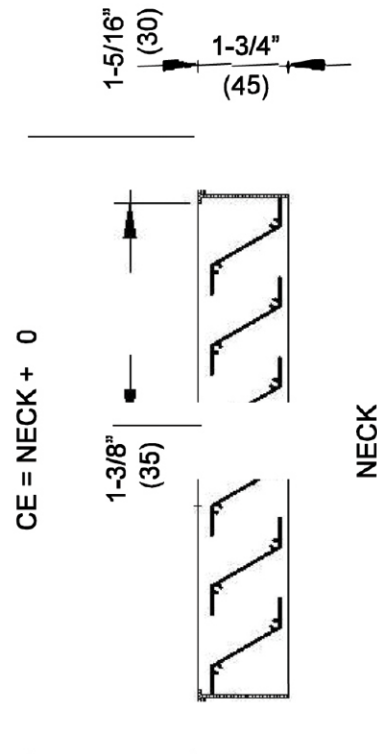


Dimensions

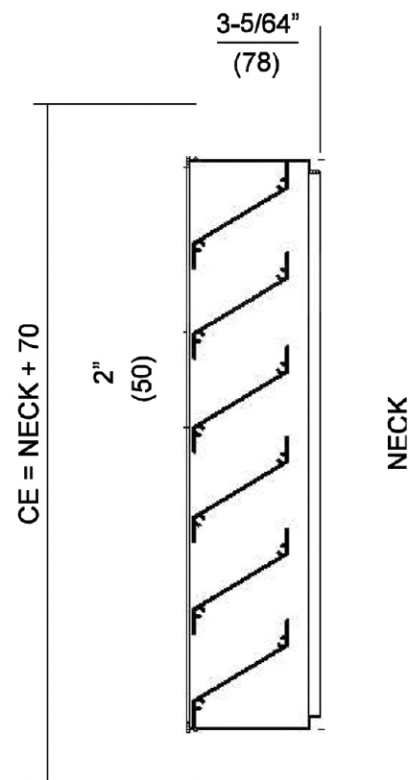
Fresh Air Louver Small Blade Fal

مصنع نظام التبريد للصناعة



Dimensions

Fresh Air Louver Big Blade Fal-50





Knowing the volumetric flow rate required and maximum allowable pressure drop, you can use the performance chart and free area table to estimate an appropriate size.

Example:

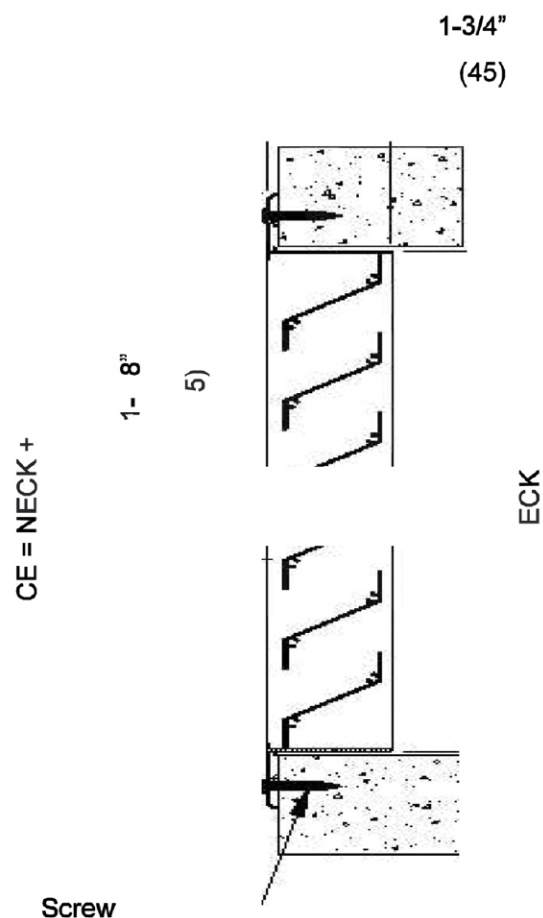
If a fan requires to draw 6000 cfm through a louver with a maximum pressure drop 60 Pa, estimate the required size.

Solution: At the chart, pivot the pressure drop of 60 Pa, then intersect with the "Intake" line to get the free air velocity as approximately 1200 fpm.

-Free area = flow rate / free air velocity = 6000 / 1200 = 5 ft².

- From the table, select any sizes that give at least 5 ft² free area, e.g., (56 x 40) in. or (48 x 48) in.

INSTALLATION

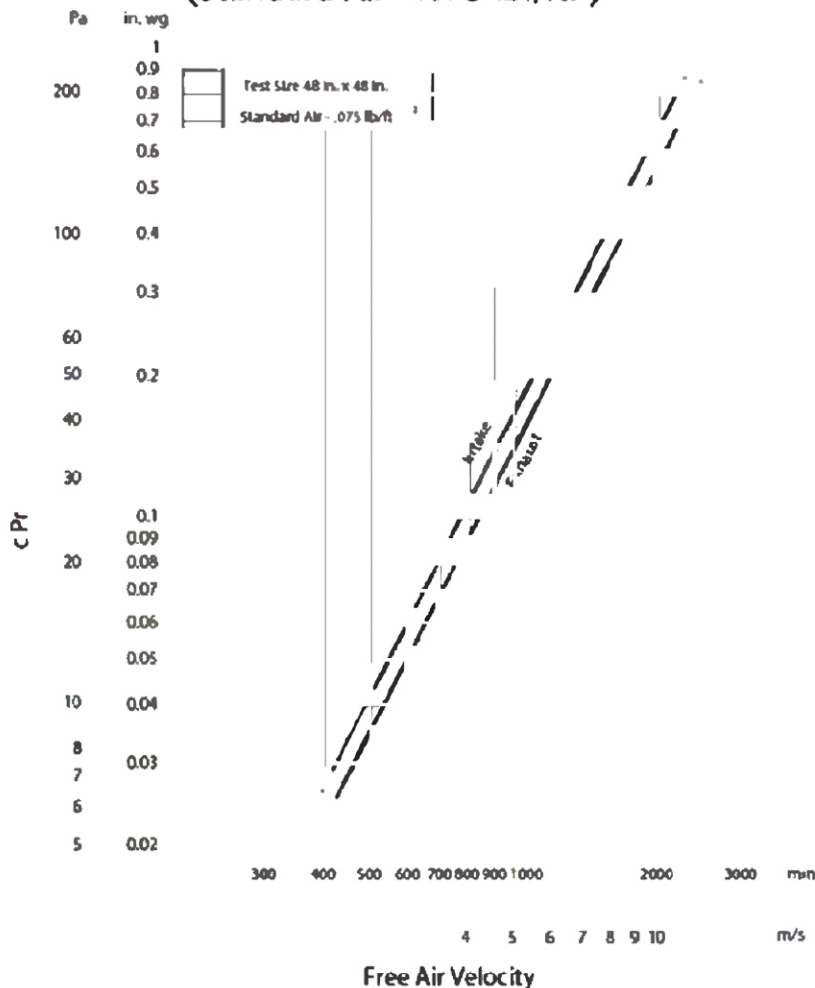




Height (inch)	Free Area & Listed Sizes(ft²)												
	Width (inch)												
	12	16	20	24	28	32	36	40	44	48	52	56	60
12	0.28	0.38	0.47	0.57	0.66	0.76	0.85	0.95	1.04	1.14	1.23	1.33	1.42
16	0.40	0.53	0.66	0.80	0.93	1.06	1.19	1.33	1.46	1.59	1.72	1.86	1.99
20	0.51	0.68	0.85	1.02	1.19	1.36	1.53	1.71	1.88	2.05	2.22	2.39	2.56
24	0.63	0.83	1.04	1.25	1.46	1.67	1.88	2.08	2.29	2.50	2.71	2.92	3.13
28	0.74	0.99	1.23	1.48	1.72	1.97	2.22	2.46	2.71	2.96	3.20	3.45	3.69
32	0.85	1.14	1.42	1.71	1.99	2.27	2.56	2.84	3.13	3.41	3.69	3.98	4.26
36	0.97	1.29	1.61	1.93	2.25	2.58	2.90	3.22	3.54	3.86	4.19	4.51	4.83
40	1.08	1.44	1.80	2.16	2.52	2.88	3.24	3.60	3.96	4.32	4.68	5.04	5.40
44	1.19	1.59	1.99	2.39	2.78	3.18	3.58	3.98	4.38	4.77	5.17	5.57	5.97
48	1.31	1.74	2.18	2.61	3.05	3.49	3.92	4.36	4.79	5.23	5.66	6.10	6.54
52	1.42	1.89	2.37	2.84	3.32	3.79	4.26	4.74	5.21	5.68	6.16	6.63	7.10
56	1.53	2.05	2.56	3.07	3.58	4.09	4.60	5.12	5.63	6.14	6.65	7.16	7.67
60	1.65	2.20	2.75	3.30	3.85	4.40	4.94	5.49	6.04	6.59	7.14	7.69	8.24

Performance

(Standard Air - .075 lb./ft.³)



-From the above table, we can deduce that the free area range is 28—33 %

Therefore, we can assume it for typical selection as 30%

-Or knowing the louver size, The approximate free area percentage for sizes not shown on the table also can be estimated as following:

$$\text{Free area} = (0.5H - 0.26) \times (W - 0.1)$$

** H and W in feet

-Flow rate = Free area x Free air velocity

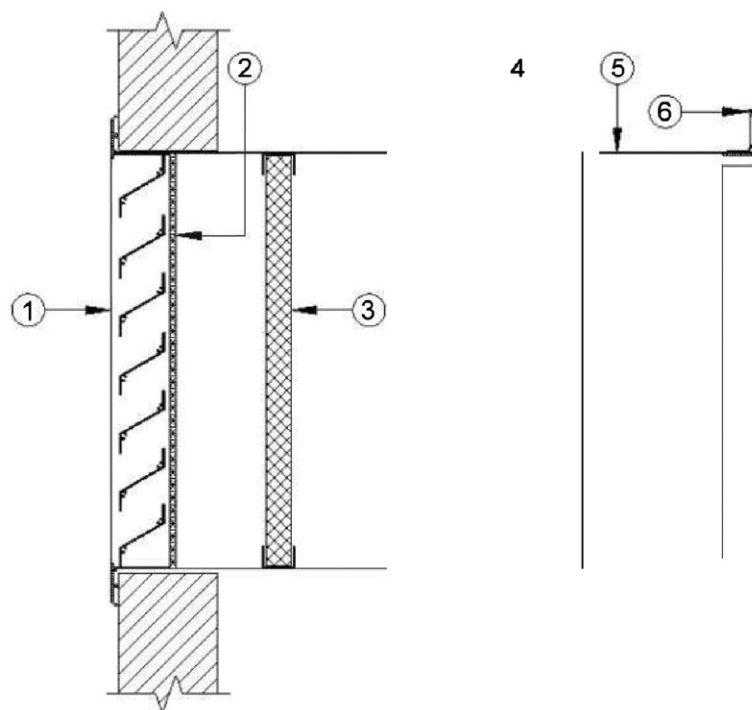
-Free area = Total area x Free area percentage

Fresh Air Louver Unit

مصنع نظام التبريد للصناعة



Fau-F



1. Fresh Air Louver.
2. Bird or Insect Screen (Aluminum or Galvanized).
3. Aluminum Filter (Washable) 1 or 2 Inches.
4. Volume Control Damper.

5. GI. Duct (20 gauge).
6. Slide on flange (MS Steel Angle) 35 x 30mm.

Note: Customer should confirm the position of the damper quadrant or actuator and access door for filter at either left or right side from louver face.