

## MODELS

- SH - Steel, louvered ceiling diffuser
- 5SH - Aluminum, louvered ceiling diffuser
- MSH - Steel, metric louvered ceiling diffuser

## FEATURES

- Core is removable from face of diffuser
- Square or rectangular duct connections
- Maintains a horizontal discharge air pattern from maximum to minimum CFM
- Lever operator on optional OBDFA damper allows easy volume adjustment from face of diffuser
- Various discharge air patterns available
- Excellent choice for VAV applications with high loads

## INLET SIZES

- Square: 6"x6" - 48"x48" (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", and 48"x24"
- 600x600mm

## COMPATIBLE OPTIONS AND ACCESSORIES

- Ultrathrow (throw reducing device)
- OBDFA - Steel, square or rectangular face operated damper
- 5OBDFA - Aluminum square or rectangular face operated 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)
- SRNA and SRNA2 - Steel, square to round adapters
- SRAC325 - Steel, square to round adapter
- SSG - Steel, square or rectangular straightening grid

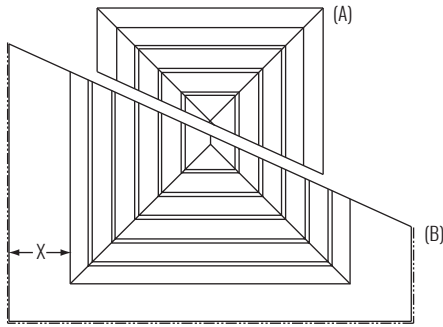


# SH / 5SH SERIES

Louvered Face Diffuser, Flush Face

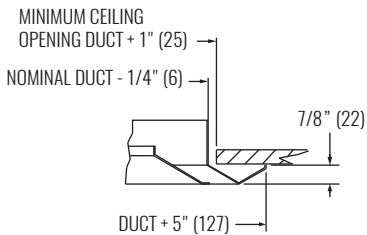


## DIMENSIONAL DATA

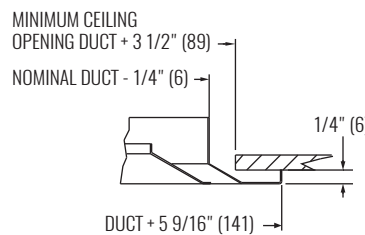


**FRAME STYLE DIFFERENCES**  
A = SURFACE MOUNT, B = LAY-IN T-BAR

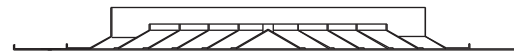
DIMENSIONS - AVAILABLE INLET SIZES			
PANEL	FRAME STYLE	MIN INLET (DIM1 x DIM2)	MAX INLET (DIM1 x DIM2)
NO PANEL	21, 22	6"x6" (152x152)	48"x48" (1219x1219)
12"x12"	23, 24, 27	6"x6" (152x152)	9"x9" (229x229) <sup>1</sup>
24"x24"	23, 24, 27	6"x6" (152x152)	21"x21" (533x533) <sup>1</sup>
	98	6"x6" (152x152)	18"x18" (457x457)
48"x24"	23, 24, 27	12"x12" (610x610)	21"x42" (533x1067) 5SH <sup>1</sup>
			21"x45" (533x1143) SH <sup>1</sup>



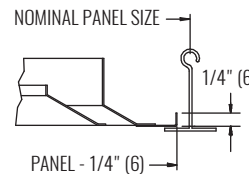
**FRAME 21, SURFACE MOUNT, BEVELED**



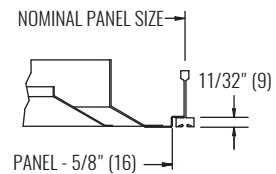
**FRAME 22, SURFACE MOUNT, FLAT**



**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.

<sup>1</sup> Available in 4-way discharge air pattern only.

## PERFORMANCE AND DESIGN DATA

SIZE	PERFORMANCE - HORIZONTAL THROW				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)			
6"x6"	50 - 180	7 - 12	200 - 325	13 - 17	225	19	0.30
9"x9"	113 - 365	10 - 18	385 - 675	18 - 24	450	27	0.30
12"x12"	200 - 600	13 - 23	640 - 1100	23 - 31	750	35	0.30
15"x15"	313 - 905	16 - 28	938 - 1563	28 - 37	1125	43	0.33
18"x18"	450 - 1245	20 - 33	1350 - 2250	34 - 44	1600	52	0.35
21"x21"	613 - 1630	23 - 37	1700 - 2756	38 - 49	2000	58	0.38
24"x24"	800 - 2060	26 - 42	2150 - 3600	43 - 56	2600	66	0.40

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.

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