

## 1400 / 51400 SERIES

Louvered Face Diffuser, 4 Cones

#### **MODELS**

- · 1400 Steel, louvered ceiling diffuser
- 51400 Aluminum, louvered ceiling diffuser 1
- M1400 Steel, hard metric, louvered ceiling diffuser (lay-in T-bar only)
- M51400 Aluminum, hard metric, louvered ceiling diffuser <sup>1</sup> (lay-in T-bar only)

#### **FEATURES**

- · 4 cones for optimum airflow control
- Cones feature a 1-piece stamped construction without mitered joints
- Round inlet for easy connection to round duct
- · Anti-smudge design prevents smeared ceilings
- · Two earthquake tabs are standard
- Great choice for variable air volume spaces

#### **INLET SIZES**

• Round: 6" - 14" (2" increments), 15"

#### FRAME STYLES

- F12 12" module in 24" F23 panel <sup>2</sup>
- F22 Surface mount 3
- F23 Lay-in T-bar
- F27 Spline
- F98 Narrow-T

#### PANEL SIZES

- 12"x12", 24"x24", 48"x24" 4
- 300x300mm, 600x600mm, 1200x600mm <sup>4 5</sup>

#### **COMPATIBLE OPTIONS AND ACCESSORIES**

- Adjustable throw pattern
- IB Insulated blanket (24"x24")
- · R6 Molded insulation (24"x24"), non-metric
- · 1400SB Steel, sectorizing baffle
- · PR10 Steel, radial opposed blade damper
- PRN100 Steel, radial fan damper
- RP12 Steel, butterfly bladed damper
- PRD10 Steel, radial opposed blade damper (duct mount)
- · PRD100 Steel, radial fan damper (duct mount)
- PR12 Steel, butterfly bladed damper (duct mount)
- RSG15 Steel, round straightening grid (duct mount)
- PRSG15 Steel, round straightening grid
- OBDDM Steel, square or rectangular damper (duct mount)
- EX8 Steel duct extractor with 1" blade spacing (duct mount)
- EX88 Steel duct extractor with 2" blade spacing (duct mount)
- HCF23 Steel, hard ceiling frame (F23 only)
- 5HCF23 Aluminum, hard ceiling frame (F23 only)



#### NOTES:

- <sup>1</sup> Safe for MRI use; F22 MRI safe mounting hardware by others.
- F12 and 12"x12" panel available with 6" and 8" inlet dimensions only.
- F22 includes separate aluminum plaster frame shipped loose for field installation.
- 48"x24" (1200x600mm) panel available in F23 only.
- <sup>5</sup> Only available with M1400 and M51400 models.

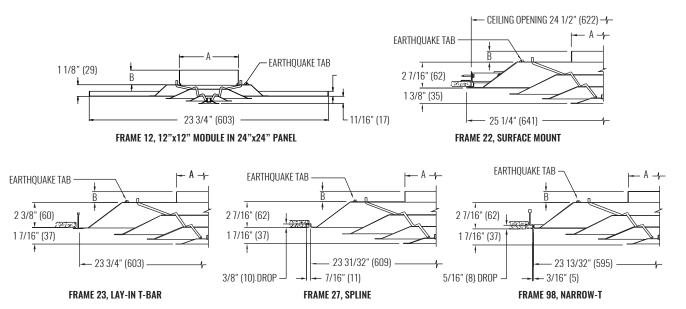
WEB SEARCH: 1400 or 51400

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#### **DIMENSIONAL DATA**



NOTES: Dimensions in parentheses are millimeters (mm). Illustrations shown are for a 24"x24" panel. See table below for dimensional references.

### PERFORMANCE, DESIGN, AND DIMENSIONAL DATA

SIZE		PERFORMANCE - HORIZONTAL THROW				DESIGN			DIMENSIONS		
PANEL	NOMINAL INLET	NC (< 25)		NC (25 - 40)		CFM @	SPACING @ 0.6 CFM/sf	MINIMUM	ACTUAL INLET SIZE	1400 & M1400	51400 & M51400
		CFM	THROW (ft)	CFM	THROW (ft)	NC=30	(ft)	CFM/sf	A	В	В
12"x12"	6"	39 - 150	4 - 11	157 - 220	12 - 14	160	16	0.25	5 7/8" (149)	1 1/4" (32)	1 1/2" (38)
	8"	70 - 250	6 - 15	279 - 370	16 - 18	260	20	0.20	7 7/8" (200)	1 1/4" (32)	1 1/2" (38)
24"x24"	6"	79 - 230	7 - 12	245 - 393	13 - 16	275	20	0.20	5 7/8" (149)	1 1/4" (32)	1 1/2" (38)
	8"	70 - 320	5 - 15	349 - 525	15 - 19	380	25	0.22	7 7/8" (200)	1 1/4" (32)	1 1/2" (38)
	10"	109 - 410	6 - 17	436 - 675	17 - 21	490	28	0.24	9 7/8" (251)	1 1/2" (38)	1 1/2" (38)
	12"	157 - 490	7 - 18	525 - 800	19 - 23	600	30	0.28	11 7/8" (302)	1 1/2" (38)	1 1/2" (38)
	14"	214 - 600	9 - 20	641 - 990	21 - 26	700	32	0.30	13 7/8" (352)	1 1/2" (38)	1 1/2" (38)
	15"	245 - 650	9 - 21	680 - 1060	21 - 27	800	34	0.30	14 7/8" (378)	1 1/2" (38)	1 1/2" (38)

NOTES: Information shown is abbreviated. See website for complete information. Dimensions in parentheses are millimeters (mm). Throw value ranges are given for isothermal conditions, unless otherwise noted, and a terminal velocity of 50 FPM (0.25 m/s). NC ranges are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10<sup>-12</sup> Watts. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. Design spacing is recommended distance between diffusers in an open plan office based on ADPI > 80%, 9ft ceiling, and 55°F discharge at 30 NC and 0.6 CFM/sf. Minimum CFM/sf is based on recommended spacing at 80% ADPI. Design recommendations not applicable to vertical throw. "N/A" in design table denotes situations which do not result in ADPI>80% and are therefore not recommended.