

EXTRUDED ALUMINUM STATIONARY LOUVER
4" (102) DEEP • K BLADE • DRAINABLE HEAD
MODEL: D-LEB-04

Model D-LEB-04, 4" (102) deep louver, combines good weather protection and performance with aesthetics that compliment any architecture. The design features a drainable head that collects the water running down the building face and channels it out the concealed downspouts in the side frame, thus preventing it from flowing down into the airstream. Suitable for use in exhaust and low to medium velocity intake applications, the K blade design features a rear water baffle plus an additional center rain hook, providing good protection against more forbidding weather conditions. Blades are reinforced with full length integral bosses for superior strength and the profile exhibits low pressure drop characteristics throughout the airflow range. Model D-LEB-04 is available with channel or flanged type frame to suit most architectural and mechanical installation requirements and is AMCA Licensed.

STANDARD CONSTRUCTION:

- FRAME:** 4" (102) deep, Type 6063-T6 extruded aluminum, .080" (2.03) nominal wall thickness. Integral caulking slot provided.
- BLADES:** Type 6063-T6 extruded aluminum, .080" (2.03) nominal wall thickness, with reinforcing bosses. K style.
- BLADE ANGLE:** Fixed at 37 degrees.
- BLADE SPACING:** Approx. 4" (102) on centers.
- BLADE SUPPORT BRACKETS:** Concealed type, factory installed on rear of louver on maximum 60" (1524) centers. Reinforced with 1 1/2" x 2" (38 x 51) angle (adds approx. 2" [51] to overall louver depth).
- MULLIONS:** Concealed type allowing continuous line appearance up to 120" (3048) wide. Larger assemblies require separate visible frames with downspouts.
- SCREEN:** 3/4" x .051 (19 x 1.3) expanded, flattened aluminum bird screen in removable frame, inside (rear) mount (adds approximately 3/8" [10] to louver depth).
- FINISH:** Mill.
- MINIMUM SIZE:** 12" W x 12" H (305 x 305).
- MAX. SINGLE SECTION SIZE:** 120" W x 84" H (3048 x 2134) or 84" W x 120" H (2134 x 3048). 70 sq. ft. (6.5m²). Larger louvers will require field assembly of smaller sections.

OPTIONS:

- FL** Flanged Frame.
- BSSS** Type 304 S.S. Bird Screen.
- BSN** No Bird Screen.
- ISA** Aluminum Insect Screen.
- ISSS** Type 304 S.S. Insect Screen.
- WE** Welded Construction.
- ESI** Extended Sill.
- FR1** 1" (25) Filter Rack.
- FR2** 2" (51) Filter Rack.
- PAC** Perimeter Anchor Clips.
- Other:** _____

OPTIONAL FINISHES:

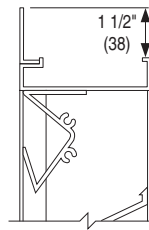
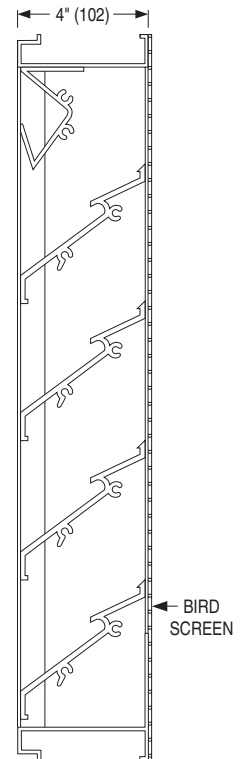
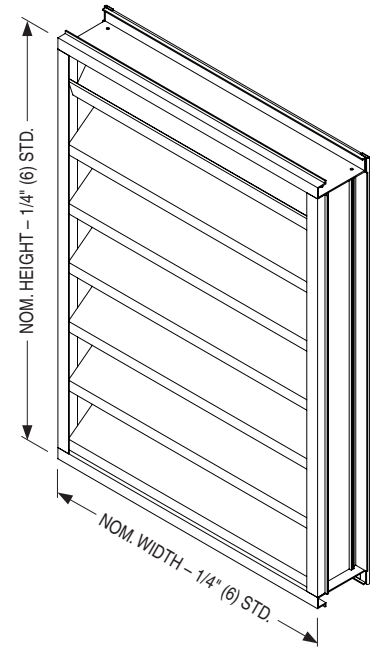
- PC3** Powder Coat AAMA 2603. Color: _____.
- PC4** High Performance Powder Coat AAMA 2604 (Equivalent to 50% Kynar®). Color: _____.
- PC5** Fluoropolymer Powder Coat AAMA 2605 (Equivalent to 70% Kynar®). Color: _____.
- PCC** Prime Coat.
- AN04** Clear Anodized 204-R1.
- AN15** Clear Anodized 215-R1.

Color Anodized:

- ANLB** Light Bronze.
- ANDB** Dark Bronze.
- ANMB** Medium Bronze.
- ANBK** Black.

OPTIONAL W x H SIZING (1/4" [6.5] Undersize standard):

- U00** Exact Size.
- U38** Undersize 3/8" (9.5).
- U50** Undersize 1/2" (12.7).



FLANGED FRAME (FL)
(OPTIONAL)

| | | | | |
|-----------------------|--------------------------------|-----------------|-------------------|--------------------|
| SCHEDULE TYPE: | Page 1 of 3 | | | |
| PROJECT: | Dimensions are in inches (mm). | | | |
| ENGINEER: | DATE | B SERIES | SUPERSEDES | DRAWING NO. |
| CONTRACTOR: | 3 - 3 - 23 | LOUVER | NEW | D-LEB-04 |



**EXTRUDED ALUMINUM STATIONARY LOUVER
4" (102) DEEP • K BLADE • DRAINABLE HEAD
PERFORMANCE DATA
MODEL: D-LEB-04**

FREE AREA in Square Feet and Square Meters

| | | Width in Inches and Meters | | | | | | | | | | | | | | | | | | |
|------------------------------------|--------------------|----------------------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | | 12 0.30 | 18 0.46 | 24 0.61 | 30 0.76 | 36 0.91 | 42 1.07 | 48 1.22 | 54 1.37 | 60 1.52 | 66 1.68 | 72 1.83 | 78 1.98 | 84 2.13 | 90 2.29 | 96 2.44 | 102 2.59 | 108 2.74 | 114 2.90 | 120 3.05 |
| Height in Inches and Meters | 12 0.30 | 0.21 0.02 | 0.34 0.03 | 0.47 0.04 | 0.60 0.06 | 0.73 0.07 | 0.85 0.08 | 0.98 0.09 | 1.11 0.10 | 1.24 0.12 | 1.37 0.13 | 1.49 0.14 | 1.62 0.15 | 1.75 0.16 | 1.88 0.17 | 2.01 0.19 | 2.13 0.20 | 2.26 0.21 | 2.39 0.22 | 2.52 0.23 |
| | 18 0.46 | 0.46 0.04 | 0.74 0.07 | 1.02 0.09 | 1.30 0.12 | 1.58 0.15 | 1.86 0.17 | 2.14 0.20 | 2.41 0.22 | 2.69 0.25 | 2.97 0.28 | 3.25 0.30 | 3.53 0.33 | 3.81 0.35 | 4.09 0.38 | 4.37 0.41 | 4.64 0.43 | 4.92 0.46 | 5.20 0.48 | 5.48 0.51 |
| | 24 0.61 | 0.73 0.07 | 1.17 0.11 | 1.60 0.15 | 2.04 0.19 | 2.48 0.23 | 2.91 0.27 | 3.35 0.31 | 3.79 0.35 | 4.22 0.39 | 4.66 0.43 | 5.10 0.47 | 5.53 0.51 | 5.97 0.55 | 6.41 0.60 | 6.85 0.64 | 7.28 0.68 | 7.72 0.72 | 8.16 0.76 | 8.59 0.80 |
| | 30 0.76 | 0.93 0.09 | 1.49 0.14 | 2.05 0.19 | 2.61 0.24 | 3.17 0.29 | 3.74 0.35 | 4.30 0.40 | 4.86 0.45 | 5.42 0.50 | 5.98 0.56 | 6.54 0.61 | 7.10 0.66 | 7.66 0.71 | 8.22 0.76 | 8.78 0.82 | 9.34 0.87 | 9.90 0.92 | 10.46 0.97 | 11.02 1.02 |
| | 36 0.91 | 1.15 0.11 | 1.85 0.17 | 2.54 0.24 | 3.23 0.30 | 3.93 0.36 | 4.62 0.43 | 5.31 0.49 | 6.00 0.56 | 6.70 0.62 | 7.39 0.69 | 8.08 0.75 | 8.77 0.82 | 9.47 0.88 | 10.16 0.94 | 10.85 1.01 | 11.54 1.07 | 12.24 1.14 | 12.93 1.20 | 13.62 1.27 |
| | 42 1.07 | 1.40 0.13 | 2.24 0.21 | 3.08 0.29 | 3.93 0.36 | 4.77 0.44 | 5.61 0.52 | 6.45 0.60 | 7.29 0.68 | 8.13 0.76 | 8.97 0.83 | 9.81 0.91 | 10.66 0.99 | 11.50 1.07 | 12.34 1.15 | 13.18 1.22 | 14.02 1.30 | 14.86 1.38 | 15.70 1.46 | 16.54 1.54 |
| | 48 1.22 | 1.62 0.15 | 2.59 0.24 | 3.56 0.33 | 4.53 0.42 | 5.50 0.51 | 6.48 0.60 | 7.51 0.70 | 8.42 0.78 | 9.39 0.87 | 10.36 0.96 | 11.33 1.05 | 12.30 1.14 | 13.28 1.23 | 14.25 1.32 | 15.22 1.41 | 16.19 1.50 | 17.16 1.59 | 18.13 1.68 | 19.10 1.77 |
| | 54 1.37 | 1.84 0.17 | 2.95 0.27 | 4.06 0.38 | 5.16 0.48 | 6.27 0.58 | 7.37 0.68 | 8.48 0.79 | 9.58 0.89 | 10.69 0.99 | 11.80 1.10 | 12.90 1.20 | 14.01 1.30 | 15.11 1.40 | 16.22 1.51 | 17.33 1.61 | 18.43 1.71 | 19.54 1.82 | 20.64 1.92 | 21.75 2.02 |
| | 60 1.52 | 2.09 0.19 | 3.34 0.31 | 4.59 0.43 | 5.84 0.54 | 7.10 0.66 | 8.35 0.78 | 9.60 0.89 | 10.85 1.01 | 12.11 1.12 | 13.36 1.24 | 14.61 1.36 | 15.86 1.47 | 17.12 1.59 | 18.37 1.71 | 19.62 1.82 | 20.87 1.94 | 22.13 2.06 | 23.38 2.17 | 24.63 2.29 |
| | 66 1.68 | 2.31 0.21 | 3.69 0.34 | 5.07 0.47 | 6.46 0.60 | 7.84 0.73 | 9.23 0.86 | 10.61 0.99 | 12.00 1.11 | 13.38 1.24 | 14.76 1.37 | 16.15 1.50 | 17.53 1.63 | 18.92 1.76 | 20.30 1.89 | 21.68 2.01 | 23.07 2.14 | 24.45 2.27 | 25.84 2.40 | 27.22 2.53 |
| | 72 1.83 | 2.55 0.24 | 4.08 0.38 | 5.62 0.52 | 7.15 0.66 | 8.68 0.81 | 10.21 0.95 | 11.74 1.09 | 13.27 1.23 | 14.80 1.38 | 16.34 1.52 | 17.87 1.66 | 19.40 1.80 | 20.93 1.94 | 22.46 2.09 | 23.99 2.23 | 25.53 2.37 | 27.06 2.51 | 28.59 2.66 | 30.12 2.80 |
| | 78 1.98 | 2.77 0.26 | 4.43 0.41 | 6.10 0.57 | 7.76 0.72 | 9.42 0.88 | 11.08 1.03 | 12.75 1.18 | 14.41 1.34 | 16.07 1.49 | 17.74 1.65 | 19.40 1.80 | 21.06 1.96 | 22.72 2.11 | 24.39 2.27 | 26.05 2.42 | 27.71 2.57 | 29.37 2.73 | 31.04 2.88 | 32.70 3.04 |
| | 84 2.13 | 2.99 0.28 | 4.79 0.45 | 6.59 0.61 | 8.38 0.78 | 10.18 0.95 | 11.98 1.11 | 13.77 1.28 | 15.57 1.45 | 17.37 1.61 | 19.16 1.78 | 20.96 1.95 | 22.76 2.11 | 24.55 2.28 | 26.35 2.45 | 28.15 2.61 | 29.94 2.78 | 31.74 2.95 | 33.54 3.12 | 35.33 3.28 |
| | 90 2.29 | 3.24 0.30 | 5.18 0.48 | 7.12 0.66 | 9.07 0.84 | 11.01 1.02 | 12.95 1.20 | 14.90 1.38 | 16.84 1.56 | 18.78 1.74 | 20.72 1.93 | 22.67 2.11 | 24.61 2.29 | 26.55 2.47 | 28.49 2.65 | 30.44 2.83 | 32.38 3.01 | 34.32 3.19 | 36.27 3.37 | 38.21 3.55 |
| | 96 2.44 | 3.46 0.32 | 5.53 0.51 | 7.61 0.71 | 9.68 0.90 | 11.76 1.09 | 13.83 1.29 | 15.91 1.48 | 17.99 1.67 | 20.06 1.86 | 22.14 2.06 | 24.21 2.25 | 26.29 2.44 | 28.36 2.63 | 30.44 2.83 | 32.51 3.02 | 34.59 3.21 | 36.66 3.41 | 38.74 3.60 | 40.81 3.79 |
| | 102 2.59 | 3.68 0.34 | 5.89 0.55 | 8.10 0.75 | 10.31 0.96 | 12.52 1.16 | 14.73 1.37 | 16.94 1.57 | 19.15 1.78 | 21.36 1.98 | 23.56 2.19 | 25.77 2.39 | 27.98 2.60 | 30.19 2.80 | 32.40 3.01 | 34.61 3.22 | 36.82 3.42 | 39.03 3.63 | 41.24 3.83 | 43.45 4.04 |
| 108 2.74 | 3.92 0.36 | 6.28 0.58 | 8.63 0.80 | 10.99 1.02 | 13.34 1.24 | 15.69 1.46 | 18.05 1.68 | 20.40 1.90 | 22.76 2.11 | 25.11 2.33 | 27.46 2.55 | 29.82 2.77 | 32.17 2.99 | 34.53 3.21 | 36.88 3.43 | 39.23 3.64 | 41.59 3.86 | 43.94 4.08 | 46.30 4.30 | |
| 114 2.90 | 4.15 0.39 | 6.63 0.62 | 9.12 0.85 | 11.61 1.08 | 14.10 1.31 | 16.58 1.54 | 19.07 1.77 | 21.56 2.00 | 24.05 2.23 | 26.53 2.46 | 29.02 2.70 | 31.51 2.93 | 34.00 3.16 | 36.48 3.39 | 38.97 3.62 | 41.46 3.85 | 43.95 4.08 | 46.43 4.31 | 48.92 4.54 | |
| 120 3.05 | 4.39 0.41 | 7.02 0.65 | 9.66 0.90 | 12.29 1.14 | 14.93 1.39 | 17.56 1.63 | 20.19 1.88 | 22.83 2.12 | 25.46 2.37 | 28.10 2.61 | 30.73 2.85 | 33.36 3.10 | 36.00 3.34 | 38.63 3.59 | 41.27 3.83 | 43.90 4.08 | 46.53 4.32 | 49.17 4.57 | 51.80 4.81 | |



SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Page 2 of 3
Dimensions are in inches (mm).

DATE

B SERIES

SUPERSEDES

DRAWING NO.

3 - 3 - 23

LOUVER

NEW

D-LEB-04

AIRFLOW/WATER PENETRATION DATA
for 48" x 48" (1219 x 1219) Louver Size

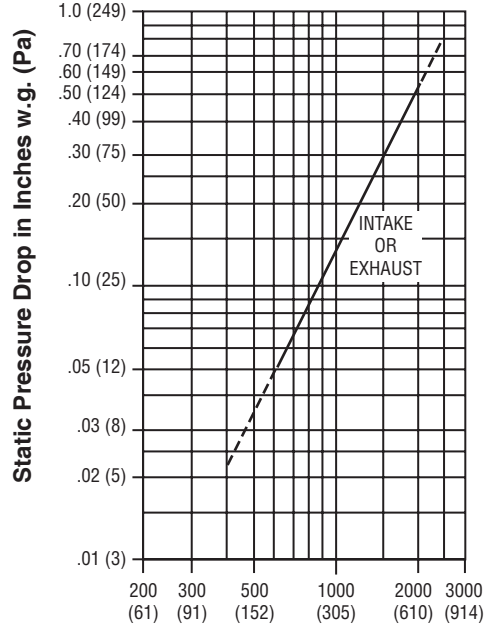
| | | |
|----------------------------|--|----------------------|
| I N T A K E | Free Area % | 47% |
| | Free Area sq. ft. (sq. m.) | 7.51 (0.70) |
| | Free Area Velocity at Point of Beginning Water Penetration at .01 oz./sq. ft. (3 ml/sq. m) (15 min. test duration) | 892 fpm (272 m/min.) |
| | Air Volume at 892 fpm | 6699 cfm (3161 l/s) |
| | Free Area Velocity | 892 fpm |
| | Pressure Drop @ 892 fpm | .11 in. w.g. (27 Pa) |

NOTE: To minimize water penetration when sizing intake louvers, select a Free Area Velocity that is **below** the point of beginning water penetration.



Safe-Air certifies the Model D-LEB-04 shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. Seal applies to air performance ratings and water penetration ratings.

PRESSURE DROP



Air Velocity in Feet (Meters) Per Minute Through Free Area
Louver test size: 48" x 48" (1219 x 1219 mm).
Standard air density @ 0.075 lbs/ft³.
Tested to AMCA Fig. 5.5 – 6.5.

| | | | | |
|-----------------------|--------------------------------|-----------------|-------------------|--------------------|
| SCHEDULE TYPE: | Page 3 of 3 | | | |
| PROJECT: | Dimensions are in inches (mm). | | | |
| ENGINEER: | DATE | B SERIES | SUPERSEDES | DRAWING NO. |
| CONTRACTOR: | 3 - 3 - 23 | LOUVER | NEW | D-LEB-04 |