

## SHFR Suggested Specification & Configuration

- 1. SERIES: (XXXX)**  
SHFR - Square/Rectangular Neck,  
Fire Rated Ceiling Diffuser
- 2. PATTERN: (XX)**  
01 - 1-Way  
02 - 2-Way  
03 - 3-Way  
04 - 4-Way
- 3. WIDTH: SQUARE NECK ONLY (XX)**  
06" - 18" in 3" Increments
- 4. HEIGHT: SQUARE NECK ONLY (XX)**  
06" - 18" in 3" Increments
- 5. FRAME: (XXX)**  
F23 - Lay-in T-Bar
- 6. PANEL: (XX)x(XX)**  
24"x24"
- 7. FINISH: (XX)**  
44 - British White

### SHFR

The ceiling diffuser shall be Krueger model SHFR (steel) louver face for non-adjustable horizontal discharge airflow. The diffuser must be a UL classified fire rated ceiling diffuser assembly listed in Underwriters Laboratories Fire Resistant Directory. The diffuser shall be tested in accordance with UL 263 and must meet NFPA 90 requirements. These diffusers shall have a square neck of the sizes shown on the drawings or job schedule. The square neck shall be an integral part of the backpan. The diffuser shall have an easily removable core with fixed blades in 1, 2, 3, or 4-way configurations.

### PERFORMANCE

The manufacturer shall provide published (printed or electronic) performance data for the diffuser. Performance data shall include 2 - 7 octave band sound power levels. The diffuser shall be tested in accordance to the data standards at the time of product introduction or ANSI/ASHRAE Standard 70.

### FINISH

The paint finish shall be #44 British White and be an anodic acrylic paint, baked at 315° for 30 minutes. The paint thickness shall be 0.8 - 1.0 mils, gloss at 60° per ASTM D523-89 of 50 - 85%, pencil hardness per ASTM D3363-92A of HB - H, crosshatch adhesion per ASTM D3359-83 of 4B - 5B, impact per ASTM D2794-93 of direct impact >100 in/lb and reverse impact >80 in/lb, salt spray per ASTM B117-9048 of 96 hours, humidity per ASTM D2247-92 of >500 hours and water soak per ASTM D870-92 of 250 hours.