

## MODELS

- 1450 - Steel, louvered ceiling diffuser
- 51450 - Aluminum, louvered ceiling diffuser <sup>1</sup>
- M1450 - Steel, hard metric ceiling diffuser
- M51450 - Aluminum, hard metric ceiling diffuser <sup>1</sup>

## FEATURES

- 3 cones for optimum airflow control
- Great choice for variable air volume spaces
- 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

## INLET SIZES

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

## FRAME STYLES

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

## PANEL SIZES

- 12"x12", 20"x20", 24"x24", 48"x24" <sup>4</sup>
- 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.
- <sup>2</sup> F12 and 12"x12" panel available with 6" and 8" inlet dimensions only.
- <sup>3</sup> F22 includes separate aluminum plaster frame shipped loose for field installation.
- <sup>4</sup> 20"x20" panel only available with 1450. 48"x24" (1200x600mm) panel available in F23 only.
- <sup>5</sup> Only available with M1450 and M51450 models.

**WEB SEARCH: 1450 or 51450**

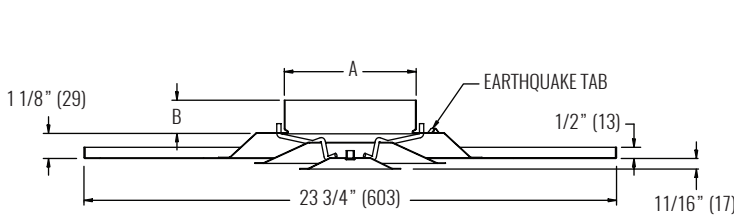


# 1450 / 51450 SERIES

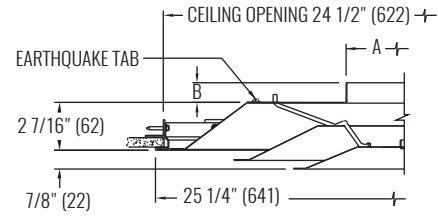
Louvered Face Diffuser, 3 Cones



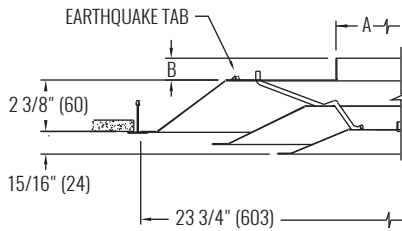
## DIMENSIONAL DATA



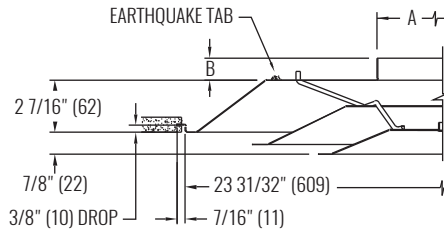
FRAME 12, 12"x12" MODULE IN 24"x24" PANEL



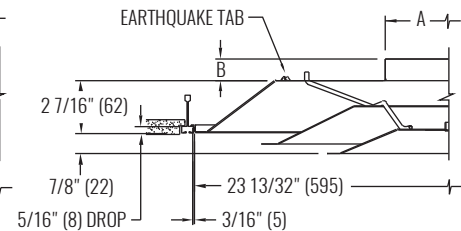
FRAME 22, SURFACE MOUNT



FRAME 23, LAY-IN T-BAR



FRAME 27, SPLINE



FRAME 98, NARROW-T

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 @ NC=30	SPACING @ 0.6 CFM/sf (ft)	MINIMUM CFM/sf	ACTUAL INLET SIZE	1450/M1450	51450/M51450
		CFM	THROW (ft)	CFM	THROW (ft)						
12"x12"	6"	29 - 170	4 - 12	180 - 245	13 - 15	225	16	0.18	5 7/8" (149)	1 1/4" (32)	1 1/2" (38)
	8"	70 - 209	6 - 14	225 - 314	14 - 17	250	20	0.20	7 7/8" (200)	1 1/4" (32)	1 1/2" (38)
24"x24"	6"	39 - 180	3 - 10	196 - 295	10 - 12	220	20	0.31	5 7/8" (149)	1 1/4" (32)	1 1/2" (38)
	8"	70 - 285	4 - 12	314 - 460	13 - 15	350	24	0.33	7 7/8" (200)	1 1/4" (32)	1 1/2" (38)
	10"	109 - 405	5 - 14	436 - 650	15 - 18	500	27	0.35	9 7/8" (251)	1 1/2" (38)	1 1/2" (38)
	12"	157 - 550	6 - 17	560 - 864	17 - 21	670	30	0.37	11 7/8" (302)	1 1/2" (38)	1 1/2" (38)
	14"	214 - 705	7 - 19	748 - 1069	19 - 23	850	36	0.40	13 7/8" (352)	1 1/2" (38)	1 1/2" (38)
	15"	245 - 785	7 - 20	820 - 1227	20 - 25	925	38	0.40	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.