

MODELS

- SHFR - Steel, fire rated, 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
- SHFR comes standard as a UL 263 classified assembly that incorporates a three hour rated fire damper and a 1/2" thick ceramic fiber blanket

INLET SIZES

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

FRAME STYLES

- F23 - Lay-in T-bar

PANEL SIZES

- 24"x24"

COMPATIBLE OPTIONS AND ACCESSORIES ¹

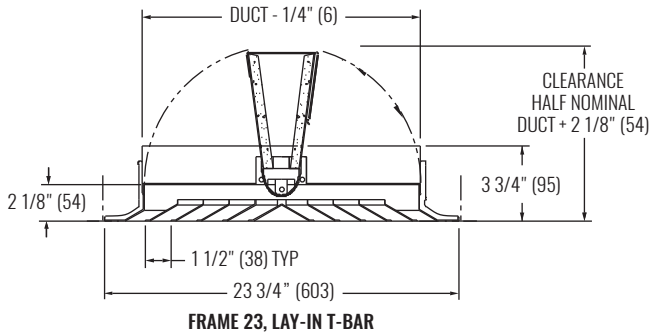
- OBDDM - Steel, square or rectangular damper (duct mount)
- EX8 - Steel duct extractor with 1" blade spacing (duct mount)
- EX88 - Steel duct extractor with 2" blade spacing (duct mount)
- HCF23 - Steel, hard ceiling frame (F23 only)

NOTES:

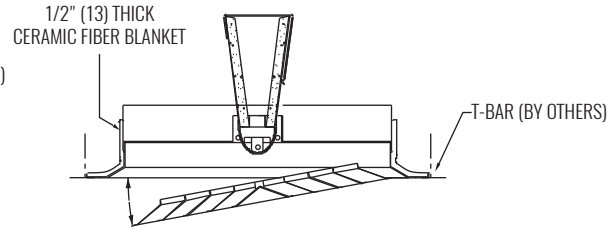
- ¹ Check allowance of options and accessories with local fire codes.



DIMENSIONAL DATA



FRAME 23, LAY-IN T-BAR



REMOVABLE CORE

NOTES: Dimensions in parentheses are millimeters (mm).

PERFORMANCE AND DESIGN DATA

| SIZE | | PERFORMANCE - HORIZONTAL THROW | | | | DESIGN | | |
|---------|---------------|--------------------------------|------------|--------------|------------|-------------|---------------------------|----------------|
| PANEL | NOMINAL INLET | NC (< 25) | | NC (25 - 40) | | CFM @ NC=30 | SPACING @ 0.6 CFM/sf (ft) | MINIMUM CFM/sf |
| | | CFM | THROW (ft) | CFM | THROW (ft) | | | |
| 24"x24" | 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 |

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.