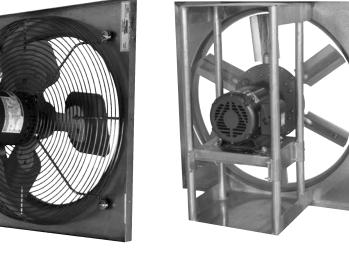
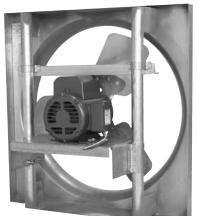


GED/GSD, DFE/DFS, DDE/DDS Sidewall Propeller Fans

Direct Drive Exhaust & Supply

Catalog DD01-July 2007





The World's Leading Producer of Air Movement Products



(St) Models GED/GSD, DFE/DFS & DDE/DDS Direct Drive Sidewall Propeller Fans

Applications

Soler & Palau USA direct driven sidewall propeller fans feature maximum efficiency, low maintenance and durable, economical designs. They are available in both exhaust (E) and supply (S) configurations to provide general ventilation for a wide variety of buildings and enclosed areas within buildings. Examples include factories, assembly plants, warehouses, gymnasiums, garages, jails, machine rooms and many others.

Models GED & GSD are available in 10 to 20 inch propeller sizes rated from 300 to 3,500 CFM and to 3/4" static pressure. They feature extremely quiet operation and an integral motorside guard as standard. Both single speed and variable speed motors are offered.

Models DFE & DFS are available in 10 to 30 inch propeller sizes rated from 500 to over 12,000 CFM and to 1" static pressure. These accept standard NEMA frame sizes for full range motor options.

Models DDE & DDS are available in 24 to 60 inch propeller sizes rated from 3,500 to over 55,000 CFM and to $I^{"}$ static pressure. They are the heaviest duty direct drive fans for larger airflow requirements.

Construction/Specification Checklist Models GED (Exhaust) & GSD (Supply)

Panel Assembly

- Galvanized steel, 16 or 18 gauge, G-90.
- One piece spun venturi for maximum efficiency.
- Prepunched mounting holes for easy installation.
- Formed flanges for added rigidity.
- Integral OSHA approved motorside guard.

Propeller

- Fabricated aluminum blades, precision pitch.
- Mounted directly on motor shaft for maximum efficiency.
- Separate exhaust and supply designs.
- Statically and dynamically balanced.

Motors

- Nationally recognized brands, locally serviced.
- Sealed ball bearings on larger fractionals.
- Sleeve bearings on smaller fractionals.
- Open drip-proof motor enclosures.

Entire Fan Unit

- Suitable for all-angle installation.
- Completely assembled and factory tested prior to shipment.

Construction/Specification Checklist Models DFE (Exhaust) & DFS (Supply)

Panel Assembly

- Galvanized steel, 16 or 18 gauge, G-90.
- Precision spun orifice for maximum performance.
- Prepunched mounting holes.
- Welded schedule 40 galvanized steel pipe support structure.

Propeller

- Precision pitched fabricated aluminum blades.
- · Mounted directly on shaft for maximum efficiency.
- Cast aluminum and nonmetallic blade options on select sizes.
- Statically and dynamically balanced.

Motors

- Nationally recognized brands, locally serviced.
- Permanently lubricated sealed ball bearing type.
- Open drip-proof, totally enclosed and explosion proof options.
- Available 2 speed units in select models.

Entire Fan Unit

- Suitable for all-angle installation.
- Completely assembled and factory tested prior to shipment.

Construction/Specification Checklist Models DDE (Exhaust) & DDS (Supply)

Panel Assembly

- Galvanized steel, 14 gauge, G-90, sizes 54 60.
- Galvanized steel, 16 gauge, G-90, sizes 24 48.
- Precision spun orifice for smooth performance.
- Prepunched mounting holes for convenient installation.
- Welded schedule 40 galvanized steel pipe support structure.

Propeller

- Aluminum airfoil blades, extruded or cast.
- Mounted directly on motor shaft for maximum efficiency.
- Steel hub plate with taper lock bushing as standard.
- Statically balanced.

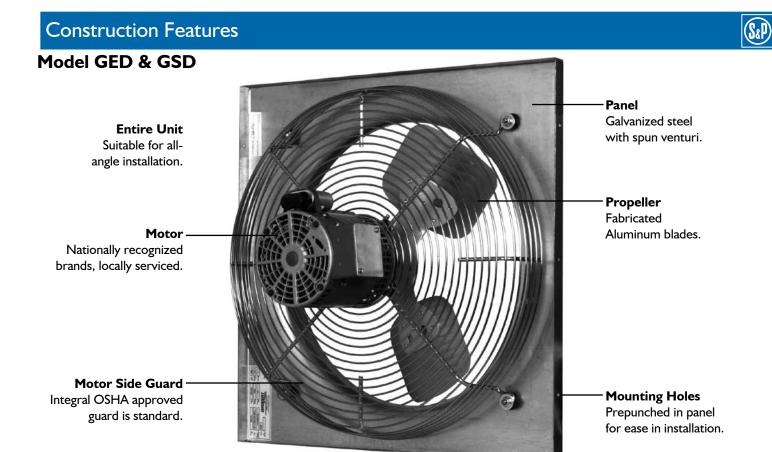
Motors

- Nationally recognized brands, locally serviced.
- · Sealed ball bearings on larger fractionals.
- I/3 hp motor is the smallest available for the DDE/DDS.
- Open drip-proof, totally enclosed and explosion proof options.
- Available 2 speed units in select formats.

Entire Fan Unit

- Suitable for all-angle installation.
- Completely assembled and factory tested prior to shipment.

All specifications are subject to change without notice unless approved in submittal by Soler & Palau USA.



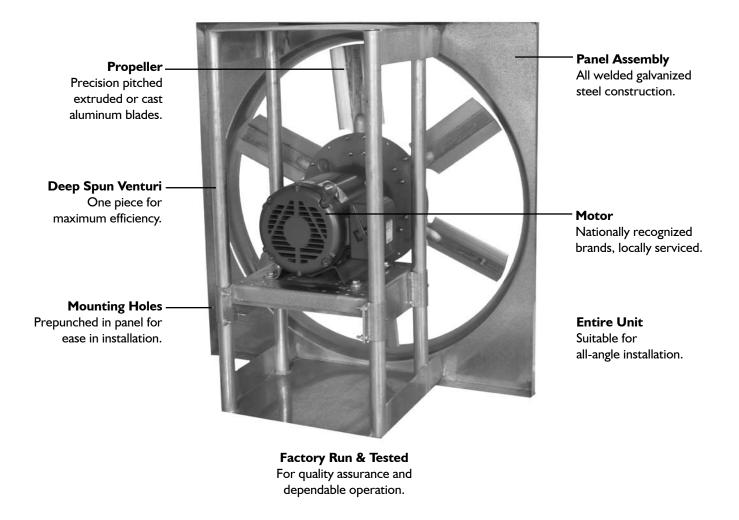
cULus Listed - Standard 705 (optional)

Model DFE & DFS

Entire Unit Suitable for all-angle installation. Motor Nationally recognized brands, locally serviced. Mounting Holes Prepunched in panel for ease in installation.

3

Model DDE & DDS

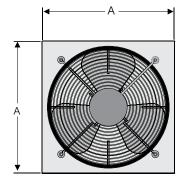


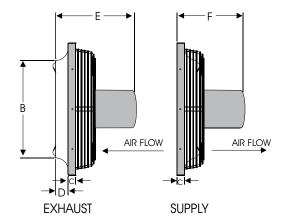
SOLER & PALAU USA LIMITED WARRANTY

Soler & Palau USA (manufacturer), 6393 Powers Avenue, Jacksonville, Florida 32217, warrants the GED/GSD, DFE/DFS, DDE/DDS to be free from defects in design, materials and workmanship (exclusive of abrasion, corrosion or erosion) for five (5) years from the date of shipment to the original purchaser or the date of notification of readiness to ship. Motor warranty is one (1) year. In order to claim the benefit of this warranty, buyer must notify manufacturer in writing of the claimed defect within ten (10) days after discovering it and return this equipment or parts to the factory with transportation prepaid. In the event of on-site repair, no service technician will be dispatched until manufacturer receives your written purchase order. If any of the following conditions exist, the warranty will be null and void: (1) Buyer has permitted other persons not approved or authorized by manufacturer to alter, adjust, replace or repair the equipment or any part there of. (2) Buyer has not followed instructions or other directions given in the contract documents or our maintenance manual. (3) When breakage or other loss or damage is the result of any negligence, misuse or fault on the part of any operator or other person not under our supervision or control. (4) The defect is the result of designs or drawings made, furnished or specified by others. (5) In the case of goods not manufactured but supplied by the manufacturer as part of a contract, manufacturer shall only be liable to the same extent that our supplier is to manufacturer, not to exceed any liability manufacturer would have for warranty on our own equipment. (6) Buyer has not paid in full any invoices submitted to buyer which are due for payment. (7) Unusual wear and tear of the equipment. Statements relating to the product, its use or installation made prior to the execution of the agreement, are not warranties except to the extent that the contrary is expressly set forth herein. It is understood that such statements were not intended to, and did not, form a part of the agreement; they were merely made in the course of negotiations of the parties. This warranty is in LIEU OF ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. OUR SOLE AND EXCLUSIVE OBLIGATION UNDER THIS WARRANTY IS TO REPAIR OR REPLACE DEFECTIVE EQUIPMENT OR PARTS OR, AT OUR OPTION, TO PAY THE REASONABLE COST OF REPAIR OR REPLACEMENT. BUYER AGREES THAT NO OTHER REMEDY (INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES, DAMAGES FOR LOST PROFITS OR SALES, OR DAMAGES FOR INJURIES TO PERSON OR PROPERTY) SHALL BE AVAILABLE. NOTWITHSTANDING THE ABOVE, THE TOTAL AMOUNT THAT MAY IN ANY EVENT BE PAYABLE IN SETTLEMENT OF LIABILITY, HOWEVER INCURRED, SHALL NOT EXCEED THE CONTRACT PRICE.

Sidewall Propeller Fan Dimensional/Performance Data

Model GED (Exhaust) & GSD (Supply)





REAR VIEW

GED/GSD			Dimen	sions (in.)			Avg.
Size	A	В	С	D	E*	F*	Ship Wt. (lbs.)
10	16	10-1/2	I	2	11	9	30
12	16	12-1/2	I	2	14	12	30
14	20	14-1/2	I	2	14	12	34
16	20	16-1/2	I	2	14	12	37
18	24	18-1/2	I	2	15	13	45
20	24	20-1/2	I	2	15	13	50

- A. Outside dimension of square panel.
- B. Diameter of venturi.
- C. Width of flange, I" for all models.
- D. Depth of venturi, 2" for all models.
- E. Depth of fan (exhaust).
- F. Depth of fan (supply).
- * Varies with motor selection.



Model	Mo	tor	Sones @		С	FM / BHP	@ Static I	Pressure (l	nches W.G	i.)	
GED/ GSD	HP	RPM	0" SP	0	1/10	I/8	I/4	3/8	I/2	5/8	3/4
10	1/10	1550	7.8	718/.04	611/.04	561/.04	391/.06	336/.07	290/.08	245/.10	197/.11
12	1/10	1550	12.9	1362/.09	1263/.10	1236/.10	990/.11	743/.13	628/.15	-	-
12	1/4	1625	11.9	1489/.17	1410/.18	1386/.18	1228/.19	966/.20	794/.22	720/.25	660/.27
14	I/4	1625	13.1	1967/.20	1862/.22	1837/.23	1704/.24	1431/.26	1142/.29	-	-
14	I/2	1625	17.1	2533/.36	2410/.38	2376/.38	2160/.40	1866/.41	1509/.42	1414/.46	1299/.50
16	I/4	1075	9.5	2467/.20	2245/.21	2159/.22	1734/.23	1347/.26	1102/.29	-	-
10	I/3	1625	15.8	2634/.27	2516/.29	2482/.29	2287/.32	2050/.34	1719/.36	1477/.39	-
	I/4	1075	10.7	3003/.20	2732/.21	2658/.21	2196/.23	1474/.24	1186/.26	929/.28	-
18	I/4	1625	15.7	3091/.24	2930/.26	2886/.27	2653/.29	2388/.31	2097/.33	1535/.35	1282/.37
	I/2	1625	16.0	3816/.40	3640/.43	3593/.44	3352/.47	3098/.50	2803/.52	2371/.54	1872/.55
20	I/4	1075	12.2	3575/.21	3264/.23	3177/.24	2715/.26	1765/.27	-	-	-
20	I/2	1625	4.	3460/.23	3285/.27	3242/.27	3006/.31	2727/.35	2362/.39	1945/.45	1676/.53

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

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

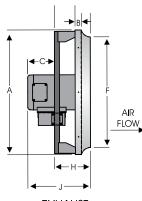
Motors designed for use with optional solid state speed controller.

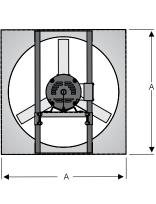
cULus available on most models (optional).

Supply performance is obtained by reversing the direction of the venturi.

Sap

Model DFE (Exhaust) / DFS (Supply)





EXHAUST

SUPPLY

DFE/DFS					Din	nensions ((in.)					Avg. Ship	
Size	Α	В	C *	D	E *	F	G	Н	I	J*	К	Wt. (lbs.)	
10	16	I	6	6	Ш	10-1/2	2	8	5	14	7	30	
12	16	I	6	6	Ш	12-1/2	2	8	5	14	7	30	
16	20	I	6	6	12	16-1/2	2	8	5	14	7	37	
18	24	I	6	6	12	18-1/2	2	8	5	14	7	45	
20	24	I	7	6	12	20-1/2	2	8	5	15	7	50	
24	30	2	10	9	21	25	3	10	4	20	Ш	70	
30	36	2	10	9	21	31	3	10	4	20	11	100	

A. Outside dimension of square panel.

B. Width of flange.

C. Depth of motor beyond support structure.*

D. Depth of support structure - supply.

E. Depth of fan - supply. *

F. Diameter of venturi.

G. Depth of venturi.

 $\ensuremath{\textbf{H}}.$ Depth of panel and support structure - exhaust.

I. Depth of support structure - exhaust.

J. Depth of fan - exhaust.*

K. Depth of panel and support structure - supply.

* Varies with motor selection

Model			Sones			CFM	/ BHP @ Sta	atic Pressure	(Inches W.	G.)		
DFE/ DFS	HP	RPM	@ 0" SP	0	1/10	I/8	1/4	3/8	I/2	5/8	3/4	I.
10	I/4	1750	8.4	617/.04	532/.04	503/.04	307/.06	181/.06	37/.07	-	-	-
10	2S	1160	5.5	409/.01	221/.02	178/.02	-	-	-	-	-	-
12	I/4	1750	16.7	1306/.09	1199/.12	1169/.12	992/.12	734/.12	576/.14	488/.14	412/.13	275/.14
12	2S	1160	12.8	866/.03	682/.04	613/.04	347/.04	235/.04	132/.05	-	-	-
16	1/3	1750	18.8	2439/.26	2309/.27	2274/.27	2208/.18	1872/.34	1633/.36	1350/.38	1152/.42	876/.43
10	2S	1160	11.7	1617/.08	1404/.09	1342/.09	974/.10	683/.12	491/.14	307/.15	132/.16	-
10	3/4	1750	20	4174/.52	4021/.59	3982/.60	3781/.64	3564/.65	3321/.72	3029/.72	2468/.76	1977/.83
18	2S	1160	10.9	2767/.15	2531/.19	2468/.19	2102/.21	1504/.22	1085/.27	626/.28	264/.30	-
	1/3	1750	19.4	3649/.31	3455/.34	3409/.34	3177/.41	2635/.44	2634/.44	2635/.44	2344/.49	-
	2S	1160	10.1	2418/.09	2134/.12	2063/.12	1639/.14	1153/.16	787/.17	509/.19	-	-
20	I	1725	24	6008/.94	5788/1.01	5731/1.02	5431/1.06	5101/1.06	4734/1.13	4315/1.13	3835/1.17	2512/1.26
20	/2	1725	40	6605/1.44	6383/1.44	6339/1.44	6061/1.44	5711/1.45	5279/1.36	4738/1.36	3885/1.26	2756/1.30
	1/2	1750	14.7	4131/.31	3961/.37	3920/.38	3705/.45	3387/.50	3063/.59	2669/.68	2314/.68	-
	2S	1160	7.7	2738/.09	2488/.13	2403/.13	1898/.17	1400/.21	-	-	-	-
	I/2	1750	18.4	5137/.37	4938/.43	4885/.45	4596/.53	4268/.63	3917/.67	3514/.76	2959/.92	2172/1.06
	2S	1160	9.6	3405/.11	3083/.15	2989/.16	2459/.21	1700/.27	1196/.32	-	-	-
24	Ι	1725	32	6655/.76	6416/.87	6354/.87	6033/.95	5681/.96	5278/.99	4775/.99	4118/1.02	2407/1.14
24	3/4	1140	37	6684/.62	6252/.70	6140/.71	5525/.72	4686/.74	3221/.79	2031/.85	1287/.91	98/1.07
	Ι	1160	17.4	7464/.92	7015/.97	6898/.99	6267/1.01	5473/1.02	4052/1.08	2676/1.15	1820/1.19	-
	/2	1725	32	8897/1.48	8644/1.60	8579/1.62	8239/1.71	7870/1.74	7467/1.74	7020/1.80	6510/1.80	4703/1.80
	I/2	1140	20	8427/.59	7520/.63	7288/.63	5939/.63	4108/.61	1455/.55	-	-	-
20	I	1140	27	10635/1.15	9468/1.12	9328/1.12	8205/1.12	6718/1.13	4175/1.10	1397/1.20	-	-
30	/2	1725	44	11570/1.68	11083/1.68	10956/1.68	10200/1.75	9323/1.74	8504/1.81	7625/1.74	6594/1.72	3905/1.67
	2	1725	48	12415/1.89	878/ .99	11723/2.01	10879/2.01	10141/2.01	9172/2.01	8172/2.01	7185/1.89	4705/1.84

Performance shown is for wall ventilators for installation type A: Free inlet, Free outlet. The power rating (BHP) does not include

drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

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

Available motor RPM's may vary from table.

Supply performance is obtained by reversing the direction of the venturi.



Model DDE (Exhaust) / DDS (Supply)

Model	MO	TOR	Sones			CF	M / BHP @ S	tatic Pressure	e (INCHES W	.G.)		
DDE/	HP	RPM	@ 0"	0	1/10	I/8	I/4	3/8	I/2	5/8	3/4	I.
DDS	1/3	1160	SP 17.8	5600/.37	4960/.37	4800/.37	3600/.37					
	1/3	1160	22	6600/.60	6200/.60	6100/.60	5400/.60	4300/.60	-	_	-	-
	3/4	1160	20	7800/.82	7240/.82	7100/.82	6300/.82	5400/.82	-	-	-	-
	1	1160	21	8700/1.09	8140/1.09	8000/1.09	7300/1.09	6300/1.09	4900/1.09	-	-	-
	1/2	1750	27	5900/.55	5420/.55	5300/.55	4700/.55	3900/.55	3000/.55	-	-	-
24	3/4	1750	28	7000/.81	6600/.81	6500/.81	5900/.81	5300/.81	4400/.81	3500/.81	-	-
	I	1750	32	8000/1.15	7600/1.15	7500/1.15	7000/1.15	6300/1.15	5500/1.15	4700/1.15	3700/1.15	-
	/2	1750	35	9000/1.66	8760/1.66	8700/1.66	8300/1.66	7900/1.66	7400/1.66	6900/1.66	6200/1.66	-
	2	1750	35	10500/2.25	10180/2.25	10100/2.25	9600/2.25	9100/2.25	8600/2.25	8100/2.25	7400/2.25	5900/2.25
	3	1750	37	12500/3.30	12100/3.30	12000/3.30	11500/3.30	11100/3.30	10500/3.30	10000/3.30	9300/3.30	7900/3.30
	Ι	870	19.9	11700/1.12	10700/1.12	10450/1.12	8900/1.12	6300/1.12	-	-	-	-
	/2	870	24	14300/1.65	13300/1.65	13050/1.65	11400/1.65	8850/1.65	5550/1.65	-	-	-
	3/4	1160	25	9900/.84	9020/.84	8800/.84	7500/.84	5700/.84	-	-	-	-
	I	1160	28	10600/1.16	10340/1.16	10054/1.16	9900/1.16	9478/1.16	9000/1.16	7900/1.16	6500/1.16	-
30	/2	1160	28	12800/1.67	12080/1.67	11900/1.67	10900/1.67	9800/1.67	8400/1.67	6700/1.67	-	-
	2	1160	29	14400/2.28	13680/2.28	13500/2.28	12400/2.28	11300/2.28	9800/2.28	7800/2.28	6000/2.28	-
	3	1160	36	17300/3.37	16660/3.37	16500/3.37	15600/3.37	14700/3.37	13000/3.37	11200/3.37	8600/3.37	-
	2	1750	44	13800/2.27	13160/2.27	13000/2.27	12200/2.27	11300/2.27	10400/2.27	-	-	-
	3	1750	55	14200/3.38	13800/3.38	13700/3.38	13200/3.38	12700/3.38	12100/3.38	11500/3.38	10700/3.38	9300/3.38
	1 1/2	870 870	25 26	13000/1.14	12040/1.14 15180/1.70	11800/1.14 14900/1.70	10200/1.14 13200/1.70	8200/1.14 11000/1.70	6000/1.14	-	-	-
	2	870	20	18500/1.70	17140/2.23	14900/1.70	15000/2.23	12900/2.23	7900/1.70 9600/2.23	-	-	-
	3	870	32	21100/3.36	20060/3.36	19800/3.36	18100/3.36	12700/2.23	12800/3.36	9600/3.36	8100/3.36	-
	3/4	1160	30	11500/.85	10220/.85	9900/.85	8100/.85	6200/.85	-	-	-	-
	 	1160	31	13500/1.18	12460/1.18	12200/1.18	10700/1.18	8800/1.18	6500/1.18	-	_	-
	1 1/2	1160	33	15900/1.73	14780/1.73	14500/1.73	13000/1.73	11300/1.73	9200/1.73	-	_	_
36	2	1160	39	15700/2.25	14980/2.25	14800/2.25	13800/2.25	12800/2.25	11600/2.25	10200/2.25	8500/2.25	-
	3	1160	40	20700/3.39	19900/3.39	19700/3.39	18600/3.39	17300/3.39	15900/3.39	14300/3.39	12300/3.39	-
	5	1160	42	25100/5.49	24200/5.49	24000/5.49	22900/5.49	21700/5.49	20300/5.49	18700/5.49	16700/5.49	-
	7 1/2	1160	53	30500/8.15	29540/8.15	29300/8.15	28100/8.15	26700/8.15	25200/8.15	23400/8.15	21400/8.15	15500/8.15
	3	1750	58	18000/3.28	17200/3.28	17000/3.28	16000/3.28	15000/3.28	13900/3.28	12800/3.28	11600/3.28	9100/3.28
	5	1750	81	18600/5.42	18280/5.42	18200/5.42	17800/5.42	17300/5.42	16800/5.42	16200/5.42	15700/5.42	14500/5.42
	7 1/2	1750	75	27000/8.25	26360/8.25	26200/8.25	25400/8.25	24600/8.25	23600/8.25	22500/8.25	21500/8.25	19200/8.25
	/2	870	36	17500/1.72	16140/1.72	15800/1.72	14100/1.72	12000/1.72	9500/1.72	7500/1.72	-	-
	2	870	36	19800/2.22	18520/2.22	18200/2.22	16200/2.22	14000/2.22	11000/2.22	8800/2.22	7200/2.22	-
	3	870	36	24500/3.26	22980/3.26	22600/3.26	20600/3.26	18000/3.26	14800/3.26	11200/3.26	9200/3.26	-
	5	870	40	31300/5.53	29780/5.53	29400/5.53	27300/5.53	24800/5.53	21800/5.53	17000/5.53	13200/5.53	-
42	3	1160	60	20500/3.30	19700/3.30	19500/3.30	18500/3.30	17300/3.30	15900/3.30	14400/3.30	13000/3.30	9700/3.30
	5	1160	61	28000/5.45	27200/5.45	27000/5.45	25800/5.45	24500/5.45	22800/5.45	20900/5.45	18900/5.45	13700/5.45
	7 I/2 5	1160	62 89	34500/8.26 26000/5.41	33540/8.26	33300/8.26	32000/8.26 23500/5.41	30600/8.26	28800/8.26	26800/8.26	24700/8.26	19400/8.26
	5 7 I/2	1750	89 94	32500/8.25	24960/5.41 31700/8.25	24700/5.41 31500/8.25	30300/8.25	22100/5.41 29140/8.25	20700/5.41 27800/8.25	19300/5.41	17900/5.41	-
	1 1/2	870	36	22800/1.68	20560/1.68	20000/1.68	16600/1.68	12100/1.68	-	-	-	-
	2	870	38	25900/2.25	23740/2.25	23200/2.25	19800/2.25	15800/2.25	-	-	-	-
	3	870	48	27000/2.23	25640/3.37	25300/3.37	23400/3.37	21100/3.37	18400/3.37	15200/3.37		_
	5	870	48	36000/5.57	34320/5.57	33900/5.57	31600/5.57	29000/5.57	25800/5.57	21900/5.57	17800/5.57	-
	7 1/2	870	51	42100/8.14	40420/8.14	40000/8.14	37600/8.14	34900/8.14	31800/8.14	28000/8.14	22500/8.14	-
48	10	870	63	46600/11.03	44920/11.03	44500/11.03	42200/11.03	39500/11.03	36100/11.03	32300/11.03	27500/11.03	20500/11.03
	3	1160	59	27000/3.29	25320/3.29	24900/3.29	22600/3.29	19800/3.29	17000/3.29	13800/3.29	11100/3.29	-
	5	1160	64	34700/5.54	33180/5.54	32800/5.54	30700/5.54	28400/5.54	26000/5.54	22900/5.54	19300/5.54	-
	7 1/2	1160	76	40500/8.12	38900/8.12	38500/8.12	36500/8.12	34000/8.12	31500/8.12	28700/8.12	25500/8.12	-
	10	1160	81	43400/10.81	42280/10.81	42000/10.81	40500/10.81	39000/10.81	37200/10.81	35200/10.81	33000/10.81	28000/10.81
	5	1160	75	37300/5.41	35220/5.41	34700/5.41	32000/5.41	29200/5.41	26100/5.41	23000/5.41	19600/5.41	-
54	7 1/2	1160	79	46000/8.21	44320/8.21	43900/8.21	41700/8.21	39200/8.21	36400/8.21	33000/8.21	29500/8.21	-
	10	1160	86	51600/11.00		49500/11.00		44800/11.00			36200/11.00	-
60	7 1/2	870	77	49000/8.25	47000/8.25	46500/8.25	43900/8.25	41100/8.25	37700/8.25	34200/8.25	30500/8.25	22700/8.25
	10	870	77				50500/10.33			39800/10.33		

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

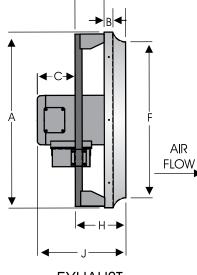
For additional sound data and for selections at other static pressures, please refer to the Optisizer Selection Program.

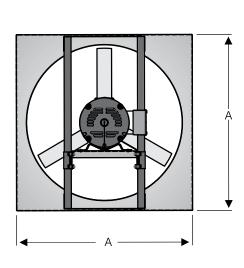
Available motor RPM's may vary from table.

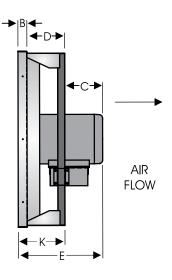
Sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type A: Free inlet fan sone levels.

Supply performance is obtained by reversing the direction of the venturi.

Model DDE & DDS







SUPPLY

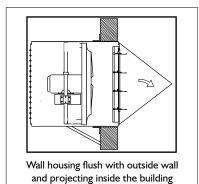
- A. Outside dimension of square panel.
- **B**. Width of flange.
- C. Depth of motor beyond support structure.*
- D. Depth of support structure supply.
- E. Depth of fan supply. *
- F. Diameter of venturi.
- G. Depth of venturi.
- $\ensuremath{\textbf{H}}.$ Depth of panel and support structure exhaust.
- I. Depth of support structure exhaust.
- J. Depth of fan exhaust.*
- ${\bf K}.$ Depth of panel and support structure supply.
- * Varies with motor selection

EXHAUST

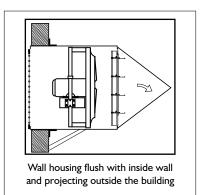
DDE/					Dim	ensions	(in.)				
DDS Size	Α	В	C *	D	E *	F	G	Н		J	К
24	30	2	11	9	21	25	3	9	4	20	11
30	36	2	П	9	21	31	3	9	4	20	- 11
36	42	2	11	9	21	37	3	9	4	20	11
42	48	2	П	9	21	43	3	9	4	20	Ш
48	54	2	12	10	23	49-1/4	4	10	4	22	12
54	60	2	13	11	25	55-1/4	5	11	4	24	13
60	66	2	13	11	25	61-1/4	5	11	4	24	13

TYPICAL MOUNTING ARRANGEMENTS

The most common mounting arrangement (below left) leaves a clean building exterior and allows access to the fan, motor and drives from inside the building. Additional bracing angle, rod or cable (field provided) should be used in addition to the mounting angles to support the fan and wall housing assembly.



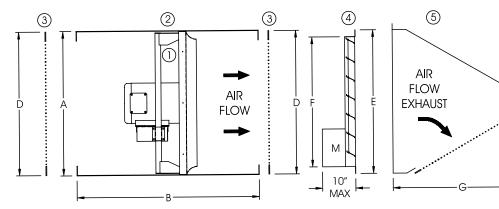
Wall housing centered within wall



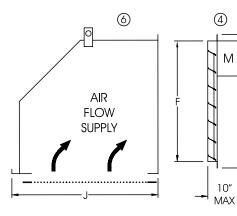
Wall Housing and Optional Accessories

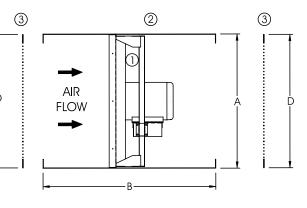


WALL HOUSING: This heavy-gauge, all galvanized G-90 steel (aluminum optional) housing provides a simple solution to installing a fan and all specified accessories in a rough wall opening. It can be used in exhaust or supply applications and maintains the proper clearance between the fan and damper. Depending on space and maintenance requirements, the wall housing may be installed projecting inside or outside of the building. All housings ship assembled with the fan to lessen job site installation costs. Wire motorside guard, damper or propeller side guard and rainhood may be attached to the flange. We strongly recommend a rainhood and motorized shutter for all supply applications and whenever additional weather resistance is desired.



	A (S.Q.)		Wall Hou B Ler		·	Minimum Wall	Flat Guard	Dampe	er	Rainhood Exhaust
Model	0.D.	GED & D	FE Only	DDE/DDS		Opening	3	4		45 Deg. 3
	0	Exhaust	Exhaust Supply Exhaust		Supply	Square	D (SQ.)	E (O.D.) F		G
10/12	17	26	26	N/A	N/A	17 1/2	16	14 1/2	12	16 1/4
14/16	21	26	26	N/A	N/A	21 1/2	20	18 1/2	16	20 1/4
18/20	25	26	26	N/A	N/A	25 1/2	24	22 1/2	20	24 1/4
24	31	32	32	32	44	31 1/2	30	28 1/2	26	28 1/2
30	37	32	32	32	44	37 1/2	36	34 1/2	32	34 1/2
36	43	N/A	N/A	44	44	43 1/2	42	40 1/2	38	40 1/2
42	49	N/A	N/A	44	44	49 1/2	48	46 1/2	44	46 1/2
48	55	N/A	N/A	44	44	55 1/2	54	52 1/2	50	49 1/2
54	61	N/A	N/A	44	44	61 1/2	60	58 I/2	56	58 1/2
60	67	N/A	N/A	44	44	67 1/2	66	64 1/2	62	64 1/2

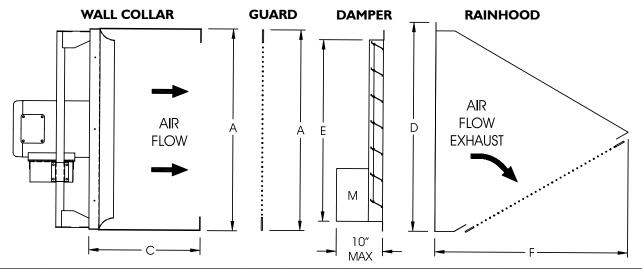




90 Deg. Supply Rainhood - Sizes 20 Thru 60

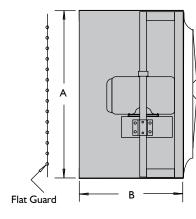
Model	Width	Height	J	Gauge	Degree
20	22	22	27 3/4	18	90
24	27 1/4	26 1/2	38 1/2	18	90
30	32 1/2	33 1/2	44 1/2	18	90
36	38 1/2	39 1/4	49	18	90
42	44 1/2	45 I/4	56 1/2	18	90
48	50 1/2	51 1/2	62 1/2	18	90
54	56 3/4	57	73	18	90
60	62 3/4	63	73	18	90

WALL COLLAR: This heavy-gauge, all G-90 galvanized (aluminum optional) mounting collar provides a simple solution to installing a fan in a rough wall opening when a rear safety guard is **NOT** required. A front wire guard or shutter and rainhood can be attached to the front flanges. The wall collar can be used in exhaust or supply applications for all fan sizes and maintain the proper clearance between the fan and damper. The wall collar is mounted with the fan on the interior side of the building. All collars ship fully assembled with the fan to lessen job site installation costs. We strongly recommend a rainhood and motorized shutter for all supply applications and for additional weather protection.



MODEL GED/GSD DFE/S	мот	ORSIDE GUA	RD SIDES (4)	WALL	COLLAR	MINIMUM WALL FLAT OPENING GUARD DAMPER		RAINHOOD Exhaust 45 Deg.		
DFE/S DDE/S	A	B EXHAUST	B SUPPLY	Α	С	Square	D (SQ.)	E (O.D.)	F	G
10/12	17	15	15	17	16	17 1/2	16	14 1/2	12	16 1/4
14/16	21	15	15	21	16	21 1/2	20	18 1/2	16	20 1/4
18/20	25	15	15	25	16	25 1/2	24	22 1/2	20	24 1/4
24	31	34	34	31	21	31 1/2	30	28 1/2	26	28 1/2
30	37	34	34	37	21	37 1/2	36	34 1/2	32	34 1/2
36	43	34	34	43	21	43 1/2	42	40 1/2	38	40 1/2
42	49	34	34	49	21	49 1/2	48	46 1/2	44	46 1/2
48	55	34	34	55	21	55 I/2	54	52 1/2	50	49 1/2
54	61	34	34	61	21	61 1/2	60	58 1/2	56	58 I/2
60	67	34	34	67	21	67 1/2	66	64 1/2	62	64 1/2

(a) Double post construction.

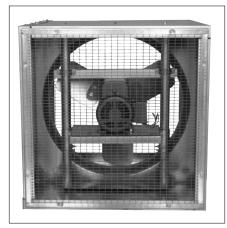


MOTORSIDE GUARD

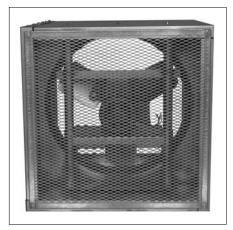
MOTORSIDE GUARD: This heavy-gauge G-90 galvanized steel (aluminum optional) housing is provided with OSHA approved wire guards with $1/2 \times 1$ in. galvanized welded wire. This housing and guard attaches to the fan panel and is suitable for both exhaust and supply applications. It ships pre-assembled to lessen field costs but is available knocked-down. Optional heavy duty OSHA approved guard is constructed of heavy-gauge aluminum expanded metal.

(S&P)

Safety Guards are strongly recommended to protect personnel from accidental injury and to prevent debris from entering the fan. OSHA approved guards are required in many installations including when the fans are within 7 feet of the floor or work/access area.



Standard Duty Flat Wire Guard: The removable safety guard satisfies OSHA requirements when used with the optional wall housing as a motorside (rear) guard. The 16 ga. 1/2" X 1" welded wire mesh is mounted in a galvanized frame and attaches to the inward flanges of the wall housing.



Heavy-Duty Flat Wire Guard: The removable safety guard satisfies OSHA requirements when used with the optional wall housing as a motorside (rear) guard. The H.D. expanded aluminum mesh is mounted in a galvanized frame and attaches to the inward flanges of the wall housing.



Sheet Metal and Wire Motorside Guard: The OSHA approved safety guard consists of galvanized sides (aluminum optional) plus a flat wire guard (standard duty or heavy-duty) factory assembled and attached to motorside (rear) of the fan panel. This guard is <u>not</u> compatible with the wall housing or wall mounting collar.

Electric Damper Operators provide more positive open and closed damper positions which helps increase weather resistance. Power openspring close (POSC) motor and linkage kits are field installed (except for center pivot style) and are available in 120/240 volts (single phase) and require approximately 0.5 amps at 120/1/60 power supply. Transformers are available for voltage reduction. For fan motors 5HP and larger, we recommend a factory tilt switch or "delay-on" timer in the control circuit (by others) to allow the damper to open prior to allowing fan operation, which will protect the damper blades and fan from damage when the fan is first energized.

Electrical Accessories are available to simplify the installation and reduce the total project cost.

Disconnect Switches can be shipped loose or factory mounted and wired (except explosion proof and two speed) in NEMA 1, 3R, 4X, or other enclosures. Two-speed and explosion proof disconnects are available but may be subject to more stringent code requirements. It is the responsibility of the buyer and the installer to comply with all local and national codes.

Speed Controls - SCR type speed controls allow simple adjustment of airflow rate and can be shipped loose or factory mounted and wired. Available only for direct driven fans with single phase motors that are specifically designed for speed control compatibility (GED/GSD only). **Two Speed Switch** - A High/Low selector switch is available for use with two speed single phase motors.

Aluminum Construction is available for most models and typically includes propeller blades, fan panel, motor support (large frame motors may have steel reinforcement) and accessories. When an explosion proof motor is specified, aluminum fan construction must be used for additional spark resistance.

cULus Standard 705 Listing is available for GED & GSD sidewall propeller fans with most motors and should be specified for electrical safety and reliability.

Extended Lube Lines provide convenient access for routine motor bearing lubrication (on limited motors, check with the factory). Lubrication lines are installed from the motor bearings to the exterior of the wall housing or sheet metal motorside guard and are provided with zerk fittings.

Paints and Coatings include protective and corrosion resistant coatings such as air-dry two part epoxy, phenolic (Heresite) and polyester resin, as well as decorative color finishes to match the building (a paint chip is required to match). Please note that our standard construction material specifications are almost exclusively G90 galvanized steel and may not require any additional coating.

Mounting Angles facilitate the installation and a secure attachment of the wall housing or wall collar into the framed wall opening. Galvanized or aluminum angles are available and are pre-cut to the proper length. Additional bracing, mounting hardware, flashing and caulking are typically provided by the installer.

Factory Wiring can simplify job site installation and reduce the overall project cost. Optional services include wiring of motor, disconnect switch, speed control (when suitable), damper actuator, and other custom controls. Please note that some wiring options may not be available in conjunction with the cULus Standard 705 listing option (for example explosion proof, two speed and special motors).





Heavy-Duty Galvanized Exhaust

Motorized Shutter: This damper has a flanged frame and is designed to fit the inside flanges of the optional wall housing or wall mounting collar. The frame and blades are constructed of galvanized steel and are rated to 3000 FPM with proper clearance as provided by all factory accessories. The damper body recesses into the opening for a flush appearance.



Standard Duty Aluminum Exhaust Gravity Shutter: This damper can greatly reduce the infiltration of outside air and although not completely watertight, will provide weather protection in an economical fashion. Constructed with a galvanized frame and aluminum blades this damper is rated to 2000 FPM with the proper clearance as provided by all factory accessories. The damper body is recessed into the opening for a flush appearance.

Heavy-Duty Galvanized Supply

Motorized Shutter: The motorized option improves weather protection by providing a tighter closure seal and is recommended for all supply applications. Heavy-duty dampers are constructed with galvanized frames and blades and are rated to 3000 FPM. The damper body is not recessed providing extra clearance between the fan and damper blades.



Standard Duty Aluminum Supply

Motorized Shutter: The motorized option improves weather protection by providing a tighter closure seal and is recommended for all supply applications. Standard duty dampers are constructed with galvanized frames and aluminum blades and are rated to 2000 FPM. The damper body is not recessed providing extra clearance between the fan and damper blades.



Center Pivot Motorized Damper -

Supply or Exhaust: The flanged frame damper is designed to recess inside the flanges of the optional wall housing or wall mounting collar. The center pivot style damper provides superior weather resistance. Galvanized (optional aluminum) construction is rated to 3500 FPM with proper clearance as provided by all factory accessories.

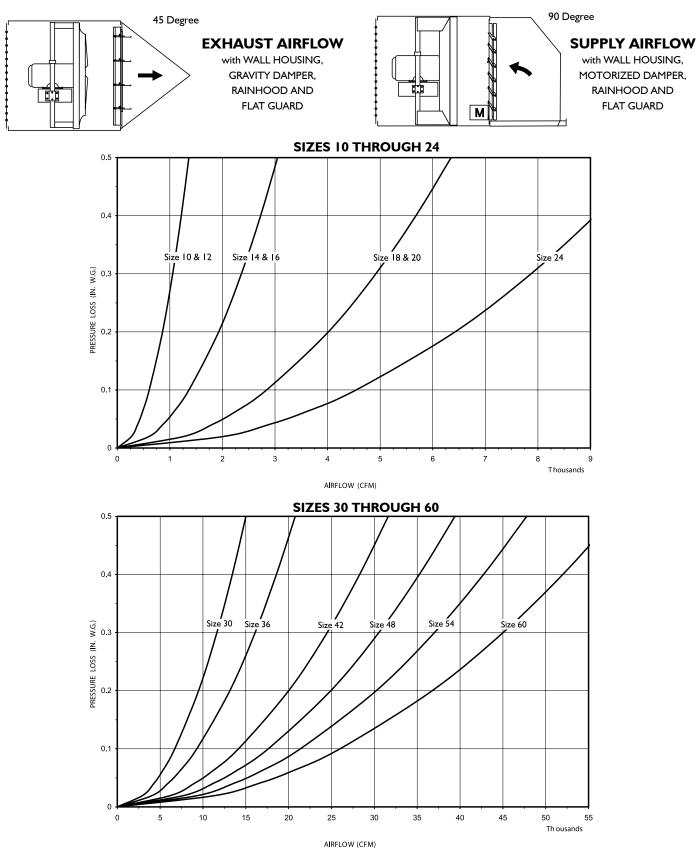


Rainhoods or Weatherhoods: Designed to provide additional weather protection by partially shielding the wall opening and should be used for all supply applications and whenever additional weather resistance is desired. The galvanized (aluminum optional) hood attaches to the wall housing or wall collar flanges. Field flashing and caulking will reduce moisture penetration. Exhaust Style 45 degree shown with optional birdscreen.

Pressure Loss Guide for Accessories

Use the estimated pressure drop graphs to help select the proper exhaust or supply fan that will deliver the desired airflow. Enter the graph from the bottom at the specified CFM and move vertically upward to the fan curve for the desired size, then horizontally to the left and read the estimated static pressure drop resulting from these typical accessory packages. Add the accessory pressure loss to the system (or building) design static pressure loss to obtain the total static pressure loss to be used for the proper fan selection.

(S&P)



Chemical Resistance Chart (S&P)

	1										
		PAI	NT SYS	TEM				PAI	NT SYS	TEM	
REAGENT INVOLVED	NON-COATED 3003 ALLOY ALUMINUM	AIR DRIED ALKYD ENAMEL	BAKED EPOXY	SYNTHETIC RESIN (EISENHEISS)	PHENOLIC (HERESITE)	REAGENT INVOLVED	NON-COATED 3003 ALLOY ALUMINUM	AIR DRIED ALKYD ENAMEL	BAKED EPOXY	SYNTHETIC RESIN (EISENHEISS)	PHENOLIC (HERESITE)
MAXIMUM TEMPERATURE	300°F	200°F	250°F	300°F	140°F	MAXIMUM TEMPERATURE	300°F	200°F	250°F	300°F	140°F
ABRASION (DRY)	U	S	S	F	F	FORMALDEHYDE	F	N	S	N	F
MOISTURE (WATER)	S	S	S	S	S	FORMIC ACID	U	F	N	N	F
SATURATED STEAM	S	S	S	S	U	GASOLINE	F	S	S	S	F
SALT SPRAY	L	L	S	S	F	HYDROBROMIC ACID	L	S	F	N	N
ACETIC ACID	L	S	S	S	F	HYDROCHLORIC ACID	U	S	F	S	F
ACETONE	S	U	S	U	F	HYDROCHLORUS ACID	L	S	F	Ν	N
ALCOHOLS	S	S	S	S	F	HYDROFLUORIC ACID	U	U	F	U	U
ALUMINUM CHLORIDE	U	S	S	S	F	HYDROGEN PEROXIDE	F	S	S	F	U
ALUMINUM SULPHATE	U	S	S	S	F	HYDROGEN SULPHIDE	L	N	S	F	F
AMMONIA GAS	N	S	S	N	N	LACQUER SOLVENTS	S	U	S	N	N
AMMONIUM CHLORIDE	U	S	S	F	F	LACTIC ACID	U	S	L	S	F
AMMONIUM HYDROXIDE	F	S	S	F	U	LINSEED OIL	N	N	S	S	S
AMMONIUM NITRATE	F	N	S	S	L	METHANOL	N	N	F	F	F
AMMONIUM SULPHATE	U	S	S	S	L	METHYL ETHYL KETONE	S	N	S	U	F
BENZENE	S	N	S	U	F	METHYL ISOBUTYL KETONE	S	N	F	U	F
BLEACHING COMPOUNDS	N	F	Ν	N	N	MINERAL SPIRITS	Ν	N	S	F	F
BORIC ACID	U	S	S	S	F	NITRIC ACID	U	S	S	F	U
BROMINE	L	S	F	N	Ν	NITROUS ACID	F	S	S	N	N
BUTANOL	N	Ν	S	S	F	OLEIC ACID	S	S	S	N	N
BUTYRIC ACID	F	Ν	S	N	N	PETROLEUM ETHER	N	N	F	F	F
CALCIUM CARBONATE	S	S	S	N	N	PHOSPHORIC ACID	U	S	S	S	F
CALCIUM CHLORIDE, WET	U	N	Ν	F	F	POTASSIUM ALUM	N	N	N	S	F
CALCIUM CHLORIDE, DRY	U	S	S	S	F	POTASSIUM CYANIDE	L	S	S	N	N
CALCIUM HYDROXIDE	U	S	S	F	F	POTASSIUM HYDROXIDE	U	S	S	F	U
CALCIUM HYPOCHLORITE	U	N	N	S	U	POTASSIUM DICHROMATE	N	N	N	N	F
CARBOLIC ACID	F	U	F	U	F	POTASSIUM NITRATE	Ν	N	S	N	Ν
CARBON DISULPHIDE	S	U	S	U	F	PYROGALLIC ACID	F	N	S	N	N
CARBON MONOXIDE	S	S	S	N	N	SODIUM BISULPHATE	L	N	N	S	F
CARBON TETRACHLORIDE	L	U	S	U	F	SODIUM CHLORIDE	L	N	S	S	F
CARBONIC ACID	F	S	S	S	F	SODIUM CYANIDE	L	S	S	N	N
CHLORINE, WET OR HOT	U	N	F	N	N	SODIUM HYDROXIDE	U	S	S	F	U
CHLORINE, DRY	U	S	S	S	F	SODIUM HYPOCHLORITE	U	N	N	F	U
CHLOROBENZENE	N	N	N	N	F	SODIUM SULPHATE	S	N	N	S	F
CHLOROFORM	F	F	S	N	N	SULPHURIC ACID	U	S	S	F	F
CHROMIC ACID	U	S	F	F	U	SULPHUROUS ACID	L	S	S	S	F
CITRIC ACID	L	S	S	S	F	SULPHUR DIOXIDE	U	s	S	F	F
COPPER SULPHATE	U	N	Ν	S	F	SULPHUR TRIOXIDE	U	L	S	N	N
ETHANOL	N	N	S	S	F	TANNIC ACID	L	S	S	S	S
ETHYL ACETATE	N	N	S	F	F	TOLUENE	S	U	S	U	F
ETHYLENE DICHLORIDE	N	N	F	F	F	TRICHLORETHYLENE	F	N	S	U	F
ETHYLENE GLYCOL	F	N	N	F	F	VINEGAR	L	N	N	S	U
FERRIC CHLORIDE	U	N	N	S	F	XYLOL	S	U	S	F	F
FERRIC SULPHATE	U	N	Ν	S	F						

 ${\sf S}$ - Suitable for heavy concentrations of fumes, including splash or condensation.

F - Suitable for mild concentrations of fumes, but no splash or condensation.

L - Suitable for light corrosion service, or intermittent exposure to light fume concentration. Not suitable if moisture, splash or condensation are present. U. Unsatisfactory for use against corrosive agent listed. N - No data available.

NOTE: Data presented is a summary of corrosion resistance characteristics of aluminum and the four coating systems shown. While single "letter" rating and a single temperature cannot possible describe all situations, this data is presented as a guide. Caution must be exercised where moisture and/or temperature along with a chemical reagent will be encountered.

Notes	SaP

Additional Products

Soler & Palau USA manufactures a complete line of gravity ventilators and fans for all your ventilation requirements.



MODEL DB Backward Inclined Belt Drive Centrifugal Roof Exhaust



MODEL RED Backward Inclined Direct Drive Centrifugal Roof Exhaust



MODEL SQB/SQD Backward Inclined Belt Drive/Direct Drive Square Inline



MODEL UBB/UBX/UBS Propeller Belt and Direct Drive Upblast Roof Exhaust



MODEL L Propeller Belt Drive Sidewall Exhaust or Supply



MODEL BGH Gravity Hood Intake or Relief



MODEL KSF Forward Curved Blower Belt Drive Filtered Roof Supply



MODEL TXB/TXD Backward Inclined Belt Drive/Direct Drive Centrifugal Upblast



MODEL BVS Backward Inclined Belt Drive Centrifugal Utility Set

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