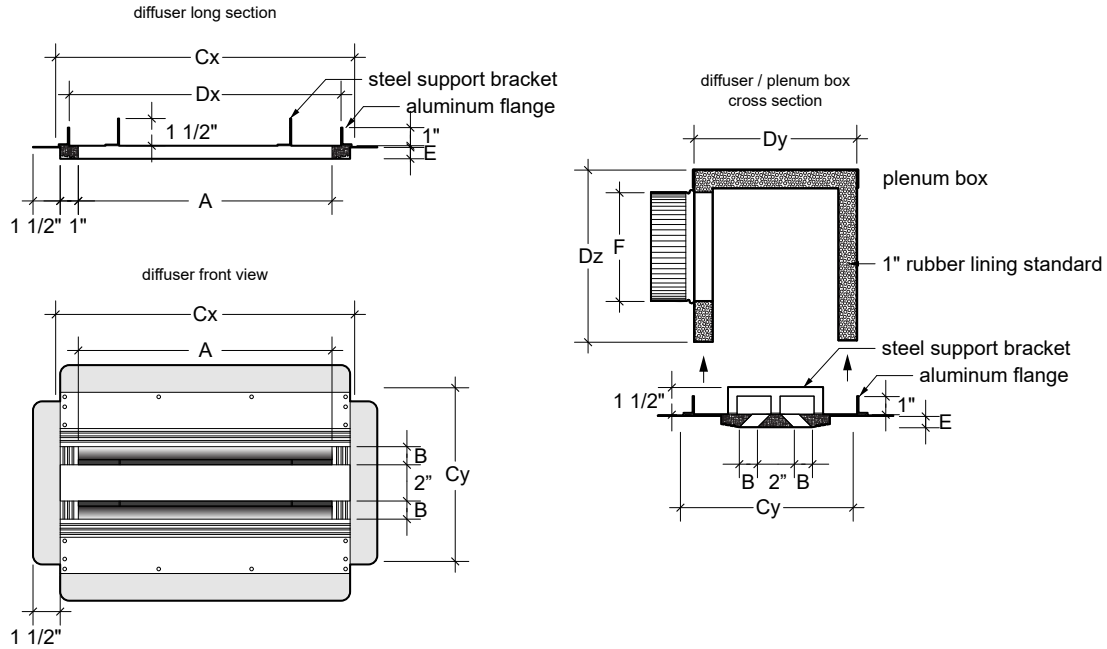


**MODEL L245**  
**ARCHITECTURAL LINEAR DIFFUSERS: 2 SLOT 45° OPENING**  
**FLUSH MOUNT, TAPE AND SPACKLE INSTALLATION**

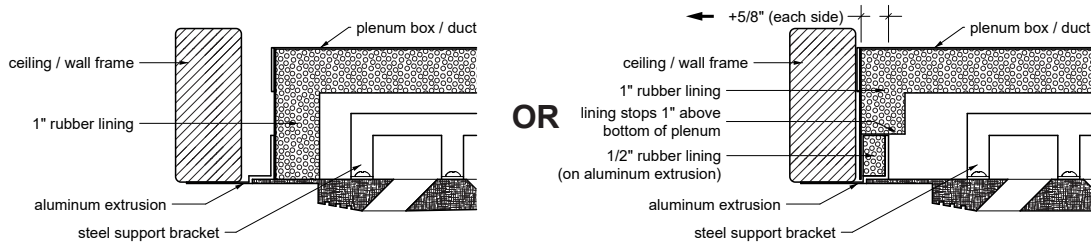


**PRODUCT DIMENSIONS**

|                          | <b>PRODUCT CODE</b> | <b>(A) DIFFUSER LENGTH</b> | <b>(B) SLOT WIDTH</b> | <b>(C) REQ. CEILING FRAME OPENING</b> | <b>(Dx, Dy) STANDARD PLENUM BOX / DUCT DIMENSIONS</b> | <b>(E) GYPSUM BOARD THICKNESS</b> |
|--------------------------|---------------------|----------------------------|-----------------------|---------------------------------------|-------------------------------------------------------|-----------------------------------|
| <input type="checkbox"/> | L4502050            | SPECIFY                    | 1/2"                  | A + 2.5" x 9.5"                       | A + 1" x 7"                                           | UP TO 5/8"                        |
| <input type="checkbox"/> | L4502075            | SPECIFY                    | 3/4"                  | A + 2.5" x 10"                        | A + 1" x 7.5"                                         | UP TO 5/8"                        |
| <input type="checkbox"/> | L4502100            | SPECIFY                    | 1"                    | A + 2.5" x 10.5"                      | A + 1" x 8"                                           | UP TO 5/8"                        |
| <input type="checkbox"/> | L4502150            | SPECIFY                    | 1 1/2"                | A + 2.5" x 11.5"                      | A + 1" x 9"                                           | UP TO 5/8"                        |
| <input type="checkbox"/> | L4502200            | SPECIFY                    | 2"                    | A + 2.5" x 12.5"                      | A + 1" x 10"                                          | UP TO 5/8"                        |

**DIFFUSER SPECIFICATIONS AND OPTIONS**

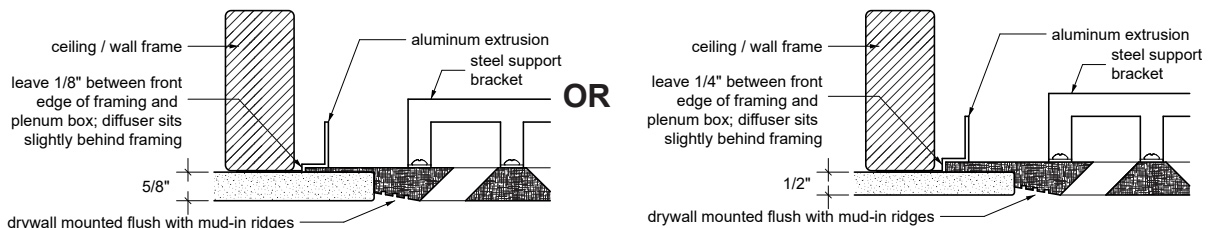
1) DIFFUSER INSTALLS INSIDE OR OUTSIDE OF PLENUM BOX OR DUCT



STANDARD DIFFUSER-OUT INSTALLATION

DIFFUSER-IN INSTALLATION (ADD 1.25" TO Dx and Dy)

2) DIFFUSER MADE FOR 5/8" OR 1/2" GYPSUM BOARD



5/8" GYPSUM BOARD

1/2" GYPSUM BOARD



**MODEL L245**  
**ARCHITECTURAL LINEAR DIFFUSERS: 2 SLOT 45° OPENING**  
**FLUSH MOUNT, TAPE AND SPACKLE INSTALLATION**

**DIFFUSER ORDER DETAILS**

| <b>PRODUCT CODE</b> | <b>(B) SLOT WIDTH</b> | <b>(A) DIFFUSER LENGTH</b> | <b>(E) GYPSUM BOARD THICKNESS</b> | <b>QTY</b> | <b>NOTES / OTHER SPECS</b> |
|---------------------|-----------------------|----------------------------|-----------------------------------|------------|----------------------------|
| L4502050            | 1/2"                  |                            |                                   |            |                            |
|                     | 1/2"                  |                            |                                   |            |                            |
|                     | 1/2"                  |                            |                                   |            |                            |
| L4502075            | 3/4"                  |                            |                                   |            |                            |
|                     | 3/4"                  |                            |                                   |            |                            |
|                     | 3/4"                  |                            |                                   |            |                            |
| L4502100            | 1"                    |                            |                                   |            |                            |
|                     | 1"                    |                            |                                   |            |                            |
|                     | 1"                    |                            |                                   |            |                            |
| L4502150            | 1 1/2"                |                            |                                   |            |                            |
|                     | 1 1/2"                |                            |                                   |            |                            |
|                     | 1 1/2"                |                            |                                   |            |                            |
| L4502200            | 2"                    |                            |                                   |            |                            |
|                     | 2"                    |                            |                                   |            |                            |
|                     | 2"                    |                            |                                   |            |                            |

**OPTIONAL PLENUM BOX ORDER SPECIFICATIONS \***

\* INVI LINEAR DIFFUSERS MAY USE A PLENUM BOX TO CONNECT TO DUCT WORK. THE TABLE BELOW SHOULD BE FILLED OUT IF YOU WISH TO PURCHASE PLENUM BOXES FROM INVI

\*\* ADD 1.25" TO Dx AND Dy OVER STANDARD DIMENSIONS IF YOU CHOSE DIFFUSER-IN INSTALLATION

| <b>(Dx) **</b><br>PLENUM LENGTH | <b>(Dy) **</b><br>PLENUM WIDTH | <b>(Dz)</b><br>PLENUM HEIGHT (SPECIFY) | <b>QTY</b> | <b>DUCT CONNECTION TYPE</b> | <b>(F) COLLAR SIZE</b> | <b>COLLAR LOCATION (TOP / SIDE / END)</b> | <b>NOTES / OTHER SPECS</b> |
|---------------------------------|--------------------------------|----------------------------------------|------------|-----------------------------|------------------------|-------------------------------------------|----------------------------|
|                                 |                                |                                        |            |                             |                        |                                           |                            |
|                                 |                                |                                        |            |                             |                        |                                           |                            |
|                                 |                                |                                        |            |                             |                        |                                           |                            |
|                                 |                                |                                        |            |                             |                        |                                           |                            |
|                                 |                                |                                        |            |                             |                        |                                           |                            |
|                                 |                                |                                        |            |                             |                        |                                           |                            |
|                                 |                                |                                        |            |                             |                        |                                           |                            |

|             |  |
|-------------|--|
| CONTRACTOR  |  |
| PROJECT     |  |
| ADDRESS     |  |
| ENGINEER    |  |
| PREPARED BY |  |

InviAir  
 67 Guernsey St  
 Brooklyn, NY 11222  
 917-909-0343



**PERFORMANCE DATA**

**INVAIR 2-SLOT LINEAR DIFFUSER, 45° OPENING**

ALL PERFORMANCE DATA FROM TESTING CONDUCTED BY INTERTEK GROUP, IN ACCORDANCE WITH ASHRAE 70-06



| SLOT WIDTH | AREA FACTOR (Ak per ft) | PARAMETERS                        | PERFORMANCE |             |            |             |             |             |              |
|------------|-------------------------|-----------------------------------|-------------|-------------|------------|-------------|-------------|-------------|--------------|
|            |                         |                                   |             |             |            |             |             |             |              |
| 0.5"       | 0.054                   | VOLUME (CFM / ft. of length)      | 25          | 42          | 50         | 67          | 75          | 83          | 92           |
|            |                         | STATIC PRESSURE (in. w.g.)        | .010        | .029        | .041       | .074        | .093        | .116        | .140         |
|            |                         | NOISE CRITERIA                    | <15         | <15         | <15        | 17          | 20          | 23          | 25           |
|            |                         | THROW (ft. at 50 / 100 / 150 fpm) | 5 / <2 / <2 | 10 / 4 / 2  | 12 / 6 / 3 | 17 / 8 / 4  | 20 / 10 / 5 | 24 / 11 / 5 | 27 / 13 / 6  |
| 0.75"      | 0.073                   | VOLUME (CFM / ft. of length)      | 25          | 50          | 63         | 75          | 88          | 100         | 125          |
|            |                         | STATIC PRESSURE (in. w.g.)        | .008        | .028        | .042       | .059        | .078        | .100        | .151         |
|            |                         | NOISE CRITERIA                    | <15         | <15         | <15        | 17          | 22          | 26          | 33           |
|            |                         | THROW (ft. at 50 / 100 / 150 fpm) | 4 / <2 / <2 | 7 / 3 / 2   | 9 / 5 / 3  | 12 / 7 / 4  | 14 / 8 / 5  | 17 / 10 / 6 | 24 / 13 / 8  |
| 1.0"       | 0.090                   | VOLUME (CFM / ft. of length)      | 33          | 67          | 83         | 100         | 117         | 133         | 150          |
|            |                         | STATIC PRESSURE (in. w.g.)        | .010        | .037        | .055       | .077        | .102        | .131        | .162         |
|            |                         | NOISE CRITERIA                    | <15         | <15         | 17         | 24          | 29          | 34          | 38           |
|            |                         | THROW (ft. at 50 / 100 / 150 fpm) | 4 / <2 / <2 | 8 / 4 / 2   | 10 / 6 / 4 | 13 / 8 / 5  | 15 / 10 / 6 | 18 / 12 / 7 | 22 / 13 / 9  |
| 1.5"       | 0.118                   | VOLUME (CFM / ft. of length)      | 50          | 75          | 100        | 125         | 150         | 175         | 200          |
|            |                         | STATIC PRESSURE (in. w.g.)        | .013        | .029        | .051       | .080        | .115        | .156        | .205         |
|            |                         | NOISE CRITERIA                    | <15         | <15         | 19         | 27          | 34          | 40          | 46           |
|            |                         | THROW (ft. at 50 / 100 / 150 fpm) | 5 / <2 / <2 | 8 / 3 / <2  | 11 / 6 / 3 | 14 / 9 / 5  | 18 / 11 / 6 | 21 / 14 / 8 | 24 / 16 / 9  |
| 2"         | 0.144                   | VOLUME (CFM / ft. of length)      | 67          | 100         | 133        | 167         | 200         | 233         | 267          |
|            |                         | STATIC PRESSURE (in. w.g.)        | .013        | .032        | .062       | .102        | .154        | .219        | .296         |
|            |                         | NOISE CRITERIA                    | <15         | 17          | 28         | 36          | 42          | 48          | >50          |
|            |                         | THROW (ft. at 50 / 100 / 150 fpm) | 8 / <2 / <2 | 13 / 5 / <2 | 18 / 8 / 3 | 23 / 12 / 5 | 27 / 15 / 6 | 31 / 19 / 8 | 34 / 22 / 10 |

NOTES: Volume (CFM): standard air density and isothermal conditions

Static Pressure: inches of water gauge

Noise Criteria: based on room attenuation of 10dB (sound power level re: 10-12 watts) with 1 diffuser operating

Throw: projection distance in feet from the diffuser discharge at which the maximum velocity has been reduced to the specified terminal velocity

Terminal Velocity: maximum velocity (Vt) in feet per minute, at the specified distance from the outlet face

Actual samples used for testing measured 4 feet in length

| NOISE CRITERIA (NC) ADJUSTMENTS FOR VARIOUS LENGTHS |             |             |             |
|-----------------------------------------------------|-------------|-------------|-------------|
| 24" = -3 NC                                         | 48" = ±0 NC | 60" = +1 NC | 96" = +3 NC |