

PERFORATED RETURN AIR DIFFUSERS

- MATCH AND COMPLIMENT SUPPLY MODELS
- SUITABLE FOR DUCTED RETURN APPLICATIONS

Steel Models:

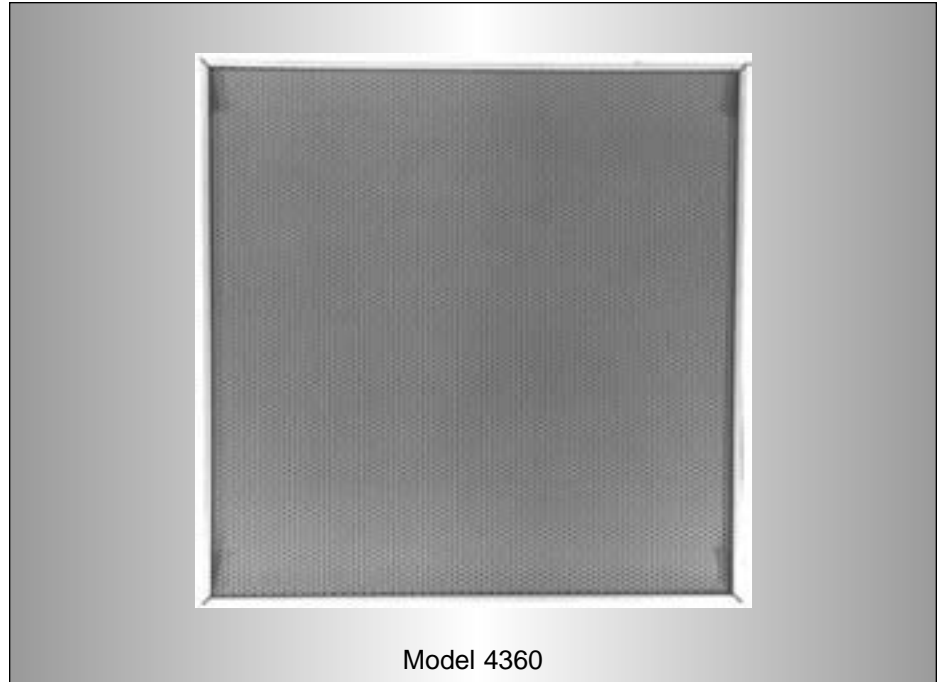
- 4360** Flush Face
- 4365** Drop Face

Aluminum Face Models:

- 4360A** Flush Face
- 4365A** Drop Face

Aluminum Models:

- 4360AA** Flush Face
- 4365AA** Drop Face



Model 4360

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The **Nailor 4360 Series Perforated Face** return air models are designed to match supply air models **4320, 4320CB, 4320F, 4320MR** and **4320M** in appearance and construction detail, less the air pattern controllers which are not required.

The **4360 Series** is offered in two versions. One for ducted return applications which features the same backpan as the supply air models with a neck for connection to flexible or rigid round duct or square duct. The other version features a dedicated frame assembly which has a neck that is 2" (51) less than the ceiling module size. This unit maximizes free area and may be used for ducted or ductless return air applications.

The **4365** model features a drop (extended) face panel that both matches in appearance the drop face supply models and compliments tegular tile ceiling systems, allowing the perforated face panel to remain flush with the ceiling line.

FEATURES:

- Round or square necks available.
 - Hinged, removable face plate with quick-release spring latches.
 - Inlet collar has minimum 1 1/4" (32) depth for easy duct connection.
 - Dropping the perforated face gives access to the optional damper.
 - Perforated face with 3/16" (5) diameter holes on staggered 1/4" (6) centers, providing 51% free area.
- Material: Models 4360/4365** have a corrosion-resistant steel perforated face and backpan. **Models 4360A/4365A** have an aluminum perforated face and a corrosion-resistant steel backpan. **Models 4360AA/4365AA** have an aluminum perforated face and backpan.
- Finish:** AW Appliance White baked enamel finish is standard. Other finishes are available.

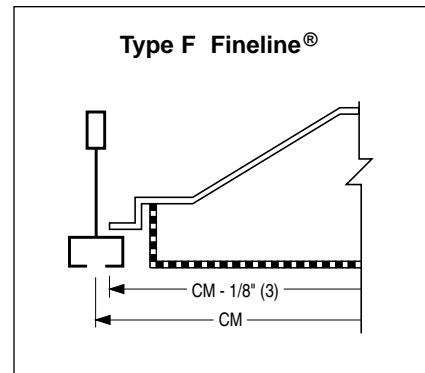
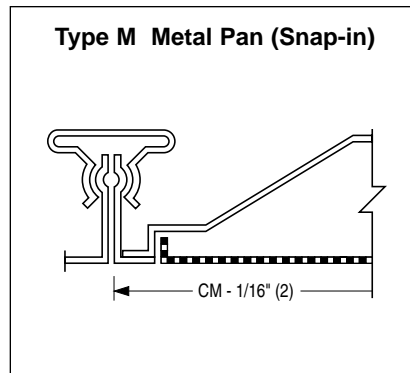
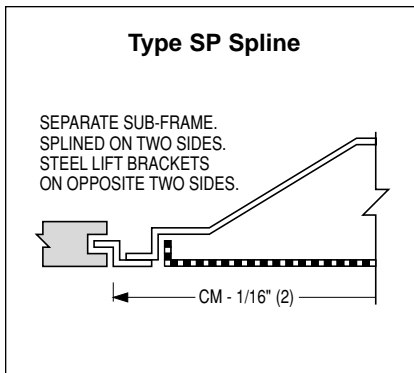
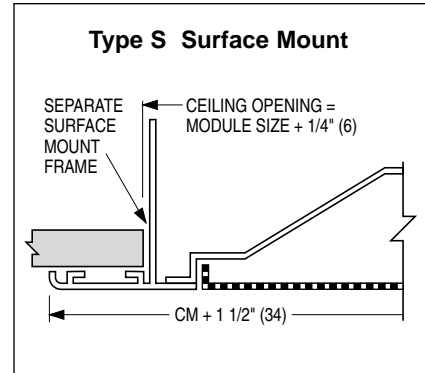
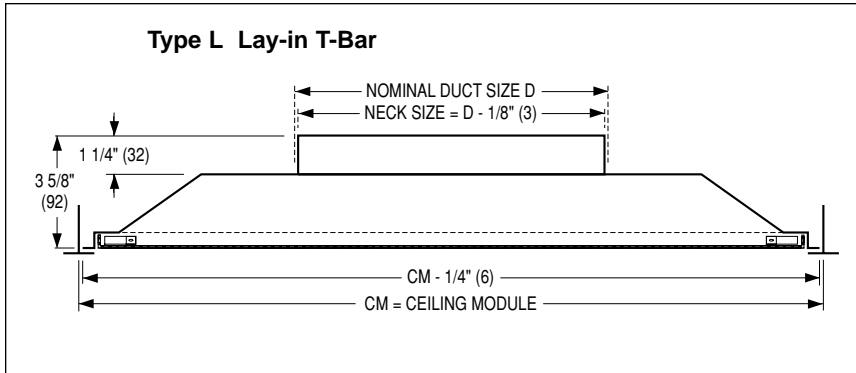
Available Combinations of Ceiling Module vs. Neck Size

Ceiling Module CM		Nominal Duct Size D			
Imperial Modules	Metric Modules	Round Neck		Square/Rectangular Neck	
		Imperial Units (in.)	Metric Units (mm)	Imperial Units (in.)	Metric Units (mm)
12 x 12	300 x 300	6, 8 dia.	152, 203 dia.	6 x 6, 8 x 8, 10 x 10	152 x 152, 203 x 203, 254 x 254
16 x 16	400 x 400	6, 8, 10, 12 dia.	152, 203, 254, 305 dia.	6 x 6, 8 x 8, 10 x 10, 12 x 12, 14 x 14	152 x 152, 203 x 203, 254 x 254, 305 x 305, 356 x 356
24 x 12	600 x 300	6, 8 dia.	152, 203 dia.	6 x 6, 8 x 8, 18 x 6, 22 x 10	152 x 152, 203 x 203, 457 x 152, 559 x 254
20 x 20	500 x 500	6, 8, 10, 12, 14 dia.	152, 203, 254, 305, 356 dia.	6 x 6, 8 x 8, 10 x 10, 18 x 18	152 x 152, 203 x 203, 254 x 254, 457 x 457
24 x 24	600 x 600	6, 8, 10, 12, 14, 15, 16, 18 dia.	152, 203, 254, 305, 356, 381, 406, 457 dia.	6 x 6, 8 x 8, 10 x 10, 12 x 12, 14 x 14, 15 x 15, 16 x 16, 18 x 18, 22 x 22	152 x 152, 203 x 203, 254 x 254, 305 x 305, 356 x 356, 381 x 381, 406 x 406, 457 x 457, 559 x 559
48 x 24	1200 x 600	6, 8, 10, 12, 14, 15, 16, 18 dia.	152, 203, 254, 305, 356, 381, 406, 457 dia.	6 x 6, 8 x 8, 10 x 10, 12 x 12, 14 x 14, 15 x 15, 16 x 16, 18 x 18, 46 x 22	152 x 152, 203 x 203, 254 x 254, 305 x 305, 356 x 356, 381 x 381, 406 x 406, 457 x 457, 1168 x 559

Dimensional Data and Frame Types

Models 4360, 4360A, 4360AA • Return • Flush Face

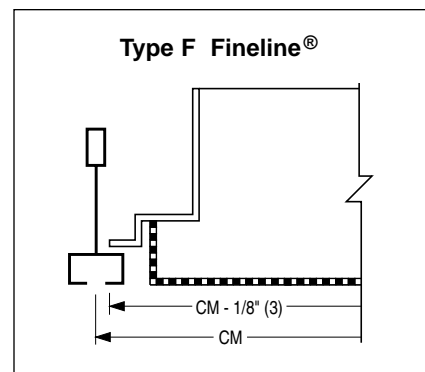
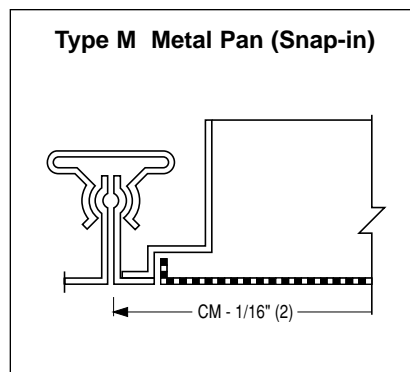
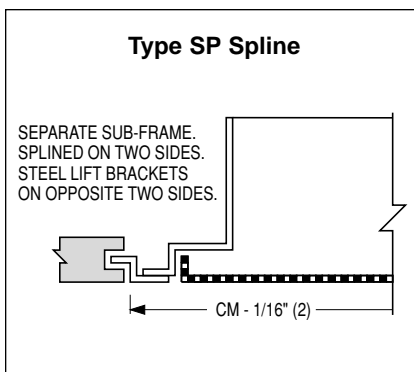
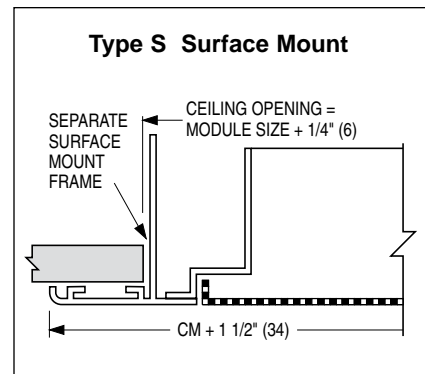
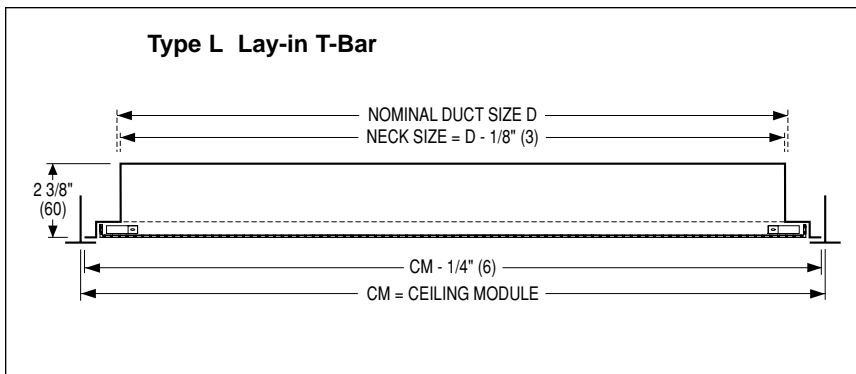
All round ducts and square ducts when duct size is less than CM - 2" (51).



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Models 4360, 4360A, 4360AA • Return • Flush Face

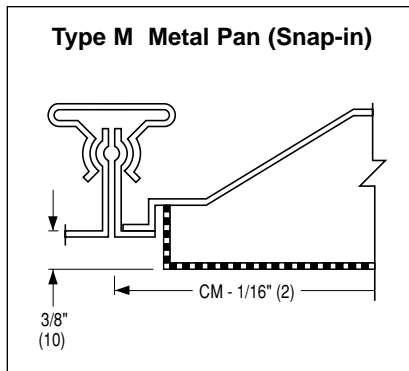
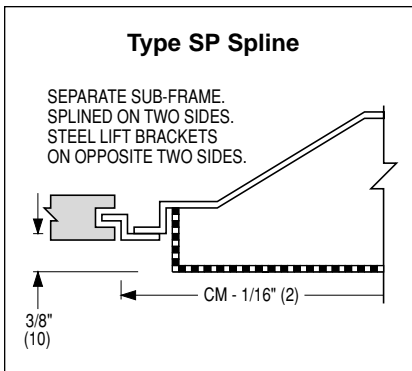
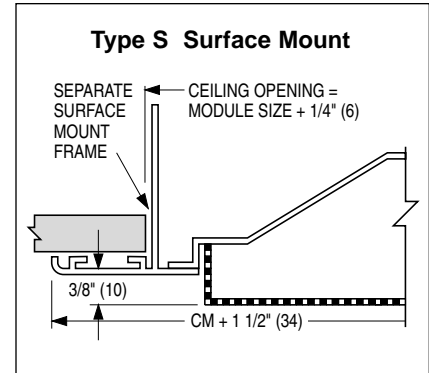
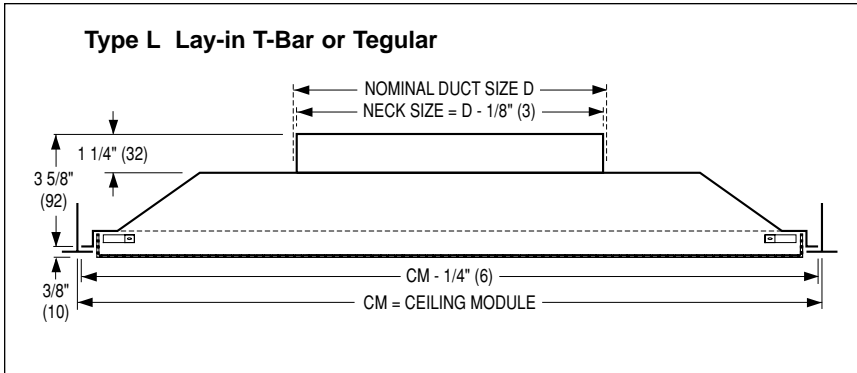
When duct size = CM - 2" (51).



Dimensional Data and Frame Types

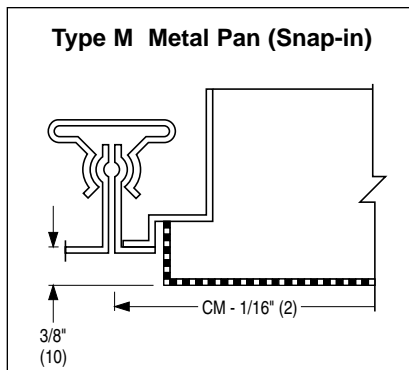
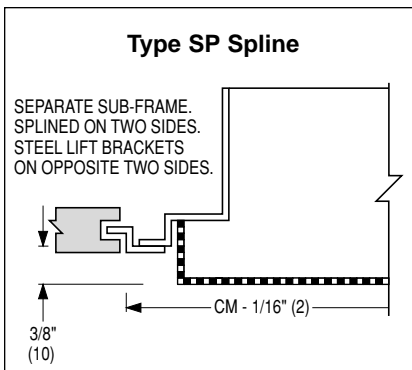
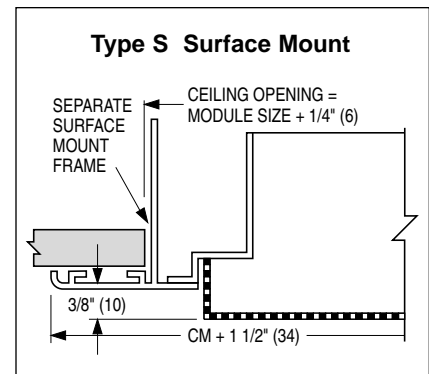
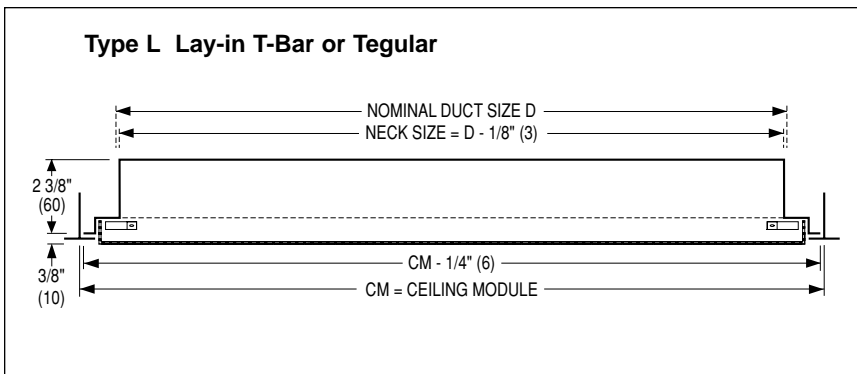
Models 4365, 4365A, 4365AA • Return • Drop Face

All round ducts and square ducts when duct size is less than CM - 2" (51).



Models 4365, 4365A, 4365AA • Return • Drop Face

When duct size = CM - 2" (51).



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CEILING DIFFUSERS

HOW TO SPECIFY OR TO ORDER

(Show complete Model Number and Size, unless "Default" is desired).

Perforated Return Ceiling Diffusers – Model Series 4360

4360 - 22 x 22 - 24 x 24 - L - AW - -

MODEL

- Steel	Flush Face	4360
	Drop Face	4365
- Aluminum Face	Flush Face	4360A
	Drop Face	4365A
- Aluminum	Flush Face	4360AA
	Drop Face	4365AA

NECK SIZE (inches)

Round

06, 08, 10, 12, 14, 15, 16, 18

Square/Rectangular

6 x 6, 8 x 8, 10 x 10, 12 x 12,
14 x 14, 18 x 6, 15 x 15, 18 x 6,
18 x 18, 22 x 10, 22 x 22, 46 x 22

CEILING MODULE

Imperial (inches) Metric (mm)

- 12 x 12	300 x 300
- 16 x 16	400 x 400
- 20 x 20	500 x 500
- 24 x 12	600 x 300
- 24 x 24	600 x 600
- 48 x 24	1200 x 600

ACCESSORIES

- None (default)	—
- External Foil Back Insulation	EX
- Earthquake Tabs	EQT

AIR BALANCING DEVICES

Round Neck

- Radial Sliding Blade Damper	4250
- Radial Opposed Blade Damper	4275
- Butterfly Damper	4675

Square Neck

- Opposed Blade Damper	OBD
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FINISH

- Appliance White (default)	AW
- Special Custom Color	SP
- AW Face/Black Backpan	BA

FRAME TYPE

- Lay-in T-Bar	L
- Surface Mount	S
- Spline	SP
- Metal Pan Snap-in	M
- Finline®	F

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Notes:

1. If more than one accessory is required, list in order.
2. Consult individual models as to limitations and availability of ceiling module and neck size combinations.

SUGGESTED SPECIFICATION:**Models 4360, 4365 – Steel**

Furnish and install **Nailor Model** (select one) **4360 Flush Face** or **4365 Drop Face, Perforated Return Ceiling Diffusers** of the sizes and capacities as shown on the plans and air distribution schedules. The diffuser shall have a heavy gauge, stamped corrosion-resistant steel backpan with a round or square neck. A steel perforated face shall have 3/16" (5) dia. holes on 1/4" (6) staggered centers, providing 51% free area. The face shall be removable, hinged and include quick-release spring latches allowing easy access for cleaning (and adjusting the optional damper). The finish shall be AW Appliance White baked enamel (optional finishes are available).

The manufacturer shall provide published performance data for the diffuser, which shall be tested in accordance with ANSI/ASHRAE Standard 70 – 1991.

Models 4360A, 4365A – Aluminum Face

Furnish and install **Nailor Model** (select one) **4360A Flush Face** or **4365A Drop Face, Perforated Return Ceiling Diffusers** of the sizes and capacities as shown on the plans and air distribution schedules. The diffuser shall have a heavy gauge, stamped corrosion-resistant steel backpan with a round or square neck. An aluminum perforated face shall have 3/16" (5) dia. holes on 1/4" (6) staggered centers, providing 51% free area. The face shall be removable, hinged and include quick-release spring latches allowing easy access for cleaning (and adjusting the optional damper). The finish shall be AW Appliance White baked enamel (optional finishes are available).

The manufacturer shall provide published performance data for the diffuser, which shall be tested in accordance with ANSI/ASHRAE Standard 70 – 1991.

Models 4360AA, 4365AA – Aluminum

Furnish and install **Nailor Model** (select one) **4360AA Flush Face** or **4365AA Drop Face, Perforated Return Ceiling Diffusers** of the sizes and capacities as shown on the plans and air distribution schedules. The diffuser shall have an aluminum backpan with a round or square neck. An aluminum perforated face shall have 3/16" (5) dia. holes on 1/4" (6) staggered centers, providing 51% free area. The face shall be removable, hinged and include quick-release spring latches allowing easy access for cleaning (and adjusting the optional damper). The finish shall be AW Appliance White baked enamel (optional finishes are available).

The manufacturer shall provide published performance data for the diffuser, which shall be tested in accordance with ANSI/ASHRAE Standard 70 – 1991.

Performance Data

Models 4360, 4360A, 4360AA • Flush Face • Return Module
 4365, 4365A, 4365AA • Drop Face • Return Module

Ceiling Module	Neck Size	Neck Velocity, FPM	300	400	500	600	700	800	1000	1200	1400
		Negative SP	.024	.042	.067	.096	.130	.170	.266	.383	.522
		VP	.006	.010	.016	.023	.031	.040	.063	.090	.123
12 x 12	10 x 10	Airflow, CFM	208	277	347	416	485	555	694	832	971
		NC	—	15	22	28	33	37	44	51	57
20 x 20	18 x 18	Airflow, CFM	675	900	1125	1350	1575	1800	2250	2700	3150
		NC	—	17	24	30	35	39	46	53	58
24 x 12	22 x 10	Airflow, CFM	459	612	765	918	1071	1224	1530	1836	2142
		NC	—	17	23	29	34	39	46	53	58
24 x 24	6" dia.	Airflow, CFM	59	78	98	118	137	157	196	235	275
		NC	—	—	—	10	15	19	26	33	38
	6 x 6	Airflow, CFM	75	100	125	150	175	200	250	300	350
		NC	—	—	—	12	17	21	28	35	40
	8" dia.	Airflow, CFM	105	140	175	209	244	279	349	419	489
		NC	—	—	—	14	19	23	30	37	42
	8 x 8	Airflow, CFM	133	178	222	267	311	356	444	533	622
		NC	—	—	—	15	20	24	31	38	43
	10" dia.	Airflow, CFM	164	218	273	327	382	436	545	654	764
		NC	—	—	10	16	21	25	32	39	44
	10 x 10	Airflow, CFM	208	278	347	417	486	556	694	833	972
		NC	—	—	11	17	22	26	33	40	45
	12" dia.	Airflow, CFM	236	314	393	471	550	628	785	942	1100
		NC	—	—	13	19	24	28	35	42	47
	12 x 12	Airflow, CFM	300	400	500	600	700	800	900	1200	1400
		NC	—	—	14	20	25	29	36	43	48
	14" dia.	Airflow, CFM	321	428	535	641	748	855	1069	1283	1497
		NC	—	—	15	21	26	30	37	44	49
	14 x 14	Airflow, CFM	408	544	681	817	953	1089	1361	1633	1906
		NC	—	10	17	23	28	32	39	46	51
15 x 15	Airflow, CFM	469	625	781	938	1094	1250	1563	1875	2188	
	NC	—	12	19	25	30	34	41	48	53	
16" dia.	Airflow, CFM	419	559	698	838	977	1117	1396	1676	1955	
	NC	—	10	17	23	28	32	39	46	51	
18 x 18	Airflow, CFM	675	900	1125	1350	1575	1800	2250	2700	3150	
	NC	—	16	23	29	34	38	45	52	57	
22 x 22	Airflow, CFM	1007	1344	1679	2015	2352	2688	3359	4031	4704	
	NC	—	18	25	31	36	40	47	54	59	
48 x 24	46 x 22	Airflow, CFM	2108	2811	3514	4217	4919	5622	7028	8433	9839
		NC	11	20	27	34	38	43	50	57	62

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

Performance Notes:

1. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.