



COMMERCIAL APPLICATION

RESIDENTIAL APPLICATION

2008CU APPLICATIONS GUIDE

COMMERCIAL/RESIDENTIAL

INTRODUCTION

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

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

PCP COMPOUND DATA

Each Genesis Air 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 Genesis Air for custom-sized units.

Complete List of PCP Compounds by Genesis Air 11.11.11

PROPRIETARY AND CONFIDENTIAL													
Height Designation	Width Designation	Build From Standards	Actual Height	Total Length with Ballast Tray and Bolted 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	14.938	2	12"	0.224	0.45	7	7.348	6.488	5.286
1216	2	12 16	16	11.5	18.938	2	16"	0.296	0.59	9	8.224	7.364	6.162
1220	3	12 20	20	11.5	22.938	2	20"	0.367	0.73	15	9.099	8.239	7.038
1221	4	12 21	21	11.5	24.063	2	20"	0.367	0.73	15	9.335	8.475	7.273
1224	5	12 24	24	11.5	26.938	2	24"	0.519	1.04	18	9.973	9.115	7.913
1226	6	12 26	16 12	11.5	30.438	2	28"	0.604	1.21	21	12.327	11.030	9.218
1232	7	12 32	22	11.5	34.438	2	31"	0.659	1.32	24	13.203	11.906	10.099
1233	8	12 33	24 9	11.5	35.938	2	31"	0.659	1.32	24	13.489	12.192	10.379
1236	9	12 36	24 12	11.5	38.438	2	36"	0.752	1.50	27	14.076	12.781	10.969
1237	10	12 37	24 13	11.5	39.688	2	36"	0.752	1.50	27	14.331	13.034	11.221
1240	11	12 40	20 20	11.5	42.438	2	40"	0.844	1.69	30	14.954	13.657	11.845
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	46.438	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	14.768	12.956
1246	15	12 46	24 22	11.5	48.938	2	44"	0.908	1.82	32	16.334	15.037	13.225
1246	16	12 48	24 24	11.5	50.438	2	48"	0.981	1.96	36	16.705	15.408	13.596
1252	17	12 52	24 16 12	11.5	53.938	2	51.5"	1.033	2.07	38.5	19.057	17.323	14.900
1253	18	12 53	24 20 9	11.5	55.438	2	51.5"	1.033	2.07	38.5	19.343	17.609	15.186
1256	19	12 56	24 22 9	11.5	57.938	2	55"	1.105	2.21	41	19.933	18.199	15.776
1257	20	12 57	24 24 9	11.5	59.438	2	55"	1.105	2.21	41	20.219	18.485	16.062
1259	21	12 59	21 21 17	11.5	61.688	2	59"	1.17	2.34	44	20.690	18.956	16.533
1260	22	12 60	24 24 12	11.5	61.938	2	59"	1.17	2.34	44	20.808	19.074	16.652
1261	23	12 61	24 24 14a	11.5	63.438	2	59"	1.17	2.34	44	21.095	19.360	16.938
1262	24	12 62	24 24 14b	11.5	64.188	2	59"	1.17	2.34	44	21.280	19.546	17.123
1612	25	16 12	12	15.5	14.938	3	12"	0.224	0.67	7	9.753	8.536	6.883
1616	26	16 16	16	15.5	18.938	3	16"	0.296	0.89	9	10.741	9.544	7.871
1620	27	16 20	20	15.5	22.938	3	20"	0.367	1.10	15	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	26.938	3	24"	0.519	1.56	18	12.718	11.521	9.848
1626	30	16 28	16 12	15.5	30.438	3	28"	0.604	1.81	21	15.855	14.030	11.482
1632	31	16 32	22 9	15.5	34.438	3	31"	0.659	1.98	24	16.843	15.019	12.470
1633	32	16 33	24 9	15.5	35.938	3	31"	0.659	1.98	24	17.157	15.333	12.784
1636	33	16 36	24 12	15.5	38.438	3	36"	0.752	2.26	27	17.831	16.007	13.458
1637	34	16 37	24 13	15.5	39.688	3	36"	0.752	2.26	27	18.112	16.288	13.739
1640	35	16 40	20 20	15.5	42.438	3	40"	0.844	2.53	30	18.820	16.995	14.447
1641	36	16 41	21 20	15.5	43.563	3	40"	0.844	2.53	30	19.084	17.259	14.711
1644	37	16 44	24 20	15.5	46.438	3	44"	0.908	2.72	32	19.808	17.984	15.433
1645	38	16 45	24 21	15.5	47.563	3	44"	0.908	2.72	32	20.072	18.248	15.699
1646	39	16 46	24 22	15.5	48.938	3	44"	0.908	2.72	32	20.370	18.545	15.996
1648	40	16 48	24 24	15.5	50.438	3	48"	0.981	2.94	36	20.797	18.972	16.424
1652	41	16 52	24 16 12	15.5	53.938	3	51.5"	1.033	3.10	38.5	23.933	21.482	18.057
1653	42	16 53	24 20 9	15.5	55.438	3	51.5"	1.033	3.10	38.5	24.247	21.796	18.371
1656	43	16 56	24 22 9	15.5	57.938	3	55"	1.105	3.32	41	24.922	22.470	19.045
1657	44	16 57	24 24 9	15.5	59.438	3	55"	1.105	3.32	41	25.236	22.784	19.360
1659	45	16 59	21 21 17	15.5	61.688	3	59"	1.17	3.51	44	25.764	23.312	19.887
1680	46	16 60	24 24 12	15.5	61.938	3	59"	1.17	3.51	44	25.910	23.438	20.034
1681	47	16 61	24 24 14a	15.5	63.438	3	59"	1.17	3.51	44	26.224	23.773	20.348
1682	48	16 62	24 24 14b	15.5	64.188	3	59"	1.17	3.51	44	26.438	23.986	20.562
1726	49	17 28	25	17	28.000	3	24"	0.519	1.56	18	14.000	12.392	10.142
2012	50	20 12	12	19.5	14.938	3	12"	0.224	0.67	7	11.014	9.556	7.518
2016	51	20 16	16	19.5	18.938	3	16"	0.296	0.89	9	12.115	10.657	8.619
2020	52	20 20	20	19.5	22.938	3	20"	0.367	1.10	15	13.217	11.758	9.721
2021	53	20 21	21	19.5	24.063	3	20"	0.367	1.10	15	13.309	12.030	10.013
2024	54	20 24	24	19.5	26.938	3	24"	0.519	1.56	18	14.318	12.839	10.822
2028	55	20 28	16 12	19.5	30.438	3	28"	0.604	1.81	21	17.970	15.770	12.698
2032	56	20 32	22 9	19.5	34.438	3	31"	0.659	1.98	24	19.071	16.872	13.799
2033	57	20 33	24 9	19.5	35.938	3	31"	0.659	1.98	24	19.414	17.214	14.141
2036	58	20 36	24 12	19.5	38.438	3	36"	0.752	2.26	27	20.173	17.973	14.900
2037	59	20 37	24 13	19.5	39.688	3	36"	0.752	2.26	27	20.481	18.282	15.209
2040	60	20 40	20 20	19.5	42.438	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	46.438	3	44"	0.908	2.72	32	22.375	20.175	17.103
2045	63	20 45	24 21	19.5	47.563	3	44"	0.908	2.72	32	22.667	20.468	17.395
2046	64	20 46	24 22	19.5	48.938	3	44"	0.908	2.72	32	22.993	20.793	17.720
2046	65	20 48	24 24	19.5	50.438	3	48"	0.981	2.94	36	23.476	21.277	18.204
2052	66	20 52	24 16 12	19.5	53.938	3	51.5"	1.033	3.10	38.5	27.128	24.188	20.080
2053	67	20 53	24 20 9	19.5	55.438	3	51.5"	1.033	3.10	38.5	27.471	24.530	20.422
2056	68	20 56	24 22 9	19.5	57.438	3	55"	1.105	3.32	41	28.230	25.289	21.181
2057	69	20 57	24 24 9	19.5	59.438	3	55"	1.105	3.32	41	28.572	25.631	21.523
2059	70	20 59	21 21 17	19.5	61.688	3	59"	1.17	3.51	44	29.156	26.216	22.107
2060	71	20 60	24 24 12	19.5	61.938	3	59"	1.17	3.51	44	29.331	26.390	22.282
2061	72	20 61	24 24 14a	19.5	63.438	3	59"	1.17	3.51	44	29.673	26.733	22.624
2062	73	20 62	24 24 14b	19.5	64.188	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	10,285
2420	76	24 20	20	23.5	22,938	4	20"	0.367	1.47	15	15,713	13,955	11,500
2421	77	24 21	21	23.5	24,063	4	20"	0.367	1.47	15	16,033	14,275	11,820
2424	78	24 24	24	23.5	26,938	4	24"	0.519	2.08	18	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	18,578	14,875
2432	80	24 32	22 9	23.5	34,438	4	31"	0.659	2.64	24	22,443	19,792	16,069
2433	81	24 33	24 9	23.5	35,938	4	31"	0.659	2.64	24	22,814	20,163	16,460
2436	82	24 36	24 12	23.5	36,438	4	36"	0.752	3.01	27	23,657	21,006	17,303
2437	83	24 37	24 13	23.5	39,688	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	24,871	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	26,085	23,434	19,731
2445	87	24 45	24 21	23.5	47,563	4	44"	0.908	3.63	32	26,406	23,755	20,052
2446	88	24 46	24 22	23.5	48,938	4	44"	0.908	3.63	32	26,759	24,109	20,405
2448	89	24 48	24 24	23.5	50,438	4	48"	0.981	3.92	36	27,299	24,649	20,945
2452	90	24 52	24 16 12	23.5	53,938	4	51.5"	1.033	4.13	38.5	31,601	28,057	23,107
2453	91	24 53	24 20 9	23.5	55,438	4	51.5"	1.033	4.13	38.5	31,972	28,428	23,477
2456	92	24 56	24 22 9	23.5	57,938	4	55"	1.105	4.42	41	32,815	29,272	24,321
2457	93	24 57	24 24 9	23.5	59,438	4	55"	1.105	4.42	41	33,186	29,642	24,691
2459	94	24 59	21 21 17	23.5	61,688	4	59"	1.17	4.68	44	33,827	30,283	25,332
2460	95	24 60	24 24 12	23.5	61,938	4	59"	1.17	4.68	44	34,030	30,486	25,535
2461	96	24 61	24 24 14a	23.5	63,438	4	59"	1.17	4.68	44	34,400	30,856	25,905
2462	97	24 62	24 24 14b	23.5	64,188	4	59"	1.17	4.68	44	34,670	31,126	26,175

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

LAMPS

Genesis Air 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. Genesis Air lamps contain trace amounts of mercury, encapsulated within the lamp and therefore reducing risk to the consumer or ecosphere.

FILTRATION

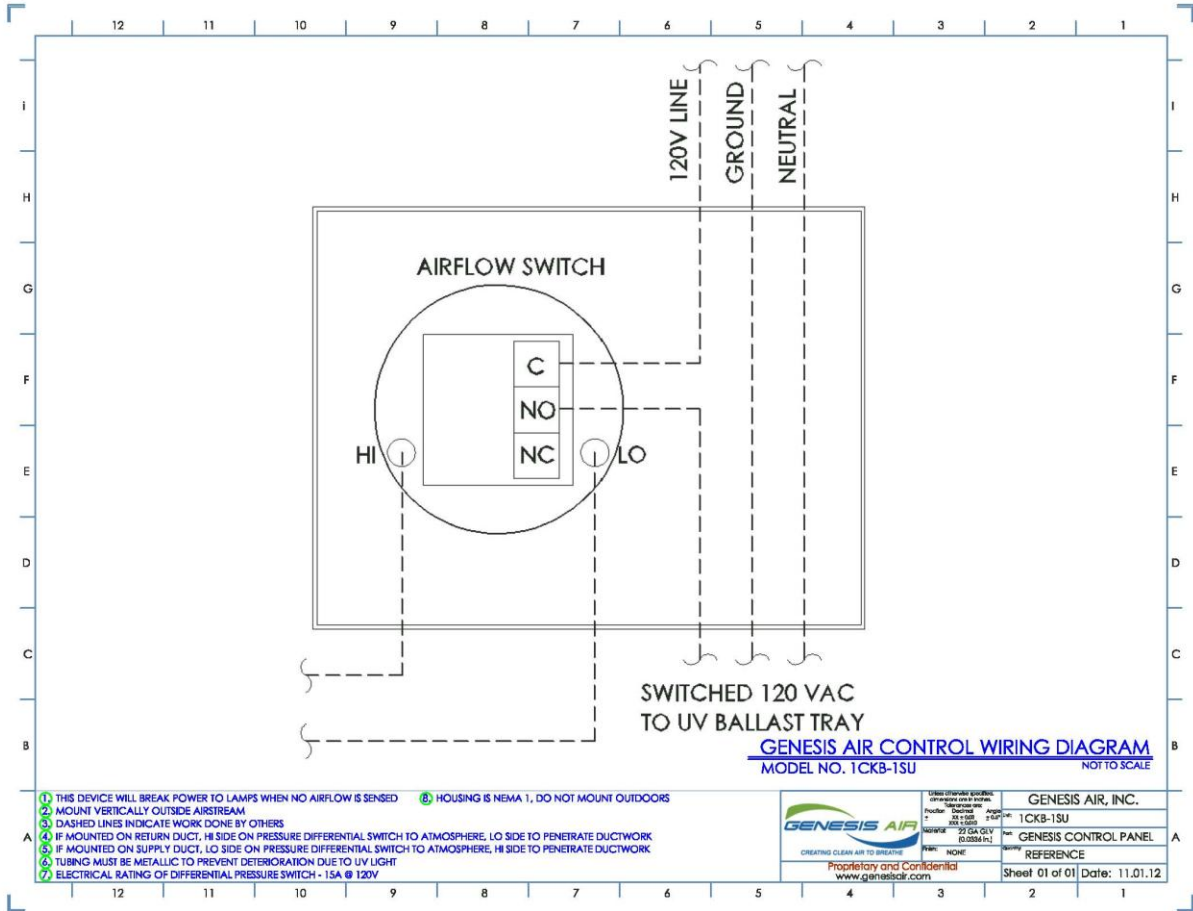
This unit requires the use of filtration. Genesis Air recommends the use of MERV 13 filters; however, a minimum of MERV 8 filters may be used where higher static pressures present problems for the air-handler.

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.



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.

GENESIS AIR QUICK REFERENCE

		2006D&L	2008DT-FP	2008B	2008LB	2008 PCP COURTLINE	2008CU	
	Small spaces	X	X			X	X	
	Medium spaces		X		X	X	X	
	Large spaces			X	X	X	X	
	Fan-powered	X	X	X				
	Multiple panels standard	X						
	Multiple panels optional			X	X	X		
	Located in:							
	AHU/RTU					X		
	Returns				X	X	X	
	Supplies				X	X	X	
	Trunk lines				X	X	X	
	Curbs					X		
	Stand-alone units	X	X	X				
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