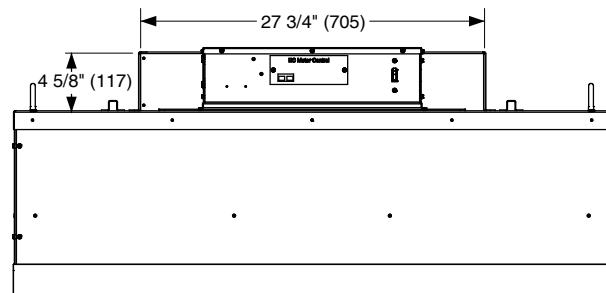
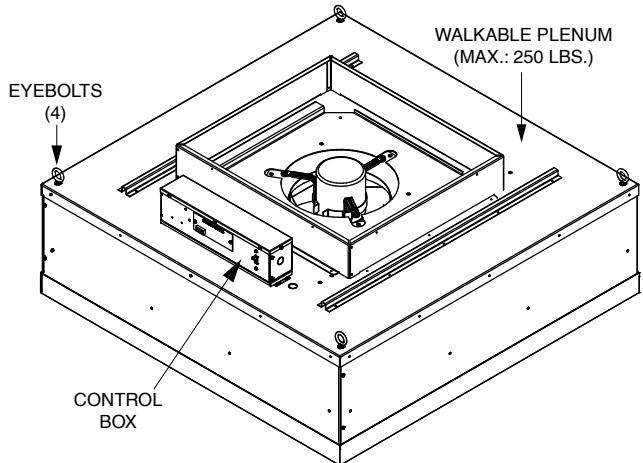
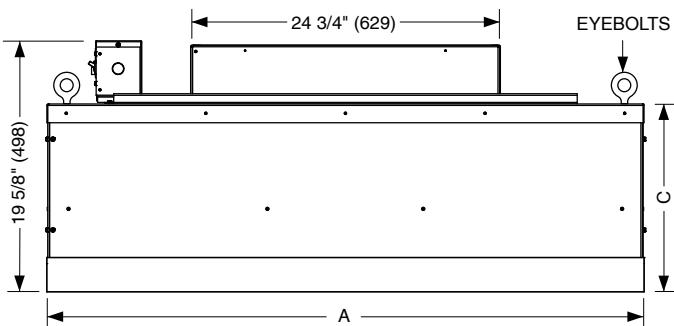




**FAN FILTER UNIT • CRITICAL ENVIRONMENT**  
**APPLICATIONS • ALUMINUM FRAME AND PLENUM**  
**ECM • HEPA / ULPA FILTER**  
**MODEL: 92FFU 48 x 48 MODULE**



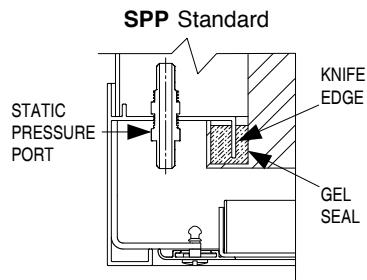
#### DIMENSIONAL DATA

Ceiling Module Size	Unit Measurements			Optional Round Duct Sizes D	Weight
	Imperial Modules	A	B		
48 x 48	47 11/16 (1211)	47 11/16 (1211)	14 7/8 (378)	12 (305) 14 (356) 16 (402)	150lbs (68kg)

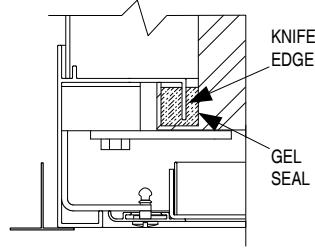
The 48 x 48 (1219 x 1219) module is only available with the Type L frame. Grid module must be extended by 1/2" for 2" T-bar grids.

#### DESCRIPTION:

Nailor 92FFU Fan Filter Units have been designed to supply HEPA/ULPA filtered air to a cleanroom environment in a very efficient manner. The larger 48" x 48" sized unit is supplied in a backward curved configuration wheel on a constant torque programmed motor. The larger size makes the unit more cost effective as it will involve less parts for installation, simplify electronic connections to other units and provide the largest amount of surface area for airflow. The units are intended for use in cleanroom applications such as microelectronics, pharmaceutical, biotechnology as well as aerospace manufacturing/assembly and laser/optic industries. All 92FFU series consist of an aluminum welded plenum and fan/motor assembly to ensure a repeatable, rigid, clean and near leak free design, meeting the most stringent of current leak tests. ECM technology provides an ultra-energy efficient design. Filters are secured within the plenum against a continuous knife edge that contacts the gel channel of the filter, providing a leak proof seal. Filters are protected by a perforated hinged face held close by quarter turn fasteners.



#### TYPE L Lay-in T-Bar Detail



Page 1 of 2

Dimensions are in inches (mm).

<b>SCHEDULE TYPE:</b>			
<b>PROJECT:</b>			
<b>ENGINEER:</b>		<b>DATE</b>	<b>B SERIES</b>
<b>CONTRACTOR:</b>		12 - 1 - 25	<b>SUPERSEDES</b>
		9200	<b>NEW</b>
			<b>DRAWING NO.</b>
			92FFU-2



**FAN FILTER UNIT • CRITICAL ENVIRONMENT**  
**APPLICATIONS • ALUMINUM FRAME AND PLENUM**  
**ECM • HEPA / ULPA FILTER**  
**MODEL: 92FFU 48 x 48 MODULE**



**STANDARD FEATURES:**

1. Aluminum frame and perforated face with 3/16" (5) dia. holes on 60° 1/4" (6) staggered centers (51% free area). The face plate is removable for cleaning, filter replacement, and is secured by 8 bolt fasteners.
2. Standard safety cables prevent accidental dropping of removable face.
3. Internal fiber free insulation to reduce sound levels.
4. Eyebolts for ceiling suspension.
5. Plenum and face in Appliance White paint finish.
6. High efficiency EC motor (ECM), single phase, 1/2HP, 60Hz at 24V.
7. Face accessible 3/8" (10) diameter SPP/PAO sample port.
8. QF Toggle disconnect switch.

9. Roomside removable HEPA filter (2" media) (99.99% on 0.3  $\mu\text{m}$ ).
10. ETL Listed & Tested to UL 507 Standard.
11. Lay-in T-Bar mounting (Up to 1 1/2" (38) wide)  
2" T-Bar must be on 48 1/2" (1232) O.C. modules.
12. MERV 8 pre-filter. (Standard for non-ducted applications.)
13. Standalone Universal Control Card (UCC)  
- Manual Mode: Onboard trim potentiometer adjustment  
- Analog Mode: 0 – 10 VDC Input  
- Network Mode: Modbus RTU
14. Open plenum square inlet.
15. Topside removable motor/blower.
16. Walkable plenum up to 250 lbs.

**OPTIONS:**

**Ceiling Module Size (inches):**

48 x 48

**Inlet Size (inches):**

12 12" dia. round collar  
 14 14" dia. round collar  
 16 16" dia. round collar

**Fan Wheel Type:**

BC Backward Curved (high eff.)

**Fan Motor Voltage:**

V18 120V ECM, 6.1 FLA  
 V19 208V ECM, 4.2 FLA  
 V20 240V ECM, 4.1 FLA  
 V21 277V ECM, 4 FLA

**EC Motor Program:**

CT Constant Torque (default for BC blower)

**Control:**

LAN Local Area Network (Modbus)

**Motor/Blower Access:**

RTMB Roomside and topside removable

**Filter Efficiency:**

ULP2 ULPA (2" media) (99.9995% on 0.12  $\mu\text{m}$ )  
 NFTR No Filter (order separately)

**Plenum Finish:**

PBW British White  
 PMI Mill

**Face Finish:**

FBW British White  
 FMI Mill

**Pre-Filter:**

NPF No Pre-filter (default for ducted inlet)  
 PF8H MERV 8 w/ side access housing (ducted)  
 PFW Washable  
 PFWH Washable w/side access housing (ducted)

**ACCESSORIES**

**Motor Run Indicator:**

MRI Face mounted LED light (green)

**Loaded Filter Indicator:**

LFI Face mounted LED light (red)

**Continuous Filter Monitoring:**

CFM1 Transducer (Modbus)  
 CFM2 Transducer (0-10 Vdc terminal block)

**PAO Challenge:**

AICP Aerosol Injection Challenge Port (1/2" (13) dia.)

**Mounting Accessory:**

SMFG Surface mount frame w/gasket (ships separately)  
(See separate submittal 92FFU-SMFG)

**Control Option:**

WMK Wall Mount Speed Control Kit  
(one per unit. Standalone)

**SCHEDULE TYPE:**

**PROJECT:**

**ENGINEER:**

**CONTRACTOR:**

Page 2 of 2  
Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
12 - 1 - 25	9200	NEW	92FFU-2