

MODEL UBS & UBS-P

BELT DRIVE UPBLAST PROPELLER ROOF EXHAUSTER



MODEL FEATURES

- Exhaust air up to 51,000 CFM in static pressure applications up to 1/2" w.g.
- Straight-through air flow design results in maximum exhaust efficiency
- Belt drives permit easy performance adjustments when needed
- cULus 705 Listed

MODEL OVERVIEW

Models UBS and UBS-P are high capacity roof mounted exhausters rated from 7,000 to 51,000 CFM. They are general ventilation units designed to economically remove large volumes of air, fumes and vapors from commercial and industrial buildings such as warehouses, manufacturing and assembly plants, chemical plants, foundries and paper mills.

Straight-through air flow design results in maximum exhaust efficiency. During operation, high air flow velocity opens butterfly dampers and prevents rain or snow from entering. Dampers close and cover the venturi opening when unit is not in use.

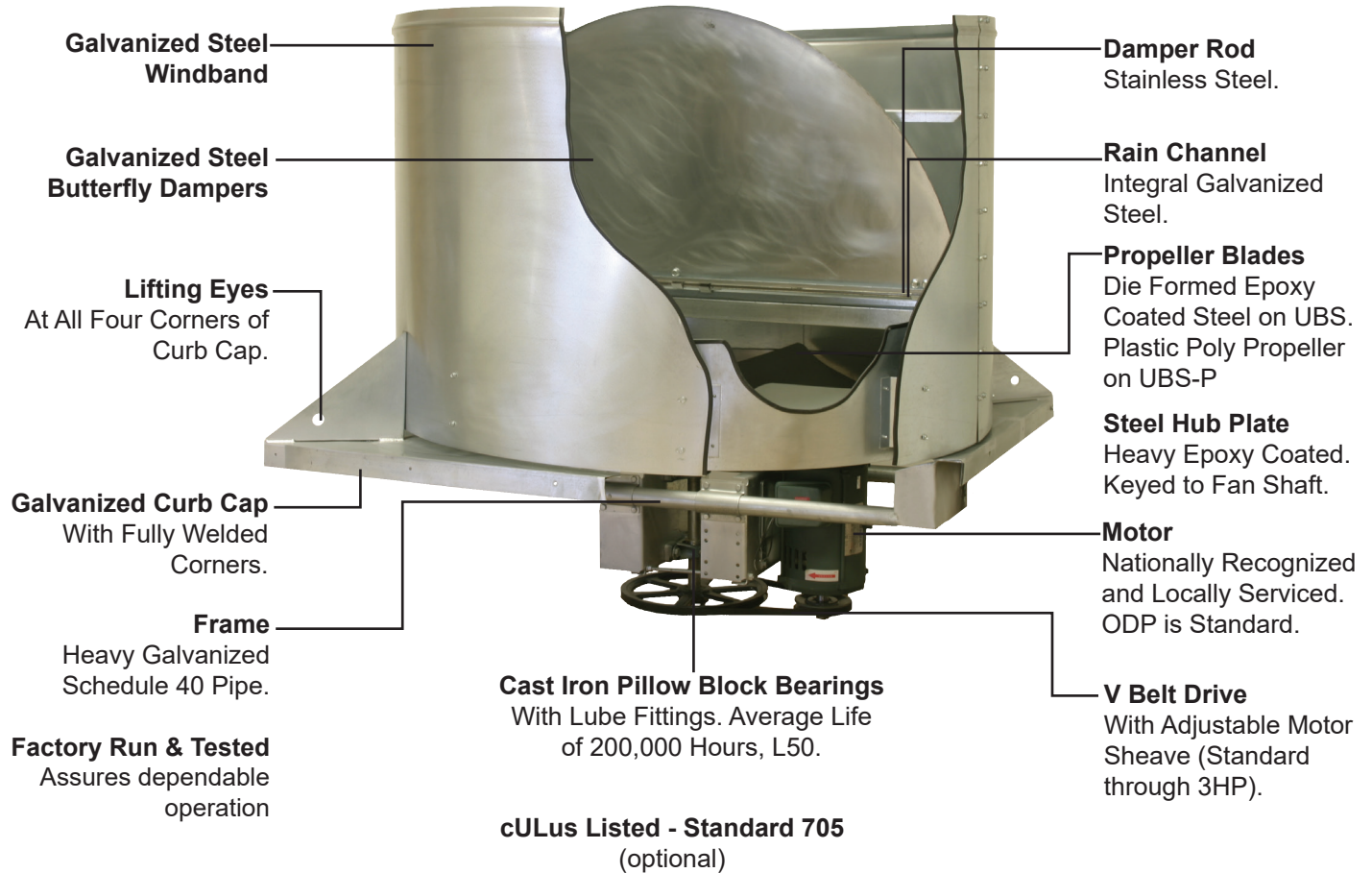
The roof mounted location eliminates interference with processes and equipment inside the building. It also permits locating the exhauster over a source of heated or contaminated air, allowing direct upward venting to the outside, unlike wall mounted exhausters which may move contaminated air through adjacent work spaces.

Belt drive units usually operate more quietly and afford easier performance adjustments, while direct drive models require less maintenance.

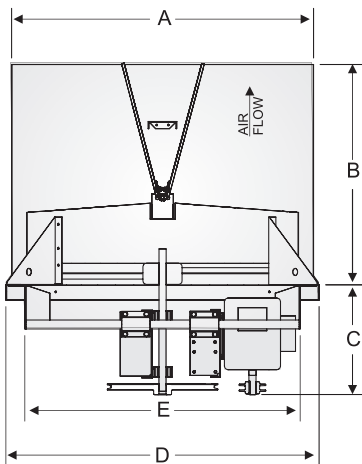
2 year fan housing warranty, 1 year motor warranty



CONSTRUCTION FEATURES AND OPTIONS



DIMENSIONAL DATA



MODEL UBS & UBS-P	A	B	C	D	E	F	METAL GAUGES		Average Wt. Lbs.
							WIND SHROUD	FAN PANEL	
24	30	26	20	32	28	31	18	16	250
30	36	29	21	38	34	37	18	16	325
36	42	31	21	44	40	43	18	16	350
42	48	34	22	50	46	49	18	16	425
48	54	37	26	56	52	55	18	16	450
54	60	40	26	62	58	61	18	14	575
60	66	43	26	68	64	67	18	14	750

A - Outside Diameter of Windband.

B - Height of Unit Above Curb Cap.

C - Maximum Depth of Unit Below Top of Curb, Actual Depth Varies with Motor Size.

D - Inside Dimension of Square Curb Cap.

E - Minimum Inside Dimension of Curb Opening Required for Adequate Clearance of Fan Frame.

F - Outside Dimension of Factory Built Prefab Curb.



CONSTRUCTION/SPECIFICATION CHECKLIST

Panel Assembly

- Heavy-gauge G90 galvanized steel panel on all sizes.
- One piece venturi for maximum efficiency.
- Welded and bolted support structure of schedule 40 galvanized pipe.
- Motor/bearing plates of heavy-gauge galvanized steel.
- Lifting eyes standard for ease of installation.

Windband/Butterfly Dampers

- Heavy-gauge galvanized steel windband.
- Galvanized steel butterfly dampers standard.
- Galvanized rain channel drains water from damper area to roof.
- Corrosion resistant.

Propeller (Model UBS)

- Steel hub plate with steel taper lock bushing.
- Die formed, heavy-gauge, epoxy coated, steel blades.

Propeller (Model UBS-P)

- Plastic airfoil propeller
- Size 24 has a glass reinforced polyamide, industrial quality propeller
- Sizes 30-60 have a glass reinforced polypropylene propeller
- Blades are pitched for optimum efficiency

Drives

- Sized for minimum 150% of drive horsepower.
- Single belt adjustable pitch sheaves through 3HP.
- Two belt fixed pitch sheaves on 5HP and 7 1/2HP units.
- Adjustable tension rods for belt adjustment.
- Nonstatic oil resistant V belts.
- Keyed, turned, ground and polished shafts coated with an anti-rust compound to resist corrosion.

Bearings

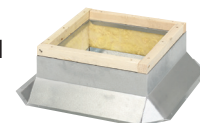
- Bearings designed for minimum 200,000 hour life, L50.
- Cast iron self-aligning pillow block ball bearings.
- Bearings are sealed, prelubricated with relube fittings.

Motors

- Brands are nationally recognized and locally serviced.
- Open drip-proof construction is standard.

OPTIONS/ACCESSORIES

Roof Curb: Prefabricated heavy-gauge galvanized steel, welded construction, 12" high with 1 - 1 / 2" wood nailer. Options include burglar bars, single and double pitch construction, and additional curb heights.



Outlet Guard: 1/2" x 1" wire mesh guard will prevent birds and other objects from entering fan.

Disconnect Switch: Nonfused safety disconnects are available for all motor sizes in open enclosures. Explosion proof, Nema4 and 4X are also available.

Magnetic Latches: Help reduce butterfly damper chatter when the units are not in operation.

Cushion Close: Allows butterfly damper doors to close quietly.

Safety Basket Guard: 1/2 x 1" galvanized wire. Guard extends into roof curb. **Important:** For all nonducted applications, the manufacturer recommends that a safety basket guard must be installed as a safety precaution for personnel below unit.



PERFORMANCE

cUL US
Standard 705
(optional)

MODEL UBS	CFM @ STATIC PRESSURE					HP	RPM	Max. BHP	Sones @ .375
	0	1/8	1/4	3/8	1/2				
24	7079	6599	6023	5284	3732	3/4	1070	0.82	22
	7939	7511	7068	6461	5718	1	1200	1.10	27
30	10546	9463	7865	5230	3906	1	871	1.10	16.8
	12781	11952	10895	9435	7270	1-1/2	1055	1.65	23
	14388	13700	12782	11745	10346	2	1188	2.20	29
36	11872	10354	8064	5301	3522	1	575	1.15	14.6
	14557	13389	11962	9903	6871	1-1/2	705	1.65	21
	16415	15416	14200	12722	10776	2	795	2.20	24
	19087	18221	17299	16291	15181	3	950	3.30	36
42	16307	14087	11400	7270	5386	1-1/2	510	1.65	16.4
	19184	17283	15281	12804	8980	2	600	2.20	22
	22382	20749	19150	17245	15170	3	700	3.30	31
	25259	23813	22382	20885	19127	5	790	5.50	42
48	22656	20052	16506	10504	7559	2	475	2.20	19.7
	27187	25018	25563	19410	14113	3	570	3.30	26
	31480	29606	27732	25319	22538	5	660	5.50	33
54	29460	25454	20962	14718	11910	3	485	3.30	19
	36456	33013	30586	26237	19623	5	600	5.50	29
60	44555	40707	36545	27962	22834	5	495	5.50	26
	50996	47635	44150	39164	31620	7-1/2	555	8.62	35

Performance shown is for roof ventilators for installation type A: Free inlet, Free outlet. The power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

Sound ratings are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type A: Free inlet fan sone levels. For additional sound data and for selections at other static pressures, please refer to the Optimizer Selection Program.

Due to air stream cooling, the motor loading into the service factor shown does not overheat the motor and is within NEMA recommended limits. BHP at most static pressure points is less than the maximum power shown - in many cases substantially less. Use Optimizer to see the exact BHP for your selection.

Model UBS-P	CFM @ Static pressure, HP Req										HP	RPM
	0	HP	1/8	HP	1/4	HP	3/8	HP	1/2	HP		
24	6610	0.587	6240	0.634	5890	0.685	5490	0.736	5010	0.781	3/4	1070
	7420	0.828	7090	0.881	6760	0.936	6440	0.996	6060	1.05	1	1200
30	10700	0.724	9550	0.764	8280	0.777	6430	0.784	3010	0.784	1	871
	12900	1.29	12000	1.35	11000	1.37	9920	1.38	8450	1.36	1-1/2	1055
	14600	1.84	13800	1.9	12900	1.94	12000	1.97	10900	1.96	2	1188
36	12500	0.65	10800	0.701	8500	0.742	4550	0.79	2930	0.912	1	575
	15300	1.2	13900	1.26	12400	1.31	10500	1.37	6630	1.4	1-1/2	705
	17200	1.71	16000	1.79	14800	1.86	13300	1.91	11400	1.97	2	795
	20600	2.93	19600	3	18600	3.1	17500	3.18	16200	3.23	3	950
42	18200	1.07	15700	1.14	12400	1.22	6270	1.25	-	-	1-1/2	510
	21400	1.66	19300	1.83	16800	1.91	13600	2.01	7620	2.02	2	600
	25000	2.78	23200	2.87	21300	2.96	19100	3.07	16400	3.19	3	700
	30000	4.86	28400	4.97	26700	5.06	24700	5.16	22600	5.27	5	790
48	26200	1.86	23000	1.97	19300	2.1	10500	2.09	-	-	2	475
	30400	2.89	27600	3.02	24500	3.14	20900	3.29	12200	3.24	3	550
	36500	4.99	34200	5.17	31700	5.29	29100	5.45	26300	5.66	5	660
54	34800	2.8	31200	2.96	26800	3.12	15400	3.14	-	-	3	425
	41800	4.84	38800	5.02	35600	5.24	31500	5.41	26000	5.47	5	510
60	50100	4.67	46600	4.78	42800	4.93	36800	4.87	25700	4.46	5	560
	58500	7.48	55600	7.6	52500	7.75	48900	7.93	43700	7.87	7-1/2	655

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