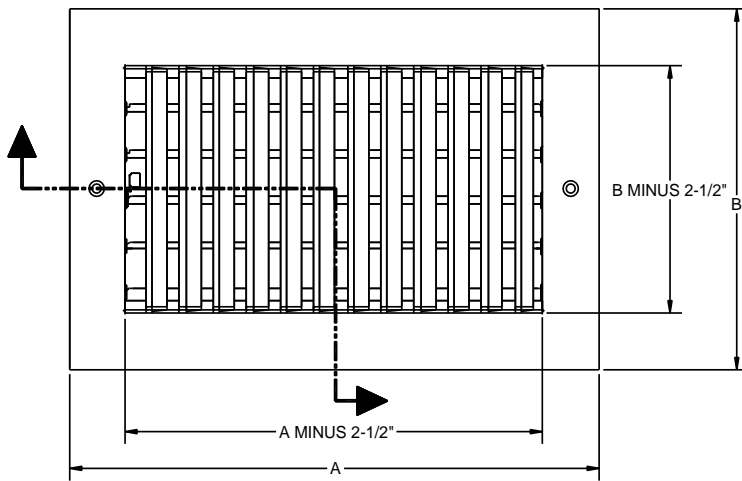
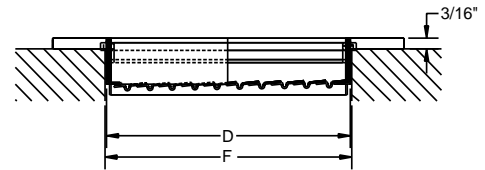
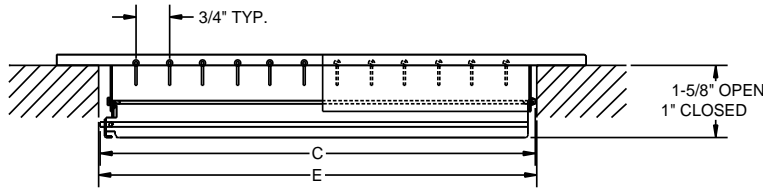




MFVSCA SERIES VERTICAL ADJUSTABLE SIDEWALL CEILING REGISTER SPECIFICATION CHART



- **Heavy Gauge Steel Construction**
- **Vertical Single Deflection**
- **Adjustable Front Fins**
- **Multi-Shutter Damper**
- **Finish: White**

| Vertical Adjustable Sidewall/Ceiling Register Dimensional Chart | | | | | | | | | |
|---|----------------------------------|--------|--------|-------|------------|----------------------------------|--------|--------|--------|
| Size (ExF) | Dimensions (See Detail Sketches) | | | | Size (ExF) | Dimensions (See Detail Sketches) | | | |
| | A | B | C | D | | A | B | C | D |
| 8 x 4 | 9-7/8 | 5-7/8 | 7-7/8 | 3-1/2 | 14 x 14 | 15-7/8 | 15-7/8 | 13-7/8 | 13-1/2 |
| 8 x 6 | 9-7/8 | 7-7/8 | 7-7/8 | 5-1/2 | 16 x 16 | 17-7/8 | 17-7/8 | 15-7/8 | 15-1/2 |
| 10 x 6 | 11-7/8 | 7-7/8 | 9-7/8 | 5-1/2 | 18 x 6 | 19-7/8 | 7-7/8 | 17-7/8 | 5-1/2 |
| 10 x 10 | 11-7/8 | 11-7/8 | 9-7/8 | 9-1/2 | 24 x 6 | 25-7/8 | 7-7/8 | 23-7/8 | 5-1/2 |
| 14 x 6 | 15-7/8 | 7-7/8 | 13-7/8 | 5-1/2 | 24 x 8 | 25-7/8 | 9-7/8 | 23-7/8 | 7-1/2 |
| 14 x 10 | 15-7/8 | 11-7/8 | 13-7/8 | 9-1/2 | | | | | |

DEFLECTION A

| Face Velocity | | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1600 | 1800 | 2000 |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Pressure Loss (In H₂O) | | 0.012 | 0.016 | 0.024 | 0.032 | 0.040 | 0.052 | 0.064 | 0.076 | 0.092 | 0.108 | 0.124 | 0.164 | 0.204 | 0.252 |
| 8 x 4 | cfm | 65 | 80 | 95 | 115 | 130 | 145 | 160 | 180 | 195 | 210 | 225 | 260 | 290 | 325 |
| Ak .16 | throw | 7.0 | 9.0 | 10.0 | 11.0 | 14.0 | 15.0 | 16.0 | 19.0 | 20.0 | 22.0 | 24.0 | 26.0 | 30.0 | 33.0 |
| 8 x 6 | cfm | 100 | 125 | 150 | 175 | 200 | 225 | 250 | 275 | 300 | 320 | 345 | 395 | 445 | 495 |
| Ak .25 | throw | 8.0 | 11.0 | 13.0 | 14.0 | 16.0 | 19.0 | 20.0 | 23.0 | 24.0 | 27.0 | 29.0 | 33.0 | 37.0 | 41.0 |
| 10 x 6 | cfm | 125 | 155 | 190 | 220 | 250 | 285 | 315 | 345 | 380 | 410 | 440 | 505 | 565 | 630 |
| Ak .32 | throw | 9.0 | 11.0 | 14.0 | 16.0 | 18.0 | 22.0 | 23.0 | 25.0 | 28.0 | 30.0 | 33.0 | 36.0 | 41.0 | 46.0 |
| 10 x 10 | cfm | 210 | 265 | 315 | 370 | 420 | 475 | 530 | 580 | 635 | 685 | 740 | 845 | 950 | 1055 |
| Ak .53 | throw | 12.0 | 15.0 | 19.0 | 21.0 | 23.0 | 27.0 | 29.0 | 33.0 | 35.0 | 38.0 | 41.0 | 48.0 | 53.0 | 60.0 |
| 14 x 6 | cfm | 180 | 225 | 270 | 315 | 360 | 405 | 450 | 495 | 540 | 580 | 625 | 715 | 805 | 895 |
| Ak .45 | throw | 11.0 | 13.0 | 16.0 | 19.0 | 23.0 | 24.0 | 27.0 | 30.0 | 33.0 | 35.0 | 39.0 | 43.0 | 50.0 | 54.0 |
| 14 x 10 | cfm | 300 | 375 | 450 | 525 | 600 | 675 | 750 | 825 | 900 | 975 | 1050 | 1200 | 1350 | 1500 |
| Ak .75 | throw | 14.0 | 17.0 | 20.0 | 24.0 | 27.0 | 31.0 | 34.0 | 38.0 | 41.0 | 45.0 | 48.0 | 55.0 | 62.0 | 69.0 |
| 14 x 14 | cfm | 425 | 535 | 640 | 750 | 855 | 965 | 1070 | 1180 | 1285 | 1390 | 1500 | 1715 | 1930 | 2140 |
| Ak 1.07 | throw | 18.0 | 22.0 | 26.0 | 30.0 | 34.0 | 38.0 | 42.0 | 47.0 | 51.0 | 55.0 | 59.0 | 67.0 | 75.0 | 84.0 |
| 16 x 16 | cfm | 560 | 700 | 845 | 985 | 1125 | 1265 | 1400 | 1545 | 1685 | 1825 | 1965 | 2250 | 2530 | 2810 |
| Ak 1.41 | throw | 19.0 | 24.0 | 29.0 | 34.0 | 39.0 | 45.0 | 50.0 | 54.0 | 59.0 | 64.0 | 68.0 | 77.0 | 86.0 | 95.0 |
| 18 x 6 | cfm | 230 | 285 | 340 | 400 | 455 | 515 | 570 | 625 | 685 | 740 | 800 | 910 | 1025 | 1140 |
| Ak .57 | throw | 12.0 | 15.0 | 18.0 | 22.0 | 24.0 | 28.0 | 30.0 | 33.0 | 37.0 | 39.0 | 43.0 | 49.0 | 55.0 | 61.0 |
| 24 x 6 | cfm | 310 | 385 | 465 | 540 | 620 | 695 | 775 | 850 | 930 | 1005 | 1085 | 1240 | 1395 | 1545 |
| Ak .77 | throw | 14.0 | 18.0 | 22.0 | 25.0 | 29.0 | 32.0 | 35.0 | 40.0 | 43.0 | 46.0 | 51.0 | 58.0 | 64.0 | 72.0 |
| 24 x 8 | cfm | 420 | 525 | 630 | 735 | 840 | 940 | 1045 | 1150 | 1255 | 1360 | 1465 | 1675 | 1885 | 2095 |
| Ak 1.05 | throw | 17.0 | 21.0 | 25.0 | 30.0 | 33.0 | 37.0 | 42.0 | 46.0 | 50.0 | 54.0 | 59.0 | 66.0 | 75.0 | 83.0 |

Terminal velocity of 75 fpm & Throw (ft)

*See page 4 for graph.

DEFLECTION C

| Face Velocity | | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1600 | 1800 | 2000 |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Pressure Loss (In H₂O) | | 0.012 | 0.016 | 0.024 | 0.032 | 0.040 | 0.052 | 0.064 | 0.076 | 0.092 | 0.108 | 0.124 | 0.164 | 0.204 | 0.252 |
| 8 x 4 | cfm | 55 | 70 | 85 | 100 | 115 | 130 | 140 | 155 | 170 | 185 | 200 | 225 | 255 | 285 |
| Ak .14 | throw | 5.0 | 6.0 | 8.0 | 9.0 | 10.0 | 11.0 | 13.0 | 14.0 | 15.0 | 17.0 | 18.0 | 20.0 | 22.0 | 25.0 |
| 8 x 6 | cfm | 85 | 110 | 130 | 150 | 175 | 195 | 215 | 240 | 260 | 280 | 300 | 345 | 390 | 430 |
| Ak .22 | throw | 6.0 | 8.0 | 10.0 | 11.0 | 13.0 | 14.0 | 15.0 | 17.0 | 18.0 | 21.0 | 22.0 | 24.0 | 28.0 | 30.0 |
| 10 x 6 | cfm | 110 | 140 | 165 | 195 | 220 | 250 | 275 | 305 | 330 | 360 | 390 | 445 | 500 | 555 |
| Ak .27 | throw | 7.0 | 9.0 | 10.0 | 12.0 | 14.0 | 16.0 | 17.0 | 19.0 | 22.0 | 22.0 | 24.0 | 27.0 | 32.0 | 34.0 |
| 10 x 10 | cfm | 185 | 235 | 280 | 325 | 370 | 420 | 465 | 510 | 560 | 605 | 650 | 745 | 835 | 930 |
| Ak .47 | throw | 9.0 | 11.0 | 14.0 | 16.0 | 18.0 | 20.0 | 22.0 | 26.0 | 27.0 | 29.0 | 32.0 | 36.0 | 40.0 | 45.0 |
| 14 x 6 | cfm | 155 | 195 | 235 | 275 | 315 | 355 | 395 | 430 | 470 | 510 | 550 | 630 | 705 | 785 |
| Ak .39 | throw | 8.0 | 10.0 | 13.0 | 14.0 | 17.0 | 19.0 | 20.0 | 24.0 | 25.0 | 27.0 | 30.0 | 33.0 | 38.0 | 42.0 |
| 14 x 10 | cfm | 270 | 340 | 405 | 475 | 540 | 610 | 675 | 745 | 810 | 880 | 945 | 1080 | 1215 | 1350 |
| Ak .68 | throw | 11.0 | 14.0 | 16.0 | 19.0 | 21.0 | 24.0 | 27.0 | 29.0 | 31.0 | 34.0 | 38.0 | 42.0 | 49.0 | 54.0 |
| 14 x 14 | cfm | 360 | 450 | 540 | 630 | 720 | 810 | 900 | 990 | 1080 | 1170 | 1260 | 1440 | 1620 | 1800 |
| Ak .90 | throw | 14.0 | 16.0 | 20.0 | 23.0 | 26.0 | 29.0 | 33.0 | 37.0 | 39.0 | 42.0 | 46.0 | 52.0 | 59.0 | 65.0 |
| 16 x 16 | cfm | 470 | 590 | 705 | 825 | 940 | 1060 | 1180 | 1295 | 1415 | 1530 | 1650 | 1885 | 2120 | 2355 |
| Ak 1.18 | throw | 17.0 | 19.0 | 21.0 | 26.0 | 28.0 | 33.0 | 36.0 | 39.0 | 43.0 | 47.0 | 50.0 | 57.0 | 64.0 | 73.0 |
| 18 x 6 | cfm | 195 | 245 | 295 | 345 | 395 | 445 | 495 | 545 | 590 | 640 | 690 | 790 | 890 | 985 |
| Ak .49 | throw | 9.0 | 11.0 | 14.0 | 17.0 | 18.0 | 22.0 | 24.0 | 26.0 | 29.0 | 31.0 | 32.0 | 38.0 | 42.0 | 47.0 |
| 24 x 6 | cfm | 265 | 330 | 395 | 460 | 530 | 595 | 660 | 725 | 790 | 860 | 925 | 1055 | 1190 | 1320 |
| Ak .66 | throw | 12.0 | 15.0 | 16.0 | 20.0 | 21.0 | 25.0 | 27.0 | 31.0 | 32.0 | 35.0 | 39.0 | 43.0 | 50.0 | 55.0 |
| 24 x 8 | cfm | 355 | 440 | 530 | 615 | 705 | 795 | 880 | 970 | 1060 | 1145 | 1235 | 1410 | 1590 | 1765 |
| Ak .88 | throw | 15.0 | 17.0 | 19.0 | 23.0 | 25.0 | 29.0 | 31.0 | 36.0 | 39.0 | 41.0 | 44.0 | 51.0 | 57.0 | 64.0 |

Terminal velocity of 75 fpm & Throw (ft)

*See page 4 for graph.

DEFLECTION E

| Face Velocity | | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1600 | 1800 | 2000 |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Pressure Loss (In H₂O) | | 0.012 | 0.016 | 0.024 | 0.032 | 0.040 | 0.052 | 0.064 | 0.076 | 0.092 | 0.108 | 0.124 | 0.164 | 0.204 | 0.252 |
| 8 x 4 | cfm | 50 | 65 | 75 | 90 | 100 | 115 | 125 | 140 | 150 | 165 | 175 | 200 | 225 | 250 |
| Ak .13 | throw | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 16.0 | 17.0 | 19.0 |
| 8 x 6 | cfm | 75 | 95 | 115 | 135 | 155 | 170 | 190 | 210 | 230 | 250 | 265 | 305 | 345 | 380 |
| Ak .19 | throw | 5.0 | 6.0 | 7.0 | 8.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 | 18.0 | 20.0 | 23.0 |
| 10 x 6 | cfm | 100 | 125 | 150 | 170 | 195 | 220 | 245 | 270 | 295 | 320 | 345 | 395 | 445 | 490 |
| Ak .25 | throw | 5.0 | 7.0 | 8.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 16.0 | 17.0 | 19.0 | 20.0 | 24.0 | 26.0 |
| 10 x 10 | cfm | 165 | 205 | 245 | 285 | 330 | 370 | 410 | 450 | 490 | 535 | 575 | 655 | 740 | 820 |
| Ak .41 | throw | 7.0 | 9.0 | 10.0 | 11.0 | 14.0 | 15.0 | 17.0 | 19.0 | 20.0 | 22.0 | 23.0 | 27.0 | 31.0 | 34.0 |
| 14 x 6 | cfm | 140 | 175 | 210 | 245 | 280 | 310 | 345 | 380 | 415 | 450 | 485 | 555 | 625 | 695 |
| Ak .35 | throw | 7.0 | 8.0 | 9.0 | 12.0 | 13.0 | 14.0 | 15.0 | 17.0 | 19.0 | 21.0 | 22.0 | 25.0 | 29.0 | 31.0 |
| 14 x 10 | cfm | 230 | 290 | 350 | 405 | 465 | 525 | 580 | 640 | 695 | 755 | 815 | 930 | 1045 | 1160 |
| Ak .58 | throw | 8.0 | 10.0 | 12.0 | 14.0 | 16.0 | 18.0 | 20.0 | 22.0 | 24.0 | 26.0 | 28.0 | 31.0 | 35.0 | 40.0 |
| 14 x 14 | cfm | 335 | 415 | 500 | 580 | 665 | 750 | 830 | 915 | 1000 | 1080 | 1165 | 1330 | 1500 | 1665 |
| Ak .83 | throw | 11.0 | 13.0 | 17.0 | 20.0 | 22.0 | 26.0 | 28.0 | 30.0 | 33.0 | 36.0 | 38.0 | 44.0 | 50.0 | 55.0 |
| 16 x 16 | cfm | 435 | 545 | 655 | 765 | 875 | 980 | 1090 | 1200 | 1310 | 1420 | 1525 | 1745 | 1965 | 2180 |
| Ak 1.09 | throw | 11.0 | 14.0 | 17.0 | 19.0 | 22.0 | 25.0 | 27.0 | 31.0 | 33.0 | 36.0 | 38.0 | 45.0 | 50.0 | 56.0 |
| 18 x 6 | cfm | 175 | 220 | 265 | 310 | 355 | 400 | 445 | 485 | 530 | 575 | 620 | 710 | 795 | 885 |
| Ak .44 | throw | 7.0 | 9.0 | 10.0 | 12.0 | 14.0 | 15.0 | 18.0 | 21.0 | 22.0 | 23.0 | 24.0 | 29.0 | 31.0 | 35.0 |
| 24 x 6 | cfm | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 | 960 | 1080 | 1200 |
| Ak .60 | throw | 9.0 | 10.0 | 12.0 | 14.0 | 16.0 | 19.0 | 21.0 | 22.0 | 24.0 | 27.0 | 28.0 | 32.0 | 37.0 | 41.0 |
| 24 x 8 | cfm | 325 | 405 | 490 | 570 | 650 | 730 | 815 | 895 | 975 | 1055 | 1140 | 1300 | 1465 | 1625 |
| Ak .81 | throw | 10.0 | 12.0 | 14.0 | 17.0 | 19.0 | 21.0 | 24.0 | 25.0 | 28.0 | 30.0 | 38.0 | 38.0 | 42.0 | 47.0 |

Terminal velocity of 75 fpm & Throw (ft)

*See page 4 for graph.

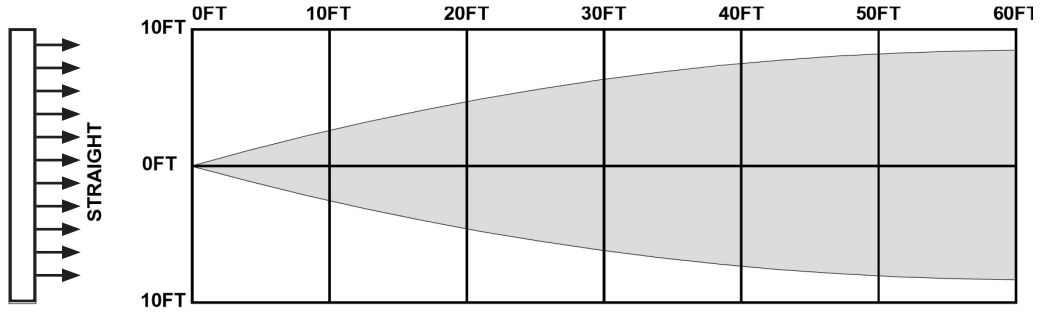
DEFLECTION G

| Face Velocity | | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1600 | 1800 | 2000 |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Pressure Loss (In H₂O) | | 0.012 | 0.016 | 0.024 | 0.032 | 0.040 | 0.052 | 0.064 | 0.076 | 0.092 | 0.108 | 0.124 | 0.164 | 0.204 | 0.252 |
| 8 x 4 | cfm | 50 | 60 | 70 | 85 | 95 | 110 | 120 | 130 | 145 | 155 | 170 | 190 | 215 | 240 |
| Ak .12 | throw | 3.0 | 4.0 | 5.0 | 5.0 | 6.0 | 7.0 | 7.0 | 8.0 | 9.0 | 10.0 | 10.0 | 11.0 | 13.0 | 14.0 |
| 8 x 6 | cfm | 70 | 90 | 105 | 125 | 140 | 160 | 175 | 195 | 210 | 230 | 245 | 280 | 315 | 350 |
| Ak .18 | throw | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 8.0 | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 16.0 |
| 10 x 6 | cfm | 90 | 110 | 135 | 155 | 180 | 200 | 225 | 245 | 270 | 290 | 315 | 360 | 405 | 450 |
| Ak .22 | throw | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 8.0 | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 16.0 | 17.0 |
| 10 x 10 | cfm | 150 | 185 | 225 | 260 | 300 | 335 | 375 | 410 | 450 | 485 | 525 | 600 | 675 | 750 |
| Ak .38 | throw | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 | 11.0 | 13.0 | 14.0 | 15.0 | 16.0 | 18.0 | 21.0 | 23.0 |
| 14 x 6 | cfm | 125 | 160 | 190 | 225 | 255 | 285 | 320 | 350 | 380 | 415 | 445 | 510 | 570 | 635 |
| Ak .32 | throw | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 | 19.0 | 20.0 |
| 14 x 10 | cfm | 210 | 265 | 320 | 370 | 425 | 475 | 530 | 585 | 635 | 690 | 740 | 850 | 955 | 1060 |
| Ak .53 | throw | 5.0 | 7.0 | 8.0 | 9.0 | 11.0 | 12.0 | 13.0 | 15.0 | 16.0 | 18.0 | 19.0 | 21.0 | 24.0 | 27.0 |
| 14 x 14 | cfm | 305 | 385 | 460 | 535 | 615 | 690 | 765 | 845 | 920 | 995 | 1075 | 1225 | 1380 | 1535 |
| Ak .77 | throw | 7.0 | 8.0 | 9.0 | 12.0 | 13.0 | 15.0 | 16.0 | 18.0 | 19.0 | 21.0 | 22.0 | 26.0 | 29.0 | 31.0 |
| 16 x 16 | cfm | 395 | 495 | 595 | 695 | 790 | 890 | 990 | 1090 | 1190 | 1285 | 1385 | 1585 | 1780 | 1980 |
| Ak .99 | throw | 7.0 | 9.0 | 12.0 | 13.0 | 15.0 | 17.0 | 19.0 | 20.0 | 22.0 | 24.0 | 26.0 | 30.0 | 34.0 | 37.0 |
| 18 x 6 | cfm | 160 | 200 | 240 | 280 | 320 | 365 | 405 | 445 | 485 | 525 | 565 | 645 | 725 | 805 |
| Ak .40 | throw | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 | 11.0 | 13.0 | 14.0 | 15.0 | 17.0 | 18.0 | 22.0 | 24.0 |
| 24 x 6 | cfm | 220 | 275 | 330 | 385 | 440 | 490 | 545 | 600 | 655 | 710 | 765 | 875 | 985 | 1095 |
| Ak .55 | throw | 6.0 | 7.0 | 8.0 | 10.0 | 11.0 | 12.0 | 14.0 | 15.0 | 17.0 | 18.0 | 20.0 | 21.0 | 25.0 | 27.0 |
| 24 x 8 | cfm | 295 | 370 | 445 | 520 | 595 | 665 | 740 | 815 | 890 | 965 | 1035 | 1185 | 1335 | 1480 |
| Ak .74 | throw | 7.0 | 8.0 | 10.0 | 11.0 | 14.0 | 15.0 | 16.0 | 18.0 | 19.0 | 20.0 | 23.0 | 26.0 | 28.0 | 32.0 |

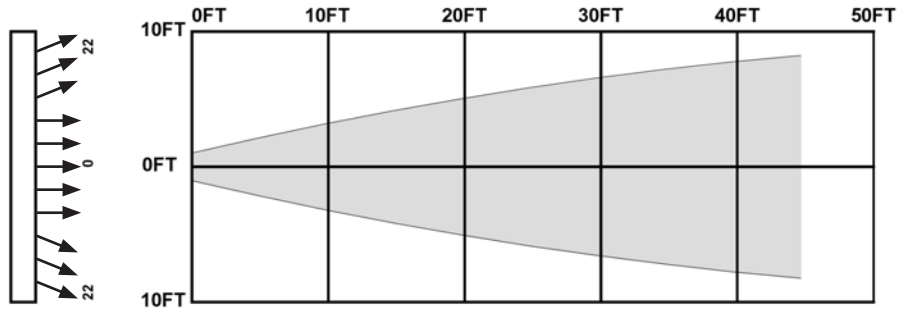
Terminal velocity of 75 fpm & Throw (ft)

*See page 4 for graph.

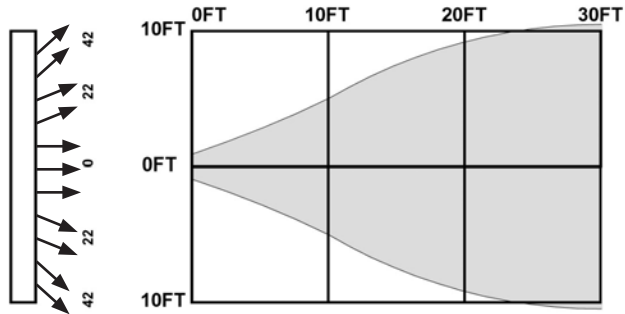
Deflection A



Deflection C



Deflection E



Deflection G

