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1400, 1400FR, 51400, M1400 & M51400
These supply diffusers feature a round neck and four cones.



1400A & 51400A
These supply diffusers feature a round neck, four cones, and adjustable pattern controllers.



1450, 51450, M1450, & M51450
These supply diffusers feature a round neck and three cones.



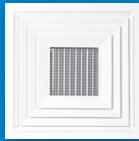
1450A & 51450A
These supply diffusers feature a round neck, three cones, and adjustable pattern controllers.



SH, 5SH, SHFR, MSH, SHV, 5SHV, SHR, 5SHR, SHRV, 5SHRV, SHFB, & 5SHFB
These supply diffusers feature a square neck, fixed louvered blades (1-way to 4-way), and removable core.



SHPC, 5SHPC, SHPCR, & 5SHPCR
These supply diffusers feature a square neck, fixed louvered blades (1-way to 4-way), removable core, and adjustable pattern controllers.



5SH/CAD & 5SHR/CAD
These supply diffusers feature fixed louvered blades with a center downblow.



SHRPLQ
This supply diffuser features fixed louvered blades (1, 2, or 3 slots) with center plaque faceplate.



7000
This combination supply/return diffuser features fixed louvered blades with removable egg-crate center frame.

| | |
|---|--|
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Introduction: SH Series

The SH/5SH series square or rectangular 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, resulting in a tight horizontal discharge 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. Because this series has higher discharge face velocities, they are an excellent choice for variable air volume systems with above normal temperature differentials. At typical flow rates, isothermal throws of 18 to 30 feet make the SH/5SH series ideal for mounting centrally in many spaces with high load requirements while providing high mixing rates in the space.

MODELS

- SH - Steel Louvered Diffuser
- 5SH - Aluminum Louvered Diffuser
- SHFR - Fire Rated, Steel Louvered Diffuser
- MSH - Metric, Steel Louvered 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.

PANEL SIZES

- 12"x12", 24"x24", and 24"x48"
- 48"x48" for Frame 2T Only
- 600x600mm

ACCESSORIES

- Optional straightening grids.
- Optional face operated OBDFA.
- Optional Ultrathrow (throw reducing device).
- Optional MRI construction (5SH).

FINISHES

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

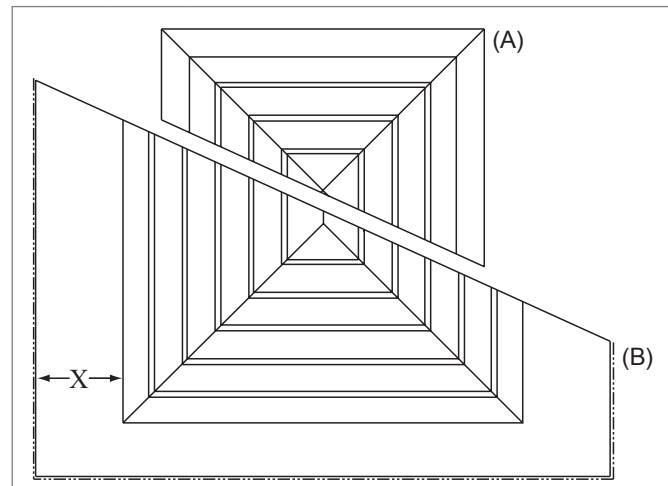


SH

SH, 5SH, SHFR, MSH

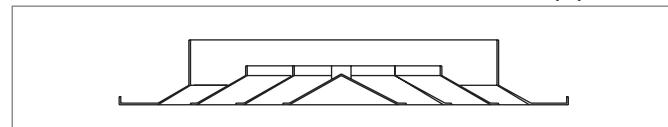
Dimensional Information

SH, 5SH, SHFR, MSH, FACE VIEW

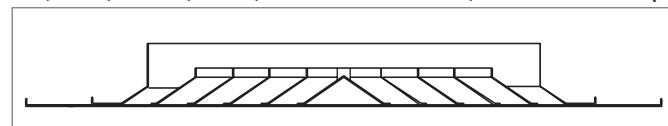


NOTE: Dimension 'X' will vary with neck sizes for Frames 23, 24, 27, and 98.

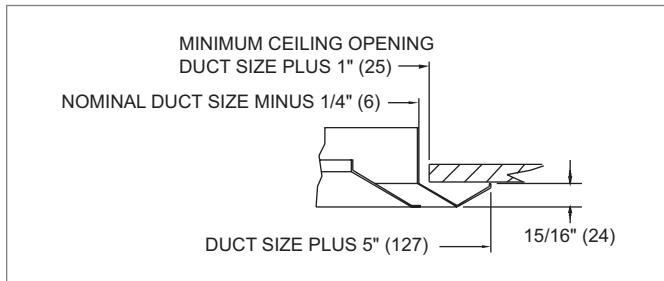
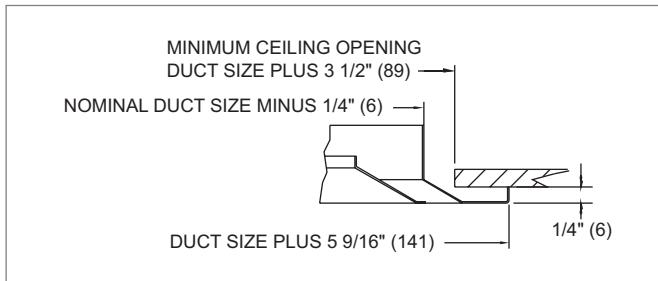
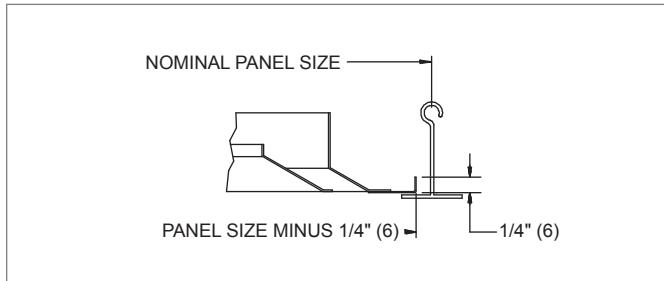
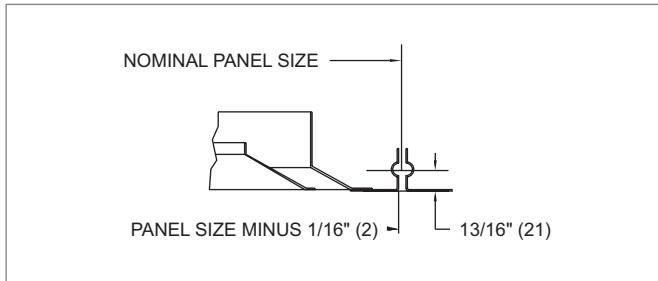
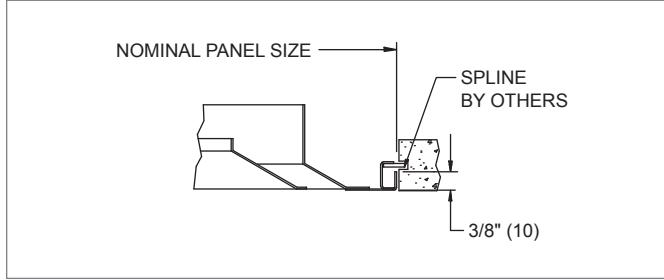
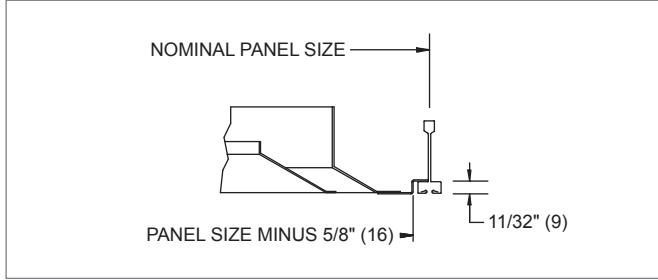
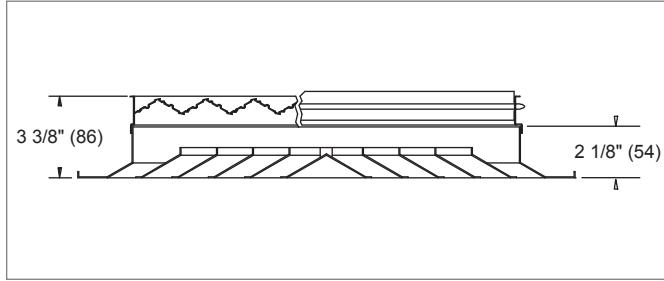
SH, 5SH, CROSS SECTION, SURFACE MOUNT (A)



SH, 5SH, SHFR, MSH, CROSS SECTION, LAY-IN T-BAR (B)



SH, 5SH | Flush Face

SH, 5SH Frame Styles**SH, 5SH, FRAME 21, SURFACE MOUNT, BEVELED****SH, 5SH, FRAME 22, SURFACE MOUNT, FLAT****SH, 5SH, SHFR, MSH, FRAME 23, LAY-IN T-BAR****SH, 5SH, FRAME 24, SNAP-IN T-BAR****SH, 5SH, FRAME 27, SPLINE****SH, 5SH, FRAME 98, NARROW-T****SH, 5SH, MSH, DAMPER DETAIL****SH, 5SH, AVAILABLE NECK SIZES**

| Frame Style | Panel Size | Minimum Inlet Dim1 x Dim2 | Maximum Inlet Dim1 x Dim2 |
|-------------|-----------------------|---------------------------|---|
| 21 | - | 6"x6" (152x152) | 48"x48" (1219x1219) |
| 22 | | | |
| 23 | 12"x12" (305x305) | 6"x6" (152x152) | 9"x9" * (229x229) |
| 24 | | | |
| 27 | | | |
| 23 | 24"x24" (610x610) | 6"x6" (152x152) | 21"x21" * (533x533) |
| 24 | | | |
| 27 | | | |
| 23 | 24"x48" (610x1219) | 12"x12" (610x610) | 21"x42" ** (533x1067) 21"x45" *** (533x1143) |
| 24 | | | |
| 27 | | | |
| 98 | 24"x24" (610x610) | 6"x6" (152x152) | 18"x18" (457x457) |

NOTES: Dimensions in parentheses are mm.

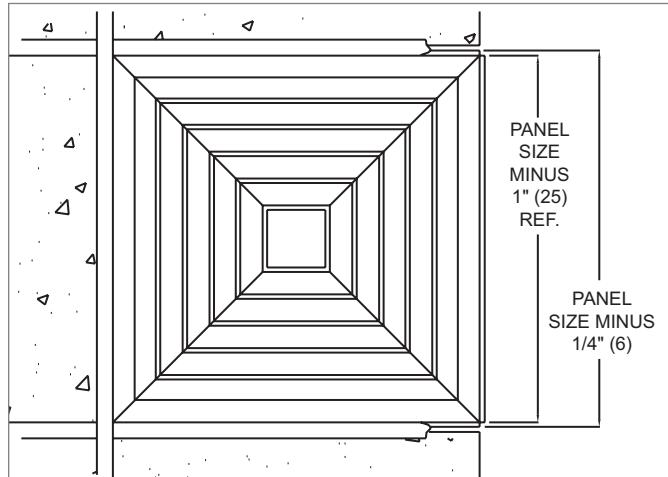
* Available in 4-way discharge air pattern only.

** Available in 4-way discharge air pattern, model 5SH only.

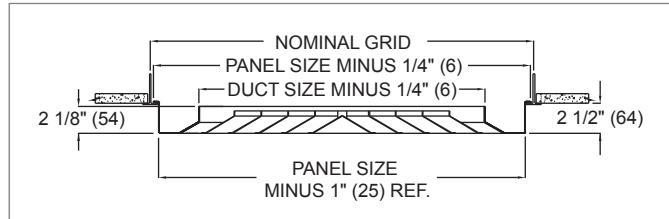
*** Available in 4-way discharge air pattern, model SH only.

SH, 5SH Drop Face Dimensional Information

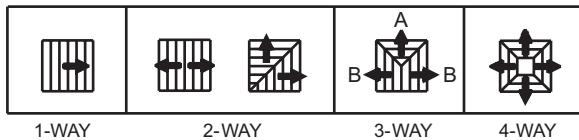
SH, FRAME 2T, FACE VIEW



SH, FRAME 2T, CROSS SECTION



SH, FRAME 2T, DISCHARGE AIR PATTERNS



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

SH, FRAME 2T, AVAILABLE NECK SIZES

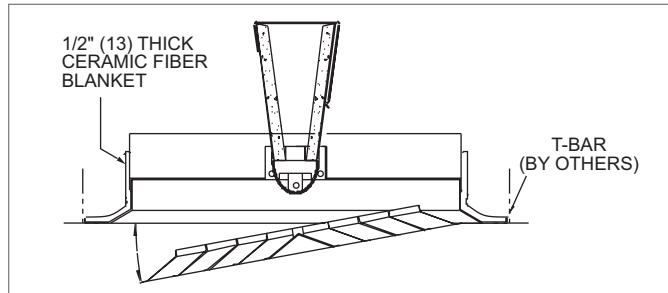
| Panel Size | Neck Size |
|---------------------|---------------------|
| 24"x24" (610x610) | 18"x18" (457x457) |
| 48"x48" (1219x1219) | 42"x42" (1067x1067) |

NOTE: Dimensions in parentheses are mm.

SHFR (Fire Rated) Dimensional Information

Krueger series SHFR is a UL fire rated version of the SH series. The SHFR gives the same performance characteristics as the SH series. The SHFR is only available in F23 for Lay-in T-Bar applications.

SHFR, REMOVABLE CORE



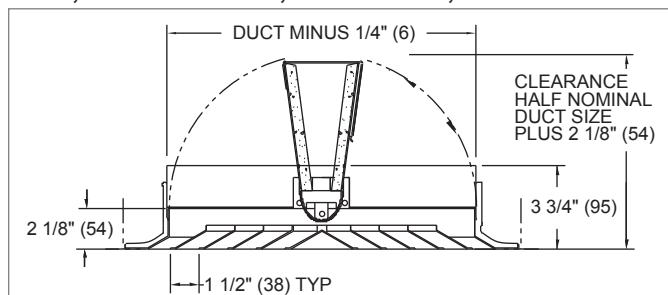
SHFR comes standard as a UL 263 classified assembly that incorporates a three hour rated fire damper and a 1/2" thick ceramic fiber blanket.

SHFR, AVAILABLE NECK SIZES

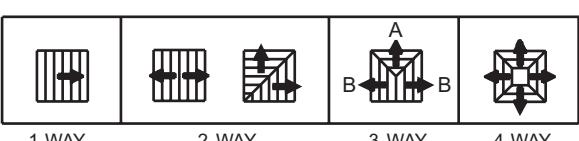
| Nominal Panel | Neck Sizes |
|----------------------|-------------------|
| | 6"x6" (152x152) |
| | 9"x9" (229x229) |
| 24"x24" (610x610) | 12"x12" (305x305) |
| | 15"x15" (381x381) |
| | 18"x18" (457x457) |

NOTE: Dimensions in parentheses are mm.

SHFR, CROSS SECTION, LAY-IN T-BAR, 24"x24" PANEL

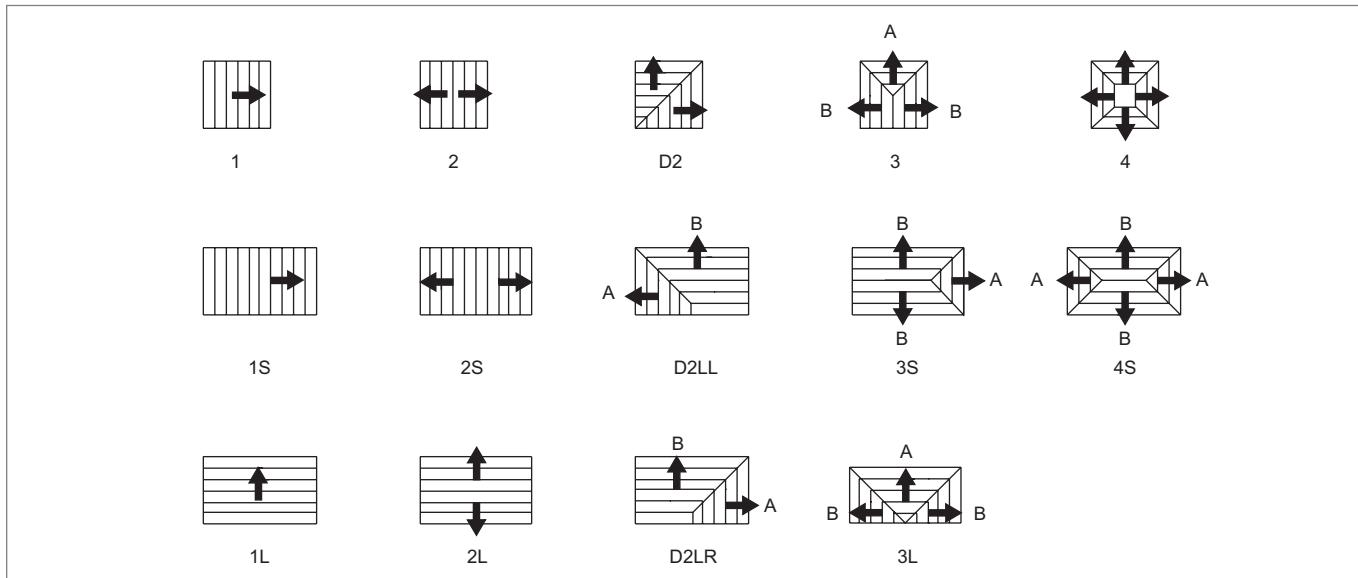


SHFR, DISCHARGE AIR PATTERNS



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

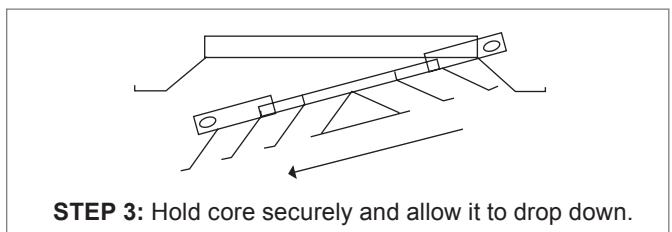
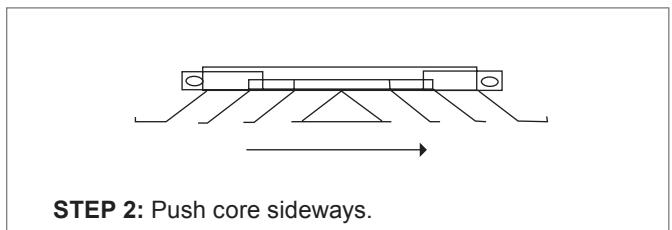
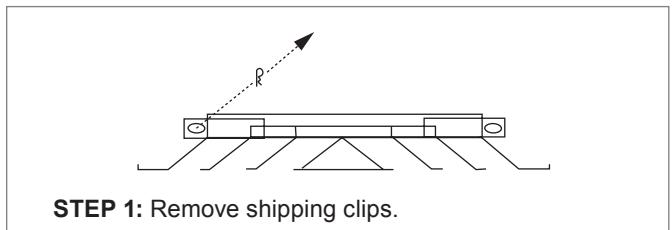
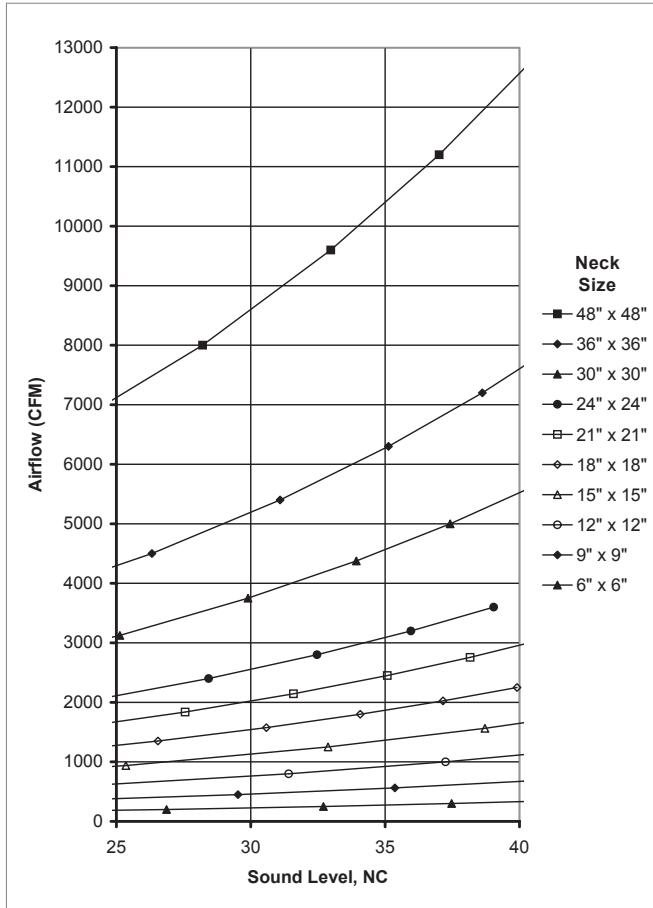
SH, 5SH | Flush Face

SH, 5SH, MSH Discharge Air Patterns**SH, 5SH, MSH, DISCHARGE AIR PATTERNS (FACE VIEW)**

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

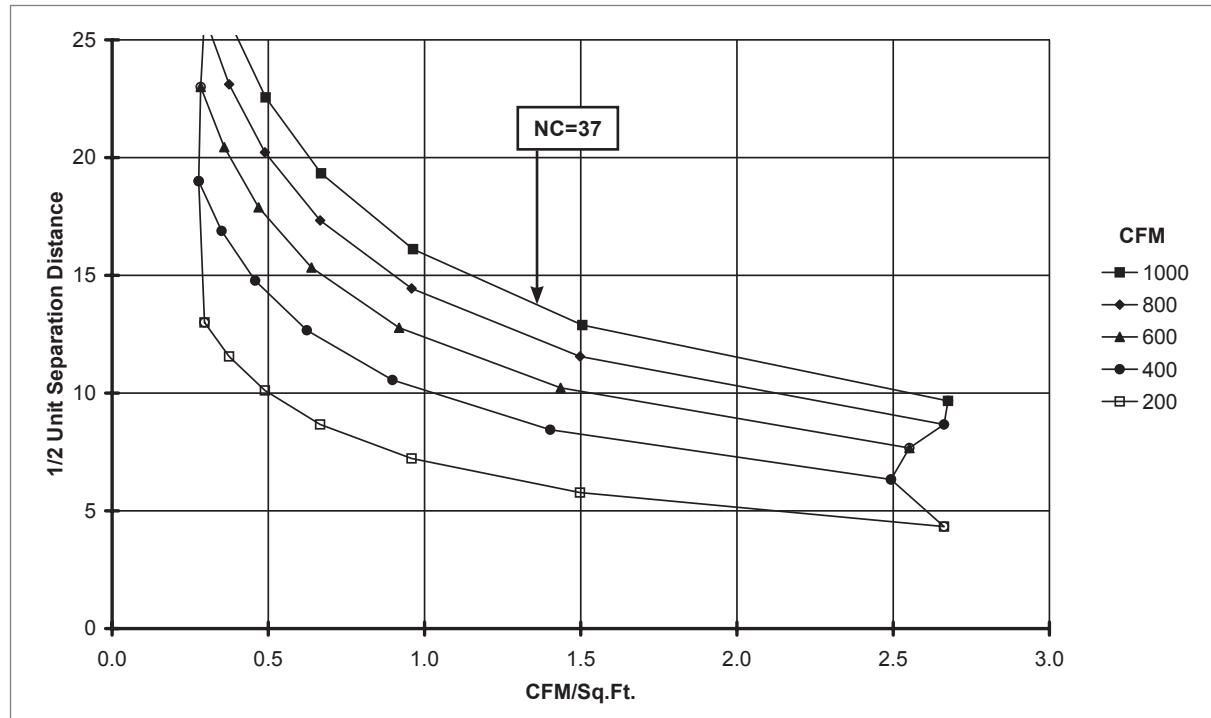
SH, 5SH, SHFR, MSH Snap-In Core**SNAP-IN CORE INSTRUCTIONS**

The SH series snap-in core is ideal for applications where no screws are required. The core is held in place by two tabs which slide into the outer frame. The other side is secured by a positive lock arrangement. The core is easily removed by releasing the cotter pins (must be removed prior to installation) and removing the core.

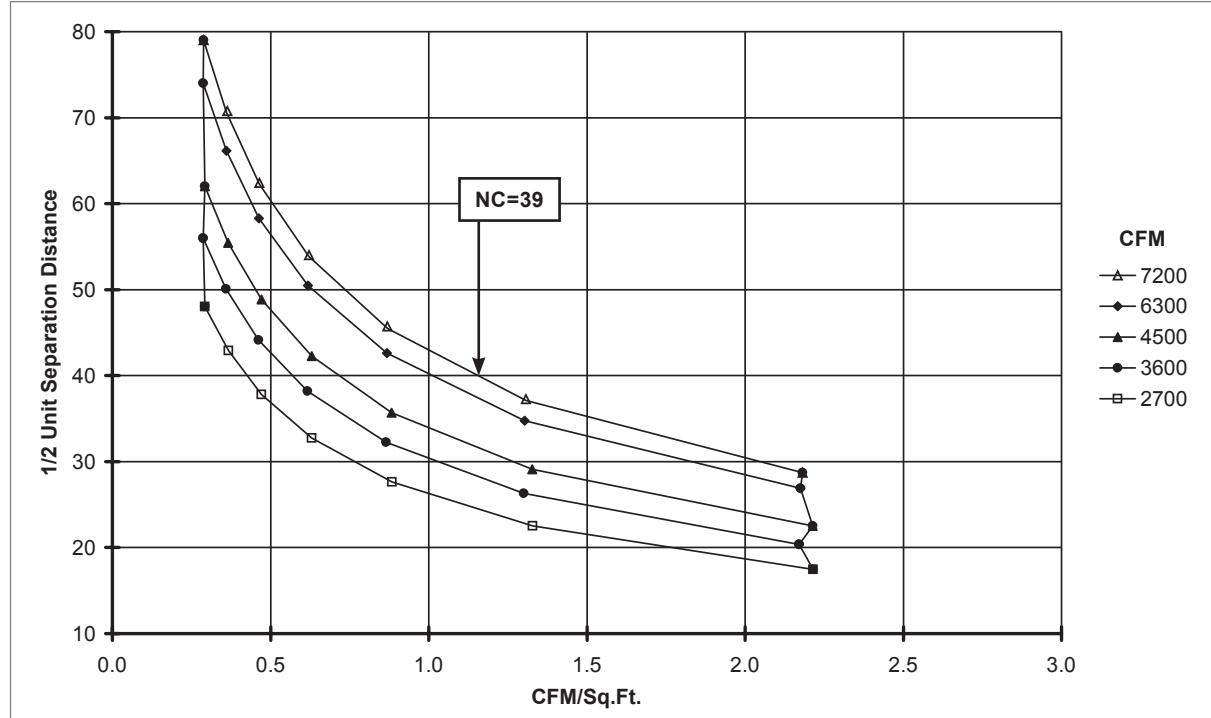
**SH, 5SH Reference Chart****AIRFLOW VS. NC LEVEL: SH SERIES (NO DAMPER)**

SH, 5SH, MSH Reference Charts: Horizontal Throw

DIFFUSER SPACING FOR 80% ADPI: SH, 5SH, MSH, 12"x12" NECK, 4-WAY (NO DAMPER)



DIFFUSER SPACING FOR 80% ADPI: SH, 5SH, 36"x36" NECK, 4-WAY (NO DAMPER)



NOTES: Charts are at 20 BTUH/ft² loads. See the Engineering section of this catalog for instructions on how to read these charts and additional ADPI information.

SH, 5SH | Flush Face

SH, 5SH, SHFR, MSH Performance Data: Horizontal Throw

IP DATA: SH, 5SH, SHFR, MSH (NO DAMPER)

| Neck Dim in. | Neck Vel | Total Pres "WG | Static Pres "WG | Total Flow CFM | NC | Air Discharge Pattern | | | | | |
|-----------------|----------|-------------------|--------------------|-------------------|----|-----------------------|--------------|-------------|--------------|------------|--------------|
| | | | | | | 1-Way Throw | | 2-Way Throw | | 3 - Side A | |
| | | | | | | ft | ft | CFM | ft | Flow | Throw |
| 6" x 6" | 200 | 0.015 | 0.013 | 50 | - | 5 - 8 - 11 | 3 - 4 - 8 | 13 | 1 - 3 - 7 | 19 | 2 - 4 - 7 |
| | 400 | 0.061 | 0.051 | 100 | - | 9 - 11 - 16 | 5 - 8 - 12 | 25 | 4 - 7 - 9 | 38 | 3 - 6 - 10 |
| | 600 | 0.138 | 0.116 | 150 | 19 | 11 - 14 - 20 | 8 - 10 - 15 | 38 | 7 - 8 - 11 | 56 | 6 - 9 - 12 |
| | 800 | 0.246 | 0.206 | 200 | 27 | 13 - 16 - 23 | 10 - 12 - 17 | 50 | 8 - 9 - 13 | 75 | 8 - 10 - 14 |
| | 1000 | 0.384 | 0.322 | 250 | 33 | 15 - 18 - 25 | 11 - 14 - 19 | 63 | 8 - 10 - 15 | 94 | 9 - 11 - 16 |
| | 1200 | 0.553 | 0.463 | 300 | 37 | 16 - 20 - 28 | 12 - 15 - 21 | 75 | 9 - 11 - 16 | 113 | 10 - 12 - 17 |
| | 1300 | 0.649 | 0.543 | 325 | 40 | 17 - 21 - 29 | 13 - 15 - 22 | 81 | 10 - 12 - 17 | 122 | 10 - 13 - 18 |
| 9" x 9" | 200 | 0.015 | 0.013 | 113 | - | 8 - 11 - 17 | 4 - 6 - 11 | 28 | 2 - 4 - 10 | 42 | 4 - 6 - 11 |
| | 400 | 0.061 | 0.051 | 225 | 11 | 14 - 17 - 24 | 8 - 11 - 18 | 56 | 7 - 10 - 14 | 84 | 7 - 11 - 16 |
| | 600 | 0.138 | 0.116 | 338 | 22 | 17 - 21 - 30 | 11 - 16 - 22 | 84 | 10 - 12 - 17 | 127 | 11 - 14 - 20 |
| | 800 | 0.246 | 0.206 | 450 | 30 | 20 - 24 - 34 | 15 - 18 - 26 | 113 | 11 - 14 - 20 | 169 | 13 - 16 - 23 |
| | 1000 | 0.384 | 0.322 | 563 | 35 | 22 - 27 - 38 | 17 - 20 - 29 | 141 | 13 - 16 - 22 | 211 | 15 - 18 - 25 |
| | 1100 | 0.465 | 0.389 | 619 | 38 | 23 - 28 - 40 | 17 - 21 - 30 | 155 | 13 - 16 - 23 | 232 | 15 - 19 - 27 |
| | 1200 | 0.553 | 0.463 | 675 | 40 | 24 - 30 - 42 | 18 - 22 - 31 | 169 | 14 - 17 - 24 | 253 | 16 - 20 - 28 |
| 12" x 12" | 200 | 0.015 | 0.013 | 200 | - | 10 - 15 - 23 | 5 - 8 - 15 | 50 | 3 - 6 - 13 | 75 | 5 - 7 - 15 |
| | 400 | 0.061 | 0.051 | 400 | 13 | 19 - 23 - 32 | 10 - 15 - 24 | 100 | 9 - 13 - 19 | 150 | 10 - 15 - 21 |
| | 600 | 0.138 | 0.116 | 600 | 24 | 23 - 28 - 39 | 15 - 21 - 30 | 150 | 13 - 16 - 23 | 225 | 15 - 18 - 26 |
| | 800 | 0.246 | 0.206 | 800 | 31 | 26 - 32 - 46 | 20 - 24 - 34 | 200 | 15 - 19 - 26 | 300 | 17 - 21 - 30 |
| | 1000 | 0.384 | 0.322 | 1000 | 37 | 29 - 36 - 51 | 22 - 27 - 38 | 250 | 17 - 21 - 29 | 375 | 19 - 24 - 34 |
| | 1100 | 0.465 | 0.389 | 1100 | 40 | 31 - 38 - 53 | 23 - 28 - 40 | 275 | 18 - 22 - 31 | 413 | 20 - 25 - 35 |
| | 1200 | 0.553 | 0.463 | 1200 | 42 | 32 - 39 - 56 | 24 - 30 - 42 | 300 | 19 - 23 - 32 | 450 | 21 - 26 - 37 |
| 15" x 15" | 200 | 0.015 | 0.013 | 313 | - | 13 - 19 - 29 | 6 - 10 - 19 | 78 | 3 - 7 - 16 | 117 | 6 - 9 - 18 |
| | 400 | 0.061 | 0.051 | 625 | 15 | 23 - 29 - 40 | 13 - 19 - 30 | 156 | 11 - 16 - 23 | 234 | 12 - 18 - 27 |
| | 600 | 0.138 | 0.116 | 938 | 25 | 29 - 35 - 49 | 19 - 26 - 37 | 234 | 16 - 20 - 28 | 352 | 18 - 23 - 33 |
| | 800 | 0.246 | 0.206 | 1250 | 33 | 33 - 40 - 57 | 25 - 30 - 43 | 313 | 19 - 23 - 33 | 469 | 22 - 27 - 38 |
| | 1000 | 0.384 | 0.322 | 1563 | 39 | 37 - 45 - 64 | 28 - 34 - 48 | 391 | 21 - 26 - 37 | 586 | 24 - 30 - 42 |
| | 1100 | 0.465 | 0.389 | 1719 | 41 | 39 - 47 - 67 | 29 - 35 - 50 | 430 | 22 - 27 - 38 | 645 | 26 - 31 - 44 |
| | 1200 | 0.553 | 0.463 | 1875 | 43 | 40 - 49 - 70 | 30 - 37 - 52 | 469 | 23 - 28 - 40 | 703 | 27 - 33 - 46 |
| 18" x 18" | 200 | 0.015 | 0.013 | 450 | - | 15 - 23 - 34 | 8 - 11 - 23 | 113 | 4 - 9 - 20 | 169 | 7 - 11 - 22 |
| | 400 | 0.061 | 0.051 | 900 | 16 | 28 - 34 - 48 | 15 - 23 - 36 | 225 | 13 - 20 - 28 | 338 | 15 - 22 - 32 |
| | 600 | 0.138 | 0.116 | 1350 | 27 | 34 - 42 - 59 | 23 - 31 - 44 | 338 | 20 - 24 - 34 | 506 | 22 - 28 - 39 |
| | 800 | 0.246 | 0.206 | 1800 | 34 | 39 - 48 - 68 | 30 - 36 - 51 | 450 | 23 - 28 - 39 | 675 | 26 - 32 - 45 |
| | 900 | 0.311 | 0.260 | 2025 | 37 | 42 - 51 - 73 | 31 - 38 - 54 | 506 | 24 - 30 - 42 | 759 | 28 - 34 - 48 |
| | 1000 | 0.384 | 0.322 | 2250 | 40 | 44 - 54 - 76 | 33 - 41 - 57 | 563 | 25 - 31 - 44 | 844 | 29 - 36 - 51 |
| | 1100 | 0.465 | 0.389 | 2475 | 42 | 46 - 57 - 80 | 35 - 42 - 60 | 619 | 27 - 33 - 46 | 928 | 31 - 38 - 53 |

NOTES: Throw values are given for isothermal conditions and terminal velocities of 150, 100, and 50 FPM. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Dash in space denotes a NC value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. The throw values given for 1-Throw is for [Total CFM] CFM per side. The throw values given for 2-Throw is for [(Total CFM)/2] CFM per side. The throw values given for 4-Throw is for [(Total CFM)/4] CFM per side. Reference page B1-36 for 'Side A' and 'Side B' detail. See Krueger's selection software for performance data not shown, including octave band data and different core styles.

SH, 5SH Performance Data: Horizontal Throw
IP DATA: SH, 5SH (NO DAMPER)

| Neck Dim in. | Neck Vel FPM | Total Pres "WG | Static Pres "WG | Total Flow CFM | NC | Air Discharge Pattern | | | | | |
|-----------------|-----------------|-------------------|--------------------|-------------------|----|-----------------------|---------------|-------------|---------------|------------|---------------|
| | | | | | | 1-Way Throw | | 2-Way Throw | | 3 - Side A | |
| | | | | | | ft | ft | CFM | ft | CFM | ft |
| 21" x 21" | 200 | 0.015 | 0.013 | 613 | - | 18 - 27 - 40 | 9 - 13 - 27 | 153 | 5 - 10 - 23 | 230 | 8 - 13 - 26 |
| | 400 | 0.061 | 0.051 | 1225 | 17 | 33 - 40 - 56 | 18 - 27 - 42 | 306 | 16 - 23 - 32 | 459 | 17 - 26 - 37 |
| | 600 | 0.138 | 0.116 | 1838 | 28 | 40 - 49 - 69 | 27 - 37 - 52 | 459 | 23 - 28 - 40 | 689 | 26 - 32 - 46 |
| | 800 | 0.246 | 0.206 | 2450 | 35 | 46 - 56 - 80 | 35 - 42 - 60 | 613 | 27 - 32 - 46 | 919 | 31 - 37 - 53 |
| | 900 | 0.311 | 0.260 | 2756 | 38 | 49 - 60 - 85 | 37 - 45 - 63 | 689 | 28 - 34 - 49 | 1034 | 32 - 40 - 56 |
| | 1000 | 0.384 | 0.322 | 3063 | 41 | 52 - 63 - 89 | 39 - 47 - 67 | 766 | 30 - 36 - 51 | 1148 | 34 - 42 - 59 |
| 24" x 24" | 1100 | 0.465 | 0.389 | 3369 | 43 | 54 - 66 - 94 | 40 - 50 - 70 | 842 | 31 - 38 - 54 | 1263 | 36 - 44 - 62 |
| | 200 | 0.015 | 0.013 | 800 | - | 20 - 31 - 46 | 10 - 15 - 30 | 200 | 5 - 12 - 26 | 300 | 10 - 15 - 29 |
| | 400 | 0.061 | 0.051 | 1600 | 18 | 37 - 46 - 64 | 20 - 30 - 48 | 400 | 18 - 26 - 37 | 600 | 20 - 29 - 43 |
| | 600 | 0.138 | 0.116 | 2400 | 28 | 46 - 56 - 79 | 30 - 42 - 59 | 600 | 26 - 32 - 45 | 900 | 29 - 37 - 52 |
| | 700 | 0.188 | 0.158 | 2800 | 32 | 49 - 60 - 85 | 35 - 45 - 64 | 700 | 28 - 35 - 49 | 1050 | 33 - 40 - 56 |
| | 800 | 0.246 | 0.206 | 3200 | 36 | 53 - 64 - 91 | 39 - 48 - 68 | 800 | 30 - 37 - 52 | 1200 | 35 - 43 - 60 |
| 30" x 30" | 900 | 0.311 | 0.260 | 3600 | 39 | 56 - 68 - 97 | 42 - 51 - 72 | 900 | 32 - 39 - 56 | 1350 | 37 - 45 - 64 |
| | 1000 | 0.384 | 0.322 | 4000 | 42 | 59 - 72 - 102 | 44 - 54 - 76 | 1000 | 34 - 41 - 59 | 1500 | 39 - 48 - 68 |
| | 200 | 0.015 | 0.013 | 1250 | - | 26 - 38 - 57 | 13 - 19 - 38 | 313 | 7 - 15 - 33 | 469 | 12 - 18 - 37 |
| | 400 | 0.061 | 0.051 | 2500 | 19 | 47 - 57 - 81 | 25 - 38 - 60 | 625 | 22 - 33 - 46 | 938 | 25 - 37 - 53 |
| | 600 | 0.138 | 0.116 | 3750 | 30 | 57 - 70 - 99 | 38 - 52 - 74 | 938 | 33 - 40 - 57 | 1406 | 37 - 46 - 65 |
| | 700 | 0.188 | 0.158 | 4375 | 34 | 62 - 75 - 107 | 44 - 56 - 80 | 1094 | 35 - 43 - 61 | 1641 | 41 - 50 - 71 |
| 36" x 36" | 800 | 0.246 | 0.206 | 5000 | 37 | 66 - 81 - 114 | 49 - 60 - 85 | 1250 | 38 - 46 - 66 | 1875 | 44 - 53 - 76 |
| | 900 | 0.311 | 0.260 | 5625 | 41 | 70 - 86 - 121 | 52 - 64 - 91 | 1406 | 40 - 49 - 70 | 2109 | 46 - 57 - 80 |
| | 1000 | 0.384 | 0.322 | 6250 | 43 | 74 - 90 - 127 | 55 - 68 - 95 | 1563 | 42 - 52 - 73 | 2344 | 49 - 60 - 84 |
| | 200 | 0.015 | 0.013 | 1800 | - | 31 - 46 - 68 | 15 - 23 - 46 | 450 | 8 - 18 - 39 | 675 | 14 - 22 - 44 |
| | 400 | 0.061 | 0.051 | 3600 | 20 | 56 - 68 - 97 | 30 - 46 - 72 | 900 | 27 - 39 - 56 | 1350 | 29 - 44 - 64 |
| | 500 | 0.096 | 0.080 | 4500 | 26 | 62 - 76 - 108 | 38 - 57 - 81 | 1125 | 33 - 44 - 62 | 1688 | 37 - 51 - 72 |
| 48" x 48" | 600 | 0.138 | 0.116 | 5400 | 31 | 68 - 84 - 118 | 46 - 63 - 89 | 1350 | 39 - 48 - 68 | 2025 | 44 - 55 - 78 |
| | 700 | 0.188 | 0.158 | 6300 | 35 | 74 - 90 - 128 | 53 - 68 - 96 | 1575 | 43 - 52 - 74 | 2363 | 49 - 60 - 85 |
| | 800 | 0.246 | 0.206 | 7200 | 39 | 79 - 97 - 137 | 59 - 72 - 102 | 1800 | 45 - 56 - 79 | 2700 | 52 - 64 - 91 |
| | 900 | 0.311 | 0.260 | 8100 | 42 | 84 - 103 - 145 | 63 - 77 - 109 | 2025 | 48 - 59 - 83 | 3038 | 55 - 68 - 96 |
| | 200 | 0.015 | 0.013 | 3200 | - | 41 - 61 - 91 | 20 - 30 - 61 | 800 | 11 - 24 - 52 | 1200 | 19 - 29 - 59 |
| | 400 | 0.061 | 0.051 | 6400 | 22 | 74 - 91 - 129 | 41 - 61 - 97 | 1600 | 36 - 52 - 74 | 2400 | 39 - 59 - 85 |
| 48" x 48" | 500 | 0.096 | 0.080 | 8000 | 28 | 83 - 102 - 144 | 51 - 76 - 108 | 2000 | 44 - 59 - 83 | 3000 | 49 - 68 - 96 |
| | 550 | 0.116 | 0.097 | 8800 | 31 | 87 - 107 - 151 | 56 - 80 - 113 | 2200 | 49 - 62 - 87 | 3300 | 54 - 71 - 100 |
| | 600 | 0.138 | 0.116 | 9600 | 33 | 91 - 112 - 158 | 61 - 84 - 118 | 2400 | 52 - 64 - 91 | 3600 | 59 - 74 - 105 |
| | 700 | 0.188 | 0.158 | 11200 | 37 | 99 - 121 - 171 | 71 - 90 - 128 | 2800 | 57 - 69 - 98 | 4200 | 65 - 80 - 113 |
| | 800 | 0.246 | 0.206 | 12800 | 41 | 105 - 129 - 182 | 79 - 97 - 137 | 3200 | 61 - 74 - 105 | 4800 | 70 - 85 - 121 |
| | | | | | | | | | | | 61 - 74 - 105 |

NOTES: Throw values are given for isothermal conditions and terminal velocities of 150, 100, and 50 FPM. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10^{-12} Watts. Dash in space denotes a NC value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. The throw values given for 1-Throw is for [Total CFM] CFM per side. The throw values given for 2-Throw is for [(Total CFM)/2] CFM per side. The throw values given for 4-Throw is for [(Total CFM)/4] CFM per side. Reference page B1-36 for 'Side A' and 'Side B' detail. See Krueger's selection software for performance data not shown, including octave band data and different core styles.

SH, 5SH, MSH Performance Data: Horizontal Throw

IP DATA: SH, 5SH, MSH, ULTRA THROW (NO DAMPER)

| Neck Dim in. | Neck Vel FPM | Total Pres "WG | Static Pres "WG | Total Flow CFM | NC | Discharge Air Pattern | | | | | |
|-----------------|-----------------|-------------------|--------------------|-------------------|----|-----------------------|-------------|--------------|-------------|--------------|----------------------|
| | | | | | | D2-Way Throw ft | 3 - Side A | | 3 - Side B | | 4-Way Throw ft |
| | | | | | | | Flow CFM | Throw ft | Flow CFM | Throw ft | |
| 6" x 6" | 200 | 0.017 | 0.014 | 50 | - | 3 - 4 - 7 | 13 | 1 - 3 - 6 | 19 | 2 - 4 - 6 | 1 - 3 - 6 |
| | 400 | 0.068 | 0.058 | 100 | 12 | 5 - 7 - 10 | 25 | 4 - 6 - 8 | 38 | 3 - 6 - 8 | 4 - 6 - 8 |
| | 600 | 0.152 | 0.130 | 150 | 22 | 7 - 9 - 12 | 38 | 6 - 7 - 10 | 56 | 6 - 7 - 10 | 6 - 7 - 10 |
| | 800 | 0.270 | 0.230 | 200 | 30 | 8 - 10 - 14 | 50 | 6 - 8 - 11 | 75 | 7 - 8 - 12 | 6 - 8 - 11 |
| | 1000 | 0.422 | 0.360 | 250 | 36 | 9 - 11 - 16 | 63 | 7 - 9 - 12 | 94 | 8 - 9 - 13 | 7 - 9 - 12 |
| | 1200 | 0.608 | 0.518 | 300 | 40 | 10 - 12 - 18 | 75 | 8 - 10 - 14 | 113 | 8 - 10 - 14 | 8 - 10 - 14 |
| | 1300 | 0.714 | 0.608 | 325 | 43 | 11 - 13 - 18 | 81 | 8 - 10 - 14 | 122 | 9 - 11 - 15 | 8 - 10 - 14 |
| 9" x 9" | 200 | 0.017 | 0.014 | 113 | - | 4 - 6 - 11 | 28 | 2 - 4 - 8 | 42 | 4 - 6 - 10 | 2 - 4 - 8 |
| | 400 | 0.068 | 0.058 | 225 | 14 | 8 - 11 - 15 | 56 | 7 - 8 - 12 | 84 | 7 - 10 - 13 | 7 - 8 - 12 |
| | 600 | 0.152 | 0.130 | 338 | 25 | 11 - 13 - 19 | 84 | 8 - 10 - 14 | 127 | 10 - 12 - 17 | 8 - 10 - 14 |
| | 800 | 0.270 | 0.230 | 450 | 33 | 12 - 15 - 22 | 113 | 10 - 12 - 17 | 169 | 11 - 13 - 19 | 10 - 12 - 17 |
| | 1000 | 0.422 | 0.360 | 563 | 38 | 14 - 17 - 24 | 141 | 11 - 13 - 19 | 211 | 12 - 15 - 21 | 11 - 13 - 19 |
| | 1100 | 0.511 | 0.436 | 619 | 41 | 15 - 18 - 25 | 155 | 11 - 14 - 19 | 232 | 13 - 16 - 22 | 11 - 14 - 19 |
| | 1200 | 0.608 | 0.518 | 675 | 43 | 15 - 19 - 26 | 169 | 12 - 14 - 20 | 253 | 13 - 17 - 23 | 12 - 14 - 20 |
| 12" x 12" | 200 | 0.017 | 0.014 | 200 | - | 5 - 8 - 14 | 50 | 3 - 6 - 11 | 75 | 5 - 7 - 13 | 3 - 6 - 11 |
| | 400 | 0.068 | 0.058 | 400 | 16 | 10 - 14 - 20 | 100 | 9 - 11 - 16 | 150 | 10 - 13 - 18 | 9 - 11 - 16 |
| | 600 | 0.152 | 0.130 | 600 | 27 | 14 - 18 - 25 | 150 | 11 - 14 - 19 | 225 | 13 - 16 - 22 | 11 - 14 - 19 |
| | 800 | 0.270 | 0.230 | 800 | 34 | 17 - 20 - 29 | 200 | 13 - 16 - 22 | 300 | 15 - 18 - 25 | 13 - 16 - 22 |
| | 1000 | 0.422 | 0.360 | 1000 | 40 | 19 - 23 - 32 | 250 | 14 - 17 - 25 | 375 | 16 - 20 - 28 | 14 - 17 - 25 |
| | 1100 | 0.511 | 0.436 | 1100 | 43 | 19 - 24 - 34 | 275 | 15 - 18 - 26 | 413 | 17 - 21 - 30 | 15 - 18 - 26 |
| | 1200 | 0.608 | 0.518 | 1200 | 45 | 20 - 25 - 35 | 300 | 16 - 19 - 27 | 450 | 18 - 22 - 31 | 16 - 19 - 27 |
| 15" x 15" | 200 | 0.017 | 0.014 | 313 | - | 6 - 10 - 18 | 78 | 3 - 7 - 14 | 117 | 6 - 9 - 16 | 3 - 7 - 14 |
| | 400 | 0.068 | 0.058 | 625 | 18 | 13 - 18 - 25 | 156 | 11 - 14 - 20 | 234 | 12 - 16 - 22 | 11 - 14 - 20 |
| | 600 | 0.152 | 0.130 | 938 | 28 | 18 - 22 - 31 | 234 | 14 - 17 - 24 | 352 | 16 - 19 - 28 | 14 - 17 - 24 |
| | 800 | 0.270 | 0.230 | 1250 | 36 | 21 - 25 - 36 | 313 | 16 - 20 - 28 | 469 | 18 - 22 - 32 | 16 - 20 - 28 |
| | 1000 | 0.422 | 0.360 | 1563 | 42 | 23 - 28 - 40 | 391 | 18 - 22 - 31 | 586 | 21 - 25 - 36 | 18 - 22 - 31 |
| | 1100 | 0.511 | 0.436 | 1719 | 44 | 24 - 30 - 42 | 430 | 19 - 23 - 32 | 645 | 22 - 26 - 37 | 19 - 23 - 32 |
| | 1200 | 0.608 | 0.518 | 1875 | 46 | 25 - 31 - 44 | 469 | 20 - 24 - 34 | 703 | 22 - 28 - 39 | 20 - 24 - 34 |
| 18" x 18" | 200 | 0.017 | 0.014 | 450 | - | 8 - 11 - 22 | 113 | 4 - 9 - 17 | 169 | 7 - 11 - 19 | 4 - 9 - 17 |
| | 400 | 0.068 | 0.058 | 900 | 19 | 15 - 22 - 31 | 225 | 13 - 17 - 23 | 338 | 15 - 19 - 27 | 13 - 17 - 23 |
| | 600 | 0.152 | 0.130 | 1350 | 30 | 22 - 26 - 37 | 338 | 17 - 20 - 29 | 506 | 19 - 23 - 33 | 17 - 20 - 29 |
| | 800 | 0.270 | 0.230 | 1800 | 37 | 25 - 31 - 43 | 450 | 19 - 23 - 33 | 675 | 22 - 27 - 38 | 19 - 23 - 33 |
| | 900 | 0.342 | 0.292 | 2025 | 40 | 26 - 32 - 46 | 506 | 20 - 25 - 35 | 759 | 23 - 29 - 40 | 20 - 25 - 35 |
| | 1000 | 0.422 | 0.360 | 2250 | 43 | 28 - 34 - 48 | 563 | 21 - 26 - 37 | 844 | 25 - 30 - 43 | 21 - 26 - 37 |
| | 1100 | 0.511 | 0.436 | 2475 | 45 | 29 - 36 - 51 | 619 | 22 - 27 - 39 | 928 | 26 - 32 - 45 | 22 - 27 - 39 |

NOTES: Throw values are given for isothermal conditions and terminal velocities of 150, 100, and 50 FPM. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10^{-12} Watts. Dash in space denotes a NC value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. The throw values given for D2-Throw is for [(Total CFM)/2] CFM per side. The throw values given for 4-Throw is for [(Total CFM)/4] CFM per side. Reference page B1-36 for 'Side A' and 'Side B' detail. See Krueger's selection software for performance data not shown, including octave band data and different core styles.

SH, 5SH Performance Data: Horizontal Throw
IP DATA: SH, 5SH, ULTRA THROW, (NO DAMPER)

| Neck Dim in. | Neck Vel FPM | Total Pres "WG | Static Pres "WG | Total Flow CFM | NC | Discharge Air Pattern | | | | | | |
|--------------------|--------------------|----------------------|-----------------------|----------------------|----|-----------------------|------|--------------|-------|---------------|--------------|----------------------|
| | | | | | | D2-Way Throw | | 3 - Side A | | 3 - Side B | | 4-Way Throw ft |
| | | | | | | ft | CFM | Flow | Throw | Flow | Throw | |
| 21" x 21" | 200 | 0.017 | 0.014 | 613 | - | 9 - 13 - 25 | 153 | 5 - 10 - 19 | 230 | 8 - 13 - 22 | 5 - 10 - 19 | |
| | 400 | 0.068 | 0.058 | 1225 | 20 | 18 - 25 - 36 | 306 | 16 - 19 - 27 | 459 | 17 - 22 - 31 | 16 - 19 - 27 | |
| | 600 | 0.152 | 0.130 | 1838 | 31 | 25 - 31 - 44 | 459 | 19 - 24 - 33 | 689 | 22 - 27 - 39 | 19 - 24 - 33 | |
| | 800 | 0.270 | 0.230 | 2450 | 38 | 29 - 36 - 50 | 613 | 22 - 27 - 39 | 919 | 26 - 31 - 45 | 22 - 27 - 39 | |
| | 900 | 0.342 | 0.292 | 2756 | 41 | 31 - 38 - 53 | 689 | 24 - 29 - 41 | 1034 | 27 - 33 - 47 | 24 - 29 - 41 | |
| | 1000 | 0.422 | 0.360 | 3063 | 44 | 33 - 40 - 56 | 766 | 25 - 31 - 43 | 1148 | 29 - 35 - 50 | 25 - 31 - 43 | |
| | 1100 | 0.511 | 0.436 | 3369 | 46 | 34 - 42 - 59 | 842 | 26 - 32 - 45 | 1263 | 30 - 37 - 52 | 26 - 32 - 45 | |
| 24" x 24" | 200 | 0.017 | 0.014 | 800 | - | 10 - 15 - 29 | 200 | 5 - 12 - 22 | 300 | 10 - 15 - 25 | 5 - 12 - 22 | |
| | 400 | 0.068 | 0.058 | 1600 | 21 | 20 - 29 - 41 | 400 | 18 - 22 - 31 | 600 | 20 - 25 - 36 | 18 - 22 - 31 | |
| | 600 | 0.152 | 0.130 | 2400 | 31 | 29 - 35 - 50 | 600 | 22 - 27 - 38 | 900 | 25 - 31 - 44 | 22 - 27 - 38 | |
| | 700 | 0.207 | 0.176 | 2800 | 35 | 31 - 38 - 54 | 700 | 24 - 29 - 41 | 1050 | 27 - 34 - 48 | 24 - 29 - 41 | |
| | 800 | 0.270 | 0.230 | 3200 | 39 | 33 - 41 - 58 | 800 | 26 - 31 - 44 | 1200 | 29 - 36 - 51 | 26 - 31 - 44 | |
| | 900 | 0.342 | 0.292 | 3600 | 42 | 35 - 43 - 61 | 900 | 27 - 33 - 47 | 1350 | 31 - 38 - 54 | 27 - 33 - 47 | |
| | 1000 | 0.422 | 0.360 | 4000 | 45 | 37 - 45 - 64 | 1000 | 29 - 35 - 49 | 1500 | 33 - 40 - 57 | 29 - 35 - 49 | |
| 30" x 30" | 200 | 0.017 | 0.014 | 1250 | - | 13 - 19 - 36 | 313 | 7 - 15 - 28 | 469 | 12 - 18 - 32 | 7 - 15 - 28 | |
| | 400 | 0.068 | 0.058 | 2500 | 22 | 25 - 36 - 51 | 625 | 22 - 28 - 39 | 938 | 25 - 32 - 45 | 22 - 28 - 39 | |
| | 600 | 0.152 | 0.130 | 3750 | 33 | 36 - 44 - 62 | 938 | 28 - 34 - 48 | 1406 | 32 - 39 - 55 | 28 - 34 - 48 | |
| | 700 | 0.207 | 0.176 | 4375 | 37 | 39 - 48 - 67 | 1094 | 30 - 37 - 52 | 1641 | 34 - 42 - 59 | 30 - 37 - 52 | |
| | 800 | 0.270 | 0.230 | 5000 | 40 | 42 - 51 - 72 | 1250 | 32 - 39 - 55 | 1875 | 37 - 45 - 64 | 32 - 39 - 55 | |
| | 900 | 0.342 | 0.292 | 5625 | 44 | 44 - 54 - 76 | 1406 | 34 - 41 - 59 | 2109 | 39 - 48 - 67 | 34 - 41 - 59 | |
| | 1000 | 0.422 | 0.360 | 6250 | 46 | 46 - 57 - 80 | 1563 | 36 - 44 - 62 | 2344 | 41 - 50 - 71 | 36 - 44 - 62 | |
| 36" x 36" | 200 | 0.017 | 0.014 | 1800 | - | 15 - 23 - 43 | 450 | 8 - 18 - 33 | 675 | 14 - 22 - 38 | 8 - 18 - 33 | |
| | 400 | 0.068 | 0.058 | 3600 | 23 | 30 - 43 - 61 | 900 | 27 - 33 - 47 | 1350 | 29 - 38 - 54 | 27 - 33 - 47 | |
| | 500 | 0.106 | 0.090 | 4500 | 29 | 38 - 48 - 68 | 1125 | 30 - 37 - 52 | 1688 | 35 - 43 - 60 | 30 - 37 - 52 | |
| | 600 | 0.152 | 0.130 | 5400 | 34 | 43 - 53 - 75 | 1350 | 33 - 41 - 57 | 2025 | 38 - 47 - 66 | 33 - 41 - 57 | |
| | 700 | 0.207 | 0.176 | 6300 | 38 | 47 - 57 - 81 | 1575 | 36 - 44 - 62 | 2363 | 41 - 50 - 71 | 36 - 44 - 62 | |
| | 800 | 0.270 | 0.230 | 7200 | 42 | 50 - 61 - 86 | 1800 | 38 - 47 - 66 | 2700 | 44 - 54 - 76 | 38 - 47 - 66 | |
| | 900 | 0.342 | 0.292 | 8100 | 45 | 53 - 65 - 92 | 2025 | 41 - 50 - 70 | 3038 | 47 - 57 - 81 | 41 - 50 - 70 | |
| 48" x 48" | 200 | 0.017 | 0.014 | 3200 | - | 20 - 30 - 58 | 800 | 11 - 24 - 44 | 1200 | 19 - 29 - 51 | 11 - 24 - 44 | |
| | 400 | 0.068 | 0.058 | 6400 | 25 | 41 - 58 - 81 | 1600 | 36 - 44 - 63 | 2400 | 39 - 51 - 72 | 36 - 44 - 63 | |
| | 500 | 0.106 | 0.090 | 8000 | 31 | 51 - 64 - 91 | 2000 | 40 - 49 - 70 | 3000 | 46 - 57 - 80 | 40 - 49 - 70 | |
| | 550 | 0.128 | 0.109 | 8800 | 34 | 55 - 67 - 95 | 2200 | 42 - 52 - 73 | 3300 | 49 - 60 - 84 | 42 - 52 - 73 | |
| | 600 | 0.152 | 0.130 | 9600 | 36 | 58 - 70 - 100 | 2400 | 44 - 54 - 77 | 3600 | 51 - 62 - 88 | 44 - 54 - 77 | |
| | 700 | 0.207 | 0.176 | 11200 | 40 | 62 - 76 - 108 | 2800 | 48 - 58 - 83 | 4200 | 55 - 67 - 95 | 48 - 58 - 83 | |
| | 800 | 0.270 | 0.230 | 12800 | 44 | 66 - 81 - 115 | 3200 | 51 - 63 - 88 | 4800 | 59 - 72 - 102 | 51 - 63 - 88 | |

NOTES: Throw values are given for isothermal conditions and terminal velocities of 150, 100, and 50 FPM. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10^{-12} Watts. Dash in space denotes a NC value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. The throw values given for D2-Throw is for [(Total CFM)/2] CFM per side. The throw values given for 4-Throw is for [(Total CFM)/4] CFM per side. Reference page B1-36 for 'Side A' and 'Side B' detail. See Krueger's selection software for performance data not shown, including octave band data and different core styles.

SH, 5SH | Flush Face

SH, 5SH, SHFR, MSH Performance Data: Horizontal Throw

METRIC DATA: SH, 5SH, SHFR, MSH (NO DAMPER)

| Neck Dim | Neck Vel | Total Pres | Static Pres | Total Flow | NC | Discharge Air Pattern | | | | | |
|----------|----------|------------|-------------|------------|----|-----------------------|--------------------|-------------|-------------------|------------|-------------------|
| | | | | | | 1-Way Throw | | 2-Way Throw | | 3 - Side A | |
| | | mm | m/s | Pa | Pa | L/s | m | m | L/s | m | L/s |
| 152 | 1.02 | 3.8 | 3.2 | 24 | - | 1.6 - 2.3 - 3.5 | 0.8 - 1.2 - 2.3 | 6 | 0.4 - 0.9 - 2.0 | 9 | 0.7 - 1.1 - 2.2 |
| | 2.03 | 15.3 | 12.8 | 47 | - | 2.8 - 3.5 - 4.9 | 1.5 - 2.3 - 3.7 | 12 | 1.3 - 2.0 - 2.8 | 18 | 1.1 - 1.8 - 3.0 |
| | 3.05 | 34.4 | 28.8 | 71 | 19 | 3.5 - 4.2 - 6.0 | 2.3 - 3.2 - 4.5 | 18 | 2.0 - 2.4 - 3.5 | 27 | 1.8 - 2.6 - 3.7 |
| | 4.06 | 61.2 | 51.2 | 94 | 27 | 4.0 - 4.9 - 6.9 | 3.0 - 3.7 - 5.2 | 24 | 2.3 - 2.8 - 4.0 | 35 | 2.4 - 3.0 - 4.3 |
| | 5.08 | 95.6 | 80.1 | 118 | 33 | 4.5 - 5.5 - 7.7 | 3.4 - 4.1 - 5.8 | 29 | 2.6 - 3.2 - 4.5 | 44 | 2.8 - 3.4 - 4.8 |
| | 6.10 | 137.7 | 115.3 | 142 | 37 | 4.9 - 6.0 - 8.5 | 3.7 - 4.5 - 6.4 | 35 | 2.8 - 3.5 - 4.9 | 53 | 3.0 - 3.7 - 5.2 |
| 229 | 6.60 | 161.6 | 135.3 | 153 | 40 | 5.1 - 6.2 - 8.8 | 3.8 - 4.7 - 6.6 | 38 | 2.9 - 3.6 - 5.1 | 58 | 3.1 - 3.8 - 5.4 |
| | 1.02 | 3.8 | 3.2 | 53 | - | 2.3 - 3.5 - 5.2 | 1.2 - 1.7 - 3.5 | 13 | 0.6 - 1.4 - 3.0 | 20 | 1.1 - 1.7 - 3.4 |
| | 2.03 | 15.3 | 12.8 | 106 | 11 | 4.2 - 5.2 - 7.4 | 2.3 - 3.5 - 5.5 | 27 | 2.0 - 3.0 - 4.2 | 40 | 2.2 - 3.4 - 4.9 |
| | 3.05 | 34.4 | 28.8 | 159 | 22 | 5.2 - 6.4 - 9.0 | 3.5 - 4.8 - 6.7 | 40 | 3.0 - 3.7 - 5.2 | 60 | 3.4 - 4.2 - 6.0 |
| | 4.06 | 61.2 | 51.2 | 212 | 30 | 6.0 - 7.4 - 10.4 | 4.5 - 5.5 - 7.8 | 53 | 3.5 - 4.2 - 6.0 | 80 | 4.0 - 4.9 - 6.9 |
| | 5.08 | 95.6 | 80.1 | 265 | 35 | 6.7 - 8.2 - 11.6 | 5.0 - 6.2 - 8.7 | 66 | 3.9 - 4.7 - 6.7 | 100 | 4.4 - 5.4 - 7.7 |
| 305 | 5.59 | 115.7 | 96.9 | 292 | 38 | 7.0 - 8.6 - 12.2 | 5.3 - 6.5 - 9.1 | 73 | 4.1 - 5.0 - 7.0 | 110 | 4.7 - 5.7 - 8.1 |
| | 6.10 | 137.7 | 115.3 | 319 | 40 | 7.4 - 9.0 - 12.7 | 5.5 - 6.7 - 9.5 | 80 | 4.2 - 5.2 - 7.3 | 119 | 4.9 - 6.0 - 8.4 |
| | 1.02 | 3.8 | 3.2 | 94 | - | 3.1 - 4.7 - 6.9 | 1.5 - 2.3 - 4.6 | 24 | 0.8 - 1.8 - 4.0 | 35 | 1.5 - 2.2 - 4.5 |
| | 2.03 | 15.3 | 12.8 | 189 | 13 | 5.7 - 6.9 - 9.8 | 3.1 - 4.6 - 7.3 | 47 | 2.7 - 4.0 - 5.6 | 71 | 3.0 - 4.5 - 6.5 |
| | 3.05 | 34.4 | 28.8 | 283 | 24 | 6.9 - 8.5 - 12.0 | 4.6 - 6.4 - 9.0 | 71 | 4.0 - 4.9 - 6.9 | 106 | 4.5 - 5.6 - 8.0 |
| | 4.06 | 61.2 | 51.2 | 378 | 31 | 8.0 - 9.8 - 13.9 | 6.0 - 7.3 - 10.4 | 94 | 4.6 - 5.6 - 8.0 | 142 | 5.3 - 6.5 - 9.2 |
| 381 | 5.08 | 95.6 | 80.1 | 472 | 37 | 8.9 - 11.0 - 15.5 | 6.7 - 8.2 - 11.6 | 118 | 5.1 - 6.3 - 8.9 | 177 | 5.9 - 7.3 - 10.3 |
| | 5.59 | 115.7 | 96.9 | 519 | 40 | 9.4 - 11.5 - 16.3 | 7.0 - 8.6 - 12.2 | 130 | 5.4 - 6.6 - 9.4 | 195 | 6.2 - 7.6 - 10.8 |
| | 6.10 | 137.7 | 115.3 | 566 | 42 | 9.8 - 12.0 - 17.0 | 7.3 - 9.0 - 12.7 | 142 | 5.6 - 6.9 - 9.8 | 212 | 6.5 - 8.0 - 11.2 |
| | 1.02 | 3.8 | 3.2 | 147 | - | 3.9 - 5.8 - 8.7 | 1.9 - 2.9 - 5.8 | 37 | 1.0 - 2.3 - 5.0 | 55 | 1.8 - 2.8 - 5.6 |
| | 2.03 | 15.3 | 12.8 | 295 | 15 | 7.1 - 8.7 - 12.3 | 3.9 - 5.8 - 9.2 | 74 | 3.4 - 5.0 - 7.1 | 111 | 3.7 - 5.6 - 8.1 |
| | 3.05 | 34.4 | 28.8 | 442 | 25 | 8.7 - 10.6 - 15.0 | 5.8 - 7.9 - 11.2 | 111 | 5.0 - 6.1 - 8.6 | 166 | 5.6 - 7.0 - 9.9 |
| 457 | 4.06 | 61.2 | 51.2 | 590 | 33 | 10.0 - 12.3 - 17.3 | 7.5 - 9.2 - 13.0 | 147 | 5.8 - 7.1 - 10.0 | 221 | 6.6 - 8.1 - 11.5 |
| | 5.08 | 95.6 | 80.1 | 737 | 39 | 11.2 - 13.7 - 19.4 | 8.4 - 10.3 - 14.5 | 184 | 6.4 - 7.9 - 11.1 | 277 | 7.4 - 9.1 - 12.8 |
| | 5.59 | 115.7 | 96.9 | 811 | 41 | 11.7 - 14.4 - 20.3 | 8.8 - 10.8 - 15.2 | 203 | 6.8 - 8.3 - 11.7 | 304 | 7.8 - 9.5 - 13.5 |
| | 6.10 | 137.7 | 115.3 | 885 | 43 | 12.3 - 15.0 - 21.2 | 9.2 - 11.2 - 15.9 | 221 | 7.1 - 8.6 - 12.2 | 332 | 8.1 - 9.9 - 14.1 |
| | 1.02 | 3.8 | 3.2 | 212 | - | 4.7 - 7.0 - 10.4 | 2.3 - 3.5 - 6.9 | 53 | 1.2 - 2.7 - 6.0 | 80 | 2.2 - 3.4 - 6.7 |
| | 2.03 | 15.3 | 12.8 | 425 | 16 | 8.5 - 10.4 - 14.7 | 4.6 - 6.9 - 11.0 | 106 | 4.0 - 6.0 - 8.5 | 159 | 4.5 - 6.7 - 9.7 |
| 457 | 3.05 | 34.4 | 28.8 | 637 | 27 | 10.4 - 12.7 - 18.0 | 6.9 - 9.5 - 13.5 | 159 | 6.0 - 7.3 - 10.4 | 239 | 6.7 - 8.4 - 11.9 |
| | 4.06 | 61.2 | 51.2 | 850 | 34 | 12.0 - 14.7 - 20.8 | 9.0 - 11.0 - 15.6 | 212 | 6.9 - 8.5 - 12.0 | 319 | 8.0 - 9.7 - 13.8 |
| | 4.57 | 77.4 | 64.9 | 956 | 37 | 12.7 - 15.6 - 22.1 | 9.5 - 11.7 - 16.5 | 239 | 7.3 - 9.0 - 12.7 | 358 | 8.4 - 10.3 - 14.6 |
| | 5.08 | 95.6 | 80.1 | 1062 | 40 | 13.4 - 16.4 - 23.2 | 10.1 - 12.3 - 17.4 | 265 | 7.7 - 9.5 - 13.4 | 398 | 8.9 - 10.9 - 15.4 |
| | 5.59 | 115.7 | 96.9 | 1168 | 42 | 14.1 - 17.2 - 24.4 | 10.5 - 12.9 - 18.3 | 292 | 8.1 - 9.9 - 14.0 | 438 | 9.3 - 11.4 - 16.1 |
| | 6.10 | 137.7 | 115.3 | 1250 | 44 | 14.7 - 18.0 - 25.0 | 11.0 - 13.3 - 20.0 | 315 | 8.5 - 10.5 - 17.0 | 478 | 9.5 - 11.5 - 18.0 |

NOTES: Throw values are given for isothermal conditions and terminal velocities of 0.75, 0.50, and 0.25 m/s. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10^{-12} Watts. Dash in space denotes a NC value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. The throw values given for 1-Throw is for [Total L/s] L/s per side. The throw values given for 2-Throw is for [(Total L/s)/2] L/s per side. The throw values given for 4-Throw is for [(Total L/s)/4] L/s per side. Reference page B1-36 for 'Side A' and 'Side B' detail. See Krueger's selection software for performance data not shown, including octave band data and different core styles.

SH, 5SH Performance Data: Horizontal Throw
METRIC DATA: SH, 5SH (NO DAMPER)

| Neck Dim | Neck Vel | Total Pres | Static Pres | Total Flow | NC | Discharge Air Pattern | | | | | | | |
|----------|----------|------------|-------------|------------|------|-----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | | | | | | 1-Way Throw | | 2-Way Throw | | 3 - Side A | | 4-Way Throw | |
| | | | | | | m | m | m | L/s | m | L/s | m | |
| 533 | 1.02 | 3.8 | 3.2 | 289 | - | 5.4 - 8.1 - 12.1 | 2.7 - 4.0 - 8.1 | 72 | 1.4 - 3.2 - 7.0 | 108 | 2.5 - 3.9 - 7.8 | 1.4 - 3.2 - 7.0 | |
| | 2.03 | 15.3 | 12.8 | 578 | 17 | 9.9 - 12.1 - 17.2 | 5.4 - 8.1 - 12.9 | 145 | 4.7 - 7.0 - 9.9 | 217 | 5.2 - 7.8 - 11.4 | 4.7 - 7.0 - 9.9 | |
| | 3.05 | 34.4 | 28.8 | 867 | 28 | 12.1 - 14.9 - 21.0 | 8.1 - 11.1 - 15.7 | 217 | 7.0 - 8.5 - 12.1 | 325 | 7.8 - 9.8 - 13.9 | 7.0 - 8.5 - 12.1 | |
| | x | 4.06 | 61.2 | 51.2 | 1156 | 35 | 14.0 - 17.2 - 24.3 | 10.5 - 12.9 - 18.2 | 289 | 8.1 - 9.9 - 14.0 | 434 | 9.3 - 11.4 - 16.1 | 8.1 - 9.9 - 14.0 |
| | 533 | 4.57 | 77.4 | 64.9 | 1301 | 38 | 14.9 - 18.2 - 25.7 | 11.1 - 13.6 - 19.3 | 325 | 8.5 - 10.5 - 14.8 | 488 | 9.8 - 12.0 - 17.0 | 8.5 - 10.5 - 14.8 |
| | | 5.08 | 95.6 | 80.1 | 1445 | 41 | 15.7 - 19.2 - 27.1 | 11.7 - 14.4 - 20.3 | 361 | 9.0 - 11.0 - 15.6 | 542 | 10.4 - 12.7 - 18.0 | 9.0 - 11.0 - 15.6 |
| | | 5.59 | 115.7 | 96.9 | 1590 | 43 | 16.4 - 20.1 - 28.4 | 12.3 - 15.1 - 21.3 | 397 | 9.5 - 11.6 - 16.4 | 596 | 10.9 - 13.3 - 18.8 | 9.5 - 11.6 - 16.4 |
| 610 | 1.02 | 3.8 | 3.2 | 378 | - | 6.2 - 9.3 - 13.9 | 3.1 - 4.6 - 9.2 | 94 | 1.6 - 3.6 - 8.0 | 142 | 2.9 - 4.5 - 8.9 | 1.6 - 3.6 - 8.0 | |
| | 2.03 | 15.3 | 12.8 | 755 | 18 | 11.3 - 13.9 - 19.6 | 6.2 - 9.2 - 14.7 | 189 | 5.4 - 8.0 - 11.3 | 283 | 6.0 - 8.9 - 13.0 | 5.4 - 8.0 - 11.3 | |
| | 3.05 | 34.4 | 28.8 | 1133 | 28 | 13.9 - 17.0 - 24.0 | 9.2 - 12.7 - 18.0 | 283 | 8.0 - 9.8 - 13.8 | 425 | 8.9 - 11.2 - 15.9 | 8.0 - 9.8 - 13.8 | |
| | x | 3.56 | 46.8 | 39.2 | 1321 | 32 | 15.0 - 18.3 - 25.9 | 10.8 - 13.7 - 19.4 | 330 | 8.6 - 10.6 - 14.9 | 496 | 9.9 - 12.1 - 17.2 | 8.6 - 10.6 - 14.9 |
| | 610 | 4.06 | 61.2 | 51.2 | 1510 | 36 | 16.0 - 19.6 - 27.7 | 12.0 - 14.7 - 20.8 | 378 | 9.2 - 11.3 - 16.0 | 566 | 10.6 - 13.0 - 18.4 | 9.2 - 11.3 - 16.0 |
| | | 4.57 | 77.4 | 64.9 | 1699 | 39 | 17.0 - 20.8 - 29.4 | 12.7 - 15.6 - 22.0 | 425 | 9.8 - 12.0 - 16.9 | 637 | 11.2 - 13.8 - 19.5 | 9.8 - 12.0 - 16.9 |
| | | 5.08 | 95.6 | 80.1 | 1888 | 42 | 17.9 - 21.9 - 31.0 | 13.4 - 16.4 - 23.2 | 472 | 10.3 - 12.6 - 17.8 | 708 | 11.9 - 14.5 - 20.5 | 10.3 - 12.6 - 17.8 |
| 762 | 1.02 | 3.8 | 3.2 | 590 | - | 7.8 - 11.6 - 17.3 | 3.9 - 5.8 - 11.6 | 147 | 2.0 - 4.5 - 10.0 | 221 | 3.6 - 5.6 - 11.2 | 2.0 - 4.5 - 10.0 | |
| | 2.03 | 15.3 | 12.8 | 1180 | 19 | 14.1 - 17.3 - 24.5 | 7.7 - 11.6 - 18.4 | 295 | 6.7 - 10.0 - 14.1 | 442 | 7.5 - 11.2 - 16.2 | 6.7 - 10.0 - 14.1 | |
| | 3.05 | 34.4 | 28.8 | 1770 | 30 | 17.3 - 21.2 - 30.0 | 11.6 - 15.9 - 22.5 | 442 | 10.0 - 12.2 - 17.3 | 664 | 11.2 - 14.1 - 19.9 | 10.0 - 12.2 - 17.3 | |
| | x | 3.56 | 46.8 | 39.2 | 2065 | 34 | 18.7 - 22.9 - 32.4 | 13.5 - 17.2 - 24.3 | 516 | 10.8 - 13.2 - 18.7 | 774 | 12.4 - 15.2 - 21.5 | 10.8 - 13.2 - 18.7 |
| | 762 | 4.06 | 61.2 | 51.2 | 2360 | 37 | 20.0 - 24.5 - 34.7 | 15.0 - 18.4 - 26.0 | 590 | 11.5 - 14.1 - 19.9 | 885 | 13.3 - 16.2 - 23.0 | 11.5 - 14.1 - 19.9 |
| | | 4.57 | 77.4 | 64.9 | 2655 | 41 | 21.2 - 26.0 - 36.8 | 15.9 - 19.5 - 27.5 | 664 | 12.2 - 15.0 - 21.2 | 996 | 14.1 - 17.2 - 24.3 | 12.2 - 15.0 - 21.2 |
| | | 5.08 | 95.6 | 80.1 | 2950 | 43 | 22.4 - 27.4 - 38.7 | 16.8 - 20.5 - 29.0 | 737 | 12.9 - 15.8 - 22.3 | 1106 | 14.8 - 18.1 - 25.7 | 12.9 - 15.8 - 22.3 |
| 914 | 1.02 | 3.8 | 3.2 | 850 | - | 9.3 - 14.0 - 20.8 | 4.6 - 6.9 - 13.9 | 212 | 2.4 - 5.4 - 12.0 | 319 | 4.4 - 6.7 - 13.4 | 2.4 - 5.4 - 12.0 | |
| | 2.03 | 15.3 | 12.8 | 1699 | 20 | 17.0 - 20.8 - 29.4 | 9.2 - 13.9 - 22.0 | 425 | 8.1 - 12.0 - 16.9 | 637 | 8.9 - 13.4 - 19.5 | 8.1 - 12.0 - 16.9 | |
| | 2.54 | 23.9 | 20.0 | 2124 | 26 | 19.0 - 23.2 - 32.9 | 11.6 - 17.3 - 24.6 | 531 | 10.1 - 13.4 - 18.9 | 796 | 11.2 - 15.4 - 21.8 | 10.1 - 13.4 - 18.9 | |
| | x | 3.05 | 34.4 | 28.8 | 2549 | 31 | 20.8 - 25.5 - 36.0 | 13.9 - 19.1 - 27.0 | 637 | 12.0 - 14.7 - 20.7 | 956 | 13.4 - 16.9 - 23.9 | 12.0 - 14.7 - 20.7 |
| | 914 | 3.56 | 46.8 | 39.2 | 2973 | 35 | 22.5 - 27.5 - 38.9 | 16.2 - 20.6 - 29.1 | 743 | 12.9 - 15.8 - 22.4 | 1115 | 14.9 - 18.2 - 25.8 | 12.9 - 15.8 - 22.4 |
| | | 4.06 | 61.2 | 51.2 | 3398 | 39 | 24.0 - 29.4 - 41.6 | 18.0 - 22.0 - 31.2 | 850 | 13.8 - 16.9 - 23.9 | 1274 | 15.9 - 19.5 - 27.5 | 13.8 - 16.9 - 23.9 |
| | | 4.57 | 77.4 | 64.9 | 3823 | 42 | 25.5 - 31.2 - 44.1 | 19.1 - 23.4 - 33.0 | 956 | 14.7 - 17.9 - 25.4 | 1434 | 16.9 - 20.7 - 29.2 | 14.7 - 17.9 - 25.4 |
| 1219 | 1.02 | 3.8 | 3.2 | 1510 | - | 12.4 - 18.6 - 27.7 | 6.2 - 9.2 - 18.5 | 378 | 3.2 - 7.2 - 16.0 | 566 | 5.8 - 8.9 - 17.9 | 3.2 - 7.2 - 16.0 | |
| | 2.03 | 15.3 | 12.8 | 3020 | 22 | 22.6 - 27.7 - 39.2 | 12.3 - 18.5 - 29.4 | 755 | 10.8 - 16.0 - 22.6 | 1133 | 11.9 - 17.9 - 26.0 | 10.8 - 16.0 - 22.6 | |
| | 2.54 | 23.9 | 20.0 | 3776 | 28 | 25.3 - 31.0 - 43.8 | 15.4 - 23.1 - 32.8 | 944 | 13.5 - 17.8 - 25.2 | 1416 | 14.9 - 20.5 - 29.0 | 13.5 - 17.8 - 25.2 | |
| | x | 2.79 | 28.9 | 24.2 | 4153 | 31 | 26.5 - 32.5 - 46.0 | 16.9 - 24.4 - 34.4 | 1038 | 14.8 - 18.7 - 26.5 | 1557 | 16.4 - 21.5 - 30.4 | 14.8 - 18.7 - 26.5 |
| | 1219 | 3.05 | 34.4 | 28.8 | 4531 | 33 | 27.7 - 34.0 - 48.0 | 18.5 - 25.4 - 36.0 | 1133 | 16.0 - 19.5 - 27.6 | 1699 | 17.9 - 22.5 - 31.8 | 16.0 - 19.5 - 27.6 |
| | | 3.56 | 46.8 | 39.2 | 5286 | 37 | 29.9 - 36.7 - 51.9 | 21.6 - 27.5 - 38.9 | 1321 | 17.2 - 21.1 - 29.8 | 1982 | 19.8 - 24.3 - 34.4 | 17.2 - 21.1 - 29.8 |
| | | 4.06 | 61.2 | 51.2 | 6041 | 41 | 32.0 - 39.2 - 55.4 | 24.0 - 29.4 - 41.5 | 1510 | 18.4 - 22.6 - 31.9 | 2265 | 21.2 - 26.0 - 36.7 | 18.4 - 22.6 - 31.9 |

NOTES: Throw values are given for isothermal conditions and terminal velocities of 0.75, 0.50, and 0.25 m/s. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Dash in space denotes a NC value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. The throw values given for 1-Throw is for [Total L/s] L/s per side. The throw values given for 2-Throw is for [(Total L/s)/2] L/s per side. The throw values given for 4-Throw is for [(Total L/s)/4] L/s per side. Reference page B1-36 for 'Side A' and 'Side B' detail. See Krueger's selection software for performance data not shown, including octave band data and different core styles.

SH, 5SH | Flush Face

SH, 5SH, MSH Performance Data: Horizontal Throw

METRIC DATA: SH, 5SH, MSH, ULTRA THROW (NO DAMPER)

| Neck Dim | Neck Vel | Total Pres | Static Pres | Total Flow | NC | Discharge Air Pattern | | | | | |
|-----------------|----------|------------|-------------|------------|----|-----------------------|-----|------------------|-----|------------------|------------------|
| | | | | | | D2-Way Throw | | 3 - Side A | | 3 - Side B | |
| | | | | | | m | L/s | m | L/s | m | L/s |
| mm | m/s | Pa | Pa | L/s | | | | | | | |
| 152 x 152 | 1.02 | 4.2 | 3.6 | 24 | - | 0.8 - 1.2 - 2.2 | 6 | 0.4 - 0.9 - 1.7 | 9 | 0.7 - 1.1 - 1.9 | 0.4 - 0.9 - 1.7 |
| | 2.03 | 16.8 | 14.3 | 47 | 12 | 1.5 - 2.2 - 3.1 | 12 | 1.3 - 1.7 - 2.4 | 18 | 1.1 - 1.8 - 2.5 | 1.3 - 1.7 - 2.4 |
| | 3.05 | 37.9 | 32.3 | 71 | 22 | 2.2 - 2.7 - 3.8 | 18 | 1.7 - 2.1 - 2.9 | 27 | 1.8 - 2.2 - 3.1 | 1.7 - 2.1 - 2.9 |
| | 4.06 | 67.3 | 57.4 | 94 | 30 | 2.5 - 3.1 - 4.4 | 24 | 1.9 - 2.4 - 3.4 | 35 | 2.1 - 2.5 - 3.6 | 1.9 - 2.4 - 3.4 |
| | 5.08 | 105.2 | 89.6 | 118 | 36 | 2.8 - 3.5 - 4.9 | 29 | 2.2 - 2.7 - 3.8 | 44 | 2.3 - 2.8 - 4.0 | 2.2 - 2.7 - 3.8 |
| | 6.10 | 151.4 | 129.1 | 142 | 40 | 3.1 - 3.8 - 5.4 | 35 | 2.4 - 2.9 - 4.1 | 53 | 2.5 - 3.1 - 4.4 | 2.4 - 2.9 - 4.1 |
| 229 x 229 | 1.02 | 4.2 | 3.6 | 53 | - | 1.2 - 1.7 - 3.3 | 13 | 0.6 - 1.4 - 2.5 | 20 | 1.1 - 1.7 - 2.9 | 0.6 - 1.4 - 2.5 |
| | 2.03 | 16.8 | 14.3 | 106 | 14 | 2.3 - 3.3 - 4.6 | 27 | 2.0 - 2.5 - 3.6 | 40 | 2.2 - 2.9 - 4.1 | 2.0 - 2.5 - 3.6 |
| | 3.05 | 37.9 | 32.3 | 159 | 25 | 3.3 - 4.0 - 5.7 | 40 | 2.5 - 3.1 - 4.4 | 60 | 2.9 - 3.6 - 5.0 | 2.5 - 3.1 - 4.4 |
| | 4.06 | 67.3 | 57.4 | 212 | 33 | 3.8 - 4.6 - 6.6 | 53 | 2.9 - 3.6 - 5.0 | 80 | 3.3 - 4.1 - 5.8 | 2.9 - 3.6 - 5.0 |
| | 5.08 | 105.2 | 89.6 | 265 | 38 | 4.2 - 5.2 - 7.3 | 66 | 3.3 - 4.0 - 5.6 | 100 | 3.7 - 4.6 - 6.5 | 3.3 - 4.0 - 5.6 |
| | 5.59 | 127.2 | 108.5 | 292 | 41 | 4.4 - 5.4 - 7.7 | 73 | 3.4 - 4.2 - 5.9 | 110 | 3.9 - 4.8 - 6.8 | 3.4 - 4.2 - 5.9 |
| 305 x 305 | 1.02 | 4.2 | 3.6 | 94 | - | 1.5 - 2.3 - 4.4 | 24 | 0.8 - 1.8 - 3.4 | 35 | 1.5 - 2.2 - 3.9 | 0.8 - 1.8 - 3.4 |
| | 2.03 | 16.8 | 14.3 | 189 | 16 | 3.1 - 4.4 - 6.2 | 47 | 2.7 - 3.4 - 4.8 | 71 | 3.0 - 3.9 - 5.5 | 2.7 - 3.4 - 4.8 |
| | 3.05 | 37.9 | 32.3 | 283 | 27 | 4.4 - 5.4 - 7.6 | 71 | 3.4 - 4.1 - 5.8 | 106 | 3.9 - 4.7 - 6.7 | 3.4 - 4.1 - 5.8 |
| | 4.06 | 67.3 | 57.4 | 378 | 34 | 5.1 - 6.2 - 8.7 | 94 | 3.9 - 4.8 - 6.7 | 142 | 4.5 - 5.5 - 7.7 | 3.9 - 4.8 - 6.7 |
| | 5.08 | 105.2 | 89.6 | 472 | 40 | 5.6 - 6.9 - 9.8 | 118 | 4.3 - 5.3 - 7.5 | 177 | 5.0 - 6.1 - 8.6 | 4.3 - 5.3 - 7.5 |
| | 5.59 | 127.2 | 108.5 | 519 | 43 | 5.9 - 7.3 - 10.3 | 130 | 4.5 - 5.6 - 7.9 | 195 | 5.2 - 6.4 - 9.1 | 4.5 - 5.6 - 7.9 |
| 381 x 381 | 1.02 | 4.2 | 3.6 | 147 | - | 1.9 - 2.9 - 5.5 | 37 | 1.0 - 2.3 - 4.2 | 55 | 1.8 - 2.8 - 4.8 | 1.0 - 2.3 - 4.2 |
| | 2.03 | 16.8 | 14.3 | 295 | 18 | 3.9 - 5.5 - 7.7 | 74 | 3.4 - 4.2 - 5.9 | 111 | 3.7 - 4.8 - 6.8 | 3.4 - 4.2 - 5.9 |
| | 3.05 | 37.9 | 32.3 | 442 | 28 | 5.5 - 6.7 - 9.5 | 111 | 4.2 - 5.1 - 7.3 | 166 | 4.8 - 5.9 - 8.4 | 4.2 - 5.1 - 7.3 |
| | 4.06 | 67.3 | 57.4 | 590 | 36 | 6.3 - 7.7 - 10.9 | 147 | 4.8 - 5.9 - 8.4 | 221 | 5.6 - 6.8 - 9.7 | 4.8 - 5.9 - 8.4 |
| | 5.08 | 105.2 | 89.6 | 737 | 42 | 7.1 - 8.6 - 12.2 | 184 | 5.4 - 6.6 - 9.4 | 277 | 6.2 - 7.6 - 10.8 | 5.4 - 6.6 - 9.4 |
| | 5.59 | 127.2 | 108.5 | 811 | 44 | 7.4 - 9.1 - 12.8 | 203 | 5.7 - 7.0 - 9.8 | 304 | 6.5 - 8.0 - 11.3 | 5.7 - 7.0 - 9.8 |
| 457 x 457 | 1.02 | 4.2 | 3.6 | 885 | 46 | 7.7 - 9.5 - 13.4 | 221 | 5.9 - 7.3 - 10.3 | 332 | 6.8 - 8.4 - 11.8 | 5.9 - 7.3 - 10.3 |
| | 2.03 | 16.8 | 14.3 | 212 | - | 2.3 - 3.5 - 6.6 | 53 | 1.2 - 2.7 - 5.0 | 80 | 2.2 - 3.4 - 5.8 | 1.2 - 2.7 - 5.0 |
| | 3.05 | 37.9 | 32.3 | 425 | 19 | 4.6 - 6.6 - 9.3 | 106 | 4.0 - 5.0 - 7.1 | 159 | 4.5 - 5.8 - 8.2 | 4.0 - 5.0 - 7.1 |
| | 4.06 | 67.3 | 57.4 | 637 | 30 | 6.6 - 8.0 - 11.4 | 159 | 5.0 - 6.2 - 8.7 | 239 | 5.8 - 7.1 - 10.0 | 5.0 - 6.2 - 8.7 |
| | 4.57 | 85.2 | 72.6 | 850 | 37 | 7.6 - 9.3 - 13.1 | 212 | 5.8 - 7.1 - 10.1 | 319 | 6.7 - 8.2 - 11.6 | 5.8 - 7.1 - 10.1 |
| | 5.08 | 105.2 | 89.6 | 1062 | 43 | 8.0 - 9.8 - 13.9 | 239 | 6.2 - 7.6 - 10.7 | 358 | 7.1 - 8.7 - 12.3 | 6.2 - 7.6 - 10.7 |
| | 5.59 | 127.2 | 108.5 | 1168 | 45 | 8.9 - 10.9 - 15.4 | 292 | 6.8 - 8.4 - 11.8 | 438 | 7.9 - 9.6 - 13.6 | 6.8 - 8.4 - 11.8 |

NOTES: Throw values are given for isothermal conditions and terminal velocities of 0.75, 0.50, and 0.25 m/s. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10^{-12} Watts. Dash in space denotes a NC value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. The throw values given for D2-Throw is for [(Total L/s)/2] L/s per side. The throw values given for 4-Throw is for [(Total L/s)/4] L/s per side. Reference page B1-36 for 'Side A' and 'Side B' detail. See Krueger's selection software for performance data not shown, including octave band data and different core styles.

SH, 5SH Performance Data: Horizontal Throw
METRIC DATA: SH, 5SH, ULTRA THROW (NO DAMPER)

| Neck Dim | Neck Vel | Total Pres | Static Pres | Total Flow | NC | D2-Way Throw | Discharge Air Pattern | | | | 4-Way Throw | |
|-------------|----------|------------|-------------|------------|----|--------------------|-----------------------|--------------------|------------|--------------------|--------------------|--|
| | | | | | | | 3 - Side A | | 3 - Side B | | | |
| | | | | | | | Flow | Throw | Flow | Throw | | |
| mm | m/s | Pa | Pa | L/s | | m | L/s | m | L/s | m | m | |
| 533 x 533 | 1.02 | 4.2 | 3.6 | 289 | - | 2.7 - 4.0 - 7.7 | 72 | 1.4 - 3.2 - 5.9 | 108 | 2.5 - 3.9 - 6.8 | 1.4 - 3.2 - 5.9 | |
| | 2.03 | 16.8 | 14.3 | 578 | 20 | 5.4 - 7.7 - 10.8 | 145 | 4.7 - 5.9 - 8.3 | 217 | 5.2 - 6.8 - 9.6 | 4.7 - 5.9 - 8.3 | |
| | 3.05 | 37.9 | 32.3 | 867 | 31 | 7.7 - 9.4 - 13.3 | 217 | 5.9 - 7.2 - 10.2 | 325 | 6.8 - 8.3 - 11.7 | 5.9 - 7.2 - 10.2 | |
| | 4.06 | 67.3 | 57.4 | 1156 | 38 | 8.8 - 10.8 - 15.3 | 289 | 6.8 - 8.3 - 11.8 | 434 | 7.8 - 9.6 - 13.5 | 6.8 - 8.3 - 11.8 | |
| | 4.57 | 85.2 | 72.6 | 1301 | 41 | 9.4 - 11.5 - 16.2 | 325 | 7.2 - 8.8 - 12.5 | 488 | 8.3 - 10.1 - 14.4 | 7.2 - 8.8 - 12.5 | |
| | 5.08 | 105.2 | 89.6 | 1445 | 44 | 9.9 - 12.1 - 17.1 | 361 | 7.6 - 9.3 - 13.1 | 542 | 8.7 - 10.7 - 15.1 | 7.6 - 9.3 - 13.1 | |
| 610 x 610 | 5.59 | 127.2 | 108.5 | 1590 | 46 | 10.4 - 12.7 - 17.9 | 397 | 8.0 - 9.7 - 13.8 | 596 | 9.2 - 11.2 - 15.9 | 8.0 - 9.7 - 13.8 | |
| | 1.02 | 4.2 | 3.6 | 378 | - | 3.1 - 4.6 - 8.7 | 94 | 1.6 - 3.6 - 6.7 | 142 | 2.9 - 4.5 - 7.7 | 1.6 - 3.6 - 6.7 | |
| | 2.03 | 16.8 | 14.3 | 755 | 21 | 6.2 - 8.7 - 12.4 | 189 | 5.4 - 6.7 - 9.5 | 283 | 6.0 - 7.7 - 10.9 | 5.4 - 6.7 - 9.5 | |
| | 3.05 | 37.9 | 32.3 | 1133 | 31 | 8.7 - 10.7 - 15.2 | 283 | 6.7 - 8.2 - 11.6 | 425 | 7.7 - 9.5 - 13.4 | 6.7 - 8.2 - 11.6 | |
| | 3.56 | 51.5 | 43.9 | 1321 | 35 | 9.4 - 11.6 - 16.4 | 330 | 7.3 - 8.9 - 12.6 | 496 | 8.4 - 10.2 - 14.5 | 7.3 - 8.9 - 12.6 | |
| | 4.06 | 67.3 | 57.4 | 1510 | 39 | 10.1 - 12.4 - 17.5 | 378 | 7.8 - 9.5 - 13.4 | 566 | 8.9 - 10.9 - 15.5 | 7.8 - 9.5 - 13.4 | |
| 762 x 762 | 4.57 | 85.2 | 72.6 | 1699 | 42 | 10.7 - 13.1 - 18.6 | 425 | 8.2 - 10.1 - 14.3 | 637 | 9.5 - 11.6 - 16.4 | 8.2 - 10.1 - 14.3 | |
| | 5.08 | 105.2 | 89.6 | 1888 | 45 | 11.3 - 13.8 - 19.6 | 472 | 8.7 - 10.6 - 15.0 | 708 | 10.0 - 12.2 - 17.3 | 8.7 - 10.6 - 15.0 | |
| | 1.02 | 4.2 | 3.6 | 590 | - | 3.9 - 5.8 - 10.9 | 147 | 2.0 - 4.5 - 8.4 | 221 | 3.6 - 5.6 - 9.7 | 2.0 - 4.5 - 8.4 | |
| | 2.03 | 16.8 | 14.3 | 1180 | 22 | 7.7 - 10.9 - 15.5 | 295 | 6.7 - 8.4 - 11.9 | 442 | 7.5 - 9.7 - 13.7 | 6.7 - 8.4 - 11.9 | |
| | 3.05 | 37.9 | 32.3 | 1770 | 33 | 10.9 - 13.4 - 18.9 | 442 | 8.4 - 10.3 - 14.5 | 664 | 9.7 - 11.8 - 16.7 | 8.4 - 10.3 - 14.5 | |
| | 3.56 | 51.5 | 43.9 | 2065 | 37 | 11.8 - 14.5 - 20.5 | 516 | 9.1 - 11.1 - 15.7 | 774 | 10.4 - 12.8 - 18.1 | 9.1 - 11.1 - 15.7 | |
| 914 x 914 | 4.06 | 67.3 | 57.4 | 2360 | 40 | 12.6 - 15.5 - 21.9 | 590 | 9.7 - 11.9 - 16.8 | 885 | 11.2 - 13.7 - 19.3 | 9.7 - 11.9 - 16.8 | |
| | 4.57 | 85.2 | 72.6 | 2655 | 44 | 13.4 - 16.4 - 23.2 | 664 | 10.3 - 12.6 - 17.8 | 996 | 11.8 - 14.5 - 20.5 | 10.3 - 12.6 - 17.8 | |
| | 5.08 | 105.2 | 89.6 | 2950 | 46 | 14.1 - 17.3 - 24.4 | 737 | 10.8 - 13.3 - 18.8 | 1106 | 12.5 - 15.3 - 21.6 | 10.8 - 13.3 - 18.8 | |
| | 1.02 | 4.2 | 3.6 | 850 | - | 4.6 - 6.9 - 13.1 | 212 | 2.4 - 5.4 - 10.1 | 319 | 4.4 - 6.7 - 11.6 | 2.4 - 5.4 - 10.1 | |
| | 2.03 | 16.8 | 14.3 | 1699 | 23 | 9.2 - 13.1 - 18.6 | 425 | 8.1 - 10.1 - 14.3 | 637 | 8.9 - 11.6 - 16.4 | 8.1 - 10.1 - 14.3 | |
| | 2.54 | 26.3 | 22.4 | 2124 | 29 | 11.6 - 14.7 - 20.7 | 531 | 9.2 - 11.3 - 15.9 | 796 | 10.6 - 13.0 - 18.3 | 9.2 - 11.3 - 15.9 | |
| 1219 x 1219 | 3.05 | 37.9 | 32.3 | 2549 | 34 | 13.1 - 16.1 - 22.7 | 637 | 10.1 - 12.3 - 17.5 | 956 | 11.6 - 14.2 - 20.1 | 10.1 - 12.3 - 17.5 | |
| | 3.56 | 51.5 | 43.9 | 2973 | 38 | 14.2 - 17.4 - 24.5 | 743 | 10.9 - 13.3 - 18.9 | 1115 | 12.5 - 15.3 - 21.7 | 10.9 - 13.3 - 18.9 | |
| | 4.06 | 67.3 | 57.4 | 3398 | 42 | 15.2 - 18.6 - 26.2 | 850 | 11.6 - 14.3 - 20.2 | 1274 | 13.4 - 16.4 - 23.2 | 11.6 - 14.3 - 20.2 | |
| | 4.57 | 85.2 | 72.6 | 3823 | 45 | 16.1 - 19.7 - 27.8 | 956 | 12.3 - 15.1 - 21.4 | 1434 | 14.2 - 17.4 - 24.6 | 12.3 - 15.1 - 21.4 | |
| | 1.02 | 4.2 | 3.6 | 1510 | - | 6.2 - 9.2 - 17.5 | 378 | 3.2 - 7.2 - 13.4 | 566 | 5.8 - 8.9 - 15.5 | 3.2 - 7.2 - 13.4 | |
| | 2.03 | 16.8 | 14.3 | 3020 | 25 | 12.3 - 17.5 - 24.7 | 755 | 10.8 - 13.4 - 19.0 | 1133 | 11.9 - 15.5 - 21.9 | 10.8 - 13.4 - 19.0 | |
| 1219 x 1219 | 2.54 | 26.3 | 22.4 | 3776 | 31 | 15.4 - 19.6 - 27.7 | 944 | 12.3 - 15.0 - 21.2 | 1416 | 14.1 - 17.3 - 24.5 | 12.3 - 15.0 - 21.2 | |
| | 2.79 | 31.8 | 27.1 | 4153 | 34 | 16.7 - 20.5 - 29.0 | 1038 | 12.9 - 15.8 - 22.3 | 1557 | 14.8 - 18.1 - 25.6 | 12.9 - 15.8 - 22.3 | |
| | 3.05 | 37.9 | 32.3 | 4531 | 36 | 17.5 - 21.4 - 30.3 | 1133 | 13.4 - 16.5 - 23.3 | 1699 | 15.5 - 18.9 - 26.8 | 13.4 - 16.5 - 23.3 | |
| | 3.56 | 51.5 | 43.9 | 5286 | 40 | 18.9 - 23.1 - 32.7 | 1321 | 14.5 - 17.8 - 25.1 | 1982 | 16.7 - 20.5 - 28.9 | 14.5 - 17.8 - 25.1 | |
| | 4.06 | 67.3 | 57.4 | 6041 | 44 | 20.2 - 24.7 - 35.0 | 1510 | 15.5 - 19.0 - 26.9 | 2265 | 17.9 - 21.9 - 30.9 | 15.5 - 19.0 - 26.9 | |

NOTES: Throw values are given for isothermal conditions and terminal velocities of 0.75, 0.50, and 0.25 m/s. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10^{-12} Watts. Dash in space denotes a NC value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. The throw values given for D2-Throw is for [(Total L/s)/2] L/s per side. The throw values given for 4-Throw is for [(Total L/s)/4] L/s per side. Reference page B1-36 for 'Side A' and 'Side B' detail. See Krueger's selection software for performance data not shown, including octave band data and different core styles.

SH, 5SH | Flush Face

SH, 5SH Suggested Specification & Configuration

SH, 5SH

The ceiling diffuser shall be Krueger model SH (steel) or 5SH (aluminum) louver face for non-adjustable horizontal discharge airflow. These diffusers shall have a square or rectangular neck of the sizes and frame styles shown on the drawings or job schedule. The square or rectangular neck shall be an integral part of the backpan and a square-to-round adapter will be an available option to accommodate round duct connections. 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 D870-92 of 250 hours.

1. SERIES: (XXX)

- SH - Square/Rectangular Neck, Steel Ceiling Diffuser
- 5SH - Square/Rectangular Neck, Aluminum Ceiling Diffuser

2. PATTERN: (XX)

- 01 - 1-Way
- 02 - 2-Way
- 03 - 3-Way
- 04 - 4-Way

3. WIDTH: (XX)

- 6" - 48" in 3" Increments

4. HEIGHT: (XX)

- 6" - 48" in 3" Increments

5. FRAME: (XXX) *

- 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

6. PANEL: (XX)x(XX) **

- None
- 12"x12"
- 24"x24"
- 24"x48"

7. DAMPER: (XX)

- 00 - None
- 02 - Steel Damper (OB DFA)
- 18 - Aluminum Damper (5OB DFA)

8. ACCESSORIES: (XX) (XX)

- 00 - None
- S - Square Straightening Grid
- T - Long Straightening Grid
- W - Short Straightening Grid
- U - Ultrathrow
- M - MRI Construction

9. FINISH: (XX)

- 01 - Mill
- 10 - Alumican
- 35 - Black
- 44 - British White

* If Frame 23, 24, 27, or 98 are specified, specify the panel size.

** Reference page B1-36 for panel and neck size availability. Specify Panel 'None' if Frame 21 or 22 has been selected.

SAMPLE CONFIGURATION: 5SH - 01 - 36x36 - F22 - NONE - 00 - 00 - 00 - 35