

SHPC, 5SHPC | Flush Face, Pattern Controllers

# Introduction: SHPC, 5SHPC -

The SHPC/5SHPC series square diffusers are available in various sizes and discharge air patterns to meet engineering requirements for capacity and directional throw in addition to a variety of frame styles to meet architectural requirements of today's ceilings. They feature a 1/4" horizontal lip on all sides of the louvered core, which results in a tight horizontal pattern at the ceiling and a higher discharge velocity at the face. This creates a high induction region just below the face of the diffuser, which improves room air mixing. Further, they include manually adjustable pattern controllers mounted between the core and frame to provide vertical discharge when required. Because they have higher discharge face velocities, they are an excellent choice for variable air volume systems with above normal temperature differentials. Also, the pattern controllers make them a great choice for use in high ceiling applications with ceiling heights ranging from 10 - 20 feet. At typical flow rates, isothermal throws of 18 - 30 feet make them ideal for mounting centrally in many spaces with high load requirements while providing high mixing rates in the space.

#### **MODELS**

SHPC - Steel Louvered Diffuser

5SHPC - Aluminum Louvered Diffuser

#### **PANEL SIZES**

- 12"x12"
- · 24"x24"
- 24"x48"

#### **FINISHES**

- · Standard finish is #44 British White.
- · Optional finishes available.



#### **FEATURES**

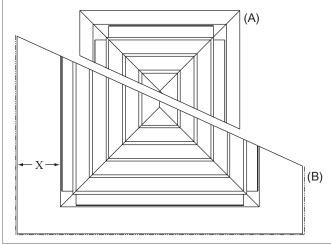
- Square duct connections.
- · Adjustable pattern controllers for vertical throw.
- · Core is removable from face of diffuser.
- · Maintains a horizontal discharge air pattern from maximum to minimum CFM.
- Excellent choice for VAV applications with high loads.
- · Excellent choice for high ceiling applications.

#### **ACCESSORIES**

- · Optional straightening grids.
- · Optional face mounted damper.

# SHPC, 5SHPC Dimensional Information =

### SHPC, 5SHPC, FACE VIEW

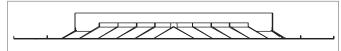


NOTE: Dimension 'X' will vary with neck sizes for Frames 23, 24, 27, and 98.

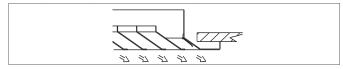
### SHPC, 5SHPC, CROSS SECTION, SURFACE MOUNT (A)



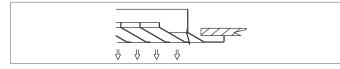
#### SHPC, 5SHPC, CROSS SECTION, LAY-IN T-BAR (B)



#### SHPC, 5SHPC, CROSS SECTION, HORIZONTAL SETTING



# SHPC, 5SHPC, CROSS SECTION, VERTICAL SETTING



S Н Ρ

C

5 S Н

Ρ С

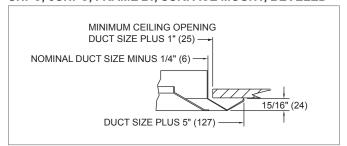
# **B1** LOUVERED FACE DIFFUSERS

SHPC, 5SHPC | Flush Face, Pattern Controllers

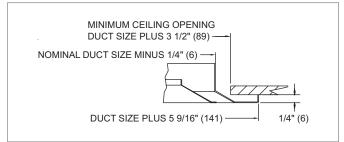


# SHPC, 5SHPC Frame Styles

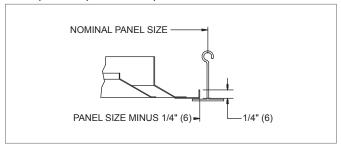
#### SHPC, 5SHPC, FRAME 21, SURFACE MOUNT, BEVELED



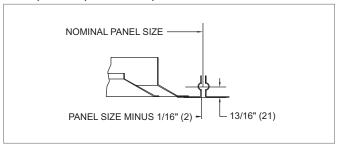
# SHPC, 5SHPC, FRAME 22, SURFACE MOUNT, FLAT



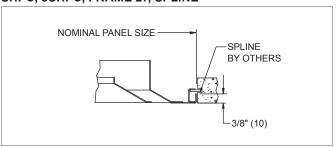
# SHPC, 5SHPC, FRAME 23, LAY-IN T-BAR



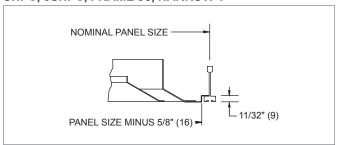
# SHPC, 5SHPC, FRAME 24, SNAP-IN T-BAR



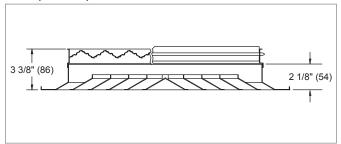
### SHPC, 5SHPC, FRAME 27, SPLINE



### SHPC, 5SHPC, FRAME 98, NARROW-T



# SHPC, 5SHPC, DAMPER DETAIL



# SHPC, 5SHPC, AVAILABLE NECK SIZES

Frame Style	Panel Size	Minimum Inlet Dim1 x Dim2	Maximum Inlet Dim1 x Dim2
21	-	6"x6"	21"x21"
22		(152x152)	(533x533)
23	12"x12" (305x305)	6"x6" (152x152)	6"x6" (152x152)
24			
27			
23	24"x24" (610x610)	6"x6" (152x152)	18"x18" (457x457)
24			
27			
98			
23	24"x48"	12"x12"	18"x18" *
24	(310x1219)	(305x305)	(457x457)

NOTES: Dimensions in parentheses are mm. Core removal is the same as the SH series of diffusers. See page B1-38 for details.

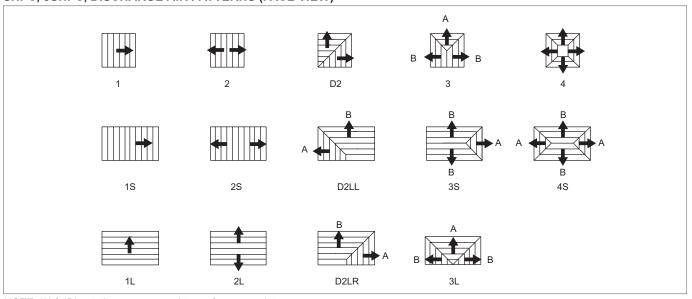
<sup>\*</sup> Available in 4-way discharge air pattern, 5SHPC only.

LOUVERED FACE DIFFUSERS

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# SHPC, 5SHPC Discharge Air Patterns =

# SHPC, 5SHPC, DISCHARGE AIR PATTERNS (FACE VIEW)



NOTE: 'A' & 'B' notations correspond to performance data.

# SHPC, 5SHPC Reference Chart -

# AIRFLOW VS. NC LEVEL: SHPC, 5SHPC (NO DAMPER)

