

HF8100-HF8300 Hooded Exhauster



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HF8100-HF8300 Hooded Exhauster

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HF8100-HF8300 Hooded Exhauster

HF8100-8300 Hooded Roof Propeller Exhauster

PRODUCT DESCRIPTION

Moffitt Hooded Roof Fans are one of our most highly used and flexible product lines available. Fans are used in both industrial and commercial applications. These fans can be adapted, with the use of roof curbs, to any roof pitch imaginable. Many different materials of construction and propeller options provide Moffitt the ability to meet virtually any capacity considerations given. Moffitt also manufactures to meet specialty components and dimensional requests. Sizes available range from 12" thru 120". This ability offers you supply flexibility unmatched by any other fan supplier.

STANDARD FEATURES

- Sizes: 24" – 120"
- CFM Range: 5,000 – 100,000 +
- Statically and Dynamically Balanced Aluminum Propeller
- All Galvanized Steel Construction
- Variable Pitch Drives Standard Through 3HP
- Drives Sized for a Minimum 150% of Drive Horsepower
- 1 Year Fan and Motor Warranty
- Removable Panel for Easy Damper Access
- Heavy Duty 200,000 Hour Rated Pillow Block Bearings
- Low Profile
- Integral Deep Spun Inlet
- Hinged Hood for easy Access
- Motor: Open Drip Proof
- Bird screen: ½" mesh, 19 ga. galvanized steel
- Complete Operation & Maintenance instructions & assembly drawings, supplied with fan shipment
- Units have been tested and rated and are guaranteed to perform as stated.
- Reversible Application

OPTIONAL FEATURES

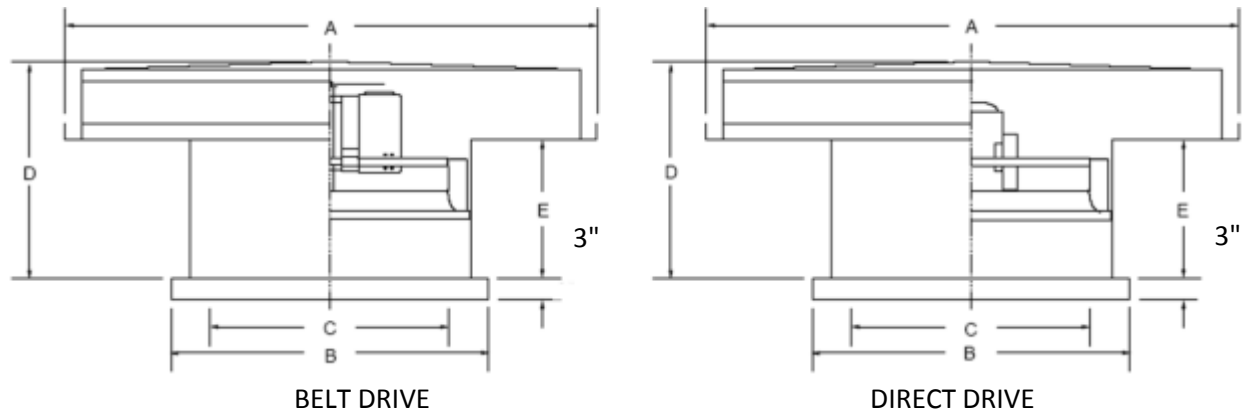
- Construction
 - Aluminum
 - Stainless Steel
- Propeller – FRP blades with cast aluminum hub
- Bird screen
- Insulated Hood
- Safety Guard Basket
- Hood Tie Downs
- 100 MPH Wind Rated Resistant Hood
- Auto Back Draft Damper
- HD Center Pivoted Damper w/ 115v/1 motor
- Delay switch
- Transformer (208/230/460)
- Curb Cap Adaptor Max 4" + or -
- Grease Line (Belt)
- Disconnect Switch
- Coatings
 - Epoxy
 - Heresite
 - Coal Tar
- Roof Curbs

SPECIAL HOODED FAN OPTIONS

- 2, 3 & 4-way airflow configurations
- Supply Duct Extensions 5' – 20'
- 45° Outlet Elbows
- Single Point Unit Wiring
- Slide Out Damper Trays
- 2-way & 4-way diffusers
- Sound Dampening Components

HF8100-HF8300 Hooded Exhauster

HF8100-8300 Hooded Roof Exhauster Submittal Data



Size	A SQ O.D. Hood (2)	B I.D. Curb Cap	C Min I.D. Opening	D Height	E Stack	Prefab Curb O.D.	Metal Gauges (1)			Avg. WT.
							Crown/Side Hood	Stack	Curb Cap	
24	58	35	30	44	23	33 ¼	18/18	18	14	300
30	66	41	36	44	23	39 ¼	18/18	18	14	360
36	78	47	42	44	23	45 ¼	18/18	18	14	440
42	87	53	48	51	30	51 ¼	18/18	18	14	540
48	99	59	54	51	30	57 ¼	18/18	16	14	690
54	111	65	60	51	30	63 ¼	18/16	16	14	820
60	111 or 123	71	66	51	30	69 1/4	18/16	16	14	910

Notes:

All materials are G90 galvanized steel.

Hoods for fan sizes 24-36" ship assembled. Hoods for fan sizes 42-60" ship knocked down unless ordered factory assembled.

Assembled 123" hoods must ship via double drop deck flatbed truck. This will affect normal freight rates. (123" hood for 15HP-non catalog performance.)

Hoods will hinge and front panel is removable for access to fan and optional damper.

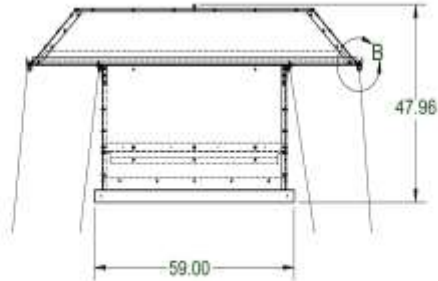
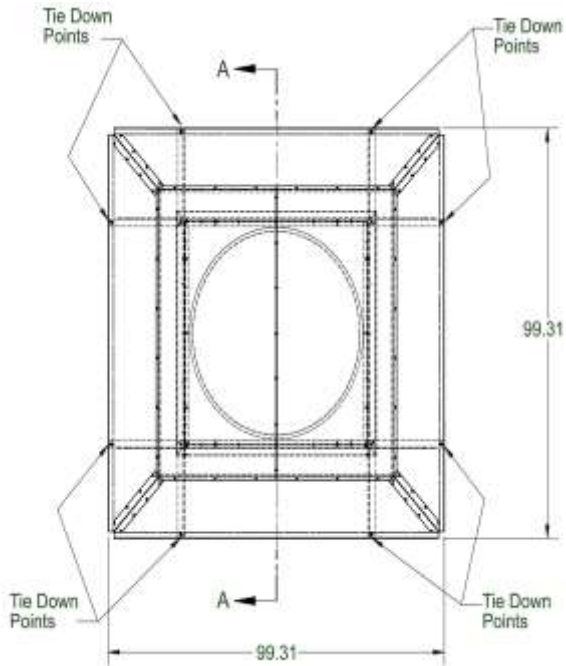
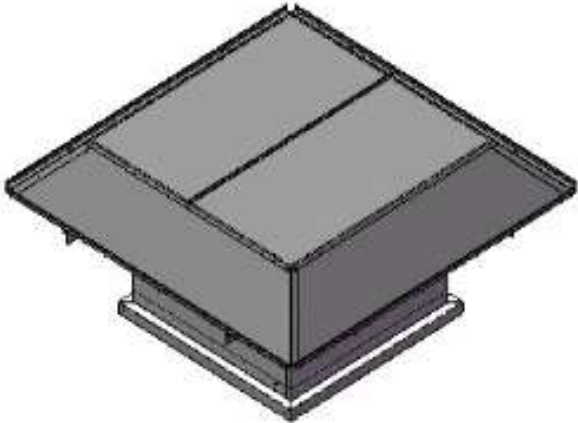
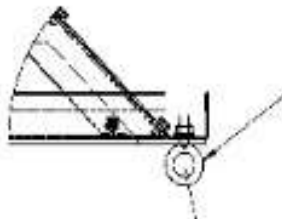
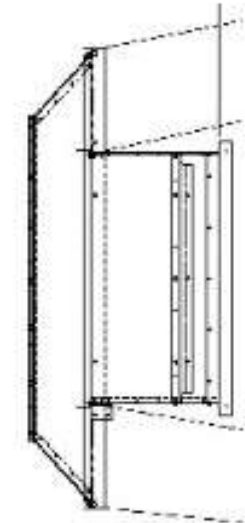
Propellers are 2, 3, 4, or 6-bladed adjustable pitch, air-foil aluminum (Fixed pitch steel, Aluminum, and FRP blades with cast aluminum hubs are also available).

Dampers mount on accessory flanges inside curbs or in the duct due to space restrictions

Hoods on 42"-60" ship KD (2)- Specify assembled if required

HF8100-HF8300 Hooded Exhauster

HF8100-8300 Cut Sheet



HF8100-HF8300 Hooded Exhauster

HF8100 Hooded Roof Exhauster Performance Data

SIZE	CFM / BHP @ Static Pressure						
	0	1/8	1/4	3/8	1/2	5/8	3/4
24	5991 / 0.541	5222 / 0.607	4453 / 0.617	2966 / 0.597	2203 / 0.609		
	6908 / 0.867	6081 / 0.860	5194 / 0.854	3735 / 0.831	2780 / 0.842	1193 / 0.851	
	5219 / 0.325	4327 / 0.384	3555 / 0.398	2526 / 0.381	1709 / 0.363		
	6390 / 0.570	5597 / 0.622	4739 / 0.627	3798 / 0.617	2572 / 0.617	1297 / 0.606	
	7394 / 0.892	6553 / 0.902	5687 / 0.893	4861 / 0.874	3918 / 0.884	2755 / 0.892	1715 / 0.983
	8361 / 1.237	7480 / 1.247	6758 / 1.248	6041 / 1.239	5084 / 1.215	3481 / 1.239	2323 / 1.258
	8800 / 1.662	8133 / 1.726	7560 / 1.746	6979 / 1.736	6254 / 1.710	4759 / 1.694	4216 / 1.694
	7115 / 0.896	6567 / 1.021	5995 / 1.045	5406 / 1.102	4802 / 1.106	4138 / 1.114	3369 / 1.083
	9535 / 1.697	8870 / 1.719	8189 / 1.728	7487 / 1.721	6759 / 1.714	5990 / 1.683	5159 / 1.686
	10288 / 2.216	9673 / 2.306	9112 / 2.342	8574 / 2.349	8042 / 2.343	7494 / 2.346	6924 / 2.337
30	8058 / 0.597	6645 / 0.627	5130 / 0.612	3974 / 0.570			
	8885 / 0.852	7507 / 0.891	6113 / 0.888	5383 / 0.878	4050 / 0.838	2400 / 0.858	
	10095 / 1.255	8508 / 1.256	7085 / 1.208	5837 / 1.185	4593 / 1.149	3590 / 1.140	2116 / 1.186
	11015 / 1.890	9970 / 1.890	8893 / 1.874	8361 / 1.849	7542 / 1.690	5640 / 1.721	4904 / 1.750
	12350 / 2.621	11159 / 2.505	9333 / 2.460	7529 / 2.408	8180 / 2.307	6815 / 2.642	5793 / 2.352
	9274 / 0.860	8023 / 0.886	6518 / 0.863	4673 / 0.820	2755 / 0.816		
	10694 / 1.267	9425 / 1.257	7878 / 1.231	6528 / 1.159	4811 / 1.140	2873 / 1.216	
	12020 / 1.923	10870 / 1.924	9633 / 1.896	8269 / 1.849	7103 / 1.815	6316 / 1.821	5272 / 1.778
	12847 / 2.523	11665 / 2.545	10635 / 2.542	9601 / 2.517	8715 / 2.493	7782 / 2.446	6963 / 2.324
	14635 / 3.789	13612 / 3.698	12046 / 3.592	10947 / 3.559	10069 / 3.537	9085 / 3.531	8146 / 3.391
36	12938 / 2.463	12151 / 2.534	11337 / 2.536	10304 / 2.536	9364 / 2.532	8331 / 2.501	7503 / 2.464
	15195 / 3.850	14454 / 3.896	13595 / 3.898	12668 / 3.900	11692 / 3.826	10813 / 3.791	9858 / 3.667
	10708 / 0.780	9073 / 0.833	7377 / 0.845	5612 / 0.808			
	12730 / 1.152	11041 / 1.200	9168 / 1.184	7346 / 1.169	5061 / 1.01		
	13685 / 1.745	12339 / 1.718	10479 / 1.629	8588 / 1.591	6455 / 1.569	3906 / 1.606	
	16374 / 2.409	14844 / 2.388	13309 / 2.392	11779 / 2.312	10037 / 2.191	7404 / 2.162	4676 / 2.102
	18199 / 3.466	16805 / 3.322	15502 / 3.285	14102 / 3.277	12081 / 3.118	9540 / 3.143	6836 / 3.268
	14053 / 1.744	12929 / 1.849	11650 / 1.865	10402 / 1.895	9167 / 1.882	7833 / 1.845	6471 / 1.769
	14679 / 2.115	13505 / 2.186	12290 / 2.221	10972 / 2.206	9636 / 2.189	8405 / 2.172	7148 / 2.158
	17582 / 3.577	16319 / 3.541	15067 / 3.534	13775 / 3.523	12491 / 3.523	12275 / 3.512	9950 / 3.487
36	21936 / 5.769	20539 / 5.574	19232 / 5.503	17980 / 5.498	16773 / 5.523	15581 / 5.523	14152 / 5.480
	15035 / 3.422	14138 / 3.515	13355 / 3.547	12613 / 3.550	11869 / 3.544	11060 / 3.555	10171 / 3.448
	20465 / 5.422	19705 / 5.639	18927 / 5.770	18129 / 5.832	17312 / 5.843	16476 / 5.826	15609 / 5.903
	24839 / 8.311	24078 / 8.482	23262 / 8.608	22392 / 8.685	21480 / 8.718	20544 / 8.716	19609 / 8.663

Performance certified is for installation type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances in the airstream. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field. Values shown are for free inlet fan sone levels. Speed (RPM) shown is nominal. Performance is based on actual speed of test.

HF8100-HF8300 Hooded Exhauster

HF8100 Hooded Roof Exhauster Performance Data cont.

SIZE	CFM / BHP @ Static Pressure						
	0	1/8	1/4	3/8	1/2	5/8	3/4
42	6570 / 1.609	14167 / 1.551	11262 / 1.420	7973 / 1.426	—	—	—
	19940 / 2.305	17744 / 2.305	15655 / 2.306	13058 / 2.215	10682 / 2.153	—	—
	22773 / 3.413	20341 / 3.290	17842 / 3.153	15424 / 3.160	13535 / 3.143	10973 / 3.067	—
	21966 / 3.308	20500 / 3.444	18953 / 3.489	17344 / 3.492	15718 / 3.518	14022 / 3.444	12180 / 3.312
	26310 / 5.833	24753 / 5.770	23272 / 5.771	21656 / 5.642	19945 / 5.643	18332 / 5.356	16737 / 4.609
	20253 / 5.745	19103 / 5.648	17959 / 5.619	16823 / 5.620	15703 / 5.493	14611 / 5.497	13403 / 5.297
48	20688 / 2.317	19025 / 2.402	16940 / 2.418	15074 / 2.389	13092 / 2.184	10681 / 2.196	7827 / 2.224
	25857 / 3.483	23353 / 3.470	20843 / 3.448	18197 / 3.344	15375 / 3.114	12299 / 3.178	8647 / 2.975
	30637 / 5.760	28009 / 5.547	25382 / 5.505	22872 / 5.527	20457 / 5.573	17925 / 5.584	14299 / 5.353
	34585 / 8.315	33085 / 8.498	31514 / 8.610	29874 / 8.656	28175 / 8.648	26449 / 8.493	24689 / 8.506
	37488 / 11.819	35927 / 11.332	34497 / 11.090	32665 / 10.976	30613 / 10.985	28509 / 10.499	26495 / 10.506
	30735 / 5.883	28107 / 5.486	25346 / 5.411	22591 / 5.430	19994 / 5.239	17423 / 4.666	14714 / 4.779
54	34476 / 8.257	32589 / 8.222	30723 / 8.227	28848 / 8.230	26934 / 8.174	24944 / 7.914	22873 / 7.765
	38005 / 11.916	35927 / 11.509	34081 / 11.356	32323 / 11.324	30562 / 11.337	28647 / 10.825	26258 / 10.795
	27942 / 3.470	25431 / 3.528	22691 / 3.539	19504 / 3.486	16154 / 3.296	12685 / 3.033	9565 / 2.570
	37098 / 4.879	34410 / 5.044	31722 / 5.209	29019 / 5.310	26232 / 5.322	23290 / 5.270	20389 / 5.119
	44330 / 8.857	41565 / 8.595	38801 / 8.333	36024 / 8.089	33088 / 8.026	29922 / 8.003	26445 / 7.749
	43655 / 11.930	40830 / 11.397	38170 / 11.216	35619 / 11.208	33151 / 11.013	30745 / 11.003	28251 / 10.863
60	27088 / 5.860	25568 / 5.788	23941 / 5.772	22218 / 5.777	20425 / 8.955	48586 / 5.506	16718 / 5.340
	36365 / 8.495	34710 / 8.753	33103 / 8.897	31500 / 8.957	29856 / 8.955	28086 / 8.811	26063 / 8.824
	48780 / 11.909	45778 / 11.745	42747 / 11.728	39680 / 11.667	36563 / 11.253	33414 / 10.753	30299 / 10.717

Performance certified is for installation type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances in the airstream. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field. Values shown are for free inlet fan sone levels. Speed (RPM) shown is nominal. Performance is based on actual speed of test.

HF8100-HF8300 Hooded Exhauster

HF8300 Hooded Roof Exhauster Performance Data

SIZE	CFM / BHP @ Static Pressure						
	0	1/8	1/4	3/8	1/2	5/8	3/4
24	5702 / 0.377	4678 / 0.400	3661 / 0.397	2480 / 0.392	1159 / 0.416		
	6525 / 0.565	5613 / 0.599	4764 / 0.599	3792 / 0.595	2730 / 0.587	1582 / 0.624	
	7466 / 0.847	6653 / 0.894	5915 / 0.896	5153 / 0.896	4271 / 0.890	3399 / 0.891	2240 / 0.896
	8230 / 1.135	7482 / 1.193	6806 / 1.202	6134 / 1.201	5417 / 1.193	4592 / 1.193	3809 / 1.194
	9318 / 1.646	8647 / 1.722	8038 / 1.744	7450 / 1.743	6850 / 1.743	6220 / 1.733	5501 / 1.731
	10347 / 2.254	9735 / 2.345	9176 / 2.382	8641 / 2.389	8113 / 2.384	7569 / 2.386	7003 / 2.382
30	7209 / 0.404	5018 / 0.387	3176 / 0.370				
	8269 / 0.610	6517 / 0.591	4594 / 0.558	3076 / 0.565			
	9435 / 0.906	7802 / 0.879	6092 / 0.852	4715 / 0.826	3378 / 0.842		
	10389 / 1.209	8811 / 1.173	7407 / 1.157	5963 / 1.135	4761 / 1.106	3524 / 1.129	
	11874 / 1.805	10351 / 1.752	9420 / 1.752	7876 / 1.698	6728 / 1.674	5675 / 1.648	4619 / 1.667
	13093 / 2.420	11601 / 2.350	10764 / 2.349	9647 / 2.312	8292 / 2.277	7287 / 2.216	6332 / 2.209
36	15001 / 3.640	13542 / 3.539	12783 / 3.532	12052 / 3.533	10959 / 3.478	9741 / 3.424	8829 / 3.431
	8786 / 0.387	6104 / 0.389	2134 / 0.352				
	10073 / 0.584	7683 / 0.594	5107 / 0.550				
	11588 / 0.889	9473 / 0.904	7492 / 0.863	4732 / 0.744			
	12724 / 1.176	10811 / 1.197	9014 / 1.181	6896 / 1.104	37181 / 1.012		
	14542 / 1.756	12808 / 1.788	11215 / 1.788	9677 / 1.708	7717 / 1.648	5057 / 1.472	
42	15981 / 2.331	14338 / 2.374	12909 / 2.372	11537 / 2.340	9985 / 2.263	8167 / 2.193	5673 / 1.949
	18329 / 3.516	16799 / 3.580	15675 / 3.578	14345 / 3.579	12167 / 3.530	11855 / 3.414	10286 / 3.301
	21737 / 5.865	20331 / 5.964	19363 / 5.974	18375 / 5.969	17234 / 5.969	16243 / 5.940	15229 / 5.892
	12466 / 0.600	8498 / 0.543	3210 / 0.541				
	41211 / 0.889	10756 / 0.820	7172 / 0.806				
	15707 / 1.200	12613 / 1.104	9405 / 1.079	5533 / 1.100			
48	17951 / 1.792	15283 / 1.648	12444 / 1.651	9640 / 1.618	5864 / 1.639		
	19821 / 2.412	17431 / 2.228	14861 / 2.223	1233 / 2.169	9694 / 2.190	5655 / 2.191	
	22688 / 3.617	20627 / 3.372	18414 / 3.325	16163 / 3.331	13965 / 3.253	11091 / 3.274	8937 / 3.314
	26927 / 6.047	25212 / 5.715	23392 / 5.574	21505 / 5.563	19606 / 5.569	17740 / 5.453	15894 / 5.439
	15781 / 0.832	12968 / 0.908	9524 / 0.814				
	17360 / 1.107	14879 / 1.199	11860 / 1.102	8269 / 1.111			
54	19814 / 1.647	17669 / 1.743	15126 / 1.761	12415 / 1.612	9098 / 1.660		
	21919 / 2.229	19977 / 2.344	17838 / 2.432	15433 / 2.384	12834 / 2.182	9694 / 2.256	
	25075 / 3.337	23364 / 3.512	21654 / 3.560	19566 / 3.587	17502 / 3.470	15250 / 3.264	12688 / 3.232
	29808 / 5.606	28351 / 5.885	26957 / 5.894	25466 / 6.081	23707 / 6.096	21940 / 6.000	20177 / 5.563
	33842 / 8.204	32546 / 8.574	31316 / 8.634	30072 / 8.712	28720 / 8.921	27168 / 8.936	25584 / 8.776
	37349 / 11.028	36166 / 1.478	35044 / 11.602	33932 / 11.595	32782 / 11.718	31524 / 12.008	30116 / 12.021
60	28075 / 2.084	24746 / 2.252	21152 / 2.357	17397 / 2.317	13225 / 2.128		
	32312 / 3.177	29421 / 3.371	27975 / 3.468	23156 / 3.593	19939 / 3.532	16352 / 3.241	
	37874 / 5.116	35407 / 5.343	32940 / 5.570	30341 / 5.745	27494 / 5.789	24714 / 5.687	21912 / 5.522
	43171 / 7.576	41007 / 7.836	38843 / 8.095	36670 / 8.350	34336 / 8.520	31840 / 8.574	29337 / 8.413
	47674 / 10.203	45714 / 10.489	43754 / 10.775	41794 / 11.061	39797 / 11.325	37648 / 11.488	35385 / 11.546
	28479 / 2.264	23920 / 2.303	19370 / 2.184	13910 / 1.862			
60	33225 / 3.596	29133 / 3.675	25508 / 3.586	21380 / 3.471	16669 / 2.978	10364 / 2.639	
	38288 / 5.502	34526 / 5.623	31547 / 5.597	28228 / 5.496	24575 / 5.311	20563 / 5.083	15845 / 4.517
	44301 / 8.523	40836 / 8.697	38290 / 8.708	35595 / 8.567	32709 / 8.512	29610 / 8.222	26232 / 7.869
	48414 / 11.124	45118 / 11.338	42732 / 11.372	40389 / 11.315	37818 / 11.099	35137 / 11.120	32275 / 10.731

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