



Leader Boiler and Heater Company

176 West Adams Street, Chicago, Illinois

"THE KOOLSTACK LINE"—Oil and Gas Fired Domestic Heating Boilers; Oil and Gas Fired Industrial Boilers; Oil and Gas Fired Warm Air Furnaces; Economizers for Oil Burners; Koolstack Air Conditioner.

SUMMERAIR FURNACES—For Oil or Gas

With the idea firmly in mind, that a successful heating unit is the one especially designed for the purpose for which it is to be used, this company has had extremely successful experience with the Koolstack line of Steam and Hot Water Boilers, fired with gas (either natural or manufactured) or fired with oil.

The Summerair Furnace, aside from the casing, is a complete steel unit, electrically welded at all joints and free from any possibility of gas leaks. The furnace itself has been raised from the floor to allow the utmost circulation of air. Because of their ease of installation they can be selected for replacement work as well as for new jobs.

Other outstanding features of Summerair Furnaces follow:

The counter-flow principle of heating the cold air in the tubes and around the economizer section.

Equipped with our patented automatic chimney temperature control damper.

Scientifically designed and laboratory tested to present a minimum resistance to the natural flow of cold air through the unit.

Entire design is circular in type, providing unrestrained heating action and easy installation of furnace outlets.

Casing is provided with a radiant plate which greatly reduces casing loss.

Can be furnished with Blowers, Filters and Humidifiers.

Summerair Furnaces are made in three models. Heating surfaces from 83 sq. ft. to 108 sq. ft.; casing diameter from 36 in. to 44 in.; number of tubes from 8 to 12; height of flue cap 59 in. to 61 in. Send for bulletin giving full data.

"KOOLSTACK"—Air Conditioner

Koolstack Air Conditioner has been designed to meet a demand for an economical, serviceable and efficient home air conditioning installation for steam, vapor or hot water boilers and warm air furnaces, when converted from coal to oil burning.

Koolstack Air Conditioner consists of four sub-units combined into one installation. Each unit has been already proved efficient and the combination has been tested thoroughly under actual working conditions.

The Koolstack Air Conditioner has been developed with a combination of appliances for utilizing the waste heat which would otherwise pass up the stack, filtering the air content and providing humidification with mechanical circulation.

The unit can be installed on any existing oil burning plant without inconvenience or interruption in service. It occupies very little space, needing a floor space twenty inches by forty inches only. If more space is available the blower and filter cabinet can be installed as illustrated or it may be suspended above or near the heating plant.



Koolstack Air Conditioner

Specifications

Economizer—Casing, Diameter, 20". Casing Height, 58". Economizer Section Diameter, 16". Economizer Section Height, 48". Tubes, Seven, each 4" in diameter. Flue Connection, 10". Fifty sq. ft. of heating surface. Will deliver 20,000 to 40,000 B.t.u. per hour depending upon the temperature and volume of flue gases. Upper head is Cast-Iron and acts as Vaporizing pan.

Blower—Type, 4" x 8" Multi-blade. Motor, Standard 1/2 horse power, 60 cycle, 1140 R.p.m., capacity about 700 cubic feet per minute. With 1750 R.p.m. capacity 1100 cubic feet per minute. Other than Standard motor at extra charge according to manufacturer's prices.

Filter—Oil Type, 16" x 25". Capacity, 800 cubic feet per minute.

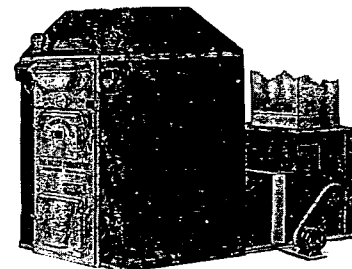
Humidifier—Furnished with an adjustable valve, four feet of 1/2" copper tubing, connector for 1/2" or 3/4" water pipe and main shut-off valve.

THE MEYER FURNACE COMPANY

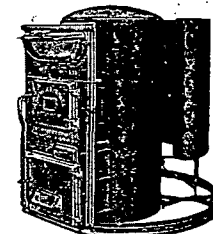


Manufacturers of Domestic Heating and Air Conditioning Units for Coal, Gas and Oil Burning

Branches and Distributors
KANSAS CITY, MO.
OMAHA, NEB.
GREEN BAY, WIS.
PITTSBURGH, PA.
NEW ORLEANS, LA.
DETROIT, MICH.
ST. LOUIS, MO.
SAN FRANCISCO, CALIF.



The Weir Conditioned-Air Unit for coal or oil burning, with the Weir Steel Furnace as its basis, is, as its name implies, a complete unit for conditioning the air in the home with respect to temperature, humidity, and air-cleansing. Casing is double-walled and finished in blue crinkle. Equipment includes thermostatic draft and damper regulator with limit control, automatic humidifier, air filters and centrifugal blower for mechanical circulation, with bonnet control. (Refer to table below for data on installations for gravity as well as mechanical circulation.)



No.	Grate Surface (Sq. Ft.)	Ratio Htg. to Grate Surface	Smoke Outlet Diam. (In.)	Gravity Circulation				Fan Circulation		
				Casing Dimen.		Rated Output		Casing Dimen. (In.)	Air Delivery (C.F.M.)	Rated Output at register (Btu/Hr.)
				Round (In.)	Rect'lar (In.)	At Reg. (Btu/Hr.)	Pipe Area (Sq. In.)			
621	1.26	41.2	9	48		54,400	400	51x102	1200	92,000
624	1.78	33.9	10	52	51x49	73,600	541	52x103	1600	118,000
628	2.32	29.2	10	54	55x51	94,100	692	54x111	2000	148,000
630	3.08	26.4	10	58	61x57	119,000	875	57x117	2300	172,000
633	3.82	22.7	10	65	61x63	138,000	1015	57x123	2700	200,000
636	4.74	19.4	10	67	61x66	160,000	1180	64x106	4000	264,000
544	7.60	18.5	12					64x114	5000	316,000

The Meyer Gas Fired Air-Conditioner automatically provides complete "conditioned-air." It is as attractive in appearance as it is compact and efficient. Heating section of heavy gauge welded steel, gas- and fume-tight construction; casing thoroughly insulated and finished in blue crinkle. Equipment also includes specially designed automatic humidifier (which may be provided with room control if desired), renewable filters, centrifugal blower with bonnet control, motor gas valve, gas-electric safety pilot with hand valve, pressure regulator, hand shut-off valves, and draft hood.

No.	Output at Bonnet (Btu/Hr.)	Input at Burner (Btu/Hr.)	Gas Consumption		Air Delivery at 1/4" S.P. (C.F.M.)	Motor Size (HP)	Vent. Diam. (In.)	General Dimensions			Approx. Shipping Weight (Lb.)
			Natural 1000 Btu (C.F.H.)	Mfd. 550 Btu (C.F.H.)				Width (In.)	Length (In.)	Height (In.)	
1-B	72,500	88,000	88	160	1000	1/6	4	20 1/2	52	42	600
2-B	145,000	176,000	176	320	2000	1/3	7	41	52	42	1100
3-B	217,500	264,000	264	480	3000	1/2	8	61 1/2	52	42	1600
4-B	290,000	352,000	352	640	4000	3/4	9	82	52	42	2100
5-B	362,500	440,000	440	800	5000	1	10	102 1/2	52	42	2600

Data on refrigerating equipment for summer cooling, to be used in conjunction with any of the above mechanically circulating systems supplied upon request.