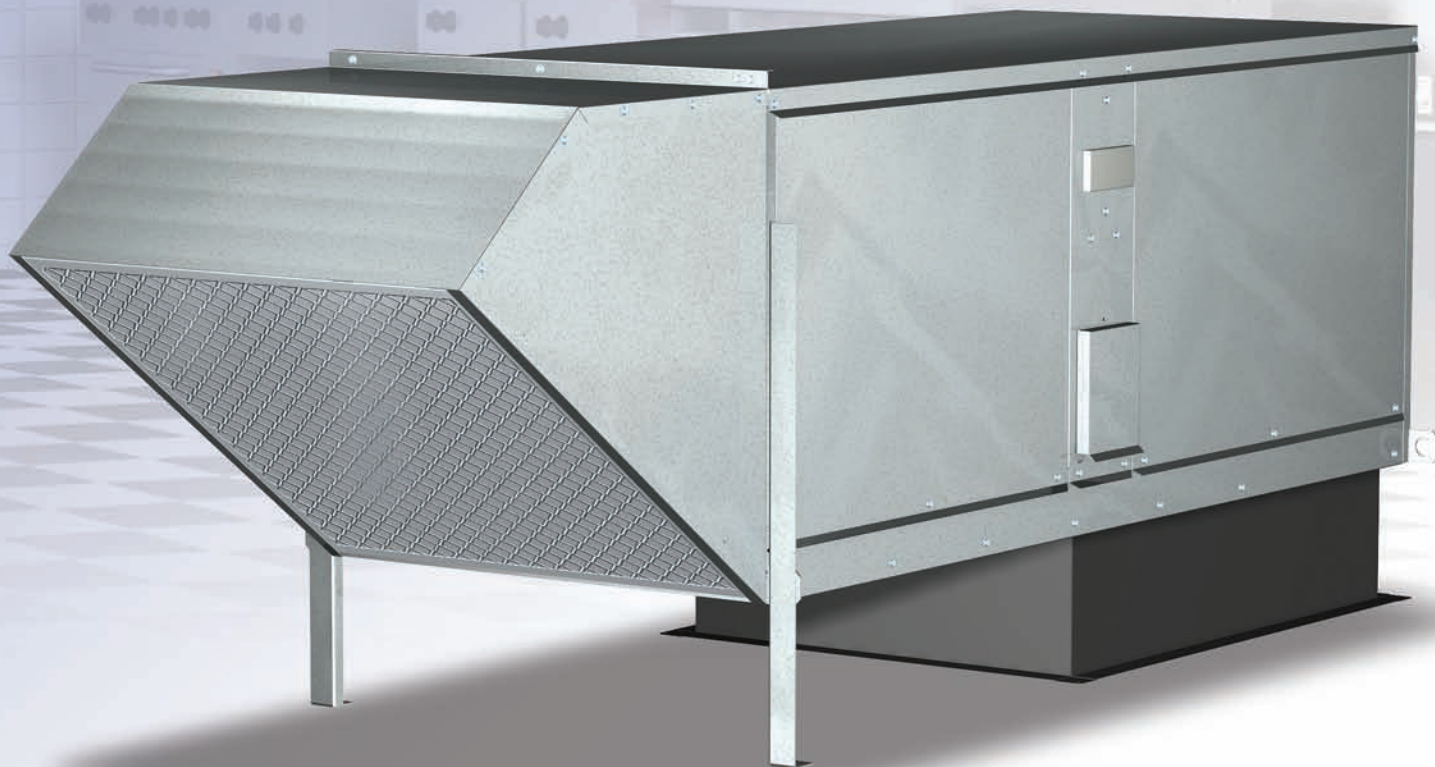


Direct Gas-Fired Make-Up Air Model DGK

• 800 to 8,500 cfm • Up to 800,000 BTU/hr

- ✓ Simple
- ✓ Compact
- ✓ Economical



Model DGK

Direct Gas-Fired Make-Up Air Unit

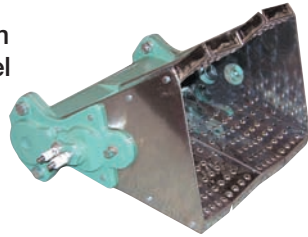
The Greenheck model DGK is a 100% efficient direct gas-fired make-up air unit.

The DGK is designed to provide make-up air to commercial kitchen facilities with process exhaust. Airflow volumes range from 800 to 8,500 cfm with heating capacities up to 800,000 Btu/hr.

Direct Gas-Fired System

Greenheck's direct gas-fired make-up air units feature:

- High quality cast aluminum burners with stainless steel mixing plates
- Maxitrol electronic modulation burner control
- 25:1 turn down ratio



Control Center

The control center includes the following standard components:

- Magnetic motor starter
- Control transformer
- Disconnect switch

Premium grade control components are selected for reliable operation. All electrical components are UL Listed, recognized or classified and factory prewired for single point power connection.

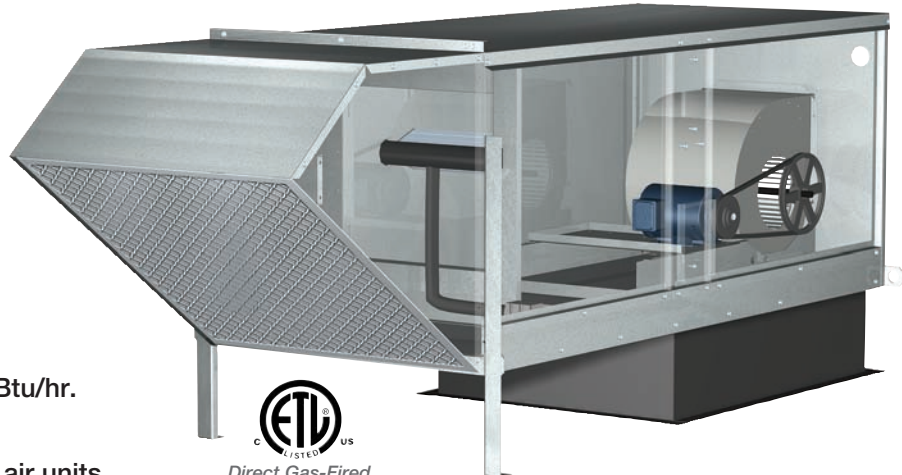
Reliable Fan Performance/Durable Construction

Air performance ratings from Greenheck's accredited test chamber ensure accurate data.

Double width, double inlet, forward curved wheels for high efficiency and low sound levels are constructed of heavy gauge steel. Wheels are statically and dynamically balanced to ensure vibration free operation. The entire fan and motor assembly is mounted on vibration isolators to minimize noise transmission into the building. Adjustable motor sheaves are standard.



Designed for maximum weather resistance, DGK housings are constructed of heavy gauge G90 galvanized steel. Lifting lugs are standard.



Access Panels

Large access panels are provided for easy inspection and maintenance of motors, drives, fan wheels, filters, and heater controls.

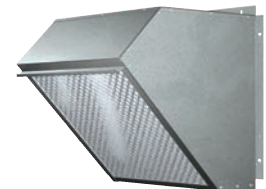
Factory Wired and Tested

All units are tested prior to shipment. Units are checked for proper operation of the gas train, electrical components and airflow.



Weatherhood

A filtered weatherhood with G90 galvanized steel construction is standard. The filtered weatherhood includes aluminum mesh filters mounted in the intake, eliminating the need for an additional filter section.



Discharge Temperature Control

Control of discharge air temperature is accomplished with a standard factory installed sensor located at the fan discharge. A Maxitrol 14 system modulates the gas valve to provide the desired discharge temperature.

Fiberglass Insulation

Standard 1-inch foil-faced fiberglass insulation is used to line the housing, preventing the formation of condensation and forming an acoustical barrier.

Inlet Air Sensor

An on/off type duct stat automatically energizes the gas system when the inlet air temperature falls below the desired setting.

Access

Units can be ordered with either right or left hand access as determined looking into unit intake.

Propane Gas

A propane heater may be provided in lieu of natural gas.

Gas Pressure Regulator

Required if building gas line pressure exceeds the maximum inlet gas pressure of the make-up air unit. Ships separately for field installation.

Intake Dampers

Motorized intake damper prevents backdrafts when the fan is not in operation. Damper is factory mounted and wired.

Special Coatings

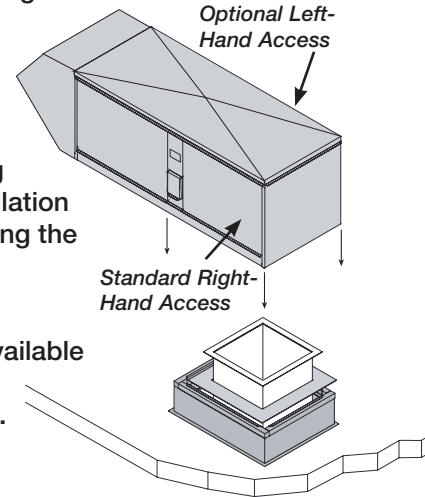
Greenheck's Permatecor™ coating is available for a durable, long lasting finish. Decorative paints are also available in a variety of colors to match existing building fixtures.

Duct Adapter

Provides easy means for attaching ductwork to curb and allows installation of top section of duct prior to setting the unit on the curb.

Roof Curb

Factory provided roof curbs are available to ensure compatibility between the make-up air unit and roof curb.

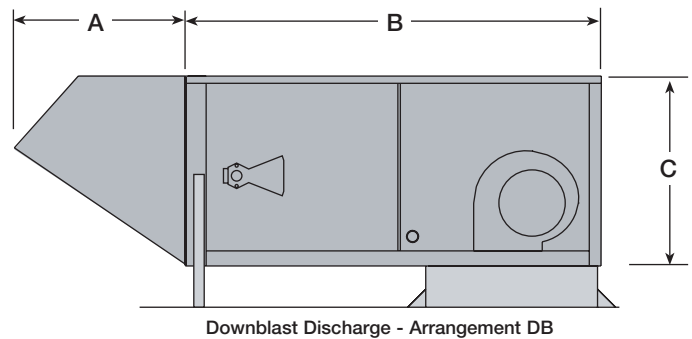


DGK Dimensions

Housing Size	A	B	C	Width
H15	30.875	76.5	29.75	31.375
H25	48	88.0	39.0	49.5

All dimensions are shown in inches.

The model DGK is available for stand alone installations with a downblast (Arrangement DB) or horizontal (Arrangement HZ) discharge.



DGK Air Performance

Model	CFM		Total Static Pressure (in. wg.)					
			0.75	1.00	1.25	1.50	1.75	2.00
DGK H15 - 109	1500	RPM	1014	1140	1255	1361	1460	
		BHP	0.45	0.54	0.63	0.73	0.84	
	2500	RPM	1244	1329	1419	1503		
		BHP	1.25	1.39	1.56	1.72		
DGK H15 - 110	2000	RPM	912	1013	1110	1199		
		BHP	0.59	0.71	0.84	0.96		
	3000	RPM	1097	1172	1244	1315	1386	1455
		BHP	1.39	1.55	1.72	1.88	2.05	2.23
DGK H15 - 112	3000	RPM	794	879	960	1033	1101	
		BHP	0.95	1.12	1.3	1.47	1.63	
	4500	RPM	951	1017	1082			
		BHP	2.25	2.51	2.77			
DGK H25 - 115	4000	RPM	681	756	822	892	956	1017
		BHP	1.28	1.54	1.78	2.10	2.42	2.75
	6500	RPM	850	906	960	1013		
		BHP	3.52	3.91	4.30	4.72		
DGK H25 - 118	6000	RPM	591	652	711	764	819	872
		BHP	1.81	2.13	2.48	2.80	3.22	3.65
	8500	RPM	690	740	790			
		BHP	3.78	4.22	4.69			

Typical Specifications

General: Make-up air unit shall be as manufactured by Greenheck or approved equal provided all specifications are met. Greenheck Model DGK equipment is used as the basis of design. Performance to be as scheduled on plans. Make-up air unit shall be ETL listed to ANSI Z83.4 and CAN 3.7.

Gas Train and Controls: Direct fired gas system shall have a drawthrough design and field adjustable burner baffles. Gas trains shall include a direct spark ignition system. Dual safety shutoff valves shall be industrial duty and use 24 VAC control signals. Temperature control shall incorporate a Maxitrol electronic modulation control system.

Unit Casing and Frames: Unit shall be of internal frame type construction of galvanized steel. All frames and panels shall be G90 galvanized steel. Where top panels are joined there shall be a standing seam to insure positive weather protection. All metal-to-metal surfaces exposed to the weather shall be sealed. All components shall be easily accessible through removable doors.

Insulation: Unit casing to be lined with 1-inch fiberglass insulation. Insulation in accordance with NFPA 90A and tested to meet UL 181 erosion requirements.

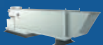
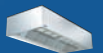
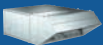
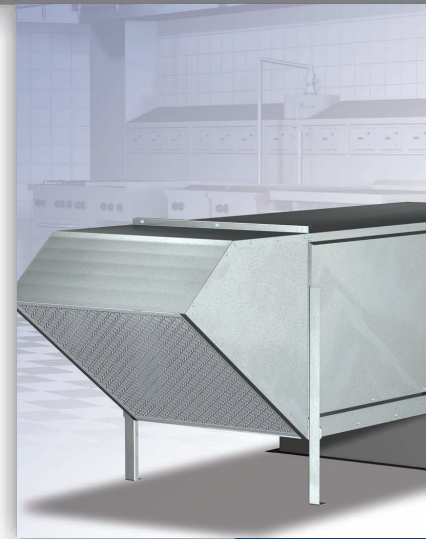
Fan Section: Centrifugal fans shall be double width, double inlet and forward curved. Fan and motor shall be mounted on a common base and shall be internally isolated. All blower wheels shall be statically and dynamically balanced. Ground and polished steel fan shafts shall be mounted in permanently lubricated ball bearings. Bearings

shall be selected for a minimum (L10) life in excess of 100,000 hours at maximum cataloged speeds.

Motors and Drives: Motors shall be energy efficient, complying with EPACT standards for ODP and TE enclosures. Motors shall be permanently lubricated, heavy duty type, matched to the fan load and furnished at the specified voltage, phase and enclosure. Drives shall be sized for a minimum of 150% of driven horsepower. Pulleys shall be cast and have machined surfaces, and be supplied with an adjustable drive pulley.

Electrical: All internal electrical components shall be prewired for single point power connection. All electrical components shall be UL listed, recognized or classified where applicable and wired in compliance with the National Electrical Code. Control center shall include motor starter, transformer for 24 VAC circuit, contactors, and disconnect switch.

Weatherhood: Weatherhood shall be constructed of G90 galvanized steel. Weatherhood shall include aluminum mesh filters mounted in the intake, eliminating the need for an additional filter section.



Our Warranty

Greenheck warrants this equipment to be free from defects in material and workmanship for a period of one year from the purchase date. Any units or parts which prove defective during the warranty period will be replaced at our option when returned to our factory, transportation prepaid. Motors are warranted by the motor manufacturer for a period of one year. Should motors furnished by Greenheck prove defective during this period, they should be returned to the nearest authorized motor service station. Greenheck will not be responsible for any removal or installation costs.

As a result of our commitment to continuous improvement, Greenheck reserves the right to change specifications without notice.

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