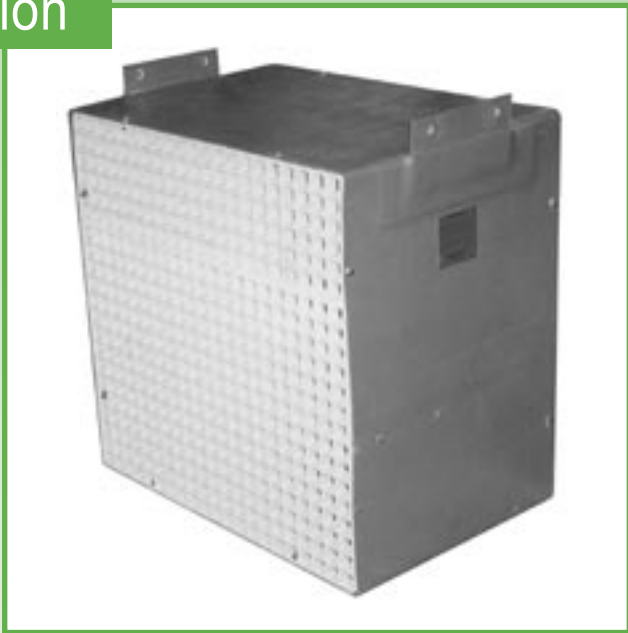




# Wall Mounted Panel Fans

FRP Construction

# Box Mounted Panel Fans



- Thirteen Sizes • Industrial Applications
- Volume Range 1000 CFM (472 l/sec) up to 50,000 CFM (23,600 l/sec)



# Plasticair

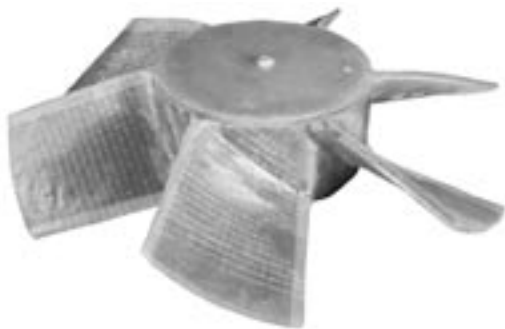
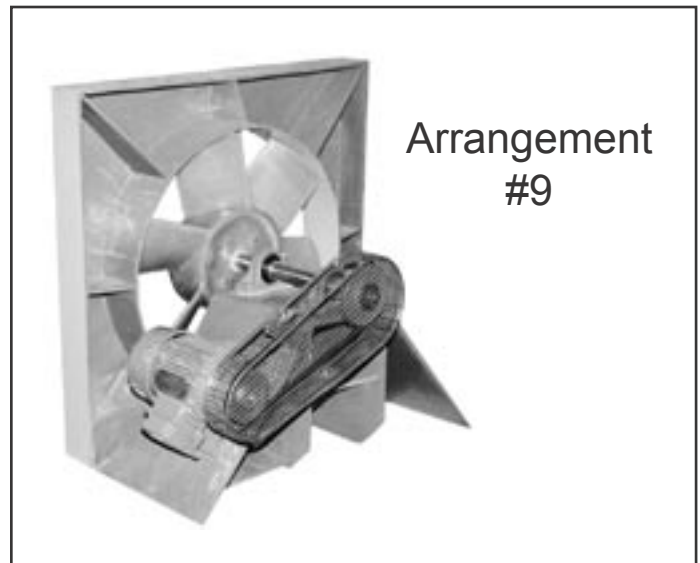
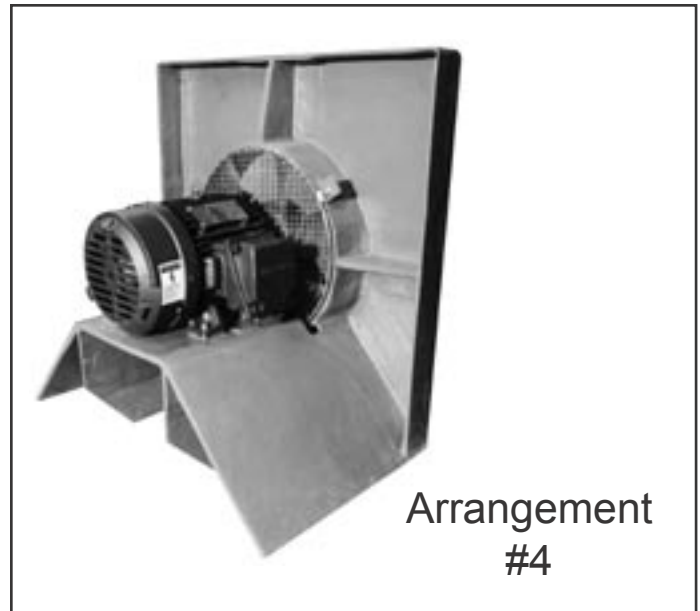
# 700 Series

## Standard Features

**FRP Housing Construction:** Designed for industrial applications, the housing is solid FRP throughout. All FRP exposed to the corrosive gas stream is constructed with a resin rich corrosion barrier complete with C-veil. The motor/bearing pedestal is a rugged full thickness FRP construction.

**Propeller Shaft:** For arrangement #9, propeller shafts are polished ground 316 stainless steel.

**Fasteners:** All Fasteners are 316 stainless steel.



**FRP Wheel Construction:** The 700 Series Propeller is constructed of vinyl ester resins and reinforcing glass by method of hand lay-up. This heavy duty design uses a solid FRP hub which is fabricated as one piece with the propeller blades. For maintenance benefits, the wheel is removable from the steel shaft. A sprocket and taper-lock bushing, which is completely covered by epoxy, is used to attach the shaft to the wheel assembly. The highly efficient design incorporates a full width and full twist blade giving the fan the best possible high end performance at the best possible sound levels. All leading and trailing edges of the propeller incorporate nexus in the corrosion barrier to achieve the high resistance against abrasion.

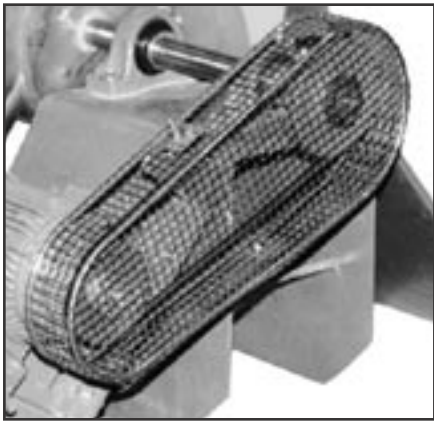
# Accessories



**Box Mounting:** The 700 Series is available in a box mounted configuration. The box is constructed of FRP and is available with flanges and safety guards. Flanged box mountings make for a quick and secure wall mounted installation.



**90° Cowling:** Constructed of FRP, this option is available with or without integral backdraft damper.



**Motor and V-belt Drive Guard:** Fabricated of 304 stainless steel and conforming to OSHA standards.



**Backdraft Damper:** This gravity operated backdraft damper is fabricated out of solid FRP. The construction is suitable for industrial applications and can operate up to 3600 feet per minute.



**Mesh propeller guards:** Inlet or outlet mesh guards can be provided. Choice of materials are 304 stainless steel or mild steel epoxy coated.



**Available Motors:** Mill & Chemical Duty, Explosion Proof & Standard TEFC

# Model 715

Outlet Area: 1.25 sq/ft  
Wheel Diameter: 14.875"

C.F.M.	O.V. F.P.M.	0" S.P.		1/8" S.P.		1/4" S.P.		3/8" S.P.		1/2" S.P.		5/8" S.P.	
		R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.
1500	1220	1183	0.09	1297	0.11	1425	0.15	1556	0.22	1772	0.30	-	-
1800	1465	1348	0.11	1478	0.15	1624	0.20	1722	0.27	1830	0.35	1953	0.44
2100	1708	1524	0.15	1671	0.20	1836	0.27	1918	0.35	2002	0.42	2092	0.51
2400	1952	1704	0.21	1868	0.27	2053	0.36	2125	0.44	2198	0.52	2271	0.61
2700	2195	1887	0.27	2069	0.36	2274	0.48	2341	0.57	2404	0.65	2469	0.74
3000	2440	2074	0.35	2274	0.46	2499	0.61	2559	0.70	2618	0.80	2675	0.90
3300	2683	2263	0.44	2481	0.58	2726	0.77	2780	0.87	2835	0.97	2888	1.08
3600	2927	2453	0.55	2689	0.72	2955	0.96	3005	1.07	3054	1.18	3104	1.29
3900	3170	2644	0.67	2898	0.89	3185	1.18	3231	1.30	3277	1.42	3323	1.54

# Model 718

Outlet Area: 1.79 sq/ft  
Wheel Diameter: 17.875"

C.F.M.	O.V. F.P.M.	0" S.P.		1/8" S.P.		1/4" S.P.		3/8" S.P.		1/2" S.P.		5/8" S.P.	
		R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.
2280	1253	994	0.13	1089	0.17	1197	0.23	1288	0.33	1425	0.43	-	-
2735	1503	1116	0.17	1223	0.23	1344	0.30	1425	0.39	1514	0.52	1616	0.64
3190	1753	1261	0.23	1382	0.31	1519	0.41	1588	0.51	1657	0.62	1731	0.75
3650	2006	1410	0.31	1546	0.41	1699	0.54	1759	0.65	1819	0.76	1879	0.90
4100	2253	1562	0.40	1713	0.53	1882	0.70	1937	0.82	1990	0.96	2043	1.09
4560	2506	1716	0.51	1882	0.68	2068	0.90	2118	1.03	2167	1.17	2214	1.32
5000	2748	1872	0.65	2053	0.85	2256	1.13	2300	1.28	2346	1.43	2390	1.58
5470	3006	2029	0.81	2225	1.06	2445	1.41	2487	1.56	2528	1.73	2569	1.90
5930	3258	2187	0.99	2398	1.30	2635	1.73	2674	1.91	2712	2.08	2750	2.26

# Model 721

Outlet Area: 2.43 sq/ft  
Wheel Diameter: 20.875"

C.F.M.	O.V. F.P.M.	0" S.P.		1/8" S.P.		1/4" S.P.		3/8" S.P.		1/2" S.P.		5/8" S.P.	
		R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.
3130	1270	840	0.17	921	0.23	1012	0.30	1105	0.43	1223	0.58	-	-
3760	1530	957	0.23	1049	0.30	1153	0.40	1223	0.53	1299	0.69	1387	0.86
4390	1785	1082	0.31	1187	0.41	1304	0.55	1362	0.68	1421	0.83	1485	1.01
5010	2036	1210	0.41	1327	0.54	1458	0.72	1509	0.87	1561	0.96	1612	1.20
5640	2293	1340	0.53	1469	0.70	1614	0.93	1662	1.10	1707	1.28	1753	1.46
6270	2550	1472	0.69	1614	0.90	1774	1.20	1817	1.39	1859	1.58	1899	1.76
6890	2800	1607	0.87	1762	1.15	1936	1.52	1974	1.71	2013	1.92	2051	2.12
7520	3057	1741	1.08	1909	1.42	2098	1.89	2134	2.10	2169	2.32	2204	2.55
8150	3313	1877	1.33	2058	1.75	2261	2.32	2294	2.56	2327	2.78	2360	3.04

# Model 724

Outlet Area: 3.17 sq/ft  
Wheel Diameter: 23.875"

C.F.M.	O.V. F.P.M.	0" S.P.		1/8" S.P.		1/4" S.P.		3/8" S.P.		1/2" S.P.		5/8" S.P.	
		R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.
4266	1289	720	0.23	790	0.30	868	0.40	948	0.57	1049	0.76	-	-
5119	1547	821	0.31	900	0.41	989	0.54	1049	0.71	1114	0.92	1189	1.15
5972	1804	928	0.42	1017	0.55	1118	0.73	1169	0.92	1219	1.13	1274	1.34
6825	2062	1038	0.55	1138	0.72	1251	0.96	1295	1.16	1339	1.38	1383	1.60
7678	2320	1150	0.71	1260	0.94	1385	1.25	1426	1.48	1465	1.70	1504	1.94
8532	2578	1263	0.91	1385	1.21	1522	1.60	1559	1.85	1595	2.11	1629	2.35
9385	2835	1379	1.16	1512	1.53	1661	2.03	1693	2.28	1727	2.56	1759	2.84
10238	3093	1494	1.44	1638	1.90	1800	2.52	1830	2.80	1860	3.11	1891	3.39
11090	3350	1610	1.78	1765	2.34	1940	3.11	1968	3.42	1996	3.71	2024	4.04

# Model 727

Outlet Area: 4.03 sq/ft  
Wheel Diameter: 26.675"

C.F.M.	O.V. F.P.M.	0" S.P.		1/8" S.P.		1/4" S.P.		3/8" S.P.		1/2" S.P.		5/8" S.P.	
		R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.
5250	1306	654	0.27	717	0.35	788	0.47	860	0.68	952	0.90	-	-
6302	1568	745	0.36	817	0.47	898	0.63	952	0.84	1012	1.08	1080	1.35
7353	1830	842	0.49	924	0.65	1015	0.86	1061	1.06	1107	1.30	1157	1.58
8404	2090	942	0.65	1033	0.85	1135	1.13	1175	1.36	1216	1.61	1256	1.88
9454	2352	1043	0.83	1144	1.10	1257	1.46	1294	1.73	1330	1.99	1365	2.27
10504	2613	1147	1.07	1258	1.42	1382	1.88	1415	2.16	1448	2.46	1479	2.75
15555	2875	1252	1.36	1372	1.79	1508	2.38	1537	2.68	1568	3.00	1597	3.32
12605	3136	1356	1.69	1487	2.23	1634	2.96	1662	3.28	1689	3.64	1717	3.97
13655	3397	1462	2.08	1603	2.74	1761	3.63	1787	4.00	1812	4.35	1838	4.75

# Model 730

Outlet Area: 4.79 sq/ft  
Wheel Diameter: 29.675"

C.F.M.	O.V. F.P.M.	0" S.P.		1/8" S.P.		1/4" S.P.		3/8" S.P.		1/2" S.P.		5/8" S.P.	
		R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.
6446	1343	550	0.35	603	0.47	663	0.62	724	0.86	792	1.15	-	-
7736	1612	627	0.49	687	0.65	755	0.86	800	1.09	848	1.37	910	1.73
9025	1880	687	0.61	753	0.81	828	1.07	896	1.46	931	1.73	969	2.03
10315	2149	747	0.76	819	1.00	900	1.33	975	1.79	1028	2.21	1057	2.51
11604	2418	818	0.97	896	1.28	985	1.70	1043	2.12	1108	2.64	1153	3.12
12893	2686	892	1.23	978	1.62	1075	2.15	1119	2.54	1178	3.07	1234	3.64
14182	2955	970	1.54	1064	2.03	1169	2.70	1204	3.12	1249	3.57	1305	4.20
15471	3223	1050	1.92	1151	2.53	1265	3.36	1294	3.78	1330	4.23	1374	4.78
16760	3492	1131	2.37	1240	3.13	1363	4.15	1387	4.54	1417	5.05	1452	5.54

# Model 733

Outlet Area: 6.00 sq/ft  
Wheel Diameter: 32.625"

C.F.M.	O.V. F.P.M.	0" S.P.		1/8" S.P.		1/4" S.P.		3/8" S.P.		1/2" S.P.		5/8" S.P.	
		R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.
7842	1341	498	0.43	546	0.57	600	0.75	656	1.05	717	1.39	-	-
9410	1609	568	0.59	622	0.78	684	1.04	725	1.34	768	1.67	824	2.10
10980	1877	623	0.75	683	0.99	750	1.31	811	1.77	843	2.09	878	2.46
12546	2145	676	0.93	742	1.22	815	1.62	883	2.18	931	2.68	958	3.05
14115	2413	740	1.18	812	1.56	892	2.07	945	2.57	1004	3.21	1045	3.78
15682	2681	808	1.50	886	1.97	974	2.62	1013	3.09	1067	3.74	1117	4.44
17251	2949	879	1.88	964	2.48	1059	3.29	1090	3.79	1131	4.34	1182	5.11
18820	3217	950	2.34	1042	3.08	1145	4.09	1172	4.61	1204	5.15	1244	5.82
20388	3485	1024	2.89	1123	3.81	1234	5.05	1265	5.53	1283	6.13	1315	6.74

# Model 736

Outlet Area: 7.17 sq/ft  
Wheel Diameter: 35.625"

C.F.M.	O.V. F.P.M.	0" S.P.		1/8" S.P.		1/4" S.P.		3/8" S.P.		1/2" S.P.		5/8" S.P.	
		R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.
9574	1345	452	0.53	496	0.69	545	0.92	595	1.28	651	1.69	-	-
11490	1614	515	0.73	565	0.96	621	1.28	658	1.63	697	2.04	748	2.56
13400	1882	565	0.91	620	1.20	681	1.59	736	2.16	765	2.56	797	3.01
15320	2152	614	1.13	673	1.48	740	1.97	802	2.66	845	3.28	869	3.73
17230	2420	671	1.45	736	1.91	809	2.53	858	3.15	911	3.92	948	4.63
19150	2690	734	1.83	804	2.41	884	3.20	920	3.77	968	4.57	1014	5.41
21060	2958	798	2.29	875	3.02	961	4.01	990	4.63	1026	5.30	1072	6.23
22980	3228	863	2.85	946	3.76	1040	4.99	1064	5.62	1093	6.29	1129	7.10
24890	3496	930	3.52	1019	4.64	1120	6.16	1140	6.75	1164	7.49	1193	8.23

# Model 740

Outlet Area: 8.84 sq/ft  
Wheel Diameter: 39.50"

C.F.M.	O.V. F.P.M.	0" S.P.		1/8" S.P.		1/4" S.P.		3/8" S.P.		1/2" S.P.		5/8" S.P.	
		R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.
11580	1331	409	0.63	449	0.84	493	1.11	538	1.54	588	2.06	-	-
13895	1597	466	0.87	511	1.15	561	1.53	594	1.97	630	2.46	676	3.10
16212	1863	510	1.10	560	1.45	615	1.92	666	2.61	692	3.09	720	3.64
18528	2130	555	1.37	609	1.80	669	2.39	725	3.21	763	3.96	786	4.50
20844	2396	608	1.75	666	2.31	732	3.06	775	3.80	823	4.74	857	5.60
23160	2662	663	2.22	727	2.92	799	3.88	831	4.56	875	5.53	917	6.55
25476	2928	721	2.77	791	3.65	869	4.85	895	5.59	928	6.41	969	7.54
27792	3195	780	3.45	855	4.55	940	6.04	962	6.80	988	7.61	1021	8.59
30108	3461	841	4.27	922	5.62	1013	7.46	1031	8.16	1053	9.05	1079	9.95

# Model 744

Outlet Area: 10.68 sq/ft  
Wheel Diameter: 43.5"

C.F.M.	O.V. F.P.M.	0" S.P.		1/8" S.P.		1/4" S.P.		3/8" S.P.		1/2" S.P.		5/8" S.P.	
		R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.
14225	1340	370	0.78	406	1.03	446	1.37	487	1.90	532	2.52	-	-
17070	1607	422	1.08	462	1.42	508	1.89	538	2.42	570	3.03	612	3.80
19915	1875	462	1.35	507	1.78	557	2.36	602	3.21	626	3.79	652	4.48
22760	2143	502	1.68	551	2.22	605	2.94	656	3.94	691	4.86	711	5.53
25605	2411	549	2.15	602	2.83	662	3.76	701	4.67	745	5.82	775	6.87
28450	2679	600	2.73	658	3.59	723	4.77	752	5.60	792	6.79	829	8.04
31290	2946	652	3.41	715	4.49	786	5.96	809	6.88	840	7.87	877	9.27
34140	3215	706	4.24	774	5.59	850	7.42	870	8.36	894	9.34	924	10.60
36980	3482	760	5.24	834	6.90	916	9.16	933	10.10	952	11.20	976	12.20

# Model 749

Outlet Area: 13.23 sq/ft  
Wheel Diameter: 48.5"

C.F.M.	O.V. F.P.M.	0" S.P.		1/8" S.P.		1/4" S.P.		3/8" S.P.		1/2" S.P.		5/8" S.P.	
		R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.
17325	1343	335	0.95	368	1.26	404	1.67	441	2.32	482	3.07	-	-
20790	1612	382	1.32	419	1.73	460	2.30	487	2.95	517	3.69	554	4.63
24250	1880	418	1.64	459	2.16	504	2.87	546	3.91	567	4.63	590	5.45
27720	2149	455	2.04	499	2.69	548	3.57	594	4.81	626	5.93	644	6.74
31180	2417	498	2.61	546	3.44	600	4.57	636	5.69	675	7.09	703	8.37
34650	2686	544	3.32	596	4.38	655	5.81	682	6.83	717	8.27	752	9.79
38100	2954	591	4.15	648	5.46	712	7.25	733	8.37	761	9.59	795	11.30
41580	3223	639	5.17	701	6.81	770	9.04	788	10.20	810	11.40	837	12.90
45040	3492	689	6.40	755	8.44	830	11.20	845	12.30	863	13.50	884	14.90

# Model 754

Outlet Area: 16.05 sq/ft  
Wheel Diameter: 53.5"

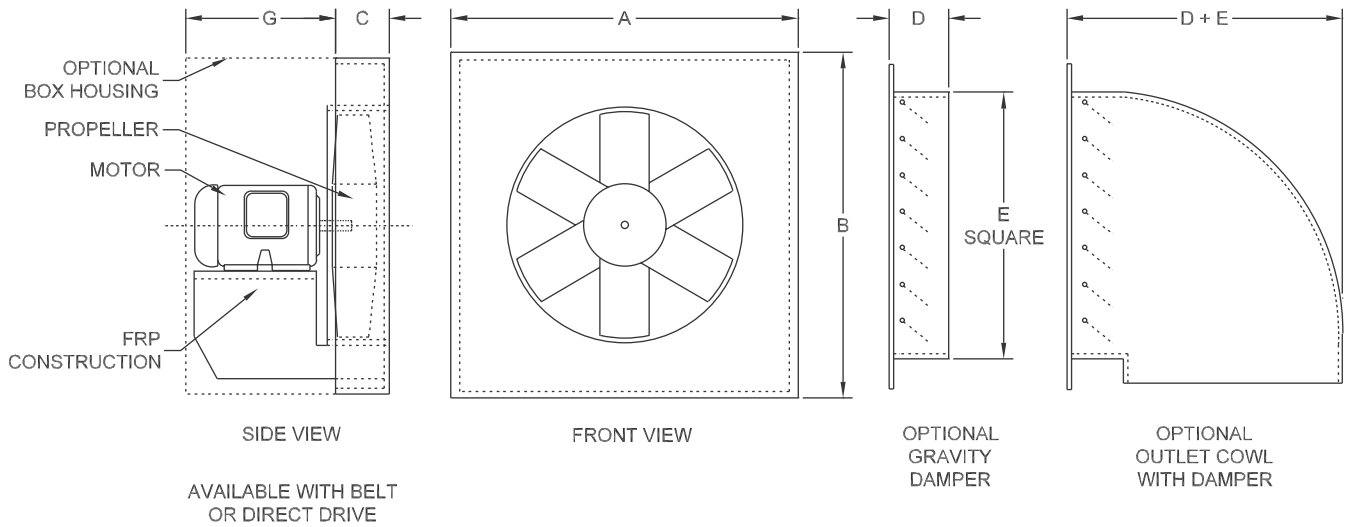
C.F.M.	O.V. F.P.M.	0" S.P.		1/8" S.P.		1/4" S.P.		3/8" S.P.		1/2" S.P.		5/8" S.P.	
		R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.
21520	1362	304	1.18	333	1.56	366	2.07	400	2.87	437	3.82	-	-
25822	1634	346	1.64	379	2.16	417	2.86	441	3.66	468	4.59	502	5.75
30125	1907	379	2.04	416	2.69	457	3.57	494	4.86	513	5.74	535	6.77
34430	2179	413	2.54	452	3.35	497	4.44	538	5.97	567	7.36	583	8.37
38730	2451	451	3.25	494	4.29	543	5.69	576	7.07	611	8.81	636	10.40
43040	2724	492	4.12	540	5.43	593	7.21	617	8.47	650	10.30	681	12.20
47340	2996	535	5.15	587	6.79	645	9.01	664	10.40	689	11.90	720	14.10
51640	3268	579	6.46	635	8.52	698	11.30	714	12.70	734	14.20	758	16.00
55950	3541	624	7.95	684	10.47	752	13.90	765	15.30	783	16.90	801	18.60

# Model 760

Outlet Area: 19.96 sq/ft  
Wheel Diameter: 59.75"

C.F.M.	O.V. F.P.M.	0" S.P.		1/8" S.P.		1/4" S.P.		3/8" S.P.		1/2" S.P.		5/8" S.P.	
		R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.	R.P.M.	B.H.P.
26593	1362	273	1.49	299	1.97	329	2.61	360	3.62	393	4.81	-	-
31909	1634	311	2.06	341	2.71	375	3.60	397	4.61	421	5.79	452	7.25
37226	1907	341	2.57	374	3.39	411	4.50	444	6.13	461	7.23	481	8.53
42546	2179	371	3.20	407	4.22	447	5.60	484	7.52	510	9.28	524	10.50
47859	2451	405	4.10	444	5.40	488	7.17	518	8.91	550	11.10	572	13.10
53185	2724	442	5.20	485	6.85	533	9.09	555	10.70	585	13.00	613	15.40
58499	2996	481	6.52	528	8.59	580	11.40	597	12.70	620	15.00	648	17.80
63812	3268	521	8.12	571	10.70	628	14.20	624	16.00	660	17.90	682	20.20
69138	3541	561	10.01	615	13.19	676	17.50	688	19.30	704	21.30	721	23.40

## Dimensions



### 700 SERIES FAN DIMENSIONS: inches (mm)

FAN SIZE	715	718	721	724	727	730	733	736	740	744	749	754	760
A	23 (584)	26 (660)	29 (737)	32 (813)	35 (889)	38 (965)	43 (1092)	46 (1168)	50 (1270)	54 (1372)	59 (1499)	64 (1626)	70 (1778)
B	23 (584)	26 (660)	29 (737)	32 (813)	35 (889)	38 (965)	43 (1092)	46 (1168)	50 (1270)	54 (1372)	59 (1499)	64 (1626)	70 (1778)
C	3 (76)	3 (76)	3 (76)	4 (102)	4 (102)	4 (102)	4 (102)	4 (102)	4 (102)	5 (127)	5 (127)	5 (127)	5 (127)
D	4 (102)	4 (102)	4 (102)	5 (127)	5 (127)	5 (127)	6 (152)	6 (152)	6 (152)	7 (178)	7 (178)	7 (178)	7 (178)
E	18 (457)	21 (533)	24 (610)	27 (686)	30 (762)	33 (838)	37 (940)	40 (1016)	44 (1118)	48 (1219)	53 (1346)	58 (1473)	64 (1626)
G	16 (406)	18 (457)	21 (533)	21 (533)	21 (533)	25 (635)	26 (660)	28 (711)	30 (762)	30 (762)	32 (813)	33 (838)	34 (864)

# 600 Series

## Standard Features

**FRP Housing Construction:** Designed for industrial applications, the housing is solid FRP throughout. All FRP exposed to the corrosive gas stream is constructed with a resin rich corrosion barrier complete with C-veil. The box design can be supplied with hanging lugs or flanges.

**Fasteners:** All Fasteners are 316 stainless steel.

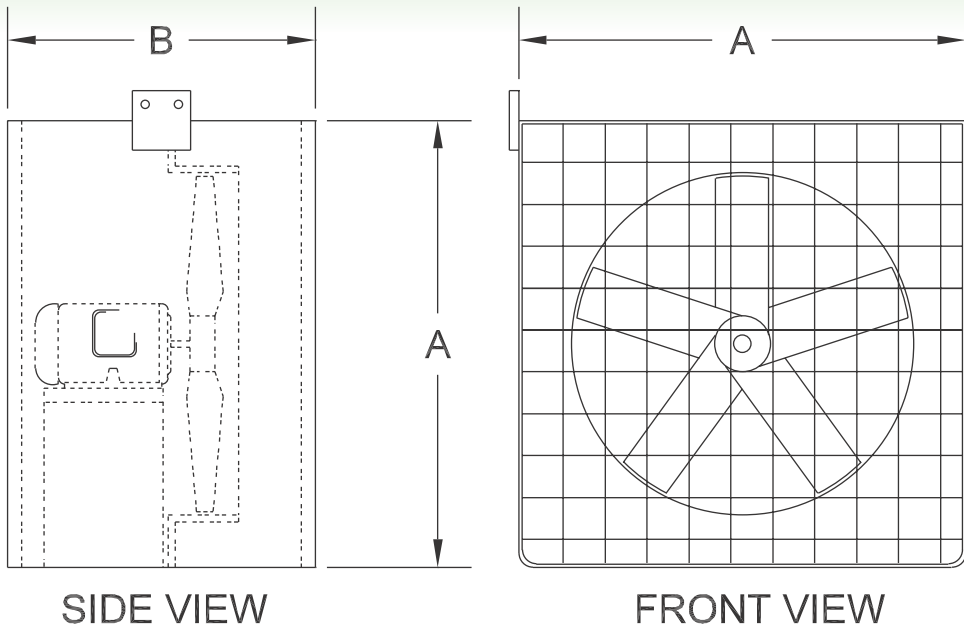
**Motor Pedestal:** Fabricated of solid FRP to full thickness for industrial rigidity.



**FRP Wheel Construction:** The 600 Series Propeller is constructed of vinyl ester resins and reinforcing glass by method of hand lay-up. This heavy duty propeller design uses a solid FRP one-piece construction, which is protected by a resin rich corrosion barrier consisting of C-veil. For maintenance benefits, the wheel is removable from the motor shaft. A sprocket and bushing, which is completely protected by epoxy coating, is used to attach the shaft to the rest of the wheel assembly.



# Dimensions



## 600 SERIES FAN DIMENSIONS: inches (mm)

FAN SIZE	624	630	636
WHEEL DIAMETER	24" (610)	30" (762)	36" (914)
A	32" (813)	40" (1016)	48" (1219)
B	22" (559)	26" (660)	30" (762)

# Air Performance

## 600 SERIES

Model	RPM	Size of Motor	Peak BHP	0"	1/8"	1/4"	3/8"	1/2"
				CFM	CFM	CFM	CFM	CFM
624	860	0.5 HP	0.3	5375	4950	-	-	-
	1125	1.0 HP	0.7	7050	6550	5950	-	-
	1500 (50 HZ)	2.0 HP	1.52	9275	8990	8700	8300	-
	1725	3.0 HP	2.45	10700	10550	10200	10000	9500
630	870	1.5 HP	1.02	10500	9800	-	-	-
	1125	3.0 HP	1.97	13700	13100	12600	11000	-
	1500 (50 HZ)	5.0 HP	4.25	18600	18040	17500	16500	-
636	870	3.0 HP	2.27	17900	17300	16400	-	-
	1125	7.5 HP	5.01	24000	23250	22400	22000	20850

## How to Specify Plasticair Axial Flow Panel Fans - 700 Series

### General

The Axial Flow Panel fan is to be designed and constructed so that the propeller and housing are fabricated of solid FRP. The construction is to be of heavy industrial quality. Acceptable AMCA arrangement is 4 or 9. The fan shall be constructed as per AMCA Standards 99.

### Air Performance

The performance ratings are to be in accordance with AMCA standard 210, and are to be guaranteed by the manufacturer.

### Sound Data

Submitted sound data shall be in accordance with AMCA standards 300 and 301. All submitted data will be in decibels, and presented in eight octave bands (10 12 watts). The designing engineer will perform the final dBA calculations.

### Propeller Construction

The propeller is to be a highly efficient full twist design. The material of construction is to be vinyl ester resin (premium quality Hetron 922) and reinforcing glass throughout. The method of construction is to be hand lay-up only. Injection molded, rotor molded or press molded techniques are not acceptable. The entire surface of the propeller exposed to the gas stream will be complete with a corrosion resin rich barrier consisting of C-veil and a smooth finish. The leading and trailing edges of the impeller blades are to be lined with an additional corrosion barrier consisting of nexus for abrasion resistance. The shaft is to be attached to the hub of the propeller by way of a taperlock bushing and a one piece cast sprocket. Sprockets with welded hubs are not acceptable. The entire shaft attachment assembly is to be completely covered with an FRP plate and silicone gasket. The propeller is to have a safe maximum tip speed rating of 16000 feet per minute, and must be detachable from the 316 stainless steel shaft for maintenance purposes. Steel or thermoplastic impellers with FRP coatings, PVC or epoxy coatings are not acceptable.

### Housing Construction

The fan housing is to be designed and constructed to resist vibration and corrosive attack. The material of construction will be vinyl ester resin (premium quality Hetron 922) and reinforcing glass throughout. The method of construction will be hand lay-up or filament wound only. The entire surface exposed to the corrosive gas stream will be complete with a corrosion resin rich barrier consisting of C-veil and a smooth finish. The outer surface of the housing will be a heavy gelcoat UV stabilized coating. Steel and thermoplastic housings complete with FRP, PVC or epoxy coatings are not acceptable.

### FRP motor support

The fan motor support is to be of heavy-duty industrial quality to minimize vibration and to ensure long life. The support is to be fabricated, solid FRP throughout.

### Bearings

Bearings are to be of a self-aligning, ball bearing, solid pillow block type. The bearings are to be rated and designed for a minimum L-10 life of 50,000 hours or L-50 life of 200,000 hours. Bearings are to be equipped with grease nipples.

### Shaft (For arrangement 9 only)

Fan shaft will be 316 stainless steel. The diameter of the shaft shall not be less than the specified manufacturer. The drive side of the shaft shall be countersunk for tachometer readings and complete with the correct keyways to accept V-belt drive selections. The propeller side of the shaft shall be complete with an FRP shaft seal, which is bonded to the back-plate of the propeller and the shaft attachment hardware, which is encapsulated in FRP.

### Balancing and Testing

The balancing shall be in accordance with ASTM D-4167. The fan shall be test run and not shipped until vibration readings are within acceptable limits.

### Warranty

The supplier shall warrant that all fan components shall be free from defects in materials and workmanship for a period of 15 months from date shipped or 12 months from equipment start up, whichever occurs first.

# How to Specify Plasticair Axial Flow Panel Fans - 600 Series

## General

The Axial Flow Panel fan is to be designed and constructed so that the propeller and housing are fabricated of solid FRP. The quality is to be of sound manufacturing techniques and free from defects. Acceptable AMCA arrangement is 4. The fan shall be constructed as per AMCA Standards 99.

## Air Performance

The performance ratings are to be in accordance with AMCA standard 210, and are to be guaranteed by the manufacturer.

## Sound Data

Submitted sound data shall be in accordance with AMCA standards 300 and 301. All submitted data will be in decibels, and presented in eight octave bands (10 12 watts). The designing engineer will perform the final dBA calculations.

## Propeller Construction

The material of construction is to be vinyl ester resin (premium quality Hetron 922) and reinforcing glass throughout. The method of construction is to be hand lay-up only. Injection molded, rotor molded or press molded techniques are not acceptable. The entire surface of the propeller exposed to the gas stream will be complete with a corrosion resin rich barrier consisting of C-veil and a smooth finish. The shaft is to be attached to the hub of the propeller by way of a taperlock bushing and a one piece cast sprocket. Sprockets with welded hubs are not acceptable. The entire shaft attachment assembly is to be completely covered with minimum 5 mils of epoxy coating. The propeller is to have a safe maximum tip speed rating of 11000 feet per minute, and must be removable from the motor shaft for maintenance purposes. Steel or thermoplastic impellers with or without FRP, PVC or epoxy coatings are not acceptable.

## Housing Construction

The fan housing is to be designed and constructed to resist vibration and corrosive attack. The material of construction will be vinyl ester resin (premium quality Hetron 922) and reinforcing glass throughout. The method of construction will be hand lay-up only. The entire surface exposed to the corrosive gas stream will be complete with a corrosion resin rich barrier consisting of C-veil and a smooth finish. The outer surface of the housing will be a heavy gel coat UV stabilized coating. Steel and thermoplastic housings complete with FRP, PVC or epoxy coatings are not acceptable.

## Motor Support:

The motor support is to be fabricated with FRP. The design is to ensure minimal vibrations for moving parts. Motor support will be a direct drive arrangement 4.

## Balancing and Testing

The balancing shall be in accordance with ASTM D-4167. The fan shall be test run and not shipped until vibration readings are within acceptable limits.

## Warranty

The supplier shall warrant that all fan components shall be free from defects in materials and workmanship for a period of 15 months from date shipped or 12 months from equipment start up, whichever occurs first.

# Plasticair Inc., Servicing Industry



FRP Fans



Scrubbing Equipment



Laboratory Fumehoods

## Plasticair Product List

### Scrubbers:

Horizontal Packed Bed - Single/Double (HS-Series)

Vertical Packed Bed Towers (VS-Series)

Odour Control Scrubbers (HCS, VCS-Series)

Demisters - Vane Type (P-Series)

Demisters - Mesh Type (M-Series)

Demisters - Multiple Stage Type (E-Series)

Venturi Scrubbers (ECE-Series)

Laboratory Fume Hood Scrubbers (FHS-Series)

### Scrubber Applications:

Oil/Air Separators

Chlorine Scrubbers

Micro Chip Manufacturing Scrubbers

Plating Plant Scrubbers

Pickling Line Scrubbers

Chromic Acid Scrubbers And Demisters

### FRP Fans:

Axial Fans - Vane / Tube

Panel Fans - Wall Mount / Box Mount

Inline Centrifugal - Backward Curved

Laboratory Fans - B.I. Utility Sets / B.I. Tubular

High Pressure Fans - Radial Blade

Medium Pressure Fans - Radial Blade

Medium Pressure Fans - Backward Curved

Mini Industrial Vent Sets - Radial Blade / B.I.

Plasticair's Sales Forces are located in major cities around the world.



Contact the factory for the agent closest to you.

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