



# Performance Data AVP-RA Combination Supply – Return

| SIZE  | NC LEVEL  | NC NOT EXCEEDING 30  |                       | NC NOT EXCEEDING 40   |                       | NC 50 OR OVER         |                         |                                 |
|---|---|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------------|---------------------------------|
|   | NECK VELOCITY                                       | 300                  | 400                   | 500                   | 600                   | 700                   | 800                     |                                 |
|   | TOTAL PRESSURE IN W.G. SUPPLY                       | .030                 | .059                  | .090                  | .10                   | .145                  | .198                    |                                 |
|   | TOTAL PRESSURE IN W.G. RETURN                       | .005                 | .009                  | .013                  | .019                  | .025                  | .035                    |                                 |
| SUPPLY<br>21 x 21<br>1.76 SQ. FT.<br>Ak .69   | CAP. IN C.F.M.<br>C.F.M. EA. SIDE<br>THROW EA. SIDE | 580<br>145<br>6-10   | 800<br>200<br>8-14    | 992<br>248<br>10-17   | 1200<br>300<br>12-19  | 1400<br>350<br>14-23  | 1600<br>400<br>16-26    | 3 TON<br>UNIT                   |
| 15 x 15 RETURN<br>1.56 SQ. FT.                | CAP. IN C.F.M.                                      | 465                  | 620                   | 750                   | 900                   | 1050                  | 1200                    |                                 |
| SUPPLY<br>24 x 24<br>2.50 SQ. FT.<br>Ak .80   | CAP. IN C.F.M.<br>C.F.M./SIDE<br>THROW/SIDE         | 700<br>175<br>6-10   | 940<br>235<br>8-13    | 1180<br>295<br>10-16  | 1400<br>350<br>12-19  | 1648<br>412<br>14-22  | 1908<br>477<br>16-26    | 3 OR 5<br>TON<br>UNIT           |
| 18 x 18 RETURN<br>2.25 SQ. FT.                | CAP. IN C.F.M.                                      | 675                  | 900                   | 1125                  | 1350                  | 1575                  | 1800                    |                                 |
| SUPPLY<br>27 x 27<br>2.80 SQ. FT.<br>Ak 1.01  | CAP. IN C.F.M.<br>C.F.M./SIDE<br>THROW/SIDE         | 860<br>215<br>7-12   | 1160<br>290<br>9-15   | 1456<br>364<br>11-18  | 1720<br>430<br>14-22  | 2000<br>500<br>15-25  | 2280<br>570<br>18-28    | 3, 5 OR 7½<br>TON UNIT          |
| 18 x 18 RETURN<br>2.25 SQ. FT.                | CAP. IN C.F.M.                                      | 675                  | 900                   | 1125                  | 1350                  | 1575                  | 1800                    |                                 |
| SUPPLY<br>33 x 33<br>4.65 SQ. FT.<br>Ak 1.63  | CAP. IN C.F.M.<br>C.F.M./SIDE<br>THROW/SIDE         | 1380<br>345<br>7-13  | 1840<br>460<br>10-17  | 2300<br>575<br>13-21  | 2780<br>695<br>15-24  | 3200<br>800<br>18-28  | 3700<br>925<br>20-32    | 5, 7½ OR 10<br>TON UNIT         |
| 21 x 21 RETURN<br>3.06 SQ. FT.                | CAP. IN C.F.M.                                      | 900                  | 1200                  | 1500                  | 1800                  | 2100                  | 2400                    |                                 |
| SUPPLY<br>36 x 36<br>5.08 SQ. FT.<br>Ak 1.80  | CAP. IN C.F.M.<br>C.F.M./SIDE<br>THROW/SIDE         | 1540<br>385<br>8-14  | 2060<br>515<br>11-18  | 2580<br>645<br>13-21  | 3080<br>770<br>16-25  | 3600<br>900<br>18-29  | 4120<br>1030<br>21-33   | 5, 7½ OR 10<br>TON UNIT         |
| 24 x 24 RETURN<br>4.0 SQ. FT.                 | CAP. IN C.F.M.                                      | 1200                 | 1600                  | 2000                  | 2400                  | 2800                  | 3200                    |                                 |
| SUPPLY<br>39 x 39<br>5.56 SQ. FT.<br>Ak 1.99  | CAP. IN C.F.M.<br>C.F.M./SIDE<br>THROW/SIDE         | 1700<br>425<br>8-14  | 2260<br>565<br>11-18  | 2800<br>700<br>14-22  | 3400<br>850<br>16-26  | 4000<br>1000<br>19-31 | 4250<br>1130<br>22-35   | 5, 7½ OR 10<br>TON UNIT         |
| 27 x 27 RETURN<br>5.06 SQ. FT.                | CAP. IN C.F.M.                                      | 1500                 | 2000                  | 2500                  | 3000                  | 3500                  | 4000                    |                                 |
| SUPPLY<br>48 x 48<br>8.50 SQ. FT.<br>Ak 3.2   | CAP. IN C.F.M.<br>C.F.M./SIDE<br>THROW/SIDE         | 2540<br>635<br>10-17 | 3400<br>850<br>14-22  | 4280<br>1070<br>17-27 | 5120<br>1280<br>20-32 | 6080<br>1520<br>24-37 | 6820<br>1705<br>27-42   | 7½, 10 OR 15<br>TON UNIT        |
| 33 x 33 RETURN<br>7.56 SQ. FT.                | CAP. IN C.F.M.                                      | 2200                 | 3000                  | 3700                  | 4500                  | 5200                  | 6000                    |                                 |
| SUPPLY<br>60 x 60<br>11.82 SQ. FT.<br>Ak 4.96 | CAP. IN C.F.M.<br>C.F.M./SIDE<br>THROW/SIDE         | 3760<br>940<br>12-20 | 5040<br>1260<br>17-28 | 6296<br>1574<br>22-35 | 7580<br>1895<br>26-41 | 8800<br>2200<br>32-50 | 10,080<br>2520<br>35-54 | 10, 15, 20<br>OR 25<br>TON UNIT |
| 45 x 45 RETURN<br>13.18 SQ. FT.               | CAP. IN C.F.M.                                      | 3800                 | 5100                  | 6350                  | 7600                  | 8800                  | 9950                    |                                 |

NC DATA BASED ON ROOM ATTENUATION OF 18 DB.

**NOTES:**

- Short throw is based on isothermal air with a terminal velocity  $V_{T1}$  of 100' per min. The longer throw  $V_{T2}$  is based on isothermal air with a terminal velocity of 75' per min.
- Return capacities are based on ½ x ½ x ½ Alum. Grid Type Core. If RA return core is used, deduct 5% from return capacity, when DG, Sight Proof Core is used, deduct 20% from return capacities.
- Performance data based on ceiling height of 12'; if greater heights are to be used, sound level and room velocity will be lower.
- If diffusers are mounted directly on end of duct work without benefit of any ceiling effect, reduce throw values by 20%.