



COMMERCIAL APPLICATION

RESIDENTIAL APPLICATION

# PVAS 2008CU APPLICATIONS GUIDE COMMERCIAL/RESIDENTIAL

## INTRODUCTION

The Pura Vida Air Systems PVAS 2008CU is a ducted-in unit used to reduce the levels of airborne biological contaminants and to help keep surfaces clean. The PVAS 2008CU uses Pura Vida Air Systems PCP Compound panel(s). It is suitable for air handlers up to 25 tons, and may be custom-sized for your application. The installer would remove a section of duct and flange up to the housing of the CU. Contact Pura Vida Air Systems for recommended unit configurations and custom units. All Pura Vida Air Systems products incorporate 3-step PCO technology: MERV Filtration, UVGI Lamps and Photocatalysis.



Residential Installation

## EXAMPLES OF USE

The unit may be utilized in the return of an air handler downstream of filtration to prevent coil buildup, or above the supply, or in the trunk line. The purpose is to reduce the amount of airborne biological contaminants, reduce VOCs and keep exposed surfaces within the unit clean.

It may be installed in vertical or horizontal applications; however, keep in mind the yearly maintenance requirements.

## PCP COMPOUND DATA

Each Pura Vida Air Systems PCP Compound standardly used in the 2008CU series has dimensions found in the chart below. All PCP Compound units are 6” deep nominal; actual dimension is 5.813”. The catalyst is plated at one pleat per inch. Three lamps are spaced 6” from each other, then centered over the width of the panel. Contact Pura Vida Air Systems for custom-sized units.

### Complete List of PCP Compounds by Pura Vida Air Systems

**PROPRIETARY AND CONFIDENTIAL**

	Height Designation	Width Designation	Buff From Standards	Actual Height	Total Length with Ballast Tray and Baffle Frames	Lamps	Lamp Length	Amp per Lamp	Total Amps	UVC Watts	Approx Weight Gal. lbs.	Approx Weight SS lbs.	Approx Weight Al lbs.
1212	1	12 12	12	11.5	14.936	2	12"	0.224	0.45	7	7.248	6.438	5.286
1216	2	12 16	16	11.5	18.936	2	14"	0.296	0.59	9	8.224	7.364	6.162
1220	3	12 20	20	11.5	22.936	2	20"	0.367	0.73	13	9.099	8.239	7.038
1221	4	12 21	21	11.5	24.063	2	20"	0.367	0.73	15	9.233	8.475	7.273
1224	5	12 24	24	11.5	26.936	2	24"	0.519	1.04	18	9.973	9.115	7.913
1228	6	12 28	16 12	11.5	30.436	2	28"	0.604	1.21	21	12.327	11.030	9.218
1232	7	12 32	22 9	11.5	34.436	2	31"	0.659	1.32	24	13.203	11.906	10.093
1233	8	12 33	24 9	11.5	35.936	2	31"	0.659	1.32	24	13.489	12.192	10.379
1236	9	12 36	24 12	11.5	38.436	2	34"	0.752	1.50	27	14.078	12.781	10.969
1237	10	12 37	24 13	11.5	39.686	2	36"	0.752	1.50	27	14.331	13.034	11.221
1240	11	12 40	20 20	11.5	42.436	2	40"	0.844	1.69	30	14.954	13.637	11.843
1241	12	12 41	21 20	11.5	43.563	2	40"	0.844	1.69	30	15.190	13.892	12.080
1244	13	12 44	24 20	11.5	46.436	2	44"	0.908	1.82	32	15.829	14.532	12.720
1245	14	12 45	24 21	11.5	47.563	2	44"	0.908	1.82	32	16.065	14.788	12.956
1246	15	12 46	24 22	11.5	48.936	2	44"	0.908	1.82	32	16.334	15.037	13.223
1248	16	12 48	24 24	11.5	50.436	2	48"	0.981	1.96	36	16.703	15.406	13.596
1252	17	12 52	24 16 12	11.5	53.936	2	51.5"	1.058	2.07	38.5	19.257	17.333	14.900
1253	18	12 53	24 20 9	11.5	55.436	2	51.5"	1.058	2.07	38.5	19.543	17.609	15.186
1256	19	12 56	24 22 9	11.5	57.936	2	55"	1.165	2.21	41	19.933	18.199	15.776
1257	20	12 57	24 24 9	11.5	59.436	2	55"	1.165	2.21	41	20.219	18.485	16.062
1259	21	12 59	21 21 17	11.5	61.686	2	59"	1.17	2.34	44	20.690	18.996	16.533
1260	22	12 60	24 24 12	11.5	61.936	2	59"	1.17	2.34	44	20.808	19.074	16.652
1261	23	12 61	24 24 14a	11.5	63.436	2	59"	1.17	2.34	44	21.093	19.350	16.938
1262	24	12 62	24 24 14b	11.5	64.186	2	59"	1.17	2.34	44	21.290	19.546	17.123
1612	25	16 12	12	15.5	14.936	3	12"	0.224	0.67	7	9.753	8.556	6.883
1616	26	16 16	16	15.5	18.936	3	14"	0.296	0.89	9	10.741	9.544	7.871
1620	27	16 20	20	15.5	22.936	3	20"	0.367	1.10	13	11.730	10.532	8.860
1621	28	16 21	21	15.5	24.063	3	20"	0.367	1.10	15	11.994	10.796	9.124
1624	29	16 24	24	15.5	26.936	3	24"	0.519	1.56	18	12.718	11.521	9.848
1628	30	16 28	16 12	15.5	30.436	3	28"	0.604	1.81	21	15.853	14.030	11.482
1632	31	16 32	22 9	15.5	34.436	3	31"	0.659	1.98	24	16.843	15.019	12.470
1633	32	16 33	24 9	15.5	35.936	3	31"	0.659	1.98	24	17.157	15.333	12.784
1636	33	16 36	24 12	15.5	38.436	3	36"	0.752	2.26	27	17.851	16.007	13.498
1637	34	16 37	24 13	15.5	39.686	3	36"	0.752	2.26	27	18.112	16.288	13.739
1640	35	16 40	20 20	15.5	42.436	3	40"	0.844	2.53	30	18.820	16.993	14.447
1641	36	16 41	21 20	15.5	43.563	3	40"	0.844	2.53	30	19.094	17.239	14.711
1644	37	16 44	24 20	15.5	46.436	3	44"	0.908	2.72	32	19.828	17.984	15.453
1646	38	16 46	24 21	15.5	47.563	3	44"	0.908	2.72	32	20.072	18.246	15.699
1646	39	16 46	24 22	15.5	48.936	3	44"	0.908	2.72	32	20.370	18.545	15.996
1648	40	16 48	24 24	15.5	50.436	3	48"	0.981	2.94	36	20.797	18.972	16.424
1652	41	16 52	24 16 12	15.5	53.936	3	51.5"	1.058	3.10	38.5	23.933	21.482	18.057
1653	42	16 53	24 20 9	15.5	55.436	3	51.5"	1.058	3.10	38.5	24.247	21.796	18.371
1656	43	16 56	24 22 9	15.5	57.936	3	55"	1.165	3.32	41	24.922	22.470	19.045
1657	44	16 57	24 24 9	15.5	59.436	3	55"	1.165	3.32	41	25.236	22.794	19.360
1659	45	16 59	21 21 17	15.5	61.686	3	59"	1.17	3.51	44	25.764	23.312	19.887
1660	46	16 60	24 24 12	15.5	61.936	3	59"	1.17	3.51	44	25.910	23.436	20.034
1661	47	16 61	24 24 14a	15.5	63.436	3	59"	1.17	3.51	44	26.224	23.775	20.348
1662	48	16 62	24 24 14b	15.5	64.186	3	59"	1.17	3.51	44	26.488	23.986	20.562
1728	49	17 28	25 17	19.5	28.000	3	24"	0.519	1.56	18	14.000	12.392	10.142
2012	50	20 12	12	19.5	14.936	3	12"	0.224	0.67	7	11.014	9.536	7.318
2016	51	20 16	16	19.5	18.936	3	14"	0.296	0.89	9	12.113	10.652	8.119
2020	52	20 20	20	19.5	22.936	3	20"	0.367	1.10	13	13.217	11.798	9.721
2021	53	20 21	21	19.5	24.063	3	20"	0.367	1.10	15	13.509	12.030	10.019
2024	54	20 24	24	19.5	26.936	3	24"	0.519	1.56	18	14.518	12.839	10.822
2028	55	20 28	16 12	19.5	30.436	3	28"	0.604	1.81	21	17.970	15.770	12.698
2032	56	20 32	22 9	19.5	34.436	3	31"	0.659	1.98	24	19.071	16.872	13.799
2033	57	20 33	24 9	19.5	35.936	3	31"	0.659	1.98	24	19.414	17.214	14.141
2036	58	20 36	24 12	19.5	38.436	3	36"	0.752	2.26	27	20.173	17.973	14.900
2037	59	20 37	24 13	19.5	39.686	3	36"	0.752	2.26	27	20.481	18.282	15.209
2040	60	20 40	20 20	19.5	42.436	3	40"	0.844	2.53	30	21.274	19.074	16.001
2041	61	20 41	21 20	19.5	43.563	3	40"	0.844	2.53	30	21.566	19.366	16.293
2044	62	20 44	24 20	19.5	46.436	3	44"	0.908	2.72	32	22.373	20.175	17.103
2045	63	20 45	24 21	19.5	47.563	3	44"	0.908	2.72	32	22.667	20.436	17.395
2046	64	20 46	24 22	19.5	48.936	3	44"	0.908	2.72	32	22.993	20.793	17.720
2048	65	20 48	24 24	19.5	50.436	3	48"	0.981	2.94	36	23.476	21.277	18.204
2052	66	20 52	24 16 12	19.5	53.936	3	51.5"	1.058	3.10	38.5	27.128	24.138	20.080
2053	67	20 53	24 20 9	19.5	55.436	3	51.5"	1.058	3.10	38.5	27.471	24.336	20.422
2056	68	20 56	24 22 9	19.5	57.936	3	55"	1.165	3.32	41	28.200	25.289	21.181
2057	69	20 57	24 24 9	19.5	59.436	3	55"	1.165	3.32	41	28.572	25.631	21.523
2059	70	20 59	21 21 17	19.5	61.686	3	59"	1.17	3.51	44	29.154	26.214	22.107
2060	71	20 60	24 24 12	19.5	61.936	3	59"	1.17	3.51	44	29.431	26.390	22.282
2061	72	20 61	24 24 14a	19.5	63.436	3	59"	1.17	3.51	44	29.673	26.733	22.624
2062	73	20 62	24 24 14b	19.5	64.186	3	59"	1.17	3.51	44	29.915	26.974	22.866



2412	74	24 12	12		23.5	14.938	4	12"	0.224	0.90	7	13.285	11.527	9.071	
2416	75	24 16	16		23.5	18.938	4	16"	0.296	1.18	9	14.499	12.741	10.283	
2420	76	24 20	20		23.5	22.938	4	20"	0.367	1.47	10	15.713	13.955	11.500	
2421	77	24 21	21		23.5	24.063	4	20"	0.367	1.47	10	16.033	14.275	11.820	
2424	78	24 24	24		23.5	26.938	4	24"	0.517	2.08	16	16.927	15.169	12.714	
2428	79	24 28	16	12	23.5	30.438	4	28"	0.604	2.42	21	21.229	18.378	14.875	
2432	80	24 32	22	9	23.5	34.438	4	31"	0.659	2.64	24	22.443	19.792	16.289	
2433	81	24 33	24	9	23.5	35.938	4	31"	0.659	2.64	24	22.814	20.163	16.660	
2436	82	24 36	24	12	23.5	36.438	4	34"	0.752	3.01	27	23.657	21.006	17.303	
2437	83	24 37	24	13	23.5	39.898	4	36"	0.752	3.01	27	23.994	21.343	17.640	
2440	84	24 40	20	20	23.5	42.438	4	40"	0.844	3.38	30	24.671	22.220	18.517	
2441	85	24 41	21	20	23.5	43.563	4	40"	0.844	3.38	30	25.192	22.541	18.838	
2444	86	24 44	24	20	23.5	46.438	4	44"	0.908	3.63	32	26.083	23.434	19.731	
2446	87	24 43	24	21	23.5	47.563	4	44"	0.908	3.63	32	26.406	23.755	20.052	
2448	88	24 46	24	22	23.5	48.938	4	44"	0.908	3.63	32	26.709	24.109	20.403	
2448	89	24 48	24	24	23.5	50.438	4	48"	0.981	3.92	36	27.299	24.649	20.948	
2452	90	24 52	24	16	12	23.5	53.938	4	51.5"	1.083	4.13	38.5	31.601	28.057	23.107
2453	91	24 53	24	20	9	23.5	55.438	4	51.5"	1.083	4.13	38.5	31.972	28.428	23.477
2456	92	24 54	24	22	9	23.5	57.938	4	55"	1.103	4.42	41	32.815	29.272	24.321
2457	93	24 57	24	24	9	23.5	59.438	4	55"	1.103	4.42	41	33.186	29.642	24.691
2458	94	24 59	21	21	17	23.5	61.898	4	59"	1.17	4.68	44	33.627	30.383	25.332
2460	95	24 60	24	24	12	23.5	61.938	4	59"	1.17	4.68	44	34.000	30.484	25.533
2461	96	24 61	24	24	14a	23.5	63.438	4	59"	1.17	4.68	44	34.400	30.835	25.903
2482	97	24 62	24	24	14b	23.5	64.188	4	59"	1.17	4.68	44	34.670	31.126	26.173

Each panel has a 0.05” H<sub>2</sub>O pressure drop @ 500 FPM.

## LAMPS

**Pura Vida Air Systems lamps do not produce ozone!** The lamps provide a minimum intensity of 775 microwatts/cm<sup>2</sup> (5 milliwatts per square inch) at 10.77 centimeters (4.24”) to activate the catalyst effectively. To maintain tested performance, lamps may not be substituted with another manufacturer’s products. These lamps provide UV-C wavelengths @ 254 nm. All lamps must be replaced at 12000 hrs (16 months continuous use) to maintain intensity requirements. Pura Vida Air Systems lamps contain trace amounts of mercury, encapsulated within the lamp and therefore reducing risk to the consumer or ecosphere.

## FILTRATION

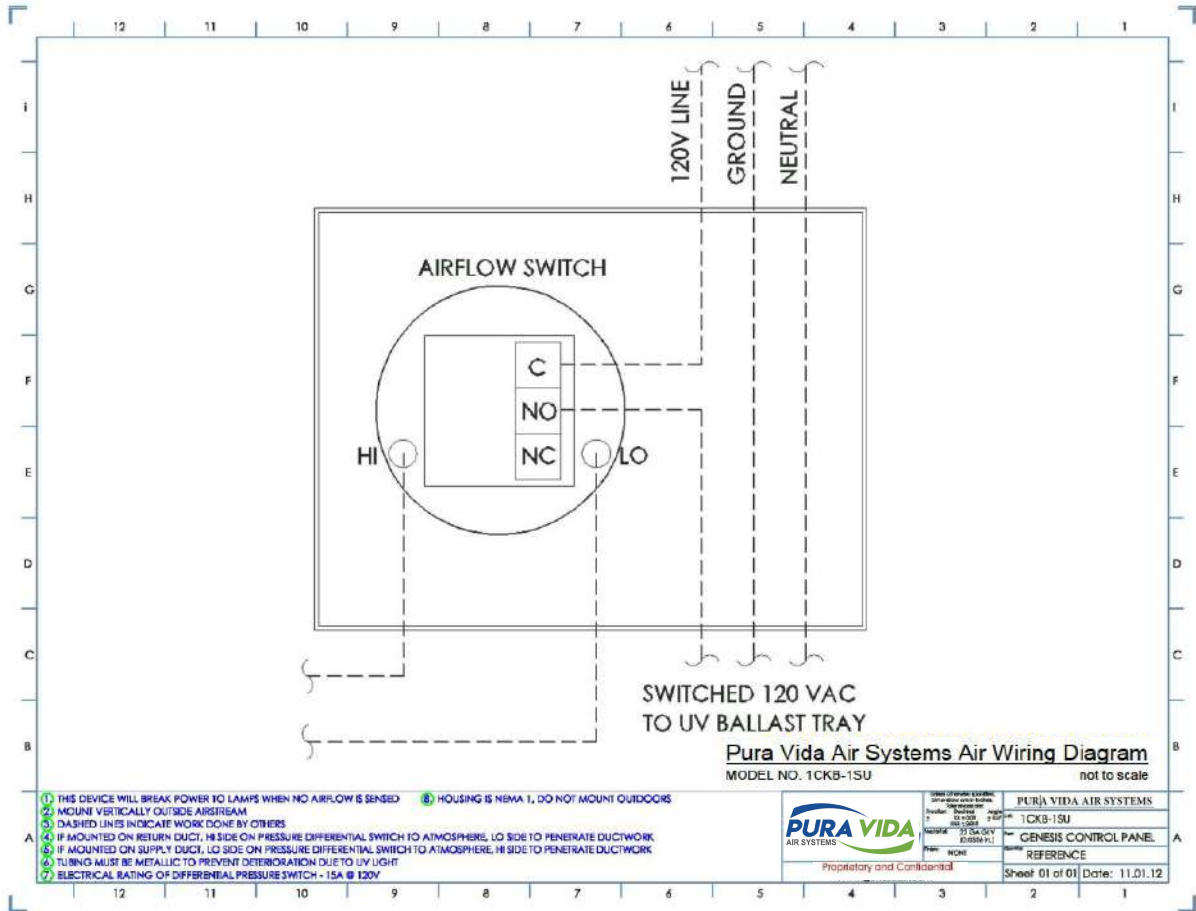
This unit requires the use of filtration. Pura Vida Air Systems recommends the use of MERV 13 filters; however, a minimum of MERV 8 filters may be used where higher static pressures presents problems for the air-handler.

## POWER

Ballasts are matched to the specific length of lamp. To maintain tested performance, ballasts may not be substituted with another manufacturer’s products. The ballasts must be specified as 120v, 60 Hz: contact the factory for other voltage/frequency requirements. The ballast operating temperature range is -20°F to 158°F. Pura Vida Air Systems provides a junction box that may be hard-wired or with appliance cord by contractor. A fan proofing switch is an option for controlling the lamps.

## FAN PROOF SWITCH

In most cases a Dwyer fan proof switch can be your primary control to operate the lamps.



**SAFETY**

Disconnect power before servicing.

UVC light hazard. UVC light can cause temporary or permanent loss of vision and sunburn. Take proper precautions to protect eyes and skin from direct exposure.



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