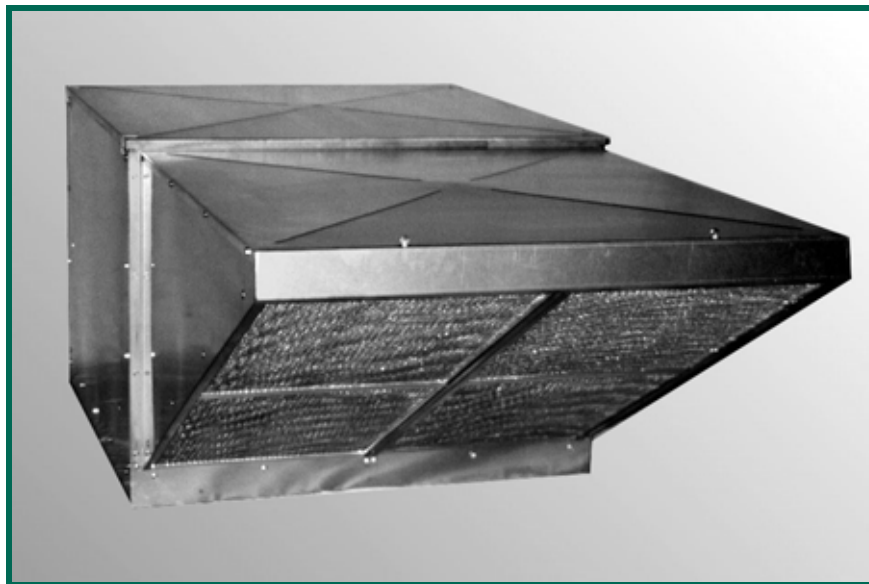




INDUSTRIES

AMERICAN COOLAIR CORPORATION



# Centrifugal Filtered Supply Roof Ventilators

TYPE CFS - TYPE SIS

# CFS

## Centrifugal Filtered Supply Fans

### Applications

The CFS Centrifugal Filtered supply fans with four (4) side inlets are designed for roof mounting on curbs to provide make-up filtered air to general ventilation systems.

Applications include a variety of commercial and industrial facilities as well as commercial and industrial kitchens.

### Construction

Construction of the CFS power roof ventilators is mill galvanized steel throughout the unit.

The blower has a DIDW centrifugal wheel with forward curved blades finished in a matte zinc coating. The blower housing is constructed of galvanized steel. The blower features sealed and permanently lubricated ball bearings suitable for operation from -65 degrees to +250 degrees F (check motor capability). The blower is mounted to the fan housing using rubber isolation grommets.

Filters are 1" aluminum mesh, cleanable and held in place by a u-channel frame.

Access to the fan, motor, drive and filters is accomplished by removal of the top utilizing four (4) thumb screws.

A factory wired disconnect switch is an available option.

### Drive Mechanism

CFS models have a V-belt drive with adjustable cast iron motor pulley for adjusting fan operating speed. Drive shaft is turned, ground and polished. Motor support is adjustable for proper belt tensioning.

### Motors

NEMA standard open drip proof motors are pre-lubricated and located in the air stream. Other motors may be available. All motor brands are recognized and serviced nationwide. Motor enclosure required may affect UL Listing.



UL705 – E39944

Type CFS ventilators are Listed by Underwriters Laboratory Inc. to US and Canadian safety standards.



American Coolair Corporation, ILG Industries Division certifies that the Type CFS units shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

### Guide Specifications

Filtered supply fans shall be of the CFS centrifugal type as manufactured by ILG Industries of American Coolair Corporation (individual models to be listed in fan schedule). Units shall bear the AMCA Certified Ratings Seal for air performance. Housing and frame of the fan are to be galvanized steel. The top of the unit is to be removable for access to the inside fan components, filters and drive. The blower is to be mounted to the fan housing using rubber isolation grommets.

Drive mechanism shall incorporate a V-belt drive with cast iron motor pulley. The centrifugal wheel shall be heavy gauge zinc-coated steel with forward-curved blades.

Motor shall be open drip-proof construction, NEMA design B with minimum service factor of 1.15. Adjustable motor pulley shall be provided to allow for field adjustment and system balance. Motor shall be mounted on an adjustable steel mounting bracket.

(Mounted and wired disconnect switch, backdraft damper, epoxy coating and other accessories shall be listed in the fan schedule.)

# CFS 9 Performance Data

HP	CFM		Static Pressure							
			0.00	.125	.250	.375	.500	.625	.750	1.00
1/4 L	700	RPM		425	556					
		BHP		0.04	0.07					
	800	RPM		441	573					
		BHP		0.05	0.09					
	900	RPM		460	589	688				
		BHP		0.07	0.10	0.13				
	1000	RPM		482	603	705	787			
		BHP		0.08	0.12	0.16	0.18			
	1100	RPM		508	618	721	804	877		
		BHP		0.10	0.14	0.19	0.23	0.25		
	1200	RPM	437	536	635	735	821	894		
		BHP	0.09	0.13	0.16	0.22	0.27	0.30		
	1300	RPM	473	566	656	749	836	911	977	
		BHP	0.12	0.15	0.19	0.24	0.31	0.35	0.39	
	1400	RPM	510	598	678	765	850	927	994	1111
		BHP	0.15	0.19	0.22	0.27	0.34	0.40	0.45	0.51
	1500	RPM	546	630	703	784	865	941	1011	1128
		BHP	0.18	0.23	0.26	0.31	0.37	0.44	0.51	0.59
1600	RPM	583	663	730	805	881	955	1025	1145	
	BHP	0.22	0.27	0.31	0.44	0.42	0.48	0.56	0.68	
1/4 H	1700	RPM	619	697	759	827	899	970	1039	1162
		BHP	0.26	0.32	0.36	0.49	0.46	0.53	0.61	0.76
1/3	1800	RPM	655	730	789	852	919	987	1053	
		BHP	0.31	0.38	0.41	0.46	0.52	0.59	0.66	
	1900	RPM	692	764	820	878	941	1005	1069	
		BHP	0.37	0.44	0.48	0.52	0.58	0.65	0.72	
1/2	2000	RPM	728	798	852	906	964	1025	1086	
		BHP	0.43	0.51	0.55	0.59	0.65	0.72	0.79	
	2100	RPM	765	832	884	935	989	1046	1104	
		BHP	0.50	0.58	0.62	0.67	0.72	0.79	0.86	
	2200	RPM	801	866	917	965	1016			
		BHP	0.57	0.66	0.71	0.75	0.81			
3/4	2300	RPM	837	900	950	996				
		BHP	0.65	0.75	0.80	0.85				
	2400	RPM	874	935						
		BHP	0.74	0.84						

Performance shown is for installation type B: Free inlet, ducted outlet. Performance ratings include the effects of filters in the airstream.

Power rating (BHP) does not include transmission losses. Bearing losses are included.

# CFS 10 Performance Data

HP	CFM		Static Pressure								
			0.00	.125	.250	.375	.500	.625	.750	1.00	1.25
1/4 L	600	RPM		355							
		BHP		0.03							
	800	RPM		383	499						
		BHP		0.05	0.08						
	1000	RPM		417	521	612	700				
		BHP		0.08	0.11	0.15	0.20				
	1200	RPM	340	454	552	635	711	785	857		
		BHP	0.07	0.11	0.15	0.20	0.24	0.29	0.38		
	1400	RPM	397	495	586	665	735	800	864		
		BHP	0.12	0.16	0.21	0.26	0.30	0.35	0.41		
1600	RPM	453	539	623	698	765	826	885	997		
	BHP	0.17	0.22	0.28	0.33	0.39	0.44	0.50	0.62		
1/4 H	1800	RPM	510	586	663	734	798	857	912	1016	1115
		BHP	0.25	0.29	0.36	0.42	0.48	0.55	0.61	0.73	0.87
1/3	2000	RPM	567	635	704	771	833	890	943	1042	1134
		BHP	0.34	0.39	0.45	0.53	0.60	0.67	0.74	0.87	1.01
1/2	2200	RPM	623	685	748	811	870	925	976	1071	1160
		BHP	0.45	0.50	0.57	0.66	0.74	0.81	0.88	1.03	1.19
3/4	2400	RPM	680	737	794	852	908	961	1011	1104	1189
		BHP	0.59	0.64	0.71	0.80	0.89	0.97	1.06	1.22	1.39
	2600	RPM	736	789	842	895	948	999	1047	1137	
		BHP	0.74	0.80	0.88	0.96	1.06	1.16	1.25	1.42	
1	2800	RPM	793	842	891	940	990	1038	1085	1172	
		BHP	0.93	0.99	1.07	1.15	1.26	1.36	1.47	1.68	
	3000	RPM	850	895	941	987	1033	1079	1124		
		BHP	1.15	1.21	1.29	1.38	1.48	1.59	1.71		
1 1/2	3200	RPM	906	949	992	1035	1078				
		BHP	1.39	1.46	1.54	1.63	1.73				

Performance shown is for installation type B: Free inlet, ducted outlet. Performance ratings include the effects of filters in the airstream.

Power rating (BHP) does not include transmission losses. Bearing losses are included.

# CFS 12 Performance Data

HP	CFM		Static Pressure									
			0.00	.125	.250	.375	.500	.625	.750	1.00	1.25	1.50
1/4	1200	RPM			453							
		BHP			0.10							
	1400	RPM			466	551						
		BHP			0.13	0.16						
	1600	RPM		397	486	563	635					
		BHP		0.12	0.16	0.21	0.24					
	1800	RPM		422	509	579	647	711				
		BHP		0.16	0.21	0.25	0.30	0.35				
	2000	RPM		450	532	599	661	722	780			
		BHP		0.20	0.26	0.31	0.36	0.41	0.47			
2200	RPM	401	480	555	623	680	736	792				
	BHP	0.20	0.26	0.32	0.38	0.43	0.49	0.55				
2400	RPM	428	511	578	646	702	754	806	906			
	BHP	0.26	0.32	0.38	0.45	0.51	0.58	0.64	0.77			
1/3	2600	RPM	474	544	604	669	726	776	823	918	1008	
		BHP	0.33	0.40	0.46	0.54	0.61	0.68	0.74	0.88	1.03	
1/2	2800	RPM	511	576	632	691	749	799	844	933	1019	1101
		BHP	0.41	0.48	0.55	0.63	0.71	0.79	0.86	1.01	1.15	1.29
	3000	RPM	547	609	662	715	772	822	867	950	1033	1112
		BHP	0.50	0.58	0.66	0.73	0.82	0.90	0.98	1.14	1.30	1.45
3/4	3200	RPM	583	643	692	741	794	845	891	971	1048	1125
		BHP	0.61	0.70	0.77	0.85	0.94	1.04	1.13	1.29	1.46	1.63
	3400	RPM	620	676	724	769	818	868	914	994	1067	1140
		BHP	0.73	0.83	0.91	0.99	1.08	1.18	1.28	1.46	1.63	1.82
1	3600	RPM	656	710	756	799	843	891	937	1017	1088	1157
		BHP	0.87	0.97	1.06	1.15	1.23	1.34	1.45	1.64	1.83	2.02
	3800	RPM	693	744	789	829	871	914	959	1041	1111	1176
		BHP	1.02	1.13	1.23	1.31	1.41	1.51	1.62	1.84	2.04	2.23
1 1/2	4000	RPM	729	778	821	861	899	940	982	1064	1134	
		BHP	1.19	1.30	1.41	1.51	1.60	1.71	1.82	2.05	2.26	
	4200	RPM	766	813	854	892	929	966	1006	1086		
		BHP	1.38	1.50	1.61	1.71	1.81	1.91	2.03	2.27		
	4400	RPM	802	847	888	924	960	995	1032			
		BHP	1.58	1.71	1.83	1.93	2.04	2.15	2.26			
2	4600	RPM	838	882	921	957	991					
		BHP	1.81	1.94	2.07	2.18	2.29					
	4800	RPM	875	917								
		BHP	2.06	2.20								

Performance shown is for installation type B: Free inlet, ducted outlet. Performance ratings include the effects of filters in the airstream.

Power rating (BHP) does not include transmission losses. Bearing losses are included.

# CFS 15 Performance Data

HP	CFM		Static Pressure								
			0.00	.125	.250	.375	.500	.625	.750	1.00	1.25
1/4	1500	RPM		268							
		BHP		0.08							
	1800	RPM		283							
		BHP		0.11							
	2100	RPM		302	377						
		BHP		0.15	0.21						
	2400	RPM	270	325	392	454					
		BHP	0.16	0.21	0.28	0.34					
2700	RPM	304	350	409	468	521					
	BHP	0.23	0.28	0.35	0.43	0.51					
1/3	3000	RPM	338	378	429	483	535	582			
		BHP	0.32	0.37	0.44	0.53	0.62	0.70			
1/2	3300	RPM	371	407	452	500	549	596	638		
		BHP	0.43	0.48	0.59	0.64	0.74	0.84	0.93		
	3600	RPM	405	437	476	520	565	609	652		
		BHP	0.55	0.61	0.69	0.78	0.88	0.98	1.09		
3/4	3900	RPM	439	468	502	542	583	625	665	741	
		BHP	0.71	0.77	0.84	0.94	1.04	1.16	1.26	1.49	
1	4200	RPM	473	499	530	566	604	642	680	754	821
		BHP	0.88	0.94	1.02	1.12	1.23	1.34	1.46	1.70	1.95
	4500	RPM	506	531	559	591	626	661	697	768	834
		BHP	1.08	1.15	1.23	1.33	1.44	1.56	1.68	1.94	2.19
1 1/2	4800	RPM	540	563	589	617	649	682	716	783	848
		BHP	1.31	1.39	1.47	1.56	1.68	1.80	1.94	2.21	2.48
	5100	RPM	574	595	619	645	674	705	736	799	862
		BHP	1.58	1.65	1.74	1.84	1.95	2.08	2.21	2.49	2.79
2	5400	RPM	608	628	650	674	700	728	758	817	
		BHP	1.88	1.95	2.04	2.14	2.26	2.38	2.52	2.81	
	5700	RPM	641	661	681	703	727	753	781	837	
		BHP	2.20	2.29	2.38	2.48	2.59	2.72	2.87	3.17	
3	6000	RPM	675	693	712	733	755	779	805		
		BHP	2.57	2.65	2.74	2.86	2.97	3.10	3.25		
	6300	RPM	709	726	744	763	784				
		BHP	2.97	3.06	3.16	3.26	3.39				
	6600	RPM	742								
		BHP	3.41								

Performance shown is for installation type B: Free inlet, ducted outlet. Performance ratings include the effects of filters in the airstream.

Power rating (BHP) does not include transmission losses. Bearing losses are included.

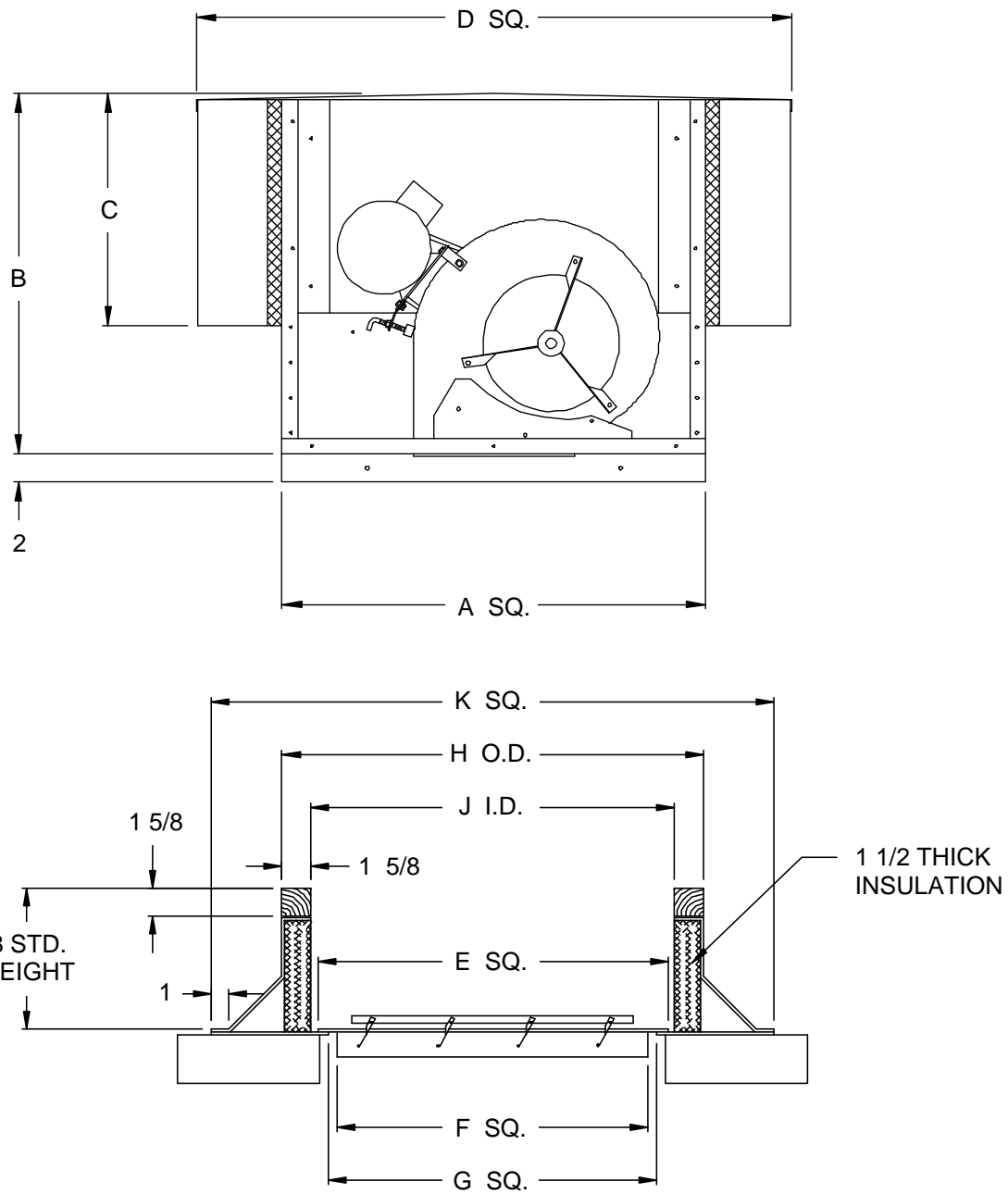
# CFS 18 Performance Data

HP	CFM		Static Pressure									
			0.00	.125	.250	.375	.500	.625	.750	1.00	1.25	1.50
1/3	2800	RPM		299	360	415						
		BHP		0.22	0.31	0.39						
	3200	RPM		324	379	430	478					
		BHP		0.31	0.39	0.49	0.60					
	3600	RPM	291	350	401	448	493	535				
		BHP	0.31	0.41	0.50	0.61	0.72	0.84				
1/2	4000	RPM	323	376	425	469	510	550	588			
		BHP	0.43	0.53	0.64	0.75	0.87	1.00	1.13			
	4400	RPM	356	403	451	491	530	567	603	672		
		BHP	0.57	0.68	0.81	0.92	1.05	1.18	1.32	1.62		
3/4	4800	RPM	388	431	476	515	551	586	620	685		
		BHP	0.74	0.86	1.00	1.13	1.26	1.39	1.54	1.84		
1	5200	RPM	420	460	502	540	574	607	639	701	760	
		BHP	0.94	1.07	1.22	1.37	1.50	1.64	1.79	2.11	2.45	
1 1/2	5600	RPM	452	489	528	565	598	629	659	719	775	829
		BHP	1.17	1.31	1.47	1.63	1.78	1.92	2.07	2.42	2.77	3.13
	6000	RPM	485	519	555	591	623	653	681	738	792	844
		BHP	1.45	1.59	1.75	1.94	2.10	2.26	2.40	2.76	3.13	3.51
2	6400	RPM	517	549	582	616	648	677	705	758	810	860
		BHP	1.75	1.90	2.07	2.26	2.45	2.62	2.79	3.13	3.52	3.92
	6800	RPM	549	579	610	643	674	702	729	780	829	
		BHP	2.10	2.25	2.43	2.64	2.85	3.03	3.21	3.57	3.94	
3	7200	RPM	582	609	639	669	699	728	754	802	850	
		BHP	2.50	2.65	2.84	3.04	3.26	3.49	3.68	4.03	4.44	
	7600	RPM	614	640	668	697	725	753	779	826		
		BHP	2.93	3.10	3.29	3.52	3.73	3.97	4.18	4.57		
	8000	RPM	646	671	697	724	752	779	804	851		
		BHP	3.42	3.59	3.79	4.01	4.26	4.51	4.73	5.16		
5	8400	RPM	678	702	727	752	779	805	830			
		BHP	3.95	4.14	4.35	4.56	4.87	5.09	5.34			
	8800	RPM	711	733	757	781	806	831				
		BHP	4.56	4.73	4.95	5.18	5.44	5.71				
	9200	RPM	743	765	787							
		BHP	5.20	5.40	5.61							

Performance shown is for installation type B: Free inlet, ducted outlet. Performance ratings include the effects of filters in the airstream.

Power rating (BHP) does not include transmission losses. Bearing losses are included.

# CFS and Roof Curb Dimensions



Unit Size	Ventilator Dimensions				Roof Curb and Damper Dimensions						Filters	
	A	B	C	D	E	F	G	H	J	K	Qty	Size
9-12	30	25 1/2	16 3/8	42 1/4	24 1/2	22	23 1/4	28 1/2	25 1/4	36 1/2	4	16 X 25
15, 18	42	29 1/2	20 3/8	52 1/2	36 1/2	34	35 1/4	40 1/2	37 1/4	48 1/2	4	20 X 25

Dimensions in inches



# SIS (Single Inlet) Centrifugal Filtered Supply Fans

## Applications

The SIS Centrifugal Filtered supply fans with single side inlet are designed for roof mounting on curbs to provide make-up filtered air to general ventilation systems.

Applications include a variety of commercial and industrial facilities as well as commercial and industrial kitchens.

## Construction

Construction of the SIS power roof ventilators is mill galvanized steel throughout the unit.

The blower has a DIDW centrifugal wheel with forward curved blades finished in a matte zinc coating. The blower housing is constructed of galvanized steel. The blower features sealed and permanently lubricated ball bearings suitable for operation from -65 degrees to +250 degrees F (check motor capability). The blower is mounted to the fan housing using rubber isolation grommets.

Filters are 1" aluminum mesh, cleanable and held in place by a u-channel frame.

Access to the fan, motor and drive is accomplished by removal of the top utilizing four (4) zinc coated, quick release snap latches.

Access to the filters is accomplished by removal of the filter retainer, utilizing two (2) thumb screws.

A factory wired disconnect switch is an available option.

## Drive Mechanism

SIS models have a V-belt drive with adjustable cast iron motor pulley for adjusting fan operating speed. Drive shaft is turned, ground and polished. Motor support is adjustable for proper belt tensioning.

## Motors

NEMA standard open drip proof motors are pre-lubricated and located in the air stream. Other motors may be available. All motor brands are recognized and serviced nationwide. Motor enclosure required may affect UL Listing.



UL705 – E39944

Type SIS ventilators are Listed by Underwriters Laboratory Inc. to US and Canadian safety standards.



American Coolair Corporation, ILG Industries Division certifies that the Type SIS units shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

## Guide Specifications

Single inlet filtered supply fans shall be of the SIS centrifugal type as manufactured by ILG Industries of American Coolair Corporation (individual models to be listed in fan schedule). Units shall bear the AMCA Certified Ratings Seal for air performance. Housing and frame of the fan are to be galvanized steel. The top of the unit is to be removable for access to the inside fan components and drive. The blower is to be mounted to the fan housing using rubber isolation grommets.

Drive mechanism shall incorporate a V-belt drive with cast iron motor pulley. The centrifugal wheel shall be heavy gauge zinc-coated steel with forward-curved blades.

Motor shall be open drip-proof construction, NEMA design B with minimum service factor of 1.15. Adjustable motor pulley shall be provided to allow for field adjustment and system balance. Motor shall be mounted on an adjustable steel mounting bracket.

(Mounted and wired disconnect switch, backdraft damper, epoxy coating and other accessories shall be listed in the fan schedule.)

# SIS 9 Performance Data

HP	CFM		Static Pressure							
			0.00	.125	.250	.375	.500	.625	.750	1.00
1/4 L	700	RPM		459						
		BHP		0.05						
	800	RPM		479						
		BHP		0.06						
	900	RPM		512						
		BHP		0.08						
	1000	RPM	429	548	650					
		BHP	0.07	0.11	0.14					
	1100	RPM	472	583	668	776				
		BHP	0.09	0.14	0.16	0.22				
	1200	RPM	515	618	699	792	879			
		BHP	0.12	0.17	0.20	0.25	0.31			
1300	RPM	558	653	734	807	902	971			
	BHP	0.15	0.21	0.25	0.28	0.36	0.40			
1/4 H	1400	RPM	601	688	770	833	917	997	1058	
		BHP	0.19	0.25	0.30	0.32	0.39	0.47	0.51	
	1500	RPM	644	724	805	866	932	1016	1084	1184
		BHP	0.24	0.30	0.36	0.39	0.43	0.52	0.59	0.65
1/3	1600	RPM	686	761	840	901	957	1029	1106	
		BHP	0.29	0.35	0.42	0.46	0.48	0.56	0.66	
	1700	RPM	729	799	875	937	989	1047	1121	
		BHP	0.34	0.41	0.49	0.54	0.57	0.61	0.71	
1/2	1800	RPM	772	837	909	973	1024	1074	1134	
		BHP	0.41	0.47	0.56	0.63	0.66	0.69	0.76	
	1900	RPM	815	877	944	1008	1060	1106	1156	
		BHP	0.48	0.55	0.64	0.72	0.76	0.79	0.83	
	2000	RPM	858	916	980	1043				
		BHP	0.56	0.63	0.72	0.81				
3/4	2100	RPM	901	956	1016					
		BHP	0.65	0.72	0.81					
	2200	RPM	944	996						
		BHP	0.75	0.82						
	2300	RPM	987							
		BHP	0.85							

Performance shown is for installation type B: Free inlet, ducted outlet. Performance ratings include the effects of filters in the airstream.

Power rating (BHP) does not include transmission losses. Bearing losses are included.

# SIS 10 Performance Data

HP	CFM		Static Pressure								
			0.00	.125	.250	.375	.500	.625	.750	1.00	1.25
1/4 L	800	RPM		403	522						
		BHP		0.04	0.07						
	1000	RPM		445	546	641	724				
		BHP		0.07	0.10	0.13	0.16				
	1200	RPM	388	485	584	665	745	818			
		BHP	0.08	0.10	0.14	0.17	0.21	0.25			
	1400	RPM	453	529	626	701	770	839	905		
		BHP	0.12	0.15	0.20	0.23	0.27	0.31	0.36		
1600	RPM	517	580	666	743	806	866	927	1043	1147	
	BHP	0.18	0.21	0.26	0.31	0.35	0.39	0.44	0.54	0.66	
1/4 H	1800	RPM	582	635	708	764	848	904	957	1064	1167
		BHP	0.26	0.28	0.33	0.40	0.45	0.50	0.54	0.64	0.76
1/3	2000	RPM	646	693	753	824	889	945	996	1091	1188
		BHP	0.36	0.38	0.42	0.49	0.56	0.62	0.68	0.77	0.89
1/2	2200	RPM	711	753	803	866	929	987	1037	1127	1215
		BHP	0.48	0.50	0.54	0.61	0.69	0.76	0.82	0.93	1.05
3/4	2400	RPM	776	813	857	911	970	1027	1079	1168	1249
		BHP	0.62	0.64	0.68	0.74	0.83	0.91	0.99	1.12	1.24
	2600	RPM	840	874	913	959	1013	1068	1119	1210	
		BHP	0.79	0.81	0.85	0.90	0.99	1.08	1.17	1.33	
1	2800	RPM	905	936	971	1012	1058	1109	1160	1252	
		BHP	0.99	1.01	1.04	1.10	1.17	1.27	1.37	1.56	
1 1/2	3000	RPM	969	999	1030	1066	1107	1153	1201		
		BHP	1.21	1.24	1.27	1.32	1.39	1.48	1.59		
	3200	RPM	1034	1061	1091	1132	1159	1200			
		BHP	1.48	1.50	1.53	1.58	1.64	1.73			

Performance shown is for installation type B: Free inlet, ducted outlet. Performance ratings include the effects of filters in the airstream.

Power rating (BHP) does not include transmission losses. Bearing losses are included.

# SIS 12 Performance Data

HP	CFM		Static Pressure									
			0.00	.125	.250	.375	.500	.625	.750	1.00	1.25	1.50
1/4	1200	RPM		407	505							
		BHP		0.08	0.12							
	1400	RPM		440	533	610	680					
		BHP		0.11	0.16	0.20	0.24					
	1600	RPM		478	561	636	702	763				
		BHP		0.16	0.20	0.25	0.30	0.35				
	1800	RPM	438	518	591	665	728	786	841			
		BHP	0.17	0.21	0.26	0.32	0.37	0.42	0.48			
2000	RPM	487	561	625	693	756	812	865	963			
	BHP	0.23	0.28	0.32	0.39	0.45	0.51	0.57	0.70			
1/3	2200	RPM	536	605	663	723	785	840	891	985		
		BHP	0.31	0.36	0.41	0.47	0.54	0.61	0.68	0.81		
1/2	2400	RPM	584	649	703	757	814	869	919	1010	1094	1175
		BHP	0.40	0.46	0.51	0.57	0.64	0.72	0.80	0.94	1.09	1.24
	2600	RPM	633	693	744	793	845	897	947	1037	1119	1195
		BHP	0.51	0.57	0.63	0.69	0.76	0.84	0.92	1.09	1.25	1.40
3/4	2800	RPM	681	738	787	833	879	928	976	1065	1145	1219
		BHP	0.63	0.71	0.77	0.83	0.90	0.98	1.07	1.25	1.42	1.59
	3000	RPM	730	784	830	873	916	960	1006	1094	1172	1245
		BHP	0.78	0.86	0.93	0.99	1.06	1.14	1.23	1.43	1.61	1.79
1	3200	RPM	779	830	874	915	955	995	1037	1122	1200	1272
		BHP	0.95	1.03	1.11	1.15	1.24	1.32	1.41	1.61	1.82	2.01
	3400	RPM	827	876	919	958	995	1032	1071	1152	1229	
		BHP	1.13	1.23	1.31	1.38	1.45	1.53	1.61	1.82	2.04	
1 1/2	3600	RPM	876	922	963	1001	1037	1072	1107	1182	1258	
		BHP	1.35	1.45	1.53	1.61	1.69	1.77	1.85	2.05	2.28	
	3800	RPM	925	968	1008	1044	1079	1112	1146			
		BHP	1.59	1.69	1.78	1.86	1.95	2.03	2.11			
2	4000	RPM	973	1015	1053	1088	1122					
		BHP	1.85	1.96	2.06	2.15	2.24					
	4200	RPM	1022	1062								
		BHP	2.14	2.26								

Performance shown is for installation type B: Free inlet, ducted outlet. Performance ratings include the effects of filters in the airstream.

Power rating (BHP) does not include transmission losses. Bearing losses are included.

# SIS 15 Performance Data

HP	CFM		Static Pressure								
			0.00	.125	.250	.375	.500	.625	.750	1.00	1.25
1/4	1800	RPM		275							
		BHP		0.11							
	2100	RPM		294	366						
		BHP		0.15	0.21						
	2400	RPM	268	317	381						
		BHP	0.16	0.20	0.27						
2700	RPM	302	344	397	454						
	BHP	0.23	0.27	0.33	0.42						
1/3	3000	RPM	335	372	417	469					
		BHP	0.31	0.36	0.42	0.51					
1/2	3300	RPM	368	402	441	486	533				
		BHP	0.41	0.47	0.53	0.61	0.71				
	3600	RPM	402	432	466	506	549	592			
		BHP	0.54	0.59	0.66	0.74	0.84	0.95			
3/4	3900	RPM	435	463	493	528	567	607	646		
		BHP	0.68	0.74	0.81	0.89	0.99	1.10	1.22		
	4200	RPM	469	494	522	553	587	624	661	732	
		BHP	0.85	0.91	0.99	1.07	1.16	1.28	1.40	1.66	
1	4500	RPM	502	526	551	579	609	642	677	746	
		BHP	1.04	1.12	1.19	1.27	1.36	1.47	1.60	1.88	
1 1/2	4800	RPM	536	558	581	606	634	664	695	761	823
		BHP	1.27	1.34	1.42	1.50	1.60	1.71	1.83	2.12	2.41
	5100	RPM	569	590	611	635	660	687	715	777	837
		BHP	1.52	1.60	1.68	1.90	1.87	1.97	2.08	2.38	2.69
2	5400	RPM	603	622	642	664	687	711	738	794	852
		BHP	1.81	1.89	1.97	2.07	2.16	2.26	2.39	2.67	2.99
	5700	RPM	636	654	684	694	715	737	761	813	
		BHP	2.12	2.21	2.42	2.40	2.50	2.60	2.71	2.99	
3	6000	RPM	670	687	705	724	744	764	787	834	
		BHP	2.48	2.57	2.66	2.76	2.87	2.97	3.10	3.36	
	6300	RPM	703	719	736	754	773	792			
		BHP	2.87	2.96	3.05	3.16	3.27	3.38			
	6600	RPM	736	752							
		BHP	3.29	3.39							

Performance shown is for installation type B: Free inlet, ducted outlet. Performance ratings include the effects of filters in the airstream.

Power rating (BHP) does not include transmission losses. Bearing losses are included.

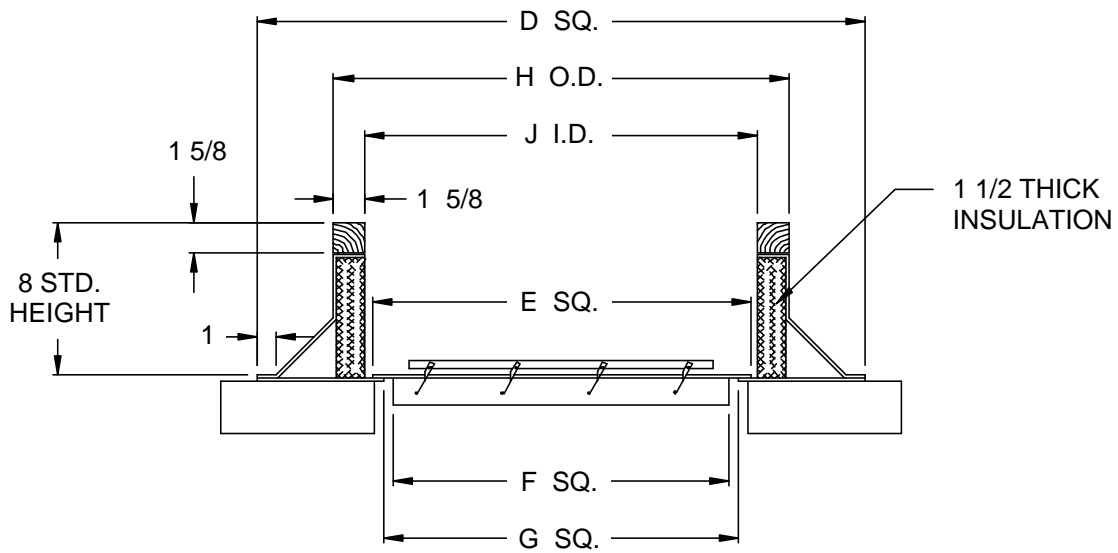
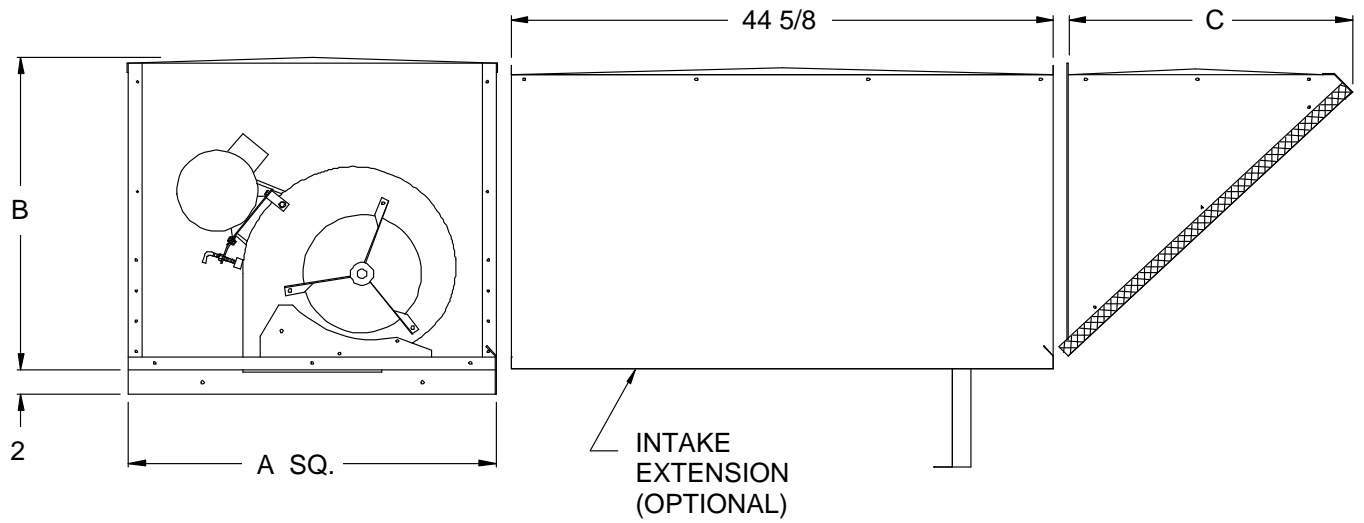
# SIS 18 Performance Data

HP	CFM		Static Pressure									
			0.00	.125	.250	.375	.500	.625	.750	1.00	1.25	1.50
1/3	2800	RPM		313	378	436	485					
		BHP		0.23	0.32	0.42	0.53					
	3200	RPM		341	396	453	501	545	585			
		BHP		0.32	0.41	0.52	0.64	0.76	0.88			
	3600	RPM	304	370	420	470	519	562	601			
		BHP	0.31	0.43	0.54	0.65	0.77	0.91	1.04			
1/2	4000	RPM	338	400	446	490	536	579	618	687	751	
		BHP	0.43	0.57	0.68	0.80	0.93	1.07	1.22	1.51	1.82	
3/4	4400	RPM	372	431	473	513	554	596	635	704	766	823
		BHP	0.58	0.74	0.85	0.97	1.11	1.26	1.41	1.73	2.07	2.40
	4800	RPM	406	462	502	539	576	614	652	721	782	838
		BHP	0.75	0.94	1.06	1.18	1.33	1.48	1.64	1.98	2.34	2.70
1	5200	RPM	439	493	532	566	600	634	670	738	799	854
		BHP	0.94	1.17	1.30	1.43	1.58	1.73	1.90	2.25	2.64	3.02
1 1/2	5600	RPM	473	524	562	595	626	657	689	755	816	871
		BHP	1.18	1.42	1.58	1.72	1.86	2.24	2.19	2.56	2.96	3.37
	6000	RPM	507	556	592	624	654	683	712	773	833	888
		BHP	1.45	1.73	1.90	2.05	2.20	2.37	2.54	2.92	3.32	3.75
2	6400	RPM	541	587	623	654	682	710	737	792	850	
		BHP	1.77	2.06	2.26	2.43	2.58	2.75	2.93	3.30	3.73	
	6800	RPM	574	619	654	684	711	737	763	814	868	
		BHP	2.11	2.44	2.66	2.84	3.00	3.17	3.36	3.75	4.17	
3	7200	RPM	608	651	685	714	740	766	790	839	888	
		BHP	2.51	2.86	3.11	3.31	3.47	3.66	3.84	4.26	4.68	
	7600	RPM	642	683	716	744	770	795	818	864		
		BHP	2.95	3.32	3.60	3.81	4.00	4.20	4.38	4.79		
	8000	RPM	676	715	747	775	800	824	847			
		BHP	3.45	3.84	4.13	4.38	4.58	4.78	4.98			
5	8400	RPM	710	747	779	806	831	854	876			
		BHP	3.99	4.40	4.74	5.00	5.23	5.44	5.64			
	8800	RPM	743	780	810	837						
		BHP	4.58	5.03	5.37	5.67						
	9200	RPM	777	812								
		BHP	5.24	5.70								

Performance shown is for installation type B: Free inlet, ducted outlet. Performance ratings include the effects of filters in the airstream.

Power rating (BHP) does not include transmission losses. Bearing losses are included.

# SIS and Roof Curb Dimensions



Unit Size	Ventilator Dim.			Roof Curb and Damper Dimensions						Filters	
	A	B	C	D	E	F	G	H	J	Qty	Size
9, 10	30	25 1/2	23 3/8	36 1/2	24 1/2	22	23 1/4	28 1/2	25 1/4	2	16 X 25
12	30	25 1/2	33 3/4	36 1/2	24 1/2	22	23 1/4	28 1/2	25 1/4	2	20 X 25
15, 18	42	29 1/2	42 3/4	48 1/2	36 1/2	34	35 1/4	40 1/2	37 1/4	4	20 X 25

Dimensions in inches

## Installation

Most models are shipped fully assembled and ready for installation. Always inspect equipment for transit damage before accepting delivery to assure valid claim. Special handling and storing procedures are required if unit is to remain idle for an extended period of time before installation.

**Placement:** All units must be accessibly installed for maintenance and servicing of belts and bearings, and for routine cleaning.

**Mounting:** Satisfactory operation of ventilators requires mounting on adequately designed and constructed roof curbs. Pre-fabricated curbs for convenience in installation are available from ILG. Install with base of unit horizontal. Provide adequate caulking, flashing or other weatherproofing means. Duct connections are made below unit.

### Inspection:

**Check centrifugal wheel** for free rotation.

**Check belt** for proper tension.

**Check motor and fan sheave faces** for proper alignment.

**Check circuit phase, voltage and wiring connection** against that shown on motor nameplate.

**Check direction of fan rotation** for proper air flow.


**After one week of operation, check belt** for proper tension.

## Maintenance

Units should be checked and cleaned monthly for the first two or three months, and periodically thereafter.

**Regular Inspection:** Units should be cleaned of material build-up every three months or when necessary, depending on condition of air and frequency of use. Any eroded parts should be replaced to avoid structural damage and possible failure.

**Belt Adjustment:** Belt alignment and tension should be adjusted if necessary. Inspection every 6 to 12 months is recommended.

<b>WARNING</b>	<b>CAUTION</b>
	
<p><b>DO NOT</b> INSTALL FAN WITH MOVING PARTS WITHIN 8 FEET OF FLOOR OR GRADE LEVEL WITHOUT A GUARD THAT COMPLIES WITH OSHA REGULATIONS. <b>DO NOT</b> USE UNLESS ELECTRICAL WIRING COMPLIES WITH ALL APPLICABLE CODES. <b>DO NOT</b> WIRE WITHOUT PROVIDING FOR A POWER SOURCE DISCONNECT AT THE FAN ITSELF. <b>DO NOT</b> SERVICE EXCEPT BY A QUALIFIED MAINTENANCE TECHNICIAN AND ONLY AFTER DISCONNECTING THE POWER SOURCE. FAILURE TO OBSERVE THESE PRECAUTIONS CAN RESULT IN SERIOUS INJURY OR DEATH.</p>	



**AMERICAN COOLAIR CORPORATION**

## Options and Accessories

### Pre-fabricated Roof Curbs

Insulated roof curbs with weather-proof continuous welded construction are available for both insulated and non-insulated roof decks.

### Special Motors

Two-speed, totally enclosed, energy efficient and explosion-proof motors for hazardous locations may be available for many models. Motor requirements may affect UL Listing.

### Backdraft Dampers

Gravity or motor operated backdraft dampers are available. They are aluminum construction and designed for installation in prefabricated roof curbs.

### Safety Disconnects

Safety disconnects cut power to motor for servicing of unit. A disconnect switch is an option for CFS and SIS units and may be shipped loose for field installation or factory mounted and wired.

### Protective Coatings

Fan units are not recommended for ventilating air of a corrosive nature. However, special protective coatings are available where units may be exposed to corrosive exterior conditions. Parts requiring painting are processed through the American Coolair five-stage pretreatment system prior to the application of any coatings to insure maximum finish adhesion. These parts use a thermosetting epoxy powder paint with an average thickness of 3 mils and baked at 400° F to a smooth, hard continuous finish. Consult your ILG Industries representative for available coatings.

## Limited Warranty

In the sale of its products, American Coolair Corporation agrees to correct, by repairs or replacement, any defects in workmanship or material that may develop under proper and normal use during the period of one year from the date of shipment from the factory. Any product or part proving, upon American Coolair's examination, to be defective during limited warranty period will be repaired or replaced, at American Coolair's option, f.o.b. factory, without charge.

Deterioration or wear caused by chemicals, abrasive action or excessive heat shall not constitute defects.

Motors are guaranteed only to the extent of the manufacturer's warranty.

American Coolair's limited warranty does not apply to any of its products or parts that have been subject to accidental damage, misuse by the user, unauthorized alterations, improper installation or electrical wiring, or lack of proper lubrication or other service requirements as established by American Coolair.

Repairs or replacements provided under the above terms shall constitute fulfillment of all American Coolair's obligations with respect to limited warranty.

THE LIMITED WARRANTY STATED HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, STATUTORY OR IMPLIED, INCLUDING WITHOUT LIMITATION THAT OF MERCHANTABILITY AND FITNESS.

NO LIABILITY FOR REINSTALLATION COST OR FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY NATURE IS ASSUMED OR SHALL BE IMPOSED UPON AMERICAN COOLAIR.

REPRESENTED BY: