

# Perforated Face Diffuser, Architectural

### **MODELS**

- 1100 Steel backpan and perforated face with aluminum frame supply diffuser
- 51100 Aluminum backpan, perforated face, and frame supply diffuser

# **FEATURES**

- Square or rectangular inlet
- · Architectural extruded aluminum borders
- Individually adjustable blade pattern deflectors for horizontal to vertical throw
- · Variety of discharge air patterns available
- Removable perforated face and core for ease of cleaning

### **INLET SIZES**

- Width: 6", 8", 9", 10", 12", 15", 18"
- Height: 6", 8", 9", 10", 12", 15", 18"

### FRAME STYLES

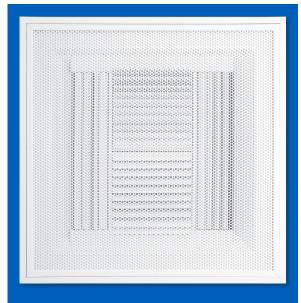
- F22 Surface mount
- F23 Lay-in T-bar
- F27 Spline

# **PANEL SIZES**

- 12"x12"
- 24"x12"
- 24"x24"
- 48"x24"

### COMPATIBLE OPTIONS AND ACCESSORIES

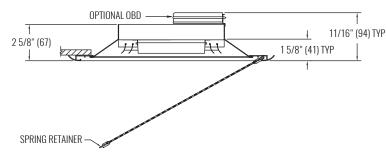
- · OBD Steel, square or rectangular damper
- 5OBD Aluminum, square or rectangular damper
- POBD Steel, square or rectangular painted damper
- OBDDM Steel, square or rectangular damper (duct mount)
- EX8 Steel duct extractor with 1" blade spacing (duct mount)
- EX88 Steel duct extractor with 2" blade spacing (duct mount)
- HCF23 Steel, hard ceiling frame (F23 only)
- 5HCF23 Aluminum, hard ceiling frame (F23 only)
- · SSG Steel, square or rectangular straightening grid
- SRAC325 Steel, square to round adapter



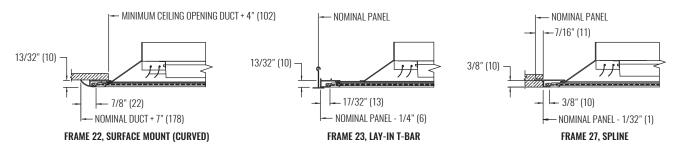
WEB SEARCH: 1100 or 51100



# **DIMENSIONAL DATA**



### **CROSS SECTION WITH HINGE DETAIL**



NOTES: Dimensions in parentheses are millimeters (mm). Illustrations shown are for 24"x24" panel size. A 12"x12" panel with F23 and F27 is only available with a 6"x6" inlet size.

A 24"x12" panel with F23 and F27 is only available with a 6"x18" inlet size or smaller.

## PERFORMANCE AND DESIGN DATA

SIZE		PERFORMANCE - HORIZONTAL THROW				DESIGN		
PANEL	NOMINAL INLET	NC (< 25)		NC (25 - 40)		CFM @	SPACING @	MINIMUM
		CFM	THROW (ft)	CFM	THROW (ft)	NC=30	0.6 CFM/sf (ft)	CFM/sf
12"x12"	6"x6"	75 - 95	5 - 6	100 - 250	7 - 11	140	15	0.50
24"x24"	8"x8"	89 - 150	5 - 8	178 - 400	9 - 14	220	19	0.50
	10"x10"	139 - 208	6 - 9	250 - 625	10 - 18	300	22	0.55
	12"x12"	165 - 300	6 - 10	330 - 800	11 - 20	460	28	0.55
	15"x15"	205 - 440	6 - 12	469 - 1250	13 - 25	625	32	0.60
	18"x18"	270 - 575	6 - 13	675 - 1688	15 - 29	800	37	0.60

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.