

# Model: DC-PVB

Extruded Aluminum Vertical Blade Penthouse  
Box Corner

Miami-Dade County, FL  
NOA No: 07- 0305.08  
Expiration Date: 8/2/2012  
FL#: 13203

## APPLICATION:

**DC-PVB** is a severe duty extruded aluminum vertical blade louvered penthouse enclosure incorporating Leader's Model **DC-VB6** Miami Dade approved louvers and is specifically designed to resist water penetration from wind driven rain. The penthouse enclosure is shipped completely assembled eliminating the need for any field assembly.

With the factory furnished roof curb installed, the penthouse is easily attached from the outside perimeter with no need to access the inside of the penthouse. The **DC-PVB** may be used for intake or exhaust applications or as a severe duty fan enclosure with the addition of the optional fan-mounting collar. The optional hinged roof and internal ladder provides convenient fan access.

**DC-PVB** is designed specifically to meet the following Miami Dade County test requirements and protocols:

- **PA 201-94** (Large Missile Impact test)
- **PA 202-94** (Uniform Static Air Pressure test)
- **PA 203-94** (Cycle Wind Loading Test)

Based on testing of a throat size of 84" x 96" x 50"h sample with a maximum design load pressure of 100-psf.

## STANDARD SPECIFICATIONS:

**Louver Frame:** Heavy gauge 6" x .081" thick 6063T5 extruded aluminum.

**Louver Blade:** Serpentine Water Control Blade 6" x .081" thick 6063T5 extruded aluminum mechanically fastened and welded. Blades are spaced at 1.5" apart.

**Roof:** .080" formed aluminum

**Birdscreen:** Standard .0516" x 1" flattened expanded aluminum.

## MINIMUM THROAT SIZE:

12" X 12" X 12"h

## MAXIMUM THROAT SIZE:

84" X 96" X 50"h

## OPTIONS: (at additional cost)

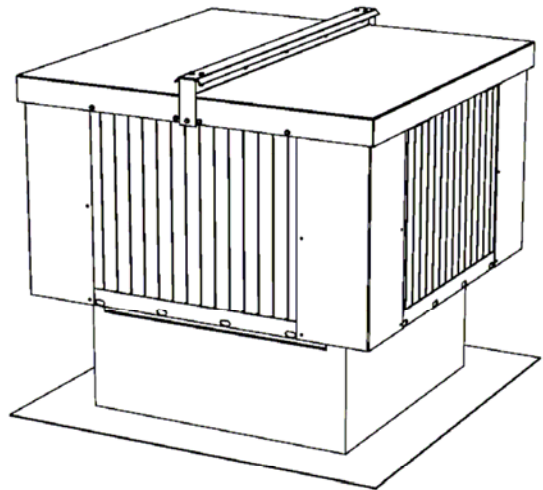
- |   |   |
|---|---|
| <input type="checkbox"/> Insect Screen          | <input type="checkbox"/> Hinged Roof                  |
| <input type="checkbox"/> Mill Finish (Standard) | <input type="checkbox"/> Roof Anti-Condensate Coating |
| <input type="checkbox"/> Enamel Finish          | <input type="checkbox"/> Insulated Roof Hood          |
| <input type="checkbox"/> Kynar Finish*          | <input type="checkbox"/> Internal Access Ladder       |
| <input type="checkbox"/> Powder Coated          | <input type="checkbox"/> Hinge Kit                    |
| <input type="checkbox"/> Filters                |   |

\*Kynar finish available in limited sizes, consult factory for availability.

## FEATURES:

- Penthouse shipped fully assembled
- Easily installed from outer perimeter
- Miami-Dade County approved as a fan enclosure

**Note: Factory curb required to meet Miami-Dade test standards is available through Creative Metals Division of Leader Industries Inc.**



**Max Wind load ±100 psf**

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## DC-PVB Free Area in sq ft of Four DC-VB6 Louvers (Square Penthouse)

		Single Louver Width							
		12	24	36	48	60	72	84	96
Single Louver Height	12	0.6	1.92	3.24	4.56	5.84	7.16	8.48	9.8
	24	1.68	5.32	9	12.64	16.32	19.96	23.64	27.28
	36	2.76	8.76	14.76	20.76	26.76	32.8	38.8	44.8
	48	3.84	12.2	20.52	28.88	37.24	45.6	53.96	62.32
	60	4.92	15.6	26.32	37	47.72	58.4	69.12	79.8
	72	5.96	19.04	32.08	45.12	58.16	71.2	84.24	97.32
	84	7.04	14.76	37.84	53.24	68.64	84.04	99.4	114.8
	96	8.12	25.88	43.6	61.36	79.08	96.84	114.56	132.32

## Severe Duty Miami-Dade County Approved Louvered Penthouse Model DC-PVB

Volumetric Flow Rate and Static Pressure Loss Performance Data

		Static Pressure Loss (in. WG)								
		0.044	0.086	0.136	0.186	0.258	0.332	0.423	0.516	
		Throat Velocity (FPM)								
		600	800	1000	1200	1400	1600	1800	2000	
Height	Square	12	360	480	600	720	840	960	1080	1200
		24	1152	1536	1920	2304	2688	3072	3456	3840
		36	1944	2592	3240	3888	4536	5184	5832	6480
		48	2736	3648	4560	5472	6384	7296	8208	9120
		60	3504	4672	5840	7008	8176	9344	10512	11680
		72	4296	5728	7160	8592	10024	11456	12888	14320
		84	5088	6784	8480	10176	11872	13568	15264	16960
		96	5880	7840	9800	11760	13720	15680	17640	19600
24	12	1008	1344	1680	2016	2352	2688	3024	3360	
	24	3192	4256	5320	6384	7448	8512	9576	10640	
	36	5400	7200	9000	10800	12600	14400	16200	18000	
	48	7584	10112	12640	15168	17696	20224	22752	25280	
	60	9792	13056	16320	19584	22848	26112	29376	32640	
	72	11976	15968	19960	23952	27944	31936	35928	39920	
	84	14184	18912	23640	28368	33096	37824	42552	47280	
	96	16368	21824	27280	32736	38192	43648	49104	54560	
36	24	5256	7008	8760	10512	12264	14016	15768	17520	
	36	8856	11808	14760	17712	20664	23616	26568	29520	
	48	12456	16608	20760	24912	29064	33216	37368	41520	
	60	16056	21408	26760	32112	37464	42816	48168	53520	
	72	19680	26240	32800	39360	45920	52480	59040	65600	
	84	23280	31040	38800	46560	54320	62080	69840	77600	
	96	26880	35840	44800	53760	62720	71680	80640	89600	
	48	36	12312	16416	20520	24624	28728	32832	36936	41040
48		17328	23104	28880	34656	40432	46208	51984	57760	
60		22344	29792	37240	44688	52136	59584	67032	74480	
72		27360	36480	45600	54720	63840	72960	82080	91200	
84		32376	43168	53960	64752	75544	86336	97128	107920	
96		37392	49856	62320	74784	87248	99712	112176	124640	
60		48	22200	29600	37000	44400	51800	59200	66600	74000
		60	28632	38176	47720	57264	66808	76352	85896	95440
	72	35040	46720	58400	70080	81760	93440	105120	116800	
	84	41472	55296	69120	82944	96768	110592	124416	138240	
	96	47880	63840	79800	95760	111720	127680	143640	159600	
72	60	34896	46528	58160	69792	81424	93056	104688	116320	
	72	42720	56960	71200	85440	99680	113920	128160	142400	
	84	50544	67392	84240	101088	117936	134784	151632	168480	
	96	58392	77856	97320	116784	136248	155712	175176	194640	
84	72	50424	67232	84040	100848	117656	134464	151272	168080	
	84	59640	79520	99400	119280	139160	159040	178920	198800	
	96	68880	91840	114800	137760	160720	183680	206640	229600	

Pressure loss ratings do not include the effect of birdscreen.



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Aug. 1, 2008

# DC-PVB Hurricane Louvered Penthouse Specifications

All Severe Duty Hurricane Louvered Penthouses shall have been tested and successfully passed the **Miami-Dade County** requirements as listed below for impact resistance, static and cyclic air pressure testing as set forth by the Miami-Dade County Building Code Compliance Office and carry the appropriate **NOA** seal.

- A. Impact Test: TAS 201 Large Missile
- B. B. Uniform Static Pressure Test: TAS 202
- C. Cyclic Wind Pressure Load Test TAS 203 with a Specimen Design Pressure (DP) rating not less than 100 pounds per square foot.

The **DC-PVB** Louvered Penthouse is a severe duty extruded aluminum vertical blade louvered penthouse enclosure constructed utilizing the Model DC-VB6 Miami Dade approved louvers specifically designed to resist water penetration from wind driven rain.

The DC-VB6 six-inch deep vertical blade Hurricane Louvers have been tested and certified for air performance and water penetration and are in compliance with the requirements of **AMCA** Standard 500-L-99 wind driven rain. Louvers have been tested at 8" rainfall with wind velocity of 50 mph and have a class A rating 100% effective.

The **DC-PVB** six inch deep Hurricane Louvered Penthouse is a vertical blade design incorporating integral water drains located with in the louver jambs. Louver Blades, Jamb Headers and Sills are constructed using a minimum .080 thick extruded 6063 T5 aluminum alloy. The roof is formed using .080 thick aluminum with reinforcement. A .0516 thick x 3/4" flattened expanded aluminum bird screen attached to the rear of the louver is standard.

The **DC-PVB** was tested with a factory supplied Miami Dade approved roof curb and is easily installed from the outside perimeter using simple hand tools with out having to have access from inside the penthouse. The **DC-PVB** may be used for either intake or exhaust applications or as a severe duty fan or equipment enclosure with the addition of the optional curb mounting collar. The optional hinged roof and internal ladder provides easy access to the interior for inspection and servicing of any installed equipment.

## Acceptable Manufacturers

### 1. Leader Dampers & Louvers Model **DC-PVB**