
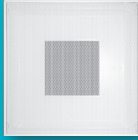




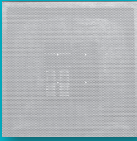

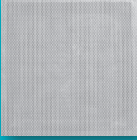





| | | | |
|---|--|---|--|
|  | <p>6100, 6150 56100, 56150 These perforated supply ceiling diffusers feature a neck mounted rotatable core with either a round or square neck. Aluminum or steel perforated face is available.</p> |  | <p>6490, 56490 These perforated ceiling returns feature a square neck.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

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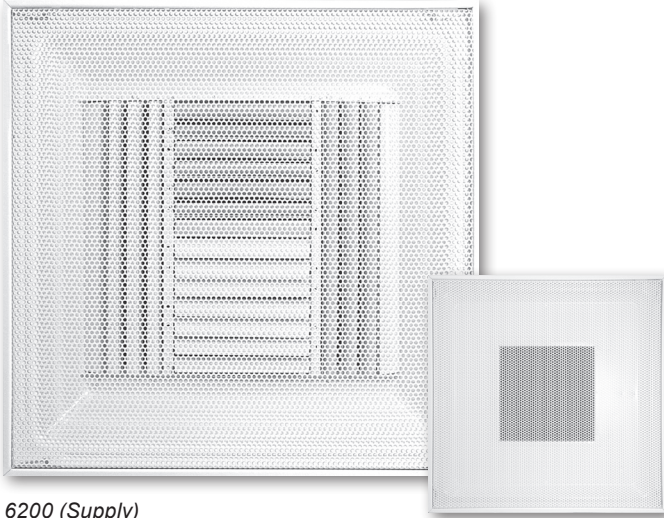
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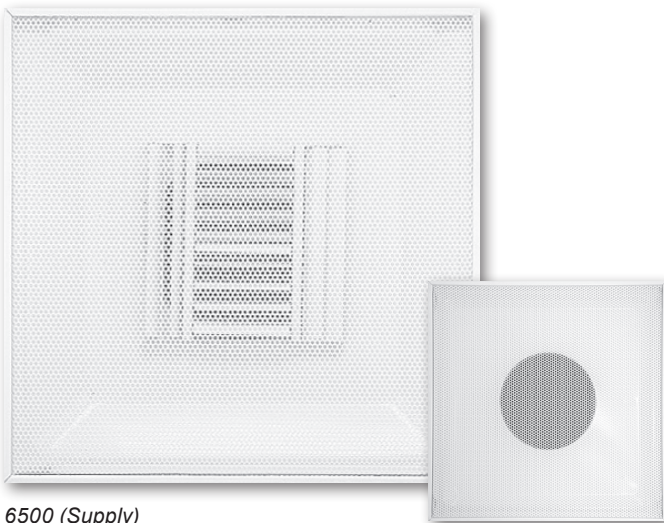
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PERFORATED FACE DIFFUSERS



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

6200FR, 6290FR (Fire Rated Supply/Return) Dimensional Information

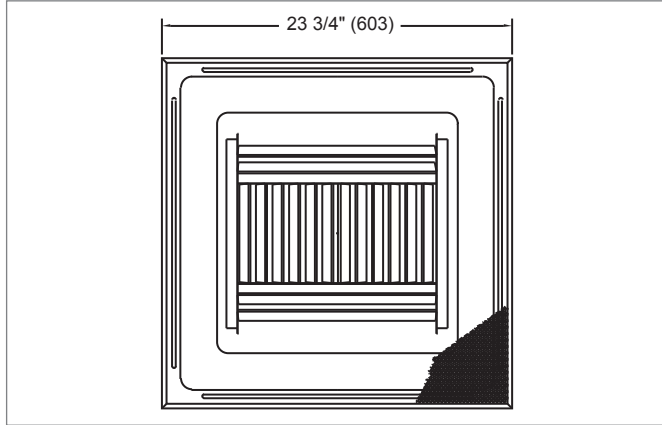
The 6200FR/6290FR offers the safety of fire rated performance with the proven 6200/6290 series diffuser. It is intended for use with Lay-in T-Bar application involving fire rated ceiling designs. It combines this flexibility with all of the features of the standard 6200/6290 and is available exclusively in steel.

6200FR/6290FR comes standard as a UL 263 classified assembly which incorporates a 3-hour rated fire damper and a 1/2" thick ceramic fiber blanket.

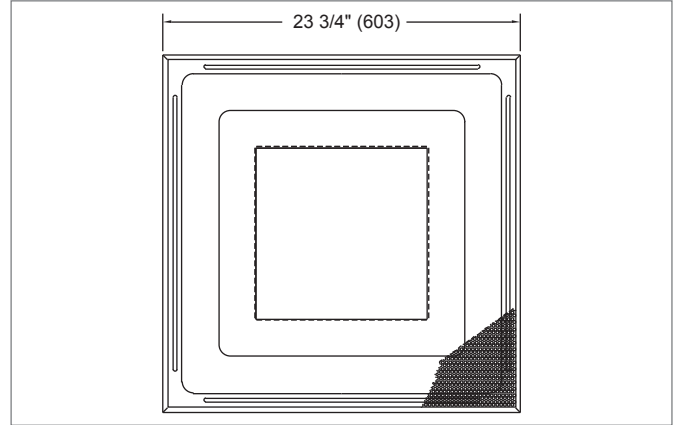


PERFORATED FACE DIFFUSERS

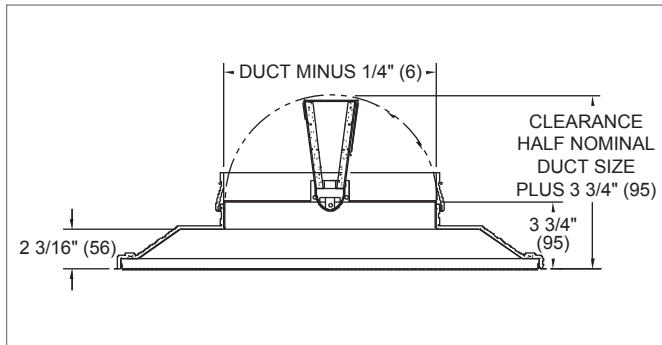
6200FR, SUPPLY FACE VIEW (24"x24" PANEL)



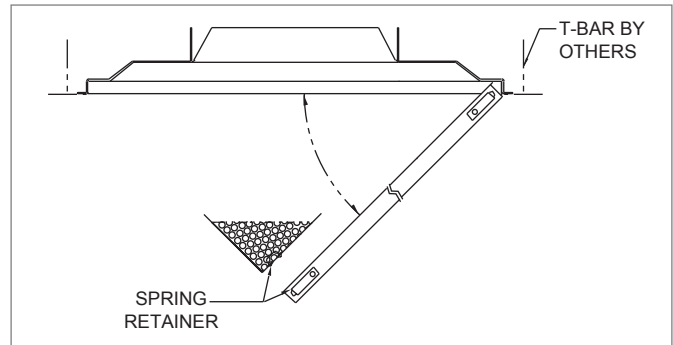
6290FR, RETURN FACE VIEW (24"x24" PANEL)



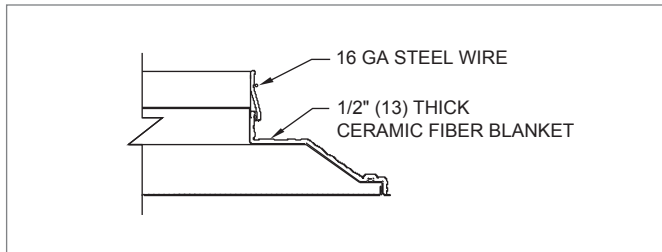
6200FR, 6290FR, CROSS SECTION



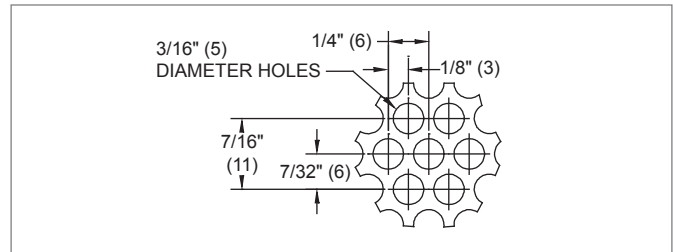
6200FR, 6290FR, HINGE DETAIL



6200FR, 6290FR, FIRE BLANKET DETAIL



6200FR, 6290FR, PERFORATION DETAIL

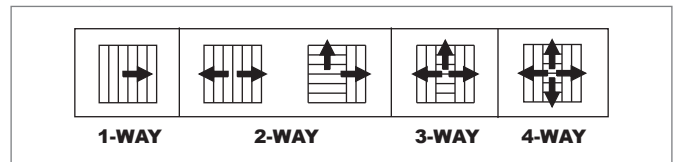


6200FR, 6290FR, AVAILABLE INLET SIZES

| NOMINAL PANEL 24" x 24" (610 x 610) | INLET SIZES | |
|---|-----------------------|---------------------|
| | | 6" x 6" (152 x 152) |
| | 8" x 8" (203 x 203) | |
| | 10" x 10" (254 x 254) | |
| | 12" x 12" (305 x 305) | |
| | 14" x 14" (356 x 356) | |

NOTE: Dimensions in parentheses are mm.

6200FR, DISCHARGE AIR PATTERNS



6200FR-6290FR

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6200, 56200 (Supply) Performance Data: Horizontal Throw

IP/METRIC DATA: 6200, 56200, 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" x 6" | 300 | 75 | 0.004 | 0.010 | 1 - 2 - 6 | - | 1.52 | 35 | 1.0 | 2.4 | 0.3 - 0.7 - 1.8 | 34 | 25 | 27 | 15 | - | - | | |
| | 400 | 100 | 0.007 | 0.017 | 2 - 4 - 8 | 14 | 2.03 | 47 | 1.8 | 4.3 | 0.5 - 1.2 - 2.4 | 36 | 30 | 32 | 22 | - | - | | |
| | 500 | 125 | 0.011 | 0.027 | 3 - 5 - 10 | 19 | 2.54 | 59 | 2.8 | 6.7 | 0.8 - 1.5 - 3.0 | 38 | 33 | 36 | 28 | 13 | - | | |
| | 600 | 150 | 0.016 | 0.039 | 4 - 6 - 11 | 23 | 3.05 | 71 | 4.0 | 9.6 | 1.2 - 1.8 - 3.2 | 40 | 36 | 39 | 32 | 19 | - | | |
| | 700 | 175 | 0.022 | 0.053 | 5 - 7 - 11 | 26 | 3.56 | 83 | 5.5 | 13.1 | 1.4 - 2.1 - 3.5 | 41 | 38 | 41 | 36 | 24 | 13 | | |
| | 800 | 200 | 0.029 | 0.069 | 5 - 8 - 12 | 29 | 4.06 | 94 | 7.2 | 17.1 | 1.6 - 2.4 - 3.7 | 42 | 40 | 44 | 39 | 29 | 18 | | |
| | 900 | 225 | 0.036 | 0.087 | 6 - 9 - 13 | 32 | 4.57 | 106 | 9.1 | 21.6 | 1.8 - 2.7 - 4.0 | 44 | 42 | 46 | 42 | 33 | 21 | | |
| | 1000 | 250 | 0.045 | 0.107 | 7 - 10 - 14 | 34 | 5.08 | 118 | 11.2 | 26.7 | 2.0 - 3.0 - 4.2 | 44 | 44 | 47 | 45 | 36 | 25 | | |
| 1100 | 275 | 0.054 | 0.130 | 7 - 10 - 14 | 36 | 5.59 | 130 | 13.5 | 32.3 | 2.2 - 3.1 - 4.4 | 45 | 45 | 49 | 47 | 40 | 28 | | | |
| 8" x 8" | 300 | 133 | 0.007 | 0.012 | 1 - 3 - 8 | - | 1.52 | 63 | 1.6 | 3.0 | 0.4 - 0.9 - 2.4 | 35 | 26 | 28 | 17 | - | - | | |
| | 400 | 178 | 0.012 | 0.022 | 2 - 5 - 11 | 16 | 2.03 | 84 | 2.9 | 5.4 | 0.7 - 1.6 - 3.2 | 38 | 30 | 33 | 24 | - | - | | |
| | 500 | 222 | 0.018 | 0.034 | 4 - 7 - 13 | 21 | 2.54 | 105 | 4.5 | 8.4 | 1.1 - 2.0 - 3.9 | 40 | 34 | 37 | 29 | 16 | - | | |
| | 600 | 267 | 0.026 | 0.048 | 5 - 8 - 14 | 24 | 3.05 | 126 | 6.5 | 12.1 | 1.6 - 2.4 - 4.3 | 41 | 37 | 40 | 34 | 22 | 12 | | |
| | 700 | 311 | 0.035 | 0.066 | 6 - 9 - 15 | 28 | 3.56 | 147 | 8.8 | 16.4 | 1.9 - 2.8 - 4.7 | 42 | 39 | 42 | 38 | 27 | 17 | | |
| | 800 | 356 | 0.046 | 0.086 | 7 - 11 - 16 | 30 | 4.06 | 168 | 11.5 | 21.4 | 2.1 - 3.2 - 5.0 | 44 | 41 | 45 | 41 | 32 | 21 | | |
| | 900 | 400 | 0.058 | 0.109 | 8 - 12 - 17 | 33 | 4.57 | 189 | 14.6 | 27.1 | 2.4 - 3.6 - 5.3 | 45 | 43 | 47 | 44 | 36 | 25 | | |
| | 1000 | 444 | 0.072 | 0.135 | 9 - 13 - 18 | 35 | 5.08 | 210 | 18.0 | 33.5 | 2.7 - 3.9 - 5.6 | 46 | 44 | 48 | 46 | 39 | 28 | | |
| 1100 | 489 | 0.087 | 0.163 | 10 - 14 - 19 | 37 | 5.59 | 231 | 21.7 | 40.5 | 3.0 - 4.1 - 5.8 | 46 | 46 | 50 | 49 | 42 | 31 | | | |
| 10" x 10" | 300 | 208 | 0.010 | 0.015 | 2 - 4 - 10 | - | 1.52 | 98 | 2.4 | 3.8 | 0.5 - 1.1 - 3.0 | 36 | 26 | 29 | 18 | - | - | | |
| | 400 | 278 | 0.017 | 0.027 | 3 - 7 - 13 | 17 | 2.03 | 131 | 4.3 | 6.8 | 0.9 - 2.0 - 4.0 | 38 | 31 | 34 | 25 | - | - | | |
| | 500 | 347 | 0.027 | 0.042 | 5 - 8 - 16 | 22 | 2.54 | 164 | 6.7 | 10.6 | 1.4 - 2.5 - 4.9 | 40 | 34 | 37 | 30 | 18 | - | | |
| | 600 | 417 | 0.039 | 0.061 | 7 - 10 - 18 | 25 | 3.05 | 197 | 9.6 | 15.2 | 2.0 - 3.0 - 5.4 | 42 | 37 | 40 | 35 | 24 | 14 | | |
| | 700 | 486 | 0.053 | 0.083 | 8 - 12 - 19 | 29 | 3.56 | 229 | 13.1 | 20.7 | 2.4 - 3.5 - 5.8 | 43 | 39 | 43 | 39 | 29 | 19 | | |
| | 800 | 556 | 0.069 | 0.109 | 9 - 13 - 20 | 31 | 4.06 | 262 | 17.1 | 27.0 | 2.7 - 4.0 - 6.2 | 45 | 42 | 45 | 42 | 34 | 24 | | |
| | 900 | 625 | 0.087 | 0.137 | 10 - 15 - 22 | 34 | 4.57 | 295 | 21.6 | 34.2 | 3.0 - 4.5 - 6.6 | 46 | 43 | 47 | 45 | 38 | 28 | | |
| | 1000 | 694 | 0.107 | 0.170 | 11 - 16 - 23 | 36 | 5.08 | 328 | 26.7 | 42.2 | 3.4 - 4.9 - 7.0 | 46 | 45 | 49 | 48 | 41 | 31 | | |
| 1100 | 764 | 0.130 | 0.205 | 12 - 17 - 24 | 38 | 5.59 | 361 | 32.3 | 51.1 | 3.7 - 5.2 - 7.3 | 47 | 46 | 51 | 50 | 44 | 34 | | | |
| 12" x 12" | 300 | 300 | 0.014 | 0.019 | 2 - 4 - 12 | 12 | 1.52 | 142 | 3.4 | 4.8 | 0.6 - 1.4 - 3.6 | 37 | 27 | 29 | 19 | - | - | | |
| | 400 | 400 | 0.024 | 0.034 | 4 - 8 - 16 | 18 | 2.03 | 189 | 6.0 | 8.5 | 1.1 - 2.4 - 4.8 | 39 | 31 | 34 | 26 | 12 | - | | |
| | 500 | 500 | 0.038 | 0.053 | 5 - 10 - 19 | 22 | 2.54 | 236 | 9.3 | 13.2 | 1.7 - 3.0 - 5.9 | 41 | 35 | 38 | 31 | 19 | - | | |
| | 600 | 600 | 0.054 | 0.076 | 8 - 12 - 21 | 26 | 3.05 | 283 | 13.5 | 19.0 | 2.4 - 3.6 - 6.5 | 43 | 38 | 41 | 36 | 26 | 16 | | |
| | 700 | 700 | 0.074 | 0.104 | 9 - 14 - 23 | 29 | 3.56 | 330 | 18.3 | 25.9 | 2.8 - 4.2 - 7.0 | 44 | 40 | 44 | 40 | 31 | 21 | | |
| | 800 | 800 | 0.096 | 0.136 | 11 - 16 - 25 | 32 | 4.06 | 378 | 23.9 | 33.9 | 3.2 - 4.8 - 7.5 | 45 | 42 | 46 | 43 | 35 | 26 | | |
| | 900 | 900 | 0.122 | 0.172 | 12 - 18 - 26 | 35 | 4.57 | 425 | 30.3 | 42.9 | 3.6 - 5.4 - 7.9 | 46 | 44 | 48 | 46 | 39 | 30 | | |
| | 1000 | 1000 | 0.150 | 0.212 | 13 - 19 - 27 | 37 | 5.08 | 472 | 37.4 | 52.9 | 4.0 - 5.9 - 8.4 | 47 | 45 | 50 | 49 | 43 | 33 | | |
| 1100 | 1100 | 0.182 | 0.257 | 15 - 20 - 29 | 39 | 5.59 | 519 | 45.2 | 64.0 | 4.4 - 6.2 - 8.8 | 48 | 47 | 52 | 51 | 46 | 36 | | | |
| 14" x 14" | 300 | 408 | 0.018 | 0.024 | 2 - 5 - 14 | 12 | 1.52 | 193 | 4.5 | 5.9 | 0.7 - 1.6 - 4.2 | 37 | 27 | 30 | 20 | - | - | | |
| | 400 | 544 | 0.032 | 0.042 | 4 - 9 - 19 | 18 | 2.03 | 257 | 8.0 | 10.5 | 1.2 - 2.8 - 5.6 | 40 | 32 | 35 | 27 | 13 | - | | |
| | 500 | 681 | 0.050 | 0.066 | 6 - 12 - 23 | 23 | 2.54 | 321 | 12.5 | 16.4 | 1.9 - 3.5 - 6.9 | 42 | 35 | 39 | 32 | 21 | 12 | | |
| | 600 | 817 | 0.072 | 0.095 | 9 - 14 - 25 | 27 | 3.05 | 385 | 18.0 | 23.6 | 2.8 - 4.2 - 7.6 | 43 | 38 | 42 | 37 | 27 | 18 | | |
| | 700 | 953 | 0.098 | 0.129 | 11 - 16 - 27 | 30 | 3.56 | 450 | 24.5 | 32.1 | 3.3 - 4.9 - 8.2 | 45 | 40 | 44 | 41 | 32 | 23 | | |
| | 800 | 1089 | 0.129 | 0.168 | 12 - 19 - 29 | 33 | 4.06 | 514 | 32.0 | 41.9 | 3.8 - 5.6 - 8.7 | 46 | 42 | 47 | 44 | 37 | 28 | | |
| | 900 | 1225 | 0.163 | 0.213 | 14 - 21 - 30 | 36 | 4.57 | 578 | 40.5 | 53.1 | 4.2 - 6.3 - 9.2 | 47 | 44 | 49 | 47 | 41 | 31 | | |
| | 1000 | 1361 | 0.201 | 0.263 | 15 - 23 - 32 | 38 | 5.08 | 642 | 50.0 | 65.5 | 4.7 - 6.9 - 9.7 | 48 | 46 | 50 | 49 | 44 | 35 | | |
| 1100 | 1497 | 0.243 | 0.318 | 17 - 24 - 34 | 40 | 5.59 | 707 | 60.5 | 79.3 | 5.2 - 7.2 - 10.2 | 49 | 47 | 52 | 52 | 47 | 38 | | | |
| 16" x 16" | 300 | 533 | 0.023 | 0.029 | 3 - 6 - 16 | 13 | 1.52 | 252 | 5.8 | 7.2 | 0.8 - 1.8 - 4.8 | 38 | 28 | 30 | 20 | - | - | | |
| | 400 | 711 | 0.041 | 0.051 | 5 - 11 - 21 | 19 | 2.03 | 336 | 10.3 | 12.8 | 1.4 - 3.2 - 6.4 | 40 | 32 | 35 | 27 | 15 | - | | |
| | 500 | 889 | 0.065 | 0.080 | 7 - 13 - 26 | 24 | 2.54 | 420 | 16.1 | 20.0 | 2.2 - 4.0 - 7.9 | 42 | 36 | 39 | 33 | 22 | 14 | | |
| | 600 | 1067 | 0.093 | 0.116 | 11 - 16 - 28 | 28 | 3.05 | 503 | 23.2 | 28.8 | 3.2 - 4.8 - 8.6 | 44 | 38 | 42 | 37 | 28 | 20 | | |
| | 700 | 1244 | 0.127 | 0.158 | 12 - 19 - 31 | 31 | 3.56 | 587 | 31.6 | 39.2 | 3.8 - 5.6 - 9.3 | 45 | 41 | 45 | 41 | 33 | 25 | | |
| | 800 | 1422 | 0.166 | 0.206 | 14 - 21 - 33 | 34 | 4.06 | 671 | 41.3 | 51.2 | 4.3 - 6.4 - 10.0 | 46 | 43 | 47 | 45 | 38 | 29 | | |
| | 900 | 1600 | 0.210 | 0.260 | 16 - 24 - 35 | 36 | 4.57 | 755 | 52.3 | 64.9 | 4.8 - 7.3 - 10.6 | 47 | 45 | 49 | 48 | 42 | 33 | | |
| | 1000 | 1778 | 0.259 | 0.322 | 18 - 26 - 37 | 38 | 5.08 | 839 | 64.6 | 80.1 | 5.4 - 7.9 - 11.1 | 48 | 46 | 51 | 50 | 45 | 36 | | |
| 1100 | 1956 | 0.314 | 0.389 | 19 - 27 - 38 | 40 | 5.59 | 923 | 78.1 | 96.9 | 5.9 - 8.3 - 11.7 | 49 | 48 | 53 | 52 | 48 | 40 | | | |
| 18" x 18" | 300 | 675 | 0.029 | 0.035 | 3 - 7 - 18 | 14 | 1.52 | 319 | 7.3 | 8.7 | 0.9 - 2.0 - 5.4 | 38 | 28 | 31 | 21 | - | - | | |
| | 400 | 900 | 0.052 | 0.062 | 5 - 12 - 24 | 20 | 2.03 | 425 | 13.0 | 15.5 | 1.6 - 3.6 - 7.3 | 41 | 32 | 36 | 28 | 16 | - | | |
| | 500 | 1125 | 0.081 | 0.097 | 8 - 15 - 29 | 24 | 2.54 | 531 | 20.3 | 24.1 | 2.5 - 4.5 - 8.9 | 43 | 36 | 39 | 34 | 23 | 15 | | |
| | 600 | 1350 | 0.117 | 0.140 | 12 - 18 - 32 | 28 | 3.05 | 637 | 29.2 | 34.8 | 3.6 - 5.4 - 9.7 | 44 | 39 | 43 | 38 | 29 | 21 | | |
| | 700 | 1575 | 0.160 | 0.190 | 14 - 21 - 34 | 31 | 3.56 | 743 | 39.7 | 47.3 | 4.2 - 6.3 - 10.5 | 46 | 41 | 45 | 42 | 34 | 26 | | |
| | 800 | 1800 | 0.208 | 0.248 | 16 - 24 - 37 | 34 | 4.06 | 850 | 51.9 | 61.8 | 4.8 - 7.3 - 11.2 | 47 | 43 | 48 | 45 | 39 | 31 | | |
| | 900 | 2025 | 0.264 | 0.314 | 18 - 27 - 39 | 37 | 4.57 | 956 | 65.7 | 78.2 | 5.4 - 8.2 - 11.9 | 48 | 45 | 50 | 48 | 43 | 34 | | |
| | 1000 | 2250 | 0.326 | 0.388 | 20 - 29 - 41 | 39 | 5.08 | 1062 | 81.1 | 96.6 | 6.0 - 8.9 - 12.5 | 49 | 47 | 51 | 51 | 46 | 38 | | |
| 1100 | 2475 | 0.394 | 0.469 | 22 - 31 - 43 | 41 | 5.59 | 1168 | 98.1 | 116.9 | 6.6 - 9.3 - 13.1 | 50 | 48 | 53 | 53 | 50 | 41 | | | |

NOTE: See page C1-22 for notes.

6200, 56200 (Supply) Performance Data: Horizontal Throw

IP/METRIC DATA: 6200, 56200, 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" x 6" | 300 | 75 | 3 - 7 - 14 | 3 - 6 - 11 | 1 - 3 - 8 | 1.52 | 35.4 | 1.0 - 2.2 - 4.1 | 0.8 - 1.7 - 3.4 | 0.4 - 0.9 - 2.4 |
| | 400 | 100 | 6 - 10 - 16 | 5 - 8 - 13 | 2 - 5 - 11 | 2.03 | 47.2 | 1.8 - 3.1 - 4.8 | 1.4 - 2.4 - 3.9 | 0.7 - 1.5 - 3.2 |
| | 500 | 125 | 9 - 12 - 18 | 7 - 10 - 14 | 3 - 7 - 12 | 2.54 | 59.0 | 2.6 - 3.8 - 5.3 | 2.0 - 3.0 - 4.4 | 1.1 - 2.0 - 3.7 |
| | 600 | 150 | 10 - 14 - 19 | 8 - 11 - 16 | 5 - 8 - 13 | 3.05 | 70.8 | 3.1 - 4.1 - 5.8 | 2.4 - 3.4 - 4.8 | 1.5 - 2.4 - 4.0 |
| | 700 | 175 | 12 - 15 - 21 | 9 - 12 - 17 | 6 - 9 - 14 | 3.56 | 82.6 | 3.6 - 4.5 - 6.3 | 2.8 - 3.6 - 5.2 | 1.9 - 2.8 - 4.3 |
| | 800 | 200 | 13 - 16 - 22 | 10 - 13 - 18 | 7 - 11 - 15 | 4.06 | 94.4 | 3.9 - 4.8 - 6.7 | 3.2 - 3.9 - 5.5 | 2.1 - 3.2 - 4.6 |
| | 900 | 225 | 14 - 17 - 23 | 11 - 14 - 19 | 8 - 11 - 16 | 4.57 | 106.2 | 4.1 - 5.0 - 7.1 | 3.4 - 4.1 - 5.8 | 2.4 - 3.5 - 4.9 |
| | 1000 | 250 | 14 - 18 - 25 | 12 - 14 - 20 | 9 - 12 - 17 | 5.08 | 118.0 | 4.3 - 5.3 - 7.5 | 3.6 - 4.4 - 6.2 | 2.7 - 3.7 - 5.2 |
| | 1100 | 275 | 15 - 18 - 26 | 12 - 15 - 21 | 10 - 13 - 18 | 5.59 | 129.8 | 4.6 - 5.6 - 7.9 | 3.7 - 4.6 - 6.5 | 2.9 - 3.8 - 5.4 |
| 8" x 8" | 300 | 133 | 4 - 10 - 18 | 3 - 8 - 15 | 2 - 4 - 11 | 1.52 | 62.9 | 1.3 - 3.0 - 5.5 | 1.0 - 2.3 - 4.5 | 0.5 - 1.1 - 3.2 |
| | 400 | 178 | 8 - 14 - 21 | 6 - 10 - 17 | 3 - 7 - 14 | 2.03 | 83.9 | 2.4 - 4.1 - 6.3 | 1.8 - 3.2 - 5.2 | 0.9 - 2.0 - 4.3 |
| | 500 | 222 | 11 - 17 - 23 | 9 - 13 - 19 | 5 - 9 - 16 | 2.54 | 104.9 | 3.5 - 5.0 - 7.1 | 2.6 - 4.0 - 5.8 | 1.4 - 2.7 - 4.9 |
| | 600 | 267 | 14 - 18 - 26 | 10 - 15 - 21 | 7 - 11 - 18 | 3.05 | 125.9 | 4.1 - 5.5 - 7.8 | 3.2 - 4.5 - 6.4 | 2.0 - 3.2 - 5.3 |
| | 700 | 311 | 16 - 20 - 28 | 12 - 16 - 23 | 8 - 12 - 19 | 3.56 | 146.8 | 4.8 - 5.9 - 8.4 | 3.7 - 4.9 - 6.9 | 2.5 - 3.7 - 5.8 |
| | 800 | 356 | 17 - 21 - 30 | 14 - 17 - 24 | 9 - 14 - 20 | 4.06 | 167.8 | 5.2 - 6.3 - 9.0 | 4.2 - 5.2 - 7.3 | 2.8 - 4.3 - 6.2 |
| | 900 | 400 | 18 - 22 - 31 | 15 - 18 - 26 | 11 - 15 - 22 | 4.57 | 188.8 | 5.5 - 6.7 - 9.5 | 4.5 - 5.5 - 7.8 | 3.2 - 4.6 - 6.5 |
| | 1000 | 444 | 19 - 23 - 33 | 16 - 19 - 27 | 12 - 16 - 23 | 5.08 | 209.8 | 5.8 - 7.1 - 10.0 | 4.7 - 5.8 - 8.2 | 3.6 - 4.9 - 6.9 |
| | 1100 | 489 | 20 - 24 - 35 | 16 - 20 - 28 | 13 - 17 - 24 | 5.59 | 230.7 | 6.1 - 7.4 - 10.5 | 5.0 - 6.1 - 8.6 | 3.9 - 5.1 - 7.2 |
| 10" x 10" | 300 | 208 | 5 - 12 - 23 | 4 - 10 - 19 | 2 - 5 - 13 | 1.52 | 98.3 | 1.7 - 3.7 - 6.9 | 1.3 - 2.9 - 5.6 | 0.6 - 1.4 - 4.0 |
| | 400 | 278 | 10 - 17 - 26 | 8 - 13 - 21 | 4 - 8 - 18 | 2.03 | 131.1 | 2.9 - 5.2 - 7.9 | 2.3 - 4.0 - 6.5 | 1.1 - 2.6 - 5.3 |
| | 500 | 347 | 14 - 21 - 29 | 11 - 16 - 24 | 6 - 11 - 20 | 2.54 | 163.9 | 4.3 - 6.3 - 8.9 | 3.3 - 5.0 - 7.3 | 1.8 - 3.3 - 6.1 |
| | 600 | 417 | 17 - 23 - 32 | 13 - 19 - 26 | 8 - 13 - 22 | 3.05 | 196.6 | 5.2 - 6.9 - 9.7 | 4.0 - 5.6 - 8.0 | 2.6 - 4.0 - 6.7 |
| | 700 | 486 | 20 - 24 - 35 | 15 - 20 - 28 | 10 - 15 - 24 | 3.56 | 229.4 | 6.0 - 7.4 - 10.5 | 4.6 - 6.1 - 8.6 | 3.1 - 4.7 - 7.2 |
| | 800 | 556 | 21 - 26 - 37 | 17 - 21 - 30 | 12 - 18 - 25 | 4.06 | 262.2 | 6.5 - 7.9 - 11.2 | 5.3 - 6.5 - 9.2 | 3.6 - 5.3 - 7.7 |
| | 900 | 625 | 23 - 28 - 39 | 19 - 23 - 32 | 13 - 19 - 27 | 4.57 | 295.0 | 6.9 - 8.4 - 11.9 | 5.6 - 6.9 - 9.7 | 4.0 - 5.8 - 8.2 |
| | 1000 | 694 | 24 - 29 - 41 | 20 - 24 - 34 | 15 - 20 - 28 | 5.08 | 327.7 | 7.2 - 8.9 - 12.5 | 5.9 - 7.3 - 10.3 | 4.4 - 6.1 - 8.6 |
| | 1100 | 764 | 25 - 31 - 43 | 20 - 25 - 35 | 16 - 21 - 30 | 5.59 | 360.5 | 7.6 - 9.3 - 13.2 | 6.2 - 7.6 - 10.8 | 4.9 - 6.4 - 9.0 |
| 12" x 12" | 300 | 300 | 7 - 15 - 27 | 5 - 11 - 22 | 3 - 6 - 16 | 1.52 | 141.6 | 2.0 - 4.5 - 8.2 | 1.6 - 3.5 - 6.8 | 0.8 - 1.7 - 4.8 |
| | 400 | 400 | 12 - 20 - 31 | 9 - 16 - 26 | 4 - 10 - 21 | 2.03 | 188.8 | 3.5 - 6.2 - 9.5 | 2.8 - 4.8 - 7.8 | 1.4 - 3.1 - 6.4 |
| | 500 | 500 | 17 - 25 - 35 | 13 - 20 - 29 | 7 - 13 - 24 | 2.54 | 236.0 | 5.2 - 7.5 - 10.6 | 4.0 - 5.9 - 8.7 | 2.1 - 4.0 - 7.3 |
| | 600 | 600 | 20 - 27 - 38 | 16 - 22 - 31 | 10 - 16 - 26 | 3.05 | 283.2 | 6.2 - 8.2 - 11.7 | 4.8 - 6.8 - 9.5 | 3.1 - 4.8 - 8.0 |
| | 700 | 700 | 24 - 29 - 41 | 18 - 24 - 34 | 12 - 18 - 28 | 3.56 | 330.4 | 7.2 - 8.9 - 12.6 | 5.6 - 7.3 - 10.3 | 3.7 - 5.6 - 8.7 |
| | 800 | 800 | 26 - 31 - 44 | 21 - 26 - 36 | 14 - 21 - 30 | 4.06 | 377.6 | 7.8 - 9.5 - 13.5 | 6.3 - 7.8 - 11.0 | 4.3 - 6.4 - 9.3 |
| | 900 | 900 | 27 - 33 - 47 | 22 - 27 - 38 | 16 - 23 - 32 | 4.57 | 424.8 | 8.2 - 10.1 - 14.3 | 6.8 - 8.3 - 11.7 | 4.8 - 6.9 - 9.8 |
| | 1000 | 1000 | 29 - 35 - 50 | 23 - 29 - 41 | 18 - 24 - 34 | 5.08 | 471.9 | 8.7 - 10.6 - 15.1 | 7.1 - 8.7 - 12.3 | 5.3 - 7.3 - 10.3 |
| | 1100 | 1100 | 30 - 37 - 52 | 25 - 30 - 43 | 19 - 25 - 36 | 5.59 | 519.1 | 9.1 - 11.2 - 15.8 | 7.5 - 9.1 - 12.9 | 5.9 - 7.7 - 10.8 |
| 14" x 14" | 300 | 408 | 8 - 17 - 32 | 6 - 13 - 26 | 3 - 7 - 18 | 1.52 | 192.7 | 2.3 - 5.2 - 9.6 | 1.8 - 4.1 - 7.9 | 0.9 - 2.0 - 5.6 |
| | 400 | 544 | 14 - 24 - 37 | 11 - 18 - 30 | 5 - 12 - 25 | 2.03 | 257.0 | 4.1 - 7.2 - 11.1 | 3.2 - 5.6 - 9.1 | 1.6 - 3.6 - 7.5 |
| | 500 | 681 | 20 - 29 - 41 | 15 - 23 - 33 | 8 - 15 - 28 | 2.54 | 321.2 | 6.0 - 8.8 - 12.4 | 4.6 - 6.9 - 10.2 | 2.5 - 4.7 - 8.5 |
| | 600 | 817 | 24 - 32 - 45 | 18 - 26 - 37 | 12 - 18 - 31 | 3.05 | 385.4 | 7.2 - 9.6 - 13.6 | 5.6 - 7.9 - 11.1 | 3.6 - 5.6 - 9.3 |
| | 700 | 953 | 28 - 34 - 48 | 21 - 28 - 40 | 14 - 21 - 33 | 3.56 | 449.7 | 8.5 - 10.4 - 14.7 | 6.5 - 8.5 - 12.0 | 4.4 - 6.5 - 10.1 |
| | 800 | 1089 | 30 - 37 - 52 | 24 - 30 - 42 | 16 - 25 - 36 | 4.06 | 513.9 | 9.1 - 11.1 - 15.7 | 7.4 - 9.1 - 12.9 | 5.0 - 7.5 - 10.8 |
| | 900 | 1225 | 32 - 39 - 55 | 26 - 32 - 45 | 18 - 27 - 38 | 4.57 | 578.1 | 9.6 - 11.8 - 16.7 | 7.9 - 9.6 - 13.6 | 5.6 - 8.1 - 11.4 |
| | 1000 | 1361 | 33 - 41 - 58 | 27 - 33 - 47 | 20 - 28 - 40 | 5.08 | 642.4 | 10.1 - 12.4 - 17.6 | 8.3 - 10.2 - 14.4 | 6.2 - 8.5 - 12.1 |
| | 1100 | 1497 | 35 - 43 - 61 | 29 - 35 - 50 | 23 - 29 - 42 | 5.59 | 706.6 | 10.6 - 13.0 - 18.4 | 8.7 - 10.7 - 15.1 | 6.8 - 8.9 - 12.7 |
| 16" x 16" | 300 | 533 | 9 - 20 - 36 | 7 - 15 - 30 | 3 - 8 - 21 | 1.52 | 251.7 | 2.6 - 6.0 - 11.0 | 2.1 - 4.7 - 9.0 | 1.0 - 2.3 - 6.4 |
| | 400 | 711 | 15 - 27 - 42 | 12 - 21 - 34 | 6 - 13 - 28 | 2.03 | 335.6 | 4.7 - 8.3 - 12.7 | 3.7 - 6.3 - 10.4 | 1.8 - 4.1 - 8.5 |
| | 500 | 889 | 23 - 33 - 47 | 17 - 26 - 38 | 9 - 18 - 32 | 2.54 | 419.5 | 6.9 - 10.0 - 14.2 | 5.3 - 7.9 - 11.6 | 2.8 - 5.3 - 9.8 |
| | 600 | 1067 | 27 - 36 - 51 | 21 - 30 - 42 | 13 - 21 - 35 | 3.05 | 503.4 | 8.3 - 11.0 - 15.5 | 6.3 - 9.0 - 12.7 | 4.1 - 6.4 - 10.7 |
| | 700 | 1244 | 32 - 39 - 55 | 24 - 32 - 45 | 16 - 25 - 38 | 3.56 | 587.3 | 9.7 - 11.9 - 16.8 | 7.4 - 9.7 - 13.8 | 5.0 - 7.5 - 11.5 |
| | 800 | 1422 | 34 - 42 - 59 | 28 - 34 - 48 | 19 - 28 - 41 | 4.06 | 671.2 | 10.4 - 12.7 - 18.0 | 8.5 - 10.4 - 14.7 | 5.7 - 8.5 - 12.3 |
| | 900 | 1600 | 36 - 44 - 63 | 30 - 36 - 51 | 21 - 30 - 43 | 4.57 | 755.1 | 11.0 - 13.5 - 19.0 | 9.0 - 11.0 - 15.6 | 6.4 - 9.3 - 13.1 |
| | 1000 | 1778 | 38 - 47 - 66 | 31 - 38 - 54 | 23 - 32 - 45 | 5.08 | 839.0 | 11.6 - 14.2 - 20.1 | 9.5 - 11.6 - 16.4 | 7.1 - 9.8 - 13.8 |
| | 1100 | 1956 | 40 - 49 - 69 | 33 - 40 - 57 | 26 - 34 - 48 | 5.59 | 922.9 | 12.2 - 14.9 - 21.1 | 10.0 - 12.2 - 17.2 | 7.8 - 10.2 - 14.5 |
| 18" x 18" | 300 | 675 | 10 - 22 - 41 | 8 - 17 - 33 | 4 - 8 - 24 | 1.52 | 318.6 | 3.0 - 6.7 - 12.4 | 2.3 - 5.2 - 10.1 | 1.1 - 2.6 - 7.2 |
| | 400 | 900 | 17 - 31 - 47 | 14 - 23 - 38 | 7 - 15 - 32 | 2.03 | 424.8 | 5.3 - 9.3 - 14.3 | 4.1 - 7.1 - 11.7 | 2.0 - 4.6 - 9.6 |
| | 500 | 1125 | 26 - 37 - 53 | 20 - 29 - 43 | 10 - 20 - 36 | 2.54 | 530.9 | 7.8 - 11.3 - 16.0 | 5.9 - 8.9 - 13.1 | 3.2 - 6.0 - 11.0 |
| | 600 | 1350 | 31 - 41 - 58 | 23 - 33 - 47 | 15 - 24 - 40 | 3.05 | 637.1 | 9.3 - 12.4 - 17.5 | 7.1 - 10.1 - 14.3 | 4.6 - 7.2 - 12.0 |
| | 700 | 1575 | 36 - 44 - 62 | 27 - 36 - 51 | 18 - 28 - 43 | 3.56 | 743.3 | 10.9 - 13.4 - 18.9 | 8.3 - 10.9 - 15.5 | 5.6 - 8.4 - 13.0 |
| | 800 | 1800 | 38 - 47 - 66 | 31 - 38 - 54 | 21 - 32 - 46 | 4.06 | 849.5 | 11.7 - 14.3 - 20.2 | 9.5 - 11.7 - 16.5 | 6.4 - 9.6 - 13.9 |
| | 900 | 2025 | 41 - 50 - 70 | 33 - 41 - 58 | 24 - 34 - 48 | 4.57 | 955.7 | 12.4 - 15.1 - 21.4 | 10.1 - 12.4 - 17.5 | 7.2 - 10.4 - 14.7 |
| | 1000 | 2250 | 43 - 53 - 74 | 35 - 43 - 61 | 26 - 36 - 51 | 5.08 | 1061.9 | 13.0 - 16.0 - 22.6 | 10.7 - 13.1 - 18.5 | 8.0 - 11.0 - 15.5 |
| | 1100 | 2475 | 45 - 55 - 78 | 37 - 45 - 64 | 29 - 38 - 54 | 5.59 | 1168.1 | 13.7 - 16.7 - 23.7 | 11.2 - 13.7 - 19.4 | 8.8 - 11.5 - 16.3 |

PERFORATED FACE DIFFUSERS

 6
2
0
0
-
5
6
2
0
0

NOTE: See page C1-23 for notes.

6200FR, 6290FR | Curved Blade, Fire Rated

6200FR, 6290FR (Fire Rated Supply/Return) Suggested Specification & Configuration

6200FR

The perforated face fire rated supply diffuser shall be Krueger model 6200FR. The diffuser must be UL classified fire rated ceiling diffuser assembly listed in Underwriters Laboratories [Fire Resistance Directory](#). The diffuser shall be tested in accordance with UL 263 and must meet NFPA 90 requirements. The diffuser must be able to operate in three-hour fire-rated, exposed grid suspended ceiling. 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 square 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.

6290FR

The perforated face fire rated return diffuser shall be Krueger model 6290FR. The diffuser must be UL classified fire rated ceiling diffuser assembly listed in Underwriters Laboratories [Fire Resistance Directory](#). The diffuser shall be tested in accordance with UL 263 and must meet NFPA 90 requirements. The diffuser must be able to operate in three-hour fire-rated, exposed grid suspended ceiling. 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 square neck.

The return diffuser shall match the Krueger model 6200FR diffuser in appearance. The perforated face must be easily removable from the backpan.

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.

- 1. SERIES: (XXXXXX)**
6200FR - Perforated, Square Neck with Backpan Mounted Adjustable Curved Blades, Steel Fire Rated Supply Diffuser
6290FR - Perforated, Square Neck, Steel Fire Rated Return
- 2. PATTERN: (XXX)**
01 - 1-Way
02 - 2-Way
03 - 3-Way
04 - 4-Way
02C - 2-Way Corner
90 - Return
- 3. WIDTH: SQUARE NECK ONLY (XX)**
6" - 14" in 2" Increments
- 4. HEIGHT: SQUARE NECK ONLY (XX)**
6" - 14" in 2" Increments
- 5. FRAME: (XXX)**
F23 - Lay-in T-Bar
- 6. PANEL: (XX)x(XX)**
24"x24"
- 7. FINISH: (XX)**
01 - Mill
10 - Alumican
35 - Black
44 - British White



PERFORATED FACE DIFFUSERS

6200FR - 6290FR

SAMPLE CONFIGURATION: 6200FR - 04 - 14x14 - F23 - 24x24 - 44