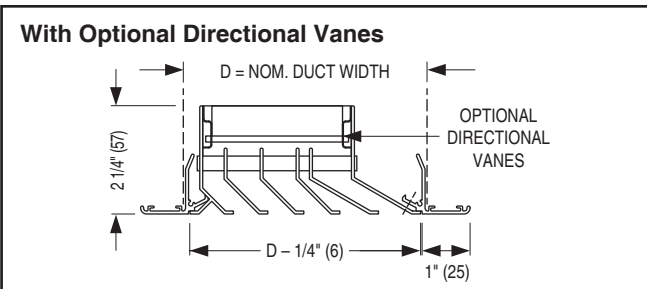
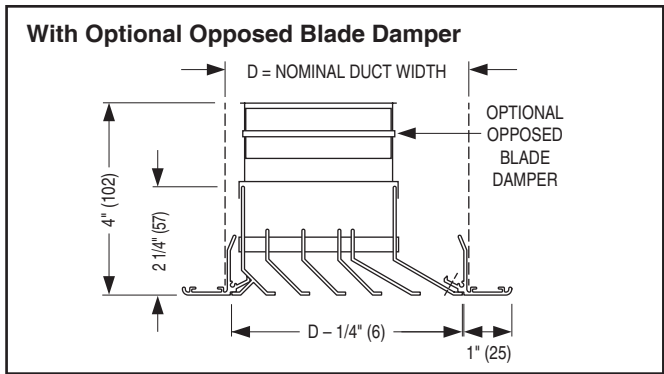
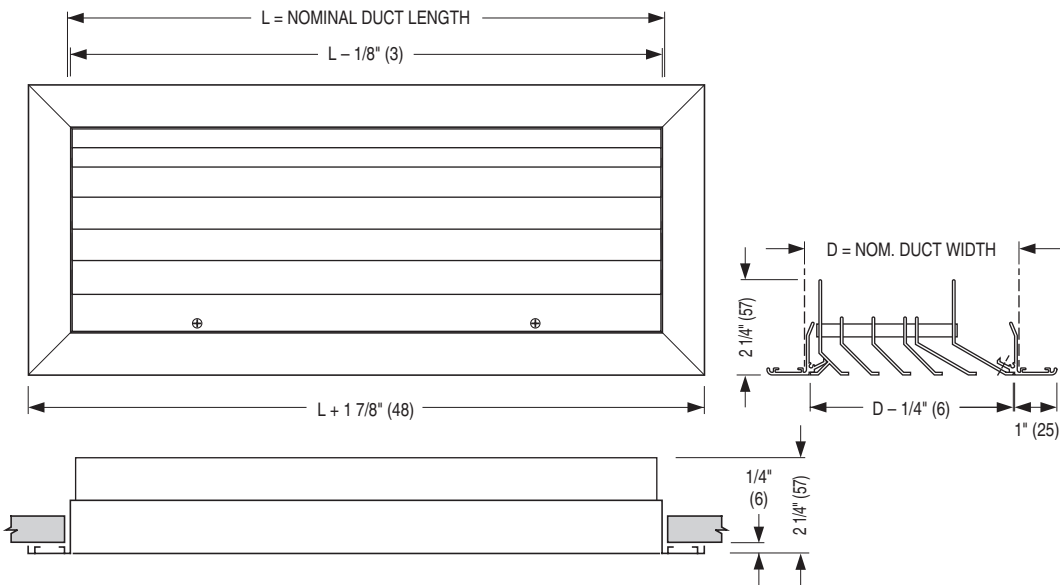




**LINEAR VANE DIFFUSERS**  
 EXTRUDED ALUMINUM • ARCHITECTURAL  
 FIXED VANES • ONE-WAY PATTERN  
**MODEL: 48LV1**



**DESCRIPTION:**

1. Material: Extruded aluminum construction.
2. Nailor 48LV1 provides crisp architectural styling for supply and return air applications. The fixed linear vanes produce a tight horizontal discharge pattern and provide excellent performance in VAV applications.
3. Frame/Border is Type A with 1" (25) flange.
4. Available in listed widths only.
5. Minimum length is 8" (203). Max. single section length is 96" (2438). Sizes over 96" (2438) will be supplied in multiple section assemblies with alignment strips for a clean and continuous appearance.
6. Mitered endcaps are standard.
7. Removable core is secured with countersunk screws.
8. Fastening: Type N is standard. Designed for duct mounted installation with concealed screws through the neck of the outer frame, providing an aesthetically clean visual appearance.
9. Standard finish is AW Appliance white.

**Available Widths**

<b>Listed Width W</b>	3 1/2 (89)	4 1/4 (108)	5 (127)	5 3/4 (146)	6 1/2 (165)	8 (203)	9 1/2 (241)	11 3/4 (298)
<b>Nom. Duct Width D</b>	3 5/8 (92)	4 3/8 (111)	5 1/8 (130)	5 7/8 (149)	6 5/8 (168)	8 1/8 (206)	9 5/8 (244)	11 7/8 (302)

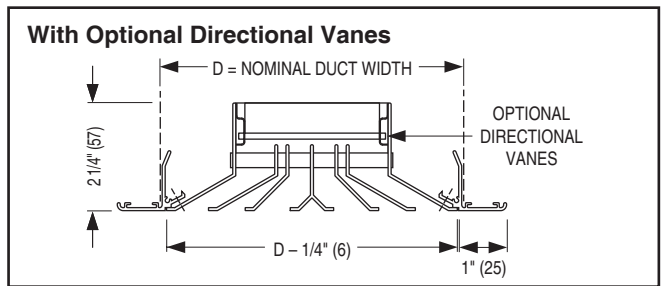
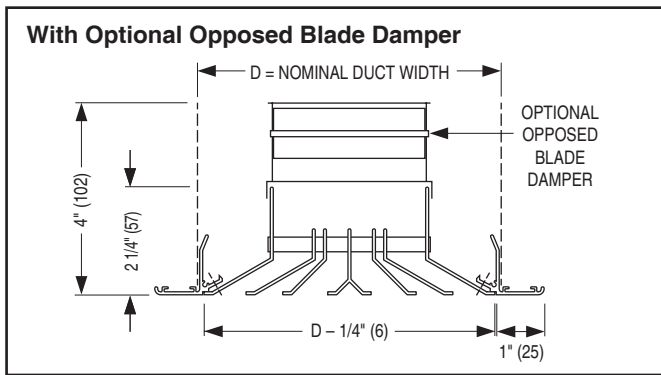
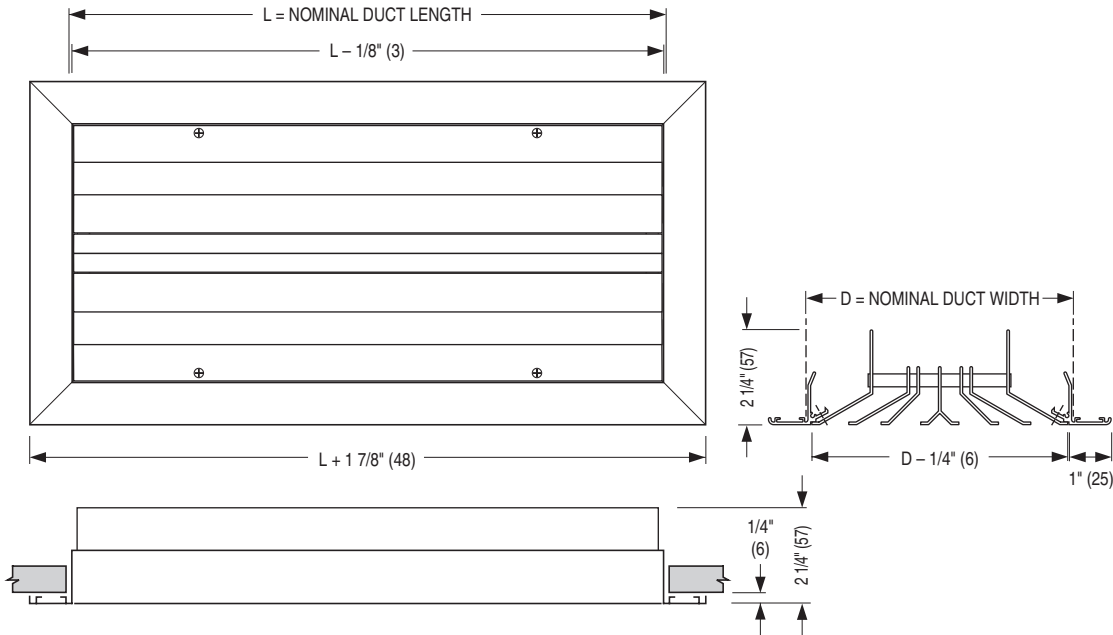
**OPTIONS:**

- Damper:**
- OBD Steel opposed blade damper.
  - OBDA Aluminum opposed blade damper.
  - DV Directional vanes (not available with OBD).
- Finish:**
- AL Aluminum.
  - SP Special, Specify \_\_\_\_\_.
- Fastening:**
- Type A Screw Holes (in outer frame).

<b>SCHEDULE TYPE:</b>	Dimensions are in inches (mm).			
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	10-8-20	48LV	7-30-20	48LV1



**LINEAR VANE DIFFUSERS**  
 EXTRUDED ALUMINUM • ARCHITECTURAL  
 FIXED VANES • TWO-WAY PATTERN  
**MODEL: 48LV2**



**DESCRIPTION:**

1. Material: Extruded aluminum construction.
2. Nailor 48LV2 provides crisp architectural styling for supply and return air applications. The fixed linear vanes produce a tight horizontal discharge pattern and provide excellent performance in VAV applications.
3. Frame/Border is Type A with 1" (25) flange.
4. Available in listed widths only.
5. Minimum length is 8" (203). Max. single section length is 96" (2438). Sizes over 96" (2438) will be supplied in multiple section assemblies with alignment strips for a clean and continuous appearance.
6. Mitered endcaps are standard.
7. Removable core is secured with countersunk screws.
8. Fastening: Type N is standard. Designed for duct mounted installation with concealed screws through the neck of the outer frame, providing an aesthetically clean visual appearance.
9. Standard finish is AW Appliance white.

**Available Widths**

<b>Listed Width W</b>	6 1/4 (159)	7 3/4 (197)	9 1/4 (235)	10 3/4 (273)	12 1/4 (311)
<b>Nom. Duct Width D</b>	6 3/8 (162)	7 7/8 (200)	9 3/8 (238)	10 7/8 (277)	12 3/8 (315)

**OPTIONS:**

- Damper:
- OBD Steel opposed blade damper.
  - OBDA Aluminum opposed blade damper.
  - DV Directional vanes (not available with OBD).
- Finish:
- AL Aluminum.
  - SP Special, Specify \_\_\_\_\_.
- Fastening:
- Type A Screw Holes (in outer frame).

<b>SCHEDULE TYPE:</b>	Dimensions are in inches (mm).			
<b>PROJECT:</b>				
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	10 - 8 - 20	48LV	7 - 30 - 20	48LV2

## PERFORMANCE DATA:

### Model: 48LV1 • One-Way Pattern

Nominal Duct Width Size								
3 1/2"	Airflow, CFM/FT	21	31	41	51	61	71	81
	Total Pressure	.004	.008	.014	.021	.030	.041	.053
	Noise Criteria	-	-	22	27	31	35	38
	Ceiling Throw	6-9-14	8-12-17	11-14-20	13-16-22	14-17-24	15-19-26	16-20-28
4 1/4"	Airflow, CFM/FT	30	45	60	75	90	105	120
	Total Pressure	.005	.012	.021	.032	.047	.063	.083
	Noise Criteria	-	17	25	30	35	38	41
	Ceiling Throw	6-9-17	9-14-21	12-17-24	16-19-27	17-21-30	18-23-32	20-24-34
5"	Airflow, CFM/FT	40	60	80	100	120	140	160
	Total Pressure	.007	.015	.026	.041	.059	.080	.105
	Noise Criteria	-	18	26	31	36	39	42
	Ceiling Throw	7-10-20	10-15-24	14-20-28	17-22-31	20-24-34	21-26-37	23-28-39
5 3/4"	Airflow, CFM/FT	52	78	104	130	156	182	208
	Total Pressure	.009	.019	.034	.054	.078	.106	.138
	Noise Criteria	-	21	28	33	37	41	44
	Ceiling Throw	8-12-22	12-18-27	16-22-32	20-25-35	22-27-39	24-30-42	26-32-45
6 1/2"	Airflow, CFM/FT	67	100	133	166	199	232	265
	Total Pressure	.011	.025	.044	.068	.098	.133	.173
	Noise Criteria	-	22	29	34	39	42	45
	Ceiling Throw	9-14-25	14-20-31	18-25-36	23-28-40	25-31-44	27-34-47	29-36-51
8"	Airflow, CFM/FT	90	135	180	225	270	315	360
	Total Pressure	.013	.030	.054	.084	.121	.165	.216
	Noise Criteria	-	23	29	35	39	43	46
	Ceiling Throw	10-16-30	16-24-36	21-30-42	26-33-47	30-36-51	32-39-55	34-42-59
9 1/2"	Airflow, CFM/FT	115	173	231	289	347	405	463
	Total Pressure	.016	.035	.063	.098	.142	.193	.252
	Noise Criteria	-	22	29	35	39	43	46
	Ceiling Throw	12-18-33	18-27-41	24-33-47	30-37-53	33-41-58	36-44-63	39-47-67
11 3/4"	Airflow, CFM/FT	160	238	316	394	472	550	628
	Total Pressure	.020	.044	.078	.121	.174	.236	.308
	Noise Criteria	-	23	30	35	39	43	46
	Ceiling Throw	14-22-39	21-32-48	28-39-55	35-44-62	39-48-68	42-52-73	45-55-78

### Throw Correction Factors for Various Lengths

Length (ft.)	2	3	4	5	6	8	10	12
Multiplier	.70	.86	1.0	1.1	1.25	1.4	1.55	1.7

### Noise Criteria Correction Factors for Various Lengths

Length (ft.)	2	3	4	5	6	8	10
Supply	-3	-1	0	+1	+2	+3	+5

### Performance Notes:

- Horizontal throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
- Throw values are based on a 4 ft. section. For other lengths, use the correction factor table above.
- Total Pressure is in inches w.g..
- Noise Criteria [NC] values are based on a 4 ft. section and a room absorption of 10 dB, re 10<sup>-12</sup> watts. For other lengths, use the correction factor table shown.
- Return Air Applications:  
Noise Criteria value is increased by + 4.  
Negative Static Pressure = 0.8 x Total Pressure.
- Dash (-) in space indicates an Noise Criteria level of less than 15.
- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70-2006.

## PERFORMANCE DATA:

### Model: 48LV2 • Two-Way Pattern

Nominal Duct Width Size								
<b>6 1/4"</b>	Airflow, CFM/FT	<b>41</b>	<b>62</b>	<b>83</b>	<b>104</b>	<b>125</b>	<b>146</b>	<b>167</b>
	Total Pressure	.005	.012	.021	.033	.048	.066	.086
	Noise Criteria	-	18	26	31	36	39	43
	Ceiling Throw	5-8-14	8-12-17	10-14-19	12-15-22	14-17-24	15-18-26	16-19-27
<b>7 3/4"</b>	Airflow, CFM/FT	<b>62</b>	<b>94</b>	<b>126</b>	<b>158</b>	<b>190</b>	<b>222</b>	<b>254</b>
	Total Pressure	.008	.018	.032	.050	.072	.099	.129
	Noise Criteria	-	21	28	34	38	42	45
	Ceiling Throw	6-9-17	9-14-21	13-17-24	15-19-27	17-21-29	18-22-32	20-24-34
<b>9 1/4"</b>	Airflow, CFM/FT	<b>84</b>	<b>126</b>	<b>168</b>	<b>210</b>	<b>252</b>	<b>294</b>	<b>336</b>
	Total Pressure	.010	.022	.040	.062	.089	.122	.159
	Noise Criteria	-	22	29	34	39	42	46
	Ceiling Throw	7-11-19	11-16-24	15-19-27	18-22-31	19-24-34	21-26-36	22-27-39
<b>10 3/4"</b>	Airflow, CFM/FT	<b>107</b>	<b>161</b>	<b>215</b>	<b>269</b>	<b>323</b>	<b>377</b>	<b>431</b>
	Total Pressure	.012	.027	.048	.075	.109	.148	.193
	Noise Criteria	-	23	30	35	39	43	46
	Ceiling Throw	8-12-22	12-19-27	17-22-31	20-25-35	22-27-38	24-29-41	25-31-44
<b>12 1/4"</b>	Airflow, CFM/FT	<b>131</b>	<b>197</b>	<b>263</b>	<b>329</b>	<b>395</b>	<b>461</b>	<b>527</b>
	Total Pressure	.014	.031	.055	.087	.125	.170	.223
	Noise Criteria	-	24	31	36	40	44	48
	Ceiling Throw	9-14-24	14-21-30	18-24-34	22-27-38	24-30-42	26-32-46	28-34-49

#### Throw Correction Factors for Various Lengths

Length (ft.)	2	3	4	5	6	8	10	12
<b>Multiplier</b>	.70	.86	1.0	1.1	1.25	1.4	1.55	1.7

#### Noise Criteria Correction Factors for Various Lengths

Length (ft.)	2	3	4	5	6	8	10
<b>Supply</b>	- 3	- 1	0	+ 1	+ 2	+ 3	+ 5

#### Performance Notes:

- Horizontal throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
- Throw values are based on a 4 ft. section. For other lengths, use the correction factor table above.
- Total Pressure is in inches w.g..
- Noise Criteria [NC] values are based on a 4 ft. section and a room absorption of 10 dB, re 10<sup>-12</sup> watts. For other lengths, use the correction factor table shown.
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