



COMMERCIAL APPLICATION

Residential Application

2008CU APPLICATIONS GUIDE COMMERCIAL/RESIDENTIAL

INTRODUCTION

The IAQ Solutions 2008CU is a ducted-in unit used to reduce the levels of airborne biological contaminants and to help keep surfaces clean. The 2008CU uses IAQ Solutions 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 IAQ Solutions for custom units. For recommended unit configurations, consult the 2008 Product Calculator supplied with packet. Contact IAQ Solutions if you do not have one. All IAQ Solutions products incorporate 3-step 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 VOC's and keep exposed surfaces within the unit clean.

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

PCP COMPOUND DATA

Each IAQ Solutions 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 pleated at one pleat per inch. Three lamps are spaced 6" from each other, then centered over the width of the panel. Contact IAQ Solutions for custom-sized units.

Complete List of PCP Compounds by Genesis Air 11.11.11

	1.1	Helphi Width	10000	and the second se	Actual	Solal Length with	C. Lawrence	Lamp	Ampper	Totol	NVC.	Appice	Approx	Approx
		signation Designation	BUILDING!	ri Stanokarðt	Height	Bolimit Tray and Bolled Frames	Longs	Length	Lamp	Amue	Watts	Weight Gal,	Weight SS. Her.	Weight Al
213	1	10.10	110		11.4	14,938	3	12	0.254	0,45	13	7.348	6.408	5.2
216	-2	12.1#	14.		11.5	16,936	- 4	0.04	0.296	0.59	18	8.224	1.364	(d.)
220	×	12.30	30			22,938		20	0.367	0.72	15	9,099	8.238	7.0
121	4	12.21	- 31		11.0	24.063	- 2	20"	0.367	0.73	18	9.335	8.475	7.2
124 128	5	12.24 12.28	34 16	42	11.5	26,938	- 2	241	0.604	1.04	18	9,971	9,115 (1,030	79
132	-	12.30	12		11.5	34.458	1	31	0.659	1.32	24	13,203	11,906	300
233	8	12 33	24		11.5	33,926	2	31"	0.657	1.32	24	13,457	12.182	30.3
1001	0	12.34	34	12	11.5	36.456	1	24	0.750	1.50	27	14078	12,785	10.1
97	10.	12.32	24	15	11.5	39.668	1	35	0.752	1.50	10	14,331	15.034	11.
40	10.	12.40	20	30	11.8	42.436	- 1	40	0.544	1.1.69	301	14358	15.637	- 10
41	12	12.41	11	210	11.2	43.563	12	-401	0.544	1.69	30	15.990	13,892	12
44	-10	12.44		20	-112	44,408	- 1	- 44	0.508	1.01	32	15.824	14.532	- 12
45	14	12:48	34	21	11.5	\$2.563	- 1	-44	0.908	1.82	182.1	16,0e3	14,748	- 12
40	15	12-44	24	12	101	45,730	1	+4"	0.900	11.82		16.354	15,037	10.
40	16	12.45	34.	24	11.2	10,408	1.	-41"	0.901	1.76	1.046	16,700	-15.408	13
2	17	12.33	24	16 12	11.3	53,458	1	11.5	1 039	2.07	38.5	199,057	17.113	14
53	19	12.53	24		11.3		1.2				41	19.543	17,609	15
98. 57	- 20	12.84	- 24	22 #	11.2	17,958	- 1	55"	1.105	2.21	41	19,933	18,199	16
59	20	12.50	11	21 17	11.4	61.680	1	- 59	1.17	2.54	- 44	20,490	18,954	74
66	22	12.60	- 24	24 12		±1.938	1	597	1.17	2.54	44	20.808	19,074	16
n)	23	12 #1	34	34 14		43.458	1.2	397	1,17	2.84	44	21.091	19,365	36
2	24	12.62	24	24 148		64.168	2	39	1.17	2.04		21,280	19,546	32
12	25	16.12	12		15.5	14.938	3	12 -	0.224	0.67	10	9.755	8.554	- A
18	26	10:10	10		-10.0	18,938	8.	161	0.296		1.00	10,743	9,544	- 1
20	17.	16.30	30		15.5	22,936		20	0.367	1,10	18	11,730	10,532	. 0
II.	28	14.21	- 21		15.5	24,063	- 3	201	0.367	1.00	1.5	11,994	10,796	
14	39	16.24	- 24		15.5	14.930	- A	34	0.519	1.14		112,218	11.541	
8	- 30	18:28	16	32	15.5	30.458	5	-28	0.604	1.00	- 21	15,635	14,030	
12	301.	16 32	- 32		19.3	34.438	-	- 117	0.659	1.98	-24	16.841	15.019	12
10 10	32	16-38 Tellae	24 24	u.	13.5	35.938	- 5	36"	0.659 0.752	1.98	24	17.157	75,833 16,007	13
31 31	14	16.37	- 24	18	15.5	39.600	-	35	0.732	2.26	21	16,112	16.288	13
60	35	16.40	10 -	20	18.3	C.438		40	0.544	1.13	20	18.800	16.945	TA
ñ.	24	16.41	- 31	20	15.5	40.363		40	0.544	- 2.53	30	17.064	17,239	14
44	10	74.44	24	30	15.5	44,438		44	0.958	2.73	32	19,000	17.984	15
46	38	16.41	34	23	15.5	47.563	-3	40	0.906	2.12	32	20.072	18.248	- 15
16	39	76.44	1.34	32	15.5	46.936	3	441	0.408	2.72	37	20.370	18.545	. 15
8	- 40	16.48	24	24	13.5	30.436	3	45	0.961	2.94	-36-1	20,797	38.972	18
12	40	16.52	34	36 12	15.5	53.7.50	- 3	\$1.5	1003	3.10	38.5	22,933	21,482	10
8	42	16.55	24	20. 9	10.0	55,498	- 8	31.51	1:039	3,10	38.5	24,247	(21,296	18
10	43	16.56	- 24	- 22 · *	18.8	37.936	3	35	1,105	3.32	- 41	24,972	22,470	- 19
π	- 44 C	16.87	1241	24 #	13.3	39.408	- 3	-35"	1.103	3.32		25,236	12.784	18
9	45	16.59	21	24 12		41,938	-	59°	1.17	3.51	44	25,744	25,312	19
0	40					61,938	-3	Ser.			44	25,910		: 20
1	4	16.61	24 34	24 14		60,458 64.7 III	- 1	57	1.17	1.51	-44	26.435	25/73	
12 雨	40	17.28	- 35	24 .14	17	18,000	- 1	24	0.519	1.55	10	14000	12,00	20
2	30	20.12	12		19.5	14,750		12	0.224	0,67	1	.15,014	9,536	
0	DI.	2018	10		19.3	16.938		36"	0.296	0.09		12,518	10.637	
80	10	20.30	.20		19.3	22.936	- 3	- 201	0.367	1.10	15	13.217	11,738	
t I	55	20.21	11		19.5	24,067		20*	0.347	1,10	15	13.504	12,050	10
54	54	20.24	- 34		19.5	26.938	-8-	-240	916.01	1.38	18	14318	12,839	10
8	35.	20.28	1.16	12	19.5	10,458		28	0.624	1.81	115	17,970	15,775	- 12
52	36	20.32	22		19,5	34.438		31+	0.659	1.78	0.24	19.071	16,872	- 13
9	37	20.33	34	Ψ.	19.5	31,936		10	0.657	1.99	24	1R414	17,214	14
H)	50	20.94	- 24	推	19.3	38.439		.06	0.752	2.26	- 421 -	20,175	17.975	-14
ir j	39	20.07	24	15	19,5	39.166	- 5		0.752	2.26	27	20,481	16.282	10
0	60	20.40	20	200	19.3	40,408	- 3	40'	0.544	2,53	30	25.274	18,074	- 14
4	61	20.41	- 24	20	19.5	45.543	-	44	0.544	2,53	10	21.346 22.321	20.175	10
14- 15-	63	20.44	24	20	19.3	47.563	-	44	0.908	2.72	32	22.667	20,175	17
0	64	20.46	24	10	19.3	40.938	- 5	41	0.500	2.72	112	22,992	20.793	17
0	45	20.45	24	14	19.8	10,456		41	0.861	2.94	34	20,474	21,277	i ii
2	66	20.52	24	36 12		55.956	- 5	31.57	1.059	-3.10	38.3	27,128	24,168	20
81	67	20.55	14	20 9	19.8	35.458		11.1	1.039	1,10	36.5	27.471	24350	
ia i	48	20.56	- 24	22. 9	19.3	27.438	- 3	15	1.105	3.32	41	28,330	25.264	21
17	6.9	292.57	24	24 9	19.5	19.456		55	1.105	3.37	Set 10	26.172	25.431	21
9	70	- 20.5#		21 17		61,688	-3	391	1.12	3.51	-44	29,356	26,216	- 22
10	71	20.40	34	24 12		A1.958	3	590	1,12	3.31	44	29,331	26.390	22
1	72	20.41	- 24	24 14		61.436	- 3	.591	1.17	3.31	144	29.475	26.735	- 22
	23	20.43	34	24 14	10.5	64.788		39	3.17	11.6	44	29.915	36.974	2

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2412	74	24.13	13			23.5	14.838	. 4	12	0.234	0.90	12	13,263	11.527	79,0071
2410	75	2A 16				23.5	18.738	- 4	14	0.276	1.18	18	14.491	12.741	10.365
2420	76	24.30	.00			08.5	22,938	- 4	- 201	0.367	1.47	-15	15,713	13,955	11.300
2421	77	24.21	- 21			20.5	24,043		20	0.367	1.47	3.5	T6003	14.375	11,820
2424	78.	24:24	- 24			23.5	26.938	-4	24	0.519	2.08	18	16.827	10.149	12,734
2426	79	24.28	114	12		29.5	30.436	. 4	28	0.804	2.42	21	21.329	10.579	14875
2432	-80	24.32	22	.*		23.5	34,438	4	31*	0.639	2.64	24	22,443	19,792	16.089
2400	51	24.33	24	9.		13.5	33,936	- 4	31	0.658	2.14	- 24	22.614	20.163	16,460
2436	82	24.84	24	12		29.5	36.450		34"	0.752	106	-27	29.457	21.006	17,303
2437	44	24.37	24	1.1		21.3	29.448	- 4	34	0.732	301	27	23,794	21.348	17.240
2440		24.40	- 20	20		23.5	42.498	4	407	0.844	1,38	.00	24.671	22.220	18,517
2641	85	24.41	21	203		23,5	45.568		- 407	-D.544	1.38	20	25.792	22.541	18.558
2444	.84	24.44	24	20		23.3	44.408	- 4	44	0.800	143	32	24.087	23,434	19.731
2645	10	24.41	24	21		223.5	47.543		44	0.906	1.62	32	28.404	23,729	30 082
2440	68	24.44	34	22		29.5	40.738		144	0.906	3.43	32	26.758	24.109	20.405
2640	84	24.48	24	24		23.5	20 494		40	0.981	3.82	34	27.299	24.2.45	20,543
2452	ND.	-24.82 -	- 24	16	-42-	23.5	03.938	- 4	41.871	1.088	4.18	38.5	108.16	28.057	28.107
2453	. \$1	24.53	1.04	20		20.5	85-400	10	11.0	1,088	14.18	08.1	31,872	26.426	23.477
2498	42	24.58	-24	22		23.5	57,938	4	- 55	1,308	4.42	41	22,812	29.272	24.321
2457	85	24.57	24	24	9	73.5	39,400	-	35	1.105	4.42	,41	313,106	29.642	24.6RT
2459	94	24.59	- 21	21-	12	-23.5	61.669	. 4	59'	1.17	4.46	144	33,827	30.268	25.332
2460	95	24.40	.24	54	32	128.5	ALV20	- 4	59	3.17	4.00	-44	34230	20.454	25,533
2401		24.67	24	24	-1-bu	29.5	63.458		597	1.17	4.60	- 14	34.400	30.856	25,800
2462	47	24 62	24	24	146	23.5	MI.188			1.12	4.68		34,470	91.326	26.172

Each panel has a 0.05" H₂O pressure drop @ 500 FPM.

LAMPS

IAQ Solutions lamps do not produce ozone! The lamps provide a minimum intensity of 775 microwatts/cm² (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. IAQ Solutions 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. IAQ Solutions recommends the use of MERV 13 filters; however, a minimum of MERV 8 filters may be used where higher static pressures present problems for the air-handler.

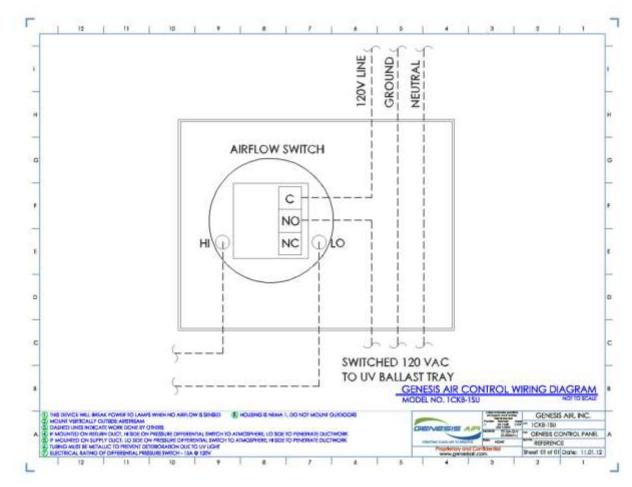
POWER

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. Genesis 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.

IAQ Solutions, Inc.



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.

IAQ SOLUTIONS QUICK REFERENCE

		2006D&L	2008DT-FP	2008B	2008LB	2008 PCP	2008CU	
S	mall spaces	×	×			×	×	
	Medium spaces		×		×	×	×	
Lc	arge spaces			×	×	×	×	
Fc	an-powered	×	×	×				
	Multiple panels standard	×						
	Multiple panels optional			×	×	×		
Lo	cated in:							
	AHU/RTU					×		
	Returns				×	×	×	
	Supplies				×	×	×	
	Trunk lines				×	×	×	
	Curbs					×		
	Stand-alone units	×	×	×				

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