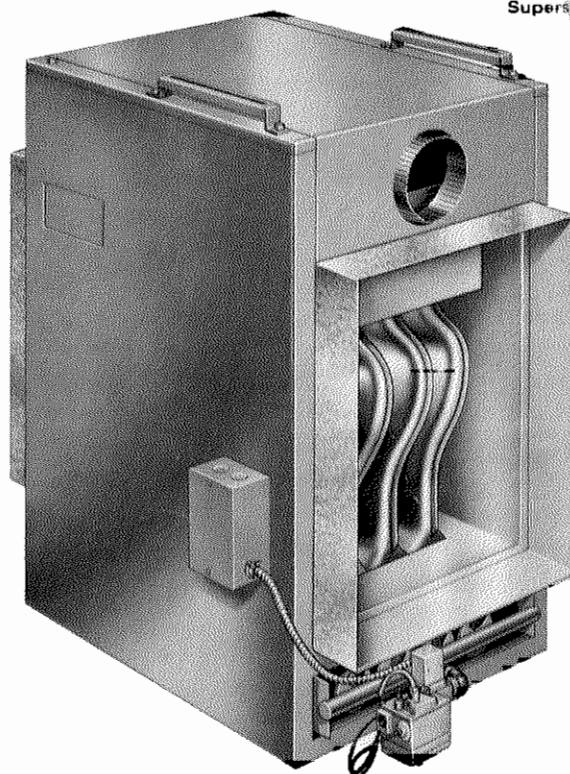




**GAS-FIRED DUCT FURNACES
LD2 SERIES—HORIZONTAL**
110,000 to 330,000 Btuh INPUT

- Choice of Aluminized or DURAGLASS^{T.M.} Coated Heat Exchanger.
- Minimum Installation Cost
- Several Sizes Available
- DURACURVE[®] Heat Exchanger
- Aluminized Burners
- Easy Duct Connection
- Hangers For Suspending
- Built-in Draft Diverter
- A.G.A. Certified

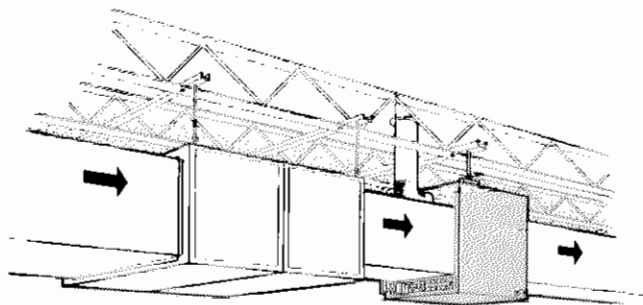


Complete Line Of Duct Furnaces For Large And Varied Application Choice

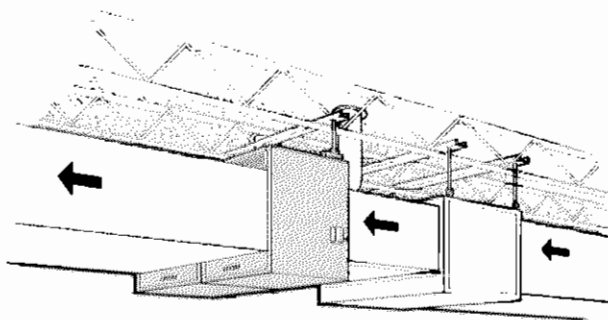
Lennox offers several different sizes of duct furnaces with a wide range of heating capacities available. Compact duct furnaces can be used in heating systems, heating-cooling systems or make-up and ventilating air systems. One or more units can be installed in a duct system providing almost any Btuh capacity required. Two stage heating is also available, as an option, on all models. These versatile units can also be easily added to existing heating or heating-cooling systems with little or no change required in the system. Lennox has incorporated the famous DURACURVE heat exchanger design into the duct furnace line, assuring maximum heating efficiency and many years of service.

Corrosion resistant heat exchanger permits installation downstream from cooling coil or in installations where excessive moisture is present in the system. Heavy gauge steel cabinet has a baked-on enamel finish. Cabinet is equipped with hangers for suspending and flanges on the inlet and outlet air openings, for easy connection of duct. Aluminized draft diverter is integral to furnace cabinet. Units are shipped completely assembled with controls factory installed and wired. In addition each unit is fire tested at the factory insuring proper operation. Installer has only to locate unit in desired location, make duct, flue, gas supply and electrical connections to complete the installation.

Applications



Installation with Cooling Coil



Installation with Duct Furnaces Close Coupled

FEATURES

Lennox DURACURVE Heat Exchanger—Available in aluminized steel or DURAGLASS coated. Specify type heat exchanger desired when ordering. See specification table for model number designation. Lennox engineered and constructed, direct-fired heat exchanger eliminates fatigue failure, ticking, resonance and cleanability problems. With this unique heat exchanger design the sides of each section form a flue restriction zone comprised of sections of two concentric cylinders. The sides expand in the same direction and at the same rate, eliminating metal fatigue and ticking. This rugged heat exchanger is the quietest and most reliable ever developed.

Aluminized Steel Burners—Each burner has four rows of practically continuous ports which result in quiet and clean combustion. A crossover igniter of actual burner ports, perpendicular to the main burner, carries a positive flame from burner to burner to achieve fast and quiet ignition of multiple burners. Burners are readily accessible in bottom of unit.

Aluminized Draft Diverter—Corrosion resistant. Factory installed within the furnace cabinet.

Rugged Cabinet—Constructed of heavy gauge cold rolled steel with a furniture finish of baked-on enamel. Aluminized steel inner panel liners keep outer cabinet surface temperature low. Wiring junction box is conveniently located on outside of cabinet. Threaded pipe connections are provided on cabinet for suspension of unit. Limit control access cover is located in side panel. Flanges on cabinet inlet and outlet openings assure positive and air tight duct connection. Threaded condensate drain connection for moisture removal is located in base.

Controls—The following controls are furnished as standard equipment: 24 volt main gas valve with 100% shutoff and pilot valve, automatic pilot burner, main shutoff valve, gas pressure regulator (not included on LPG models), 115/24v transformer and limit control. Two limit controls are furnished with the LD2-220, 275 and 330 models. The following are available as optional equipment and must be ordered extra: thermostat, two stage gas valve.

Close Couple Kit (Optional)—LD2-220, LD2-275 and LD2-330 models may be close coupled with only one entering and leaving duct required. A field installed close couple kit is required for this type installation. Kit contains installation instructions and necessary parts for securing units together. Three kits are available: For Single or two stage heating, 120 volt, order no. BM-4325. For two stage heating, 24 volt, order no. BM-4326. For single stage heating, 24 volt, order no. BM-4327.

Approvals—A.G.A. certified and CSA approved for use with natural and LPG gases.

Power Venters (Optional)—Power venters are available for field installation and must be ordered extra.

LD2-110 thru LD2-275 models.

PV3-115-24 (volt) order no. — (P-8-8519)

PV3-230-24 (volt) order no. — (P-8-8520)

(4" flue connection)

Optional PV3 flue adaptors (flue size and order no.):

5" to 4"—(P-8-8515) 7" to 4"—(P-8-8517)

6" to 4"—(P-8-8516) 8" to 4"—(P-8-8518)

LD2-330 models.

PV4-115-24 (volt) order no. — (P-8-8521)

PV4-230-24 (volt) order no. — (P-8-8522)

(6" flue connection)

Flue adaptor must be supplied by installer.

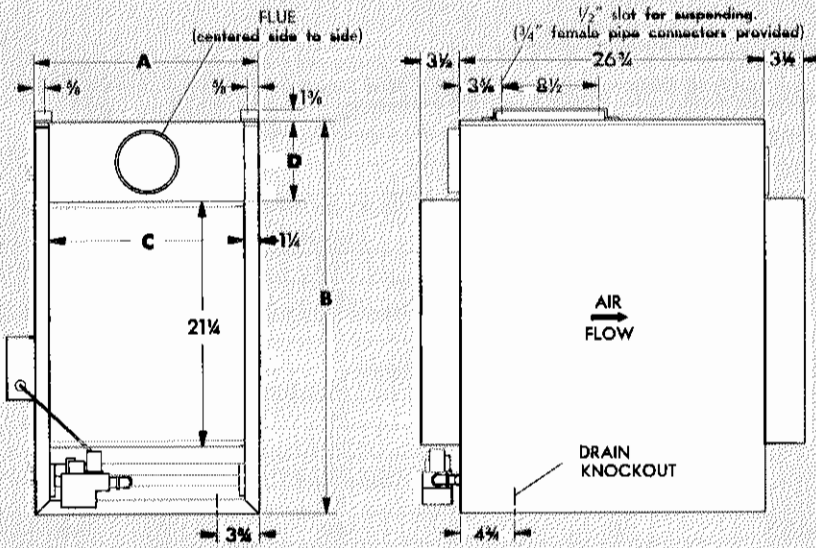
SPECIFICATIONS

*Model No.	Aluminized DURAGLASS	LD2-110	LD2-137	LD2-165	LD2-220	LD2-275	LD2-330
		LD2-110-V	LD2-137-V	LD2-165-V	LD2-220-V	LD2-275-V	LD2-330-V
Heating Capacity Input (Btuh)		110,000	137,000	165,000	220,000	275,000	330,000
Heating Capacity Output (Btuh)		88,000	109,600	132,000	176,000	220,000	264,000
Air Volume Throughput (cfm)	Minimum	800	1,000	1,300	1,700	2,100	2,500
	Maximum	1,600	2,000	2,400	3,200	4,000	4,900
Temperature Rise (Degrees F)	Minimum	60	60	60	50	50	50
	Maximum	100	100	100	100	100	100
High statics certified by A.G.A. (in. wg)		2.00	2.00	2.00	2.00	2.00	2.00
Flue size (in. round)		5	6	7	8	8	9
Gas Piping Sizes (in.)	Natural	1/2	1/2	3/4	3/4	3/4	3/4
	LPG	1/2	1/2	3/4	3/4	3/4	3/4
Condensate drain fpt (in.)		3/4	3/4	3/4	3/4	3/4	3/4
Number of packages		1	1	1	1	1	1
Net weight (lbs.)		165	208	310	347	362	435

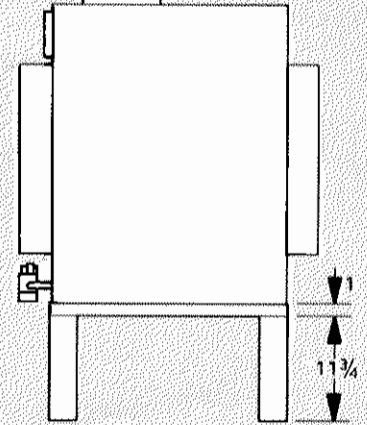
*Choice of two heat exchangers available: Aluminized steel or DURAGLASS coated. See model numbers in table for designation. Specify correct model number, for type heat exchanger desired, when ordering.

NOTE—High altitude derate—A.G.A. requires gas furnaces be derated 4% per thousand feet above sea level when the installation is at an altitude of 2000 feet or more. Thus an installation at 3,000 feet altitude requires a derate of 12% while up to 2,000 feet the unit has full rating.

DIMENSIONS (in.)



BF2 SERIES OPTIONAL ADDITIVE BASE



NOTE—When units are installed at floor level an optional additive base is required to provide adequate service access to burner area. Order number **BF2-110**, **AND** **BF2-137**, **BF2-165**, **BF2-220**, **BF2-275** and **BF2-330** to match corresponding duct heater.

Model No.	A	B	C	D
LD2-110	19-5/8	34-3/8	17-1/8	6-7/8
LD2-137	22-3/4	35-3/8	20-1/4	7-7/8
LD2-165	25-7/8	36-3/8	23-3/8	8-7/8
LD2-220	32-1/8	37-3/8	29-5/8	9-7/8
LD2-275	38-3/8	37-3/8	35-7/8	9-7/8
LD2-330	44-5/8	38-3/8	42-1/8	10-7/8

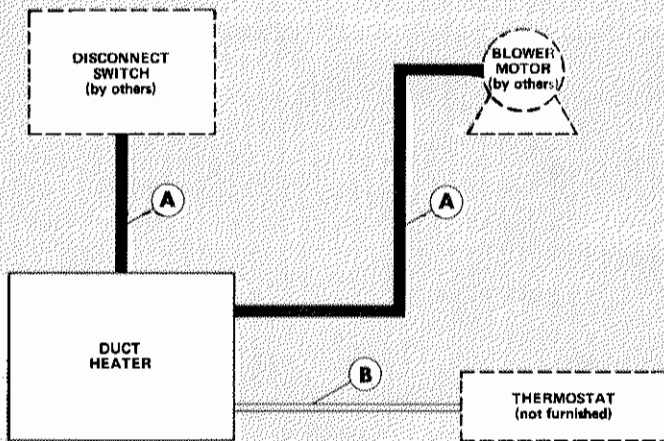
INSTALLATION CLEARANCES TO COMBUSTIBLES

Four Sides	18"
Top	6"
Floor	12"
Flue	6"

Note—Provide adequate clearance for servicing.

FIELD WIRING

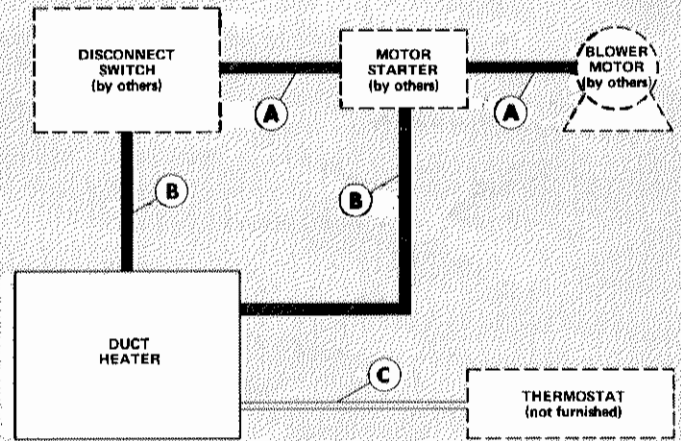
WITHOUT MOTOR STARTER



A—Two wire power (not furnished)

B—Two or three wire—line or low voltage (not furnished)

WITH MOTOR STARTER



A—Two or three wire power (not furnished)

B—Two wire power (not furnished)

C—Two or three wire—line or low voltage (not furnished)

NOTE: All wiring must conform to NEC and local electrical code.

AIR RESISTANCE

Model No.	Air Volume (cfm)	Total Resistance (in wg.)	*Temperature Rise Degrees F
LD2-110	800	.04	100
	1000	.05	81
	1200	.07	67
	1400	.10	58
	1600	.12	51
LD2-137	1000	.03	100
	1200	.05	85
	1400	.07	78
	1600	.08	68
	1800	.11	56
LD2-165	1300	.05	96
	1400	.06	89
	1600	.07	83
	1800	.09	69
	2000	.11	62
	2200	.13	57
LD2-220	2400	.15	52
	1700	.06	96
	1800	.07	91
	2000	.08	82
	2200	.10	74
	2400	.11	68
	2600	.13	63
	2800	.15	58
LD2-275	3000	.17	54
	3200	.19	51
	2100	.05	98
	2500	.06	82
	3000	.09	68
LD2-330	3500	.11	58
	4000	.15	51
	2500	.03	98
	3000	.05	82
	3500	.06	70
	4000	.08	61
LD2-330	4500	.10	55
	4900	.13	50

*High stage heating only