

MODELS

- SHPCR - Steel, louvered ceiling diffuser with round inlet and pattern controllers
- 5SHPCR - Aluminum, louvered ceiling diffuser with round inlet and pattern controllers

FEATURES

- Round duct connections
- Adjustable pattern controllers for vertical throw
- Core is removable from face of diffuser
- Maintains a horizontal discharge air pattern from maximum to minimum CFM
- Excellent choice for VAV applications with high loads
- Excellent choice for high ceiling applications

INLET SIZES

- Round: 6" - 16" (2" increments)
- Square: 6"x6" - 18"x18" (3" increments)

FRAME STYLES

- F21 - Surface mount, beveled
- F22 - Surface mount, flat
- F23 - Lay-in T-bar
- F24 - Snap-in T-bar
- F27 - Spline
- F98 - 5/16" step down

PANEL SIZES

- 12"x12"
- 24"x24"

COMPATIBLE OPTIONS AND ACCESSORIES

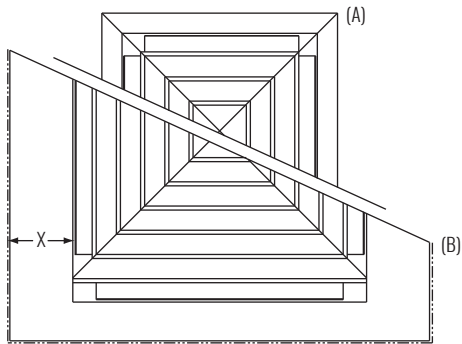
- PR10 - Steel, radial opposed blade damper
- PRN100 - Steel, radial fan damper
- RP12 - Steel, butterfly bladed damper
- PRD10 - Steel, radial opposed blade damper (duct mount)
- PRD100 - Steel, radial fan damper (duct mount)
- PR12 - Steel, butterfly bladed damper (duct mount)
- RSG15 - Steel, round 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)



ZOOMED VIEW OF PATTERN CONTROLLERS

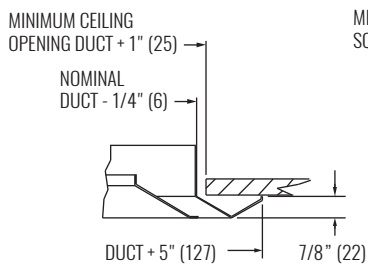


DIMENSIONAL DATA

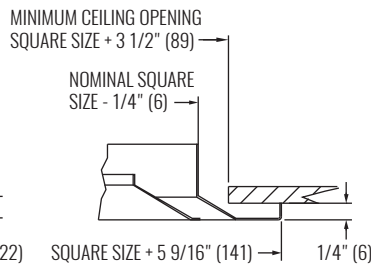


FRAME STYLE DIFFERENCES
A = SURFACE MOUNT, B = LAY-IN T-BAR

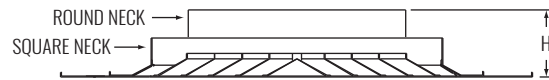
DIMENSIONS - AVAILABLE INLET SIZES			
PANEL	ROUND INLET	NOMINAL SQUARE	HEIGHT (H)
12" x 12"	6"	6"	3 1/8" (79)
24" x 24"	6"	6", 9", 12", 15", 18"	3 1/8" (79)
	8"	9", 12", 15", 18"	3 3/8" (86)
	10"	12", 15", 18"	3 3/8" (86)
	12"	12", 15", 18"	3 3/8" (86)
	14"	15", 18"	3 3/8" (86)
	16"	18"	3 3/8" (86)



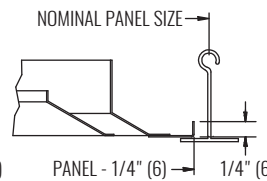
FRAME 21, SURFACE MOUNT, BEVELED



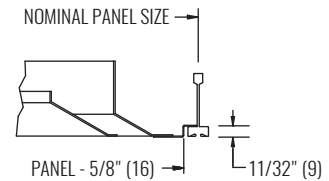
FRAME 22, SURFACE MOUNT, FLAT



CROSS SECTION, FRAME 23



FRAME 23, LAY-IN T-BAR



FRAME 98, NARROW-T

NOTES: Dimensions in parentheses are millimeters (mm). Illustrations shown are for a 24"x24" panel. Dimension 'X' will vary with inlet sizes for Frames 23, 24, 27, and 98.

PERFORMANCE AND DESIGN DATA

SIZE		PERFORMANCE				DESIGN		
NOMINAL ROUND INLET	NOMINAL SQUARE INLET	NC (< 25)		NC (25 - 40)		CFM @ NC=30	SPACING @ 0.6 CFM/sf (ft)	MINIMUM CFM/sf
		CFM	THROW (ft)	CFM	THROW (ft)			
HORIZONTAL THROW								
6"	6"x6"	78 - 170	6 - 12	183 - 295	13 - 22	210	16	0.35
8"	9"x9"	140 - 291	8 - 16	314 - 488	17 - 26	370	20	0.36
12"	12"x12"	314 - 696	11 - 26	706 - 1099	26 - 40	750	26	0.38
8"	18"x18"	140 - 291	8 - 16	314 - 523	17 - 28	320	20	0.35
12"	18"x18"	314 - 608	11 - 22	628 - 1099	23 - 40	770	28	0.40
16"	18"x18"	558 - 1046	15 - 28	1116 - 1814	30 - 49	1300	34	0.40
VERTICAL THROW								
6"	6"x6"	78 - 147	7 - 14	157 - 255	15 - 24	N/A	N/A	N/A
8"	9"x9"	140 - 253	10 - 18	279 - 453	20 - 32	N/A	N/A	N/A
12"	12"x12"	314 - 530	15 - 25	569 - 942	26 - 44	N/A	N/A	N/A
8"	18"x18"	140 - 253	10 - 18	270 - 453	19 - 32	N/A	N/A	N/A
12"	18"x18"	314 - 530	15 - 25	569 - 942	26 - 44	N/A	N/A	N/A
16"	18"x18"	558 - 907	20 - 32	977 - 1535	34 - 54	N/A	N/A	N/A

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 10⁻¹² 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.