

Fans and Ventilating Equipment

L. J. Wing Mfg. Co.

Branch Offices In
Principal Cities

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NEWARK, N. J.

Manufacturers of Wing Featherweight Unit Heaters, Wing Turbine and Motor Driven Blowers, Wing-Scruplex Fans and Exhausters

Wing Featherweight Unit Heaters

The outstanding features of Wing Featherweight unit heaters are their extreme light weight (about one-tenth that of the old style) and small dimensions, combined with the fact that driving motors are direct connected (no belts) and are out of the path of heated air.

These features open a much broader field of application for this system of heating—which is generally accepted by engineers and architects as the best system for industrial plants and other buildings of large open areas such as garages, armories, etc.

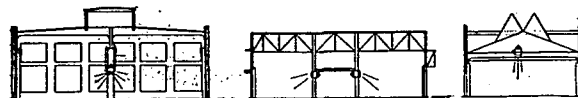
The features emphasized make possible suspending the units from ceiling or roof of any building, old or new, without necessitating additional strengthening of the structure; and the overhead installation makes it possible to run all steam and return lines overhead out of the way.

Wing Featherweight unit heaters heat the floor or working level first. Being placed near the roof or ceiling, they withdraw the heated air which tends to accumulate there and return it to the working level where it is needed. Considerable economy is effected by reducing the temperature directly under the roof where heat transmission is always the greatest.

Wing Featherweight unit heaters are made in four different designs: vertical, high ceiling, vertical medium ceiling, vertical low ceiling, and horizontal.

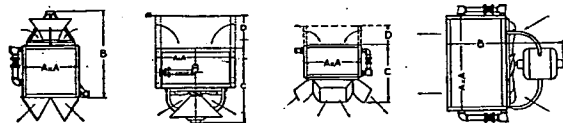
Methods of Installation

The cuts show three different methods of installation, the units in each case being located well above the head line, out of the way. The third illustration shows the high ceiling type heater installed thirty feet from the floor above a traveling crane. The column of heated air leaves the heater with sufficient velocity to strike the floor with considerable force from this point, but by the aid of adjustable diffusers the column is divided and directed so that no objectionable velocity is felt at the head line. The best and most economical installation of Wing Featherweight unit heaters is when they are placed close to the roof or ceiling.



Condensed Table of Engineering Data

Size Unit	A x A In.	B In.	C In.	D In.	Air C.F.M.	Motor H.P.	Temperature		B.t.u. per Hr. Available	Approx. Shipping Weight
							Room	Leav.		
17-3-12	23 x 23	24	24	6	1950	1/4	65	113	92,500	210
22-3-12	28 x 28	27	27	6	3200	1/2	65	115	157,000	270
22-4-12	28 x 28	27	27	7	3800	3/4	65	125	162,600	280
22-5-12	28 x 28	27	27	6	2600	1/2	65	135	173,200	290
25-4-12	33 x 33	27	27	7	4800	1	65	125	279,000	320
25-5-12	33 x 33	27	27	7	4500	1	65	135	300,000	330
30-4-85	35 x 35	33	33	8	6900	1	65	125	401,000	360
30-5-85	35 x 35	33	33	8	6500	1	65	135	433,000	360
36-4-85	41 x 41	39	39	8	9600	2	65	125	558,000	500
36-5-85	41 x 41	39	39	8	9000	2	65	135	599,400	530



Wing Featherweight Unit Heaters

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Horizontal Type



Vertical High Ceiling Heater



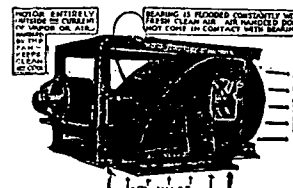
Vertical Medium Ceiling Heater



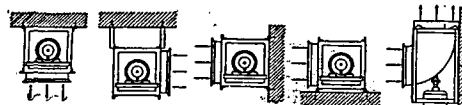
Vertical Low Ceiling Heater

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Wing-Scruplex Exhauster



Proper Selection of Exhausters—Where particularly quiet operation is desired, as in offices, residences, hospital wards, churches, theatres, etc., use lowest speeds in all sizes. For toilet rooms, laboratories, motion picture booths, stock-rooms, etc., use any speed in sizes 1 and 2; low and medium speeds in all other sizes. In industrial plants, hotel and restaurant kitchens, engine-rooms, workshops, etc., use any speeds.

Size	Inlet Sq. In.	Outlet Round, In.	Speed Rounded, f. p. m.	Free Air		.15 in.		.25 in.		.40 in.		.50 in.	
				Cu. f. m.	Hp.	Cu. f. m.	Hp.	Cu. f. m.	Hp.	Cu. f. m.	Hp.	Cu. f. m.	Hp.
1-A	10	10½	1750	850	0.052	630	0.054	330	0.060	.....	.....	.....	.....
2-A	13½	14½	1150	1440	0.060	950	0.069	395	0.090	.....	.....	.....	.....
2-B	13½	14½	1750	2050	0.195	1895	0.208	1695	0.216	1155	0.248	750	0.285
3-S	16½	17½	850	2130	0.090	1250	0.110	.....	.....	.....	.....	.....	.....
3-A	16½	17½	1150	2700	0.180	2150	0.195	1550	0.221	.....	.....	.....	.....
3-C	16½	17½	1750	4000	0.600	3720	0.635	3510	0.655	3150	0.700	2810	0.720
4-S	21	21½	850	2850	0.100	2200	0.125	1610	0.150	.....	.....	.....	.....
4-A	21	21½	1150	3575	0.170	3150	0.200	2775	0.220	1950	0.245	1550	0.280
4-C	21	21½	1750	5400	0.540	5160	0.600	4990	0.650	4670	0.710	4440	0.750
5-A	25	25	1150	5200	0.330	4720	0.380	4250	0.440	3300	0.530	2610	0.600
5-B	25	25	1750	8000	1.330	7740	1.360	7540	1.400	7175	1.480	6900	1.540
6-A	30	30	600	5500	0.210	3725	0.250	2375	0.330	.....	.....	.....	.....
6-B	30	30	850	7400	0.550	6280	0.600	5450	0.740	4000	0.830	3400	0.960
6-C	30	30	1150	10250	1.500	9520	1.550	8950	1.570	8000	1.620	7340	1.760

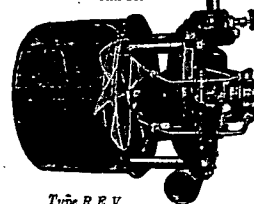
WING-SCRUPLEX FANS

Wing Scruplex Fans are built in the following sizes: 10 in., 13 in., 17 in., 22 in., 25 in., 30 in., 36 in., 42 in., 54 in., and 60 in. Capacities from 950 C. F. M. to 33,000 C. F. M. Up to 25 in. diameter, propellers are made of cast aluminum alloy while the larger sizes are of pressed steel.

WING FORCED DRAFT BLOWERS

The Wing Type EM blower makes the ideal forced draft for heating boilers. This small, compact propeller fan outfit is an integral unit, ready to install. No belting or coupling; the fan is right on the motor shaft. Where the base of the boiler is not high enough to accommodate the fan casing, the blower is provided with feet for mounting, placed a short distance away and connected to the boiler by means of a small piece of duct. E. M. units are furnished either in D. C., polyphase or single phase with speed regulation; or with squirrel cage motors and damper regulation.

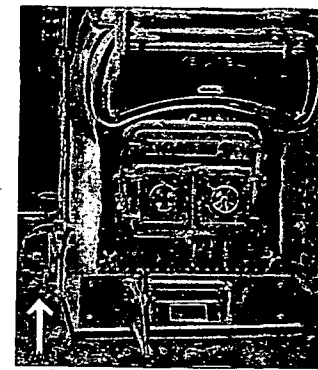
Ask for Bulletin 26.



Type R.E.V. Turbine Driven

The Wing Turbine Blower, while long considered standard equipment for supplying forced draft to hand-fired boilers, has in more recent years become widely used for stokered boilers as well, a single blower delivering enough air to develop as high as 1000 h. p. Either manual or automatic operation may be had.

Ask for Bulletin 67.



Type EM Motor Driven

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