCR	2 x 4	277	N310	703915	302090	60 lbs. (27.2 kg.)

* UL Listed
 Prefilter and Safety Switch are Standard on all Models