



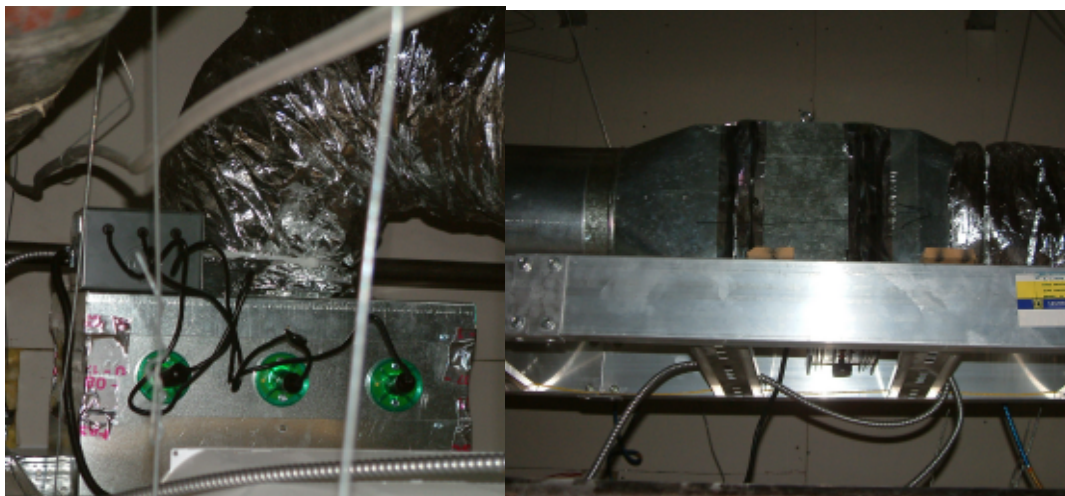
CREATING CLEAN AIR TO BREATHE



# 2008DT-FP APPLICATIONS GUIDE

## INTRODUCTION

The Genesis Air 2008DT-FP is a stand-alone unit used to reduce the levels of Volatile Organic Compounds (VOC's) and viable airborne biological contaminants. The unit is utilized as a ducted-in application for permanent installations. This unit will clean and recirculate the air in a room without disrupting the HVAC system. The 2008DT-FP uses one Genesis Air PCP Standard panel. It is suitable for spaces up to 8300 ft<sup>3</sup>. 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.



PCP location

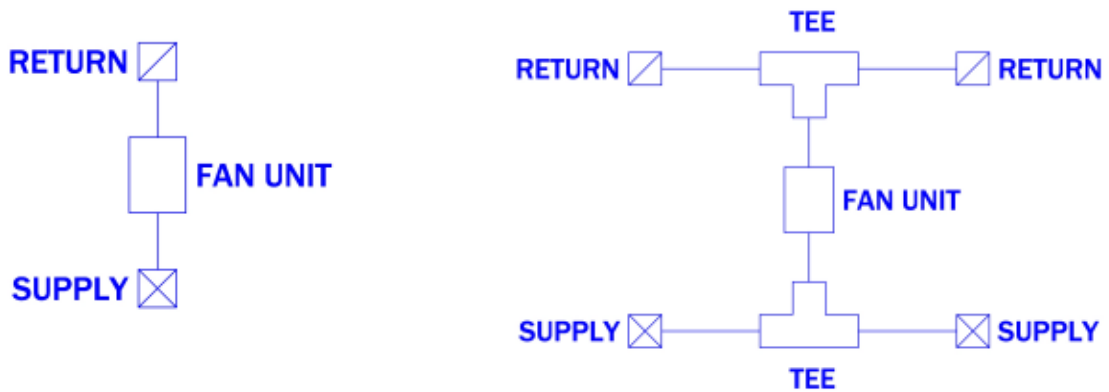
Fan location

## EXAMPLES OF USE

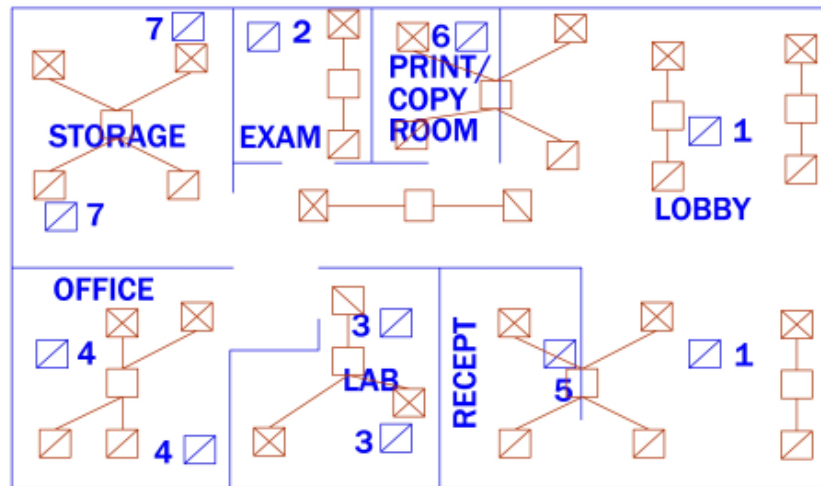
The 2008DT-FP is ideally suited to contain isolated contaminants. Examples of uses are in public restrooms, laboratories, smoking lounges, etc. It will recycle the air in a space, without returning it to the air handler. The unit is simple, and may be installed by employees rather than HVAC contractors. The 2008DT-FP should be used when adding high-efficiency filtration (MERV 13 or greater) to the air handler will cause a noticeable drop in performance.

## DIMENSIONAL DATA

The Genesis Air 2008DT-FP is made of three parts: The supply(s), the return(s) and the fan box. The fan box is generally suspended from the roof using chain and eyelets. Both the supply and the return are made to fit into drop-tile ceiling grids, using a 24”x 24”x 11” space. Bear in mind that an adjustable elbow may be necessary to attach duct to the top of the unit, which will add height to the return and/or supply. The supplies and/or returns may also be wall-mounted for certain applications. For other special applications, two supplies and/or two returns may be outfitted to the fan box. **Contact Genesis Air for custom applications.**



## INSTALLATION EXAMPLE



**LOCATION OF DT'S EXAMPLE**  
**LOCATION OF DT-FP'S EXAMPLE**

Rationale:

1. Reduce the threat from airborne contaminants at common entry point, such as mold, bacteria, viruses, and odors.
2. Reduce the possibility of potentially immuno-compromised people from airborne risks.
3. Reduce noxious odors and vapors from entering into the returns of the air handler.
4. To provide a safer environment for staff and personnel.
5. The receptionist area is the staff's first point-of-contact with potential bio-hazards.
6. Local VOC source.
7. If this is a dock with forklifts, these are large sources of VOC's and other contaminants that can be re-circulated into the air handlers.

Of course, use good judgment. Find out what is in each room, and what must be removed. The use of any stand-alone system, such as a 2008DT-FP, will reduce the overall load of contaminants entering the air handlers.

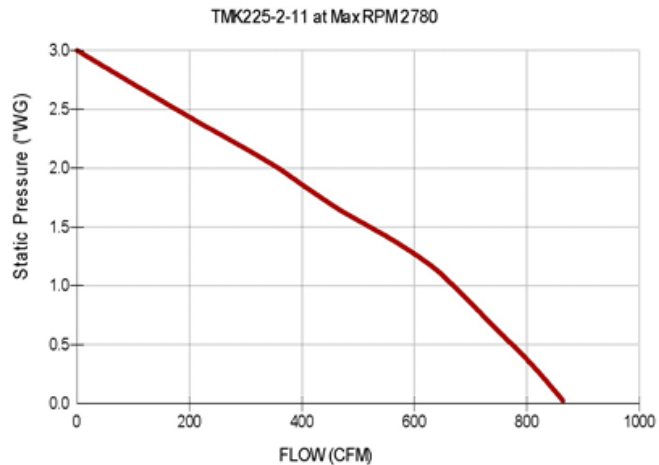
## PCP STANDARD DATA

Each Genesis Air PCP Standard used in the 2008DT-FP series has nominal dimensions of 20" x 20"; actual dimensions are 1/2" less than nominal. All PCP Standard units are 6" deep nominal; actual dimension is 5 13/16". 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.

## FAN DATA

The Genesis Air 2008 DT-FP series incorporates a single CFM TMK225 fan. The fan is rated at 830 cfm with no load. This fan is available in 115V and 230V single phase 50/60Hz; for other voltages contact Genesis Air. For 115V, the fan's amp draw is 3.0A, and rotates at 2780 RPM. The fan's speed is controlled by potentiometer. This will also serve to power the unit (including lamps) on and off.

<b>Model No.</b>	<b>TMK225-2-11 (115V)</b>
<b>Max. Airflow</b>	<b>830 CFM @ 0" SP</b>
<b>Motor</b>	<b>410 watts</b>
<b>Max. Speed</b>	<b>2780 RPM</b>
<b>Voltage</b>	<b>115 volt</b>
<b>Phase</b>	<b>1</b>
<b>Cycle</b>	<b>50/60 HZ</b>
<b>Amperage</b>	<b>3.6 amps</b>
<b>Max. Temp.</b>	<b>40 C</b>
<b>Capacitor</b>	<b>20 x 400V</b>
<b>Weight</b>	<b>9 lbs.</b>



## LAMPS

Genesis Air 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 yearly (9000 hrs) 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

The Genesis Air 2008DT-FP series is equipped with one 20"x 20"x 4" MERV 13 filter. However, with ducted-in usage, up to two 20"x 20" filter grilles may be used. These filter grilles must be placed near the source of contaminants to be effective, i.e. in the smoke layer in a casino.

## 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 either 120v or 240v, 60 Hz.: contact the factory for other voltage/frequency requirements. The ballast operating temperature range is -20°F to 158°F. The 2008DT-FP draws 3.75A at 120V.

**SAFETY**

Genesis Air includes a safety kill switch on all units. The switch breaks power to the lamps and fan.

**GENESIS AIR QUICK REFERENCE**

	2008DT-FP	2008DT	2008B	2008LB	2006D&L	2008GS	2008RGS	2008 PCP STANDARD	2008 PCP DROP-IN	2008CU
Small spaces	X	X			X		X	X	X	X
Medium spaces	X	X		X		X	X	X	X	X
Large spaces			X	X		X		X	X	
Fan-powered	X		X		X	X	X			
Multiple panels standard					X	X				
Multiple panels optional			X	X				X	X	

**Located in:**

AHU/RTU								X	X	
Returns		X		X				X	X	X
Supplies		X		X				X	X	X
Trunk lines				X				X	X	
Stand-alone units	X		X		X	X	X			

## CONTACT INFORMATION

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