

MODELS

- SHPC - Steel, louvered ceiling diffuser with square or rectangular inlet and pattern controllers
- 5SHPC - Aluminum, louvered ceiling diffuser with square or rectangular inlet and pattern controllers

FEATURES

- Square 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

- Square: 6"x6" - 21"x21" (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"
- 48"x24"

COMPATIBLE OPTIONS AND ACCESSORIES

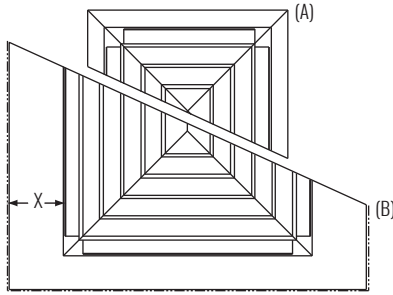
- OBDFDA - Steel, square or rectangular face operated damper for SH Series
- 5OBDFDA - Aluminum, square or rectangular face operated damper for SH Series
- SRNA - Steel, square to round adapter for SH Series
- SRNA2 - Steel, square to round adapter for SH Series
- SSG - Steel, square or rectangular straightening 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

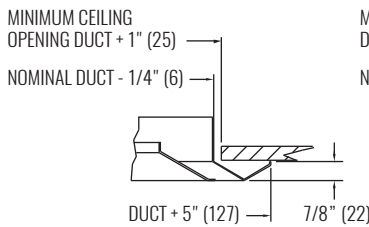


DIMENSIONAL DATA

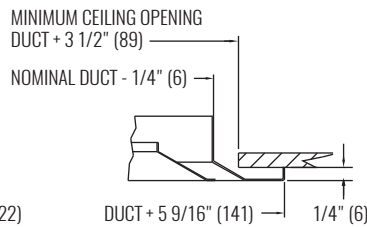


FRAME STYLE DIFFERENCES
A = SURFACE MOUNT, B = LAY-IN T-BAR

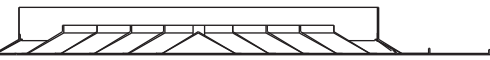
DIMENSIONS			
PANEL	FRAME STYLE	MIN INLET (DIM1 x DIM2)	MAX INLET (DIM1 x DIM2)
NO PANEL	21, 22	06"x06" (152x152)	21"x21" (533x533)
12"x12"	23, 24, 27	06"x06" (152x152)	06"x06" (152x152)
24"x24"	23, 24, 27, 98	06"x06" (152x152)	18"x18" (457x457)
48"x24"	23, 24, 27	12"x12" (305x305)	18"x18" (457x457)



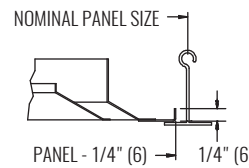
FRAME 21, SURFACE MOUNT, BEVELED



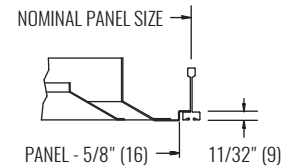
FRAME 22, SURFACE MOUNT, FLAT



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. Core removal is the same as the SH series of diffusers.

PERFORMANCE AND DESIGN DATA

SIZE	PERFORMANCE				DESIGN		
	NC (< 25)		NC (25 - 40)		CFM @ NC=30	SPACING @ 0.6 CFM/sf (ft)	MINIMUM CFM/sf
NOMINAL INLET	CFM	THROW (ft)	CFM	THROW (ft)			
HORIZONTAL THROW							
6"x6"	100 - 138	9 - 12	150 - 250	12 - 15	200	18	0.42
9"x9"	225 - 325	14 - 17	350 - 580	17 - 22	420	25	0.41
12"x12"	400 - 540	19 - 22	575 - 1000	22 - 29	680	30	0.40
15"x15"	469 - 781	20 - 26	850 - 1400	27 - 35	1000	38	0.39
18"x18"	675 - 1100	24 - 31	1125 - 2025	31 - 42	1350	44	0.38
21"x21"	919 - 1430	28 - 35	1531 - 2580	36 - 47	1780	50	0.35
VERTICAL THROW							
6"x6"	100 - 125	9 - 12	150 - 250	12 - 15	N/A	N/A	N/A
9"x9"	225 - 281	14 - 16	304 - 495	16 - 21	N/A	N/A	N/A
12"x12"	400 - 467	19 - 20	500 - 800	21 - 27	N/A	N/A	N/A
15"x15"	469 - 677	20 - 25	729 - 1250	25 - 33	N/A	N/A	N/A
18"x18"	675 - 938	24 - 29	1013 - 1575	30 - 37	N/A	N/A	N/A
21"x21"	919 - 1225	29 - 33	1327 - 2144	34 - 44	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.