

Application

Architecturally pleasing unit with very low sound levels, suitable for high ceiling spaces where 50% of the flow needs to be vertical, and 50% horizontal.

Standard Features

- Heavy gauge steel construction.
- Core is easily removed for installation or maintenance.
- Neck sizes 5" through 16".
- Neck is undersized by 1/8" to fit inside duct.
- Standard finish is Carnes electrocoat acrylic baked enamel. Other finishes are available upon request.
- The standard color is #11 bright white. Other colors are available on request.

Optional Features

- 24"x24" units can be set in larger panels for T-bar mounting. Those larger panels are:

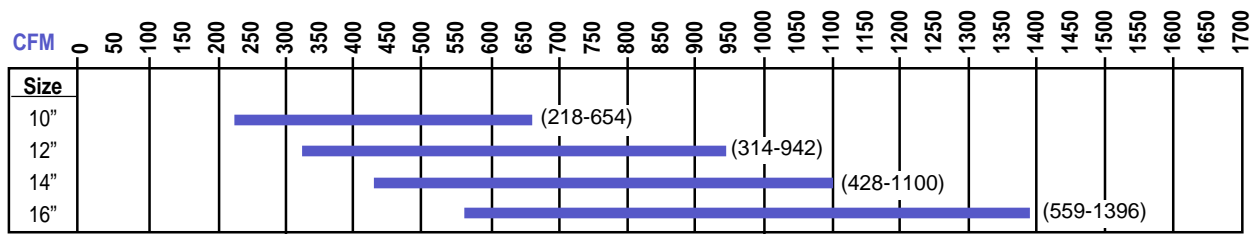
Option	T-bar grid size
Option 24	24" x 48"

Accessories

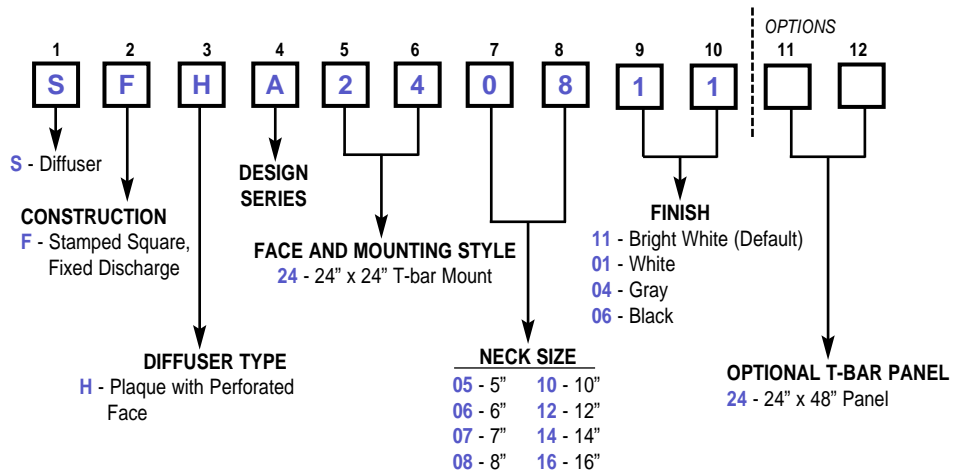
- When specifying damper for sizes 5"-16", use round damper model KXMB (p. A429).
- To mount this in a plaster ceiling, use auxiliary frame model KXFA (p. A447).

Quick Select Chart

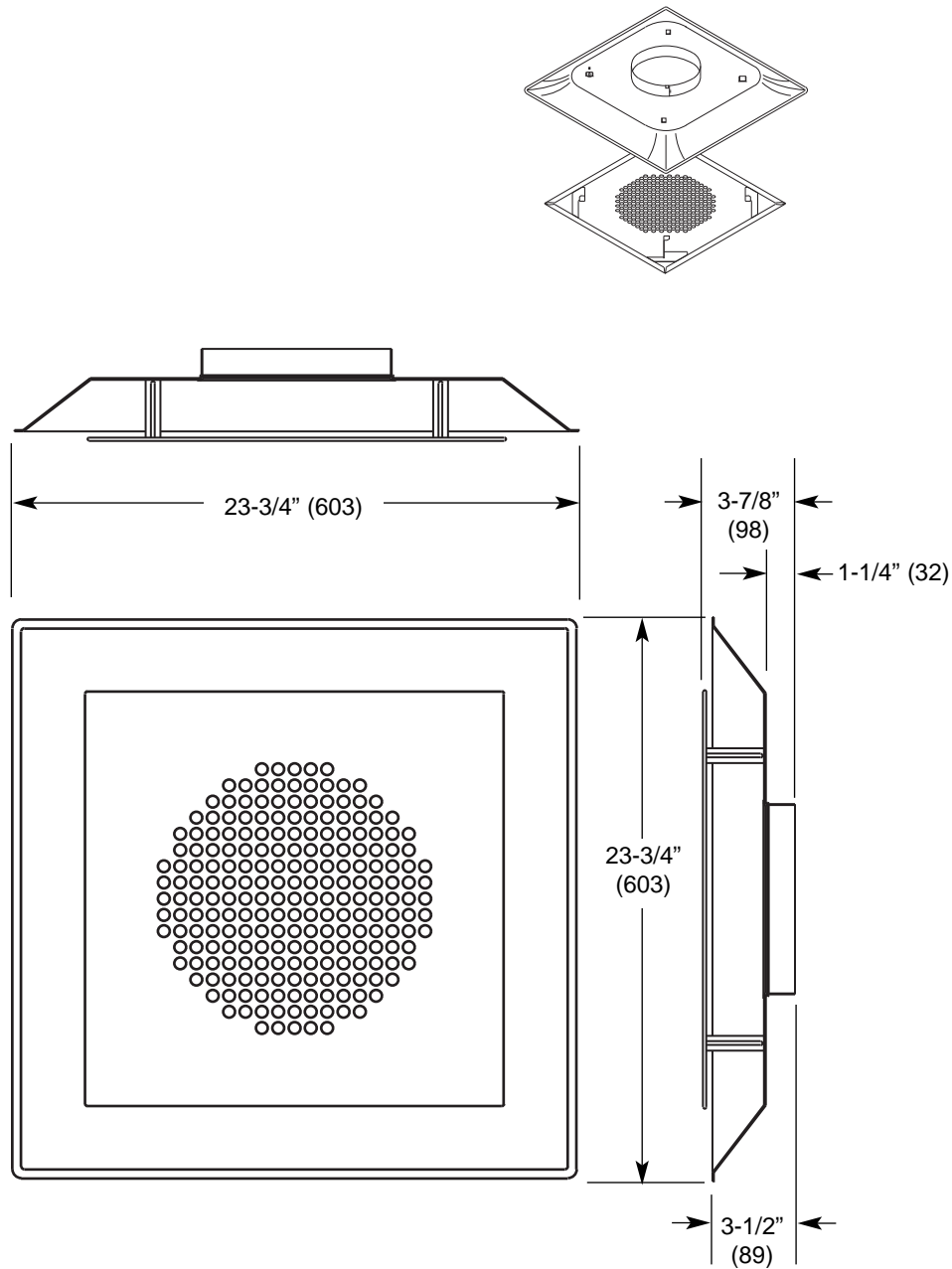
This shows units with: • A maximum NC/RC of 35.
• A minimum duct velocity of 400 FPM.



Modeling Number System



Sq. & Rect. Louvered Diffusers



Metric Dimensions are in Millimeters

Model	Nominal Duct Diameter	Inlet O. D. (Dim. A)
SFHA 2406	6" (152)	5-7/8" (149)
SFHA 2408	8" (203)	7-7/8" (200)
SFHA 2410	10" (254)	9-7/8" (251)
SFHA 2412	12" (305)	11-7/8" (302)
SFHA 2414	14" (356)	13-7/8" (352)
SFHA 2416	16" (406)	15-7/8" (403)

Neck Velocity (fpm) - - >	400	500	600	700	800	900	1000	1200	1400
Velocity Pressure (w.g.)	0.010	0.016	0.022	0.030	0.040	0.050	0.062	0.090	
10" Flow (cfm) - - >	218	273	327	382	436	491	545	654	764
10" Total Pressure (w.g.)	0.030	0.042	0.057	0.074	0.092	0.112	0.133	0.178	0.230
10" Sound (NC/RC)	13/12H	16/16H	19/19N	22/22N	25/25N	27/27N	30/29N	34/32N	38/36N
10" Horizontal Throw (ft.)	1-4-5	2-4-6	3-5-7	4-5-7	4-6-8	5-6-8	5-6-9	5-7-10	6-7-11
10" Vertical Projection (ft.)	7-9-13	8-10-14	9-11-16	10-12-17	11-13-19	11-14-20	12-15-21	13-16-23	14-17-26
12" Flow (cfm) - - >	314	393	471	550	628	707	785	942	1100
12" Total Pressure (w.g.)	0.031	0.046	0.063	0.082	0.103	0.127	0.152	0.208	0.275
12" Sound (NC/RC)	14/14H	17/18H	20/21N	23/24N	26/27N	28/29N	31/31N	35/35N	39/38N
12" Horizontal Throw (ft.)	2-4-7	4-5-7	4-6-8	5-6-8	5-7-9	6-7-9	6-7-10	7-8-11	7-8-12
12" Vertical Projection (ft.)	9-11-16	10-13-18	11-14-19	12-15-21	13-16-23	14-17-24	14-18-26	16-19-28	17-21-31
14" Flow (cfm) - - >	428	535	641	748	855	962	1069	1283	1497
14" Total Pressure (w.g.)	0.032	0.049	0.071	0.095	0.124	0.156	0.192	0.273	0.369
14" Sound (NC/RC)	15/16H	18/20H	21/23H	24/26N	27/29N	30/31N	32/33N	36/37N	40/40N
14" Horizontal Throw (ft.)	3-5-7	4-6-8	5-6-8	5-7-9	6-7-9	6-8-10	7-8-11	7-8-12	8-9-13
14" Vertical Projection (ft.)	10-13-19	11-15-21	13-16-23	14-17-25	15-18-27	16-19-28	17-21-30	18-22-33	20-24-36
16" Flow (cfm) - - >	559	698	838	977	1117	1257	1396	1676	1955
16" Total Pressure (w.g.)	0.034	0.053	0.077	0.106	0.139	0.177	0.217	0.315	0.434
16" Sound (NC/RC)	16/18H	19/22H	23/25H	26/28N	29/30N	31/33N	33/35N	38/39N	41/42N
16" Horizontal Throw (ft.)	4-6-8	5-7-9	6-7-9	6-8-10	7-8-10	7-9-11	8-9-12	8-10-13	9-11-14
16" Vertical Projection (ft.)	12-15-22	13-17-24	14-19-27	16-20-29	17-21-31	18-23-33	10-24-35	21-26-38	22-28-41

Notes:

- For a given size, 50% of the published flow is directed horizontally, and 50% is directed vertically.
- The Throw and Projection values are based on this 50/50 split between horizontal and vertical.
- Performance Data is based on tests conducted in accordance with ANSI/ASHRAE Standard 70-1991.
- Testing was conducted in isothermal conditions.
- Actual performance in the field may vary.
- Velocity values are given in Feet per Minute (fpm).
- Sound values are provided in both NC and RC.
- Sound levels are based on room absorption of 10db re 10⁻¹² watts.
- Throw and Projection values are provided in feet for terminal velocities of 150, 100 and 50 feet per minute respectively.

NOTES:

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