
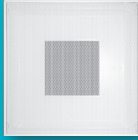




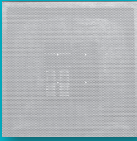

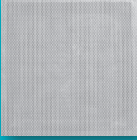





|  |  |
|--|--|
|  <p><b>6100, 6150<br/>56100, 56150</b><br/>These perforated supply ceiling diffusers feature a neck mounted rotatable core with either a round or square neck. Aluminum or steel perforated face is available.</p>                                    |  <p><b>6490, 56490</b><br/>These perforated ceiling returns feature a square neck. Aluminum or steel perforated face is available.</p>  |
|  <p><b>6200, 56200<br/>6200FR, 6290F</b><br/>These perforated supply, ceiling diffusers feature neck mounted curved blades with a square neck. Aluminum or steel perforated face is available. Fire rated or filter return variations available.</p>  |  <p><b>6600, 56600, 6600FR</b><br/>These perforated supply ceiling diffusers feature face mounted deflectors with a round neck. Aluminum or steel perforated face is available. A fire rated variation is also available.</p>                     |
|  <p><b>6500, 56500<br/>6500FR, 6590FR</b><br/>These perforated supply, ceiling diffusers feature neck mounted curved blades with a round neck. Aluminum or steel perforated face is available. Fire rated supply and return variations available.</p> |  <p><b>6690, 56690</b><br/>These perforated ceiling returns feature a round neck. Aluminum or steel perforated face is available.</p>   |
|  <p><b>6300</b><br/>This perforated supply, ceiling diffuser features face mounted deflectors and a prescored fiberglass backpan for field cutting. Available in steel construction only.</p>   |  <p><b>6790, 56790</b><br/>These aluminum or steel perforated screen ceiling panels with no backpan are great for non-ducted return or exhaust applications.</p>  |
|  <p><b>6390</b><br/>This perforated return features a prescored fiberglass backpan for field cutting. Available in steel construction only.</p>   |  <p><b>1100, 51100</b><br/>These architectural, perforated, supply ceiling diffusers feature neck mounted curved blades with a square or rectangular neck. Available in steel or aluminum construction. A metric version is also available.</p> |
|  <p><b>6400, 56400, 6400FR</b><br/>These perforated supply ceiling diffusers feature face mounted deflectors with a square neck. Aluminum or steel perforated face as well as a fire rated variations are available.</p>                            |  <p><b>1190, 51190</b><br/>These architectural, perforated, ceiling returns feature a square or rectangular neck. Available in steel or aluminum construction.</p>  |

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**6150, 56150 (Supply)**  
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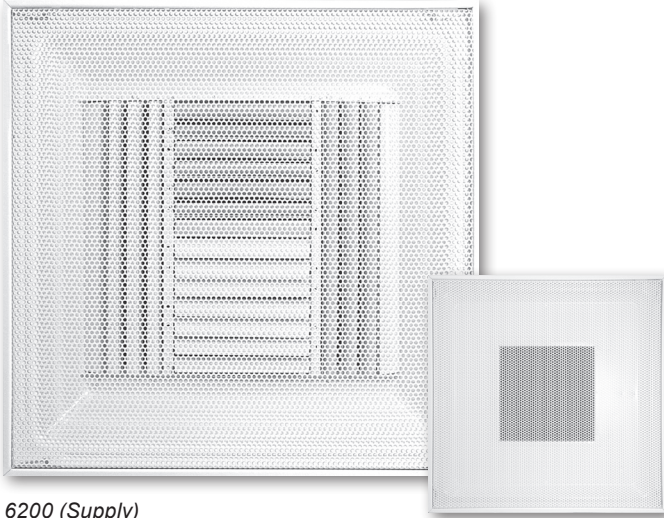
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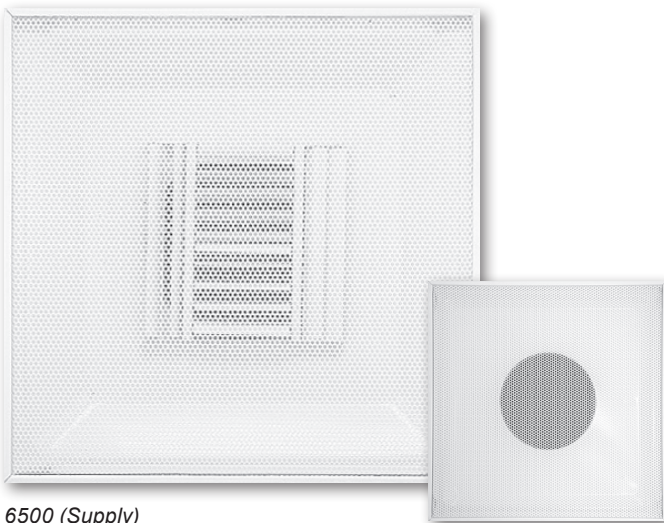
**6600, 56600, 6600FR (Supply)**  
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PERFORATED FACE DIFFUSERS



6200 (Supply)

6490 (Return)  
See page C1-52 for more information.



6500 (Supply)

6690 (Return)  
See page C1-52 for more information.

**Introduction: 6200, 6500 Series**

The 6200/6500 series perforated diffusers use blade-type pattern deflectors mounted on the backpan and are available in pre-selected 1, 2, 3, or 4-way blow patterns. Individually adjustable curved blades allow field adjustment of the air pattern in each direction, which may be field set to any position between a vertical throw and a tight ceiling, long throw pattern. The pattern deflectors on the backpan create aspiration of secondary air through the perforated face where it is mixed with primary air that is then discharged through the perforated face. This aspiration and mixing effect reduces the discharge air temperature to avoid cold air drafts. Additionally, it removes smudging material from the secondary air by impingement on the perforated face. Ceiling smudging of adjacent, hard to clean ceiling surfaces is greatly reduced. The 6200/6500 series diffusers exhibit typical isothermal throws of 8' to 20' for 4-way air distribution and 21' to 50' for 1-way air distribution making this diffuser an excellent choice for irregular room shapes. Matching returns are the 6490 and 6690 series.

**MODELS**

- 6200 - Steel Construction, Square Neck, Supply Diffuser
- 6200FR - Fire Rated, Steel Construction, Square Neck, Supply Diffuser
- 6290F - Steel Construction, Designed for Standard 20"x20"x1" Filter (By Others), Square Neck, Filter Return
- 6290FR - Fire Rated, Steel Construction, Square Neck Return
- 56200 - Aluminum Perforation with Steel Backpan, Square Neck, Supply Diffuser
- 6500 - Steel Construction, Round Neck, Supply Diffuser
- 6500FR - Fire Rated, Steel Construction, Round Neck, Supply Diffuser
- 56500 - Aluminum Perforation with Steel Backpan, Round Neck, Supply Diffuser
- 6590FR - Fire Rated, Steel Construction, Round Neck Return

**FEATURES**

- Individually adjustable curved blade pattern deflectors for horizontal to vertical throw.
- Variety of air discharge patterns available.
- Removable perforated face and core for easy cleaning.

**PANEL SIZES**

- 12"x12"
- 20"x20"
- 24"x24"
- 16"x16"
- 12"x24"
- 24"x48"

**ACCESSORIES**

- Optional Round Damper
- Optional Opposed Blade Damper (Model OBD)
- Optional Straightening Grid
- Optional Insulated Backpan

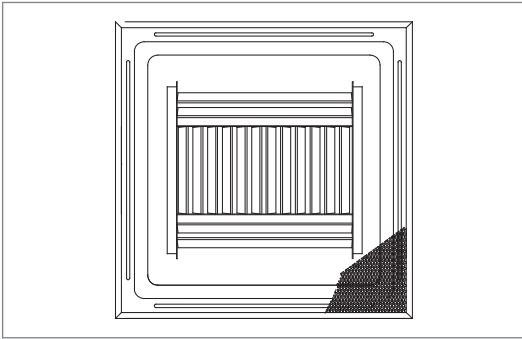
**FINISHES**

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

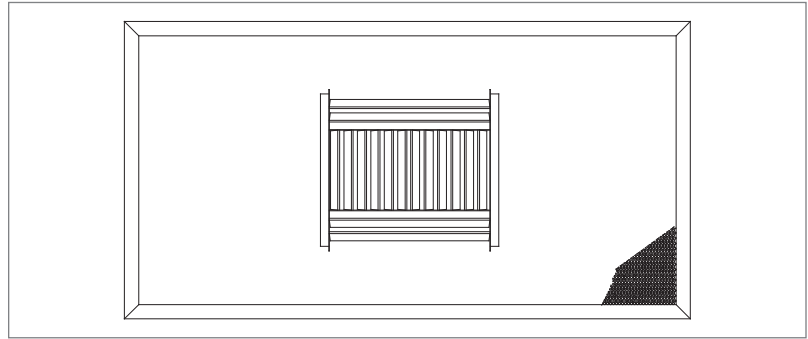
6200-6500

**6500, 56500 (Supply) Dimensional Information**

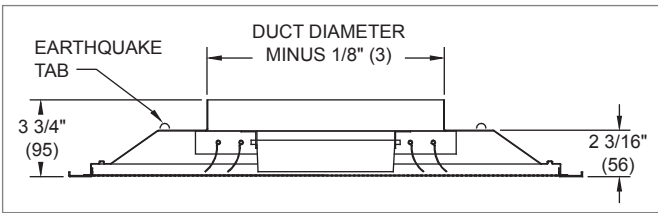
**6500, 56500, FACE VIEW (24"x24" PANEL)**



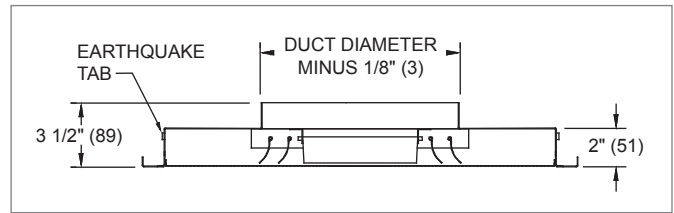
**6500, 56500, FACE VIEW (ALL OTHER PANELS)**



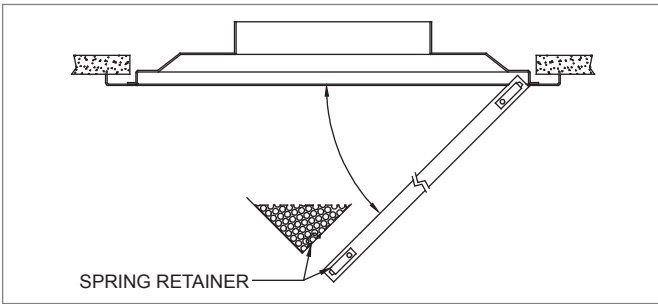
**6500, 56500, CROSS SECTION (24"x24" PANEL)**



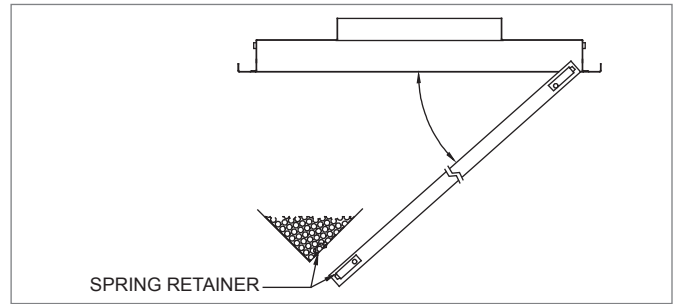
**6500, 56500, CROSS SECTION (ALL OTHER PANELS)**



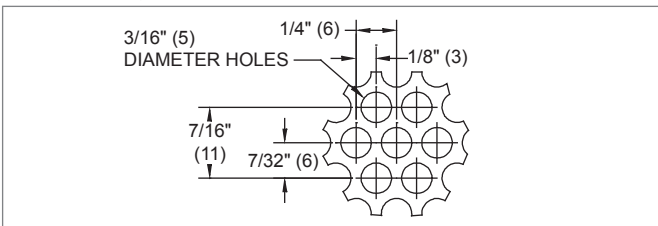
**6500, 56500, HINGE DETAIL (24"x24" PANEL)**



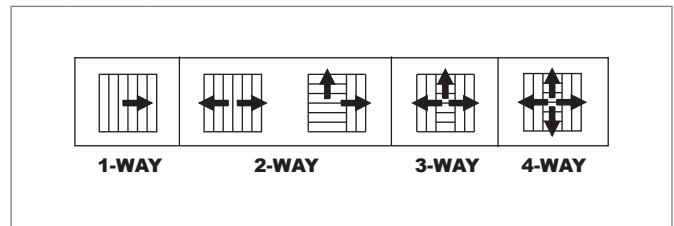
**6500, 56500, HINGE DETAIL (ALL OTHER PANELS)**



**6500, 56500, PERFORATION DETAIL**



**6500, 56500, DISCHARGE AIR PATTERNS**



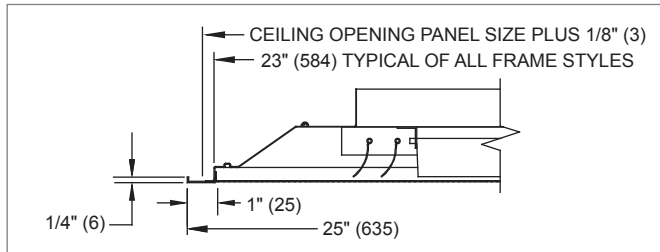
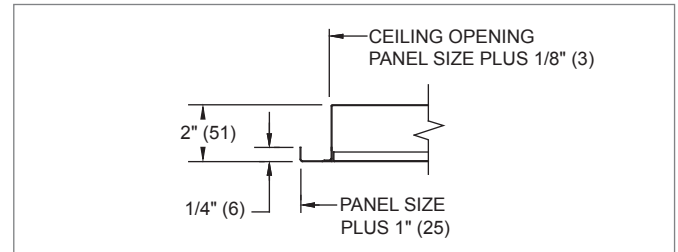
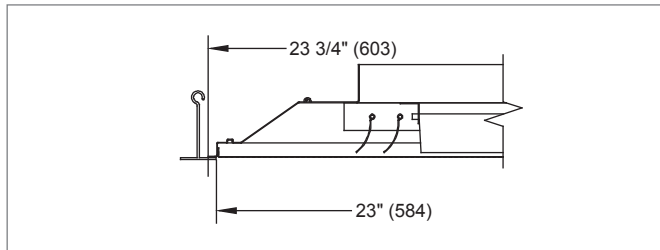
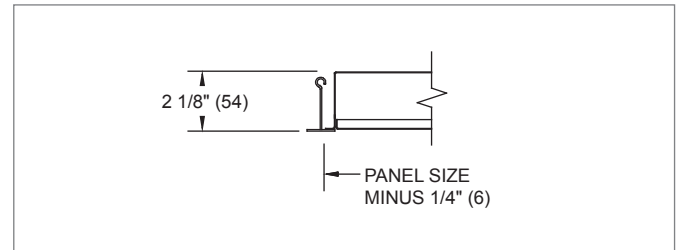
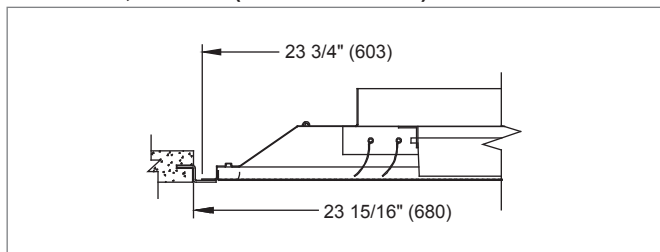
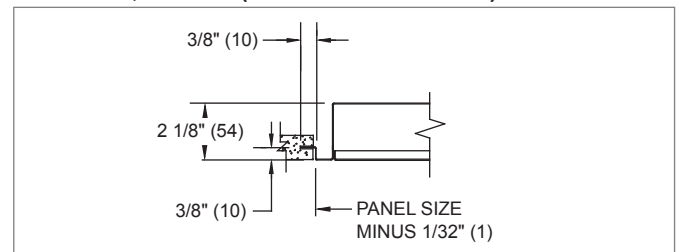
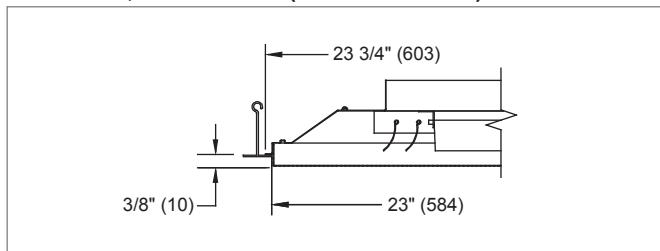
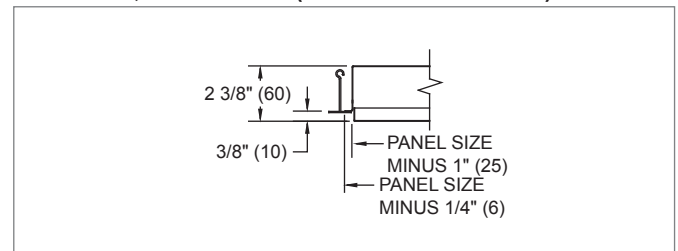
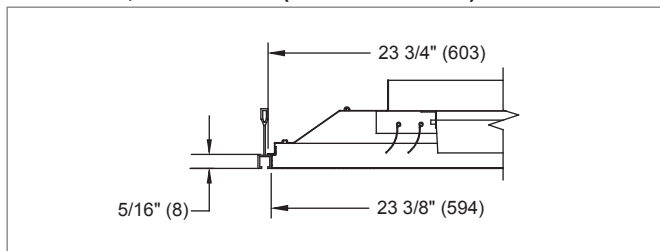
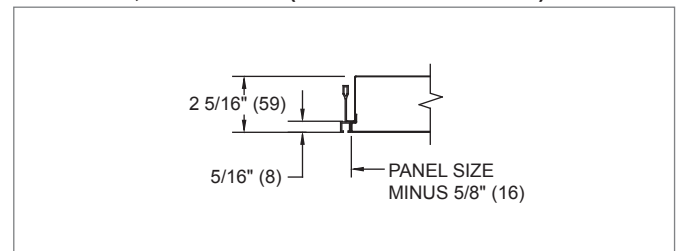
**6500, 56500, AVAILABLE SIZES**

| Neck Size | Panel Size               |                          |                          |                          |                          |                           |
|-----------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|
|           | 12" x 12"<br>(305 x 305) | 16" x 16"<br>(406 x 406) | 20" x 20"<br>(508 x 508) | 24" x 24"<br>(610 x 610) | 12" x 24"<br>(305 x 610) | 24" x 48"<br>(610 x 1219) |
| 6" (152)  | .                        | .                        | .                        | .                        | .                        | .                         |
| 8" (203)  | .                        | .                        | .                        | .                        | .                        | .                         |
| 10" (254) | .                        | .                        | .                        | .                        | .                        | .                         |
| 12" (305) | .                        | .                        | .                        | .                        | .                        | .                         |
| 14" (356) | .                        | .                        | .                        | .                        | .                        | .                         |
| 16" (406) | .                        | .                        | .                        | .                        | .                        | .                         |

NOTES: Dimensions in parentheses are mm. Dot indicates applicable. The 16" neck size with a 24"x24" panel is constructed like "All Other Panels".

PERFORATED FACE DIFFUSERS

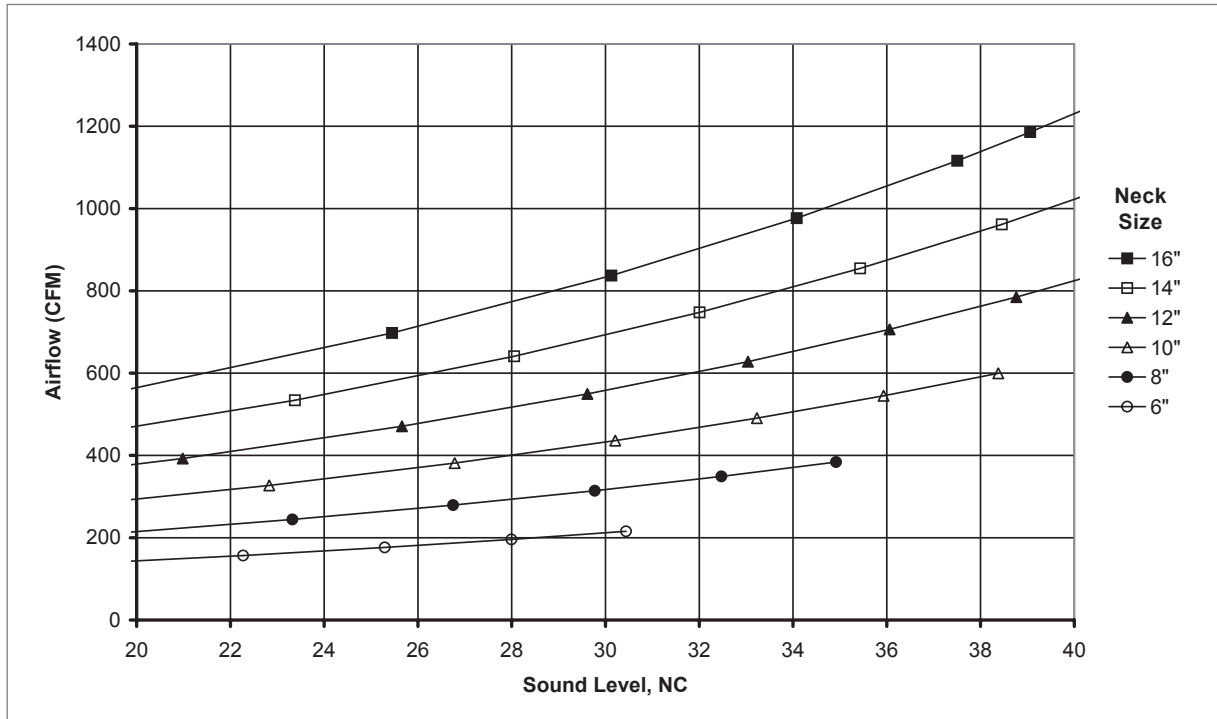
6500-1-56500

**6500, 56500 (Supply) Frame Styles**
**FRAME 20, SURFACE MOUNT (24"x24" PANEL)**

**FRAME 20, SURFACE MOUNT (ALL OTHER PANELS)**

**FRAME 23, LAY-IN T-BAR (24"x24" PANEL)**

**FRAME 23, LAY-IN T-BAR (ALL OTHER PANELS)**

**FRAME 27, SPLINE (24"x24" PANEL)**

**FRAME 27, SPLINE (ALL OTHER PANELS)**

**FRAME 30, DROP FACE (24"x24" PANEL)**

**FRAME 30, DROP FACE (ALL OTHER PANELS)**

**FRAME 98, NARROW-T (24"x24" PANEL)**

**FRAME 98, NARROW-T (ALL OTHER PANELS)**


NOTES: Dimensions in parentheses are mm. The 16" neck size with a 24"x24" panel is constructed like "All Other Panels".

**6500, 56500 (Supply) Reference Charts**

**AIRFLOW VS. NC LEVEL: 6500, 56500, 24"x24" PANEL (NO DAMPER)**

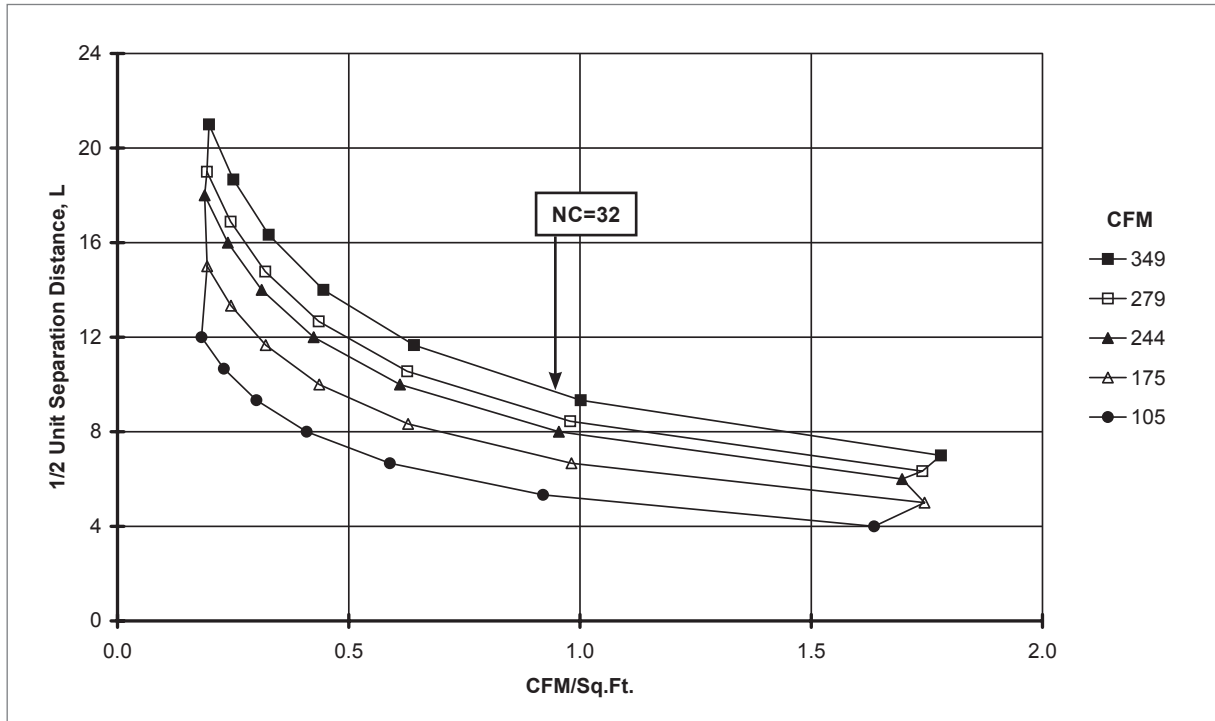


PERFORATED FACE DIFFUSERS

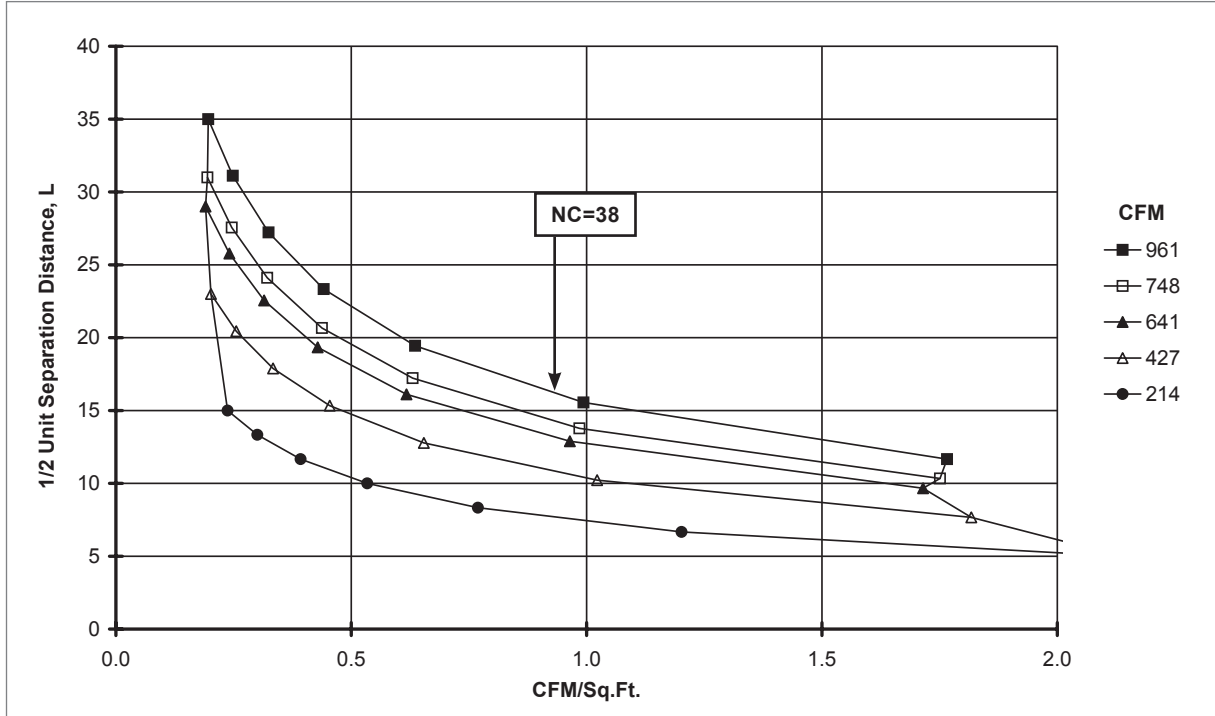
65000-56500

**6500, 56500 (Supply) Reference Charts**

**SPACING FOR 80% ADPI: 6500, 56500, 24"x24" PANEL, 8" NECK, 4-WAY (NO DAMPER)**



**SPACING FOR 80% ADPI: 6500, 56500, 24"x24" PANEL, 14" NECK, 4-WAY (NO DAMPER)**



NOTES: Charts are at 20 BTUH/ft<sup>2</sup> loads. See the Engineering section of this catalog for instructions on how to read these charts and additional ADPI information.

PERFORATED FACE DIFFUSERS

65000-156500

**6500, 56500 (Supply) Performance Data: Horizontal Throw**
**IP/METRIC DATA: 6500, 56500, 12"x12" PANEL, 4-WAY (NO DAMPER)**

|    | IP Data  |          |       |       |             | NC | Metric Data |          |      |      |                 | Octave Band, dB |    |    |    |    |    |  |
|----|----------|----------|-------|-------|-------------|----|-------------|----------|------|------|-----------------|-----------------|----|----|----|----|----|--|
|    | Neck Vel | Air Flow | Ps    | Pt    | 4-way Throw |    | Neck Vel    | Air Flow | Ps   | Pt   | 4-way Throw     | 2               | 3  | 4  | 5  | 6  | 7  |  |
|    | FPM      | CFM      | "WG   | "WG   | ft          |    | m/s         | L/s      | Pa   | Pa   | m               |                 |    |    |    |    |    |  |
|    |          |          |       |       |             |    |             |          |      |      |                 |                 |    |    |    |    |    |  |
| 6" | 300      | 59       | 0.009 | 0.015 | 1 - 1 - 6   | -  | 1.52        | 28       | 2.2  | 3.6  | 0.2 - 0.4 - 1.7 | 23              | 15 | 18 | -  | -  | -  |  |
|    | 400      | 78       | 0.016 | 0.026 | 1 - 2 - 8   | -  | 2.03        | 37       | 3.9  | 6.4  | 0.3 - 0.7 - 2.4 | 27              | 21 | 22 | 14 | -  | -  |  |
|    | 500      | 98       | 0.025 | 0.040 | 2 - 4 - 10  | -  | 2.54        | 46       | 6.1  | 10.0 | 0.5 - 1.2 - 2.9 | 29              | 25 | 26 | 21 | -  | -  |  |
|    | 600      | 118      | 0.036 | 0.058 | 2 - 6 - 10  | 14 | 3.05        | 56       | 8.9  | 14.4 | 0.7 - 1.7 - 3.2 | 31              | 28 | 29 | 26 | 16 | -  |  |
|    | 700      | 137      | 0.048 | 0.079 | 3 - 7 - 11  | 19 | 3.56        | 65       | 12.0 | 19.7 | 1.0 - 2.1 - 3.4 | 33              | 31 | 31 | 31 | 23 | -  |  |
|    | 800      | 157      | 0.063 | 0.103 | 4 - 8 - 12  | 23 | 4.06        | 74       | 15.7 | 25.7 | 1.3 - 2.4 - 3.7 | 34              | 34 | 33 | 35 | 28 | 15 |  |
|    | 900      | 176      | 0.080 | 0.130 | 6 - 9 - 13  | 27 | 4.57        | 83       | 19.9 | 32.5 | 1.7 - 2.7 - 3.9 | 35              | 36 | 35 | 38 | 33 | 20 |  |
|    | 1000     | 196      | 0.099 | 0.161 | 7 - 10 - 13 | 30 | 5.08        | 93       | 24.6 | 40.1 | 2.0 - 2.9 - 4.1 | 36              | 38 | 37 | 41 | 37 | 24 |  |
|    | 1100     | 216      | 0.119 | 0.195 | 7 - 10 - 14 | 34 | 5.59        | 102      | 29.7 | 48.5 | 2.2 - 3.0 - 4.3 | 37              | 40 | 38 | 44 | 41 | 28 |  |

**IP/METRIC DATA: 6500, 56500, 12"x12" PANEL, 1 - 3-WAY (NO DAMPER)**

|    | IP Data  |          |              |              |             | Metric Data |          |                  |                 |                 |
|----|----------|----------|--------------|--------------|-------------|-------------|----------|------------------|-----------------|-----------------|
|    | Neck Vel | Air Flow | 1-Way Throw  | 2-Way Throw  | 3-Way Throw | Neck Vel    | Air Flow | 1-Way Throw      | 2-Way Throw     | 3-Way Throw     |
|    | FPM      | CFM      | ft           | ft           | ft          | m/s         | L/s      | m                | m               | m               |
| 6" | 300      | 59       | 4 - 8 - 15   | 2 - 4 - 10   | 2 - 4 - 8   | 1.52        | 28       | 1.2 - 2.3 - 4.6  | 0.5 - 1.2 - 3.2 | 0.5 - 1.1 - 2.3 |
|    | 400      | 78       | 7 - 10 - 20  | 3 - 7 - 14   | 3 - 5 - 10  | 2.03        | 37       | 2.0 - 3.1 - 6.1  | 0.9 - 2.1 - 4.2 | 0.9 - 1.5 - 3.1 |
|    | 500      | 98       | 8 - 13 - 24  | 5 - 9 - 16   | 4 - 6 - 13  | 2.54        | 46       | 2.6 - 3.8 - 7.2  | 1.4 - 2.6 - 4.8 | 1.3 - 1.9 - 3.8 |
|    | 600      | 118      | 10 - 15 - 26 | 7 - 10 - 17  | 5 - 8 - 14  | 3.05        | 56       | 3.1 - 4.6 - 7.9  | 2.1 - 3.2 - 5.2 | 1.5 - 2.3 - 4.2 |
|    | 700      | 137      | 12 - 18 - 28 | 8 - 12 - 19  | 6 - 9 - 15  | 3.56        | 65       | 3.6 - 5.4 - 8.5  | 2.5 - 3.7 - 5.6 | 1.8 - 2.7 - 4.6 |
|    | 800      | 157      | 13 - 20 - 30 | 9 - 14 - 20  | 7 - 10 - 16 | 4.06        | 74       | 4.1 - 6.1 - 9.1  | 2.8 - 4.2 - 6.0 | 2.0 - 3.1 - 4.9 |
|    | 900      | 176      | 15 - 22 - 32 | 10 - 15 - 21 | 8 - 11 - 17 | 4.57        | 83       | 4.6 - 6.8 - 9.6  | 3.2 - 4.5 - 6.4 | 2.3 - 3.5 - 5.2 |
|    | 1000     | 196      | 17 - 24 - 33 | 12 - 16 - 22 | 8 - 13 - 18 | 5.08        | 93       | 5.1 - 7.2 - 10.2 | 3.5 - 4.8 - 6.7 | 2.6 - 3.8 - 5.5 |
|    | 1100     | 216      | 18 - 25 - 35 | 13 - 16 - 23 | 9 - 13 - 19 | 5.59        | 102      | 5.6 - 7.5 - 10.6 | 3.9 - 5.0 - 7.1 | 2.8 - 4.1 - 5.7 |

**IP/METRIC DATA: 6500, 56500, 12"x24" PANEL, 4-WAY (NO DAMPER)**

|    | IP Data  |          |       |       |             | NC | Metric Data |          |      |      |                 | Octave Band, dB |    |    |    |    |    |  |
|----|----------|----------|-------|-------|-------------|----|-------------|----------|------|------|-----------------|-----------------|----|----|----|----|----|--|
|    | Neck Vel | Air Flow | Ps    | Pt    | 4-Way Throw |    | Neck Vel    | Air Flow | Ps   | Pt   | 4-Way Throw     | 2               | 3  | 4  | 5  | 6  | 7  |  |
|    | FPM      | CFM      | "WG   | "WG   | ft          |    | m/s         | L/s      | Pa   | Pa   | m               |                 |    |    |    |    |    |  |
|    |          |          |       |       |             |    |             |          |      |      |                 |                 |    |    |    |    |    |  |
| 6" | 300      | 59       | 0.009 | 0.015 | 1 - 1 - 3   | -  | 1.52        | 28       | 2.2  | 3.6  | 0.2 - 0.4 - 0.8 | 27              | 26 | 12 | -  | -  | -  |  |
|    | 400      | 78       | 0.016 | 0.026 | 1 - 2 - 4   | -  | 2.03        | 37       | 4.0  | 6.4  | 0.3 - 0.5 - 1.1 | 30              | 30 | 19 | 11 | -  | -  |  |
|    | 500      | 98       | 0.025 | 0.040 | 1 - 2 - 4   | -  | 2.54        | 46       | 6.2  | 10.1 | 0.4 - 0.7 - 1.3 | 32              | 33 | 24 | 18 | -  | -  |  |
|    | 600      | 118      | 0.036 | 0.058 | 2 - 3 - 5   | 11 | 3.05        | 56       | 8.9  | 14.5 | 0.5 - 0.8 - 1.5 | 33              | 35 | 29 | 24 | 11 | -  |  |
|    | 700      | 137      | 0.049 | 0.079 | 2 - 3 - 5   | 17 | 3.56        | 65       | 12.1 | 19.7 | 0.6 - 0.9 - 1.7 | 35              | 38 | 32 | 29 | 19 | -  |  |
|    | 800      | 157      | 0.064 | 0.104 | 2 - 4 - 6   | 22 | 4.06        | 74       | 15.8 | 25.8 | 0.7 - 1.1 - 1.8 | 36              | 40 | 36 | 33 | 25 | 12 |  |
|    | 900      | 176      | 0.081 | 0.131 | 3 - 4 - 6   | 26 | 4.57        | 83       | 20.1 | 32.6 | 0.8 - 1.2 - 1.9 | 37              | 41 | 39 | 37 | 30 | 17 |  |
|    | 1000     | 196      | 0.099 | 0.162 | 3 - 4 - 7   | 30 | 5.08        | 93       | 24.8 | 40.3 | 0.9 - 1.3 - 2.0 | 38              | 43 | 41 | 40 | 35 | 22 |  |
|    | 1100     | 216      | 0.120 | 0.196 | 3 - 5 - 7   | 33 | 5.59        | 102      | 30.0 | 48.7 | 1.0 - 1.5 - 2.1 | 39              | 44 | 43 | 43 | 40 | 27 |  |

**IP/METRIC DATA: 6500, 56500, 12"x24" PANEL, 1 - 3-WAY (NO DAMPER)**

|    | IP Data  |          |              |              |              | Metric Data |          |                  |                 |                 |
|----|----------|----------|--------------|--------------|--------------|-------------|----------|------------------|-----------------|-----------------|
|    | Neck Vel | Air Flow | 1-Way Throw  | 2-Way Throw  | 3-Way Throw  | Neck Vel    | Air Flow | 1-Way Throw      | 2-Way Throw     | 3-Way Throw     |
|    | FPM      | CFM      | ft           | ft           | ft           | m/s         | L/s      | m                | m               | m               |
| 6" | 300      | 59       | 4 - 8 - 15   | 2 - 4 - 10   | 2 - 5 - 11   | 1.52        | 28       | 1.2 - 2.3 - 4.6  | 0.5 - 1.2 - 3.2 | 0.7 - 1.6 - 3.3 |
|    | 400      | 78       | 7 - 10 - 20  | 3 - 7 - 14   | 4 - 7 - 14   | 2.03        | 37       | 2.0 - 3.1 - 6.1  | 0.9 - 2.1 - 4.2 | 1.3 - 2.2 - 4.3 |
|    | 500      | 98       | 8 - 13 - 24  | 5 - 9 - 17   | 6 - 9 - 18   | 2.54        | 46       | 2.6 - 3.8 - 7.2  | 1.4 - 2.6 - 5.3 | 1.8 - 2.7 - 5.4 |
|    | 600      | 118      | 10 - 15 - 26 | 7 - 10 - 20  | 7 - 11 - 19  | 3.05        | 56       | 3.1 - 4.6 - 7.9  | 2.1 - 3.2 - 6.2 | 2.2 - 3.3 - 5.9 |
|    | 700      | 137      | 12 - 18 - 28 | 8 - 12 - 22  | 8 - 12 - 21  | 3.56        | 65       | 3.6 - 5.4 - 8.5  | 2.5 - 3.7 - 6.7 | 2.5 - 3.8 - 6.4 |
|    | 800      | 157      | 13 - 20 - 30 | 9 - 14 - 23  | 10 - 14 - 22 | 4.06        | 74       | 4.1 - 6.1 - 9.1  | 2.8 - 4.2 - 7.1 | 2.9 - 4.3 - 6.8 |
|    | 900      | 176      | 15 - 22 - 32 | 10 - 16 - 25 | 11 - 16 - 24 | 4.57        | 83       | 4.6 - 6.8 - 9.6  | 3.2 - 4.7 - 7.6 | 3.3 - 4.9 - 7.2 |
|    | 1000     | 196      | 17 - 24 - 33 | 12 - 17 - 26 | 12 - 18 - 25 | 5.08        | 93       | 5.1 - 7.2 - 10.2 | 3.5 - 5.3 - 8.0 | 3.6 - 5.4 - 7.6 |
|    | 1100     | 216      | 18 - 25 - 35 | 13 - 19 - 28 | 13 - 19 - 26 | 5.59        | 102      | 5.6 - 7.5 - 10.6 | 3.9 - 5.8 - 8.4 | 4.0 - 5.7 - 8.0 |

NOTE: See pages C1-34 and C1-35 for notes.

**6500, 56500 (Supply) Performance Data: Horizontal Throw**

IP/METRIC DATA: 6500, 56500, 16"x16" PANEL, 4-WAY (NO DAMPER)

|      | IP Data  |          |       |             |             | NC   | Metric Data |          |      |                 |                 | Octave Band, dB |    |    |    |    |    |  |
|------|----------|----------|-------|-------------|-------------|------|-------------|----------|------|-----------------|-----------------|-----------------|----|----|----|----|----|--|
|      | Neck Vel | Air Flow | Ps    | Pt          | 4-Way Throw |      | Neck Vel    | Air Flow | Ps   | Pt              | 4-Way Throw     |                 |    |    |    |    |    |  |
|      | FPM      | CFM      | "WG   | "WG         | ft          |      | m/s         | L/s      | Pa   | Pa              | m               | 2               | 3  | 4  | 5  | 6  | 7  |  |
|      |          |          |       |             |             |      |             |          |      |                 |                 |                 |    |    |    |    |    |  |
| 6"   | 300      | 59       | 0.008 | 0.014       | 1 - 2 - 6   | -    | 1.52        | 28       | 2.1  | 3.5             | 0.3 - 0.7 - 1.8 | 23              | 26 | 16 | -  | -  | -  |  |
|      | 400      | 78       | 0.015 | 0.025       | 2 - 4 - 8   | -    | 2.03        | 37       | 3.7  | 6.1             | 0.6 - 1.2 - 2.4 | 27              | 30 | 22 | 16 | -  | -  |  |
|      | 500      | 98       | 0.023 | 0.038       | 3 - 5 - 9   | -    | 2.54        | 46       | 5.7  | 9.6             | 0.9 - 1.5 - 2.7 | 30              | 33 | 27 | 23 | -  | -  |  |
|      | 600      | 118      | 0.033 | 0.055       | 4 - 6 - 10  | 15   | 3.05        | 56       | 8.2  | 13.8            | 1.2 - 1.8 - 2.9 | 32              | 36 | 31 | 28 | 17 | -  |  |
|      | 700      | 137      | 0.045 | 0.075       | 5 - 7 - 10  | 20   | 3.56        | 65       | 11.2 | 18.8            | 1.4 - 2.1 - 3.2 | 34              | 38 | 34 | 33 | 23 | -  |  |
|      | 800      | 157      | 0.059 | 0.099       | 5 - 8 - 11  | 24   | 4.06        | 74       | 14.6 | 24.5            | 1.6 - 2.4 - 3.4 | 36              | 40 | 37 | 37 | 29 | 14 |  |
|      | 900      | 176      | 0.074 | 0.125       | 6 - 8 - 12  | 28   | 4.57        | 83       | 18.5 | 31.1            | 1.8 - 2.5 - 3.6 | 37              | 42 | 40 | 40 | 33 | 19 |  |
|      | 1000     | 196      | 0.092 | 0.154       | 7 - 9 - 12  | 31   | 5.08        | 93       | 22.8 | 38.3            | 2.0 - 2.7 - 3.8 | 39              | 43 | 42 | 43 | 37 | 24 |  |
|      | 1100     | 216      | 0.111 | 0.186       | 7 - 9 - 13  | 34   | 5.59        | 102      | 27.6 | 46.4            | 2.2 - 2.8 - 4.0 | 40              | 45 | 44 | 46 | 41 | 28 |  |
| 8"   | 200      | 70       | 0.004 | 0.006       | 1 - 1 - 5   | -    | 1.02        | 33       | 0.9  | 1.5             | 0.2 - 0.4 - 1.6 | 23              | 25 | 14 | -  | -  | -  |  |
|      | 300      | 105      | 0.008 | 0.014       | 1 - 3 - 8   | -    | 1.52        | 49       | 2.1  | 3.5             | 0.4 - 1.0 - 2.4 | 28              | 31 | 23 | 16 | -  | -  |  |
|      | 400      | 140      | 0.015 | 0.025       | 3 - 5 - 10  | 12   | 2.03        | 66       | 3.7  | 6.1             | 0.8 - 1.6 - 3.2 | 32              | 35 | 29 | 25 | 14 | -  |  |
|      | 500      | 175      | 0.023 | 0.038       | 4 - 7 - 12  | 20   | 2.54        | 82       | 5.7  | 9.6             | 1.2 - 2.0 - 3.6 | 34              | 39 | 34 | 31 | 22 | -  |  |
|      | 600      | 209      | 0.033 | 0.055       | 5 - 8 - 13  | 25   | 3.05        | 99       | 8.2  | 13.8            | 1.6 - 2.4 - 3.9 | 37              | 41 | 37 | 37 | 29 | 14 |  |
|      | 700      | 244      | 0.045 | 0.075       | 6 - 9 - 14  | 30   | 3.56        | 115      | 11.2 | 18.8            | 1.8 - 2.8 - 4.2 | 39              | 44 | 41 | 41 | 35 | 20 |  |
|      | 800      | 279      | 0.059 | 0.099       | 7 - 10 - 15 | 34   | 4.06        | 132      | 14.6 | 24.5            | 2.1 - 3.2 - 4.5 | 41              | 46 | 44 | 45 | 40 | 26 |  |
|      | 900      | 314      | 0.074 | 0.125       | 8 - 11 - 16 | 38   | 4.57        | 148      | 18.5 | 31.1            | 2.4 - 3.4 - 4.8 | 42              | 47 | 46 | 49 | 45 | 31 |  |
| 1000 | 349      | 0.092    | 0.154 | 9 - 12 - 17 | 42          | 5.08 | 165         | 22.8     | 38.3 | 2.6 - 3.6 - 5.1 | 43              | 49              | 48 | 52 | 49 | 36 |    |  |
| 10"  | 200      | 109      | 0.004 | 0.006       | 1 - 2 - 7   | -    | 1.02        | 51       | 0.9  | 1.5             | 0.2 - 0.5 - 2.0 | 26              | 29 | 19 | 11 | -  | -  |  |
|      | 300      | 164      | 0.008 | 0.014       | 2 - 4 - 10  | 11   | 1.52        | 77       | 2.1  | 3.5             | 0.5 - 1.2 - 3.0 | 31              | 35 | 28 | 23 | 12 | -  |  |
|      | 400      | 218      | 0.015 | 0.025       | 3 - 7 - 13  | 20   | 2.03        | 103      | 3.7  | 6.1             | 1.0 - 2.0 - 4.0 | 35              | 39 | 34 | 31 | 23 | -  |  |
|      | 500      | 273      | 0.023 | 0.038       | 5 - 8 - 15  | 27   | 2.54        | 129      | 5.7  | 9.6             | 1.5 - 2.5 - 4.5 | 38              | 43 | 39 | 38 | 31 | 15 |  |
|      | 600      | 327      | 0.033 | 0.055       | 7 - 10 - 16 | 33   | 3.05        | 154      | 8.2  | 13.8            | 2.0 - 3.0 - 4.9 | 40              | 45 | 43 | 43 | 38 | 23 |  |
|      | 650      | 354      | 0.039 | 0.065       | 7 - 11 - 17 | 36   | 3.30        | 167      | 9.6  | 16.2            | 2.1 - 3.2 - 5.1 | 41              | 47 | 44 | 46 | 41 | 26 |  |
|      | 700      | 382      | 0.045 | 0.075       | 8 - 11 - 17 | 38   | 3.56        | 180      | 11.2 | 18.8            | 2.3 - 3.5 - 5.3 | 42              | 48 | 46 | 48 | 44 | 29 |  |
|      | 750      | 409      | 0.052 | 0.087       | 8 - 12 - 18 | 40   | 3.81        | 193      | 12.8 | 21.6            | 2.5 - 3.7 - 5.5 | 43              | 49 | 47 | 50 | 47 | 32 |  |
| 800  | 436      | 0.059    | 0.099 | 9 - 13 - 19 | 42          | 4.06 | 206         | 14.6     | 24.5 | 2.6 - 4.0 - 5.7 | 44              | 50              | 49 | 52 | 49 | 35 |    |  |

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values are given for isothermal conditions. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10<sup>-12</sup> Watts. Dash in space denotes a NC or dB 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 4-Way Throw is for [Total CFM/4] CFM per side (L/s). See Krueger's selection software for performance data not shown, including octave band data.

PERFORATED FACE DIFFUSERS

6500 - 56500



**6500, 56500 (Supply) Performance Data: Horizontal Throw**

IP/METRIC DATA: 6500, 56500, 16"x16" PANEL, 1 - 3-WAY (NO DAMPER)

|     | IP Data  |          |              |              |              | Metric Data |          |                  |                 |                 |
|-----|----------|----------|--------------|--------------|--------------|-------------|----------|------------------|-----------------|-----------------|
|     | Neck Vel | Air Flow | 1-Way Throw  | 2-Way Throw  | 3-Way Throw  | Neck Vel    | Air Flow | 1-Way Throw      | 2-Way Throw     | 3-Way Throw     |
|     | FPM      | CFM      | ft           | ft           | ft           | m/s         | L/s      | m                | m               | m               |
|     |          |          |              |              |              |             |          |                  |                 |                 |
| 6"  | 300      | 59       | 1 - 3 - 10   | 1 - 3 - 8    | 1 - 3 - 7    | 1.52        | 28       | 0.4 - 0.8 - 3.0  | 0.4 - 0.9 - 2.4 | 0.4 - 0.9 - 2.0 |
|     | 400      | 78       | 2 - 5 - 13   | 2 - 5 - 11   | 2 - 4 - 9    | 2.03        | 37       | 0.6 - 1.4 - 4.0  | 0.7 - 1.6 - 3.2 | 0.7 - 1.4 - 2.7 |
|     | 500      | 98       | 3 - 7 - 17   | 4 - 7 - 13   | 3 - 6 - 11   | 2.54        | 46       | 1.0 - 2.2 - 5.0  | 1.1 - 2.0 - 3.8 | 1.0 - 1.7 - 3.4 |
|     | 600      | 118      | 5 - 10 - 20  | 5 - 8 - 14   | 4 - 7 - 13   | 3.05        | 56       | 1.4 - 3.0 - 6.0  | 1.6 - 2.4 - 4.2 | 1.4 - 2.0 - 4.0 |
|     | 700      | 137      | 6 - 12 - 23  | 6 - 9 - 15   | 5 - 8 - 14   | 3.56        | 65       | 1.9 - 3.5 - 6.9  | 1.9 - 2.8 - 4.5 | 1.6 - 2.4 - 4.4 |
|     | 800      | 157      | 8 - 13 - 24  | 7 - 11 - 16  | 6 - 9 - 15   | 4.06        | 74       | 2.5 - 4.0 - 7.4  | 2.1 - 3.2 - 4.8 | 1.8 - 2.7 - 4.7 |
|     | 900      | 176      | 10 - 15 - 26 | 8 - 12 - 17  | 7 - 10 - 16  | 4.57        | 83       | 3.0 - 4.5 - 7.8  | 2.4 - 3.6 - 5.1 | 2.0 - 3.0 - 5.0 |
|     | 1000     | 196      | 11 - 17 - 27 | 9 - 13 - 18  | 7 - 11 - 17  | 5.08        | 93       | 3.4 - 5.0 - 8.2  | 2.7 - 3.8 - 5.4 | 2.3 - 3.4 - 5.2 |
|     | 1100     | 216      | 12 - 18 - 28 | 10 - 13 - 19 | 8 - 12 - 18  | 5.59        | 102      | 3.7 - 5.5 - 8.6  | 2.9 - 4.0 - 5.7 | 2.5 - 3.7 - 5.5 |
| 8"  | 200      | 70       | 1 - 2 - 6    | 1 - 2 - 7    | 1 - 2 - 6    | 1.02        | 33       | 0.2 - 0.5 - 1.9  | 0.2 - 0.5 - 2.1 | 0.2 - 0.5 - 1.8 |
|     | 300      | 105      | 2 - 4 - 13   | 2 - 4 - 11   | 2 - 4 - 9    | 1.52        | 49       | 0.5 - 1.1 - 4.0  | 0.5 - 1.2 - 3.2 | 0.5 - 1.1 - 2.7 |
|     | 400      | 140      | 3 - 6 - 18   | 3 - 7 - 14   | 3 - 6 - 12   | 2.03        | 66       | 0.8 - 1.9 - 5.4  | 0.9 - 2.1 - 4.3 | 0.9 - 1.8 - 3.6 |
|     | 500      | 175      | 4 - 10 - 22  | 5 - 9 - 17   | 5 - 7 - 15   | 2.54        | 82       | 1.3 - 3.0 - 6.7  | 1.5 - 2.7 - 5.1 | 1.4 - 2.3 - 4.5 |
|     | 600      | 209      | 6 - 13 - 26  | 7 - 11 - 18  | 6 - 9 - 18   | 3.05        | 99       | 1.9 - 4.0 - 8.1  | 2.1 - 3.2 - 5.6 | 1.8 - 2.7 - 5.4 |
|     | 700      | 244      | 9 - 15 - 30  | 8 - 12 - 20  | 7 - 10 - 19  | 3.56        | 115      | 2.6 - 4.7 - 9.2  | 2.5 - 3.8 - 6.0 | 2.1 - 3.2 - 5.8 |
|     | 800      | 279      | 11 - 18 - 32 | 9 - 14 - 21  | 8 - 12 - 21  | 4.06        | 132      | 3.4 - 5.4 - 9.8  | 2.9 - 4.3 - 6.4 | 2.4 - 3.6 - 6.2 |
|     | 900      | 314      | 13 - 20 - 34 | 11 - 16 - 23 | 9 - 13 - 22  | 4.57        | 148      | 4.0 - 6.0 - 10.4 | 3.2 - 4.8 - 6.8 | 2.7 - 4.1 - 6.6 |
|     | 1000     | 349      | 15 - 22 - 36 | 12 - 17 - 24 | 10 - 15 - 23 | 5.08        | 165      | 4.5 - 6.7 - 11.0 | 3.6 - 5.1 - 7.2 | 3.0 - 4.5 - 7.0 |
| 10" | 200      | 109      | 1 - 2 - 8    | 1 - 2 - 9    | 1 - 2 - 7    | 1.02        | 51       | 0.3 - 0.6 - 2.4  | 0.3 - 0.7 - 2.7 | 0.3 - 0.6 - 2.3 |
|     | 300      | 164      | 2 - 4 - 17   | 2 - 5 - 13   | 2 - 5 - 11   | 1.52        | 77       | 0.6 - 1.3 - 5.0  | 0.7 - 1.5 - 4.0 | 0.6 - 1.4 - 3.4 |
|     | 400      | 218      | 3 - 8 - 22   | 4 - 9 - 18   | 4 - 7 - 15   | 2.03        | 103      | 1.1 - 2.4 - 6.7  | 1.2 - 2.7 - 5.4 | 1.1 - 2.3 - 4.5 |
|     | 500      | 273      | 5 - 12 - 28  | 6 - 11 - 21  | 6 - 9 - 19   | 2.54        | 129      | 1.7 - 3.7 - 8.4  | 1.9 - 3.3 - 6.4 | 1.8 - 2.8 - 5.6 |
|     | 600      | 327      | 8 - 17 - 33  | 9 - 13 - 23  | 7 - 11 - 22  | 3.05        | 154      | 2.4 - 5.0 - 10.1 | 2.7 - 4.0 - 7.0 | 2.3 - 3.4 - 6.8 |
|     | 650      | 354      | 9 - 18 - 36  | 10 - 14 - 24 | 8 - 12 - 23  | 3.30        | 167      | 2.8 - 5.5 - 10.9 | 2.9 - 4.4 - 7.3 | 2.4 - 3.7 - 7.0 |
|     | 700      | 382      | 11 - 19 - 38 | 10 - 15 - 25 | 9 - 13 - 24  | 3.56        | 180      | 3.3 - 5.9 - 11.5 | 3.1 - 4.7 - 7.5 | 2.6 - 3.9 - 7.3 |
|     | 750      | 409      | 12 - 21 - 39 | 11 - 17 - 26 | 9 - 14 - 25  | 3.81        | 193      | 3.7 - 6.3 - 11.9 | 3.3 - 5.0 - 7.8 | 2.8 - 4.2 - 7.5 |
|     | 800      | 436      | 14 - 22 - 40 | 12 - 18 - 27 | 10 - 15 - 26 | 4.06        | 206      | 4.2 - 6.7 - 12.3 | 3.6 - 5.4 - 8.1 | 3.0 - 4.5 - 7.8 |

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values are given for isothermal conditions. 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-Way Throw is for [Total CFM] CFM per side (L/s). The throw values given for 2-Way Throw is for [Total CFM/2] CFM per side (L/s). The throw values given for 3-Way Throw is for [Total CFM/3] CFM per side (L/s). See Krueger's selection software for performance data not shown, including octave band data.

**6500, 56500 (Supply) Performance Data: Horizontal Throw**

IP/METRIC DATA: 6500, 56500, 20"x20" PANEL, 4-WAY (NO DAMPER)

|     | IP Data  |          |       |       |             | NC | Metric Data |          |      |      |                 | Octave Band, dB |    |    |    |    |    |  |
|-----|----------|----------|-------|-------|-------------|----|-------------|----------|------|------|-----------------|-----------------|----|----|----|----|----|--|
|     | Neck Vel | Air Flow | Ps    | Pt    | 4-Way Throw |    | Neck Vel    | Air Flow | Ps   | Pt   | 4-Way Throw     | 2               | 3  | 4  | 5  | 6  | 7  |  |
|     | FPM      | CFM      | "WG   | "WG   | ft          |    | m/s         | L/s      | Pa   | Pa   | m               |                 |    |    |    |    |    |  |
|     |          |          |       |       |             |    |             |          |      |      |                 |                 |    |    |    |    |    |  |
| 6"  | 300      | 59       | 0.011 | 0.017 | 1 - 2 - 5   | -  | 1.52        | 28       | 2.8  | 4.2  | 0.3 - 0.6 - 1.6 | 25              | 28 | 19 | -  | -  | -  |  |
|     | 400      | 78       | 0.020 | 0.030 | 2 - 3 - 7   | -  | 2.03        | 37       | 4.9  | 7.4  | 0.5 - 1.1 - 2.1 | 29              | 32 | 25 | 17 | -  | -  |  |
|     | 500      | 98       | 0.031 | 0.046 | 2 - 4 - 9   | -  | 2.54        | 46       | 7.7  | 11.6 | 0.7 - 1.3 - 2.6 | 31              | 35 | 29 | 24 | 12 | -  |  |
|     | 600      | 118      | 0.044 | 0.067 | 3 - 5 - 9   | 17 | 3.05        | 56       | 11.1 | 16.7 | 1.1 - 1.6 - 2.9 | 33              | 38 | 33 | 29 | 20 | -  |  |
|     | 700      | 137      | 0.061 | 0.091 | 4 - 6 - 10  | 22 | 3.56        | 65       | 15.1 | 22.7 | 1.2 - 1.9 - 3.1 | 35              | 40 | 36 | 34 | 26 | 13 |  |
|     | 800      | 157      | 0.079 | 0.119 | 5 - 7 - 11  | 26 | 4.06        | 74       | 19.7 | 29.6 | 1.4 - 2.1 - 3.3 | 36              | 42 | 39 | 38 | 31 | 18 |  |
|     | 900      | 176      | 0.100 | 0.151 | 5 - 8 - 12  | 30 | 4.57        | 83       | 24.9 | 37.5 | 1.6 - 2.4 - 3.5 | 37              | 44 | 41 | 42 | 36 | 22 |  |
|     | 1000     | 196      | 0.124 | 0.186 | 6 - 9 - 12  | 34 | 5.08        | 93       | 30.8 | 46.3 | 1.8 - 2.6 - 3.7 | 39              | 45 | 44 | 45 | 40 | 26 |  |
|     | 1100     | 216      | 0.149 | 0.225 | 6 - 9 - 13  | 37 | 5.59        | 102      | 37.2 | 56.0 | 2.0 - 2.7 - 3.9 | 40              | 47 | 46 | 48 | 44 | 30 |  |
| 8"  | 300      | 105      | 0.011 | 0.017 | 1 - 3 - 7   | -  | 1.52        | 49       | 2.8  | 4.2  | 0.4 - 0.8 - 2.1 | 28              | 30 | 22 | 14 | -  | -  |  |
|     | 400      | 140      | 0.020 | 0.030 | 2 - 5 - 9   | -  | 2.03        | 66       | 4.9  | 7.4  | 0.6 - 1.4 - 2.9 | 31              | 34 | 28 | 23 | 11 | -  |  |
|     | 500      | 175      | 0.031 | 0.046 | 3 - 6 - 11  | 17 | 2.54        | 82       | 7.7  | 11.6 | 1.0 - 1.8 - 3.5 | 34              | 38 | 33 | 29 | 19 | -  |  |
|     | 600      | 209      | 0.044 | 0.067 | 5 - 7 - 13  | 23 | 3.05        | 99       | 11.1 | 16.7 | 1.4 - 2.1 - 3.8 | 36              | 40 | 37 | 35 | 27 | 14 |  |
|     | 700      | 244      | 0.061 | 0.091 | 5 - 8 - 14  | 28 | 3.56        | 115      | 15.1 | 22.7 | 1.7 - 2.5 - 4.1 | 37              | 42 | 40 | 40 | 33 | 19 |  |
|     | 800      | 279      | 0.079 | 0.119 | 6 - 9 - 15  | 33 | 4.06        | 132      | 19.7 | 29.6 | 1.9 - 2.9 - 4.4 | 39              | 44 | 43 | 44 | 38 | 25 |  |
|     | 900      | 314      | 0.100 | 0.151 | 7 - 11 - 15 | 36 | 4.57        | 148      | 24.9 | 37.5 | 2.1 - 3.2 - 4.7 | 40              | 46 | 45 | 47 | 43 | 29 |  |
|     | 1000     | 349      | 0.124 | 0.186 | 8 - 11 - 16 | 40 | 5.08        | 165      | 30.8 | 46.3 | 2.4 - 3.5 - 4.9 | 41              | 47 | 47 | 51 | 47 | 33 |  |
|     | 1050     | 366      | 0.136 | 0.205 | 8 - 12 - 17 | 42 | 5.33        | 173      | 33.9 | 51.0 | 2.5 - 3.6 - 5.1 | 42              | 48 | 48 | 52 | 49 | 35 |  |
| 10" | 200      | 109      | 0.005 | 0.007 | 1 - 1 - 6   | -  | 1.02        | 51       | 1.2  | 1.9  | 0.2 - 0.4 - 1.8 | 26              | 26 | 17 | -  | -  | -  |  |
|     | 300      | 164      | 0.011 | 0.017 | 1 - 3 - 9   | -  | 1.52        | 77       | 2.8  | 4.2  | 0.4 - 1.0 - 2.7 | 30              | 32 | 25 | 18 | -  | -  |  |
|     | 400      | 218      | 0.020 | 0.030 | 3 - 6 - 12  | 14 | 2.03        | 103      | 4.9  | 7.4  | 0.8 - 1.8 - 3.6 | 33              | 36 | 31 | 27 | 16 | -  |  |
|     | 500      | 273      | 0.031 | 0.046 | 4 - 7 - 14  | 22 | 2.54        | 129      | 7.7  | 11.6 | 1.2 - 2.2 - 4.4 | 36              | 39 | 36 | 34 | 25 | 12 |  |
|     | 600      | 327      | 0.044 | 0.067 | 6 - 9 - 16  | 28 | 3.05        | 154      | 11.1 | 16.7 | 1.8 - 2.7 - 4.8 | 38              | 42 | 39 | 39 | 32 | 19 |  |
|     | 700      | 382      | 0.061 | 0.091 | 7 - 10 - 17 | 33 | 3.56        | 180      | 15.1 | 22.7 | 2.1 - 3.1 - 5.2 | 39              | 44 | 43 | 44 | 38 | 25 |  |
|     | 750      | 409      | 0.070 | 0.105 | 7 - 11 - 18 | 35 | 3.81        | 193      | 17.3 | 26.0 | 2.2 - 3.3 - 5.3 | 40              | 45 | 44 | 46 | 41 | 27 |  |
|     | 800      | 436      | 0.079 | 0.119 | 8 - 12 - 18 | 37 | 4.06        | 206      | 19.7 | 29.6 | 2.4 - 3.6 - 5.5 | 41              | 46 | 45 | 48 | 44 | 30 |  |
|     | 900      | 491      | 0.100 | 0.151 | 9 - 13 - 19 | 41 | 4.57        | 231      | 24.9 | 37.5 | 2.7 - 4.0 - 5.9 | 42              | 47 | 48 | 52 | 49 | 34 |  |
| 12" | 200      | 157      | 0.005 | 0.007 | 1 - 2 - 7   | -  | 1.02        | 74       | 1.2  | 1.9  | 0.2 - 0.5 - 2.1 | 27              | 27 | 19 | -  | -  | -  |  |
|     | 300      | 235      | 0.011 | 0.017 | 2 - 4 - 11  | -  | 1.52        | 111      | 2.8  | 4.2  | 0.5 - 1.2 - 3.2 | 32              | 33 | 27 | 22 | -  | -  |  |
|     | 400      | 314      | 0.020 | 0.030 | 3 - 7 - 14  | 19 | 2.03        | 148      | 4.9  | 7.4  | 0.9 - 2.1 - 4.3 | 35              | 37 | 33 | 31 | 20 | -  |  |
|     | 500      | 392      | 0.031 | 0.046 | 5 - 9 - 17  | 26 | 2.54        | 185      | 7.7  | 11.6 | 1.5 - 2.7 - 5.2 | 37              | 40 | 38 | 38 | 29 | 16 |  |
|     | 600      | 471      | 0.044 | 0.067 | 7 - 11 - 19 | 32 | 3.05        | 222      | 11.1 | 16.7 | 2.1 - 3.2 - 5.7 | 39              | 43 | 42 | 43 | 37 | 23 |  |
|     | 650      | 510      | 0.052 | 0.079 | 8 - 11 - 20 | 35 | 3.30        | 241      | 13.0 | 19.6 | 2.3 - 3.5 - 6.0 | 40              | 44 | 43 | 46 | 40 | 26 |  |
|     | 700      | 549      | 0.061 | 0.091 | 8 - 12 - 20 | 37 | 3.56        | 259      | 15.1 | 22.7 | 2.5 - 3.7 - 6.2 | 41              | 45 | 45 | 48 | 43 | 29 |  |
|     | 750      | 589      | 0.070 | 0.105 | 9 - 13 - 21 | 39 | 3.81        | 278      | 17.3 | 26.0 | 2.7 - 4.0 - 6.4 | 42              | 46 | 46 | 50 | 46 | 31 |  |
|     | 800      | 628      | 0.079 | 0.119 | 9 - 14 - 22 | 41 | 4.06        | 296      | 19.7 | 29.6 | 2.9 - 4.3 - 6.6 | 43              | 47 | 48 | 52 | 48 | 34 |  |

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values are given for isothermal conditions. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10<sup>-12</sup> Watts. Dash in space denotes a NC or dB 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 4-Way Throw is for [Total CFM/4] CFM per side (L/s). See Krueger's selection software for performance data not shown, including octave band data.

PERFORATED FACE DIFFUSERS

6500 - 56500

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**6500, 56500 (Supply) Performance Data: Horizontal Throw**

IP/METRIC DATA: 6500, 56500, 20"x20" PANEL, 1 - 3-WAY (NO DAMPER)

|     | IP Data  |          |              |              |              | Metric Data |          |                  |                 |                 |
|-----|----------|----------|--------------|--------------|--------------|-------------|----------|------------------|-----------------|-----------------|
|     | Neck Vel | Air Flow | 1-Way Throw  | 2-Way Throw  | 3-Way Throw  | Neck Vel    | Air Flow | 1-Way Throw      | 2-Way Throw     | 3-Way Throw     |
|     | FPM      | CFM      | ft           | ft           | ft           | m/s         | L/s      | m                | m               | m               |
|     |          |          |              |              |              |             |          |                  |                 |                 |
| 6"  | 300      | 59       | 2 - 4 - 11   | 1 - 3 - 7    | 1 - 2 - 7    | 1.52        | 28       | 0.5 - 1.2 - 3.2  | 0.3 - 0.8 - 2.1 | 0.3 - 0.7 - 2.0 |
|     | 400      | 78       | 3 - 7 - 14   | 2 - 4 - 9    | 2 - 4 - 9    | 2.03        | 37       | 0.9 - 2.1 - 4.3  | 0.6 - 1.4 - 2.7 | 0.5 - 1.2 - 2.7 |
|     | 500      | 98       | 5 - 9 - 16   | 3 - 6 - 11   | 3 - 6 - 11   | 2.54        | 46       | 1.5 - 2.7 - 4.9  | 1.0 - 1.7 - 3.4 | 0.8 - 1.7 - 3.3 |
|     | 600      | 118      | 7 - 11 - 18  | 4 - 7 - 13   | 4 - 7 - 13   | 3.05        | 56       | 2.1 - 3.2 - 5.3  | 1.4 - 2.1 - 4.1 | 1.2 - 2.0 - 4.0 |
|     | 700      | 137      | 8 - 12 - 19  | 5 - 8 - 15   | 5 - 8 - 15   | 3.56        | 65       | 2.5 - 3.7 - 5.8  | 1.6 - 2.4 - 4.5 | 1.6 - 2.3 - 4.5 |
|     | 800      | 157      | 9 - 14 - 20  | 6 - 9 - 16   | 6 - 9 - 16   | 4.06        | 74       | 2.9 - 4.3 - 6.2  | 1.8 - 2.7 - 4.8 | 1.8 - 2.7 - 4.8 |
|     | 900      | 176      | 11 - 15 - 22 | 7 - 10 - 17  | 7 - 10 - 17  | 4.57        | 83       | 3.2 - 4.6 - 6.5  | 2.1 - 3.1 - 5.1 | 2.0 - 3.0 - 5.1 |
|     | 1000     | 196      | 12 - 16 - 23 | 7 - 11 - 18  | 7 - 11 - 18  | 5.08        | 93       | 3.6 - 4.9 - 6.9  | 2.3 - 3.4 - 5.3 | 2.2 - 3.3 - 5.4 |
|     | 1100     | 216      | 13 - 17 - 24 | 8 - 12 - 18  | 8 - 12 - 19  | 5.59        | 102      | 3.9 - 5.1 - 7.2  | 2.5 - 3.8 - 5.6 | 2.5 - 3.7 - 5.6 |
| 8"  | 300      | 105      | 2 - 5 - 14   | 2 - 3 - 9    | 1 - 3 - 9    | 1.52        | 49       | 0.7 - 1.6 - 4.3  | 0.5 - 1.0 - 2.7 | 0.4 - 0.9 - 2.7 |
|     | 400      | 140      | 4 - 9 - 19   | 3 - 6 - 12   | 2 - 5 - 12   | 2.03        | 66       | 1.3 - 2.8 - 5.7  | 0.8 - 1.8 - 3.6 | 0.7 - 1.6 - 3.6 |
|     | 500      | 175      | 6 - 12 - 21  | 4 - 8 - 15   | 4 - 7 - 15   | 2.54        | 82       | 2.0 - 3.6 - 6.5  | 1.3 - 2.3 - 4.6 | 1.1 - 2.2 - 4.5 |
|     | 600      | 209      | 9 - 14 - 23  | 6 - 9 - 18   | 5 - 9 - 18   | 3.05        | 99       | 2.8 - 4.3 - 7.1  | 1.8 - 2.7 - 5.5 | 1.6 - 2.7 - 5.4 |
|     | 700      | 244      | 11 - 16 - 25 | 7 - 11 - 20  | 7 - 10 - 20  | 3.56        | 115      | 3.3 - 5.0 - 7.7  | 2.1 - 3.2 - 6.0 | 2.1 - 3.1 - 6.0 |
|     | 800      | 279      | 13 - 19 - 27 | 8 - 12 - 21  | 8 - 12 - 21  | 4.06        | 132      | 3.8 - 5.7 - 8.2  | 2.4 - 3.6 - 6.4 | 2.4 - 3.6 - 6.4 |
|     | 900      | 314      | 14 - 20 - 29 | 9 - 14 - 22  | 9 - 13 - 22  | 4.57        | 148      | 4.3 - 6.2 - 8.7  | 2.7 - 4.1 - 6.8 | 2.7 - 4.0 - 6.8 |
|     | 1000     | 349      | 16 - 21 - 30 | 10 - 15 - 23 | 10 - 15 - 24 | 5.08        | 165      | 4.8 - 6.5 - 9.2  | 3.0 - 4.6 - 7.1 | 3.0 - 4.5 - 7.2 |
|     | 1050     | 366      | 16 - 22 - 31 | 11 - 16 - 24 | 10 - 15 - 24 | 5.33        | 173      | 5.0 - 6.7 - 9.4  | 3.2 - 4.8 - 7.3 | 3.1 - 4.7 - 7.3 |
| 10" | 200      | 109      | 1 - 3 - 12   | 1 - 2 - 7    | 1 - 2 - 7    | 1.02        | 51       | 0.4 - 0.9 - 3.5  | 0.3 - 0.6 - 2.3 | 0.2 - 0.5 - 2.0 |
|     | 300      | 164      | 3 - 7 - 18   | 2 - 4 - 11   | 2 - 4 - 11   | 1.52        | 77       | 0.9 - 2.0 - 5.4  | 0.6 - 1.3 - 3.4 | 0.5 - 1.1 - 3.4 |
|     | 400      | 218      | 5 - 12 - 23  | 3 - 7 - 15   | 3 - 7 - 15   | 2.03        | 103      | 1.6 - 3.5 - 7.1  | 1.0 - 2.3 - 4.6 | 0.9 - 2.0 - 4.5 |
|     | 500      | 273      | 8 - 15 - 27  | 5 - 9 - 19   | 5 - 9 - 18   | 2.54        | 129      | 2.5 - 4.5 - 8.1  | 1.6 - 2.8 - 5.7 | 1.4 - 2.8 - 5.6 |
|     | 600      | 327      | 12 - 18 - 29 | 7 - 11 - 22  | 7 - 11 - 22  | 3.05        | 154      | 3.5 - 5.4 - 8.9  | 2.3 - 3.4 - 6.8 | 2.0 - 3.4 - 6.7 |
|     | 700      | 382      | 14 - 21 - 32 | 9 - 13 - 25  | 9 - 13 - 25  | 3.56        | 180      | 4.2 - 6.2 - 9.6  | 2.7 - 4.0 - 7.5 | 2.6 - 3.9 - 7.5 |
|     | 750      | 409      | 15 - 22 - 33 | 9 - 14 - 25  | 9 - 14 - 26  | 3.81        | 193      | 4.5 - 6.7 - 10.0 | 2.8 - 4.3 - 7.7 | 2.8 - 4.2 - 7.8 |
|     | 800      | 436      | 16 - 23 - 34 | 10 - 15 - 26 | 10 - 15 - 26 | 4.06        | 206      | 4.8 - 7.1 - 10.3 | 3.0 - 4.6 - 8.0 | 3.0 - 4.5 - 8.0 |
|     | 900      | 491      | 18 - 25 - 36 | 11 - 17 - 28 | 11 - 17 - 28 | 4.57        | 231      | 5.4 - 7.7 - 10.9 | 3.4 - 5.1 - 8.4 | 3.4 - 5.0 - 8.5 |
| 12" | 200      | 157      | 2 - 3 - 14   | 1 - 2 - 9    | 1 - 2 - 8    | 1.02        | 74       | 0.5 - 1.1 - 4.3  | 0.3 - 0.7 - 2.7 | 0.3 - 0.6 - 2.4 |
|     | 300      | 235      | 3 - 8 - 21   | 2 - 5 - 13   | 2 - 4 - 13   | 1.52        | 111      | 1.1 - 2.4 - 6.4  | 0.7 - 1.6 - 4.1 | 0.6 - 1.4 - 4.0 |
|     | 400      | 314      | 6 - 14 - 28  | 4 - 9 - 18   | 4 - 8 - 18   | 2.03        | 148      | 1.9 - 4.3 - 8.6  | 1.2 - 2.7 - 5.5 | 1.1 - 2.4 - 5.4 |
|     | 500      | 392      | 10 - 18 - 32 | 6 - 11 - 22  | 6 - 11 - 22  | 2.54        | 185      | 3.0 - 5.4 - 9.8  | 1.9 - 3.4 - 6.8 | 1.7 - 3.4 - 6.7 |
|     | 600      | 471      | 14 - 21 - 35 | 9 - 13 - 27  | 8 - 13 - 26  | 3.05        | 222      | 4.3 - 6.4 - 10.7 | 2.7 - 4.1 - 8.2 | 2.4 - 4.0 - 8.0 |
|     | 650      | 510      | 15 - 23 - 37 | 10 - 15 - 28 | 9 - 14 - 29  | 3.30        | 241      | 4.6 - 7.0 - 11.1 | 3.0 - 4.4 - 8.6 | 2.8 - 4.4 - 8.7 |
|     | 700      | 549      | 16 - 25 - 38 | 10 - 16 - 29 | 10 - 15 - 30 | 3.56        | 259      | 5.0 - 7.5 - 11.5 | 3.2 - 4.8 - 8.9 | 3.1 - 4.7 - 9.0 |
|     | 750      | 589      | 18 - 26 - 39 | 11 - 17 - 30 | 11 - 17 - 31 | 3.81        | 278      | 5.4 - 8.0 - 11.9 | 3.4 - 5.1 - 9.3 | 3.4 - 5.0 - 9.3 |
|     | 800      | 628      | 19 - 28 - 41 | 12 - 18 - 31 | 12 - 18 - 32 | 4.06        | 296      | 5.7 - 8.6 - 12.3 | 3.6 - 5.5 - 9.6 | 3.6 - 5.4 - 9.6 |

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Throw values are given for isothermal conditions. 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-Way Throw is for [Total CFM] CFM per side (L/s). The throw values given for 2-Way Throw is for [Total CFM/2] CFM per side (L/s). The throw values given for 3-Way Throw is for [Total CFM/3] CFM per side (L/s). See Krueger's selection software for performance data not shown, including octave band data.

**6500, 56500 (Supply) Performance Data: Horizontal Throw**

IP/METRIC DATA: 6500, 56500, 24"x24" PANEL, 4-WAY (NO DAMPER)

|      | IP Data  |          |       |              |              | NC   | Metric Data |          |      |                  |                  | Octave Band, dB |    |    |    |    |    |  |
|------|----------|----------|-------|--------------|--------------|------|-------------|----------|------|------------------|------------------|-----------------|----|----|----|----|----|--|
|      | Neck Vel | Air Flow | Ps    | Pt           | 4-Way Throw  |      | Neck Vel    | Air Flow | Ps   | Pt               | 4-Way Throw      |                 |    |    |    |    |    |  |
|      | FPM      | CFM      | "WG   | "WG          | ft           |      | m/s         | L/s      | Pa   | Pa               | m                | 2               | 3  | 4  | 5  | 6  | 7  |  |
|      |          |          |       |              |              |      |             |          |      |                  |                  |                 |    |    |    |    |    |  |
| 6"   | 300      | 59       | 0.011 | 0.017        | 2 - 4 - 9    | -    | 1.52        | 28       | 2.7  | 4.1              | 0.6 - 1.3 - 2.6  | 21              | 21 | 17 | -  | -  | -  |  |
|      | 400      | 78       | 0.020 | 0.030        | 3 - 6 - 10   | -    | 2.03        | 37       | 4.9  | 7.4              | 1.0 - 1.9 - 3.0  | 24              | 26 | 23 | -  | -  | -  |  |
|      | 500      | 98       | 0.031 | 0.046        | 5 - 8 - 11   | -    | 2.54        | 46       | 7.6  | 11.5             | 1.6 - 2.4 - 3.4  | 27              | 30 | 28 | 16 | -  | -  |  |
|      | 600      | 118      | 0.044 | 0.067        | 6 - 9 - 12   | 15   | 3.05        | 56       | 11.0 | 16.6             | 1.9 - 2.6 - 3.7  | 30              | 33 | 32 | 22 | -  | -  |  |
|      | 700      | 137      | 0.060 | 0.091        | 7 - 9 - 13   | 19   | 3.56        | 65       | 15.0 | 22.6             | 2.2 - 2.8 - 4.0  | 32              | 36 | 35 | 27 | 13 | -  |  |
|      | 800      | 157      | 0.078 | 0.118        | 8 - 10 - 14  | 22   | 4.06        | 74       | 19.5 | 29.5             | 2.5 - 3.0 - 4.3  | 34              | 38 | 38 | 31 | 18 | -  |  |
|      | 900      | 176      | 0.099 | 0.150        | 9 - 11 - 15  | 25   | 4.57        | 83       | 24.7 | 37.3             | 2.6 - 3.2 - 4.5  | 35              | 40 | 41 | 35 | 23 | 12 |  |
|      | 1000     | 196      | 0.123 | 0.185        | 9 - 11 - 16  | 28   | 5.08        | 93       | 30.5 | 46.1             | 2.8 - 3.4 - 4.8  | 37              | 42 | 43 | 38 | 28 | 16 |  |
|      | 1100     | 216      | 0.148 | 0.224        | 10 - 12 - 17 | 30   | 5.59        | 102      | 36.9 | 55.7             | 2.9 - 3.6 - 5.0  | 38              | 44 | 45 | 41 | 32 | 20 |  |
| 8"   | 300      | 105      | 0.011 | 0.017        | 2 - 6 - 12   | -    | 1.52        | 49       | 2.7  | 4.1              | 0.7 - 1.7 - 3.5  | 25              | 24 | 21 | -  | -  | -  |  |
|      | 400      | 140      | 0.020 | 0.030        | 4 - 8 - 13   | -    | 2.03        | 66       | 4.9  | 7.4              | 1.3 - 2.5 - 4.0  | 28              | 29 | 27 | 15 | -  | -  |  |
|      | 500      | 175      | 0.031 | 0.046        | 7 - 10 - 15  | 15   | 2.54        | 82       | 7.6  | 11.5             | 2.1 - 3.2 - 4.5  | 31              | 33 | 32 | 22 | -  | -  |  |
|      | 600      | 209      | 0.044 | 0.067        | 8 - 12 - 16  | 19   | 3.05        | 99       | 11.0 | 16.6             | 2.5 - 3.5 - 5.0  | 34              | 36 | 36 | 27 | 13 | -  |  |
|      | 700      | 244      | 0.060 | 0.091        | 10 - 12 - 18 | 23   | 3.56        | 115      | 15.0 | 22.6             | 3.0 - 3.8 - 5.4  | 36              | 38 | 39 | 32 | 20 | -  |  |
|      | 800      | 279      | 0.078 | 0.118        | 11 - 13 - 19 | 27   | 4.06        | 132      | 19.5 | 29.5             | 3.3 - 4.0 - 5.7  | 38              | 41 | 42 | 36 | 25 | 15 |  |
|      | 900      | 314      | 0.099 | 0.150        | 12 - 14 - 20 | 30   | 4.57        | 148      | 24.7 | 37.3             | 3.5 - 4.3 - 6.1  | 39              | 43 | 45 | 40 | 30 | 19 |  |
|      | 1000     | 349      | 0.123 | 0.185        | 12 - 15 - 21 | 32   | 5.08        | 165      | 30.5 | 46.1             | 3.7 - 4.5 - 6.4  | 40              | 45 | 47 | 43 | 35 | 23 |  |
| 1100 | 384      | 0.148    | 0.224 | 13 - 16 - 22 | 35           | 5.59 | 181         | 36.9     | 55.7 | 3.9 - 4.7 - 6.7  | 42               | 46              | 49 | 46 | 39 | 27 |    |  |
| 10"  | 300      | 164      | 0.011 | 0.017        | 3 - 7 - 14   | -    | 1.52        | 77       | 2.7  | 4.1              | 0.9 - 2.1 - 4.4  | 28              | 26 | 23 | -  | -  | -  |  |
|      | 400      | 218      | 0.020 | 0.030        | 5 - 10 - 17  | 12   | 2.03        | 103      | 4.9  | 7.4              | 1.7 - 3.2 - 5.1  | 31              | 31 | 30 | 19 | -  | -  |  |
|      | 500      | 273      | 0.031 | 0.046        | 9 - 13 - 19  | 18   | 2.54        | 129      | 7.6  | 11.5             | 2.6 - 4.0 - 5.7  | 34              | 35 | 35 | 26 | 11 | -  |  |
|      | 600      | 327      | 0.044 | 0.067        | 10 - 14 - 20 | 23   | 3.05        | 154      | 11.0 | 16.6             | 3.2 - 4.4 - 6.2  | 37              | 38 | 39 | 32 | 19 | -  |  |
|      | 700      | 382      | 0.060 | 0.091        | 12 - 16 - 22 | 27   | 3.56        | 180      | 15.0 | 22.6             | 3.7 - 4.7 - 6.7  | 39              | 41 | 42 | 36 | 25 | 15 |  |
|      | 800      | 436      | 0.078 | 0.118        | 14 - 17 - 24 | 30   | 4.06        | 206      | 19.5 | 29.5             | 4.1 - 5.1 - 7.2  | 41              | 43 | 45 | 41 | 31 | 20 |  |
|      | 900      | 491      | 0.099 | 0.150        | 14 - 18 - 25 | 33   | 4.57        | 231      | 24.7 | 37.3             | 4.4 - 5.4 - 7.6  | 42              | 45 | 48 | 44 | 36 | 25 |  |
|      | 1000     | 545      | 0.123 | 0.185        | 15 - 19 - 26 | 36   | 5.08        | 257      | 30.5 | 46.1             | 4.6 - 5.7 - 8.0  | 43              | 47 | 50 | 47 | 40 | 29 |  |
| 1100 | 600      | 0.148    | 0.224 | 16 - 20 - 28 | 38           | 5.59 | 283         | 36.9     | 55.7 | 4.8 - 5.9 - 8.4  | 45               | 48              | 52 | 50 | 44 | 33 |    |  |
| 12"  | 300      | 235      | 0.011 | 0.017        | 4 - 8 - 17   | -    | 1.52        | 111      | 2.7  | 4.1              | 1.1 - 2.5 - 5.3  | 30              | 27 | 26 | 14 | -  | -  |  |
|      | 400      | 314      | 0.020 | 0.030        | 7 - 12 - 20  | 15   | 2.03        | 148      | 4.9  | 7.4              | 2.0 - 3.8 - 6.1  | 34              | 32 | 32 | 23 | -  | -  |  |
|      | 500      | 392      | 0.031 | 0.046        | 10 - 16 - 22 | 21   | 2.54        | 185      | 7.6  | 11.5             | 3.1 - 4.7 - 6.8  | 37              | 36 | 37 | 30 | 15 | -  |  |
|      | 600      | 471      | 0.044 | 0.067        | 12 - 17 - 24 | 26   | 3.05        | 222      | 11.0 | 16.6             | 3.8 - 5.3 - 7.4  | 39              | 40 | 41 | 35 | 23 | 14 |  |
|      | 700      | 549      | 0.060 | 0.091        | 15 - 19 - 26 | 30   | 3.56        | 259      | 15.0 | 22.6             | 4.4 - 5.7 - 8.0  | 41              | 42 | 44 | 40 | 30 | 20 |  |
|      | 800      | 628      | 0.078 | 0.118        | 16 - 20 - 28 | 33   | 4.06        | 296      | 19.5 | 29.5             | 5.0 - 6.1 - 8.6  | 43              | 45 | 47 | 44 | 35 | 25 |  |
|      | 900      | 706      | 0.099 | 0.150        | 17 - 21 - 30 | 36   | 4.57        | 333      | 24.7 | 37.3             | 5.3 - 6.4 - 9.1  | 45              | 47 | 50 | 48 | 40 | 30 |  |
|      | 1000     | 785      | 0.123 | 0.185        | 18 - 22 - 32 | 39   | 5.08        | 370      | 30.5 | 46.1             | 5.5 - 6.8 - 9.6  | 46              | 48 | 52 | 51 | 45 | 34 |  |
| 1100 | 863      | 0.148    | 0.224 | 19 - 23 - 33 | 41           | 5.59 | 407         | 36.9     | 55.7 | 5.8 - 7.1 - 10.1 | 47               | 50              | 54 | 54 | 49 | 37 |    |  |
| 14"  | 200      | 214      | 0.005 | 0.007        | 2 - 4 - 15   | -    | 1.02        | 101      | 1.2  | 1.8              | 0.6 - 1.3 - 4.4  | 27              | 22 | 19 | -  | -  | -  |  |
|      | 300      | 320      | 0.011 | 0.017        | 4 - 10 - 20  | -    | 1.52        | 151      | 2.7  | 4.1              | 1.3 - 2.9 - 6.1  | 32              | 29 | 28 | 17 | -  | -  |  |
|      | 400      | 427      | 0.020 | 0.030        | 8 - 15 - 23  | 18   | 2.03        | 202      | 4.9  | 7.4              | 2.3 - 4.4 - 7.1  | 36              | 34 | 34 | 26 | -  | -  |  |
|      | 500      | 534      | 0.031 | 0.046        | 12 - 18 - 26 | 23   | 2.54        | 252      | 7.6  | 11.5             | 3.6 - 5.5 - 7.9  | 39              | 38 | 39 | 32 | 19 | 11 |  |
|      | 600      | 641      | 0.044 | 0.067        | 15 - 20 - 29 | 28   | 3.05        | 302      | 11.0 | 16.6             | 4.4 - 6.1 - 8.7  | 41              | 41 | 43 | 38 | 27 | 18 |  |
|      | 700      | 748      | 0.060 | 0.091        | 17 - 22 - 31 | 32   | 3.56        | 353      | 15.0 | 22.6             | 5.2 - 6.6 - 9.4  | 43              | 44 | 46 | 43 | 33 | 24 |  |
|      | 800      | 855      | 0.078 | 0.118        | 19 - 23 - 33 | 35   | 4.06        | 403      | 19.5 | 29.5             | 5.8 - 7.1 - 10.0 | 45              | 46 | 49 | 47 | 39 | 29 |  |
|      | 900      | 961      | 0.099 | 0.150        | 20 - 25 - 35 | 38   | 4.57        | 454      | 24.7 | 37.3             | 6.1 - 7.5 - 10.6 | 47              | 48 | 52 | 51 | 44 | 34 |  |
| 1000 | 1068     | 0.123    | 0.185 | 21 - 26 - 37 | 41           | 5.08 | 504         | 30.5     | 46.1 | 6.5 - 7.9 - 11.2 | 48               | 50              | 54 | 54 | 48 | 38 |    |  |
| 16"  | 200      | 279      | 0.005 | 0.007        | 2 - 5 - 17   | -    | 1.02        | 132      | 1.2  | 1.8              | 0.7 - 1.5 - 5.1  | 28              | 23 | 21 | -  | -  | -  |  |
|      | 300      | 419      | 0.011 | 0.017        | 5 - 11 - 23  | 12   | 1.52        | 198      | 2.7  | 4.1              | 1.5 - 3.4 - 7.0  | 34              | 30 | 29 | 19 | -  | -  |  |
|      | 400      | 558      | 0.020 | 0.030        | 9 - 17 - 27  | 20   | 2.03        | 263      | 4.9  | 7.4              | 2.6 - 5.1 - 8.1  | 38              | 35 | 36 | 28 | 13 | -  |  |
|      | 500      | 698      | 0.031 | 0.046        | 14 - 21 - 30 | 25   | 2.54        | 329      | 7.6  | 11.5             | 4.1 - 6.3 - 9.0  | 41              | 39 | 41 | 35 | 22 | 14 |  |
|      | 600      | 837      | 0.044 | 0.067        | 17 - 23 - 33 | 30   | 3.05        | 395      | 11.0 | 16.6             | 5.1 - 7.0 - 9.9  | 43              | 42 | 45 | 41 | 30 | 21 |  |
|      | 700      | 977      | 0.060 | 0.091        | 19 - 25 - 35 | 34   | 3.56        | 461      | 15.0 | 22.6             | 5.9 - 7.6 - 10.7 | 45              | 45 | 48 | 45 | 37 | 27 |  |
|      | 800      | 1116     | 0.078 | 0.118        | 22 - 27 - 38 | 38   | 4.06        | 527      | 19.5 | 29.5             | 6.6 - 8.1 - 11.4 | 47              | 47 | 51 | 49 | 42 | 32 |  |
|      | 850      | 1186     | 0.089 | 0.134        | 22 - 27 - 39 | 39   | 4.32        | 560      | 22.1 | 33.3             | 6.8 - 8.3 - 11.8 | 48              | 48 | 52 | 51 | 45 | 35 |  |
| 900  | 1256     | 0.099    | 0.150 | 23 - 28 - 40 | 41           | 4.57 | 593         | 24.7     | 37.3 | 7.0 - 8.6 - 12.1 | 48               | 49              | 54 | 53 | 47 | 37 |    |  |

NOTE: See pages C1-36 for notes.

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PERFORATED FACE DIFFUSERS

6500 - 56500

**6500, 56500 (Supply) Performance Data: Horizontal Throw**
**IP/METRIC DATA: 6500, 56500, 24"x24" PANEL, 1 - 3-WAY (NO DAMPER)**

|     | IP Data  |          |              |              |              | Metric Data |          |                   |                   |                  |
|-----|----------|----------|--------------|--------------|--------------|-------------|----------|-------------------|-------------------|------------------|
|     | Neck Vel | Air Flow | 1-Way Throw  | 2-Way Throw  | 3-Way Throw  | Neck Vel    | Air Flow | 1-Way Throw       | 2-Way Throw       | 3-Way Throw      |
|     | FPM      | CFM      | ft           | ft           | ft           | m/s         | L/s      | m                 | m                 | m                |
| 6"  | 300      | 59       | 3 - 5 - 11   | 2 - 5 - 10   | 2 - 4 - 8    | 1.52        | 28       | 0.8 - 1.6 - 3.2   | 0.7 - 1.5 - 3.0   | 0.5 - 1.2 - 2.6  |
|     | 400      | 78       | 5 - 7 - 12   | 4 - 7 - 11   | 3 - 6 - 10   | 2.03        | 37       | 1.5 - 2.2 - 3.7   | 1.2 - 2.1 - 3.5   | 1.0 - 1.8 - 2.9  |
|     | 500      | 98       | 6 - 9 - 14   | 6 - 9 - 13   | 5 - 7 - 11   | 2.54        | 46       | 1.8 - 2.7 - 4.1   | 1.8 - 2.6 - 3.9   | 1.5 - 2.2 - 3.3  |
|     | 600      | 118      | 7 - 11 - 15  | 7 - 10 - 14  | 6 - 8 - 12   | 3.05        | 56       | 2.2 - 3.2 - 4.5   | 2.1 - 3.0 - 4.2   | 1.8 - 2.6 - 3.6  |
|     | 700      | 137      | 8 - 11 - 16  | 8 - 11 - 15  | 7 - 9 - 13   | 3.56        | 65       | 2.6 - 3.5 - 4.9   | 2.5 - 3.2 - 4.6   | 2.1 - 2.8 - 3.9  |
|     | 800      | 157      | 10 - 12 - 17 | 9 - 11 - 16  | 8 - 10 - 14  | 4.06        | 74       | 2.9 - 3.7 - 5.2   | 2.8 - 3.5 - 4.9   | 2.4 - 2.9 - 4.2  |
|     | 900      | 176      | 11 - 13 - 18 | 10 - 12 - 17 | 8 - 10 - 15  | 4.57        | 83       | 3.2 - 3.9 - 5.5   | 3.0 - 3.7 - 5.2   | 2.6 - 3.1 - 4.4  |
|     | 1000     | 196      | 11 - 14 - 19 | 10 - 13 - 18 | 9 - 11 - 15  | 5.08        | 93       | 3.4 - 4.1 - 5.8   | 3.2 - 3.9 - 5.5   | 2.7 - 3.3 - 4.7  |
|     | 1100     | 216      | 12 - 14 - 20 | 11 - 13 - 19 | 9 - 11 - 16  | 5.59        | 102      | 3.5 - 4.3 - 6.1   | 3.3 - 4.0 - 5.7   | 2.8 - 3.5 - 4.9  |
| 8"  | 300      | 105      | 4 - 7 - 14   | 3 - 7 - 13   | 2 - 5 - 11   | 1.52        | 49       | 1.1 - 2.2 - 4.3   | 0.9 - 2.1 - 4.0   | 0.7 - 1.6 - 3.4  |
|     | 400      | 140      | 6 - 10 - 16  | 5 - 9 - 15   | 4 - 8 - 13   | 2.03        | 66       | 1.9 - 2.9 - 4.9   | 1.6 - 2.8 - 4.6   | 1.3 - 2.4 - 3.9  |
|     | 500      | 175      | 8 - 12 - 18  | 8 - 12 - 17  | 7 - 10 - 14  | 2.54        | 82       | 2.4 - 3.7 - 5.5   | 2.3 - 3.5 - 5.1   | 2.0 - 3.0 - 4.4  |
|     | 600      | 209      | 10 - 14 - 20 | 9 - 13 - 19  | 8 - 11 - 16  | 3.05        | 99       | 2.9 - 4.3 - 6.0   | 2.8 - 4.0 - 5.6   | 2.4 - 3.4 - 4.8  |
|     | 700      | 244      | 11 - 15 - 21 | 11 - 14 - 20 | 9 - 12 - 17  | 3.56        | 115      | 3.4 - 4.6 - 6.5   | 3.3 - 4.3 - 6.1   | 2.8 - 3.7 - 5.2  |
|     | 800      | 279      | 13 - 16 - 23 | 12 - 15 - 21 | 10 - 13 - 18 | 4.06        | 132      | 3.9 - 4.9 - 7.0   | 3.7 - 4.6 - 6.5   | 3.2 - 3.9 - 5.6  |
|     | 900      | 314      | 14 - 17 - 24 | 13 - 16 - 23 | 11 - 14 - 19 | 4.57        | 148      | 4.3 - 5.2 - 7.4   | 4.0 - 4.9 - 6.9   | 3.4 - 4.2 - 5.9  |
|     | 1000     | 349      | 15 - 18 - 26 | 14 - 17 - 24 | 12 - 14 - 20 | 5.08        | 165      | 4.5 - 5.5 - 7.8   | 4.2 - 5.1 - 7.3   | 3.6 - 4.4 - 6.2  |
|     | 1100     | 384      | 16 - 19 - 27 | 15 - 18 - 25 | 12 - 15 - 21 | 5.59        | 181      | 4.7 - 5.8 - 8.2   | 4.4 - 5.4 - 7.6   | 3.8 - 4.6 - 6.5  |
| 10" | 300      | 164      | 4 - 9 - 18   | 4 - 8 - 16   | 3 - 7 - 14   | 1.52        | 77       | 1.4 - 2.8 - 5.3   | 1.1 - 2.6 - 5.0   | 0.9 - 2.0 - 4.3  |
|     | 400      | 218      | 8 - 12 - 20  | 7 - 12 - 19  | 5 - 10 - 16  | 2.03        | 103      | 2.4 - 3.7 - 6.2   | 2.0 - 3.5 - 5.8   | 1.6 - 3.0 - 4.9  |
|     | 500      | 273      | 10 - 15 - 23 | 10 - 14 - 21 | 8 - 12 - 18  | 2.54        | 129      | 3.1 - 4.6 - 6.9   | 2.9 - 4.4 - 6.4   | 2.5 - 3.7 - 5.5  |
|     | 600      | 327      | 12 - 18 - 25 | 12 - 16 - 23 | 10 - 14 - 20 | 3.05        | 154      | 3.7 - 5.3 - 7.5   | 3.5 - 5.0 - 7.0   | 3.0 - 4.3 - 6.0  |
|     | 700      | 382      | 14 - 19 - 27 | 13 - 18 - 25 | 11 - 15 - 21 | 3.56        | 180      | 4.3 - 5.8 - 8.1   | 4.1 - 5.4 - 7.6   | 3.5 - 4.6 - 6.5  |
|     | 800      | 436      | 16 - 20 - 29 | 15 - 19 - 27 | 13 - 16 - 23 | 4.06        | 206      | 4.9 - 6.2 - 8.7   | 4.7 - 5.8 - 8.1   | 4.0 - 4.9 - 6.9  |
|     | 900      | 491      | 18 - 21 - 30 | 16 - 20 - 28 | 14 - 17 - 24 | 4.57        | 231      | 5.3 - 6.5 - 9.2   | 5.0 - 6.1 - 8.6   | 4.3 - 5.2 - 7.4  |
|     | 1000     | 545      | 18 - 23 - 32 | 17 - 21 - 30 | 15 - 18 - 26 | 5.08        | 257      | 5.6 - 6.9 - 9.7   | 5.3 - 6.4 - 9.1   | 4.5 - 5.5 - 7.8  |
|     | 1100     | 600      | 19 - 24 - 34 | 18 - 22 - 31 | 15 - 19 - 27 | 5.59        | 283      | 5.9 - 7.2 - 10.2  | 5.5 - 6.7 - 9.5   | 4.7 - 5.8 - 8.1  |
| 12" | 300      | 235      | 5 - 11 - 21  | 5 - 10 - 20  | 4 - 8 - 17   | 1.52        | 111      | 1.6 - 3.3 - 6.4   | 1.4 - 3.1 - 6.0   | 1.1 - 2.4 - 5.1  |
|     | 400      | 314      | 10 - 14 - 24 | 8 - 14 - 23  | 6 - 12 - 19  | 2.03        | 148      | 2.9 - 4.4 - 7.4   | 2.4 - 4.2 - 6.9   | 1.9 - 3.6 - 5.9  |
|     | 500      | 392      | 12 - 18 - 27 | 12 - 17 - 25 | 10 - 15 - 22 | 2.54        | 185      | 3.7 - 5.5 - 8.3   | 3.5 - 5.3 - 7.7   | 3.0 - 4.5 - 6.6  |
|     | 600      | 471      | 14 - 21 - 30 | 14 - 20 - 28 | 12 - 17 - 24 | 3.05        | 222      | 4.4 - 6.4 - 9.0   | 4.2 - 6.0 - 8.5   | 3.6 - 5.1 - 7.2  |
|     | 700      | 549      | 17 - 23 - 32 | 16 - 21 - 30 | 14 - 18 - 26 | 3.56        | 259      | 5.1 - 6.9 - 9.8   | 4.9 - 6.5 - 9.1   | 4.2 - 5.5 - 7.8  |
|     | 800      | 628      | 19 - 24 - 34 | 18 - 23 - 32 | 16 - 19 - 27 | 4.06        | 296      | 5.9 - 7.4 - 10.4  | 5.6 - 6.9 - 9.8   | 4.8 - 5.9 - 8.3  |
|     | 900      | 706      | 21 - 26 - 36 | 20 - 24 - 34 | 17 - 21 - 29 | 4.57        | 333      | 6.4 - 7.8 - 11.1  | 6.0 - 7.3 - 10.4  | 5.1 - 6.3 - 8.8  |
|     | 1000     | 785      | 22 - 27 - 38 | 21 - 25 - 36 | 18 - 22 - 31 | 5.08        | 370      | 6.7 - 8.3 - 11.7  | 6.3 - 7.7 - 10.9  | 5.4 - 6.6 - 9.3  |
|     | 1100     | 863      | 23 - 28 - 40 | 22 - 27 - 38 | 19 - 23 - 32 | 5.59        | 407      | 7.1 - 8.7 - 12.2  | 6.6 - 8.1 - 11.5  | 5.6 - 6.9 - 9.8  |
| 14" | 200      | 214      | 3 - 6 - 17   | 2 - 5 - 16   | 2 - 4 - 14   | 1.02        | 101      | 0.8 - 1.9 - 5.1   | 0.7 - 1.6 - 4.9   | 0.6 - 1.3 - 4.2  |
|     | 300      | 320      | 6 - 13 - 25  | 5 - 12 - 23  | 4 - 9 - 20   | 1.52        | 151      | 1.9 - 3.9 - 7.5   | 1.6 - 3.6 - 7.0   | 1.3 - 2.9 - 6.0  |
|     | 400      | 427      | 11 - 17 - 28 | 9 - 16 - 27  | 7 - 14 - 23  | 2.03        | 202      | 3.4 - 5.1 - 8.6   | 2.9 - 4.9 - 8.1   | 2.3 - 4.2 - 6.9  |
|     | 500      | 534      | 14 - 21 - 32 | 13 - 20 - 30 | 11 - 17 - 25 | 2.54        | 252      | 4.3 - 6.4 - 9.6   | 4.1 - 6.1 - 9.0   | 3.5 - 5.2 - 7.7  |
|     | 600      | 641      | 17 - 25 - 35 | 16 - 23 - 32 | 14 - 20 - 28 | 3.05        | 302      | 5.1 - 7.5 - 10.6  | 4.9 - 7.0 - 9.9   | 4.2 - 6.0 - 8.4  |
|     | 700      | 748      | 20 - 27 - 37 | 19 - 25 - 35 | 16 - 21 - 30 | 3.56        | 353      | 6.0 - 8.1 - 11.4  | 5.7 - 7.5 - 10.7  | 4.9 - 6.4 - 9.1  |
|     | 800      | 855      | 23 - 28 - 40 | 22 - 27 - 37 | 18 - 23 - 32 | 4.06        | 403      | 6.8 - 8.6 - 12.2  | 6.6 - 8.1 - 11.4  | 5.6 - 6.9 - 9.7  |
|     | 900      | 961      | 25 - 30 - 43 | 23 - 28 - 40 | 20 - 24 - 34 | 4.57        | 454      | 7.5 - 9.1 - 12.9  | 7.0 - 8.5 - 12.1  | 6.0 - 7.3 - 10.3 |
|     | 1000     | 1068     | 26 - 32 - 45 | 24 - 30 - 42 | 21 - 25 - 36 | 5.08        | 504      | 7.9 - 9.6 - 13.6  | 7.4 - 9.0 - 12.7  | 6.3 - 7.7 - 10.9 |
| 16" | 200      | 279      | 3 - 7 - 19   | 3 - 6 - 18   | 2 - 5 - 16   | 1.02        | 132      | 1.0 - 2.2 - 5.9   | 0.8 - 1.8 - 5.6   | 0.6 - 1.4 - 4.8  |
|     | 300      | 419      | 7 - 14 - 28  | 6 - 14 - 26  | 5 - 11 - 22  | 1.52        | 198      | 2.2 - 4.4 - 8.5   | 1.8 - 4.1 - 8.0   | 1.4 - 3.3 - 6.8  |
|     | 400      | 558      | 13 - 19 - 32 | 11 - 18 - 30 | 8 - 16 - 26  | 2.03        | 263      | 3.9 - 5.9 - 9.8   | 3.3 - 5.6 - 9.2   | 2.6 - 4.8 - 7.9  |
|     | 500      | 698      | 16 - 24 - 36 | 15 - 23 - 34 | 13 - 20 - 29 | 2.54        | 329      | 4.9 - 7.3 - 11.0  | 4.7 - 7.0 - 10.3  | 4.0 - 6.0 - 8.8  |
|     | 600      | 837      | 19 - 28 - 40 | 18 - 26 - 37 | 16 - 22 - 32 | 3.05        | 395      | 5.9 - 8.5 - 12.1  | 5.6 - 8.0 - 11.3  | 4.8 - 6.8 - 9.6  |
|     | 700      | 977      | 23 - 30 - 43 | 22 - 28 - 40 | 18 - 24 - 34 | 3.56        | 461      | 6.8 - 9.2 - 13.0  | 6.6 - 8.6 - 12.2  | 5.6 - 7.4 - 10.4 |
|     | 800      | 1116     | 26 - 32 - 46 | 25 - 30 - 43 | 21 - 26 - 37 | 4.06        | 527      | 7.8 - 9.8 - 13.9  | 7.5 - 9.2 - 13.0  | 6.4 - 7.9 - 11.1 |
|     | 900      | 1256     | 28 - 34 - 49 | 26 - 32 - 45 | 22 - 27 - 39 | 4.57        | 593      | 8.5 - 10.4 - 14.8 | 8.0 - 9.8 - 13.8  | 6.8 - 8.3 - 11.8 |
|     | 1000     | 1395     | 30 - 36 - 51 | 28 - 34 - 48 | 24 - 29 - 41 | 5.08        | 658      | 9.0 - 11.0 - 15.6 | 8.4 - 10.3 - 14.6 | 7.2 - 8.8 - 12.4 |

PERFORATED FACE DIFFUSERS

6500 - 56500

NOTE: See pages C1-37 for notes.

**6500, 56500 (Supply) Suggested Specification & Configuration**
**1. SERIES: (XXXXX)**

- 6500 - Round Neck, Steel Perforated Face Supply Diffuser with Backpan Mounted Adjustable Curved Blades
- 56500 - Round Neck, Aluminum Perforated Face, Steel Backpan Supply Diffuser with Backpan Mounted Adjustable Curved Blades

**2. PATTERN: (XXX)**

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

**3. DIMENSION 1: ROUND NECK ONLY (XX)**

- 6" - 16" in 2" Increments

**4. FRAME: (XXX)**

- F20 - Surface Mount
- F23 - Lay-in T-Bar
- F27 - Spline
- F30 - Drop Face
- F98 - Narrow-T

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

- 12"x12"
- 16"x16"
- 12"x24"
- 20"x20"
- 24"x24"
- 24"x48"

**6. ACCESSORIES: (XX)**

- 00 - None
- IB - Insulated Backpan

**7. FINISH: (XX)**

- 01 - Mill
- 03 - Black Backpan with British White Face
- 10 - Alumican
- 35 - Black
- 44 - British White

**6500, 56500**

The perforated face supply diffuser shall be Krueger model 6500 (steel perforated face) or 56500 (aluminum perforated face). The diffusers shall have a perforated face with 3/16" diameter holes on 1/4" centers resulting in a 51% free area. The diffuser backpan shall be constructed of heavy gage steel and provide a round neck.

The diffuser shall have individually adjustable curved blade deflectors mounted at the neck of the diffuser. The curved blade deflectors shall allow vertical or 1, 2, 3, or 4-way horizontal projection of air in to the room. The perforated face must be easily removable from the backpan for access to the adjustable curved blades for adjustments and access to the damper.

Optional round damper shall be constructed of heavy gage steel. Damper shall be operable from the face of the diffuser.

**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.