



HVAC EQUIPMENT

for Residential, Industrial & Commercial Applications



STERLING[®]

HVAC PRODUCTS





Sterling HVAC, the most recognized name in the game, has been producing industry leading high efficiency heating products for over 50 years. From traditional Unit Heaters to Rooftop and Indoor Make-Up Air units, Sterling HVAC has the solution to fit every residential, commercial or industrial application.

A division of Mestek, Inc. a family of over 36 specialty HVAC related manufacturers, Sterling HVAC proudly manufactures all of its products in Farmville, North Carolina USA.

Known as a true innovator Sterling HVAC designs, engineers and manufactures all of their heating products “in-house” and sets the standard for performance and quality across the industry.

Sterling HVAC provides unparalleled factory support from sales and technical resources to full application engineering support. For additional information or to speak with a Sterling HVAC representative please call toll free 800-490-2290 or visit our website at www.sterlinghvac.com.

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Tubular Unit Heaters

GG Series

GG Series gas-fired unit heaters combine the latest tubular heat exchanger technologies with a unique single-orifice burner system for superior durability, reliability and performance. GG Series propeller units are available in sizes from 30 to 120 MBH and offer industry leading operating efficiencies in a compact low-profile design perfect for applications where space is limited.

Residential Garage Certified

All GG Series units are covered by a limited 10-year heat exchanger warranty and are ETL certified for residential garage installations. Units come standard with LP gas conversion kits and for applications in dusty or damp environments, optional field installed combustion air inlet kits are available and allow easy conversion to separated combustion.

STANDARD FEATURES

- 82%+ Thermal Efficiency
- Residential Certification
- Single Orifice Burner System
- Direct Spark Ignition
- 20-Gauge Tubular Heat Exchangers
- 20-Gauge Jacket Panels with Baked Enamel Finish
- Power Vented
- OSHA Fan Guard
- Terminal Strip Low Voltage Wiring
- Field Convertible To Separated Combustion with Addition of Combustion Air Inlet Kit
- LP Gas Conversion Kit Included
- Easy Access Control Panel
- 321 Stainless Steel Burner Box
- 10-Year Heat Exchanger Warranty



MODEL GG



SPECIFICATIONS

MBH Input [†]	30	45	60	75	90	105	120
MBH Output [†]	24	37	49	61	73	86	98
Free Air Delivery CFM	370	550	740	920	1,100	1,300	1,475
Motor HP	1/20	1/20	1/12	1/12	1/10	1/10	1/10
Flue Size Diameter							
Standard Combustion	4"	4"	4"	4"	4"	4"	4"
Separated Combustion	4"	4"	4"	4"	5"	5"	5"

[†]Ratings shown are for unit installations at elevations between 0 and 2,000 ft. (0 to 610m). For installations in USA above 2,000 ft. (610m), the unit input must be derated 4% for each 1,000 ft. (305m) above sea level; refer to local codes, or refer to the latest edition of the National Fuel Gas Code, ANSI Standard Z223.1 (NFPA No. 54).

For installations in Canada, any reference to deration at altitudes in excess of 2,000 ft. (610m) are to be ignored. At altitudes of 2,000 ft. to 4,500 ft. (610 to 1372m), the unit must be derated to 90% of the normal altitude rating, and be so marked in accordance with the ETL certification.

Tubular Unit Heaters

TF & TC Series

TF & TC Series gas-fired unit heaters combine the latest tubular heat exchanger technologies with an innovative “In-Shot” burner system for superior durability, reliability and performance in a commercial unit heater. Units are available in both propeller (TF) and blower configurations (TC) for application flexibility. Sizes range from 100 to 400 MBH with industry leading operating efficiencies and carry a 10-year heat exchanger warranty.

The Shield - GF Series

Sterling HVAC’s Shield propeller units are the perfect gas-fired unit heater for use in corrosive environments such as greenhouses, waste water treatment plants, agricultural and food service industries.

Constructed with the same durability and reliability as the commercial grade TF Series, the Shield adds a corrosive resistant stainless steel heat exchanger and cabinet for maximum protection from the elements. Sizes range from 150 to 400 MBH and carry a limited 5-year heat exchanger warranty.

STANDARD FEATURES

- 82%+ Thermal Efficiency
- 20-Gauge Tubular Heat Exchangers
- In-Shot Burner Technology
- Direct Spark Ignition System
- 20-Gauge Jacket Panels with Baked Enamel Finish
- Power Vented
- Easy Access Control Panel
- Certified for Category I and III Venting
- Terminal Strip Low Voltage Wiring
- 10-Year Heat Exchanger Warranty (TF & TC)
- Factory Fire Tested
- Optional 2-Stage Gas Valve



MODEL TF



MODEL GF (Greenhouse Speciality)



SPECIFICATIONS

MBH Input†	100	125	150	175	200	250	300	350	400
MBH Output† TF/GF	83	103	124	145	166	207	249	290	332
MBH Output† TC	83	103	124	145	166	207	246	290	332
Free Air Delivery CFM TF/GF	1,600	2,200	2,400	2,850	3,200	3,450	5,000	5,600	5,800
Free Air Delivery CFM TC	1,181	1,476	1,771	2,067	2,362	2,953	3,501	4,134	4,724
Motor HP (Qty) TF/GF	1/10	1/4	1/4	1/3	1/3	1/3	1/4(2)	1/3(2)	1/3(2)
Motor HP (Qty) TC	1/4	1/2	1/2	3/4	3/4	1	1	1-1/2	1-1/2
*Flue Size Diameter	5"	5"	5"	5"	5"	5"	6"	6"	6"

†Published ratings are shown for elevations up to 2,000 ft. (610m) above sea level. For higher elevations derate 4% for each 1,000 ft. (305m) above sea level.

In Canada, derate 10% for altitudes 2,000 to 4,500 ft. (610 to 1372m).

*Flue collar is factory supplied with unit; to be field installed per included instructions on 150/400 MBH sizes.



Tubular Unit Heaters

SF & SC Series

SF & SC Series gas-fired unit heaters utilize the same durable tubular heat exchanger technologies found throughout the extensive Sterling HVAC tubular product offering. Coupled with Sterling's "In-Shot" burner technology SF & SC units are built for superior durability, reliability and performance.

The SF & SC use a separated combustion process allowing application flexibility in areas where dust, dirt, humidity and mildly corrosive conditions exist. All primary components are enclosed within the durable cabinet providing superior protection from the potentially corrosive elements.

Units are available in sizes ranging from 100 to 400 MBH in both propeller (SF) and blower (SC) configurations and offer industry leading efficiencies with a limited 10-year heat exchanger warranty. Optional 409 stainless steel heat exchangers, burners and flue collectors are available for extremely corrosive environments.

STANDARD FEATURES

- Separated Combustion
- 20-Gauge Aluminized Steel Tubular Heat Exchanger
- 82%+ Thermal Efficiency
- In-Shot Burner Technology
- 115/1/60 Supply Voltage
- Power Vented
- 20-Gauge Steel Cabinetry with Baked Enamel Finish
- Direct-Spark Ignition System
- Rear Burner Access for Ease of Service
- Individually Adjustable and Removable Horizontal Louvers
- 10-Year Heat Exchanger, Flue Collector and Burner Warranty
- Combustion Air Inlet Kits for Concentric Vent Applications (Optional)



MODEL SF



SPECIFICATIONS

MBH Input†	100	125	150	175	200	250	300	350	400
MBH Output†	83	103	124	145	166	207	249(SF) 246(SC)	290	332
SF Free Air Delivery CFM	1,600	2,200	2,400	2,850	3,200	3,450	5,000	5,600	5,800
SC Free Air Delivery CFM	1,181	1,476	1,771	2,067	2,362	2,953	3,501	4,134	4,724
SF Motor HP (Qty)	1/10	1/4	1/4	1/3	1/3	1/3	1/4(2)	1/3(2)	1/3(2)
SC Motor HP	1/4	1/2	1/2	3/4	3/4	1	1	1-1/2	1-1/2
*Flue Size Diameter	5"	5"	5"	5"	5"	5"	6"	6"	6"

†Ratings shown are for unit installations at elevations between 0 and 2,000 ft. (0 to 610m). For unit installations in USA above 2,000 ft. (610m), the unit input must be derated 4% for each 1,000 ft. (305m) above sea level; refer to local codes, or in absence of local codes, refer to the latest edition of the National Fuel Gas Code, ANSI Standard Z223.1 (NFPA No. 54).

For installations in Canada, any reference to deration at altitudes in excess of 2,000 ft. (610m) are to be ignored. At altitudes of 2,000 ft. to 4,500 ft. (610 to 1372m), the unit must be derated to 90% of the normal altitude rating, and be so marked in accordance with the ETL certification.

* Flue collar is factory supplied with unit; to be field installed per included instructions.

Hydronic Unit Heaters

HS Series

Sterling HS Series horizontal unit heaters are available in both serpentine and header type units. Serpentine units offer outputs from 8,030 to 35,900 BTUs and are ideal for hot water installations with limited clearances. Header type horizontal units range from 18,000 to 360,000 BTUs and can operate with either hot water or steam. Both units are furnished with totally enclosed motors as standard equipment, explosion proof motors are optional.

VS Series

Sterling VS Series vertical unit heaters are designed for installations requiring down flow air delivery. Offered in 15 sizes ranging from 41,300 to 705,000 BTU. Low output (increased airflow) units are available for high ceiling applications, steam or hot water operation.

HS STANDARD FEATURES

- Copper Coils w/Aluminum Fins
- 20-Gauge Cabinetry
- 115/1/60 Volt Motor
- Thermal Over Load Protection
- Adjustable Louvers

VS STANDARD FEATURES

- Copper Coils w/Aluminum Fins
- Totally Enclosed Motors
- Standard Units are Field Convertible to Low Output by Removing Air Port Knockouts Located on Top of the Unit
- Thermal Over Load Protection
- 4-Point Suspension



MODEL HS
Header Type



MODEL HS
Serpentine Type



MODEL VS



SPECIFICATIONS

Model	Type	Motor H.P. Range	Output Range	CFM Range
HS (Serpentine Coil)	Horizontal	1/6W-1/20	8,030-35,900	245-850
HS (Header Type Coil)	Horizontal	1/6W-1/2	18,000-360,000	395-5,500
VS (Standard Unit)	Vertical	1/40-3	41,300-705,000	598-11,000
VS (Low Output Unit)	Vertical	1/40-3	34,800-620,000	668-11,900



Indoor Duct Furnaces

QVED/QVES Series

The QVED and QVES are power vented indoor duct furnaces. QVED offers bottom burner access while the model QVES offers side access. Both models offer high efficiencies that achieve annual fuel savings of up to 25% over conventional natural vented duct furnaces. Also featured are a factory installed power venter and sealed flue collector that controls combustion and excess air during on cycles. Spark ignition is standard.

QVSD Series

The Sterling QVSD Series separated combustion indoor duct furnace is designed to be installed in mildly hostile environments where dust, dirt, and mild corrosives exist. The QVSD also performs well in atmospheres with humidity or slightly negative pressures. The burners, pilot and flue system are enclosed within the unit. The entire combustion process is literally unaffected by the atmosphere in the space where the unit is located.

STANDARD FEATURES

- 80% Thermal Efficiency
- 100-400 MBH
- Aluminized Steel Heat Exchanger - 20-Gauge
- Optional 409 and 321 Stainless Steel Heat Exchangers
- Single Stage Gas Valve
- Optional 2-Stage and Modulating Gas Valves
- Optional Air Flow Prove Switch
- Spark Ignition
- Natural or LP Gas Available
- Easy Burner Access with Individual Removable Burners
- Factory Test Fired
- 1-Year Warranty



MODEL QVED



SPECIFICATIONS

MBH Input [†]	100	125	150	175	200	225	250	300	350	400
MBH Output [†]	80	100	120	140	160	180	200	240	280	320
MODEL QVED/QVES										
Min Temp. Rise	30	30	30	30	30	30	30	30	30	30
Max CFM	2,469	3,086	3,704	4,321	4,938	5,556	6,173	7,407	8,642	9,877
Pressure Drop	0.48	0.48	0.48	0.5	0.48	0.47	0.48	0.5	0.48	0.5
Max Temp. Rise	80	80	80	80	80	80	80	80	80	80
Min CFM	929	1,157	1,389	1,620	1,852	2,083	2,315	2,778	3,241	3,704
Pressure Drop	0.12	0.13	0.15	0.14	0.14	0.14	0.14	0.13	0.13	0.14
MODEL QVSD										
Min Temp. Rise	20	20	20	20	20	20	20	20	20	20
Max CFM	3,700	4,625	5,550	6,475	7,401	8,326	9,251	11,101	12,951	14,801
Pressure Drop	2.03	1.92	1.81	1.86	1.9	1.93	1.96	2	2.02	2.05
Max Temp. Rise	90	90	90	90	90	90	90	90	90	90
Min CFM	822	1,028	1,233	1,439	1,645	1,850	2,056	2,467	2,878	3,289
Pressure Drop	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Flue Size Diameter	4"	4"	4"	4"	5"	5"	5"	6"	6"	6"

[†]Published ratings are shown for elevations up to 2,000 ft. (610m) above sea level. For higher elevations derate 4% for each 1,000 ft. (305m) above sea level. In Canada, derate 10% for altitudes 2,000 to 4,500 ft. (610 to 1372m).

MODEL QVOF



SPECIFICATIONS

MBH Input	70	105	126	231	312	375	560
MBH Output	56	84	100	184	250	300	450
Firing Rate #2 Fuel Oil (GPH)	0.5	0.75	0.9	1.65	2.25	2.75	4
Free Air Delivery CFM	1,050	1,750	2,000	3,200	3,400	5,000	6,000
Motor HP (Qty)	1/4	1/4	1/4	1/4	1/2	1/2	1/3 (2)
Flue Size Diameter	7"	7"	7"	8"	9"	9"	10"

MODEL CAB



SPECIFICATIONS

Model	CAB1	CAB2	CAB3	CAB4
Minimum CFM	1,250	2,000	2,250	5,000
Maximum CFM	2,000	3,000	5,000	8,000

Oil Fired Unit Heaters

QVOF Series

Sterling's QVOF Series oil-fired unit heater is designed to operate on number 1 & 2 fuel oils. Available in seven sizes ranging from 70 to 560 MBH (.50 to 4.00 GPH) all units are factory assembled and ready to install.

STANDARD FEATURES

- Heavy Duty 18-Gauge Heat Exchanger
- Energy Efficient Flame Retention Beckett® Burner
- Adjustable Discharge Air Louvers
- Fan/Limit Control
- Four Point Suspension
- CAD Cell Burner Safeguard Control
- 115/1/60

Cabinet Blowers

Cabinet Blowers (Models CAB 1 - 4)

Sterling cabinet blowers have been designed for high static pressure applications in conjunction with an indoor duct furnace. Cabinet blowers have been specially matched for use with a single Sterling indoor duct furnace to provide maximum efficiencies.

STANDARD FEATURES

- Four Sizes with Capacities Ranging from 1,250 to 8,000 CFM
- Removable Side Inspection Panels
- Floor Mounted Motors (1-3 HP, 56Hz Frames or Larger)
- Duct Furnace Transition Piece when Ordered with Duct Furnace
- Available with 1 in. Washable or Throw Away Filters

Infrared Heaters

SLR Series - Low Intensity

Sterling SLR Series low intensity infrared heaters are available with inputs of 40 to 200 MBH and system lengths of 10 to 80 feet. All units are field assembled and utilize Sterling's integral tube/reflector hanging system. The burner is of the box type design and is totally enclosed to protect against dust and moisture.

STANDARD FEATURES

Burner Box

- Totally Enclosed/Split Chamber Design
- Black Matte Powder Coated Finish
- Direct Spark Ignition
- Factory Fired Tested

Radiant Tube

- Aluminized Steel on First 10 Feet of Unit
- Hot Rolled Steel on Remainder of Unit
- Optional Complete Aluminized Steel
- Draw Band Coupling System Utilizes a Heavy Duty Bolt and Locking Screw Fastening System

Reflector

- Design Prevents Reflector Separation
- Heavy Duty 22-Gauge Material
- 8 Reflector Surfaces Concentrate Heat Efficiently to the Floor

System Layouts

- Straight
- 90 Degree
- 180 Degree
- Can be Field Installed up to a 45 Degree Tilt

Venting

- Rooftop
- Sidewall Vent Kits Available

SHR Series - High Intensity

Sterling SHR Series high intensity infrared heaters are available with inputs of 35 to 200 MBH. Units are shipped knocked down for simple field assembly.

STANDARD FEATURES

- Direct Spark Ignition – 100% Shut Off
- Aluminized Steel Burner Housing
- Efficient Ceramic Burner Tile
- Natural or LP Gas
- 24 Volt Control
- 4-Point Suspension
- 10-Year Burner Warranty

MODEL SLR



SPECIFICATIONS

Model Number	MBH Input	System Length		Flue Size
		Min.	Max.	
SLR-40	40	10'	20'	4"
SLR-50	50	20'	20'	4"
SLR-60	60	20'	40'	4"
SLR-75	75	20'	40'	4"
SLR-80	80	20'	40'	4"
SLR-100	100	20'	50'	4"
SLR-125	125	30'	50'	4"
SLR-150	150	40'	60'	4"
SLR-175	175	40'	70'	4"
SLR-200	200	60'	80'	4"

Manifold Pressure - Nat. 3.5 in. WC
L.P. 10.5 in. WC

MODEL SHR



SPECIFICATIONS

Model Number	MBH Input
SHR-35	35
SHR-50	50
SHR-75	71.5
SHR-100	100
SHR-150	150
SHR-200	200

MODEL RT Duct Furnace



MODEL PV Duct Furnace



MODEL EV



MODEL AH



MODEL ERMS



Outdoor Duct Furnaces

RT and PV Series

Sterling outdoor duct furnaces utilize the same quality components as our indoor line of equipment. Installed in a weatherproof enclosure, these furnaces can be used with standard air handling systems or included in a Sterling packaged unit.

Inputs range from 100 to 1,200 MBH and are ETL approved for a 20° to 90°F temperature rise. Available as either natural (RT) or power vented (PV) and for use with natural or LP gas.

Evaporative Coolers

EV Series

Sterling EV Series evaporative coolers are available in four sizes ranging from 800 to 8,500 CFM. Units utilize 8 in. CELdek® media as standard, optional 12 in. CELdek® and 8 in. or 12 in. GLASdek® media are available.

Sterling evaporative coolers are available as stand alone units or factory assembled arrangements including a Sterling air handler.

Air Handlers

AH Series

Sterling AH Series air handlers are divided into two classifications “Standard” and “High CFM”. Standard air handlers have a CFM range of 1,500 to 8,000 CFM and are available factory assembled with evaporative coolers and downturn plenums. High CFM air handlers have a CFM range of 3,000 to 15,000 CFM and are available factory assembled with coil cabinets (up to 20 tons) and downturn plenums.

ERMS Series

The Sterling ERMS unit is an outdoor rooftop mounted, electrically controlled, outdoor air pre-conditioner utilizing an Air Xchange Energy Recovery Wheel to reduce the heating and cooling load placed on the HVAC unit by untreated outside air. Outside air will be drawn through the ERMS cassette by the ERMS supply blower and shall be discharged directly into the rooftop unit return air. Units are available in sizes 800 to 14,000 CFM.

Indirect Fired Make-Up Air Systems

RT and PV Series

Sterling RT and PV Series indirect fired make-up air systems are available in multiple configurations and vary depending on the specific application. Standard and High CFM Blower cabinets are designed to be mounted on a common heavy duty skid rail with up to three outdoor gas-fired duct furnaces. Other cabinets include downturn plenums, coil cabinets with factory installed coils and evaporative coolers.

Multiple factory installed gas and air controls are available including DDC control packages, electronic stage controllers, building pressurization controllers, and a variety of mixed air controllers.

The packaged unit is certified by ETL, an exclusive for Sterling.

ME Series

Sterling ME Series indirect fired make-up air systems are similar to the outdoor model "PV" with the exception that the model QVES duct furnaces are utilized. Heating

capacities range from 100 to 1,200 MBH with airflows up to 9,800 CFM.

Multiple factory installed gas and air controls are available including DDC control packages, electronic stage controllers, enthalpy controlled economizers, building pressurization controllers and a variety of other mixed air control packages.

All indoor make-up air units are factory assembled on a 4 in. heavy duty common skid rail allowing the unit to be suspended for overhead installations.

MS Series

Sterling MS Series separated combustion indoor make-up air systems are similar to the ME unit except a separated combustion type duct furnace is utilized. Separated combustion units are designed to be installed in dusty, dirty and mildly corrosive environments or where local codes require outside air to be used for combustion. Heating capacities range from 100 to 1,200 MBH with airflows from 900 to 14,800 CFM.

STANDARD FEATURES

- ETL Certified Outdoor Packaged Units
- Outdoor and Indoor Models
- Heating Capacities from 100 to 1,200 MBH
- CFM Ranges from 800–14,000 CFM
- Dedicated Control Cabinet Isolated from the Air Stream
- Natural (RT) or Power Vented (PV, ME, MS) Duct Furnaces
- Motors Sizes up to 15HP
- Draw-Thru Coil Cabinet with Stainless Steel Drip Pan
- Factory Installed Heating And Cooling Coils
- Evaporative Coolers with Standard 8" or Optional 12" Media
- 1" Washable Filters (Standard)
- 18-Gauge Cabinetry
- 20-Gauge Aluminized Steel Heat Exchangers
- Over 40 Standard Gas and Air Control Packages
- Heavy Duty Centrifugal Blowers
- Factory Assembled and Mounted Air Hood
- Factory Fire Tested
- Hinged Access Doors

TYPICAL OUTDOOR PV UNIT



TYPICAL INDOOR MS UNIT






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