

Note: 92FRP-2 pattern controllers illustrated.

LxW	Imperial Mo	dules (inches)	24 x 24	48 x 24
	Metric Modules (mm)		600 x 600	1200 x 600
	Duct Size	(inches)	8, 10	10, 12
	D	(mm)	203, 254	254, 305

DESCRIPTION:

The Model 92FRP Series has been designed to produce a radial air pattern utilizing a non-intrusive flush perforated face design. The 92FRP-1 produces a one-way 90° pattern. The 92FRP-2 produces a hemispherical 180° pattern. Suitable for pharmaceutical manufacturing, biotechnology research, animal labs, food processing and other clean applications where high airflows with short throws are required.

The design features solid baffles behind a 51% free area perforated face, which maximizes capacity while allowing low initial face velocities. The radial air pattern flushes the critical area underneath the diffuser with large volumes of clean conditioned air, minimizing entrainment and hence mixing with contaminated air.

CONSTRUCTION:

 Extruded aluminum frame and steel perforated face with 3/16" (5) dia. holes on 1/4" (6) staggered centers (51% free area). The face plate is removable for cleaning and is secured by 1/4 turn fasteners.

*Compatible with all T-Bars up to 2" (51) wide.

- 2. Corrosion resistant steel backpan and pattern controllers.
- 3. Standard safety cables prevent accidental dropping of removable face.
- 4. Standard finish is AW Appliance White. BA Appliance White Face/Black backpan and other finishes are available.

OPTIONS:

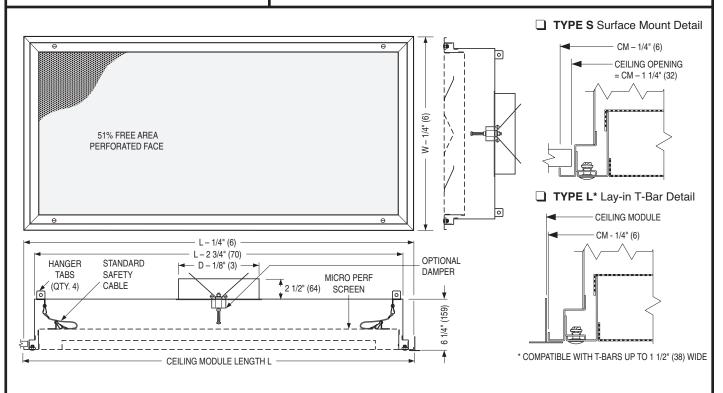
- BD Butterfly damper, coated steel, AW Appliance White finish.
- EX05 0.5" (13) External Foil-Back Fiberglass Insulation.
- □ EX15 1.5" (38) External Foil-Back Fiberglass Insulation, R-4.2.
- Other

ACCESSORIES:

DFA Aluminum Drywall/Plaster Frame. Provides simple easy installation of Type L in hard ceilings. (See submittal dwg. ACC-DFA). Ordered separately.

SCHEDULE TYPE:	Dimensions are in inches (mm).			m)
PROJECT:				
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.
CONTRACTOR:	5 - 11 - 22	9200	10 - 29 - 15	92FRP

RADIAL PATTERN DIFFUSER – FLUSH FACE 90° PATTERN • STAINLESS STEEL CRITICAL ENVIRONMENT APPLICATIONS REMOVABLE PERFORATED FACE MODEL: 92FRP-1SS



Ceiling Module Sizes L x W & Nominal Round Duct Sizes D

Nailor

Industries Inc.

LxW	Imperial Mod	dules (inches)	24 x 24	36 x 24	48 x 24	60 x 24
	Metric Mo	dules (mm)	600 x 600	900 x 600	1200 x 600	1500 x 600
	Duct Size D	(inches)	6, 7, 8, 10	6, 7, 8, 10	7, 8, 10, 12	10, 12
		(mm)	152, 178, 203, 254	152, 178, 203, 254	178, 203, 254, 305	254, 305

DESCRIPTION:

The Model 92FRP-1SS Flush Face Radial Pattern Diffuser has been designed to provide low aspiration at high ventilation rates, especially for clean room applications such as research laboratories, animal labs, food processing, hospital rooms and computer rooms.

The unique baffle design incorporates an internal pressure plate providing large volumes of air at low initial face velocities.

The 92FRP-1SS model introduces air in a 90 degree radial flow pattern for perimeter applications, flushing a room with large volumes of clean conditioned air, minimizing entrainment and hence mixing with contaminated air, while still allowing low room air velocities.

CONSTRUCTION:

- 1. 304 stainless steel frame and perforated face with 3/16" (5) dia. holes on 60 degree 1/4" (6) staggered centers (51% free area). The face plate is removable for cleaning and is secured by 1/4 turn fasteners.
- 2. 304 stainless steel fully welded plenum, perforated pressure plate and baffles.
- 3. Standard safety cables prevent accidental dropping of removable face.
- 4. Standard finish is #4 Brushed Satin Polished.

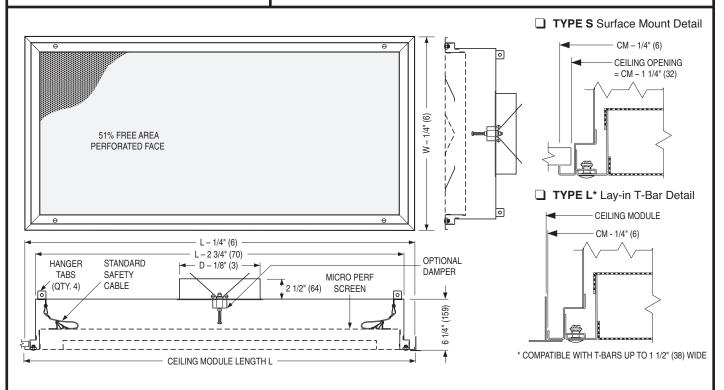
OPTIONS:

- 316 Stainless Steel construction.
- □ BDS Butterfly damper, Stainless Steel (face operated).
- Finish:
- WA 🗆 Appliance White. Special

□ SP

SCHEDULE TYPE:	Dimensions are in inches (mm).			
PROJECT:				
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.
CONTRACTOR:	9 - 2 - 16	9200	12 - 12 - 11	92FRP-1SS

RADIAL PATTERN DIFFUSER – FLUSH FACE 180° PATTERN • STAINLESS STEEL CRITICAL ENVIRONMENT APPLICATIONS REMOVABLE PERFORATED FACE MODEL: 92FRP-2SS



Ceiling Module Sizes L x W & Nominal Round Duct Sizes D

Nailor®

Industries Inc.

LxW	Imperial Mod	dules (inches)	24 x 24	36 x 24	48 x 24	60 x 24
	Metric Mo	dules (mm)	600 x 600	900 x 600	1200 x 600	1500 x 600
	Duct Size D	(inches)	6, 7, 8, 10	6, 7, 8, 10	7, 8, 10, 12	10, 12
	Duct Size D	(mm)	152, 178, 203, 254	152, 178, 203, 254	178, 203, 254, 305	254, 305

DESCRIPTION:

The Model 92FRP-2SS Flush Face Radial Pattern Diffuser has been designed to provide low aspiration at high ventilation rates, especially for clean room applications such as research laboratories, animal labs, food processing, hospital rooms and computer rooms.

The unique baffle design incorporates an internal pressure plate providing large volumes of air at low initial face velocities.

The 92FRP-2SS model introduces air in a semicylindrical 180 degree radial flow pattern, flushing a room with large volumes of clean conditioned air, minimizing entrainment and hence mixing with contaminated air, while still allowing low room air velocities.

CONSTRUCTION:

- 1. 304 stainless steel frame and perforated face with 3/16" (5) dia. holes on 60 degree 1/4" (6) staggered centers (51% free area). The face plate is removable for cleaning and is secured by 1/4 turn fasteners.
- 2. 304 stainless steel fully welded plenum, perforated pressure plate and baffles.
- 3. Standard safety cables prevent accidental dropping of removable face.
- 4. Standard finish is #4 Brushed Satin Polished.

OPTIONS:

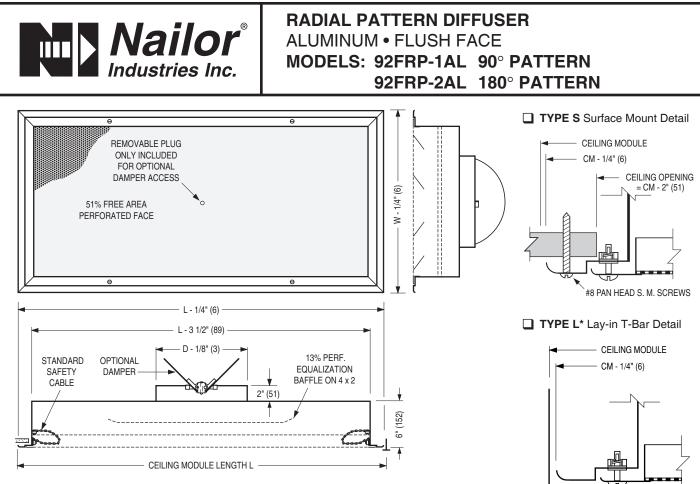
316 Stainless Steel construction.

□ BDS Butterfly damper, Stainless Steel (face operated).

- Finish:
- WA 🗆 Appliance White. Special

□ SP

SCHEDULE TYPE:	Dimensions are in inches (mm).			um)
PROJECT:				
ENGINEER:	DATE B SERIES SUPERSEDES DRAWING N			DRAWING NO.
CONTRACTOR:	9 - 2 - 16	9200	12 - 12 - 11	92FRP-2SS



Note: 92FRP-2AL pattern controllers illustrated.

LxW	Imperial Mo	dules (inches)	24 x 24	48 x 24
	Metric Modules (mm)		600 x 600	1200 x 600
	Duct Size	(inches)	8, 10	10, 12
	D	(mm)	203, 254	254, 305

DESCRIPTION:

The Model 92FRP Series has been designed to produce a radial air pattern utilizing a non-intrusive flush perforated face design. The 92FRP-1AL produces a one-way 90° pattern. The 92FRP-2AL produces a hemispherical 180° pattern. Suitable for pharmaceutical manufacturing, biotechnology research, animal labs, food processing and other clean applications where high airflows with short throws are required.

The design features solid baffles behind a 51% free area perforated face, which maximizes capacity while allowing low initial face velocities. The radial air pattern flushes the critical area underneath the diffuser with large volumes of clean conditioned air, minimizing entrainment and hence mixing with contaminated air.

CONSTRUCTION:

1. Extruded aluminum frame and aluminum perforated face with 3/16" (5) dia. holes on 1/4" (6) staggered centers (51% free area). The face plate is removable for cleaning and is secured by 1/4 turn fasteners.

*Compatible with all T-Bars up to 2" (51) wide.

- 2. Aluminum backpan and pattern controllers.
- 3. Standard safety cables prevent accidental dropping of removable face.
- 4. Standard finish is AW Appliance White. BA Appliance White Face/Black backpan and other finishes are available.

OPTIONS:

Other

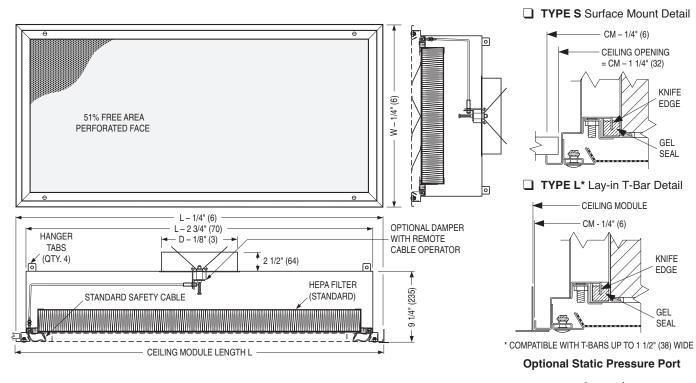
- BD Butterfly damper, coated steel, AW Appliance White finish.
- EX05 0.5" (13) External Foil-Back Fiberglass Insulation.
- □ EX15 1.5" (38) External Foil-Back Fiberglass Insulation, R-4.2.
- SSF Type 304 Stainless Steel Perforated Face.

ACCESSORIES:

DFA Aluminum Drywall/Plaster Frame. Provides simple easy installation of Type L in hard ceilings. (See submittal dwg. ACC-DFA). Ordered separately.

SCHEDULE TYPE:	Dimensions are in inches (mm).			(m)
PROJECT:				
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.
CONTRACTOR:	5 - 11 - 22	9200	10 - 29 - 15	92FRP-AL

RADIAL PATTERN DIFFUSER – FLUSH FACE 90° PATTERN • STAINLESS STEEL • CRITICAL ENVIRONMENT APPLICATIONS • REMOVABLE PERFORATED FACE HEPA OR ULPA FILTER • DOP SCAN TESTED MODEL: 92FRPF–1SS

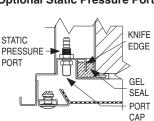


Ceiling Module Sizes L x W & Nominal Round Duct Sizes D

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LxW	Imperial Mo	dules (inches)	24 x 24	36 x 24	48 x 24	60 x 24
	Metric Modules (mm)		600 x 600	900 × 600	1200 x 600	1500 x 600
	Duct Size D	(inches)	6, 7, 8	6, 7, 8, 10	7, 8, 10, 12	10, 12
		(mm)	152, 178, 203	152, 178, 203, 254	178, 203, 254, 305	254, 305



DESCRIPTION:

The Model 92FRPF-1SS Flush Face Radial Pattern Diffuser has been designed to provide low aspiration at high ventilation rates, especially for clean room applications such as research laboratories, animal labs, food processing, hospital rooms and computer rooms.

The diffuser includes specially designed baffles and an extended plenum with a unique frame that is designed to accomodate a Gel Seal HEPA or ULPA filter. The filters can be easily removed and replaced from the face of the unit. This design provides large volumes of air at low initial velocities.

The plenum is factory DOP scan tested for leaks in accordance with Standard IEST-RP-CCO34.3.

The 92FRPF-1SS model introduces air in a 90 degree radial flow pattern for perimeter applications, flushing a room with large volumes of clean conditioned air, minimizing entrainment and hence mixing with contaminated air, while still allowing low room air velocities.

CONSTRUCTION:

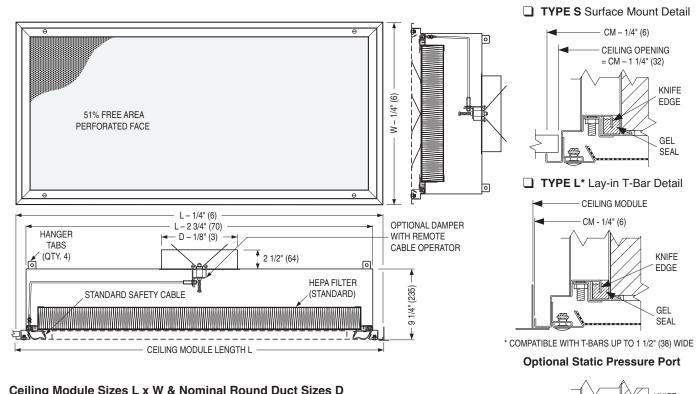
- 304 stainless steel frame and perforated face with 3/16" (5) dia. holes on 60 degree 1/4" (6) staggered centers (51% free area). The face plate is removable for cleaning and is secured by 1/4 turn fasteners.
- 2. 304 stainless steel fully welded plenum and baffles.
- 3. Standard safety cables prevent accidental dropping of removable face.
- 4. HEPA Filter: Clear anodized extruded aluminum filter frame with port for damper adjustment.
- 5. Standard finish is #4 Brushed Satin Polished.

OPTIONS:

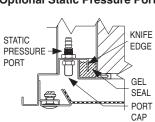
- □ 316 Stainless Steel construction.
- \Box UL ULPA Filter (99.9995% on 0.12 μ m).
- □ FBO Filter by others.
- BDS Butterfly damper, Stainless Steel (face operated).
- BDSR Butterfly damper with remote cable operator, Stainless Steel.
- □ SPP Static pressure test/DOP port.
- CPM DOP/PAO Challenge Port and Manifold.
- STC Scan Testing Certificate.
- Finish:
- AW Appliance White.SP Special

SCHEDULE TYPE: Dimensions are in inches (mm). PROJECT: DATE B SERIES SUPERSEDES DRAWING NO. ENGINEER: DATE 9 - 2 - 16 9200 12 - 12 - 11 92FRPF-1SS

RADIAL PATTERN DIFFUSER – FLUSH FACE 180° PATTERN • STAINLESS STEEL • CRITICAL ENVIRONMENT APPLICATIONS • REMOVABLE PERFORATED FACE HEPA OR ULPA FILTER • DOP SCAN TESTED MODEL: 92FRPF–2SS



LxW	Imperial Mo	dules (inches)	24 x 24	36 x 24	48 x 24	60 x 24				
	Metric Modules (mm)		600 x 600	900 x 600	1200 x 600	1500 x 600				
	Duct Size D	(inches)	6, 7, 8	6, 7, 8, 10	7, 8, 10, 12	10, 12				
		(mm)	152, 178, 203	152, 178, 203, 254	178, 203, 254, 305	254, 305				



DESCRIPTION:

The Model 92FRPF-2SS Flush Face Radial Pattern Diffuser has been designed to provide low aspiration at high ventilation rates, especially for clean room applications such as research laboratories, animal labs, food processing, hospital rooms and computer rooms.

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The diffuser includes specially designed baffles and an extended plenum with a unique frame that is designed to accomodate a Gel Seal HEPA or ULPA filter. The filters can be easily removed and replaced from the face of the unit. This design provides large volumes of air at low initial velocities.

The plenum is factory DOP scan tested for leaks in accordance with Standard IEST-RP-CCO34.3.

The 92FRPF-2SS model introduces air in a semicylindrical 180 degree radial flow pattern, flushing a room with large volumes of clean conditioned air, minimizing entrainment and hence mixing with contaminated air, while still allowing low room air velocities.

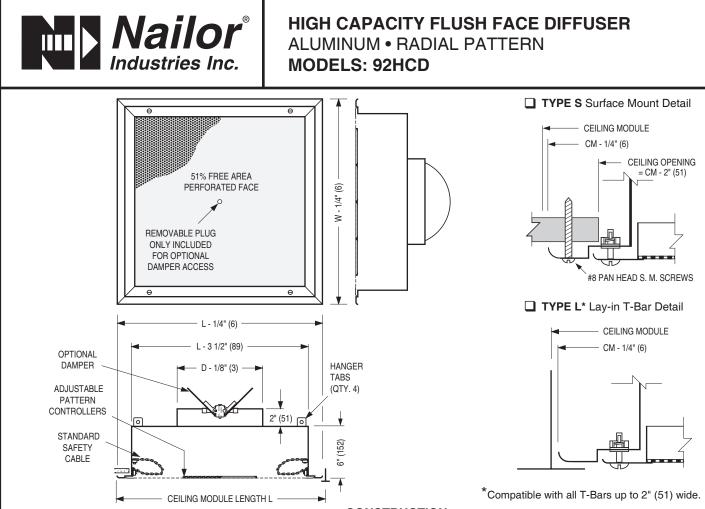
CONSTRUCTION:

- 304 stainless steel frame and perforated face with 3/16" (5) dia. holes on 60 degree 1/4" (6) staggered centers (51% free area). The face plate is removable for cleaning and is secured by 1/4 turn fasteners.
- 2. 304 stainless steel fully welded plenum and baffles.
- 3. Standard safety cables prevent accidental dropping of removable face.
- HEPA Filter: Clear anodized extruded aluminum filter frame with port for damper adjustment.
- 5. Standard finish is #4 Brushed Satin Polished.

OPTIONS:

- □ 316 Stainless Steel construction.
- ULPA Filter (99.9995% on 0.12 μm).
- □ FBO Filter by others.
- BDS Butterfly damper, Stainless Steel (face operated).
- BDSR Butterfly damper with remote cable operator, Stainless Steel.
- □ SPP Static pressure test/DOP port.
- CPM DOP/PAO Challenge Port and Manifold.
- □ STC Scan Testing Certificate.
- Finish:
- AW Appliance White.
 SP Special _____

SCHEDULE TYPE:	Di	monsions ar	e in inches (m	um)
PROJECT:				
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.
CONTRACTOR:	9 - 2 - 16	9200	12 - 12 - 11	92FRPF-2SS



Ceiling Module Sizes L x W & Nominal Round Duct Sizes D

LxW	Imperial Mo	dules (inches)	24 x 24	48 x 24
	Metric Mo	odules (mm)	600 x 600	1200 x 600
	Duct Size	(inches)	8, 10	10, 12
	D	(mm)	203, 254	254, 305

DESCRIPTION:

The Model 92HCD Series has been designed to produce a radial air pattern utilizing a non-intrusive flush perforated face design. Adjustable factory set pattern controllers on the diffuser face produce a one-way 90 degree or two-way 180 degree radial pattern. Suitable for medical facilities, kitchens, biotechnology research, animal labs, food processing and other applications where high airflows with short throws are required.

The design features deflector blades behind a 51% free area perforated face, which maximizes capacity while allowing low initial face velocities. The radial air pattern flushes the critical area underneath the diffuser with large volumes of clean conditioned air, minimizing entrainment and hence mixing with contaminated air.

CONSTRUCTION:

1. Extruded aluminum frame and aluminum perforated face with 3/16" (5) dia. holes on 1/4" (6) staggered centers (51% free area). The face plate is removable for cleaning and is secured by 1/4 turn fasteners.

- 2. Steel backpan and pattern controllers.
- 3. Standard safety cables prevent accidental dropping of removable face.
- 4. Standard finish is AW Appliance White.

OPTIONS:

AIR PATTERN

- □ 1W 1 way half radial
- 2W 2 way full radial
- BD Butterfly damper, coated steel, AW Appliance White finish.
- EX05 0.5" (13) External Foil-Back Fiberglass Insulation.
- □ EX15 1.5" (38) External Foil-Back Fiberglass Insulation, R-4.2.
- AB Aluminum Backpan.
- Other

ACCESSORIES:

DFA Aluminum Drywall/Plaster Frame. Provides simple easy installation of Type L in hard ceilings. (See submittal dwg. ACC-DFA). Ordered separately.

SCHEDULE TYPE:		monsions ar	e in inches (m	m)
PROJECT:			e in inches (in	
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.
CONTRACTOR:	1 - 10 - 23	9200	NEW	92HCD



Nailor offers a selection of standard

colors and finishes available on our

grilles, registers and diffusers. For

painted finishes, our state-of-the-art

paint systems provide environmentally

friendly finishing solutions with uniform

coverage and coating thickness. The

result is an exceptionally durable finish

that resists scratching, corrosion and

general wear. Additional facilities

for special requirements, as well as

a selection of anodized or brushed

finishes, complete our ability to provide

unmatched beauty and durability for

NAILOR POWDER COAT PROPERTIES

2.0 to 3.0 mils

2 H

Direct: 160 inch - lbs.

Reverse 160 inch - lbs.

1000 hours

.8 to 1.2 mils

HB TO H

80 inch - lbs

100 hours

any application.

FILM THICKNESS

HARDNESS

IMPACT

RESISTANCE

SALT SPRAY

FILM THICKNESS

HARDNESS

IMPACT

RESISTANCE

SALT SPRAY

200 - 212 - 202 - 202 Ref. - 212 - 202 - 202 - 202 Ref. - 212 - 202 - 202 - 202 - 202

ELECTROCOATING PROPERTIES

STANDARD AND OPTIONAL FINISHES FOR GRILLES AND DIFFUSERS

POWDER COAT

Nailor's powder coat is a high-tech thermosetting polyester powder coating with superior physical properties that provide excellent color and gloss retention. The finish offers extreme durability and hardness that resists scratching, chipping and general wear. Surface preparation includes degreasing and a chemical cleaning followed by a clean rinse before a final powder coat finish is applied and baked. The environmentally friendly Nailor powder coat system assures uniform coverage and color consistency resulting in a long lasting superior finish. Colors, including simulated anodizing, which is far more economical than color anodizing, can be selected from Nailor's standard color chart or non-standard colors and can be matched from sample chips provided to Nailor.

ELECTROCOATING

E-Coat is an environmentally friendly coating that provides complete coverage and a wide range of performance properties, formulated to meet corrosion, durability and other performance specifications. Electrocoating is a highly automated process in which paint is electrically deposited onto a metal foundation. Film build thickness is uniform and overall application efficiencies are in excess of 90%. Paint is consistent on all part-to-part surfaces, preventing sags, runs or drips. E-Coat offers flexibility, better first yield pass and quicker production times compared to other forms of paint applications. Electrocoating is an excellent solution that offers superior properties and uniform finish.

CLEAR ANODIZING (Aluminum products only)

Clear anodizing is a clear oxide coating that exemplifies an aluminum surface's natural oxide coating producing a hard, scratch resistant surface that is resistant to general wear and mild chemicals. The process provides a natural looking, virtually maintenance free finish that will endure for many years.

COLOR ANODIZING (Aluminum products only)

Color anodizing is an electrolytic process where, after standard anodizing procedures, colored metallic pigments penetrate the oxide surface pores producing a corrosion resistant, colorfast finish. The process results in a natural metallic appearance that requires little maintenance.

BRUSHED AND CLEAR COAT

Available on specific aluminum products (consult applicable product page for availability). Surface is brushed to achieve a scratch finish texture before being degreased and chemically cleaned. A clear lacquer coating is then applied to provide a durable protective finish.

#4 BRUSHED SATIN POLISHED (Stainless Steel products only)

Surface is polished to ASTM A480 #4 standard to achieve a bright durable finish that is resistant to mild chemicals and corrosion. A final coating is not required due to the inherent anti-corrosion properties of the stainless steel.

PRIME COAT

Prime coat provides a stable base for painting in the field. Surface pretreatment includes degreasing and a chemical cleaning before an alkyd prime coat is applied. After a thorough cleaning for dust, etc. that can contaminate the final finish and cause premature flaking or peeling, finish coat should be field applied as soon as possible.

PAINT PREPARED ALUMINUM (Aluminum products only)

Allows for field applied paint. Surface preparation includes degreasing and a chemical cleaning followed by a clean rinse. Finish coat should be field applied as soon as possible.

MILL FINISH

Surface is left untreated and requires cleaning, degreasing, etc. in the field before final finish can be applied if required.

"Complete Air Control and Distribution Solutions."

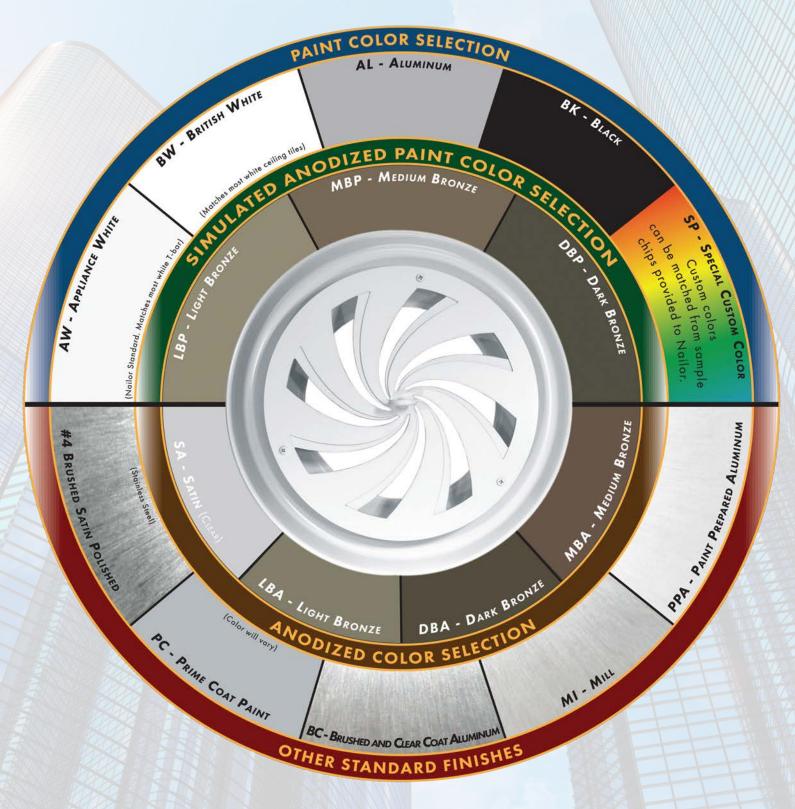
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and and and



STANDARD AND OPTIONAL FINISHES FOR GRILLES AND DIFFUSERS

The following standard colors and finishes are available on applicable Nailor air distribution products. Consult individual product pages for availability



The pictured finishes have been represented as best as possible within printing limitations. However, actual finish may vary. Contact your Nailor representative for a color chip sample on the material specified for a more accurate representation.

DBK - Black (for registers ordered with factory mounted dampers) - BA - Perforated Diffusers (4300 series only) Appliance White (AW) face with black back pan and pattern controllers.

"Complete Air Control and Distribution Solutions."

WGDSOF2015

Performance Data

Model Series 92FRP • Aluminum and Steel • Flush Face Radial Pattern Models 92FRP-2AL and 92FRP-2 • 180° 2-Way Pattern

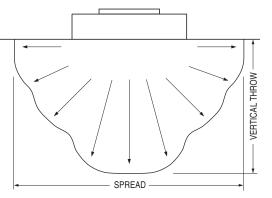
Module Size	Airflow	Pt	Ps			Sprea	d				Vertica	l Thro	ow (ft)			
and Inlet Size	cfm	"W.g.	"w.g.	NC	10	(ft) 10-75	-50	10	5⁰∆T 0-75-	50		10⁰∆T 0-75-{	50		15⁰∆1 0-75-	
	250	.065	.033	24	1	3	5	1	2	5	1	2	5	1	3	5
24" x 24"	300	.086	.040	28	2	4	6	1	3	5	1	3	5	1	3	5
8" Inlet	400	.152	.070	36	3	4	7	2	3	5	2	4	5	3	4	7
	500	.223	.095	42	4	6	8	3	4	5	4	5	6	4	6	7
	250	.028	.015	<20	1	2	3	0	1	2	1	1	2	1	1	2
24" x 24"	300	.037	.019	<20	1	2	4	1	1	2	1	2	3	1	2	3
10" Inlet	475	.085	.038	26	3	4	7	1	2	5	1	3	6	2	4	7
	600	.129	.054	38	4	6	8	3	4	7	3	5	8	4	6	9
	400	.062	.028	<20	3	5	6	0	1	1	0	1	1	1	2	2
24" x 48"	500	.100	.048	24	5	7	9	1	2	3	1	2	4	1	2	4
10" Inlet	700	.193	.090	41	5	7	10	2	2	5	2	3	6	2	5	7
	900	.324	.155	49	7	9	11	2	5	7	3	6	8	3	6	8
	500	.054	.029	<20	1	2	4	1	1	2	1	2	2	1	2	4
24" x 48"	650	.093	.050	26	2	4	7	1	2	4	1	2	4	2	4	6
12" Inlet	750	.150	.085	31	3	5	8	1	3	5	2	3	5	2	4	6
	1000	.226	.125	46	4	8	11	2	3	6	3	6	8	4	6	8

Models 92FRP-1AL and 92FRP-1 • 90° 1-Way Pattern

Module Size	Airflow	Pt	Ps		:	Sprea	d				Vertica	l Thro	ow (ft)			
and	cfm			NC		(ft)			5º∆T		1	I O⁰∆T			15º ∆]	Γ
Inlet Size	UIII	"w.g.	"w.g.		10	10-75-	·50	10	10-75-	50	10	0-75-5	50	10	0-75-	50
	200	.036	.016	<20	1	1	2	2	3	5	2	3	5	3	5	7
12" x 48"	250	.057	.025	20	1	1	2	2	3	5	3	4	6	3	4	6
8" Inlet	300	.079	.033	22	1	1	3	2	3	5	3	4	6	3	5	8
	400	.150	.068	33	1	2	3	3	5	7	4	6	8	4	5	7
	250	.064	.032	<20	1	1	3	0	0	1	0	1	2	1	1	3
24" x 24"	300	.084	.038	28	1	2	4	0	1	1	1	2	3	1	3	5
8" Inlet	400	.150	.068	35	2	3	4	1	1	2	2	3	5	2	5	9
	500	.218	.090	40	3	3	4	1	1	3	2	4	9	4	6	9
	250	.028	.015	<20	1	2	3	1	1	2	1	2	3	2	3	6
24" x 24"	300	.044	.018	22	1	2	4	1	2	5	2	4	7	3	6	9
10" Inlet	475	.084	.037	27	3	3	5	2	4	5	3	6	7	6	7	9
	600	.127	.052	38	3	4	5	2	5	7	4	6	8	7	8	9
	400	.058	.024	<20	1	2	3	1	3	4	1	3	4	3	5	8
24" x 48"	500	.095	.043	24	2	3	4	2	4	5	2	4	6	4	7	9
10" Inlet	700	.178	.075	40	2	3	4	2	4	5	3	5	7	6	8	9
	900	.314	.145	48	3	5	7	3	5	7	4	6	8	8	8	9
	500	.050	.025	<20	1	1	3	2	5	7	3	5	7	4	6	7
24" x 48"	650	.088	.045	26	2	3	5	3	6	8	4	6	8	5	7	9
12" Inlet	750	.145	.080	32	3	4	5	4	6	9	5	7	9	6	7	9
	1000	.221	.120	44	2	5	7	7	9	9	8	9	9	8	9	9

Performance Notes:

- 1. Throw and Spread values are given for terminal velocities of 100, 75 and 50 fpm.
- 2. Spread is the maximum width of the isovel at the indicated terminal velocity.
- 3. Vertical throw is the furthest distance below the ceiling where the indicated terminal velocity can be measured.
- 4. ΔT is the cooling temperature differential between supply and room air.
- 5. NC (Noise Criteria) values based on 10dB room absorption, re $10^{\mbox{-}12}$ watts.
- 6. Data derived from tests were conducted in accordance with ANSI /ASHRAE Standard 70-2006.



Typical 75 fpm Isovel for 180° Pattern

Performance Data

Model 92FRP-1SS • 90° Pattern Imperial Units

24" x 24" or 600 mm x 600 mm Module Size • 8" (203 mm) dia. Inlet

Airflow				Т	Spread	ł		ical Thr 5°F ∆T	ow @	T Verl	tical Th 10°F ∆	row @ T		tical Th 15°F ∆	
CFM	Pt	Ps	NC	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
200	.054	.032	<20	1	2	3	1	1	2	1	2	2	1	2	3
300	.121	.072	26	1	3	4	1	2	3	1	2	3	2	3	4
400	.215	.128	35	2	3	4	2	3	5	2	3	5	3	4	7
500	.336	.200	41	3	4	5	2	4	6	2	4	7	4	5	8
600	.484	.288	45	4	5	6	3	4	7	4	7	9	5	8	10

24" x 24" or 600 mm x 600 mm Module Size • 10" (254 mm) dia. Inlet

Airflow	D .			Т	Spread	ł		ical Thr 5°F ∆T	ow @		tical Th 10°F ∆			ical Th 15°F ∆	
CFM	Pt	Ps	NC	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
200	.025	.016	<20	1	2	4	1	1	2	1	2	2	1	2	3
300	.056	.036	20	2	3	5	1	2	3	1	2	4	2	3	4
400	.099	.064	28	3	4	6	2	3	5	2	3	6	4	5	7
500	.155	.100	33	4	5	7	2	4	7	3	5	8	5	6	9
600	.223	.144	36	4	6	8	4	6	8	4	7	10	6	9	10

48" x 24" or 1200 mm x 600 mm Module Size • 10" (254 mm) dia. Inlet

Airflow		D		Т	Spread	ł		ical Thr 5°F ∆T	ow @	T Verl	tical Th 10°F ∆	row @ T		tical Th 15°F ∆	
CFM	Pt	Ps	NC	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
400	.096	.061	24	1	2	3	2	4	6	3	4	6	4	5	7
500	.150	.095	28	1	2	3	3	4	6	3	5	7	4	6	8
600	.216	.136	33	2	2	4	3	5	7	5	6	7	5	6	8
700	.294	.186	37	2	3	4	4	5	7	5	6	8	6	7	9
800	.383	.242	41	3	4	5	4	6	8	6	7	8	6	8	9
900	.485	.307	46	3	4	6	5	6	8	6	7	9	7	8	10

48" x 24" or 1200 mm x 600 mm Module Size • 12" (305 mm) dia. Inlet

Airflow	Pt	Do	NC	Т	Spread	k		ical Thr 5°F ∆T	ow @	T Verl	tical Th 10°F ∆			ical Th 15°F ∆	
CFM	Ρι	Ps	NC	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
500	.079	.053	20	1	2	3	3	4	7	4	5	7	4	6	8
600	.114	.076	23	2	3	4	4	5	7	5	6	8	5	7	9
700	.155	.103	27	3	3	5	4	6	8	6	7	9	6	8	9
800	.202	.135	31	3	4	5	5	7	8	6	8	9	7	9	10
900	.256	.171	37	3	4	6	6	7	9	7	9	10	8	9	10
1000	.316	.211	44	4	5	7	7	8	9	8	9	10	8	10	10

CFM - cubic feet per minute

FPM - feet per minute velocity

- Pt total pressure inches w.g.
- **Ps** static pressure inches w.g.
- T throw or spread in feet

NC - Noise Criteria (values) based on 10 dB room absorption, re 10⁻¹² watts.

Performance Notes:

1. The radial flow pattern of the **92FRP-1SS** is unlike conventional air distribution devices. The data presented above describes isovels by average terminal velocity in both horizontal and vertical directions.

2. ΔT is the temperature difference between supply and room air.

Performance Data

Model 92FRP-1SS • 90° Pattern

Metric Units

610 mm x 610 mm or 600 mm x 600 mm Module Size • 8" (203 mm) dia. Inlet

Airflow	Dł	Da		Т	Spread	ł		ical Thr 3°C ∆T	ow @		tical Th 5.5°C ∆			ical Th 8.5°C ∆	
L/S	Pt	Ps	NC	0.51 M/S	0.38 M/S	0.25 M/S	0.51 M/S	0.38 M/S	0.25 M/S	0.51 M/S	0.38 M/S	0.25 M/S	0.51 M/S	0.38 M/S	0.25 M/S
94	13	8	<20	0.3	0.6	0.9	0.3	0.3	0.6	0.3	0.6	0.6	0.3	0.6	0.9
142	30	18	26	0.3	0.9	1.2	0.3	0.6	0.9	0.3	0.6	0.9	0.6	0.9	1.2
189	53	32	35	0.6	0.9	1.2	0.6	0.9	1.5	0.6	0.9	1.5	0.9	1.2	2.1
236	84	50	41	0.9	1.2	1.5	0.6	1.2	1.8	0.6	1.2	2.1	1.2	1.5	2.4
283	120	72	45	1.2	1.5	1.8	0.9	1.2	2.1	1.2	2.1	2.7	1.5	2.4	3.0

610 mm x 610 mm or 600 mm x 600 mm Module Size • 10" (254 mm) dia. Inlet

Airflow	Pt	Ps	NC	Т	Spread	k		ical Thr 3°C ∆T	ow @		tical Th 5.5°C ∆			tical Th 8.5°C ∆	
L/S	Fι	F5	NC	0.51 M/S	0.38 M/S	0.25 M/S	0.51 M/S	0.38 M/S	0.25 M/S	0.51 M/S	0.38 M/S	0.25 M/S	0.51 M/S	0.38 M/S	0.25 M/S
94	6	4	<20	0.3	0.6	1.2	0.3	0.3	0.6	0.3	0.6	0.6	0.3	0.6	0.9
142	14	9	20	0.6	0.9	1.5	0.3	0.6	0.9	0.3	0.6	1.2	0.6	0.9	1.2
189	25	16	28	0.9	1.2	1.8	0.6	0.9	1.5	0.6	0.9	1.8	1.2	1.5	2.1
236	39	25	33	1.2	1.5	2.1	0.6	1.2	2.1	0.9	1.5	2.4	1.5	1.8	2.7
283	55	36	36	1.2	1.8	2.4	1.2	1.8	2.4	1.2	2.1	3.0	1.8	2.7	3.0

1219 mm x 610 mm or 1200 mm x 600 mm Module Size • 10" (254 mm) dia. Inlet

Airflow	Dł	De	NO	Т	Spread	k		ical Thr 3°C ∆T	ow @		tical Th 5.5°C ∆			tical Th 8.5°C ∆	
L/S	Pt	Ps	NC	0.51 M/S	0.38 M/S	0.25 M/S	0.51 M/S	0.38 M/S	0.25 M/S	0.51 M/S	0.38 M/S	0.25 M/S	0.51 M/S	0.38 M/S	0.25 M/S
189	24	15	24	0.3	0.6	0.9	0.6	1.2	1.8	0.9	1.2	1.8	1.2	1.5	2.1
236	37	24	28	0.3	0.6	0.9	0.9	1.2	1.8	0.9	1.5	2.1	1.2	1.8	2.4
283	54	34	33	0.6	0.6	1.2	0.9	1.5	2.1	1.5	1.8	2.1	1.5	1.8	2.4
330	73	46	37	0.6	0.9	1.2	1.2	1.5	2.1	1.5	1.8	2.4	1.8	2.1	2.7
378	95	60	41	0.9	1.2	1.5	1.2	1.8	2.4	1.8	2.1	2.4	1.8	2.4	2.7
425	121	76	46	0.9	1.2	1.8	1.5	1.8	2.4	1.8	2.1	2.7	2.1	2.4	3.0

1219 mm x 610 mm or 1200 mm x 600 mm Module Size • 12" (305 mm) dia. Inlet

Airflow	Pt	Do	NC	Т	Spread	k		ical Thr 3°C ∆T	ow @		tical Th 5.5°C ∆			ical Th 8.5°C ∆	
L/S	ы	Ps	NC	0.51 M/S	0.38 M/S	0.25 M/S	0.51 M/S	0.38 M/S	0.25 M/S	0.51 M/S	0.38 M/S	0.25 M/S	0.51 M/S	0.38 M/S	0.25 M/S
236	20	13	20	0.3	0.6	0.9	0.9	1.2	2.1	1.2	1.5	2.1	1.2	1.8	2.4
283	28	19	23	0.6	0.9	1.2	1.2	1.5	2.1	1.5	1.8	2.4	1.5	2.1	2.7
330	39	26	27	0.9	0.9	1.5	1.2	1.8	2.4	1.8	2.1	2.7	1.8	2.4	2.7
378	50	34	31	0.9	1.2	1.5	1.5	2.1	2.4	1.8	2.4	2.7	2.1	2.7	3.0
425	64	43	37	0.9	1.2	1.8	1.8	2.1	2.7	2.1	2.7	3.0	2.4	2.7	3.0
472	79	52	44	1.2	1.5	2.1	2.1	2.4	2.7	2.4	2.7	3.0	2.4	3.0	3.0

L/S - litres per second

- M/S meters per second velocity
- Pt total pressure Pa
- Ps static pressure Pa
- T throw or spread in meters
- NC Noise Criteria (values) based on 10 dB room absorption, re 10⁻¹² watts.

Performance Notes:

1. The radial flow pattern of the **92FRP-1SS** is unlike conventional air distribution devices. The data presented above describes isovels by average terminal velocity in both horizontal and vertical directions.

2. ΔT is the temperature difference between supply and room air.

Performance Data

Model 92FRP-2SS • 180° Two-Way Pattern Imperial Units

24" x 24" or 600 mm x 600 mm Module Size • 8" (203 mm) dia. Inlet

Airflow	Pt	Ps	NC		≤ 15°F ∆T 100 75 50 10			ical Thr 5°F ∆T	'ow @	T Verl	ical Th 10°F ∆	row @ T	T Vert	ical Th 15°F ∆	
CFM	Γl	гэ	NC	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
200	.058	.037	20	1	1	2	1	1	1	1	1	2	1	1	2
300	.131	.082	29	1	2	3	1	2	2	1	2	3	1	2	3
400	.233	.146	36	2	3	4	1	3	4	2	3	4	2	4	5
500	.365	.228	43	2	3	4	2	3	6	2	4	6	3	5	7

24" x 24" or 600 mm x 600 mm Module Size • 10" (254 mm) dia. Inlet

Airflow	Pt	Ps	NC		≤ 15°F ∆T 100 75 50 10			ical Thr 5°F ∆T	ow @	T Verl	tical Th 10°F ∆	row @ T	T Vert	ical Th 15°F Δ	
CFM	Γι	ГЭ	NC	100 FPM	100 75 50		100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
300	.058	.039	20	1	1	2	1	2	2	1	2	3	1	2	4
400	.104	.068	24	1	2	3	1	3	5	2	3	5	2	4	6
500	.162	.107	29	2	3	4	2	4	6	2	4	7	3	5	8
600	.233	.154	38	2	3	5	3	5	8	3	6	9	4	7	10

48" x 24" or 1200 mm x 600 mm Module Size • 10" (254 mm) dia. Inlet

Airflow	Pt	Ps	NC		lorizon 15°F ∆			ical Thr 5°F ∆T	ow @	T Vert	ical Th 10°F Δ		T Vert	ical Th 15°F ∆	
CFM	г	гэ	NC	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
400	.099	.064	20	1	2	3	1	1	2	1	2	2	1	2	3
500	.155	.100	24	2	3	4	1	2	3	1	2	3	1	3	4
600	.223	.144	30	2	3	4	1	2	4	1	2	5	2	4	6
700	.304	.196	38	3	4	5	2	2	5	2	3	6	2	4	6
800	.397	.256	45	3	4	5	2	3	5	2	4	7	3	5	7
900	.502	.324	51	4	5	5	2	4	6	3	5	8	4	6	8

48" x 24" or 1200 mm x 600 mm Module Size • 12" (305 mm) dia. Inlet

Airflow	PT PS N	NC		lorizon 15°F Δ			ical Thr 5°F ∆T	ow @	T Verl	tical Th 10°F Δ			ical Th 15°F ∆		
CFM		13	NO	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
500	.083	.057	20	1	1	2	1	2	3	1	2	4	2	3	5
600	.119	.082	24	1	2	3	1	2	4	1	2	5	2	3	6
700	.163	.111	29	1	2	4	1	2	5	2	3	6	2	4	7
800	.212	.145	34	2	3	4	2	3	5	2	4	7	3	5	8
900	.269	.183	40	2	3	5	2	4	6	3	5	8	4	6	9
1000	.332	.226	46	2	4	5	3	5	7	4	6	9	4	7	10

- CFM cubic feet per minute
- **FPM** feet per minute velocity
- Pt total pressure inches w.g.
- **Ps** static pressure inches w.g.
- T throw in feet
- NC Noise Criteria (values) based on 10 dB room absorption, re 10⁻¹² watts.

Performance Notes:

1. Horizontal throw is the furthest distance from the diffuser centerline where the indicated terminal velocity can be measured.

2. Vertical throw is the furthest distance below the ceiling where the indicated terminal velocity can be measured. 3. ΔT is the temperature difference between supply and room air.

Performance Data

Model 92FRPF-1SS • 90° One-Way Pattern with HEPA Filter

Imperial Units

24" x 24" or 600 mm x 600 mm Module Size • 8" (203 mm) dia. Inlet

Airflow	Pt	Ps	NC		≤15°F ∆T 100 75 50 10			ical Thr 5°F ∆T	ow @	T Verl	ical Th 10°F ∆	row @ T		tical Th 15°F ∆	
CFM	г	гэ	NC	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
150	0.33	0.32	-	1	1	2	0	1	1	0	1	2	0	1	2
200	0.61	0.59	-	1	2	3	1	1	2	1	2	2	1	2	3
300 *	1.38	1.33	28	1	3	4	1	2	3	1	2	3	2	3	4
400	2.46	2.37	37	2	3	4	2	3	5	2	3	5	3	4	7

24" x 24" or 600 mm x 600 mm Module Size • 10" (254 mm) dia. Inlet

Airflow	Pt	Ps	NC		≤15°F ∆T 100 75 50 10			ical Thr 5°F ∆T	ow @	T Verl	tical Th 10°F ∆	row @ T		tical Th 15°F ∆	
CFM	г	ГЭ	NC	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
150	0.32	0.31	-	1	1	2	0	1	1	0	1	2	0	1	2
200	0.60	0.58	-	1	2	4	1	1	2	1	2	2	1	2	3
300 *	1.32	1.30	22	2	3	5	1	2	3	1	2	4	2	3	4
400	2.34	2.30	30	3	4	6	2	3	5	2	3	6	4	5	7

48" x 24" or 1200 mm x 600 mm Module Size • 10" (254 mm) dia. Inlet

Airflow	Pt	Ps	NC		T Horizontal ≤15°F ∆T 100 75 50		ical Thr 5°F ∆T	ow @	T Verl	ical Th 10°F ∆	row @ T		tical Th 15°F ∆		
CFM	г	ГЭ	NC	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
300	0.27	0.25	-	1	1	2	2	3	5	2	3	5	3	5	6
400	0.48	0.44	26	1	2	3	2	4	6	3	4	6	4	5	7
500	0.75	0.69	30	1	2	3	3	4	6	3	5	7	4	6	8
600	1.07	0.99	35	2	2	4	3	5	7	5	6	7	5	6	8
700*	1.46	1.35	39	2	3	4	4	5	7	5	6	8	6	7	9

48" x 24" or 1200 mm x 600 mm Module Size • 12" (305 mm) dia. Inlet

Airflow	Pt	Ps	NC		lorizon 15°F ∆1			ical Thr 5°F ∆T	ow @		tical Th 10°F ∆			ical Th 15°F ∆	
CFM	г	гэ	NC	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
400	0.45	0.41	-	1	1	2	2	3	5	2	3	5	3	5	6
500	0.67	0.64	22	1	2	3	3	4	7	4	5	7	4	6	8
600	0.97	0.93	25	2	3	4	4	5	7	5	6	8	5	7	9
700 *	1.31	1.26	29	3	3	5	4	6	8	6	7	9	6	8	9
800	1.72	1.65	33	3	4	5	5	7	8	6	8	9	7	9	10

CFM - cubic feet per minute

- **FPM** feet per minute velocity
- **Pt** total pressure inches w.g.
- **Ps** static pressure inches w.g.
- T throw or spread in feet
- NC Noise Criteria (values) based on 10 dB room absorption, re 10⁻¹² watts.

Performance Notes:

1. Horizontal throw is the furthest distance from the diffuser centerline where the indicated terminal velocity can be measured.

2. Vertical throw is the furthest distance below the ceiling where the indicated terminal velocity can be measured.

3. ΔT is the temperature difference between supply and room air.

4. *Maximum airflow based on 150 fpm (0.76 m/s) velocity per square foot of filter media face area.

Performance Data

Model 92FRPF-2SS • 180° Two-Way Pattern with HEPA Filter

Imperial Units

24" x 24" or 600 mm x 600 mm Module Size • 8" (203 mm) dia. Inlet

Airflow	Pt	Ps	NC		≤15°F ∆T 100 75 50 10		ical Thr 5°F ∆T	ow @	T Verl	ical Th 10°F ∆			ical Th 15°F ∆		
CFM	г	ГЭ	NC	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
150	0.33	0.32	-	1	1	2	0	1	1	0	1	2	0	1	2
200	0.61	0.59	-	1	1	2	1	1	1	1	1	2	1	1	2
300 *	1.38	1.33	28	1	2	3	1	2	2	1	2	3	1	2	3
400	2.46	2.37	37	2	3	4	1	3	4	2	3	4	2	4	5

24" x 24" or 600 mm x 600 mm Module Size • 10" (254 mm) dia. Inlet

Airflow	Pt	Ps	NC		≤15°F ∆T 100 75 50 10			ical Thr 5°F ∆T	ow @	T Verl	tical Th 10°F ∆	row @ T		tical Th 15°F ∆	
CFM	г	ГЭ	NC	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
150	0.32	0.31	-	1	1	2	0	1	1	0	1	2	0	1	2
200	0.60	0.58	-	1	1	2	1	1	1	1	1	2	1	1	2
300 *	1.32	1.30	22	1	1	2	1	2	2	1	2	3	1	2	4
400	2.34	2.30	30	1	2	3	1	3	5	2	3	5	2	4	6

48" x 24" or 1200 mm x 600 mm Module Size • 10" (254 mm) dia. Inlet

Airflow	Pt	Ps	NC					ical Thr 5°F ∆T	ow @		ical Th 10°F ∆	row @ T		ical Th 15°F ∆	
CFM	г	гэ	NC	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
300	0.27	0.25	_	1	1	2	0	1	1	0	1	1	0	1	2
400	0.48	0.44	26	1	2	3	1	1	2	1	2	2	1	2	3
500	0.75	0.69	30	2	3	4	1	2	3	1	2	3	1	3	4
600	1.07	0.99	35	2	3	4	1	2	4	1	2	5	2	4	6
700*	1.46	1.35	39	3	4	5	2	2	5	2	3	6	2	4	6

48" x 24" or 1200 mm x 600 mm Module Size • 12" (305 mm) dia. Inlet

Airflow CFM	Pt	Ps	NC	T Horizontal ≤15°F ∆T			T Vertical Throw @ $5^{\circ}F \Delta T$			T Vertical Throw @ 10°F ∆T			T Vertical Throw @ $15^{\circ}F \Delta T$		
				100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
400	0.45	0.41	_	0	1	2	1	1	2	1	2	2	1	2	3
500	0.67	0.64	22	1	1	2	1	2	3	1	2	4	2	3	5
600	0.97	0.93	25	1	2	3	1	2	4	1	2	5	2	3	6
700 *	1.31	1.26	29	1	2	4	1	2	5	2	3	6	2	4	7
800	1.72	1.65	33	2	3	4	2	3	5	2	4	7	3	5	8

CFM - cubic feet per minute

- **FPM** feet per minute velocity
- **Pt** total pressure inches w.g.
- **Ps** static pressure inches w.g.
- T throw or spread in feet
- NC Noise Criteria (values) based on 10 dB room absorption, re 10⁻¹² watts.

Performance Notes:

1. Horizontal throw is the furthest distance from the diffuser centerline where the indicated terminal velocity can be measured.

2. Vertical throw is the furthest distance below the ceiling where the indicated terminal velocity can be measured.

3. ΔT is the temperature difference between supply and room air.

4. *Maximum airflow based on 150 fpm (0.76 m/s) velocity per square foot of filter media face area.