AEROVENT

INDUSTRIAL VENTILATION SYSTEMS

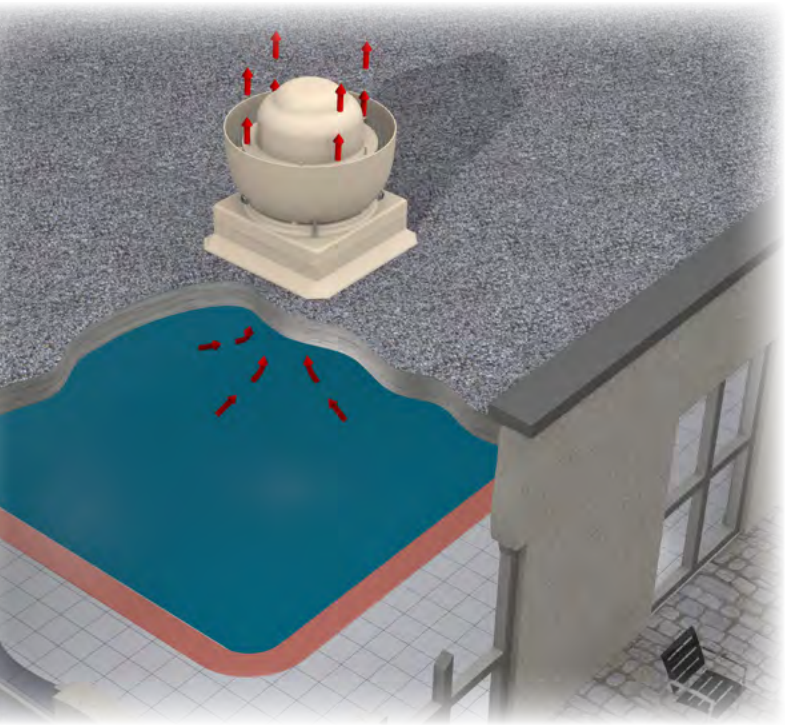
FIBERGLASS VENTILATORS

Model AHAB

Model AWAB

MODELS: AWA/AWAB, AHA/AHAB

CATALOG 977
JULY 2022



Model AWA Installation

Model AHA Installation

Overview

AWA/AWAB I AHA/AHAB

The Aerovent Fibre-Aire® line of fiberglass fans is ideal for spaces that require a little more chemical resistance than what a typical light commercial fan offers. Both roof and wall fans are available in direct drive or belt driven options with a variety of configurations. In addition, a fiberglass gravity ventilator completes the Fibre-Aire® product offering for low flow, corrosive atmospheres.

The Fibre-Aire® products have a clean, architecturally-pleasing design and are virtually dent, crack and break proof. The fiberglass housing absorbs sound and the molded throat and outlet designs also optimize airflow.

Typical Applications Include

Natatoriums, Aquariums, Swimming Pool Exhaust, Laboratories Waste Water Treatment Plants, General Exhaust

Configurations

Direct Drive and Belt Driven, Wall Mount, Upblast and Downblast

Impeller Type

Polypropylene, Backward Inclined

Optional Construction

Corrosion Resistance

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For complete product performance, drawings and available accessories, download our Fan Selector program at aerovent.com.

Whirlout®

AWA I AWAB

The Whirlout® Series AWA/AWAB fiberglass upblast centrifugal roof exhausters are especially designed for applications requiring the exhaust of chemical fumes or cooking grease where the removal of exhaust away from the roof line is required.

Fiberglass roof exhausters are available as direct or adjustable capacity belt drive. Each configuration features an isolated motor and drive chamber with a neoprene shaft seal to protect motor and drive components from fumes or hazardous matter suspended in the air. The upblast design makes it ideal for use with ducts, hoods or canopies over interior work areas. Basket type supports eliminate internal air shocks, reduce vibration and increase efficiency.

The fiberglass housing of the unit has excellent resistance to a wide range of chemicals and fumes. The corrosion resistant, backward inclined impeller provides quiet and efficient operation.

Whirlout® Series fiberglass upblast centrifugal roof exhausters are also used in natatoriums, aquariums, indoor swimming pools, laboratories, wastewater treatment plants and any other area, where corrosive fumes present a problem.

Sizes and Capacities

- Direct drive sizes 7" to 18"
- Belt driven sizes 14" to 40"
- Airflow to 21,500 CFM
- Static pressures to 2" w.g.

Construction Features

- Molded fiberglass housings are virtually impossible to dent, crack or break and resist weather, salt spray and most chemicals. Fiberglass housings also absorb noise and vibration.
- Designed for applications requiring the exhaust of chemical fumes or contaminated air up and away from the roof.
- Ideal for use with ducts, hoods or canopies over interior work areas.
- Fan impellers are polypropylene, backward inclined, as standard.
- All structural mild steel components in contact with airstream are epoxy coated for additional corrosion resistance.
- A neoprene shaft seal is standard on all belt drive units to protect motor and drives from fumes or hazardous matter suspended in the air.
- A 1/2" x 1/2" PVC coated bird screen is standard on all units to prevent entry of birds and debris.

Maximum Fan RPM

MODEL AWA*B	MOTOR HP	MAX FAN RPM
14	1/4	1475
	1/3	1635
	1/2	1870
18	1/4	900
	1/3	990
	1/2	1130
24	1/4	560
	1/3	615
	1/2	705
	3/4	805
	1	890
30	1/3	435
	1/2	500
	3/4	570
	1	630
	1 1/2	720
	2	790

MODEL AWA*B	MOTOR HP	MAX FAN RPM
36	1/2	365
	3/4	415
	1	460
	1 1/2	525
	2	580
	3	660
	5	785
40	1/2	315
	3/4	360
	1	395
	1 1/2	450
	2	495
	3	565
	5	675
	7 1/2	765

Construction Features (cont'd.)

- Factory mounted and wired disconnect switch is standard on all units, except with EXP motors.
- A conduit chase extending through the curb cap and into the motor compartment is provided as standard on all units for field wiring.
- 304 SS fan shaft on belt driven unit.

Accessories

- Gravity (PVC) and motorized (aluminum) backdraft dampers
- Fiberglass roof curbs
- Stainless steel bird screen

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Hid-N-Aire®

AHA I AHAB

The Hid-N-Aire® Model AHA/AHAB fiberglass wall mount ventilators provide high performance ventilation without distracting from the architectural lines of a building's exterior. Only the aluminum fixed louver, which fits flush with the building's wall, is visible from the outside of the building. From the interior, the unit presents a clean, molded fiberglass venturi. All fiberglass components come in the standard beige color.

The Hid-N-Aire® fiberglass centrifugal wall ventilators are designed to mount compactly within an exterior wall and satisfy general building exhaust requirements.

Sizes and Capacities

- Direct drive sizes 7" to 18"
- Belt driven sizes 12" to 30"
- Airflow to 9,800 CFM
- Static pressures to 1" w.g.

Construction Features

- Rugged molded fiberglass inlet venturi.
- Rubber isolator motor mounts absorb vibration for quietness.
- Fan impellers are polypropylene, backward inclined, as standard.
- All structural mild steel components in contact with airstream are epoxy coated for additional corrosion resistance.
- Extruded fixed aluminum louver fits flush with the building's wall and is visible only from the exterior.
- Built-in PVC bird screen and fabric backdraft dampers within aluminum louver.
- Simple to install and maintain.
- Motor is prewired with plug and cord assembly (disconnect switch) and provided with a plug-in electrical receptacle mounted inside the motor housing for ease of maintenance and service. (Not included with explosion proof or 2-speed motors.)
- 304 SS fan shaft on belt driven unit.

Accessories

- An attractive grille is available for attachment to fiberglass venturi when ductwork to AHA/AHAB is not present.
- Duct adapter kit for use when AHA/AHAB is used as an inline centrifugal unit.
- Companion angles.

Static Pressure Drop Calculation

Performances shown for fiberglass wall ventilators are the capacities without the exterior wall louver. The following tables give the gross louver areas and the static pressure drop. An example is also shown to help you determine the correct size unit for a specific application.

Example:

Required 825 CFM @ 1/8" S.P. (.125) quiet duty.

1. Select a direct drive unit from the performance data on page 3 with a slightly higher capacity such as 14HA-1 (863 CFM @ 1/8" S.P.)
2. Divide the CFM by the gross louver area (see Table 1) to obtain gross velocity: 863 ÷ 3.84 = 225 FPM
3. From Table 2, the static pressure drop is slightly more than .018 (approximately .023).
4. Add the specified static pressure to the static pressure drop through the louver: .125 + .023 = .148 in. w.g. total static pressure
5. Checking the capacity table on page 3, we now see that because the static pressure has increased slightly, the capacity has decreased slightly. The 14AHA-1 unit will deliver 825 CFM @ .148 static pressure through the exterior flush-mounted louver.

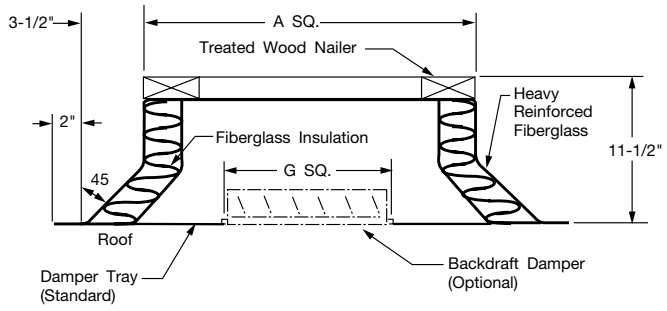
Table 1.

SIZE	GROSS AREA OF LOUVER
7	1.13 sq. ft.
10, 12	2.92 sq. ft.
14	3.84 sq. ft.
18	4.69 sq. ft.
24	9.52 sq. ft.
30	14.71 sq. ft.

Table 2. Static Pressure Drop For Various Velocities

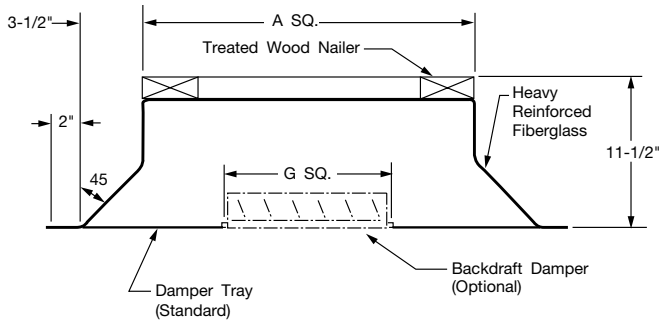
GROSS VEL. (FPM)	100	200	300	400	500	600	700
S.P. DROP (IN. W.G.)	.005	.018	.041	.073	.114	.164	.224

Series EF (w/insulation)



E12F — A 12" high, beige color, molded fiberglass, reinforced polyester resin, double shell, prefabricated roof curb with a 3 1/2" cant, corner gussets, 2" thick fiberglass insulation and incorporating a treated 1 1/2" x 3 1/2" treated wood nailer and damper tray.

Series E



E12 — A 12" high, beige color, molded fiberglass, reinforced polyester resin, single shell, prefabricated roof curb with a 3 1/2" cant, corner gussets and incorporating a treated 1 1/2" x 3 1/2" treated wood nailer and damper tray.

FAN / HOOD			ROOF CURB DIM. A (SQ)	12" HIGH CURB WITH INSULATION		12" HIGH CURB NON-INSULATED		G (SQ)	DAMPER SIZE WHEN REQ'D
MODEL	SIZE	BASE I.D.		PART NUMBER	APPROX. SHIP WT. (LB)	PART NUMBER	APPROX. SHIP WT. (LB)		
AWA	7	17 x 17	16 x 16	15025102	31	15025002	26	6.63	6 x 6
	10, 12	21 x 21	20 x 20	15025104	38	15025004	31	10.63	10 x 10
	14	24.8 x 24.8	24 x 24	15025105	46	15025005	38	14.63	14 x 14
	18	29 x 29	28 x 28	15025107	53	15025007	44	18.63	18 x 18
AWAB	14	24.8 x 24.8	24 x 24	15025105	46	15025005	38	14.63	14 x 14
	18	29 x 29	28 x 28	15025107	53	15025007	44	18.63	18 x 18
	24	37.5 x 37.5	36 x 36	15025109	68	15025009	56	24.63	24 x 24
	30	45.5 x 45.5	44 x 44	15025112	82	15025012	67	30.63	30 x 30
	36, 40	53 x 53	52 x 52	15025115	99	15025015	80	36.63	36 x 36

NOTE: Damper to be flanged. Dimensions are not to be used for construction.

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Models AWA | AWAB

Model AWA – Direct Drive

MODEL AWA	HP	PEAK BHP	MTR RPM	CFM VERSUS STATIC PRESSURE								SOUND POWER REFERENCE 10^{-12} WATTS OCTAVE BAND CENTER FREQUENCIES								SONES AT 0" SP
				0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1"	63	125	250	500	1000	2000	4000	8000	
07	1/15	0.04	1550	370	355	290	140					—	—	—	—	—	—	—	—	2.5
10	1/12	0.02	860	600	465	200						—	—	—	—	—	—	—	—	2.2
	1/8	0.05	1140	800	700	580	420	50				—	—	—	—	—	—	—	—	3.7
	1/6	0.18	1725	1210	1145	1080	1005	930	845	740	370	—	—	—	—	—	—	—	—	7.2
12	1/12	0.03	860	648	498	263						74	69	65	63	59	58	50	48	7.1
	1/8	0.07	1140	859	751	628	464					82	77	73	71	67	64	60	54	11.3
	1/4	0.26	1725	1300	1229	1157	1082	1002	911	808	536	93	89	84	81	78	74	73	65	23.0
14	1/12	0.06	860	1060	883	658	298					73	72	68	64	60	60	48	50	7.7
	1/8	0.13	1140	1405	1276	1135	970	768	501			79	81	76	72	67	67	60	54	12.6
	1/2	0.45	1725	2127	2041	1955	1867	1774	1675	1568	1326	88	88	87	83	79	75	75	63	23.0
18	1/4	0.17	860	2011	1796	1566	1288	926				81	79	76	71	66	63	56	53	11.6
	1/2	0.39	1140	2665	2505	2340	2170	1982	1770	1527	900	87	87	84	80	74	71	65	60	18.9

1. Performance shown is for installation Type A: free inlet, free outlet.
2. The sound power level ratings shown are in decibels, referred to 10^{-12} watts calculated per AMCA Standard 301. Values shown are for Lwi sound power levels for installation Type A: free inlet, free outlet. Ratings do not include the effects of duct end correction for inlet and outlet ducts.
3. Performance ratings do not include the effects of appurtenances in the airstream.

Model AWAB – Belt Driven

MODEL AWAB	HP	PEAK BHP	FAN RPM	CFM VERSUS STATIC PRESSURE											SOUND POWER REFERENCE 10^{-12} WATTS OCTAVE BAND CENTER FREQUENCIES								SONES AT 0" SP
				0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	1 3/4"	2"	63	125	250	500	1000	2000	4000	8000	
14	1/4	0.12	1125	1387	1255	1112	943	732	442							78	80	75	71	67	66	59	54	11.9
	1/4	0.16	1238	1526	1406	1281	1137	973	772	507						80	82	78	74	70	68	64	55	14.0
	1/4	0.25	1418	1748	1644	1539	1423	1299	1155	989	538					83	85	82	78	74	71	69	59	17.6
	1/3	0.33	1560	1923	1832	1733	1632	1522	1406	1276	962	480				85	87	84	81	76	73	72	60	20.0
	1/2	0.50	1786	2201	2118	2037	1952	1864	1768	1664	1441	1185	850	205		88	89	88	84	80	75	75	64	24.0
18	1/4	0.16	784	2084	1822	1521	1130	488								79	77	74	68	64	61	53	51	10.0
	1/4	0.25	898	2387	2160	1915	1626	1268	753							82	81	78	73	67	65	58	54	12.9
	1/3	0.33	988	2626	2420	2205	1964	1678	1334	858						83	84	81	77	70	68	61	56	15.4
	1/2	0.50	1131	3007	2827	2643	2448	2231	1987	1705	911					86	87	84	80	73	71	65	59	18.7
24	1/4	0.16	488	3167	2603	1811										82	75	70	65	61	53	47	47	8.5
	1/4	0.25	559	3628	3146	2562	1735									84	80	73	68	64	58	50	50	10.7
	1/3	0.33	615	3992	3557	3067	2420	1567								86	83	76	71	66	61	52	52	12.9
	1/2	0.50	704	4569	4195	3791	3320	2720	1992							88	88	80	75	70	66	57	55	16.8
	3/4	0.75	806	5231	4910	4563	4195	3768	3253	2656						89	93	84	79	74	70	62	57	21.0
	1	1.00	887	5757	5469	5155	4834	4484	4079	3607	2465					91	95	87	82	77	73	65	60	25.0
30	1/3	0.33	434	5284	4557	3690	2419									81	79	73	67	64	56	52	49	10.0
	1/2	0.50	497	6051	5424	4730	3886	2666								85	82	79	70	69	60	56	52	13.0
	3/4	0.75	569	6927	6384	5807	5158	4389	3377							88	86	82	74	73	65	59	56	16.5
	1	1.00	627	7634	7143	6629	6074	5451	4723	3805						90	88	84	79	75	69	61	58	19.0
	1 1/2	1.50	717	8729	8302	7861	7399	6908	6366	5763	4201					92	92	88	81	78	73	65	62	23.0
	2	2.00	790	9618	9231	8835	8427	7999	7544	7048	5914	4343				94	94	92	85	80	76	68	64	28.0
36	1/2	0.50	363	8226	7108	5681	3663									84	79	73	65	64	55	50	49	10.0
	3/4	0.75	416	9428	8477	7347	5944	4006								87	83	78	69	67	60	54	51	13.1
	1	1.00	458	10379	9528	8551	7403	6001	4136							89	86	81	72	70	63	56	52	15.5
	1 1/2	1.50	524	11875	11143	10333	9426	8387	7181	5715						91	90	85	77	73	68	60	55	19.5
	2	2.00	577	13076	12417	11702	10921	10052	9082	7979	5087					93	92	88	80	75	72	63	58	23.0
	3	3.00	660	14957	14388	13780	13131	12433	11685	10867	8974	6544				96	96	92	84	78	76	67	62	28.0
	5	5.00	782	17722	17230	16761	16235	15688	15100	14432	13157	11650	9900	7899	4032	101	101	96	91	82	81	73	67	39.0
40	1/2	0.50	312	8795	7263	5263	1099									84	79	74	65	64	57	54	52	10.5
	3/4	0.75	357	10064	8756	7170	5189									88	82	78	70	67	61	57	55	13.2
	1	1.00	393	11078	9899	8555	6941	4778								90	84	80	73	69	63	59	57	15.2
	1 1/2	1.50	450	12685	11657	10569	9286	7839	6065	2894						92	88	84	77	73	67	62	60	18.9
	2	2.00	495	13954	13019	12062	10983	9746	8394	6759						94	90	87	80	75	69	64	62	22.0
	3	3.00	567	15983	15164	14351	13480	12512	11438	10302	7517					96	94	92	85	80	73	68	66	28.0
	5	5.00	672	18943	18249	17567	16871	16139	15354	14496	12624	10537	7607	2000		98	99	96	91	84	78	73	70	37.0
	7 1/2	7.50	763	21508	20922	20300	19689	19092	18430	17748	16235	14586	12776	10788	7690	100	102	99	94	87	82	76	73	44.0

1. Performance shown is for installation Type A: free inlet, free outlet.
2. The sound power level ratings shown are in decibels, referred to 10^{-12} watts calculated per AMCA Standard 301. Values shown are for Lwi sound power levels for installation Type A: free inlet, free outlet. Ratings do not include the effects of duct end correction for inlet and outlet ducts.
3. Power rating (BHP) does not include drive losses.
4. Performance ratings do not include the effects of appurtenances in the airstream.

Models AHA | AHAB

Model AHA – Direct Drive

MODEL AHA	HP	PEAK BHP	FAN RPM	CFM VERSUS STATIC PRESSURE								SOUND POWER REFERENCE 10^{-12} WATTS OCTAVE BAND CENTER FREQUENCIES								SONES AT 0" SP
				0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1"	63	125	250	500	1000	2000	4000	8000	
07	1/15	0.02	1550	180	160	130	75	—	—	—	—	—	—	—	—	—	—	—	—	3.4
072	1/15	0.03	1550	350	325	280	135	—	—	—	—	—	—	—	—	—	—	—	—	3.2
10	1/8	0.05	1140	700	595	455	255	—	—	—	—	—	—	—	—	—	—	—	—	4.5
	1/6	0.18	1725	1060	990	910	830	745	645	520	110	—	—	—	—	—	—	—	—	9.0
12	1/12	0.03	860	617	463	222	—	—	—	—	—	73	63	57	58	58	60	45	49	6.5
	1/8	0.07	1140	819	711	579	412	—	—	—	—	79	69	63	64	64	66	51	55	9.5
	1/4	0.24	1725	1239	1170	1098	1018	930	834	728	456	88	78	72	73	73	75	60	64	16.6
14	1/12	0.05	860	1038	863	631	—	—	—	—	—	70	68	65	62	63	63	54	50	8.2
	1/8	0.11	1140	1376	1250	1108	938	729	400	—	—	76	74	71	68	69	69	60	56	11.9
	1/2	0.40	1725	2082	2001	1916	1828	1733	1633	1523	1271	85	83	80	77	78	78	69	65	21.0
18	1/4	0.18	860	1982	1763	1510	1211	817	—	—	—	74	74	72	68	77	68	61	55	13.7
	1/2	0.43	1140	2627	2467	2295	2107	1898	1671	1416	—	80	80	78	74	83	74	67	61	19.7

1. Performance shown is for installation Type A: free inlet, free outlet.
2. The sound ratings shown are loudness values in fan sones at 5 ft. in a hemispherical free field calculated per AMCA Standard 301-90. Values shown are for installation Type A: free inlet fan sone levels.
3. Performance ratings do not include the effects of appurtenances in the airstream.

Model AHAB – Belt Driven

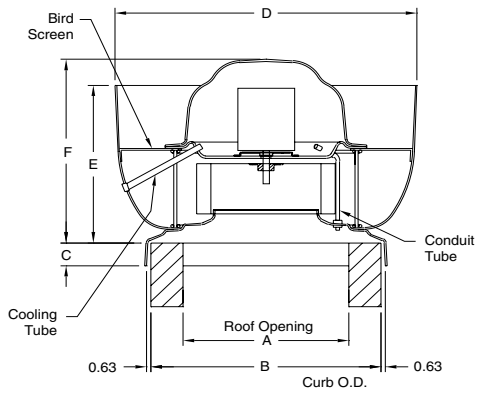
MODEL AHAB	HP	PEAK BHP	FAN RPM	CFM VERSUS STATIC PRESSURE								SOUND POWER REFERENCE 10^{-12} WATTS OCTAVE BAND CENTER FREQUENCIES								SONES AT 0" SP
				0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1"	63	125	250	500	1000	2000	4000	8000	
12	1/4	0.12	1380	991	904	806	692	559	390	—	—	84	74	68	69	69	71	56	60	12.9
	1/4	0.16	1518	1090	1012	926	829	720	594	439	480	86	76	70	71	71	73	58	62	14.7
	1/4	0.25	1738	1248	1180	1108	1030	943	848	743	—	89	79	73	74	74	76	61	65	17.6
14	1/4	0.12	1165	1406	1283	1145	982	784	508	—	—	77	75	72	69	70	70	61	57	12.6
	1/4	0.16	1283	1549	1438	1317	1180	1021	832	581	—	79	77	74	71	72	72	63	59	14.2
	1/4	0.25	1468	1772	1676	1573	1463	1342	1203	1048	620	82	80	77	74	75	75	66	62	17.1
	1/3	0.33	1615	1950	1863	1771	1675	1571	1457	1331	1036	84	82	79	76	77	77	68	64	19.3
	1/2	0.50	1849	2232	2157	2078	1997	1911	1821	1725	1508	87	85	82	79	80	80	71	67	23.0
18	1/4	0.16	826	1903	1675	1405	1081	595	—	—	—	73	73	71	67	76	67	60	54	12.9
	1/4	0.25	945	2178	1981	1761	1507	1213	817	—	—	76	76	74	70	79	70	63	57	15.5
	1/3	0.33	1040	2397	2220	2027	1810	1565	1288	921	—	78	78	76	72	81	72	65	59	17.5
	1/2	0.50	1191	2745	2592	2429	2252	2058	1848	1617	1003	81	81	79	75	84	75	68	62	21.0
	3/4	0.75	1363	3141	3009	2869	2722	2567	2397	2218	1821	84	84	82	78	87	78	71	65	25.0
24	1/4	0.25	575	3418	2953	2398	1656	—	—	—	—	75	77	74	71	68	67	62	57	11.9
	1/3	0.33	633	3763	3345	2871	2287	1505	—	—	—	77	79	76	73	70	69	64	59	13.5
	1/2	0.	725	4310	3949	3557	3111	2579	1926	700	—	80	82	79	76	73	72	67	62	16.3
	3/4	0.75	830	4934	4621	4291	3934	3535	3076	2544	—	83	85	82	79	76	75	70	65	19.6
	1	1.00	913	5427	5143	4849	4537	4198	3825	3409	2375	85	87	84	81	78	77	72	67	22.0
30	1/3	0.33	436	5399	4594	3611	2177	—	—	—	—	80	78	74	70	65	59	54	50	10.1
	1/2	0.50	500	6192	5503	4724	3744	2399	—	—	—	83	78	77	73	68	62	57	53	12.2
	3/4	0.75	572	7084	6487	5841	5113	4206	3077	—	—	86	81	80	76	71	65	60	56	14.7
	1	1.00	630	7802	7264	6689	6068	5358	4498	3462	—	88	83	82	78	73	67	62	58	16.7
	11/2	1.50	721	8929	8461	7973	7457	6906	6292	5587	3823	91	86	85	81	76	70	65	61	20.0
	2	2.00	793	9820	9395	8959	8501	8021	7511	6951	5601	93	88	87	83	78	72	67	63	23.0

1. Performance shown is for installation Type A: free inlet, free outlet.
2. The sound ratings shown are loudness values in fan sones at 5 ft. in a hemispherical free field calculated per AMCA Standard 301-90. Values shown are for installation Type A: free inlet fan sone levels.
3. Power rating (BHP) does not include drive losses.
4. Performance ratings do not include the effects of appurtenances in the airstream.

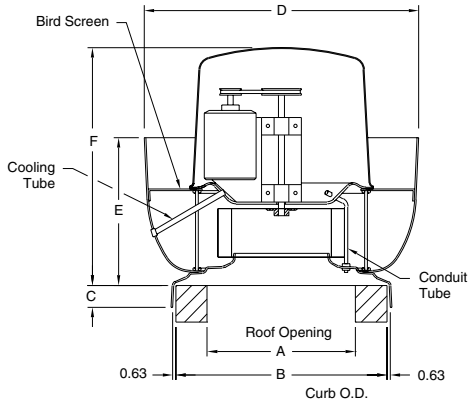
AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

Models AWA I AWAB

Model AWA - Direct Drive



Model AWAB - Belt Driven



Model AWA - Direct Drive

MODEL AWA	HP	RPM	WEIGHT (LBS.)	DIMENSIONS (INCHES)						BACKDRAFT DAMPER
				A	B	C	D	E	F	
07	1/15	1550	18	8	16	2	17 1/4	8	11 11/16	6 x 6
10	1/12	860	50	12	20	3	25 1/4	12 1/8	18 5/8	10 x 10
	1/8	1160	43							
	1/6	1750	44							
12	1/12	860	50	12	20	3	25 1/4	12 1/8	19 3/8	10 x 10
	1/8	1160	43							
	1/4	1750	46							
14	1/12	860	67	16	24	3	28 7/8	17 1/2	28 1/16	14 x 14
	1/8	1160	67							
	1/2	1750	73							
18	1/4	860	118	20	28	3	36 3/4	25	32 3/8	18 x 18
	1/2	1160	130							

D-3300-1C

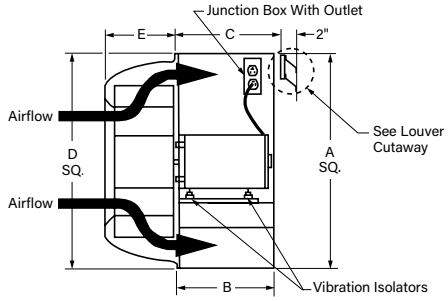
Model AWAB - Belt Driven

MODEL AWAB	HP	WEIGHT (LBS.)	DIMENSIONS (INCHES)						BACKDRAFT DAMPER
			A	B	C	D	E	F	
14	1/4	72	16	24	3	28 7/8	17 1/2	28 1/16	14 x 14
	1/4	73							
	1/4	75							
	1/3	74							
	1/2	76							
18	1/4	123	20	28	3	36 3/4	25	32 3/8	18 x 18
	1/4	125							
	1/3	129							
	1/2	133							
24	1/4	185	28	36	3	45 3/4	31	34 1/16	24 x 24
	1/4	187							
	1/3	192							
	1/2	195							
	3/4	202							
	1	205							
30	1/3	265	36	44	3	59	34 1/2	39 3/8	30 x 30
	1/2	269							
	3/4	287							
	1	291							
	1 1/2	295							
	2	307							
36	1/2	572	44	52	3	69 1/2	45	46 1/16	36 x 36
	3/4	591							
	1	595							
	1 1/2	599							
	2	611							
	3	615							
	5	625							
40	1/2	632	44	52	3	69 1/2	45	46 1/16	36 x 36
	3/4	658							
	1	675							
	1 1/2	671							
	2	677							
	3	681							
	5	730							
	7 1/2	750							

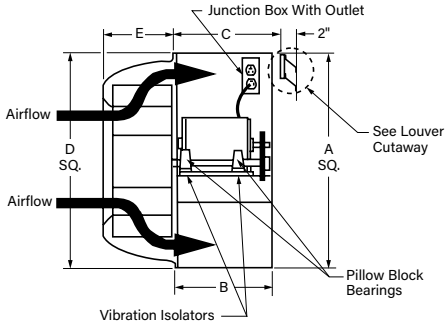
D-3300-2C

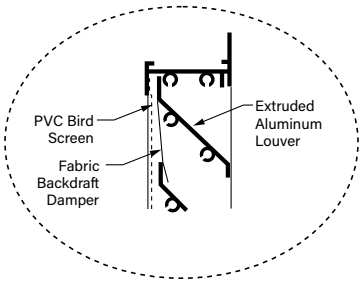
Models AHA I AHAB

Model AHA - Direct Drive



Model AHAB - Belt Driven





Louver Cutaway

Model AHA - Direct Drive

MODEL AHA	HP	RPM	WEIGHT (LBS.)	DIMENSIONS (INCHES)					
				A SQ.	B	C MAX. STD. MOTOR	C MAX. SPECIAL MOTOR	D SQ.	E
07	1/15	1550	30	$12\frac{3}{4}$	$6\frac{1}{8}$	$6\frac{1}{2}$	NA	13	$3\frac{7}{8}$
072	1/15	1550	30						
10	1/8	1160	70	$20\frac{1}{2}$	$11\frac{3}{4}$	$12\frac{1}{8}$	$13\frac{3}{4}$	$20\frac{3}{4}$	6
	1/6	1750	75						
12	1/12	860	75	$20\frac{1}{2}$	$11\frac{3}{4}$	$12\frac{1}{8}$	$13\frac{3}{4}$	$20\frac{3}{4}$	6
	1/8	1140	80						
	1/4	1750	75						
14	1/12	860	90	$23\frac{1}{2}$	13	$13\frac{3}{8}$	$14\frac{1}{4}$	$23\frac{3}{4}$	$7\frac{7}{8}$
	1/8	1160	90						
	1/2	1750	105						
18	1/4	860	115	26	14	$14\frac{3}{8}$	$14\frac{3}{4}$	$26\frac{1}{4}$	$8\frac{3}{4}$
	1/2	1160	115						

D-3100-1B

Dimension 'A' is the outside of the housing and the louver. Dimension 'D' is the outside of the trim angle.

Model AHAB - Belt Driven

MODEL AHAB	HP	WEIGHT (LBS.)	DIMENSIONS (INCHES)					
			A SQ.	B	C MAX. STD. MOTOR	C MAX. SPECIAL MOTOR	D SQ.	E
	1/4	75						
12	1/4	80	$20\frac{1}{2}$	$11\frac{3}{4}$	$12\frac{1}{8}$	$16\frac{1}{8}$	$20\frac{3}{4}$	6
	1/4	80						
	1/4	90						
	1/4	90						
14	1/4	90	$23\frac{1}{2}$	13	$13\frac{3}{8}$	$18\frac{3}{8}$	$23\frac{3}{4}$	$7\frac{7}{8}$
	1/3	90						
	1/2	105						
	1/4	105						
	1/4	115						
18	1/3	115	26	14	$14\frac{3}{8}$	$17\frac{7}{8}$	$26\frac{1}{4}$	$8\frac{3}{4}$
	1/2	115						
	3/4	120						
	1/4	155						
	1/3	160						
24	1/2	160	37	$14\frac{1}{2}$	$14\frac{7}{8}$	$17\frac{3}{8}$	$37\frac{1}{4}$	$11\frac{11}{16}$
	3/4	180						
	1	180						
	1/3	250						
	1/2	255						
	3/4	255						
30	1	260	46	$16\frac{1}{4}$	$16\frac{5}{8}$	$20\frac{3}{8}$	$46\frac{1}{4}$	$15\frac{1}{8}$
	$1\frac{1}{2}$	260						
	2	300						

D-3100-2B

Dimension 'A' is the outside of the housing and the louver. Dimension 'D' is the outside of the trim angle.

Model
AWA

Fiberglass centrifugal roof ventilators shall be Whirlout® upblast Model AWA direct drive as manufactured by Aerovent, Minneapolis, MN. Ventilators shall be specifically designed for the exhaust of moisture-laden, corrosive or chemically contaminated air where process temperatures will not exceed 150°F. Fiberglass, non-powered roof ventilators shall be molded with aerodynamically shaped venturi to provide minimum system resistance within gravity or positive pressure systems.

PERFORMANCE — Fans shall be tested in accordance with AMCA test codes for air moving devices and shall be guaranteed by the manufacturer to deliver rated published performance levels.

CONSTRUCTION — Fan housings including aerodynamically shaped inlet venturi, windband skirt and motor cover shall be molded of high quality, beige-colored, fiberglass reinforced plastic resulting in assemblies that are virtually impossible to dent, crack or break and are highly resistant to the effects of weather, salt spray and most chemicals. Polyester resin with properties equal or similar to Koppers Dion 6693 shall be used to provide high strength with ultraviolet light and chemical resistance. The resin shall have antimony trioxide added to provide fire retardancy with a flame spread rating of 25 or less when tested per ASTM-E84. Further, all component plastic surfaces are to be gel coated to provide the utmost in added corrosion protection. All fan housings shall have PVC encapsulated ½" x ½" mesh screens or guards fitted to the airflow guides and basket supports to keep out birds, leaves or other debris and maintain a high level of corrosion resistance.

After fabrication, the assembled fan impeller and all structural metal components in contact with the exhaust airstream shall be black epoxy coated (2 mils DFT minimum) for additional chemical resistance.

IMPELLERS — Fan impellers shall be of the airfoil centrifugal type (sizes 14 and 18) or the flat bladed, backward inclined type (sizes 07, 10 and 12), non-overloading design to couple non-overloading power limiting characteristics with performance of the highest efficiency and lowest noise generation. Airfoil blades on sizes 14 and 18 shall be extruded from aluminum and welded to the front and back plate of the impeller using jigs and fixtures to insure exact location and thus insure optimum fan performance. Airfoil impellers shall be epoxy coated. Flat bladed, backward inclined impellers on sizes 07, 10 and 12 shall be of polypropylene construction, securely fixed to a cast aluminum hub. A polypropylene option for sizes 14 through 18 shall be available.

The fan impeller shall be secured to the motor or fan shaft with knurled cup point set screws. All recommended lubrication and maintenance shall be accomplished without removal and disassembly of the fan impeller.

MOTORS — All fan motors shall be located outside of the exhaust airstream, covered and protected from the weather by the fiberglass fan motor cover, and cooled by fresh air separate from the exhaust. Fan motors shall be manufactured in accordance with current applicable standards of IEEE, NEC and NEMA. They shall be heavy-duty ball bearing open drip-proof type with a 1.15 service factor and closely matched to the fan load. All motors shall be UL and/or CSA listed.

Electrical wire leads of the motor shall be extended by the factory through an airtight vinyl coated flexible metal conduit and be wired to a properly sized non-fused disconnect switch contained within a terminal junction box mounted under the fan motor cover. To simplify installation, a conduit chase constructed of airtight vinyl coated flexible metal conduit shall be provided through fiberglass curb cap to the motor compartment for field supply conductors.

FACTORY RUN TEST — All fans prior to shipment shall be completely assembled and test run as a unit at the specified operating speed or maximum RPM allowed for the particular construction type. Each impeller shall be statically and dynamically balanced in accordance with ANSI/AMCA 204-96 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. Balance readings shall be taken by electronic type equipment in the axial, vertical and horizontal directions on each of the bearings. Records shall be maintained and a written copy shall be available upon request.

GUARANTEE — The manufacturer shall guarantee the workmanship and materials for its fiberglass ventilators for at least one (1) year from startup or eighteen (18) months from shipment, whichever occurs first.

Model

AWAB

Fiberglass centrifugal roof ventilators shall be Whirlout® upblast Model AWAB belt driven as manufactured by Aerovent, Minneapolis, MN. Ventilators shall be specifically designed for the exhaust of moisture-laden, corrosive or chemically contaminated air where process temperatures will not exceed 150°F. Fiberglass, non-powered roof ventilators shall be molded with aerodynamically shaped venturi to provide minimum system resistance within gravity or positive pressure systems.

PERFORMANCE — Fans shall be tested in accordance with AMCA test codes for air moving devices and shall be guaranteed by the manufacturer to deliver rated published performance levels.

CONSTRUCTION — Fan housings including aerodynamically shaped inlet venturi, windband skirt and motor cover shall be molded of high quality, beige-colored, fiberglass reinforced plastic resulting in assemblies that are virtually impossible to dent, crack or break and are highly resistant to the effects of weather, salt spray and most chemicals. Polyester resin with properties equal or similar to Koppers Dion 6693 shall be used to provide high strength with ultraviolet light and chemical resistance. The resin shall have antimony trioxide added to provide fire retardancy with a flame spread rating of 25 or less when tested per ASTM-E84. Further, all component plastic surfaces are to be gel coated to provide the utmost in added corrosion protection. All fan housings shall have PVC encapsulated $^{1}/_{2}$" x $^{1}/_{2}$" mesh screens or guards fitted to the airflow guides and basket supports to keep out birds, leaves or other debris and maintain a high level of corrosion resistance.

After fabrication, the assembled fan impeller and all structural metal components in contact with the exhaust airstream shall be black epoxy coated (2 mils DFT minimum) for additional chemical resistance.

IMPELLERS — Fan impellers shall be of the airfoil centrifugal type (sizes 14 through 36) or the flat bladed, backward inclined type (sizes 07, 10 and 12), non-overloading design to couple non-overloading power limiting characteristics with performance of the highest efficiency and lowest noise generation. Airfoil blades on sizes 14 through 36 shall be extruded from aluminum and welded to the front and back plate of the impeller using jigs and fixtures to insure exact location and thus insure optimum fan performance. Airfoil impellers shall be epoxy coated. Flat bladed, backward inclined impellers on sizes 07, 10 and 12 shall be of polypropylene construction, securely fixed to a cast aluminum hub. A polypropylene option for sizes 14 through 36 shall be available.

The fan impeller shall be secured to the motor or fan shaft with knurled cup point set screws. All recommended lubrication and maintenance shall be accomplished without removal and disassembly of the fan impeller.

DRIVES & BEARINGS — All motors and drives for belt driven fans shall be located outside of the exhaust airstream, covered and protected from the weather by the fiberglass fan top cap, and cooled by fresh air separate from the exhaust. Belt driven fan drives shall be sized for a minimum of 150% of driven horsepower. Belt driven fans shall be provided with machined, cast iron motor sheaves that shall be adjustable for final system balance. Fan shafts shall be precision ground and polished 304 SS. Shafts shall have a first critical speed of at least 125% of the fan's maximum operating speed. Bearings for belt driven fans shall be of the one-piece, cast iron, pillow block type with relubricable zerk fittings. Bearings shall be designed for service with a minimum L-10 life as defined by AFBMA in excess of 40,000 hours (200,000 hours L-50 average life) at the maximum cataloged operating speed.

MOTORS — All fan motors shall be located outside of the exhaust airstream, covered and protected from the weather by the fiberglass fan motor cover, and cooled by fresh air separate from the exhaust. Fan motors shall be manufactured in accordance with current applicable standards of IEEE, NEC and NEMA. They shall be heavy-duty ball bearing open drip-proof type with a 1.15 service factor and closely matched to the fan load. All motors shall be UL and/or CSA listed.

Electrical wire leads of the motor shall be extended by the factory through an airtight vinyl coated flexible metal conduit and be wired to a properly sized non-fused disconnect switch contained within a terminal junction box mounted under the fan motor cover. To simplify installation, a conduit chase constructed of airtight vinyl coated flexible metal conduit shall be provided through fiberglass curb cap to the motor compartment for field supply conductors.

FACTORY RUN TEST — All fans prior to shipment shall be completely assembled and test run as a unit at the specified operating speed or maximum RPM allowed for the particular construction type. Each impeller shall be statically and dynamically balanced in accordance with ANSI/AMCA 204-96 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. Balance readings shall be taken by electronic type equipment in the axial, vertical and horizontal directions on each of the bearings. Records shall be maintained and a written copy shall be available upon request.

GUARANTEE — The manufacturer shall guarantee the workmanship and materials for its fiberglass ventilators for at least one (1) year from startup or eighteen (18) months from shipment, whichever occurs first.

Model

AHA

Fiberglass centrifugal wall ventilators shall be Hid-N-Aire® wall flush mounted Model AHA direct drive as manufactured by Aerovent, Minneapolis, MN. Ventilators shall be specifically designed for the exhaust of moisture-laden, corrosive or chemically contaminated air where process temperatures will not exceed 150°F. Fiberglass, non-powered roof ventilators shall be molded with aerodynamically shaped venturi to provide minimum system resistance within gravity or positive pressure systems.

PERFORMANCE — Fans shall be tested in accordance with AMCA test codes for air moving devices and shall be guaranteed by the manufacturer to deliver rated published performance levels.

CONSTRUCTION — Fan housings including aerodynamically shaped inlet venturi, and windband skirt shall be molded of high quality, beige-colored, fiberglass reinforced plastic resulting in assemblies that are virtually impossible to dent, crack or break and are highly resistant to the effects of weather, salt spray and most chemicals. Polyester resin with properties equal or similar to Koppers Dion 6693 shall be used to provide high strength with ultra-violet light and chemical resistance. The resin shall have antimony trioxide added to provide fire retardancy with a flame spread rating of 25 or less when tested per ASTM-E84. Further, all component plastic surfaces are to be gel coated to provide the utmost in added corrosion protection.

After fabrication, the assembled fan impeller and all structural metal components in contact with the exhaust airstream (including the wall box on model HA) shall be black epoxy coated (2 mils DFT minimum) for additional chemical resistance.

The Hid-N-Aire® ventilator shall consist of a fiberglass inlet venturi panel bolted to a wall box that contains a belt driven impeller assembly prewired with a plug and cord, a plug-in electrical receptacle mounted to the inside of the wall box and an extruded aluminum exterior louver with integral PVC bird screen and automatic fabric backdraft damper. The entire power assembly including the motor, mounting plate on vibration isolation, fan shaft and bearings and impeller assembly shall be easily removable from the interior or exterior of the building by removing the exterior louver or the inlet fiberglass venturi panel. Only four bolts must be removed to easily slide out from the power assembly from the wall box.

IMPELLERS — Fan impellers shall be of the airfoil centrifugal type (sizes 14 and 18) or the flat bladed, backward inclined type (sizes 07, 072, 10 and 12), non-overloading design to couple non-overloading power limiting characteristics with performance of the highest efficiency and lowest noise generation. Airfoil blades on sizes 14 and 18 shall be extruded from aluminum and welded to the front and back plate of the impeller using jigs and fixtures to insure exact location and thus insure optimum fan performance. Airfoil impellers shall be epoxy coated. Flat bladed, backward inclined impellers on sizes 07, 072, 10 and 12 shall be of polypropylene construction, securely fixed to a cast aluminum hub. A polypropylene option for sizes 14 and 18 shall be available.

The fan impeller shall be secured to the motor or fan shaft with knurled cup point set screws. All recommended lubrication and maintenance shall be accomplished without removal and disassembly of the fan impeller.

MOTORS — All fan motors shall be located outside of the exhaust airstream, covered and protected from the weather by the fiberglass fan motor cover, and cooled by fresh air separate from the exhaust. Fan motors shall be manufactured in accordance with current applicable standards of IEEE, NEC and NEMA. They shall be heavy-duty ball bearing open drip-proof type with a 1.15 service factor and closely matched to the fan load. All motors shall be UL and/or CSA listed.

Motors shall be prewired with a plug and cord for insertion into a properly sized terminal junction box mounted inside the wall box.

FACTORY RUN TEST — All fans prior to shipment shall be completely assembled and test run as a unit at the specified operating speed or maximum RPM allowed for the particular construction type. Each impeller shall be statically and dynamically balanced in accordance with ANSI/AMCA 204-96 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. Balance readings shall be taken by electronic type equipment in the axial, vertical and horizontal directions on each of the bearings. Records shall be maintained and a written copy shall be available upon request.

GUARANTEE — The manufacturer shall guarantee the workmanship and materials for its fiberglass ventilators for at least one (1) year from startup or eighteen (18) months from shipment, whichever occurs first.

Model

AHAB

Fiberglass centrifugal roof and wall ventilators shall be Hid-N-Aire® wall flush mounted Model AHAB belt driven as manufactured by Aerovent, Minneapolis, MN. Ventilators shall be specifically designed for the exhaust of moisture-laden, corrosive or chemically contaminated air where process temperatures will not exceed 150°F. Fiberglass, non-powered roof ventilators shall be molded with aerodynamically shaped venturi to provide minimum system resistance within gravity or positive pressure systems.

PERFORMANCE — Fans shall be tested in accordance with AMCA test codes for air moving devices and shall be guaranteed by the manufacturer to deliver rated published performance levels.

CONSTRUCTION — Fan housings including aerodynamically shaped inlet venturi, and windband skirt shall be molded of high quality, beige-colored, fiberglass reinforced plastic resulting in assemblies that are virtually impossible to dent, crack or break and are highly resistant to the effects of weather, salt spray and most chemicals. Polyester resin with properties equal or similar to Koppers Dion 6693 shall be used to provide high strength with ultra-violet light and chemical resistance. The resin shall have antimony trioxide added to provide fire retardancy with a flame spread rating of 25 or less when tested per ASTM-E84. Further, all component plastic surfaces are to be gel coated to provide the utmost in added corrosion protection.

After fabrication, the assembled fan impeller and all structural metal components in contact with the exhaust airstream (including the wall box on model HAB) shall be black epoxy coated (2 mils DFT minimum) for additional chemical resistance.

The Hid-N-Aire® ventilator shall consist of a fiberglass inlet venturi panel bolted to a wall box that contains a belt driven impeller assembly prewired with a plug and cord, a plug-in electrical receptacle mounted to the inside of the wall box and an extruded aluminum exterior louver with integral PVC bird screen and automatic fabric backdraft damper. The entire power assembly including the motor, mounting plate on vibration isolation, fan shaft and bearings and impeller assembly shall be easily removable from the interior or exterior of the building by removing the exterior louver or the inlet fiberglass venturi panel. Only four bolts must be removed to easily slide out from the power assembly from the wall box.

IMPELLERS — Fan impellers shall be of the airfoil centrifugal type (sizes 14 through 30) or the flat bladed, backward inclined type (sizes 07, 072, 10 and 12), non-overloading design to couple non-overloading power limiting characteristics with performance of the highest efficiency and lowest noise generation. Airfoil blades on sizes 14 through 30 shall be extruded from aluminum and welded to the front and back plate of the impeller using jigs and fixtures to insure exact location and thus insure optimum fan performance. Airfoil impellers shall be epoxy coated. Flat bladed, backward inclined impellers on sizes 07, 072, 10 and 12 shall be of polypropylene construction, securely fixed to a cast aluminum hub. A polypropylene option for sizes 14 through 30 shall be available.

The fan impeller shall be secured to the motor or fan shaft with knurled cup point set screws. All recommended lubrication and maintenance shall be accomplished without removal and disassembly of the fan impeller.

DRIVES & BEARINGS — All motors and drives for belt driven fans shall be located outside of the exhaust airstream, covered and protected from the weather by the fiberglass fan top cap, and cooled by fresh air separate from the exhaust. Belt driven fan drives shall be sized for a minimum of 150% of driven horsepower. Belt driven fans shall be provided with machined, cast iron motor sheaves that shall be adjustable for final system balance. Fan shafts shall be precision ground and polished 304 SS. Shafts shall have a first critical speed of at least 125% of the fan's maximum operating speed. Bearings for belt driven fans shall be of the one-piece, cast iron, pillow block type with relubricable zerk fittings. Bearings shall be designed for service with a minimum L-10 life as defined by AFBMA in excess of 40,000 hours (200,000 hours L-50 average life) at the maximum cataloged operating speed.

MOTORS — All fan motors shall be located outside of the exhaust airstream, covered and protected from the weather by the fiberglass fan motor cover, and cooled by fresh air separate from the exhaust. Fan motors shall be manufactured in accordance with current applicable standards of IEEE, NEC and NEMA. They shall be heavy-duty ball bearing open drip-proof type with a 1.15 service factor and closely matched to the fan load. All motors shall be UL and/or CSA listed.

Motors shall be prewired with a plug and cord for insertion into a properly sized terminal junction box mounted inside the wall box.

FACTORY RUN TEST — All fans prior to shipment shall be completely assembled and test run as a unit at the specified operating speed or maximum RPM allowed for the particular construction type. Each impeller shall be statically and dynamically balanced in accordance with ANSI/AMCA 204-96 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. Balance readings shall be taken by electronic type equipment in the axial, vertical and horizontal directions on each of the bearings. Records shall be maintained and a written copy shall be available upon request.

GUARANTEE — The manufacturer shall guarantee the workmanship and materials for its fiberglass ventilators for at least one (1) year from startup or eighteen (18) months from shipment, whichever occurs first.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