INTRODUCING

HIGH STATIC

The Compact Air Purifying Solution for A Healthier, More Productive Environment

HIGH STATIC

HEALTHY AIR.

Breathe deeply.
Aah, the peace-of-mind knowing that the air around you is bacteria- and contaminant-free – resulting in a safer, healthier, more productive environment. Introducing High Static. The most versatile indoor air quality improvement system designed for a multitude of residential, commercial and industrial applications.

In one compact modular design, High Static provides all the indoor air quality offerings currently available. High Static is the first indoor air quality control packaged solution that overcomes the obstacle of low CFM with high static pressure. Available in either vertical or horizontal orientation, High Static offers high filtration, UV lights, odor removal filters, several heating choices, humidification and a variable speed blower.

Take a few moments to review the High Static features and benefits that follow and find out just how easy it is to soon enjoy indoor quality air that a custom built High Static solution can provide. Now, you can breathe easy.

CONTENTS

MANY DIVERSE APPLICATIONS:

Medical/Healthcare Facilities
Reduced threat of spreading infections, bacteria and viruses. Reduced odors/ toxic gases. Improved recovery.

Computer & Telecommunications Rooms
Maintain cleanliness for your data and switchgear equipment.

Pharmaceutical
Indoor air quality for laboratories, cleanrooms and critical environments.

Schools & Nurseries
Reduced threat of spreading airborne bacteria, viruses and communicable diseases.

Residences
Relief to allergy and chemically sensitive individuals.

Industrial
Any hazardous, toxic chemical or dangerous particulates environment.

Libraries & Museums
Reduced risk of molds, spores and gaseous contaminants to ensure maximum protection of books and artifacts; provides comfort for visitors and employees.

Convention/Meeting Facilities
Any populated or smoke-filled environment.

Restaurants & Lounges
Reduced concentrations of tobacco smoke resulting in increased clientele and sales volume.

COMPONENT FEATURES

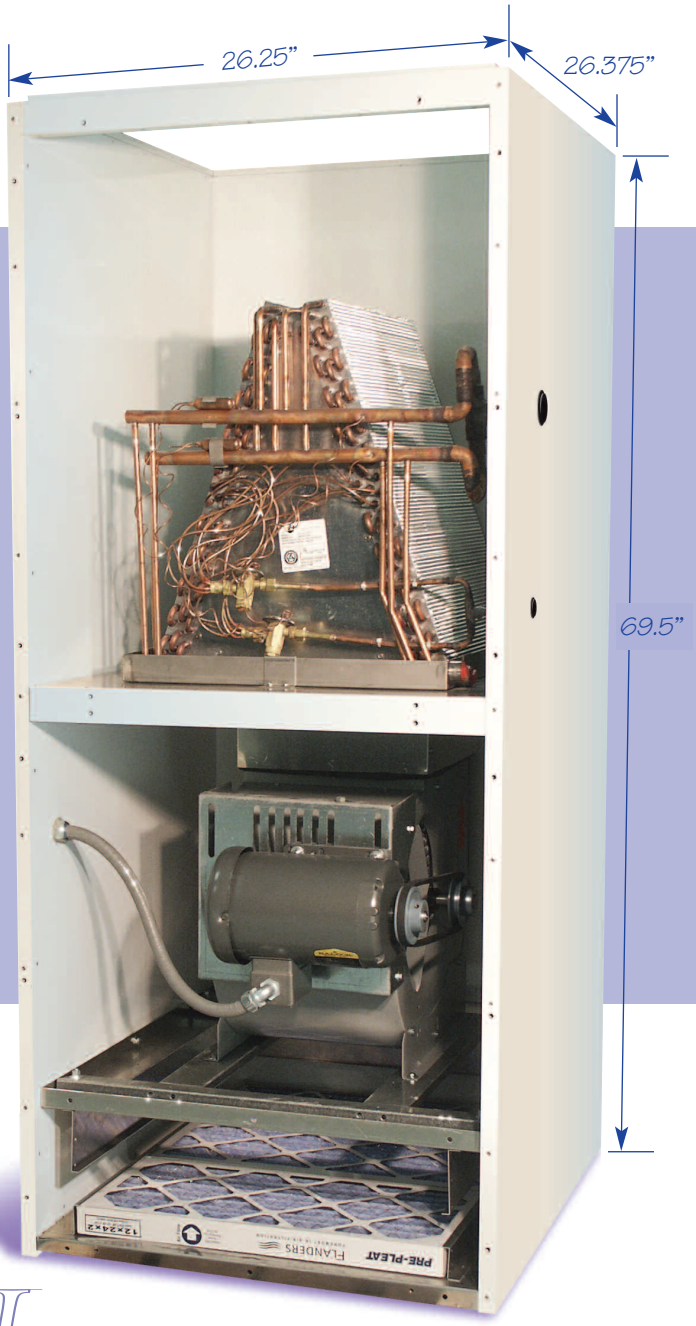
Double wall .040 white aluminum insulated with 1" insulation

Full size removable access panels provide complete access and easy serviceability

High static fans allow several filtration choices

Grommeted field connection holes provide positive seal

Electrical box for fan motor, VFD and factory mounted controls



Heat/Humidity module accommodates hot water coil, electric duct heater and/or steam humidifier

Copper-tube aluminum fin DX, CW or HP coils available

Upflow or horizontal unit orientation

UV lights for mold and mildew removal

PCO filters for odor removal

HIGH STATIC

2 – 5 Ton Unit Dimensions:
L26.375" x W26.25" x H69.5"

6 & 7.5 Ton Unit Dimensions:
L34.125" x W30" x H70"

MODEL NUMBER LEGEND

IQA – 60 CW V

COOLING COIL CAPACITY

- **F** – No Cooling, Filtration Only
- **24** – 2 Ton
- **36** – 3 Ton
- **48** – 4 Ton
- **60** – 5 Ton
- **72** – 6 Ton
- **90** – 7.5 Ton

COOLING COIL TYPE

- **DX** – R-22 Refrigerant Coil
- **CW** – Chilled Water Coil
- **HP** – Heat Pump Coil

UNIT ORIENTATION (DISCHARGE)

- **V** – Vertical
- **H** – Horizontal

HIGH STATIC

PERFORMANCE

*High Static provides the capacity to fit your environment:**

	2 TON	3 TON	4 TON	5 TON	6 TON	7.5 TON
CFM RANGE	600-1000	1000-1400	1400-1800	1800-2200	2200-2600	2800-3200
MAX EST	4 in.	4 in.	4 in.	4 in.	4 in.	4 in.
DX COIL						
EAT	80/67	80/67	80/67	80/67	80/67	80/67
LAT	55/54	55/54	55/54	55/54	55/54	55/54
MBH (TOT)	24	36	48	60	72	90
MBH (SENSIBLE)	16.8	25.2	33.6	42	50.4	63
CHILLED WATER						
EAT	80/67	80/67	80/67	80/67	80/67	80/67
LAT	61.4/57.4	61.3/57.4	57.6/56.7	58.3/57.1	55/54	55/54
MBH (TOT)	24.5	36.6	51.8	62.6	72	90
MBH (SENSIBLE)	16.23	24.51	39.3	47.51	50.4	63
EWT/LWT	44/47.25	45/50.6	45/52.9	45/54.6	44/54	44/54
WPD	4.5 ft.	1.1 ft.	.4 ft.	1.1 ft.	5 ft.	5 ft.
HOT WATER						
EAT	60	60	60	60	60	60
LAT	92.9	89.9	93.2	89.2	90	90
MBH (TOT)	28.6	38.98	57.6	63.2	72	90
EWT/LWT	180/175.5	180/173.9	180/170.9	180/170	180/160	180/160
WPD	4.36 ft.	4.36 ft.	1.3 ft.	1.3 ft.	5 ft.	5 ft.
ELECTRICAL (FLA)						
208-230/1/60	4.8-4.2	4.8-4.2	7.4-6.7	9.5-9	NA	NA
208-230/3/60	NA	2.5-2.	3.7-3.4	5.2-5.6	6.2	6.2
460/3/60	NA	1	1.7	2.8	3.1	3.1
NET WEIGHT (LBS)	173	215	230	234	334	350

**Manufacturer reserves the right to vary dimensions and capacities depending upon particular unit.*

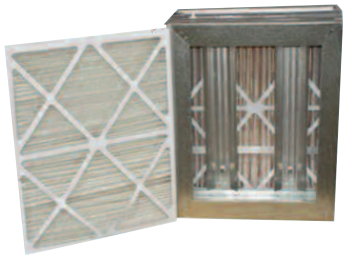
Above information is provided for general guidelines.
Please contact your sales representative for specific data prior to your job design and application.

HIGH STATIC

Custom design the air quality solution for your unique application:

OPTIONS

- *2,3,4,5, 6 or 7 1/2 ton cooling coils – refrigeration, chilled water, or heat pump*
- *Hot water or Steam heating coil*
- *Separate heat/humidity module*
- *Vertical or horizontal arrangements*
- *Return air plenum*
- *Free discharge plenum with aluminum double deflection grille*
- *Aluminum return air grilles for use with return air plenum*
- *Foot casters for roll around capability*
- *Electrical Duct Heaters*
- *Steam Humidifier*
- *UV Lights*
- *Photocatalytic Filters*
- *Variable Frequency Drive*
- *Pleated Media Filters*
- *65%, 85%, or 95% Cartridge Filters*
- *Hepa Filters*
- *Factory DDC controller*



Genesis Air Photocatalytic Filter
See following page

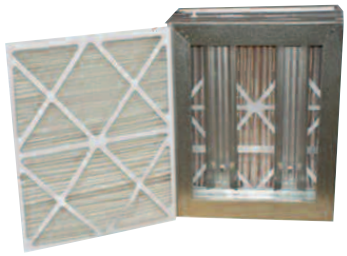
Steril-Aire UV Lights
See following page

Electrical Control Box

OPTIONAL MODULES

ODOR REMOVAL

GENESIS AIR PHOTOCATALYSIS (GAP™).



- *Three-step, synergistic approach to achieve air quality like never before!*
- *Proven, leading-edge technology.*
- *Rationalized design for application-specific products.*
- *Safe – no ozone or by-products, no accumulation of chemical contaminants; converts toxic substances to benign.*
- *Value-priced, low maintenance costs, long-life components.*

Advanced Filtration

Removes even particles you can't see. New, high efficiency, high capacity, low resistance particle filter removes most pollen, mold, mildew, ragweed, dust mites, house dust, bacteria, pet dander and many other submicroscopic poisons, allergens and irritants.

Genesis Air Photocatalysis

(GAP™) – Converts and breaks down harmful chemical vapors and odors.

Titanium Dioxide in the presence of UV light has a natural purifying effect on organic compounds, odors, and toxic gases of all kinds. Its oxidizing effect converts chemical and biological contaminants into benign elements – carbon dioxide and water vapor.

BENEFITS OF GAP™

1. *Removes unwanted particulate matter (irritants, toxins and allergens).*
2. *Neutralizes and destroys biological contaminants.*
3. *Disinfects air passing through the GAP™ technology (germicidal, biocidal, virucidal).*
4. *Destroys odors and toxic gases and organic compounds.*

MOLD & BACTERIA REMOVAL

STERIL-AIRE: First and Best in "UVC for HVAC™"

Improve indoor air quality (IAQ) and eliminate mold, bacteria and other contaminants in schools, commercial buildings, health care facilities, food processing plants and homes.

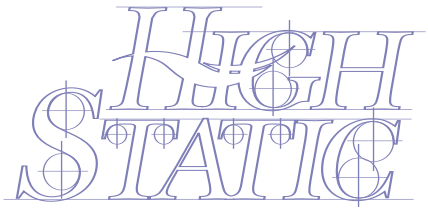
The solution is Steril-Aire's multi-patented UVC Emitters™. These safe yet powerful UVC lights work within your existing heating and air conditioning system to kill both surface and airborne microorganisms and prevent the spread of infectious diseases caused by viruses and bacteria.

In addition to the health benefits, they also save money by reducing HVAC energy costs and eliminating the need for costly coil cleaning programs. Steril-Aire germicidal UV lamps are the best equipment in IAQ technology today.

BENEFITS OF USING UVC

1. *Steril-Aire's UVC Emitters™ improve indoor air quality (IAQ) and eliminate mold, bacteria and other contaminants.*
2. *Kills or inactivates surface and airborne microorganisms that trigger allergy-asthma symptoms – including mold and mold spores, solvents and other VOCs. Also eliminates associated odors.*
3. *Reduces the spread of infectious diseases caused by bacteria (including TB, Legionella, E. coli, and whooping cough) and viruses (including colds, flu, measles, German measles, chicken pox, small pox and SARS).*

4. *Continuously cleans coils, drain pans, plenums and ducts, reducing or eliminating costly cleaning programs and the use of harmful chemicals and disinfectants.*
5. *Lowers HVAC energy costs by improving heat transfer and increasing net cooling capacity.*
6. *Improves general IAQ for better productivity and less absenteeism.*
7. *Produces no ozone or secondary contaminants – will not harm building occupants, equipment or furnishings.*
8. *Improves product quality, shelf life and yield in processing plants.*
9. *Rapidly pays for itself in maintenance and energy savings.*



SPECIFICATIONS

GENERAL

- *Provide and install Model IQA units as scheduled. Units shall be completely packaged and include double wall insulated casing, pre-filter, 85% filter section, fan section, motor and drive. Options available include a PCO (photocatalytic) filter section, cooling coil (dx or chilled water) section, hot water coil section, electric heat section and final filter section.*

UNIT CASING

- *Unit casing shall be constructed of double-walled .040 aluminum insulated with one inch insulation. Structural frame shall be 14 gauge welded structural angles with intermediate bracing for strength and rigidity. All interior and exterior cabinet surfaces shall be finished with polar white baked enamel finish.*
- *Removable double wall access panels shall provide complete access to all interior components for easy serviceability. Gasketing shall be provided between all critical surfaces to prevent air-bypass.*
- *Final filter section shall consist of gasketed glide rail channels with galvanized steel filter holding frame. Steel spring fasteners shall provide positive pressure filter seal against holding frame gasket seal.*

FAN SECTION

- *Fan section shall include a DWDI forward curved centrifugal fan constructed of heavy gauge steel housing, precision balanced fan wheel, oversized self-lubricating, self-aligning ball bearings, and ground and polished cold rolled steel fan shaft.*
- *Motors shall be high efficiency type with automatic thermal overload protection and mounted on adjustable motor base. Provide v-belt drive with adjustable motor sheave to provide 30% fan speed variation.*
- *Motor and fan assembly shall be mounted on rubber isolation pads. A flexible canvas connection shall be installed on fan discharge for vibration control.*

PRE-FILTER

- *Two inch pre-filter shall be medium efficiency, pleated type and shall have an average efficiency of 25-30% with average arrestance of 90-92% in accordance with ASHRAE 52.2-1999 test method. The filter shall be classified by Underwriters Laboratory as meeting Class II specifications.*

95% CARTRIDGE FILTER

- *Filter media shall be of the high efficiency, extended media type and shall have an average atmospheric dust spot efficiency of 95% as determined by ASHRAE 52.2-1999 test method. The filter shall be listed as UL Class I. Filter casing shall be galvanized steel. Static pressure drop across filter shall not exceed that scheduled.*

REFRIGERANT COIL

- *Refrigerant coil shall be constructed of aluminum fins mechanically bonded to copper tubes. Refrigerant connections shall be sweat type. Provide condensate drain pan with 3/4" minimum drain connections. An air distribution baffle shall be installed at air inlet of coil. Coil shall be easily removable through unit access panel. Refrigerant metering shall be by factory mounted expansion valve.*

CHILLED WATER COIL

- *Chilled water coil shall be A-frame configuration and constructed of aluminum fins. Manifolded headers shall be heavy walled seamless copper. Coil shall be easily removable through access panel.*

CONTROLS

- *The IAQ units shall include a factory wired DDC controller. This can be factory provided or provided by the ATC contractor for the project.*

INDOOR AIR QUALITY FACTS

- *Contaminated central air handling systems can become breeding grounds for mold, mildew, and other sources of biological contaminants and can then distribute these contaminants through the home. (The Inside Story-A Guide to Indoor Air Quality published April 1995 by the U.S. Environmental Protection Agency)*
- *The World Health Organization estimates that up to 30% of office buildings worldwide may suffer significant problems, with 10 to 30% of the buildings' occupants experiencing health effects which are, or are perceived to be, related to poor IAQ.*
- *Indoor air pollution is the primary cause in as many as 50 million cases of occupational chronic respiratory disease each year – one-third of all occupational illnesses. These are widespread, debilitating and affect people in their social and economic prime of life. They are preventable with a minimum of resources. (WHO's 1999 Guidelines for Air Pollution Control – Revised September 2000)*
- *The U.S. Environmental Protection Agency (EPA) estimates that one-third of the 4.5 million commercial buildings in the U.S. offer less than acceptable air quality and ranks IAQ among the top five important environmental issues.*
- *In a nationwide random sampling of office workers, 24% perceived air quality problems in their work environments and 20% believed that their work performance was hampered accordingly. (Indoor Pollution In The Office published by the American Lung Association)*
- *Indoor air quality can reduce a person's ability to perform specific mental tasks requiring concentration, calculation, or memory. (EPA Indoor Environments Division, Indoor Air Quality and Student Performance – August 2000)*
- *Allergies are responsible for 3.5 million lost U.S. workdays each year at a cost of $639 million. An estimated two million school days are lost each year due to allergies with an indirect cost reaching $4 billion. (Asthma and Allergy Foundation of America Web Site)*
- *Many organic chemicals are found in indoor air at trace concentrations and may cause IAQ problems. Potential sources for organic chemicals include building insulation, carpeting, paint, chemicals used in cleaning and cooking odors.*
- *The number of personal injury liability lawsuits due to poor quality indoor air is increasing. Settlements and awards have reached the $500,000 mark per plaintiff.*
- *20% of the U.S. population, nearly 55 million people, spends their days in our elementary and secondary schools. Studies show that one-half of our nation's 115,000 schools have problems linked to indoor air quality. Students are at greater risk because of the hours spent in school facilities and because children are especially susceptible to pollutants.*
- *One out of six people who suffer from allergies do so because of the direct relationship to the fungi and bacteria in air duct systems. (Total Health & Better Health Magazine)*
- *Air pollution contributes to lung disease – including respiratory tract infections, asthma and lung cancer. Lung disease claims close to 335,000 lives in America every year and is the third leading cause of death in the United States. Over the past decade, the death rate for lung disease has risen faster than for almost any other major disease. (American Lung Association)*
- *House dust is the major cause of allergies in persons with year-round complaints of runny or stuffy nose, itchy, watery eyes and sneezing. In addition to these allergic reactions, dust can trigger asthma attacks of wheezing, coughing and shortness of breath.*
- *87% of American homeowners are not aware that pollution may be worse inside their homes than outdoors. (American Lung Association)*
- *Six out of 10 homes and buildings are hazardous to occupants. (U.S. Environmental Protection Agency)*
- *An estimated 100 million days are lost to asthma each year and asthma causes 10 million days of school absences annually. Direct and indirect expenses related to asthma are estimated at more than $6 billion a year. (Online Allergy Center)*
- *Indoor air pollution consistently ranks among the top five environmental risks to public health. (EPA Indoor Environments Division, Indoor Air Quality Tools for Schools: Actions to Improve IAQ – September 1999)*
- *It is possible for microbial growth to occur in HVAC systems when the proper conditions are met such as appropriate temperature range and the presence of water and nutrients. In the presence of sufficient moisture, dust and other organic particles, contamination can act as nutrient base microbial growth. (Presentation by Frank Sanders, Director of Antimicrobial Division of the U.S. Environmental Protection Agency at 1999 American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) Annual Meeting in Chicago)*
- *50% of homes contain problem molds. A new medical study attributes nearly 100% of chronic sinus infections to mold. A 300% increase in the asthma rate over the past 20 years has been linked to molds. (USA WEEKEND, Dec. 3-5, 1999)*

FOR MORE INFO OR TO PLACE AN ORDER, CONTACT:

HIGH STATIC

HEALTHY AIR.