





# Stock Catalog and Aricolist



## HOFFMAN & HOFFMAN, INC.

Greensboro Warehouse (800) 334-0254 Columbia Warehouse (803) 451-8355

STEAM SPECIALTIES

## **Table of Contents**

FANS/DAMPERS/CURBS	
Centrifugal Roof Exhausters	2-9
Sidewall Exhausters	8-9
Roof Curbs, Equipment Rails	10
Sidewall Propeller Fans & Accessories	11
Ceiling & Cabinet Fans & Accessories	12-17
Gravity Ventilators	18
ASHRAE General Ventilation Design	18
In-Line Fans	19-21
Backdraft Dampers	22-23
Electrical Accessories	24
MAGNETIC STARTERS/AC DRIVES	
Magnetic Starters	25
AC Drives	
REGISTERS/GRILLES/DIFFUSERS/TRANSITIONS	
Supply Registers	28
Return Grilles & Registers	29
Round Ceiling Diffusers	30
Volume Control Dampers	30
Steel Perforated Diffusers	31
Louver Faced Ceiling Diffusers	32-33
Tee-Bar Mounting Frame	34
Door Grilles	34
Cube Core Grilles	34-35, 37
Economy Registers & Diffusers	35-36
Filter Grilles	37
Spiral Grilles	38
VAV Diffusers	38
Slot Diffusers	38
Square to Round Transitions	39
Concentric Reducers	39
VAV TERMINALS/HOT WATER COILS	
Control By Others Terminals	40
Hot Water Coils	41



DAMPERS/LOUVERS/ACCESS DOORS/ACTUATORS	
Balancing Dampers	42
Control Dampers	43
Actuators	44
Smoke Detectors	44
Ceiling Radiation Dampers	45
Round Fire Dampers	46
Rectangular Fire Dampers	47
Lexington, Kentucky Direct Ship	48-49
Brick Vents	50
Stationary Louvers	51
Parsons, Kansas Direct Ship	52-53
Access Doors	54
Access Panels	55
FLEXIBLE DUCT/SNAPLOCK & ACCESSORIES	
Low, Medium & High Pressure Duct	
Stick-On Fittings	
Snaplock & Accessories	
Clamps, Tools, Tape, Wrap	
Pipe Portals Systems	63
SPIRAL PIPE & ACCESSORIES	
Spiral Pipe	
Spiral Fittings	
Hanging Systems, Blast Gates	
ELECTRIC HEATERS/FILTERS & ACCESSORIES	
Unit Heaters & Accessories	
Wall Heaters & Accessories	
Pleated Prefilters, Filter Rolls	
Cartridge Filters	
Filter Accessories	
Pressure Gauges & Manometers	
Side Access Filter Housings	/6
VIBRATION ISOLATION	
Steel Mountings	
Spring Hangers	
Elastomeric Pad	79
STEAM SPECIALTIES 25 Series	00
Traps & Strainers	
Terms and Conditions	83

### **CENTRIFUGAL DIRECT DRIVE ROOF EXHAUSTERS**



DIFFUSERS / TRANSITIONS REGISTERS / GRILLES /

ELECTRIC HEATERS / FILTERS & ACCESSORIES

#### **DIMENSIONAL DATA**

Model	A	В	*C	D	100 Damper	Roof Opening
G-060, 070	17	19 <sup>3</sup> / <sub>8</sub>	12 <sup>1</sup> / <sub>8</sub>	3	8 x 8	10 <sup>1</sup> / <sub>2</sub> x 10 <sup>1</sup> / <sub>2</sub>
G-080, 090, 095	17	213/4	14 <sup>5</sup> / <sub>8</sub>	4	10 x 10	12 <sup>1</sup> / <sub>2</sub> x 12 <sup>1</sup> / <sub>2</sub>
G-099, 103, 123, 133	19	243/8	233/4	43/8	12 x 12	14 <sup>1</sup> / <sub>2</sub> x 14 <sup>1</sup> / <sub>2</sub>
G-143	22	283/8	233/4	43/8	16 x 16	18 <sup>1</sup> / <sub>2</sub> x 18 <sup>1</sup> / <sub>2</sub>

<sup>\*</sup>May vary depending upon motor size.

#### MODEL G

Model G direct drive exhausters are designed for roof mounted applications exhausting relatively clean and cool air. They feature a spun aluminum housing, a non-overloading backward inclined wheel and positive motor cooling. Model G fans are licensed to bear the AMCA Certified Ratings Seals for air and sound performance and are UL listed.

#### **CONSTRUCTION FEATURES**

- Spun aluminum hood and galvanized steel frame.
- · Easily removable cover for access to motor.
- Disconnect switch (standard).
- · Motors located out of airstream and cooled by ambient air.
- Thermal overload protection.
- · Vibration isolation for motor and wheel assembly.
- Three-speed motors standard on Model G-060 through G-095; field wired for either 1050, 1300 or 1550 RPM.
- · Wire mesh birdscreen.

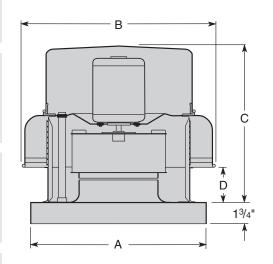
#### **ACCESSORIES**

- Roof curbs 12" high. See page 10.
- Backdraft damper, Model 100. See page 22.
- Speed controls. See page 24.

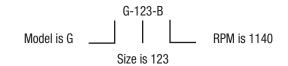
#### STOCK NOTES

- Units are stocked with 115/60/1 motors.
- All G units can be used with a speed control.
- Models G-060 through G-095 can be shipped UPS.
- Vari-Green® motor 80% turndown, 85% efficient. Available on select sizes.

The table below lists model designation suffixes for motor horsepower and fan RPM.



For direct drive units, the model number designates the model type, size and motor/fan RPM.



Direct	Drive
Suffix	Fan RPM
Α	1725
В	1140
С	860
D	1550
G	1300
Е	1050



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ES	R
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STAF	\$
3	F
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동	×
록	Ξ
듥	38
RO	록
읊	S

# ELECTRIC HEATERS / FILTERS & ACCESSORIES

# VIBRATION ISOLATION

STEAM SPECIALTIES

## PERFORMANCE DATA AND PRICING **MODEL G**



				STATIC PRESSURE IN INCHES OF W.G. / CAPACITY (CFM)								12" Curb		100 Damper	
MODEL		DDM	TO	0.000 0.100 0.125 0.250 0.375 0.500 0.625							Price Each	12 Curb		100 Dailipei	
MODEL		RPM	TS	Sone BHP	Sone BHP	Sone BHP	Sone BHP	Sone BHP	Sone BHP	Sone BHP		Size	ADD	Size	AD
	E	1050	2234	138	90	73									\$59 \$59
G-060		1030	2234	1.9 .004	1.7 .005	1.7 .005									1
1/60 HP	G	1300	2765	170	135	125					\$421	17	\$88	8 x 8	Φı
	u	1300	2700	2.9 .008	2.6 .009	2.5 .009					<b>Φ421</b>	17	φοο	0 8 0	φ
3 Speed	2007	203	173	166	120										
	D	1550	3297	4.3 .013	3.9 .014	3.9 .014	3.9 .016								
	_	1050	0004	253	196	179									
	E	1050	2234	2.5 .007	1.7 .008	1.5 .008					]				
G-070		4000	0705	314	268	257	171				0.404	47			_
1/30 HP	G	1300	2765	4.1 .013	3.4 .015	3.2 .015	2.7 .015				\$421	17	\$88	8 x 8	\$
3 Speed				374	337	327	274	190			1				
	D	1550	3297	5.6 .002	5.3 .024	5.2 .024	4.7 .026	4.2 .025							
	_			335	268	249	134								
	E	1050	2990	3.8 .012	3.6 .015		3.5 .017								
G-080				415	361	348	272	175					\$88	10 x 10	\$64
1/20 HP	G	1300	3701	5.4 .022			5.4 .032	5.4 .033			\$468	17			
3 Speed				495	450	439	379	314	238						
D   155	1550	4413		7.4 .042			7.4 .055								
				520	441	420	292	7.1   .000	7.1  .007						
	E	1050	2990	3.8 .014			3.6 .024				-				
G-090				644	580	565	478	373			1				
1/15 HP	G	1300	3701	5.4 .027	5.4 .033		-	5.5 .045			\$468	17	\$88	10 x 10	\$6
3 Speed				768	713	701	633	557	472	338	1				
	D	1550	4413	7.5 .046				7.4 .070		7.4 .074	-				\$555 \$566 \$666 \$666 \$666 \$666 \$666 \$666
				717	605	570	389	7.4 .070	7.4 .070	7.4 .074					
E	E	1050	2990	4.9 .029	4.6 .034						1				
G-095				888	801	780	640	493	184		-				
1/8 HP	G	1300	3701	7.4 .056				6.4 .071	6.4 .049		\$468	17	\$88	10 x 10	\$
3 Speed				1059	986	969	863	745	623	474	-				
	D	1550	4413	9.6 .095		9.4 .103		8.2 .117			-				
				1179	1114	1098	1013	903	800	688					
G-095-VG6X	1/6 HP	1725	5052	11.4 .13	11.4 .14		11.2 .15		11.3 .16	11.3 .16	\$763	17	\$88	10 x 10	\$
				1307	1280	1250	1192	1135	1076	1013					
G-099-VG4X	1/4 HP	1725	5052	13.6 .23	13.6 .23		13.4 .24		12.9 .25	12.6 .25	\$1056	19	\$95	12 x 12	\$
				966	900	883	805	702	507	12.0 .23					
G-103-B 1	6 HP	1140 33	3320	6.6 .07	6.1 .07	6.0 .08	5.7 .09	5.1 .09	4.1 .08		\$753	19	\$95	12 x 12	\$
				1483	1450	1427	1374	1321	1274	1010			-		
G-103-A 1	4 HP	HP 1725 5024		12.5 .26	12.4 .27	12.1 .27	11.7 .28	11.5 .29	11.3 .30	1219 10.6 .31	\$789	19	\$95	12 x 12	\$
				1462	1425	1405	1351	1298	1250	1193					
G-103-VG4X	1/4 HP	1725	5052								\$1103	19	\$95	12 x 12	\$
						11.9 .26									
G-123-B 1	6 HP	1140	3898	1383 8.4 .12	1325 8.4 .12	1300 8.4 .13	1213 8.4 .14	8.1 .14	993 7.9 .14	7.8 .14	\$755	19	\$95	12 x 12	2 \$6
				· ·					· · · · · · · · · · · · · · · · · · ·						
G-123-A 1	'2 HP	1725	5899	2093 17.4 .40	2050	2038 17.2 .42	1984 17.0 .44	1928 16.8 .45	1871 16.7 .46	1810 16.7 .47	\$852	19	\$95	12 x 12	\$
				2093	2052	2038	1984	1928	1871						
G-123-VG5X	1/2 HP	1725	5052	17.4 .40					16.7 .46	1810 16.4 .47	\$1200	19	\$95	12 x 12	\$
				-						· ·					
G-133-B 1	6 HP	1140	3917	1618	1560	1535	1444	1340	1211	1031	\$861	19	\$95	12 x 12	\$
	-	-	-	10.0 .15				9.2 .17	8.8 .17	8.5 .17	+		-		
G-143-B 1	/3 HP	1140	4365	2115	2050	2008	1905	1792	1660	1488	\$1152	22	\$103	16 x 16	\$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$7
					10.9 .30			10.4 .31	9.4 .31	10.4 .29					
G-143-VG7X	3/4 HP	1550	5935	2875	2830	2797	2719	2644	2566	2487	\$1419	22	\$103	16 x 16	\$
				17.7 .71	17.7 .71	18.0 .73	17.4 ./4	17.2 ./6	10.8 .//	15.0 .78					
lodel 5W (6 A	mp) – So	lid State S	Speed Cor	ntrol							\$55				
omner Met-	Dook Mr	100 100/	60/11/								6110				
amper Motoi	rack IVII	100 120/	0U/ I V								\$112				

Performance shown is for Model G without ducts.



#### **CENTRIFUGAL BELT DRIVE ROOF EXHAUSTERS**



DIFFUSERS / TRANSITIONS REGISTERS / GRILLES /

VAV TERMINALS / HOT WATER COILS

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

FLEXIBLE DUCT / SNAPLOCK & ACC.

ELECTRIC HEATERS / FILTERS & ACCESSORIES

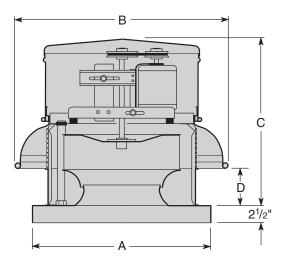
STEAM SPECIALTIES



#### **DIMENSIONAL DATA**

DIMENSIONAL DAI	<i>_</i>					
Model	A	В	*C	D	100 Damper	Roof Opening
GB-071, 081	19	243/8	233/4	43/8	12 x 12	14 <sup>1</sup> / <sub>2</sub> x 14 <sup>1</sup> / <sub>2</sub>
GB-101, 121	19	243/8	233/4	43/8	12 x 12	14 <sup>1</sup> / <sub>2</sub> x 14 <sup>1</sup> / <sub>2</sub>
GB-131	19	283/8	233/4	4	12 x 12	14 <sup>1</sup> / <sub>2</sub> x 14 <sup>1</sup> / <sub>2</sub>
GB-141, 161	22	283/8	233/4	4	16 x 16	18 <sup>1</sup> / <sub>2</sub> x 18 <sup>1</sup> / <sub>2</sub>
GB-180, 200	30	351/2	28	51/2	18 x 18	20 <sup>1</sup> / <sub>2</sub> x 20 <sup>1</sup> / <sub>2</sub>
GB-240	34	423/4	31 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	24 x 24	26 <sup>1</sup> / <sub>2</sub> x 26 <sup>1</sup> / <sub>2</sub>
GB-300	40	50	36	81/4	30 x 30	32 <sup>1</sup> / <sub>2</sub> x 32 <sup>1</sup> / <sub>2</sub>

\*May vary depending upon motor size.



For direct drive units, the model number designates the model type, size and motor/fan RPM.

#### **EXAMPLE:**



#### **MODEL GB**

Model GB belt drive exhausters are designed for roof mounted applications exhausting relatively clean air. They feature a spun aluminum housing and a non-overloading backward inclined wheel. Motors are located out of the airstream with positive cooling by ambient air. Model GB fans are licensed to bear the AMCA Certified Ratings Seals for air and sound performance and are UL listed.

#### CONSTRUCTION FEATURES

- · Spun aluminum hood, aluminum wheel and galvanized steel frame.
- · Easily removable cover for access to motor.
- · Disconnect switch (standard).
- · Vibration isolation for entire motor and drive assembly.
- · Motors located out of airstream and cooled by ambient air.
- Rigid wire birdscreen.
- Thermal overload protection 1/4 HP through 3/4 HP single phase (Greensboro stock only).

#### **ACCESSORIES**

- Roof curbs 12" high. See page 10.
- Backdraft damper, Model 100. See page 22.
- · Magnetic starters. See page 25.

#### STOCK NOTES

- Motors 1/4 HP, 1PH are 115/60/1.
- Motors 1/3 & 1/2 HP, 1PH are 115/208-230/60/1 and wired for 115 volts.
- Motors 3/4 HP, 1PH are 115/208-230/60/1 and wired for 208-230 volts.
- Motors 3/4 HP, 3PH and larger are 208-230/460/60 are wired for 208-230 volts.
- Motors are constant speed, open drip proof. (Contact your salesman for other styles.)
- · Units are shipped preset for maximum RPM and are adjustable.
- · Units are also stocked less motor and drive for maximum flexibility. (QD stock only.)

The table below lists model designation suffixes for motor horsepower and fan RPM.

	Belt l	Drive	
Suffix	Motor HP	Suffix	Motor HP
4	1/4	10	1
3	1/3	15	1-1/2
5	1/2	20	2
7	3/4	30	3

## PERFORMANCE DATA AND PRICING **MODEL GB**



					STATIC PRESSURE IN INCHES OF W.G. / CAPACITY (CFM)  0.000 0.125 0.250 0.375 0.500 0.625					Price	12" R	oof Curb	100 Damper		Starters		
	MODEL	HP	PH	RPM	Sone BHP	Sone BHP	Sone BHP	Sone BHP	Sone BHP	Sone BHP	Each	Size	ADD	Model	ADD	STD	W/D
					376	353	339	316	297	273							
	GB-071-4	1/4	1	1725				10.6 0.13			\$823	19	\$95	12 x 12	\$67		\$20
_																	
	GB-081-4	1/4	1	1725	864	821	793	756	719	679	\$823	19	\$95	12 x 12	\$67		\$20
					12.5   0.17			11.9 0.18		11.2 0.19	· .		·				L.
	GB-101-4	1/4	1	1400	1187	1100	1052	990	909	810	\$849	19	\$95	12 x 12	\$67		\$20
	GD-101-4	1/4	'	1400	8.9 .12	8.5 .13	8.1 .14	7.8   15	7.6   16	7.4 16	φ049	19	φυσ	12 1 12	φ01		φΖί
					1692	1625	1557	1484	1404	1315							
	GB-121-4	1/4	1	1395	12.5 0.21			12.2 0.25			\$916	19	\$95	12 x 12	\$67		\$20
_						1794		<del></del>	<del></del>								
	GB-131-4	1/4	1	1315	1866		1718	1637	1545	1435	\$1198	19	\$95	12 x 12	\$67		\$20
								12.1 0.25		11.2 0.26	ı.		·				
	GB-131-5	1/2	1	1685	2391	2335	2279	2219	2158	2020	\$1282	19	\$95	12 v 12	\$67		\$20
	GD-131-3	1/2	1 '	1005	16.9 0.47	16.6 0.48	16.3 0.50	16.0 0.51	15.7 0.52	15.4 0.53	\$1202	19	φυσ	12 x 12	φυ		φΖι
					1595	1457	1304	1085									
	GB-141-4	1/4	1	860	7.1 0.12						\$988						
								<del></del>	1000	1400							
	GB-141-3	1/3	1	1140	2115	2008	1905	1800	1660	1488	\$1036	22	\$103	16 x 16	\$76		\$20
					11.4   0.31	11.3   0.32	10.8   0.33	10.3 0.33	9.9 0.34	9.3 0.34	,			10 % 10	Ψίσ		420
	CD 141 F	1/0	4	1000	2523	2433	2347	2259	2166	2062	\$1052						
	GB-141-5	1/2	1	1360	14.6 0.48	14.3 0.50	13.9 0.51	13.5 0.52	13.1 0.52	12.7 0.52	\$1052						
					3367	3094	3072	2922	2761	2587							
	GB-161-5	1/2	1	1140							\$1484	22	\$103	16 x 16	\$76		\$20
								13.8 0.53		13.0 0.53							
	GB-180-4	1/4	1	730	2839	2667	2469	2213	1882		\$1425						
	UD-100-4	1/4	'	730	7.4 0.26	7.1 0.15	6.5 0.17	5.8 0.17			ψ1423			5 18 x 18			ma.
					3150	2997	2832	2624	2375	2053					\$98		\$20
	GB-180-3	1/3	1	810		8.3 0.31			7.6 0.35		\$1366						
					'	<u> </u>						30 \$145	\$145				400
	GB-180-5	1/2	1	940	3655	3527	3388	3234	3052	2844	\$1384						
		L.			12.7   0.55	12.4   0.47	12.1   0.49	11.3 0.52	10.4   0.54	10.0   0.55			,				\$20
	CD 100 7	2/4	1	1055	4102	3989	3867	3742	3596	3432	\$1482						
	GB-180-7	3/4	3	1055	16.2 0.77	15.7 0.67	14.9 0.68	14.4 0.72	14.0 0.74	13.5 0.76	\$1515					\$685	\$950
					4608	4507	4401	4290	4179	4046							
	GB-180-10	1	3	1185				17.4 0.98			\$2114					ΨΟΟΟ	
						· '		<del></del>		<del>                                     </del>							
	GB-200-5	1/2	1	770	4261	4013	3744	3477	3141	2643	\$1835						
	GD 200 0	.,_		110	12.1 0.52	11.0 0.53	10.7   0.55	10.2 0.55	9.8 0.55	9.3 0.52	φισσσ						\$20
			1		4759	4548	4289	4068	3811	3504	\$1958						
	GB-200-7	3/4	3	860	14 1 0 73		129 0 75	12.4 0.77	11 8 0 77	11 4 0 77	\$2002						
_					'	<u> </u>					ΨΖΟΟΖ	30	\$145	18 x 18	\$98		
	GB-200-10	1	3	965	5340	5157	4927	4720	4520	4285	\$2181						
					16.7   1.03	16.0   1.04	15.4   1.05	15.0 1.08	14.5   1.09	14.1 1.09	, .					\$685	\$9
	CD 200 15	1100	2	1000	6032	5870	5682	5473	5301	5124	¢2216						
	GB-200-15	1 <sup>1</sup> /2	3	1090	20 1.49	19.6 1.50	18.9 1.51	18.4 1.52	18.1 1.56	17.8 1.56	\$2216						
					6702	6427	6158	5861	5507	5077							
	GB-240-10	1	3	730				13.8 1.05			\$2682						
_																	
	GB-240-15	11/2	3	825	7575	7331	7092	6844	6574	6261	\$2718	34	\$165	24 x 24	\$175	\$685	\$9
	GD 210 10	. /2	Ů	020	19.7   1.39	18.6 1.44	17.7   1.49	17.2 1.51	16.8 1.52	16.4 1.54	φ27.10		ψιου		ψιιο	Ψοσο	ΨΟ
	OD 040 00			010	8355	8134	7916	7700	7467	7215	00705						
	GB-240-20	2	3	910	24 1.86	23 1.92	21 1.97	21 2.02	21 2.03	20 2.05	\$2765						
			1		7694	7197	6616	5955	5095	1 1 1 1 1 1 1	\$3175						\$2
	GB-300-7	3/4		475													ΨΖ
			3					8.8 0.77			\$3219						
	GB-300-10	1	3	530	8585	8149	7640	7094	6456	5668	\$3397						
	ар-300 <b>-</b> 10	'	J	330	13.4 1.00	12.9 1.03	12.2 1.06	11.5 1.07	10.7 1.07	10.0 1.03	ψυυσί						
					9719	9334	8907	8446	7952	7388							
	GB-300-15	1 <sup>1</sup> /2	3	600				14.3 1.54			\$3433	40	\$194	30 x 30	\$212	\$685	¢0
_		$\vdash$						<del></del>	<del></del>							φυου	\$950
	GB-300-20	2	3	665	10772	10424	10060	9648	9228	8773	\$3479						
	25 000 F0	-		000	18.8 1.97	18.2 2.02	17.7 2.06	17.2 2.10	16.8 2.11	16.3 2.12	ΨΟ ΤΙ Ο						
	GB-300-30	3	3	760	12311	12007	11704	11357	10997	10629	\$3854						

#### **BELT DRIVEN CENTRIFUGAL UPBLAST ROOF EXHAUSTERS**



VARIABLE SPEED DRIVES & STARTERS

DIFFUSERS / TRANSITIONS

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

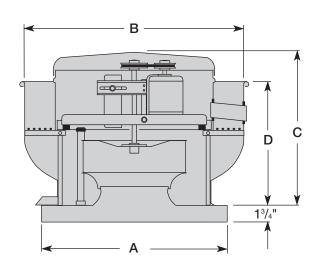
**VIBRATION ISOLATION** 

ES
F
2
S .
STE/



#### **DIMENSIONAL DATA**

Model	A	В	C	D	100 Damper	Roof Opening
CUBE-101-121	19	247/8	281/4	17³/ <sub>8</sub>	12 x 12	14 <sup>1</sup> / <sub>2</sub> x 14 <sup>1</sup> / <sub>2</sub>
CUBE-141	22	287/8	293/4	19³/ <sub>8</sub>	16 x 16	18¹/2 x 18¹/2
CUBE-161	22	287/8	293/4	19³/ <sub>8</sub>	16 x 16	18¹/2 x 18¹/2
CUBE-180	30	353/8	285/8	21	18 x 18	20 <sup>1</sup> / <sub>2</sub> x 20 <sup>1</sup> / <sub>2</sub>
CUBE-200	30	353/8	285/8	21	18 x 18	20 <sup>1</sup> / <sub>2</sub> x 20 <sup>1</sup> / <sub>2</sub>
CUBE-240	34	423/4	337/8	251/2	24 x 24	26 <sup>1</sup> / <sub>2</sub> x 26 <sup>1</sup> / <sub>2</sub>
CUBE-300	40	50	36	29	30 x 30	32 <sup>1</sup> / <sub>2</sub> x 32 <sup>1</sup> / <sub>2</sub>



#### **MODEL CUBE**

Model CUBE exhausters are designed for roof-mounted restaurant and commercial applications, exhausting dirty or grease laden air up and away from the roof line. All fans are UL 762 listed for restaurant applications and for operation with air temperatures up to 300°F. Model CUBE fans are licensed to bear the AMCA Certified Ratings Seals for air and sound performance and are UL listed.

#### **CONSTRUCTION FEATURES**

#### **UL 762 Listed for Restaurant Applications**

- · Spun aluminum hood, aluminum wheel and galvanized steel frame.
- · Easily removable cover for access to motor.
- · Disconnect switch (standard).
- · Vibration isolation for entire motor and drive assembly.
- Thermal overload protection 1/4 HP through 3/4 HP single phase.
- . Motors located out of airstream and cooled by ambient air.

#### **ACCESSORIES**

- Prefab roof curbs 12" high. See page 10.
- · Birdscreen kit.
- · Magnetic starters. See page 25.
- · Grease trap kit attaches to drain trough to collect grease.
- Backdraft damper, Model 100. (Not for use in grease applications) See page 22.
- Available from factory with coated wheels for heavy cooking applications.

#### **STOCK NOTES**

- Motors 1/4 HP, 1PH are 115/60/1.
- Motors 1/3 & 1/2 HP, 1PH are 115/208-230/60/1 and wired for 115 volts.
- Motors 3/4 HP, 1PH are 115/208-230/60/1 and are wired for 208-230
- Motors 3/4 HP, 3PH and larger are 208-230/460/60 are wired for 208-230 volts.
- Motors are constant speed, open drip proof. (Contact your salesman for other styles.)
- Units are stocked less motor and drive for maximum flexibility. (QD Stock Only)
- Vari-Green® motor 80% turndown, 85% efficient. Available on select sizes.



## PERFORMANCE DATA AND PRICING **MODEL CUBE**



				0.000	0.125	SURE IN INCHE 0.250	0.375	0.500	0.625	Price	Bird Screen	12" Ro	of Curb	*100 Damp		Sta	arters
MODEL	HP	PH	RPM	Sone BHP	Sone BHP	Sone BHP	Sone BHP	Sone BHP	Sone BHP	Each	ADD	Size	ADD	Size	ADD	STD	W/DIS
CUBE-101-4	1/4	1	1660	1413	1364	1313	1251	1189	1125	\$1175	\$47	19	\$95	12 x 12	\$67		\$20
CUBE-121-4	1/4	1	1410	12.6   0.21	1595	11.19 0.23 1528	1463	1398	1315	\$1551							
CUBE-121-3	1/3	1	1545	11.1   0.21	1760	1699	1639	12.6 0.25	1518	\$1610	\$47	19	\$95	12 x 12	\$67		\$20
CUBE-121-5	1/2	1	1725	2037	13.4   0.29	1923	1869	14.7 0.32 1816	1763	\$1633							
CUBE-141-4	1/4	1	1105	2001	16.1 0.40 1905	1793	1667	17.9 0.44	1318	\$1387							
CUBE-141-3	1/3	1	1210	2192	2106	2006	1896	10.0 0.26	9.9 0.26	\$1436							
CUBE-141-5	1/2	1	1390	2518	2445	11.7 0.32 2362	2271	2174	2068	\$1350	\$52	22	\$103	16 x 16	\$76		\$20
CUBE-141-7	3/4	1	1595	2889	2826	14.2 0.48 2757	2683	2602	2517	\$1549							
CUBE-161-5	1/2		1110	3191	3072	18.5 0.72 2941	2796	2641	2475	\$1865							
		1	1170	3363	3250	14.2 0.53 3129	2994	2848	2697	\$1986	\$52	22	\$103	16 x 16	\$76		\$20
CUBE-161-7	3/4	3	1265	3636	3532	15.4 0.61 3425	3301	3172	3035	\$2029	402		ψ.00		ψ. σ	\$685	\$95
CUBE-180-4	1/4	1	745	2815	18.1 0.74 2616	2448	2143	16.8 0.79 1763	16.5   0.79	\$1971						4000	400
CUBE-180-3	1/3		820	9.2 0.22 3098	2915	2759	7.4 0.26 2525	2257	1867	\$2031							
CUBE-180-5	1/2	1	940	3551	10.4 0.32 3388	3243	9.5 0.35 3115	2879	2654	\$2053	\$84	30	\$145	18 x 18	\$98		\$20
CUBE-180-7	3/4	1	1075	4061	3919	13.1 0.49 3786	3666	3554	3345	\$2175	ψοτ	00	ψιτο	10 % 10	φοσ		
CUBE-180-10	1	3	1185	4477	4348	15.8 0.73 4224	4108	4005	3903	\$2217 \$2393						\$685	\$95
CUBE-200-3	1/3		665	18.5   0.90 3740	17.9 0.93 4321	17.1 0.96 3096	16.8 0.99 2699	16.5   1.01 2073	16.3   1.04	\$2238							
CUBE-200-5	1/2	1	760	4275	8.83   0.34 3993	3718	7.5 0.35 3413	3048	2518	\$2261							\$20
CUBE-200-7	3/4	1	875	12.1 0.49 4922	11.7 0.51 4676	10.9 0.52 4439	10.1 0.52 4192	9.4 0.51 3922	9.0 0.50 3626	\$2382							
CUBE-200-10	1	3	960	16.3 0.75 5400	16.3 0.77 5175	15.2 0.78 4958	14.7 0.79 4742	13.5 0.79 4508	12.9 0.79 4254	\$2425	\$84	30	\$145	18 x 18	\$98		
				18.7 0.98 6187	18.4   1.01 5991	17.7   1.03 5798	17.0 1.04 5610	16.4 1.04 5421	15.6 1.04 5217	\$2601						\$685	\$95
	11/2		1100	23.0 1.48 6806	23.0 1.51 6628	23.0 1.53 6451	22.0 1.55 6279	21.0 1.57 6108	21.0   1.57 5932	\$2636							
CUBE-200-20	2	3	1210	25   1.97 5303	24 2.00 4960	23 2.03 4540	23 2.05 4093	22 2.07 3565	22 2.09	\$2681							
CUBE-240-5	1/2	1	585		10.5 0.49 5762	9.5 0.51 5461	8.8 0.52 5052	8.4 0.51 4659	4202	\$2921 \$3042							\$20
	3/4	3	670			12.8 0.76 6133				\$3085	NI/A	0.4	ф1.C=	04 :: 04	φ <sub>4</sub> ¬ Γ		
CUBE-240-10	1	3	735	16.6 0.92 7660		15.5 0.99 7184				\$3260	N/A	34	\$165	24 x 24	<b>\$1/5</b>	\$685	\$95
CUBE-240-15	_		845			18.6   1.49 7985				\$3295							
CUBE-240-20	2	3	930			23.0 1.98 7772				\$3341							
CUBE-300-10	1	3	530			12.2   1.00 9127				\$4124							
CUBE-300-15			605			15.7   1.46 10193				\$4160	N/A	40	\$194	30 x 30	\$212	\$685	\$95
CUBE-300-20	2	3	665			18.6   1.92 11904				\$4207						- συσο	
CUBE-300-30	3	3	765	24 2.70			22 2.94		21 3.06	\$4589							
Grease Containe	ers –	Mod	ei 4/55	38						\$184							

<sup>\*</sup>Damper not for use in kitchen applications.

OD - Orders received in Greensboro warehouse by 11:00 a.m. EASTERN TIME will normally ship within 24 hours. Call TOLL-FREE: 1-800-334-0254.

VARIABLE SPEED DRIVES & STARTERS

DIFFUSERS / TRANSITIONS REGISTERS / GRILLES /

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

#### **DIRECT DRIVE CENTRIFUGAL EXHAUST FANS**







#### **DIMENSIONAL DATA**

Model	A	В	C	Damper	Opening
CUE-070	17	183/8	131/2	8 x 8	10 <sup>1</sup> / <sub>2 x</sub> 10 <sup>1</sup> / <sub>2</sub>
CUE-080, 090	19	21	13³/8	10 x 10	12 <sup>1</sup> / <sub>2 x</sub> 12 <sup>1</sup> / <sub>2</sub>
CUE-095	19	21	15¹/₄	10 x 10	12 <sup>1</sup> / <sub>2 x</sub> 12 <sup>1</sup> / <sub>2</sub>
CUE-101, 121	19	247/8	281/4	12 x 12	14 <sup>1</sup> / <sub>2 x</sub> 14 <sup>1</sup> / <sub>2</sub>
CUE-141	22	287/8	293/4	16 x 16	18 <sup>1</sup> / <sub>2 x</sub> 18 <sup>1</sup> / <sub>2</sub>

# Α

#### **MODEL CUE**

Model CUE is a direct drive fan designed for roof or wall mounting where the exhaust air is directed away from the mounting surface. Constructed of a single piece, countinuously wedled housing, this fan is used for exhausting contaminated or grease laden air.

#### **CONSTRUCTION FEATURES**

- Spun aluminum hood and galvanized steel frame.
- Easily removable cover for access to motor.
- · Disconnect switch (standard).
- · Vibration isolation for entire motor and drive assembly.
- Thermal overload protection.
- · Motors located out of airstream and cooled by ambient air.
- · Models CUE-070 through CUE-095 are equipped with 3-speed motors, field wired for either 1050, 1300 or 1550 RPM.

#### **ACCESSORIES**

- Prefab roof curbs 12" high. See page 10.
- Magnetic starters. See page 25.
- Grease trap kit attaches to drain trough to collect grease.
- Backdraft damper. (Not for use in grease applications) See page 22-23.
- · Speed controls. See page 24.

#### STOCK NOTES

- Model CUE
- Models 070-095 are UL 705 listed.
- Models 101-141 are UL 762 listed.
- Motors are 115/60/1
- Models CUE-070 through CUE-095 can be shipped by
- Vari-Green® motor 80% turndown, 85% efficient. Available on select sizes.



# PERFORMANCE DATA AND PRICING MODEL CUE



					ST	ATIC P	RESSU	RE IN	INCHES	OF W.	.G. / CA	PACIT	(CFM						D	Comb	33		10	
			0.	000	0.1	00	0.1	25	0.2	:50	0.3	75	0.5	00	0.6	625	Price Each	Wall Bracket	Roof	Curb	WALL D	AMPER	ROOF D	AMPER
MODEL		RPM	Sone	ВНР	Sone	внр	Sone	ВНР	Sone	ВНР	Sone	внр	Sone	ВНР	Sone	ВНР			Size	ADD	Size	ADD	Size	ADD
	_	1050	2	50	19	93	17	71																
	E	1050	2.5	.007	1.7	.008	1.5	.008																
CUE-070	G	1300	3	09	26	67	25	55	15	52							\$471	\$59	17	\$88	8 x 8	\$78	8 x 8	\$59
1/30 HP	u	1300	4.1	.013	3.4	.015	3.2	.015	2.7	.013							φ4/1	φυθ	17	φοο	0 X 0	\$10	0 X 0	<b></b>
	D	1550	3	69	33	34	32	25	26	69	16	60												
	D	1330	5.6	.023	.53	.025	5.2	.025	4.7	.026	4.2	.021												
	Е	1050	3	25	26	35	24	17	13	33														
	_	1030	3.8	.012	3.6	.014	3.6	.015	3.5	.016														
CUE-080	G	1300	4	03	35	55	34	13	27	72	17	73					\$547	\$60	19	\$95	10 x 10	\$86	10 x 10	\$64
1/20 HP		1300	5.4	.022	5.4	.025	5.4	.026	5.4	.031	5.4	.031					ΨΟΨΙ	ψοσ	13	ψυυ	10 x 10	φοσ	10 x 10	ΨΟΨ
	D	1550	4	80	44	11	43	31	37	76	31	14	23	35										
		1000	7.3	.037	7.4	.041	7.4	.042	7.4	.047	7.4	.053	7.4	.054										
CUE-090	Е	1050	5	49	47	70	45	51	30	)6														
	_	1000	3.8	.019	3.7	.023	3.7	.024	3.6	.027														
	G	1300	6	80	61	16	60	00	51	17	39	91					\$547	\$60	19	\$95	10 x 10	\$86	10 x 10	\$64
1/15 HP			5.4	.035	5.4	.041	5.4	.042	5.5	.048	5.5	.052						Ψοσ		000		φσσ		
	D	1550	8	11	75	57	74	14	67	77	60	)4	50	)1	34	47								
			7.5	.060	7.4		7.4	.068		.076	76 7.4	.083	7.4	.088	7.4	.084							-	
	Е	1050		11	60		57		38								-							
			4.9	.032	4.6	.036	4.6	.037	4.5	.037							-							
CUE-095	G	1300		80	79		77		64		48		19				\$561	\$60	19	\$95	10 x 10	\$86	10 x 10	\$64
1/8 HP			7.4	.061	6.9					.072		.071	6.4	.054										
	D	1550		)49	98		96		86		74		61			42	-							
			9.6	.103	9.4		9.4			.117		.121	8.0	.121		.106								
CUE-095-V 1/6 HP		1725		67	11		10		10		90		80			30	\$884	\$60	19	\$95	10 x 10	\$86	10 x 10	\$64
1/0 ПР			11.3		11.1	.15	11.0		10.5		9.9		9.8	.17	9.6	.17								
CUE-101-V		1725		168	14		14		13		13		12				\$1324	\$60	19	\$95	12 x 12	\$92	12 x 12	\$67
1/4 HP			13.3	.24	13.0	.25	12.9	.26	11.5	.27	12.0	.28	11.7	.29				·						
CUE-121-V		1725	20	)37	20	00	19	79	19	23	18	69	18	16	17	63	\$1411	\$60	19	\$95	12 x 12	\$92	12 x 12	\$67
1/2 HP			15.6	.39	15.8	.39	16.1	.40	16.7	.41	17.3	.43	17.9	.44	18.2	.45		7,50		,,,,			,	7.
CUE-141-V		1550	28	888	27	65	27	43	26	71	25	94	25	09			\$1684	\$66	22	\$103	16 x 16	\$109	16 x 16	\$76
3/4 HP			18.7	.63	18.2	.63	17.8	.64	17.5	.66	17.7	.68	14.9	.69			7.001	400		7.00		7.00		Ψ. υ
Model 5W	V (6 A	mp) Sol	id Stat	e Spee	d Cont	roller	(070-0	95)									\$55							

Performance shown is for Model CUE without ducts. Damper not for use in kitchen applications.

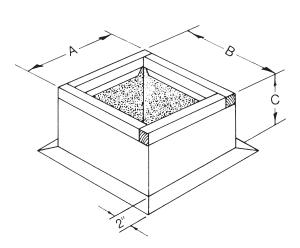


## **CURBS, RAILS AND ADAPTERS**



#### STRAIGHT ROOF CURBS

Curbs are 12" high and are constructed of 18 gauge galvanized steel with welded seams. They have 1-1/2" thick, 3lb density rigid fiberglass insulation, 2" flashing strip and factory installed treated wood nailer strip.



15	131/2	131/2	12	1000	\$82
17	15 <sup>1</sup> / <sub>2</sub>	15 <sup>1</sup> / <sub>2</sub>	12	1000	\$88
19	171/2	171/2	12	1000	\$95
22	201/2	201/2	12	1200	\$103
24	221/2	221/2	12	1200	\$114
26	241/2	241/2	12	1200	\$124
*30	281/2	281/2	12	1330	\$145
*34	321/2	321/2	12	1470	\$165
*40	381/2	381/2	12	1600	\$194
*46	441/2	441/2	12	1730	\$225
*52	50 <sup>1</sup> / <sub>2</sub>	50 <sup>1</sup> / <sub>2</sub>	12	1870	\$255
*58	56 <sup>1</sup> / <sub>2</sub>	56 <sup>1</sup> / <sub>2</sub>	12	2000	\$287

12

12

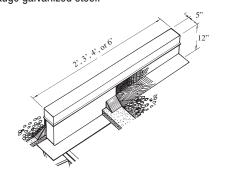
1000

\$77

\*Curb sizes 30 thru 58 must ship Motor Freight.

## **EQUIPMENT RAILS 12" TALL – NO CANT SURFACE MOUNT STYLE**

The equipment rail construction is all welded unitized, 18 gauge galvanized steel shell and base, wood nailer, and flashing cap of 20 gauge galvanized steel.

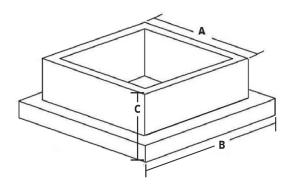


12

12

Length	Price Each
2'	\$84
3'	\$126
4'	\$168
*6'	\$252

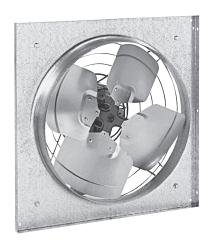
<sup>\*</sup>Must ship Motor Freight.



Model	A	В	С	Price Each
850616	17	19	7	\$162
850618	19	22	7	\$176
823055	22	26	7	\$204

#### **DIRECT DRIVE SIDEWALL PROPELLER FANS**





#### **MODEL SE1**

- · Direct drive sidewall design.
- Motor is constant speed, totally enclosed, U.L. labeled.
- Neoprene motor mounts.
- · Designed for relatively clean air and low pressure applications.
- Sizes SE1-8 thru SE1-12 include motor side guard.

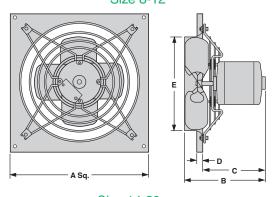
#### PERFORMANCE DATA AND PRICES

				STATIC PRE	SSURE/CFM		Price	320 D/	AMPER	WALL HOUSIING
Model	Model HP RPM		0.000	0.100	0.125	0.250	Each	Size	ADD	ADD
SE1-8-440-D	1/25	1550	459	351	307	167	\$365	10 x 10	\$96	\$249
SE1-10-440-D	1/12	1550	924	800	763	624	\$377	12 x 12	\$103	\$249
SE1-12-432-D	1/8	1550	1449	1309	1271	1042	\$416	14 x 14	\$112	\$254
SE1-14-440-B	1/6	1160	1604	1406	1350	908	\$715	16 x 16	\$128	\$258
SE1-16-426-B	1/6	1160	2235	2058	2012	1710	\$736	18 x 18	\$135	\$271
SE1-18-429-B	1/4	1160	3238	2987	2908	2434	\$827	20 x 20	\$169	\$283
SE1-20-428-B	1/3	1160	4227	4030	3974	3621	\$951	22 x 22	\$205	\$295

Performance ratings are AMCA certified

For additional performance data, see Greenheck Catalog SB/S-1

#### Size 8-12



Size 14-20	)
<b>←</b> A sq. →	$\stackrel{\longleftarrow}{\longleftarrow} \stackrel{B}{\longrightarrow} \stackrel{\longrightarrow}{\longleftarrow} D$
	E

#### DIMENSIONAL DATA

Model	A	В	C	D	E	Damper
SE1-8-440-D	13	7	5	1	83/8	10 x 10
SE1-10-440-D	15	83/4	5	1	10³/8	12 x 12
SE1-12-432-D	18	10³/ <sub>4</sub>	81/4	1	12 <sup>3</sup> /8	14 x 14
SE1-14-440-B	20	11 <sup>1</sup> / <sub>4</sub>	81/2	1	14 <sup>3</sup> /8	16 x 16
SE1-16-426-B	22	113/4	87/8	1	16³/ <sub>8</sub>	18 x 18
SE1-18-429-B	24	14	10 <sup>7</sup> /8	1	18³/ <sub>8</sub>	20 x 20
SE1-20-428-B	26	17	11	1	201/2	22 x 22

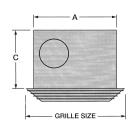
### VARIABLE SPEED DRIVES & STARTERS

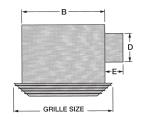
# MODEL SP DOWNSIZE CEILING EXHAUST FANS



#### **MODEL SP6**

#### By Broan





Model SP-6 ceiling exhaust fans have steel housings, high strength polymer grilles with torsion springs for secure fit, integral backdraft dampers, and motors that are permanently lubricated, shaded pole with built in overload protection. A plug-in disconnect is provided inside the housing.

#### **DIMENSIONAL DATA**

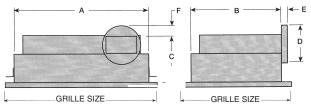
Model	A	В	C	D	E	Grille Size	Wt.
SP-6	91/4	10	53/4	4	33/8	12 x 11 <sup>3</sup> /8	8

For complete dimensional information, see submittal drawings.

#### PERFORMANCE DATA

Model	DDM	AMD	Watts		CI	FM/STATIC PI	RESSURE IN I	NCHES OF W.	G.		Price
Model	RPM	AMP	(Input)		0.000	0.100	0.125	0.250	0.375	0.500	Each
SP-6	1280	0.40	40	CFM	80	80	77	67	59		<b>#100</b>
5P-0	1200	0.40	43	Sones	2.0	2.0	2.3	2.6	2.9		\$128

#### MODEL SP-B50 - B200



Models SP-B50 - B200 features corrosion resistant galvanized steel fan housing & scroll, white high impact polystyrene grille with two attachment screws, and a forward curved fan wheel that is dynamically balanced for vibration free operation. Motors are 115/60/1 with built in thermal overload protection. Angle mounting brackets can be adjusted to any typical ceiling material thickness.



#### **DIMENSIONAL DATA**

Model	A	В	*C	D	E	Std Grille	Decorative Grille	Unit Wt.
B50, 70, 80	13 <sup>7</sup> /8	11¹/2	7	6	1 <sup>1</sup> /4	14 <sup>7</sup> /8 x 13 <sup>1</sup> /4	15¹/4 sq.	9
B90, 110, 150, 200	13 <sup>7</sup> /8	11¹/2	7	6	1 <sup>1</sup> /4	14 <sup>7</sup> /8 x 13 <sup>1</sup> /4	15¹/4 sq.	10

For complete dimensional information, see submittal drawings.

#### PERFORMANCE DATA

Model	RPM	AMP	Watts				CFM/ST	ATIC PRESSL	JRE IN INCHE	S OF W.G.				Price
Model	KPW	AIVIP	(Input)		0.000	0.100	0.125	0.250	0.375	0.500	0.625	0.750	1.000	Each
SP-B50	625	0.50	37.8	CFM	67	54	51	40	29					\$110
96-P20	023	0.50	37.0	Sones	1.2	1.4	1.4	2.0	3.0					\$110
CD D70	075	0.10	474	CFM	89	75	71	54	35					01.51
SP-B70	675	0.16	17.1	Sones	0.8	0.8	0.9	1.4	2.0					\$151
CD DOO	000	0.10	10.0	CFM	94	81	77	62	46					<b>Ф10</b> Г
SP-B80	900	0.16	18.6	Sones	0.8	0.9	0.9	1.3	2.0					\$125
CD DOO	700	0.10	01.1	CFM	104	92	89	72	57					01.51
SP-B90	700	0.18	21.1	Sones	1.0	1.0	1.0	1.5	2.0					\$151
D D110	050	4 4 4	00.0	CFM	133	114	110	97	95	94	91	85	50	<b>#100</b>
SP-B110	950	1.14	80.2	Sones	1.5	1.5	1.5	2.0	2.0	2.0	3.0	3.5	4.5	\$139
D D150	1050	1.70	100	CFM	160	156	155	154	152	149	147	138	92	<b>010</b> E
SP-B150	1050	1.70	128	Sones	2.5	2.5	2.5	3.0	3.5	3.5	4.0	4.5	5.0	\$185
2D D000	1100	0.00	170	CFM	197	195	194	191	187	184	181	166	128	<b>#100</b>
SP-B200	1100	2.20	172	Sones	3.5	4.0	4.0	4.5	4.5	5.0	5.0	5.5	5.5	\$186
Model 5W	(6 Amp) So	lid State Sp	eed Control	er (SP-6,	SP-B50 - B	-200, SP-A5	0 - A900)			,				\$55
		Solid State					,							\$106

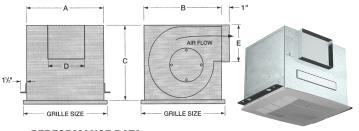
Performance shown is for Model SP exhaust for installation type B: Free Inlet, Ducted outlet. Performance ratings include the effects of an inlet grille and backdraft damper in the airsteam Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type B: free inlet sone levels. The AMCA Certified Ratings Sound Seal applies to sone ratings only.

MODEL SP CEILING EXHAUST FANS



MODEL CDA110 A700

Model SP ceiling exhaust fans are whisper quiet centrifugal fans for offices, toilets and general ventilation. Housings are corrosion resistant galvanized steel with an interior lined with sound absorbing insulation for quiet operation. Grilles are white and attach to fan housing with two screws. Grilles for sizes A50-A390 are made of high impact polystyrene. Grilles for sizes A410-A1550 are constructed of aluminum coated with baked enamel. Fan wheels are double width forward curved centrifugal type in a single scroll for A50-A780. A900-A1550 have twin double width forward curved wheels in separate scrolls driven by a single motor. All wheels are dynamically balanced for vibration-free operation. Motors are 115/60/1 with built in thermal overload protection, sized to match fan loads and mounted on vibration isolators. The electrical access cover located on the housing exterior permits external wiring without removing the power assembly, saving installation time and cost.

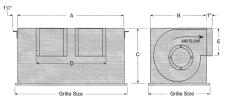


DIMENSIONAL D	AIA		IV	IUUEL	<u> </u>	1U-A/8U	
Model	A	В	C	D	E	Grille Size	Unit Wt.
A50, 70, 90	13 <sup>1</sup> / <sub>4</sub>	105/8	9	(	3	14 <sup>7</sup> /8 x 13 <sup>1</sup> / <sub>4</sub>	12
A110, 125, 190	13 <sup>1</sup> / <sub>4</sub>	105/8	9	8	6	14 <sup>7</sup> /8 x 13 <sup>1</sup> / <sub>4</sub>	17
A200, 250, 290, 390	14	11 <sup>7</sup> /8	11 <sup>1</sup> / <sub>4</sub>	8	8	14 <sup>7</sup> /8 x 13 <sup>1</sup> / <sub>4</sub>	24
A410, 510	18	143/8	141/2	8	8	19 <sup>3</sup> / <sub>8</sub> x 16 <sup>3</sup> / <sub>8</sub>	31
A700	235/8	11 <sup>5</sup> /8	11 <sup>5</sup> /8	19 <sup>1</sup> / <sub>2</sub>	8	25 <sup>1</sup> / <sub>8</sub> x 13 <sup>1</sup> / <sub>2</sub>	34
A710, 780	18	14 <sup>3</sup> / <sub>8</sub>	141/2	10	8	193/8 x 163/8	34

#### PERFORMANCE DATA

Model	RPM	AMP	Watts				CF	M/STATIC P	RESSURE IN	INCHES OF	W.G.				Price
Model	111111	7.1111	(Input)		0.000	0.100	0.125	0.250	0.375	0.500	0.625	0.750	0.875	1.000	Each
SP-A50	790	0.33	25.9	CFM	89	66	61	31							\$190
SF-AUU	790	0.55	25.9	Sones	0.4	0.6	0.6	0.9							\$190
SP-A70	790	0.14	15.6	CFM	88	74	71	54							\$202
OI -A/O	730	0.14	13.0	Sones	0.3	0.3	0.3	0.3							ΨΖΟ
SP-A90	870	0.14	16.9	CFM	114	101	98	80							\$20
01 750	070	0.14	10.5	Sones	0.3	0.3	0.3	0.4							Ψ20.
SP-A110	950	0.16	19.4	CFM	130	119	115	98							\$20
DI ATTO	330	0.10	15.4	Sones	0.3	0.3	0.3	0.5							ΨΖΟ
SP-A125	1010	0.19	23	CFM	144	130	127	109							\$26
JI A120	1010	0.10	25	Sones	0.4	0.4	0.4	0.6							Ψ20
SP-A190	1400	0.45	54.2	CFM	229	214	210	186	156						\$27
DI A150	1400	0.40	54.2	Sones	2.5	2.1	2.1	1.8	1.6						ΨΖΙ
SP-A200	900	0.47	56.1	CFM	267	246	242	224	199	162	109	68			\$27
JI A200	300	0.47	30.1	Sones	2.0	2.0	2.0	2.5	3.0	3.5	4.0	4.5			ΨΖΙ
SP-A250	1000	0.56	67	CFM	294	274	271	250	230	201	147	92			\$27
DI A200	1000	0.50	07	Sones	2.5	2.5	2.5	3.0	3.5	4.0	5.0	5.0			ΨΖΙ
SP-A290	1050	0.72	80.7	CFM	315	293	287	257	231	207	175	124			\$30
01 71200	1000	0.72	00.7	Sones	2.5	2.5	2.5	3.0	3.0	3.5	3.5	4.5			ΨΟΟ
SP-A390	1350	1.34	135	CFM	410	395	391	368	345	325	307	279			\$32
7,000	1000	1.01	100	Sones	4.5	4.5	4.5	4.5	5.0	5.0	5.5	5.5			Ψ02
SP-A410	1000	1.74	121	CFM	443	413	405	351	306						\$34
01 71110	1000	1.7 1	121	Sones	3.5	3.0	3.0	3.0	3.5						Ψ0.
SP-A510	1070	3.30	224	CFM	557	512	501	439	392	325					\$42
01 71010	1070	0.00		Sones	5.0	4.5	4.5	4.5	4.5	4.0					Ψ12
SP-A700	1100	3.20	350	CFM	757	730	723	700	679	649	613	560	494	396	\$51
J. 7.1.00	1.00	5.20	550	Sones	5.0	5.0	5.0	5.5	5.5	6.0	6.0	6.5	6.5	6.5	Ψυ
SP-A710	1080	4.40	285	CFM	752	714	701	653	588	486	320				\$52
J. A. 10	1000	טד.ד	200	Sones	6.0	6.0	6.0	6.0	6.0	5.5	5.5				ΨΟΖ
SP-A780	1600	3.30	348	CFM	812	782	775	741	704	665	625	581			\$52
n -M100	1000	0.30	340	Sones	8.5	8.5	8.5	8.0	8.0	8.0	8.0	8.0			ر پ





DIMENSIONA	L DATA		M	ODEL SI	PA900-	A1550	
Model	A	В	C	D	E	Grille Size	Wt.
A900-A1550	233/4	14 <sup>3</sup> / <sub>8</sub>	141/2	177/16	8	25 x 16 <sup>3</sup> / <sub>9</sub>	56

#### PERFORMANCE DATA

Model	RPM	AMP	Watts			CF	M/STATIC PR	ESSURE IN IN	ICHES OF W.G				Price			
model		7	(Input)		0.000	0.100	0.125	0.250	0.375	0.500	0.625	0.750	Each			
SP-A900	950	4.00	285	CFM	955	907	896	841	773	701			\$773			
5F-A900	950	4.00	200	Sones	4.0	5.0	5.0	5.0	5.0	5.0			\$113			
SP-A1050	1095	6.30	420	CFM	1125	1059	1043	964	885	796	662		\$773			
5F-A1000	1095	0.30	420	420	420	Sones	6.0	6.0	6.0	6.0	5.5	5.5	5.5		\$113	
SP-A1410	1450	7.40	786	CFM	1455	1415	1404	1353	1307	1262	1218	1174	\$773			
SP-A1410	1450	7.40	7.40	7.40	7.40	700	Sones	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	\$113
SP-A1550	1610 8.60	8 60	0.00	818	CFM	1607	1558	1558	1506	1449	1407	1369	1323	\$854		
3F-M1330		010	Sones	10.5	10.0	10.0	10.0	10.0	10.5	11.5	13.0	φου4				

Performance shown is for Model SP exhaust for installation type B: Free Inlet, Ducted outlet. Performance ratings include the effects of an inlet grille and backdraft damper in the airsteam Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type B: free inlet sone levels.

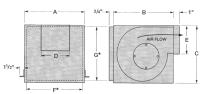
The AMCA Certified Ratings Sound Seal applies to sone ratings only.

#### MODEL CSP INLINE CABINET FANS



DRIVES & STARTERS

The Model CSP fan is designed for inline discharge, intake and air boosting applications with a duct system. The fan housing is constructed of corrosion resistant galvanized steel lined with sound absorbing insulation for quiet operation. Removable bottom housing panel allows easy access to the power assembly for inspection or service. Angle mounting brackets can be adjusted to any typical ceiling material thickness. Outlet duct connection with integral backdraft damper can be converted from horizontal to vertical discharge. Fan scroll is constructed of galvanized steel. Fan wheels are double width forward curved centrifugal type for CSP A-110-A780. CSP A900-A1550 have twin double width forward curved wheels in separate scrolls driven by a single motor. All wheels are dynamically balanced for vibration free operation. Motors for CSP A110-A1550 are 115/60/1. Motors are sized to match fan loads and mounted on vibration isolators. Power assemblies can be easily unplugged and removed for inspection or service.





CSP A110-A780

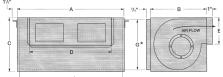
**DIMENSIONAL DATA MODEL CSP B110-A780** 

				Out	tlet	In	let	
Model	Α	В	C	D	E	F	G	Wt.
B110, 150, 200	13 <sup>7</sup> /8	11 <sup>1</sup> / <sub>2</sub>	7	6	11/4	13 <sup>1</sup> / <sub>2</sub>	31/4	10
A110, 125, 190	12 <sup>7</sup> /8	105/8	9	8	6	12	91/4	16
A200, 250, 290, 390	14	11 <sup>7</sup> /8	11 <sup>1</sup> / <sub>4</sub>	8	8	12 <sup>7</sup> /8	10	23
A410, 510	18	14 <sup>3</sup> / <sub>8</sub>	14 <sup>1</sup> / <sub>2</sub>	8	8	16 <sup>7</sup> /8	13 <sup>1</sup> / <sub>4</sub>	36
A700	235/8	115/8	11 <sup>5</sup> /8	19 <sup>1</sup> / <sub>2</sub>	8	225/8	10 <sup>1</sup> / <sub>2</sub>	34
A710, 780	18	14 <sup>3</sup> / <sub>8</sub>	141/2	10	8	16 <sup>7</sup> /8	13¹/₄	36

\*Inlet Dimensions \*\*Optional Discharge Posititon

PERFORM	MANCE D	ATA						For complete	dimensional inf	ormation, see su	bmittal drawing	S.			
Model	RPM	AMP	Watts				CF	M/STATIC P	RESSURE IN	INCHES OF	W.G.				Price
Model	111 101	AIVII	(Input)		0.000	0.100	0.125	0.250	0.375	0.500	0.625	0.750	0.875	1.000	Each
CSP-B110	950	1.14	80	CFM	103	100	100	98							\$149
COF-DIIU	900	1.14	00	Sones	1.5	1.5	1.5	2.0							\$148
CSP-B150	1050	1.7	129	CFM	151	150	149	148							\$166
001-0100	1000	1.7	123	Sones	2.0	2.0	2.0	2.0							ψ100
CSP-B200	1100	2.2	173	CFM	186	184	184	182							\$186
001 -D200	1100	2.2	173	Sones	3.0	3.0	3.0	3.0							φ100
CSP-A110	950	0.62	20	CFM	124	112	110	102	77						\$236
001 -A110	330	0.02	20	Sones	0.8	0.8	0.8	0.9	0.9						φ230
CSP-A125	1100	0.63	33	CFM	138	126	124	114	91						\$236
001 -A123	1100	0.03	33	Sones	1.1	1.1	1.1	1.0	1.2						φ230
CSP-A190	1400	1.10	55	CFM	215	202	198	180	159	121					\$278
001 -A130	1400	1.10	33	Sones	2.0	1.5	2.0	2.0	2.5	2.5					ΨΖΙΟ
CSP-A200	900	0.43	58	CFM	254	231	226	203	178	145	109	70			\$280
001 -A200	300	0.43	30	Sones	0.6	0.4	0.5	0.9	1.0	1.3	1.5	1.5			ΨΖΟΟ
CSP-A250	1000	0.79	67	CFM	266	246	241	221	205	187	165	132			\$280
001 A230	1000	0.73	07	Sones	0.9	1.0	1.0	2.0	2.5	3.0	2.5	2.5			ΨΖΟΟ
CSP-A290	1050	0.71	102	CFM	318	299	292	265	248	229	201	144			\$309
001 -A230	1030	0.71	102	Sones	1.1	1.2	1.3	2.0	2.5	3.5	3.0	3.0			φυσ
CSP-A390	1350	1.33	161	CFM	412	400	397	382	363	339	324	309			\$327
001 -A000	1330	1.55	101	Sones	2.0	2.0	2.0	2.5	3.0	4.0	4.5	4.5			ΨυΖΙ
CSP-A410	1000	1.87	132	CFM	447	441	403	364	317	217					\$348
001 -A410	1000	1.07	132	Sones	1.5	1.5	1.5	2.0	2.0	2.0					φυτο
CSP-A510	1070	3.11	218	CFM	545	514	506	464	405	324					\$423
001 -A010	1070	3.11	210	Sones	2.5	2.0	2.0	2.0	2.0	2.5					ψ423
CSP-A700	1100	3.20	352	CFM	766	755	752	739	726	702	678	635	549	418	\$517
001 -A1 00	1100	3.20	332	Sones	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5	2.5	4.0	φυιι
CSP-A710	1080	4.40	333	CFM	737	698	688	635	567	475	334				\$529
001 -A1 10	1000	4.40	333	Sones	2.5	2.5	2.5	2.5	2.0	2.0	2.0				φυζυ
CSP-A780	1600	3.77	496	CFM	813	784	777	742	707	672	638	603	567	527	\$529
OOF =A7 00	1000	3.11	450	Sones	3.0	3.0	3.0	3.0	3.0	2.0	3.0	3.0			φυζσ





DIMENSIONAL D	ΔΤΔ	MODFI	CSP	Δ900-Δ1550

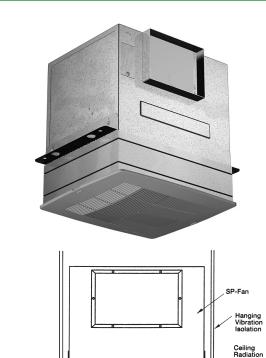
Model	A	В	C	D	E	F	G	Wt.	
900, 1050, 1410, 1550	233/4	143/8	141/2	183/4	8	225/8	131/4	59	

\*\*Optional Discharge Posititon \*Inlet Dimensions PERFORMANCE DATA

CSP-A900			Watts				CEM	STATIC PR	ESSURE IN I	NCHES OF V	v G				Price
Model	RPM	AMP	(Input)		0.000	0.100	0.125	0.250	0.375	0.500	0.625	0.750	0.875	1.000	Each
CCD ACCO	050	4.07	225	CFM	908	852	841	782	715	631					ф <b>7</b> 70
CSP-A900	950	4.87	335	Sones	1.4	1.4	1.4	2.0	2.5	3.0					\$773
CCD 410F0	1005	095 6.65 469		CFM	1182	1110	1093	1013	922	832	743				\$773
CSP-ATUSU	1095	0.00	409	Sones	2.5	2.5	2.5	2.5	2.5	2.5	2.5				\$113
CCD A1410	1450	7.00	074	CFM	1584	1543	1533	1483	1439	1395	1345	1293	1238	1181	<b>6770</b>
CSP-A1410	1450	7.80	871	Sones	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.0	4.0	\$773
00D A1EE0	1610	1010 0.00	913	CFM	1672	1618	1604	1543	1484	1427	1367	1307	1240	1172	\$854
CSP-A1550	1010	8.32	913	Sones	5.0	4.5	4.5	4.5	4.5	4.0	4.0	4.5	4.5	4.5	φου4
Model 5W (6 A	Amp) Solid S	State Speed	Controller (CSP	-B110 - B200,	CSP-A110 - A	N900)									\$55
Model 10W (1	0 Amp) Soli	d State Spe	ed Controller (C	SP-A1050 - A1	550)										\$106

#### SP AND CSP ACCESSORIES





#### **CEILING RADIATION DAMPER**

National Fire Protection Association (NFPA) Standard 90A requires that openings in fire rated ceiling/floor assemblies must be protected by appropriately rated ceiling radiation dampers.

As a result, many local codes require that fans installed in fire rated ceilings must also be protected by dampers which are insulated against both heat and flame.

The Greenheck SP (60 Series) ceiling radiation damper option protects fire rated ceilings and effectively blocks the spread of heat and flames through the building's ventilation system. This damper is U.L. Classified, rated at three to four hours fire resistance, and is available for SP fan sizes 50 through 1550. Its non-asbestos, ceramic blanket provides the required thermal barrier for fire rated ceilings while also protecting both the fan and the ductwork. The ceramic blanket stows compactly against the damper frame to permit maximum free area and eliminate performance losses.

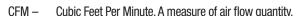
Once the accumulation of heat in the airstream reaches the temperature limits of the fusible link, the closure mechanism is activated. Stainless steel closure springs draw the ceramic blanket securely over the damper opening. Standard fusible links activate at air temperatures of 165°F. Other links are available.

The galvanized steel frame of the ceiling radiation damper is sized to match the Model SP housing. This design saves space by allowing the damper to mount directly beneath the fan. The damper adds approximately 3" in height to the combined installation.

#### **DIMENSIONAL DATA**

SP Model	CRD Size	A	В	Material Gauge	Price Each
A50-A190	310	13 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> /8	22	\$84
B50-B-200 A200-A390	320	14 <sup>3</sup> / <sub>8</sub>	12¹/₄	22	\$90
A410-A510 A710-A780	350	187/16	<b>14</b> <sup>15</sup> / <sub>16</sub>	22	\$126

#### **TERMS**



SP – Static Pressure. Resistance to airflow measured in inches of water column.

Sone – A measure of loudness. One sone can be approximated as the loudness of a quiet refrigerator at adistance of 5 feet. Sones follow a linear scale, that is, 10 sones are twice as loud as 5 sones.

BHP – Brake Horsepower. A measure of power consumption. Used to determine the proper motor horsepower and wiring.

HP – Horsepower. Measure of a motor's power output. Used to indicate a fan's motor size.

RPM – Revolutions Per Minute. Measure of fan speed.

TS – Tip Speed. The speed of the tip of a fan wheel or prop measured in feet per minute.

AMCA – Air Movement and Control Association. A nationally recognized association which establishes standards for fan testing and performance ratings. Certifies air volume and sound ratings.

 U.L. – Underwriters Laboratories. An organization which estalishes and operates product safety certification programs and tests products for safety.

#### SP AND CSP DISCHARGE ACCESSORIES



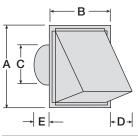
# DRIVES & STARTERS

#### **MODEL RJ Pitched Roof Cap**

- Steel construction with black enamel finish
- · Integral flashing flange
- Built in birdscreen and damper

Model	For use with sizes	Α	В	С	D	E	Throat Dia.	Price Each
RJ-4	B50-B80	11	91/4	8 <sup>1</sup> / <sub>4</sub>	55/16	41/2	4 in. Dia.	\$43
RJ-6x9	B90-B200 A50-A390	183/4	141/4	141/2	103/8	61/2	6 x 9	\$51
RJ-10x10	A410-A1050	18 <sup>1</sup> / <sub>2</sub>	271/2	15 <sup>3</sup> / <sub>4</sub>	235/8	91/2	10 x 10	\$113

All dimensions in inches.

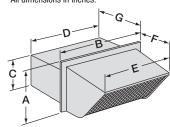


#### **MODEL WC & SDWVA** (Rounded Connection) **Hooded Wall Cap**

- Aluminum construction-Aluminum finish
- · For outside wall applications
- Built in damper
- Bird screen (not available on WC-4)

Model	For use with sizes	A	В	C	D	E	Price Each
WC-4	B50-B80	61/2	6	4	23/4	5	\$33
WC-6	C-6 B90-B200 A50-A190		8	6	41/8	5	\$41
WC-8	A200-A510	11	11	8	5 <sup>1</sup> /8	31/2	\$62
SDWVA-10	10" Round	131/2	13	10	7	81/2	\$86
SDWVA-12	12" Round	14 <sup>1</sup> / <sub>2</sub>	14	12	9	81/2	\$101

All dimensions in inches.

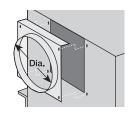


#### **MODEL WC (Rectangular Connection) Hooded Wall Cap**

- · Steel construction with black enamel finish
- For outside wall applications
- · Built in damper
- · Built in birdscreen and damper

Model	For use with sizes	А	В	С	D	E	F	G	Price Each
WC-10x3	50-290	5 <sup>1</sup> / <sub>2</sub>	12 <sup>3</sup> / <sub>4</sub>	31/2	101/4	11 <sup>1</sup> /8	41/4	5	\$38
WC-8x8	200-510	10 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>4</sub>	81/4	81/4	81/4	63/4	5	\$70
WC-18x8	700-1550	10 <sup>1</sup> / <sub>4</sub>	201/4	81/4	18 <sup>1</sup> / <sub>4</sub>	18 <sup>1</sup> / <sub>4</sub>	63/4	5	\$135

All dimensions in inches.



#### **MODEL RDC Round Duct Connector**

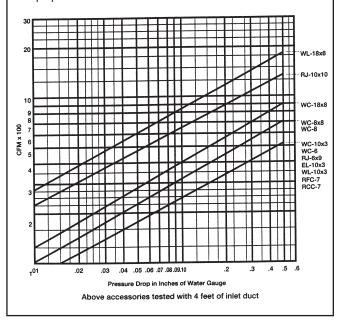
- · Replaces the standard square discharge duct connector and damper
- Uses existing mounting holes
- · Galvanized steel construction
- RDC-8 does not include a damper

Model	For use with sizes	Dia.	Price Each
RDC-6	A110-A190	6	\$25
RDC-8	A200-A510	8	\$32

All dimensions in inches

#### **ACCESSORY PRESSURE DROPS**

The chart below can be used with all of the discharge accessories shown on these two pages. Specific pressure drop values for these accessories must be included in total system calculations for proper fan selection.



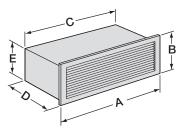
#### **MODEL EL - 10X3**

#### **Elbow Discharge with Grille**

- · Designed for installation under roof eaves
- Painted steel louvered grille
- · Built in damper
- For SP-C/SP-B/SP-A sizes 50-290
- For CSP-B/CSP-A sizes 110-290

Model	For use with sizes	Price Each
EL-10x3	50-290	\$59

All dimensions in inches.



#### **MODEL WL Wall Louvered Discharge**

- Anodized aluminum grille
- · Built in damper
- · Not recommended for exterior applications exposed to severe weather conditions. An external wall louver is recommended for such applications.

Model	For use with sizes	Α	В	C	D	E	Price Each
WL-10x3	50-290	12	5 <sup>1</sup> / <sub>4</sub>	10	73/4	31/2	\$177
WL-18x6	390-1550	193/4	8	18	9	6	\$238

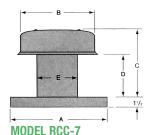
All dimensions in inches

# STEAM SPECIALTIES

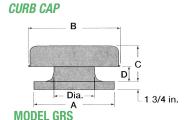
#### SP AND CSP ACCESSORIES



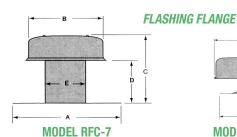
#### **ROOF DISCHARGE ACCESSORIES**



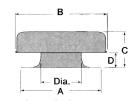
- Weathertight aluminum construction
- Integral birdscreen
- Built in curb cap
- Requires roof curb



- All aluminum exterior construction
- · Galvanized steel internal supports
- · Integral birdscreen
- · Built in curb cap
- · Requires roof curb



- Weathertight aluminum construction
- Integral birdscreen
- · Built in flashing flange



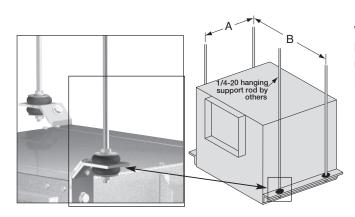
#### **MODEL GRSF**

- All aluminum exterior construction
- Galvanized steel internal supports
- Integral birdscreen
- · Built in flashing flange

	WITH CURB CAP												
Model	For use with sizes	A	В	С	D	Throat Dia.	Price Each						
RCC-7	50-390	15	12	10	63/8	7	\$140						
GRS-8	50-390	19	201/2	71/4	11/2	81/4	\$186						
GRS-10	410-710	19	201/2	73/4	2	10 <sup>1</sup> / <sub>4</sub>	\$204						
GRS-12	780-1050	22	29	10	31/2	121/4	\$225						
GRS-16	1410-2150	26	29	11	41/4	<b>16</b> <sup>5</sup> / <sub>16</sub>	\$304						
GRS-20	3600	30	351/2	11 <sup>1</sup> / <sub>4</sub>	33/4	205/16	\$376						

	WITH FLASHING FLANGE											
Model	For use with sizes	A	В	C	D	Throat Dia.	Price Each					
RFC-7	50-390	18	12	10	63/8	7	\$130					
GRSF-8	50-390	23	201/2	71/4	11/2	81/4	\$173					
GRSF-10	410-710	23	201/2	73/4	2	10¹/₄	\$192					
GRSF-12	780-1050	26	29	10	31/2	12¹/ <sub>4</sub>	\$207					
GRSF-16	1410-2150	30	29	11	41/4	<b>16</b> <sup>5</sup> / <sub>16</sub>	\$284					
GRSF-20	3600	34	351/2	11 <sup>1</sup> / <sub>4</sub>	33/4	205/16	\$354					

#### HANGING VIBRATION ISOLATORS



Vibration isolator kits are available for suspended installations. Kits include all hardware necessary to mount one unit, with the exception of <sup>1</sup>/4-20 threaded rod to be supplied by others. Fan mounting brackets include prepunched mounting holes for ease of installation.

SP/CSP Size	А	В	Price Each
B50-B200	41/2	15 <sup>5</sup> /8	\$30
A50-A190	51/2	145/8	\$30
A200-A390	63/4	15 <sup>1</sup> / <sub>2</sub>	\$30
A410, A510 A710, A780	91/4	195/8	\$30
A700	51/2	25 <sup>1</sup> / <sub>8</sub>	\$30
A900-A1050 A1410-A1550	91/4	253/8	\$30

All dimensions in inches.

В

Dia.

#### **ROOF VENTILATORS**

DÎ



#### MODEL GRS GRAVITY INTAKE/RELIEF VENTILATOR

Model GRS is an aluminum ventilator designed to be used as an intake or relief unit on natural gravity or positive pressure systems. The GRS appearance blends with other Greenheck products and, with its low silhouette, avoids the problem of detracting from architectural aesthetics.

#### DIMENSIONAL DATA AND PRICES

					DIIVIE	NOIUNA	L DAIA	ANV PR	ICEO				
MODEL	А	В	C	D	Throat	Throat 12" Roof oat area Price Curb		100 Damper Relief		410 Damper Intake			
					Dia.	(FT²)	Each	Model	ADD	Size	ADD	Size	ADD
GRS-8	19	201/2	71/4	11/2	81/4	0.37	\$186	19	\$95	8 x 8	\$59	8 x 8	\$108
GRS-10	19	201/2	73/4	2	101/4	0.57	\$204	19	\$95	10 x 10	\$64	10 x 10	\$109
GRS-12	22	29	10	31/2	121/4	0.82	\$225	22	\$103	12 x 12	\$67	12 x 12	\$109
GRS-15	22	29	10	31/2	141/4	1.12	\$293	22	\$103	16 x 16	\$76	16 x 16	\$142
GRS-16	26	29	11	41/4	165/16	1.45	\$304	26	\$124	16 x 16	\$76	16 x 16	\$142
GRS-18	30	351/2	73/4	13/4	201/4	1.83	\$365	30	\$145	18 x 18	\$98	18 x 18	\$172
GRS-20	30	351/2	11 <sup>1</sup> / <sub>4</sub>	33/4	205/16	2.25	\$376	30	\$145	18 x 18	\$98	18 x 18	\$172
GRS-24	34	381/4	11	4	241/2	3.24	\$557	34	\$165	24 x 24	\$175	24 x 24	\$203

## General Ventilation Design Ventilation Rates for Acceptable Indoor Air Quality

Volita	iation mate	o lui Auu	optubio iliuool Ali Quulit		
Space	Outdoor Air Required (CFM/person)	Occupancy (People/ 1000 ft²)	Space	Outdoor Air Required (CFM/person)	Occupancy (People/ 1000 ft²)
Auditoriums	15	150	Laboratories	20	30
Ballrooms/Discos	25	100	Libraries	15	20
Bars	30	100	Medical Procedure Rooms	15	20
Beauty Shops	25	25	Office Spaces	20	7
Classrooms	15	50	Pharmacies	15	20
Conference Rooms	20	50	Photo Studios	15	10
Correctional Facility Cells	20	20	Physical Therapy	15	20
Dormitory Sleeping Rooms	15	20	Restaurant Dining Areas	20	70
Dry Cleaners	30	30	Retail Facilities	15	20
Gambling Casinos	30	120	Smoking Lounges	60	70
Game Rooms	25	70	Sporting Spectator Areas	15	150
Hardware Stores	15	8	Supermarkets	15	8
Hospital Operating Rooms	30	20	Theaters	15	150
Hospital Patient Rooms	25	10			

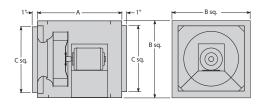
<sup>\*</sup>Adapted from ASHRAE Standard 62-1989 "Ventilation for Acceptable Indoor Air Quality".

#### **INLINE CENTRIFUGAL FANS**



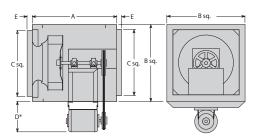


#### MODEL SO DIRECT DRIVE DIMENSIONS



Unit Size	A	В	C	E
SQ 80-95	16	15	11 <sup>7</sup> /8	1
SQ 100	21	17	13 <sup>7</sup> /8	1
SQ 120	21	19	15 <sup>7</sup> /8	1

#### **MODEL BSQ BELT DRIVE DIMENSIONS**



Unit Size	A	В	C	D*	E
BSQ 70-80-90	21	17 <sup>1</sup> /8	13 <sup>7</sup> /8	9	1
BSQ 100	21	17 <sup>1</sup> /8	13 <sup>7</sup> /8	9	1
BSQ 120	21	19¹/8	15 <sup>7</sup> /8	9	1
BSQ 140	22	23 <sup>1</sup> /8	19 <sup>7</sup> /8	9	1
BSQ 160	26	26 <sup>1</sup> /8	22 <sup>7</sup> /8	11	1
BSQ 180	28	271/8	237/8	11	1 <sup>1</sup> /2

<sup>\*</sup>Varies with motor size.

#### **MODEL SQ AND BSQ**

Model SQ and BSQ inline duct fans are designed for intake, exhaust, return or makeup air systems that require high efficiency, mounting versatility, low sound levels and ease of service. The square, compact housing design permits mounting in any position, whether horizontal, vertical or at any angle. Two removable panels provide access for service. Models SQ and BSQ are licensed to bear the AMCA Certified Ratings Seals for sound and air performance. BSQ models with motors mounted and all SQ sizes are UL listed.

#### **CONSTRUCTION FEATURES**

- Galvanized steel housing.
- Two removable service panels.
- · Formed collars for duct connection at inlet and outlet.
- Flexible motor leads and combination junction box and disconnect switch (standard).
- BSQ motors, bearings and drives are mounted out of the airstream and are cooled by ambient air.

#### STOCK NOTES

#### • Model SQ Direct Drive

SQ motors are 115/60/1. All fans can be used with a speed control and offer thermal overload protection.

SQ-90 and 95 are equipped with 3-speed motors, field wired for either 1050, 1300 or 1500 RPM and can be shipped UPS.

SQ-90 and 95 are constant speed, totally enclosed. SQ100 are constant speed, open drip proof. (Contact your salesman for other styles.)

• Vari-Green® motor - 80% turndown, 85% efficient.

#### Available on select sizes.

Motors 1/4 HP are 115/60/1.

• Model BSQ Belt Drive

Motors 1/3 & 1/2 HP, 1 PH are 115/208-230/60/1 and wired for 115 volts. Motors 1 HP, 3 PH and larger are 208-230/460/60/3 are wired for 208-230 volts

#### BSQ motors are constant speed, open drip proof. (Contact your salesman for other styles.)

Units are shipped preset for maximum RPM and are adjustable. BSQ sizes 70 through 90 are stocked with motors mounted and HP ratings as cataloged.

BSQ sizes 100, 120, 140, 160, 180 are stocked less motors and drives. See page 21.

Specify fan RPM, motor HP, voltage and phase required. Motor and drive will be shipped separate for field installation.



ANS / DAMPERS

VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS

DAMPERS /LOUVERS / ACCESS DOORS / ACTUATORS

FLEXIBLE DUCT /

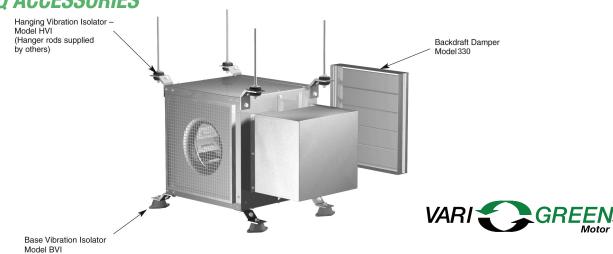
SPIRAL PIPE ACCESSORIES

# PERFORMANCE DATA AND PRICING MODEL SQ

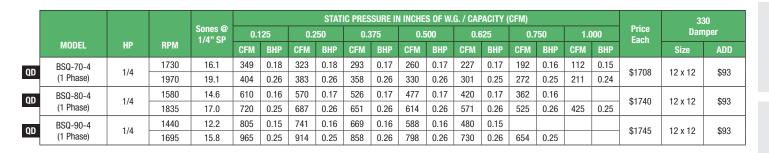


						STATIC PRESSURE IN INCHES OF W.G. / CAPACITY (CFM)					20	20			
					Max.	0.000	0.100	0.125	0.250	0.375	0.500	0.625	Price Each	33 Dan	su 1per
MODEL		HP	RPM	TS	ВНР	Sones	Sones	Sones	Sones	Sones	Sones	Sones		Size	ADD
CO 00 VCCV		1/0	1705	4410	٥٢٢	503	461	451	405	350	294		<b>#1000</b>	10 10	¢οο
SQ-80-VG6X		1/6	1725	4412	.055	8.4	8.5	8.6	8.6	8.6	8.7		\$1220	12 x 12	\$92
	Е	1/50	1050	2989	.020	500	399	369	188						
		1/30	1030	2303	.020	4.0	3.9	3.9	4.1						
SQ-90	G	1/25	1300	3701	.040	619	539	519	397	245			\$720	12 x 12	\$92
3Q-30	u	1/23	1300	3701	.040	5.4	5.4	5.4	5.5	5.6			\$120	12 1 12	φθΖ
	D	1/10	1550	4412	.068	738	673	654	564	457	334				
	, D	1/10	1330	4412	.000	7.6	7.5	7.5	7.4	7.4	7.4				
	Е	1/30	1050	2989	.031	623	507	475	274						
		1/30	1030	2303	.031	4.9	4.5	4.5	4.5						
SQ-95	G	1/15	1300	3701	.059	771	684	659	522	352			\$720	12 x 12	\$92
30-93	u	1/13	1300	3701	.059	7.6	6.8	6.7	6.4	6.4			\$120	12 1 12	φυΖ
	D	1/8	1/8 1550	4412	.100	919	852	829	720	603	461	276			
		1/0	1000	4412	.100	9.6	9.4	9.3	8.7	8.1	7.6	7.1			
SQ-95-VG6X		1/6	1725	5050	.100	1024	1000	948	850	751	641	507	\$1274	12 x 12	\$92
3Q-93-VG0X		1/0	1723	3030	.100	11.3	11.1	11.0	10.6	10.1	9.8	9.2	φ12/4	12 1 12	φυΖ
SQ-100-A		1/4	1725	5052	.250	1454	1413	1402	1349	1292	1227	1156	\$1031	14 x 14	\$100
3Q-100-A		1/4	1723	3032	.230	13.1	12.5	12.4	11.9	11.5	11.1	10.7	φισσι	14 X 14	φ100
SQ-120-VG5X		1/2	1725	5927	.41	1948	1897	1883	1818	1754	1692	1628	\$1792	16 x 16	\$109
3Q-120-VU3A		1/2	1725	3321	.41	14.7	14.4	14.1	13.8	13.6	13.5	13.5	ψ1732	10 x 10	φ109
BAS 1P Magnetic Starter W/DIS							W/DIS	- \$201							
Hanging Rubber Vibration Isolator Kit (HVI-250)							\$93								
Base Rubber Vibration Isolator Kit (BVI-250)							\$127								
Mounting Bracke	ets (80	0201)											\$60		
Model 5W (6 Am	p) Soli	d State S	peed Cor	itrol (thru	Size 100	)							\$55		

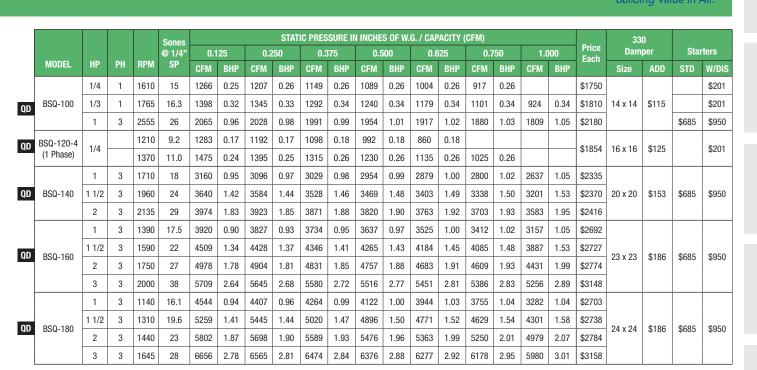
#### **SQ & BSQ ACCESSORIES**



### **BSQ PERFORMANCE DATA - MOTORS & DRIVES FACTORY MOUNTED**



#### **BSQ PERFORMANCE DATA - MOTORS & DRIVES** FIELD MOUNTED



#### **ACCESSORIES**



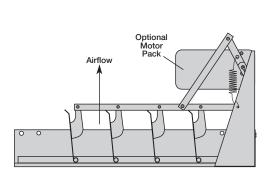
DESCRIPTION	Fan Size	Price Each	
Hanging Rubber Vibration Isolator Kit HVI-2	250	BSQ 70-140	\$114
Hanging Rubber Vibration Isolator Kit HVI-4	140	BSQ 160-180	\$163
Base Rubber Vibration Islator Kit BVI-2	250	BSQ 70-140	\$155
Base Rubber Vibration Isolator Kit BVI-4	140	BSQ 160-180	\$205
Mounting Bracket 8002	01	SQ & BSQ	\$72

VAV TERMINALS / HOT WATER COILS

#### **BACKDRAFT DAMPERS**



All dampers feature a frame constructed of heavy gauge galvanized steel with prepunched mounting holes for ease of installation. Blades are fabricated with vinyl on the closing edge. Each blade pivots on nylon bushings to assure quiet and smooth operation. Optional 120V motor packs are available for field mounting.

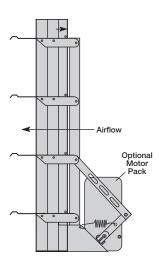


	Damper Size Sq.	Price Each	Add Motor Pack
	8 x 8	\$59	\$112
7	10 x 10	\$64	\$112
	12 x 12	\$67	\$112
	16 x 16	\$76	\$112
	18 x 18	\$98	\$112
	24 x 24	\$175	\$112
QD	30 x 30	\$212	\$112

Motor Pack is MP100/120/60/1V

#### **MODEL 100**

- Model 100 dampers are designed for use with all Greenheck roof mounted exhaust fans.
- Sizes 12 through 30 are spring assisted to aid in initial opening on gravity operated models.
- Sizes 8 through 30 can be shipped UPS.



Damper Size Sq.	Price Each	Add Motor Pack
10 x 10	\$96	\$215
12 x 12	\$103	\$215
14 x 14	\$112	\$215
16 x 16	\$128	\$215
18 x 18	\$135	\$215
20 x 20	\$169	\$215
22 x 22	\$205	\$215

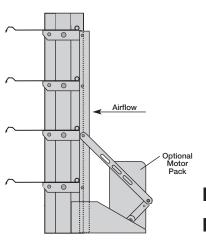
Motor Pack is MP300/120/60/1V

#### **MODEL 320**

- Model 320 dampers are designed for use with Greenheck sidewall propeller fans.
- A tie bar is added to assure uniform blade opening and to counter balance the weight of the blade assembly allowing the damper to open fully at minimal airflow.
- NOTE: 320 is exhaust only.
  Sizes 10 through 22 can be shipped UPS.

#### **BACKDRAFT DAMPERS**





	Damper Size Sq.	Price Each	Add Motor Pack
	8 x 8	\$78	\$215
	9 x 9	\$86	\$215
	10 x 10	\$86	\$215
	12 x 12	\$92	\$215
	14 x 14	\$100	\$215
	16 x 16	\$109	\$215
QD	18 x 18	\$153	\$215
QD	20 x 20	\$153	\$215
QD	23 x 23	\$186	\$215
QD	24 x 24	\$186	\$215

Motor Pack is MP300/120/60/1V

#### **MODEL 330**

- Model 330 dampers have been designed for application with Greenheck's SQ in-line fans and when a no flange damper is required. A balanced design affords minimal resistance to airflow.
- Sizes 8 through 24 can be shipped UPS.

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Damper Size Sq.	Price Each
8 x 8	\$108
10 x 10	\$109
12 x 12	\$109
16 x 16	\$142
18 x 18	\$172
24 x 24	\$203

#### **MODEL 410**

- Model 410 non-motorized dampers are designed for use with Greenheck's model RSF and GRS supply fans, and Fabra Hoods.
- All sizes can be shipped UPS.

NOTE: Actual damper size is 1/16" smaller than nominal size.

#### **ELECTRICAL ACCESSORIES**



DIFFUSERS / TRANSITIONS REGISTERS / GRILLES /

VAV TERMINALS / HOT WATER COILS

ELECTRIC HEATERS / FILTERS & ACCESSORIES

VIBRATION ISOLATION

#### FAN SPEED CONTROL

GREENHECK

Speed controls are available in two models for use with shaded pole and open permanent split capacitor motors in 115 volt single phase only.

> Model 5W – For applications up to 6.0 AMPS. Requires 2 x 4 handy box by others.

Price Each: \$55.00

Model 10W - For applications up to 10.0 AMPS. Requires 2 x 4 handy box by others.

Price Each: \$106.00



#### MANUAL STARTER **SWITCH**

Manual motor starting switches are available in three models. All models are U.L. Listed, HP rated, specification grade and feature neoprene rockers for quiet operation. Model MS-16 includes a pilot light. All models require a handy box by others.



Vari-Speed



Model 867008- Vari Green Remote Dial Retrofit Kit. Requires 2 x 4 handy box by others.

Price Each: \$320.00

Speeds	Model	HP	Volts	PH	Price
1	MS-1	1/2	120	1	\$10
1	MS-16 w/pl	1/2	120	1	\$36
1	MS-4	2	200/277	1	\$21

#### TIME DELAY SWITCH



#### **MODEL GTD**

The Model GTD Time Delay Switch is available for keeping a fan or light operating for an extended period of time after the initiating switch has been turned off. The GTD assembly consists of a single pole, single throw switch, a timer and a cover plate.

Price Each: \$129.00

#### **DISCONNECT SWITCHES**



For safety in servicing fans not equipped with factory mounted disconnects, switches are available in seven models. Each model includes a switch assembly, handy box and cover plate.

Weatherproof Disconnect Switches in NEMA rated waterproof boxes for positive electrical shutoff and safety in servicing fans. NEMA 3R toggle style switch models are listed below.

#### THERMOSTAT ETD9STS



Wall-mounted line voltage thermostat is designed for on/off control in cooling or heating applications. Recommended for fan and unit heater applications only. U.L. listed. Requires standard handy box (not included).

Temperature Range: 50 - 90 F **Electrical Rating:** 22 amps @ 125/277 VAC

3/4 hp @125 VAC, 1-1/2 hp @ 277 VAC

Price Each: \$37.00

Model	HP	Volts	PH	Price				
STANDARD	STANDARD							
NITS -1	up to 1/2	120	1	\$11				
NITS -2	3/4 to 1	120	1	\$16				
NITS -3	1-1/2 to 2	120	1	\$44				
NITS -4	1/4 to 2	200/277	1	\$21				
NITS -6	up to 7-1/2	230/460	3	\$60				
WEATHERPROOF								
N3RTS-1	1/4 to 2	120	1	\$110				
N3RTS-6	up to 7-1/2	230/460	3	\$118				

## **MAGNETIC STARTERS**



#### **MODEL BAS1/MSAC**

- UL Listed
- HOA Keypad
- BAS Compatible
- Fireman's Override
- Type 1 Enclosures

ADJUSTABLE OVERLOAD - SINGLE PHASE W/DISCONNECT					
Model	Price Each	120V	230V		
BAS 1P	\$209	0.1 - 1 HP	0.1 - 1 HP		

ELECTRONIC OVERLOAD - NEMA 1 ENCLOSURES							
Model Price Each Three Phase					NEMA		
		208V	230V	460V	Size		
MSAC-1-9/J-40	\$685	2 HP	2 HP	5 HP	00		
MSAC-1-18/J-40	\$727	5 HP	7.5 HP	10 HP	0		
MSAC-1-32/J-40	\$769	7.5 HP	10 HP	20 HP	1		

ELECTRONIC OVERLOAD W/DISCONNECT - NEMA 1 ENCLOSURES								
Model	Price Each		Three Phase					
Model	FIICE Lacii	208V	230V	460V	Size			
MSAC-1-9/J-G2.5-40	\$950	.5 HP	.5 HP	1 HP	00			
MSAC-1-9/J-G4-40	\$950	.75 HP	.75 HP	2 HP	00			
MSAC-1-9/J-G6-40	\$950	1 HP	1.5 HP	3 HP	00			
MSAC-1-18/J-G8-40	\$992	2 HP	2 HP	5 HP	0			
MSAC-1-18/J-G13-40	\$992	3 HP	3 HP	7.5 HP	0			
MSAC-1-18/J-G17-40	\$992	3 HP	5 HP	10 HP	0			
MSAC-1-32/J-G26-40	\$1006	7.5 HP	7.5 HP	15 HP	1			
MSAC-1-32/J-G32-40	\$1006	7.5 HP	10 HP	20 HP	1			

FANS / DAMPERS / CURBS

> ABLE SPEED S & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS

## AC DRIVES By ABB





#### **MODEL ACH580 - 208 VOLT**

- UL Listed
- HVAC Designed
- Full Graphic Display
- Type 1 Enclosures

MODEL: ACH580-01-BASE DRIVE								
MODEL HP VOLTAGE PH AMPS FRAME								
ACH580-01-10A6-2	3	208	3	10.6	R1			
ACH580-01-017A-2	5	208	3	16.7	R1			
ACH580-01-024A-2	7.5	208	3	24.2	R2			
ACH580-01-031A-2	10	208	3	30.8	R2			
ACH580-01-046A-2	15	208	3	46.2	R3			
ACH-AP-H Control Panel for All ACH580 Drives								

Contact your local salesperson for pricing.

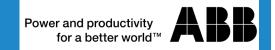


MODEL: ACH580-	MODEL: ACH580-VCR-W/ ELECTRONIC BYPASS & SERVICE SWITCH									
MODEL	HP	VOLTAGE	PH	AMPS	FRAME					
ACH580-VCR-10A6-2+F267	3	208	3	10.6	R1					
ACH580-VCR-017A-2+F267	5	208	3	16.7	R1					
ACH580-VCR-024A-2+F267	7.5	208	3	24.2	R2					
ACH580-VCR-031A-2+F267	10	208	3	30.8	R2					
ACH580-VCR-046A-2+F267	15	208	3	46.2	R3					
ACH-AP-H	Control Panel for All ACH580 Drives									

Contact your local salesperson for pricing.

Please note: To extend your factory one (1) year warranty to a two (2) year warranty, Check, Test and Start is required by an authorized ABB specialist. Please contact your local salesperson for more information.

## **AC DRIVES** By ABB





#### **MODEL ACH580 - 460 VOLT**

- UL Listed
- HVAC Designed
- Full Graphic Display
- Type 1 Enclosures

	MODEL: ACH580-01-BASE DRIVE									
MODEL	HP	VOLTAGE	PH	AMPS	FRAME					
ACH580-01-03A0-4	1.5	460	3	3.0	R1					
ACH580-01-04A8-4	3	460	3	4.8	R1					
ACH580-01-07A6-4	5	460	3	7.6	R1					
ACH580-01-012A-4	7.5	460	3	12	R1					
ACH580-01-014A-4	10	460	3	14	R2					
ACH580-01-023A-4	15	460	3	23	R2					
ACH580-01-027A-4	20	460	3	27	R3					
ACH580-01-034A-4	25	460	3	34	R3					
ACH580-01-044A-4	30	460	3	44	R3					
ACH580-01-052A-4	40	460	3	52	R4					
ACH580-01-065A-4	50	460	3	65	R4					
ACH-AP-H	Control Panel for All ACH580 Drives									

Contact your local salesperson for pricing.



MODEL: ACH580-VCR-W/ ELECTRONIC BYPASS & SERVICE SWITCH								
MODEL	HP	VOLTAGE	PH	AMPS	FRAME			
ACH580-VCR-04A8-4+F267	3	460	3	4.8	R1			
ACH580-VCR-07A6-4+F267	5	460	3	7.6	R1			
ACH580-VCR-012A-4+F267	7.5	460	3	12	R1			
ACH580-VCR-014A-4+F267	10	460	3	14	R2			
ACH580-VCR-023A-4+F267	15	460	3	23	R2			
ACH580-VCR-027A-4+F267	20	460	3	27	R3			
ACH580-VCR-034A-4+F267	25	460	3	34	R3			
ACH580-VCR-044A-4+F267	30	460	3	44	R3			
ACH580-VCR-052A-4+F267	40	460	3	52	R4			
ACH580-VCR-065A-4+F267	50	460	3	65	R4			
ACH-AP-H	Control Panel for All ACH580 Drives							

Contact your local salesperson for pricing.

Please note: To extend your factory one (1) year warranty to a two (2) year warranty, Check, Test and Start is required by an authorized ABB specialist. Please contact your local salesperson for more information.

FANS / DAMPERS / CURBS

#### **SUPPLY REGISTERS**



DRIVES & STARTERS **VARIABLE SPEED** 

VAV TERMINALS / HOT WATER COILS

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

VIBRATION ISOLATION

STEAM SPECIALTIES

**11/4"** (32) -€Grille Face Opening = D -3/4" (19)>> Grille Frame Overall = D +13/4" (45) 3/4" (19) <u>\rightarrow</u> Opposed 1

#### MODEL 620D & MODEL 520D

- Surface Mount
- Double deflection design for full side spread and drop control
- Model 620D is manufactured from corrosion resistant extruded aluminum with an aluminum (B15) powder coat finish. Includes rollformed steel opposed blade damper
- Model 520D is manufactured from stamped steel components with a white (B12) powder coat finish. Includes rollformed steel opposed blade damper.
- Individually adjustable semi-airfoil blades
- · Vertical front blades
- Outer frames with corner inserts for hairline mitered seams on larger sizes

WxH	Nominal CFM*	Aluminum (B15) Price Each	Steel (B12) Price Each	WxH	Nominal CFM*	Aluminum (B15) Price Each	Steel (B12) Price Each	WxH	Nominal CFM*	Aluminum (B15) Price Each	Steel (B12) Price Each
8 x 4	180	\$51	\$47	16 x 10	720	\$106	\$89	24 x 10	1300	\$133	\$118
8 x 6	260	\$58	\$55	18 x 6	480	\$89	\$78	24 x 12	1440	\$148	\$130
10 x 4	220	\$58	\$55	18 x 8	720	\$101	\$84	24 x 16	1720	\$179	\$156
10 x 6	340	\$66	\$55	18 x 10	855	\$114	\$94	30 x 8	1200	\$153	\$141
12 x 4	260	\$65	\$58	18 x 12	1070	\$126	\$107	30 x 10	1400	\$175	\$154
12 x 6	390	\$72	\$60	20 x 6	550	\$99	\$82	30 x 12	1800	\$196	\$176
12 x 8	480	\$82	\$71	20 x 8	750	\$111	\$93	30 x 16	2180	\$236	\$217
14 x 6	370	\$77	\$67	20 x 10	945	\$118	\$100	36 x 8	1440	\$180	\$156
14 x 8	550	\$87	\$75	20 x 12	1045	\$128	\$111	36 x 12	1950	\$224	\$199
16 x 6	415	\$87	\$71	24 x 6	750	\$108	\$89	36 x 16	2530	\$275	\$244
16 x 8	650	\$99	\$82	24 x 8	945	\$125	\$107	36 x 18	3000	\$301	\$273

#### \*Columbia Stock Steel (B12) Only.

\*Performance based on a sound level of approximately NC 30. For more specific performance information, consult your Hoffman & Hoffman representative or visit www.price-hvac.com

Touchup Paint.....\$28.00

12 oz aerosol can (White or Aluminum)

# HANS / DAMPERS

VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

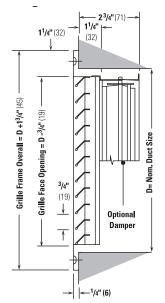
#### **RETURN GRILLES AND REGISTERS**





#### MODELS 630, 530, 630D, 530D

- Surface Mount
- Model 630 is constructed of extruded aluminum with an aluminum (B15) powder coat finish
- Model 530 is manufactured from rollformed steel components with a white (B12) powder coat finish
- Deflecting vanes are curved and set at 45°
- · Horizontal front vanes
- · Outer frames with corner inserts for hairline mitered seams on larger sizes
- · Model 630D and 530D furnished with opposed blade damper



MODEL 630D & MODEL 530D								
WxH	Nominal CFM*	Aluminum (B15) Price Each	Steel (B12) Price Each					
6 x 6	125	\$54	\$46					
8 x 8	235	\$59	\$46					
10 x 10	370	\$68	\$55					
12 x 12	400	\$76	\$60					



WxH	Nominal CFM*	Aluminum (B15) Price Each	Steel (B12) Price Each	WxH	Nominal CFM*	Aluminum (B15) Price Each	Steel (B12) Price Each	WxH	Nominal CFM*	Aluminum (B15) Price Each	Steel (B12) Price Each
6 x 6	125	\$40	\$29	14 x 14	710	\$61	\$47	24 x 18	1400	\$100	\$67
8 x 8	235	\$43	\$29	16 x 8	490	\$53	\$42	24 x 24	1700	\$119	\$82
10 x 6	240	\$43	\$29	16 x 10	550	\$61	\$46	30 x 12	1100	\$99	\$71
10 x 8	280	\$45	\$35	16 x 16	960	\$76	\$53	30 x 24	2150	\$147	\$107
10 x 10	370	\$48	\$38	18 x 12	805	\$66	\$51	30 x 30	3000	\$173	\$121
12 x 6	250	\$45	\$35	18 x 18	1000	\$84	\$60	36 x 18	2150	\$141	\$105
12 x 8	375	\$48	\$35	20 x 20	1300	\$95	\$66	36 x 24	2800	\$166	\$116
12 x 12	550	\$53	\$42	22 x 22	1600	\$106	\$75	36 x 30	3000	\$193	\$134
14 x 6	280	\$45	\$35	24 x 8	710	\$66	\$51	36 x 36	3600	\$218	\$154
14 x 8	420	\$48	\$38	24 x 12	925	\$79	\$55	48 x 24	3300	\$254	\$195

#### \*Columbia Stock Steel (B12) Only.

\*Performance based on a sound level of approximately NC 30. For more specific performance information, consult your Hoffman & Hoffman representative or visit <a href="https://www.price-hvac.com">www.price-hvac.com</a>

**Touchup Paint......\$28.00** 

12 oz aerosol can (White or Aluminum)

FANS / DAMPERS / CURBS

DRIVES & STARTERS

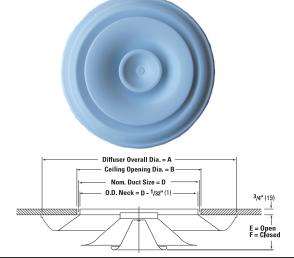
### **MISCELLANEOUS AIR DISTRIBUTION PRODUCTS**



#### **MODEL RCDE**

- Steel construction with a white (B12) powder coat finish
- Two position adjustment
- · Easily adjustable without requiring special tools

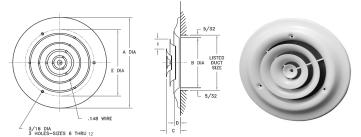
Size	Nominal CFM	Price Each	A	В	D	E	F
6	200	\$116	11 1/8	6 1/2	6	1 3/4	1 1/8
8	280	\$121	14 3/4	8 1/2	8	2 1/8	1 1/2
10	490	\$132	18 1/4	10 1/2	10	2 7/8	2 1/8
12	705	\$147	22	12 1/2	12	3 1/8	2 3/8



#### **MODEL 16 ROUND CEILING DIFFUSER**

- Steel construction with a white (B12) powder coat finish
- Low cost design
- Optional duct ring or damper
- Ideal for residential, apartment, light commercial applications

Size	Nominal CFM*	Grille Price Each	Duct Ring Price Each	Damper/w Duct Ring
6	135	\$25	\$19	\$33
8	225	\$28	\$21	\$33
10	345	\$35	\$27	\$41
12	500	\$47	\$34	\$56



Size	A DIA	B DIA	С	D	E DIA
6	9 –15/16	5 –11/16	1 –3/64	11/16	6 –1/2
8	11–15/16	7–11/16	1-7/32	11/16	8–1/2
10	13 –15/16	9 –11/16	1 –25/64	11/16	10 –1/2
12	15 –15/16	11 –11/16	1 –9/16	11/16	12 –1/2

#### **VOLUME CONTROL DAMPERS**

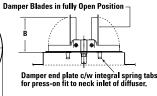
- Model VCR8E butterfly style, steel construction
- Model VCR9 radial shutter style, steel construction, low profile for flex duct installations
- · Sizes match Price diffusers

Size	VCR8E	VCR9
6	\$20	\$22
8	\$22	\$24
10	\$22	\$28
12	\$24	\$29
14	\$37	\$42

Five Segment Blades are rotated to desired Damper Configuration



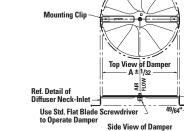




**Model VCR8E** 







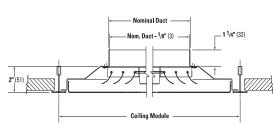
<sup>\*</sup>Performance based on a sound level of approximately NC 30. For more specific performance information, consult your Hoffman & Hoffman representative or visit www.price-hvac.com

## PERFORATED STEEL CEILING DIFFUSERS



#### MODEL PDC TEE-BAR LAY-IN SUPPLY

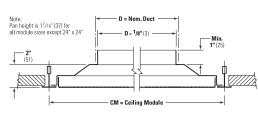
- All steel construction with a white (B12) powder coat finish
- Flush mounting in 24 x 24 lay-in tee-bar ceilings
- Approved for use in fire rated ceilings
- Four-way, adjustable pattern controllers
- Hinged, removable perforated face
- One piece plenum with one inch integrally drawn inlet collar
- Matching Model PDDR returns in stock
- Optional control damper. See page 30.



#### **MODEL PDC SUPPLY ROUND NECK**

Neck Size	Nominal CFM*	Price Each
6	160	\$76
8	275	\$76
10	390	\$82
12	550	\$82
14	675	\$91
16	875	\$96

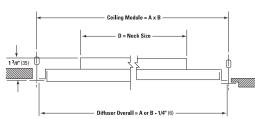




#### **MODEL PDDR RETURN ROUND NECK**

Neck Size	Nominal CFM*	Price Each
6	130	\$58
8	240	\$58
10	375	\$58
12	525	\$58
14	700	\$58
16	800	\$76





\*Nominal CFM based on a sound level of approximately NC 30. For more specific performance information, consult your Hoffman & Hoffman representative or visit www.price-hvac.com

#### **MODEL PDDR RETURN SOUARE NECK**

OQUAIL NEOK				
Neck Size	Panel Size	Nominal CFM*	Price Each	
22 x 22	24 x 24	2200	\$55	
10 x 10	12 x 12	425	\$46	

FANS / DAMPERS / CURBS

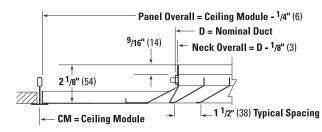
#### **LOUVER FACED CEILING DIFFUSERS**





#### MODEL SMD-TB TEE-BAR LAY-IN

- All steel construction with a white (B12) powder coat finish
- Flush mounting in 24 x 24 lay-in tee-bar ceiling
- Four-way pattern cores with miter-cut corners
- Spring-loaded snap-out core
- Optional snap-in opposed blade damper

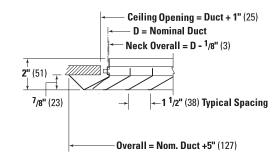


Neck Size	Nominal CFM*	SMD-D-TB (with damper) Price Each	SMD-TB (less damper) Price Each	Neck Size	Nominal CFM*	SMD-D-TB (with damper) Price Each	SMD-TB (less damper) Price Each
6 x 6	200	\$85	\$76	15 x 15	900	\$152	\$129
9 x 9	400	\$102	\$85	18 x 18	1200	\$154	\$129
12 x 12	600	\$125	\$107				



#### **MODEL SMD SURFACE MOUNT**

- All steel construction with a white (B12) powder coat finish
- Surface mounting
- Four-way pattern cores with miter-cut corners
- Spring-loaded snap-out core
- Optional snap-in opposed blade damper



Neck Size	Nominal CFM*	SMD-D (with damper) Price Each	SMD (less damper) Price Each	Neck Size	Nominal CFM*	SMD-D (with damper) Price Each	SMD (less damper) Price Each
6 x 6	200	\$66	\$56	15 x 15	900	\$130	\$107
9 x 9	400	\$82	\$66	18 x 18	1200	\$163	\$132
12 x 12	600	\$105	\$85				

\*Performance based on a sound level of approximately NC 30. For more specific performance information, consult your Hoffman & Hoffman representative or visit www.price-hvac.com

#### **LOUVER FACED CEILING DIFFUSERS**

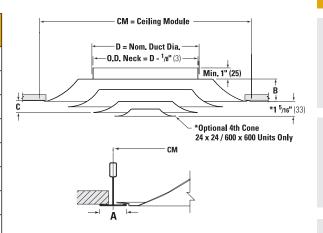




#### MODEL SCD TEE-BAR LAY-IN

- All steel construction with a white (B12) powder coat finish
- Flush mounting in lay-in tee-bar ceilings
- Four-way pattern, removable cones
- · Optional control damper. See page 30.
- · Center buttoned opening for damper adjustment
- Optional cosmetic center cone

Neck Size	Panel Size	Nominal CFM*	Price Each
6	24 x 24	250	\$89
8	24 x 24	400	\$89
10	24 x 24	575	\$89
12	24 x 24	775	\$89
14	24 x 24	975	\$89
6	12 x 12	235	\$62
8	12 x 12	350	\$62
AFI (R6) Insulation Blanket	12 x 12		\$25
AFI (R6) Insulation Blanket	24 x 24		\$27
Center Cone			\$16





#### **MODEL SPD TEE-BAR LAY-IN**

- All steel construction with a white (B12) powder coat finish
- Flush mounting in lay-in tee-bar ceilings
- · Face panel is easily installed and removed without special tools
- Satisfies both architectural appeal and engineering performance criteria

-	CM = Ceiling Module —
I-	Panel = CM - 1/4" (6)
↓ B	D = Nom. Duct Dia.  O.D. Neck = D - 1/8" (3)  Min. 1" (25)
· 1	→ Diffuser Plaque →
	→ Diffuser Size →

Neck Size	Panel Size	Nominal CFM*	Price Each
6	24 x 24	250	\$82
8	24 x 24	375	\$82
10	24 x 24	545	\$82
12	24 x 24	725	\$82
14	24 x 24	950	\$82
6	12 x 12	235	\$62
8	12 x 12	350	\$62
AFI (R6) Insulation Blanket	12 x 12		\$25
AFI (R6) Insulation Blanket	24 x 24		\$27

<sup>\*</sup>Performance based on a sound level of approximately NC 30. For more specific performance information, consult your Hoffman & Hoffman representative or visit <a href="https://www.price-hvac.com">www.price-hvac.com</a>

VAV TERMINALS / HOT WATER COILS

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

#### MISCELLANEOUS AIR DISTRIBUTION PRODUCTS

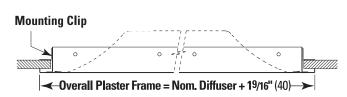






#### MODEL SPF MOUNTING FRAME

- Allows easy installation of lay-in diffusers in plaster or gypsum ceilings
- Steel construction with a white (B12) powder coat finish
- All necessary mounting hardware

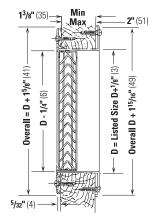


Size	Price Each
12 x 12	\$46
24 x 12	\$51
24 x 24	\$58

#### MODEL ATG DOOR GRILLE

- Extruded aluminum construction with 70° blades
- Inverted vee blades prevent clear line of sight
- Finished on both sides for door
- Fits doors or partitions as thin as 1-3/8 inch
- Aluminum (B15) powder coat finish

Size	Nominal CFM*	Price Each
12 x 12	250	\$109
18 x 12	350	\$124
18 x 18	500	\$173
24 x 24	700	\$278

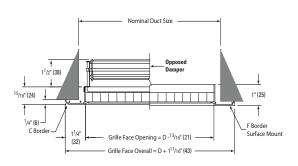


**Auxiliary Frame Assembly** 

#### **MODEL 80D CUBE CORE REGISTER**

- Aluminum "egg crate" type 1/2 inch cube core for surface mounting
- Includes opposed blade damper
- White (B12) powder coat finish

Size	Nominal CFM*	Price Each
6 x 6	225	\$46
8 x 8	400	\$49
10 x 10	650	\$58
12 x 12	900	\$67
14 x 14	1150	\$86



<sup>\*</sup>Performance based on a sound level of approximately NC 30. For more specific performance information, consult your Hoffman & Hoffman representative or visit www.price-hvac.com

## MISCELLANEOUS AIR DISTRIBUTION PRODUCTS

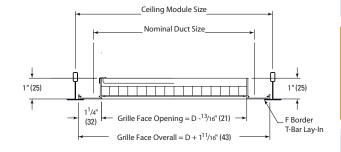




#### MODEL 80 CUBE CORE RETURN GRILLE

- Aluminum "egg crate" type 1/2 in. cube core for tee-bar lay-in ceilings
- White (B12) powder coat finish

Neck Size	Panel Size	Nominal CFM*	Price Each
22 x 10	24 x 12	1500	\$53
22 x 22	24 x 24	2700	\$89
46 x 22	48 x 24	4000	\$194

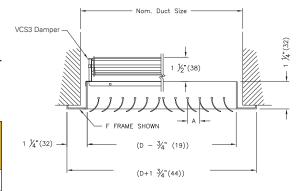




#### **MODEL SCVD SUPPLY REGISTERS**

- Surface Mount
- Four-way ceiling supply register
- All steel construction
- Curved blades and opposed blade damper
- White (B12) powder coat finish

Size	Nominal CFM*	Price Each	Size	Nominal CFM*	Price Each
6 x 6	130	\$66	10 x 10	350	\$84
8 x 8	225	\$67	12 x 12	450	\$94





# Grille Face Opening = D - 3/4" (19) Grille Frame Overall = D + 13/4" (45)

#### **MODEL 540 SUPPLY GRILLES**

- Surface Mount
- Economical steel construction
- Single deflection
- Multi-shutter damper
- White (B12) powder coat finish

Size	Nominal CFM*	Price Each
10 x 4	375	\$31
12 x 4	415	\$35
10 x 6	500	\$37
12 x 6	550	\$38
12 x 8	700	\$42
14 x 8	800	\$44
16 x 8	900	\$46

<sup>\*</sup>Performance based on a sound level of approximately NC 30. For more specific performance information, consult your Hoffman & Hoffman representative or visit www.price-hvac.com

> VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

YAV TERMINALS / RS HOT WATER COILS



Spiral Pipe Accessories





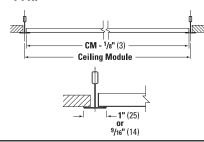
## **MISCELLANEOUS RETURN GRILLES**



### MODEL PFRF PERFORATED PANEL

- Matches PDC/PDDR series diffusers
- Tee-Bar Lay-In
- · All steel construction with a white (B12) powder coat finish
- Turned-up edges, no frame

### **PFRF**



Panel Size	Nominal CFM*	Price Each
24 x 12	575	\$24
24 x 24	2550	\$35



### **MODEL 10A SURFACE MOUNT RETURN**

- Aluminum core construction
- White (B12) powder coat finish
- Surface mounting

← Nom. Size →	
← Nom <sup>13</sup> /16" (21) →	<del></del>
	1/4" (6) 11/8" (28)
Perforated Face	1
← Face Opening = D - 11/2" (38) → (32)	
→ Nom. + 1 <sup>11</sup> /16" (43) →	

Neck Size	Overall Face Size	Nominal CFM*	Price Each
6 x 6	7 <sup>11</sup> / <sub>16</sub> x 7 <sup>11</sup> / <sub>16</sub>	185	\$44
8 x 8	8 <sup>11</sup> / <sub>16</sub> x 8 <sup>11</sup> / <sub>16</sub>	275	\$49
10 x 10	11 <sup>11</sup> / <sub>16</sub> x 11 <sup>11</sup> / <sub>16</sub>	425	\$58
12 x 12	13 <sup>11</sup> / <sub>16</sub> x 13 <sup>11</sup> / <sub>16</sub>	635	\$67
14 x 14	15 <sup>11</sup> / <sub>16</sub> x 15 <sup>11</sup> / <sub>16</sub>	830	\$81
16 x 16	17 <sup>11</sup> / <sub>16</sub> x 17 <sup>11</sup> / <sub>16</sub>	1125	\$91
18 x 18	19 <sup>11</sup> / <sub>16</sub> x 19 <sup>11</sup> / <sub>16</sub>	1450	\$102

## MODEL 630-TB ALUMINUM RETURN MODEL 530-TB STEEL RETURN

- Tee-Bar Lay-In
- · Available in steel or aluminum, white (B12) powder coat finish
- Fixed horizontal bars set at 45°

	Listed Size 1/4
1 1/4	
1 1/4	-
-	Overall Grille = T-Bar Spacing Horizontal Deflection Vanes

Neck Size	Panel Size	Nominal CFM*	Aluminum (B12) Price Each	Steel (B12) Price Each
22 x 10	24 x 12	800	\$58	\$51
22 x 22	24 x 24	1600	\$92	\$75
22 x 46	24 x 48	2750	\$188	\$161

\*Performance based on a sound level of approximately NC 30. For more specific performance information, consult your Hoffman & Hoffman representative or visit <a href="https://www.price-hvac.com">www.price-hvac.com</a>

## FILTER GRILLES





### **MODEL 80FF CUBE CORE LAY-IN TEE-BAR**

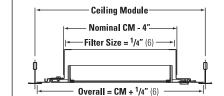
- Egg crate face with 1/2" cube core design
- 80% free area
- Aluminum grid with a white (B12) powder coat finish

Neck Size	Panel Size	Nominal CFM*	Price with Filter
20 x 20	24 x 24	2400	\$161

### **MODEL 10FF PERFORATED FACE LAY-IN**

- · Perforated face for lay-in ceilings
- Steel construction with a white (B12) powder coat finish
- · Hinged core and latches for easy cleaning

Neck Size	Panel Size	Nominal CFM*	Price with Filter
20 x 20	24 x 24	2000	\$129

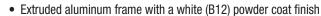


Ceiling Module

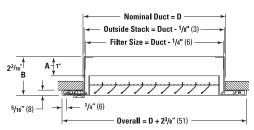
— Nominal CM - 4"—— Filter Size = D -<sup>1</sup>/4" (6) -

Overall = CM - 1/4" (6)

### **MODEL 630FF SURFACE MOUNT**



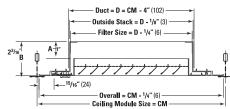
- 45° blades
- Hinged core and latches for easy filter cleaning



Filter Size	Neck Size	Nominal CFM*	Price with Filter
12 x 12	12 <sup>3</sup> /8 x 12 <sup>3</sup> /8	575	\$89
20 x 20	20 <sup>3</sup> /8 x 20 <sup>3</sup> /8	1400	\$142
24 x 12	24 <sup>3</sup> /8 x 12 <sup>3</sup> /8	1000	\$126
24 x 24	24 <sup>3</sup> / <sub>8</sub> x 24 <sup>3</sup> / <sub>8</sub>	1800	\$171



### **MODEL 630FF-TB LAY-IN**



- Similar to 630FF above but for tee-bar lay-in ceilings
- Extruded aluminum frame with a white (B12) powder coat finish
- 45° blades
- · Hinged core and latches for easy filter change
- · Continuous frame without screw holes

Neck Size	Panel Size	Nominal CFM*	Price with Filter
20 x 20	24 x 24	1400	\$150
20 x 44	24 x 48	3000	\$259

<sup>\*</sup>Performance based on a sound level of approximately NC 30. For more specific performance information, consult your Hoffman & Hoffman representative or visit <a href="https://www.price-hvac.com">www.price-hvac.com</a>

DRIVES & STARTERS

## **MISCELLANEOUS AIR DISTRIBUTION PRODUCTS**



**2 <sup>1</sup>/2"**\_ <sub>22</sub> (64)

STEAM SPECIALTIES

### VARITHERM® MODEL VPD-HC

The Price Varitherm® is a thermally powered self-modulating diffuser featuring a specialized linkage design for optimal zone temperature control in a stand-alone package. The Varitherm® VPD-HC is available for heating and cooling modes with an automatic heating/cooling changeover.

3 <sup>15</sup>/16" (101)

- Designed for tee bar lay-in ceilings
- Steel backpan, faceplate and linkage for strength and durability
- Minimum airflow adjustment at diffuser
- Forced open made for system balancing
- Manual temperature set point adjustment at diffuser
- Hinged plague with powerful magnetic closure
- White (B12) powder coat finish

Inlet Size	Nominal CFM*	Noise Criteria	VPD-HC Price Each
8"	300	30	\$537
10"	400	30	\$537
12"	500	30	\$537

Ceiling Module

Nom. Duct

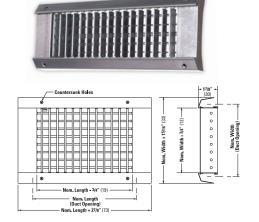
Nom. Duct - 1/4" (3)

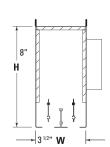
Diffuser Plagu

### **MODEL SDG SPIRAL GRILLE**

- Surface mount
- Model SDG is constructed of galvanized steel (mill finish)
- Integral gasket seals grille tightly to duct
- Built in extractor to allow accurate balancing

WXH	Min/Max Pipe Size	Nominal CFM	Price Each	WXH	Min/Max Pipe Size	Nominal CFM	Price Each
10 x 4	8/24	250	\$113	16 x 6	14/24	500	\$140
10 x 6	14/24	350	\$119	18 x 6	14/24	550	\$147
12 x 4	8/24	300	\$115	18 x 8	20/24	800	\$153
14 x 6	14/24	450	\$131	20 x 6	14/24	600	\$153
16 x 4	8/24	350	\$130	20 x 8	20/24	850	\$160
20 x 4	8/24	450	\$140	24 x 6	14/24	700	\$181
24 x 4	8/24	550	\$159	24 x 8	20/24	900	\$189







### **MODEL TBD1475 SLOT DIFFUSERS**

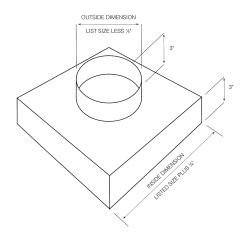
- Designed for tee bar lay-in ceilings
- Adjustable air pattern controllers with 3/4 in. slots
- Internally insulated with neoprene coated fiberglass insulation

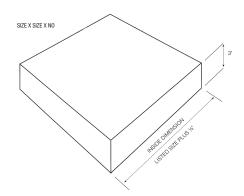
Length	A Width	Inlet	# of Slots	Nominal CFM*	Price Each
24"	3 1/2"	8" flat oval	2	160	\$136
48"	3 1/2"	8" flat oval	2	225	\$182
48"	3 1/2"	10" flat oval	2	275	\$182

<sup>\*</sup>Performance based on a sound level of approximately NC 30. For more specific performance information, consult your Hoffman & Hoffman representative or visit www.price-hvac.com

## MISCELLANEOUS AIR DISTRIBUTION PRODUCTS







## **MODEL F3SO SQUARE-TO-ROUND ADAPTERS**

- · Constructed of 26 ga. galvanized steel
- Open square corners

Size	Price Each	Size	Price Each	Size	Price Each
6 x 6 x 5	\$13	12 x 12 x 12	\$22	20 x 20 x 14	\$44
6 x 6 x 6	\$13	15 x 15 x 10	\$29	20 x 20 x 16	\$44
8 x 8 x 6	\$16	15 x 15 x 12	\$29	20 x 20 x 18	\$44
8 x 8 x 7	\$16	15 x 15 x 14	\$29	*21 x 21 x N0	\$35
8 x 8 x 8	\$16	16 x 16 x 14	\$32	*22 x 22 x N0	\$37
9 x 9 x 6	\$17	18 x 18 x 12	\$38	22 x 22 x 6	\$51
9 x 9 x 7	\$17	18 x 18 x 14	\$38	22 x 22 x 8	\$51
9 x 9 x 8	\$17	18 x 18 x 16	\$38	22 x 22 x 10	\$51
9 x 9 x 9	\$17	18 x 18 x 18	\$38	22 x 22 x 12	\$51
10 x 10 x 8	\$18	*20 x 20 x N0	\$31	22 x 22 x 14	\$51
10 x 10 x 9	\$18	20 x 20 x 6	\$44	22 x 22 x 16	\$51
10 x 10 x 10	\$18	20 x 20 x 8	\$44	22 x 22 x 18	\$51
12 x 12 x 8	\$22	20 x 20 x 10	\$44		
12 x 12 x 10	\$22	20 x 20 x 12	\$44		

<sup>\*</sup>Square box with no openings.



### **CONCENTRIC REDUCERS**

- Galvanized steel construction
- · Used to connect flexible duct to round neck diffusers

Size	Price Each	Size	Price Each
6" x 4"	\$8	10" x 9"	\$11
6" x 5"	\$8	12" x 8"	\$12
8" x 6"	\$10	12" x 10"	\$12
8" x 7"	\$10	14" x 10"	\$18
10" x 8"	\$11	14" x 12"	\$18

VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

## SINGLE DUCT VARIABLE VOLUME TERMINALS



### **CONTROLS BY OTHERS**

Control Terminals are designed for use in low, medium or high pressure variable air volume, single duct systems.

This throttling-type terminal incorporates a single damper blade which operates through a  $90^{\circ}$  arc, providing throttling capability in all positions.

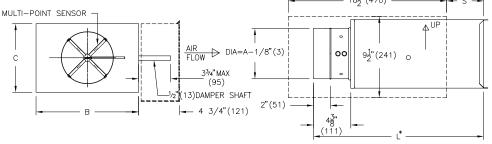
Controls by Others terminal incorporates many unique features. Most of these standard features are expensive options for other manufacturers. The Controls By Others incorporates the Patented FlowStar airflow sensor along with a Nema 1 enclosure and 120-volt transformer.

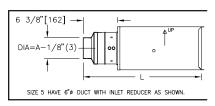
### PERFORMANCE DATA AND PRICING

Size	Nom. CFM	Min. PS	*Controls by Others Each
5	250	.01	\$344
6	400	.08	\$344
8	600	.04	\$384
10	1100	.05	\$403
12	1800	.07	\$413
14	2300	.07	\$491

<sup>\*</sup>Terminal provided with controls enclosure (no controls) and 120V transformer.

### **CONTROLS BY OTHERS**





	IMPERIAL UNITS inches				
UNIT SIZE	OUT	LET	INLET	LEN	GTH
	В	С	Α	L	S
5	10	8	5	22 1/8	
6	12	0	6	20 1/8	3 13/16
8	12	10	8		
10	14	12 1/2	10		
12	16	15	12		
14	20	17 1/2	14	23 5/8	5 5/16

VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINALS /

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

## SINGLE DUCT VARIABLE VOLUME TERMINALS

Hot Water Coils



Part Number	Description	Price Each
WCSXV1R-5,6	1-Row Hot Water Coil with 1/2" O.D.Sweat Connection for 5" & 6" VAV Boxes	\$105
WCSXV1R-8	1-Row Hot Water Coil with 1/2" O.D.Sweat Connection for 8" VAV Boxes	\$105
WCSXV1R-10	1-Row Hot Water Coil with 1/2" O.D.Sweat Connection for 10" VAV Boxes	\$128
WCSXV1R-12	1-Row Hot Water Coil with 1/2" O.D.Sweat Connection for 12" VAV Boxes	\$174
WCSXV1R-14	1-Row Hot Water Coil with 1/2" O.D.Sweat Connection for 14" VAV Boxes	\$210
WCSXV2R-5,6	2-Row Hot Water Coil with 7/8" O.D.Sweat Connection for 5" & 6" VAV Boxes	\$140
WCSXV2R-8	2-Row Hot Water Coil with 7/8" O.D.Sweat Connection for 8" VAV Boxes	\$150
WCSXV2R-10	2-Row Hot Water Coil with 7/8" O.D.Sweat Connection for 10" VAV Boxes	\$189
WCSXV2R-12	2-Row Hot Water Coil with 7/8" O.D.Sweat Connection for 12" VAV Boxes	\$239
WCSXV2R-14	2-Row Hot Water Coil with 7/8" O.D.Sweat Connection for 14" VAV Boxes	\$334

## **BALANCING DAMPERS**



VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINA HOT WATER CI

FLEXIBLE DUCT / SNAPLOCK & ACC.

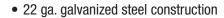
SPIRAL PIPE & ACCESSORIES

ELECTRIC HEATERS / FILTERS & ACCESSORIES

VIBRATION ISOLATION

STEAM SPECIALTIES

### **MODEL MD-25/35 MANUAL BALANCING DAMPER**



- 3/8 in. square plated steel shaft
- Includes hand quadrant and 2 in. standoff mounting bracket



Model	Size W x H	Price Each	Model	Size W x H	Price Each
MD-25	12 x 6	\$59	MD-25	24 x 12	\$83
MD-25	12 x 8	\$64	MD-35	14 x 14	\$112
MD-25	12 x 10	\$64	MD-35	18 x 18	\$144
MD-25	12 x 12	\$67	MD-35	24 x 18	\$149
MD-25	18 x 12	\$74	MD-35	24 x 24	\$168

### **MODEL MDRS-25 ROUND MANUAL BALANCING DAMPER**



- Factory-mounted stand-off with locking hand quadrant
- Designed for spiral duct balancing applications
- · Seal becomes part of ductwork



Model	Size	Frame Length	Price Each
MDRS-25	6	6"	\$60
MDRS-25	8	6"	\$66
MDRS-25	10	6"	\$69
MDRS-25	12	6"	\$73
MDRS-25	14	6"	\$77

STEAM SPECIALTIES

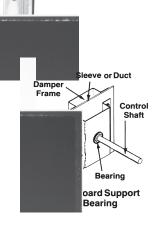
## **CONTROL DAMPERS**



### MODEL CD-36 LOW LEAKAGE CONTROL DAMPER



- EPDM blade seals, metal compression jamb seals
- · Includes outboard support bearing and control shaft
- · Actuator or hand quadrant sold separately



Size W x H	Price Each	Size W x H	Price Each
12 x 12	\$142	30 x 24	\$283
18 x 12	\$155	36 x 24	\$296
24 x 12	\$165	30 x 30	\$356
14 x 14	\$175	36 x 36	\$414
18 x 18	\$225	42 x 42	\$528
24 x 18	\$233	48 x 48	\$591
24 x 24	\$261	Hand Quadrant (HQR050)	\$13

### **MODEL CDRS-25 ROUND LOW LEAKAGE CONTROL DAMPER**



- · Polyethylene blade seal ensures low leakage
- Frame constructed of 20 ga. galvanized steel



Model	Size	Frame Length	Price Each
CDRS-25	6	6"	\$120
CDRS-25	8	6"	\$125
CDRS-25	10	6"	\$132
CDRS-25	12	6"	\$137
CDRS-25	14	6"	\$144
Hand Quadrant (HQR050)			\$13
2" Stand-off			\$7

VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

FLEXIBLE DUCT / SNAPLOCK & ACC.

SPIRAL PIPE

## **DAMPER ACTUATORS**



### **BELIMO DIRECT MOUNT ACTUATORS**

- 24V/120V, 2 position, spring return
- For use on standard or low leakage dampers
- · Graduated position indicator and auxiliary SPDT switch
- · Direct mount on damper shaft; can be set for CW or CCW rotation
- Internal closure spring provides consistent closure torque

Model	Voltage	Max. Damper Size	Price Each
TFB-24-S	24V	4.5 FT <sup>2</sup>	\$254
TFB-120-S	120V	4.5 FT <sup>2</sup>	\$288
LF-24-S	24V	8 FT <sup>2</sup>	\$301
LF-120-S	120V	8 FT <sup>2</sup>	\$329
NFBUP-S	24V - 240V	15 FT <sup>2</sup>	\$427
AFBUP-S	24V - 240V	33 FT <sup>2</sup>	\$479

## **SMOKE DETECTORS**





D4120 Smoke Detector

RTS151 Remote Test Station

### SYSTEM SENSOR MODEL D4120

- Duct-mounted design
- Samples airstream for early detection of smoke in HVAC systems
- Includes exhaust tube
- · Please select sampling tube from accessory listing below
- Price Each . . . . \$172.00

	=	
	_	
	•	

APA151 Annunciator



RTS2

Accessory	Description	Price Each
RTS151	Remote Test Station for testing remotely located smoke detector	\$51
APA151	Piezo Annunciator, audible signal appliance for alarm service, red alarm LED, green power LED, audible alarm	\$46
RTS2	Multi-signaling Duct Accessory with Audible Alarm	\$124
AOS	Add on strobe for RTS2	\$58
DST-1.5	Sampling Tube, 1 1/2 ft.	\$11
DST-3	Sampling Tube, 3 ft.	\$14
DST-5	Sampling Tube, 5 ft.	\$20

## **CEILING RADIATION DAMPERS**

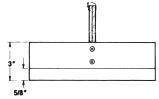


### **MODEL CFD CEILING RADIATION DAMPER**

- UL classified radiation dampers
- 22 ga. galvanized blades with UL insulation
- 20 ga. galvanized frame

### **STANDARD FRAME**

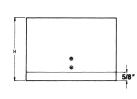




Model	Size*	Price Each	
CFD3.5	6 x 6	\$49	
CFD3.5	8 x 8	\$54	
CFD2	9 x 9	\$62	
CFD3.5	10 x 4	\$56	
CFD3.5	10 x 6	\$58	
CFD2	10 x 10	\$62	
CFD2	12 x 6	\$56	
CFD2	12 x 12	\$74	
CFD2	15 x 15	\$93	
CFD2	18 x 18	\$99	
CFD4	21 x 21	\$140	
CFD4	22 x 22	\$140	
CFD4	24 x 24	\$150	

### **EXTENDED FRAME**





Model	Size*	Ext. Frame Height (H)	Price Each
CFD3.5	6 x 6	6"	\$56
CFD3.5	8 x 8	6"	\$61
CFD2	9 x 9	6"	\$73
CFD2	10 x 10	6"	\$73
CFD2	12 x 12	8"	\$87
CFD2	15 x 15	8"	\$109
CFD2	18 x 18	8"	\$116
CFD4	21 x 21	8"	\$164
CFD4	22 x 22	8"	\$164

<sup>\*</sup>Extended Frames are actual size

### \*Standard Frames – deduct 1/4 inch

### **MODEL CFDR ROUND CEILING RADIATION DAMPER**



- UL 555 classified radiation dampers
- Designed for use with round neck diffusers
- Frame and blades are 20 ga. galvanized steel
- Stocked with extended frame only, actual size shown

Model	Size*	Frame Height	Price Each	Model	Size*	Frame Height	Price Each
CFDR3.5	6"	6 1/2"	\$59	CFDR2	12"	6 1/2"	\$87
CFDR3.5	8"	6 1/2"	\$64	CFDR2	14"	6 1/2"	\$97
CFDR3.5	10"	6 1/2"	\$70	CFDR2	16"	11 1/2"	\$109

Add for 24" x 24" insulation blanket (required by some codes for lay-in ceiling applications).

Blankets are cut in the field to fit the diffuser neck. \$28.00 each

Detailed drawings and installation instructions available at www.ruskin.com

> Variable speed Drives & Starters

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

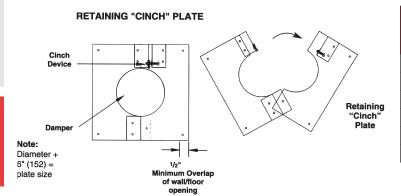
## **FIRE DAMPERS**





### MODEL FDR25 ROUND FIRE DAMPER

- UL 555 classified damper with 1<sup>1</sup>/<sub>2</sub> hour rating
- · Approved for use in 2 hour fire partitions
- Galvanized steel construction, 212°F fusible link
- Retaining cinch plates and extended duct connections for adjustable installation
- Low pressure drop
- Vertical and horizontal closure spring operation for assured closure under air flow (fans on) in HVAC systems



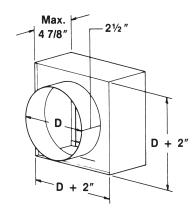
Collar Diameter (in.)	Sleeve Length	Price Each
6	14"	\$123
8	14"	\$140
10	14"	\$151
12	14"	\$164
14	14"	\$178
16	14"	\$192

Type FDR25 dampers are furnished 1/8 in. smaller than given collar dimensions.

### MODEL IBD2R/HV ROUND FIRE DAMPER



- 1½ hour rating for use in 2 hour rated partitions, 212°F fusible link
- · Stocked dampers have closure spring and latches for horizontal or vertical installations
- Damper housings are square with 2<sup>1</sup>/<sub>2</sub> in. deep round collars
- Recommended for low pressure and low velocity applications only



Collar Diameter (in.)	Housing Size (in.)	Price Each	
6	8 x 8	\$92	
8	10 x 10	\$101	
10	12 x 12	\$115	
12	14 x 14	\$126	
14	16 x 16	\$164	

Type IBD2R dampers are furnished 1/4 in. smaller than given duct and collar dimensions.

Detailed drawings and installation instructions available at www.ruskin.com

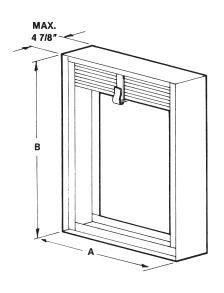
## **FIRE DAMPERS**



### MODEL IBD2A/HV RECTANGULAR FIRE DAMPER

- Curtain style fire damper with 11/2 hour UL rating
- · Approved for use in 2 hour fire partitions
- · Galvanized steel construction, 212°F fusible link
- Stocked dampers have closure spring and latches for horizontal and vertical installations





Size A x B	Price Each	Size A x B	Price Each	
6 x 6	\$36	12 x 12	\$48	
8 x 6	\$36	14 x 12	\$59	
10 x 6	\$36	16 x 12	\$59	
12 x 6	\$36	18 x 12	\$65	
14 x 6	\$45	20 x 12	\$69	
8 x 8	\$41	24 x 12	\$69	
10 x 8	\$41	14 x 14	\$67	
12 x 8	\$41	16 x 14	\$67	
14 x 8	\$48	18 x 14	\$72	
16 x 8	\$48	20 x 14	\$79	
18 x 8	\$55	24 x 14	\$79	
20 x 8	\$62	16 x 16	\$67	
10 x 10	\$45	20 x 16	\$79	
12 x 10	\$45	24 x 16	\$79	
14 x 10	\$55	18 x 18	\$81	
16 x 10	\$55	24 x 18	\$90	
18 x 10	\$62	20 x 20	\$95	
20 x 10	\$67	24 x 24	\$95	

Note: Type IBD2A dampers are furnished 1/4" smaller than given duct dimensions.

Detailed drawings and installation instructions available at  $\begin{tabular}{l} www.ruskin.com \\ \end{tabular}$ 

<sup>\*</sup>More Sizes and styles available. See page 48.

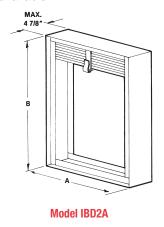
> VARIABLE SPEED DRIVES & STARTERS

## FIRE DAMPERS-QUICK SHIP-24 HOURS



## MODEL IBD2A AND IBD2B RECTANGULAR FIRE DAMPER

- Ships in 24 hours if order received in Greensboro by 11:00 a.m.
   Eastern time (Not Guaranteed)
- · Please allow 3 days for delivery
- 11/2 hour rating for use in 2 hour rated partitions
- Changes or cancellation cost 100% of order value.
- Other sizes available



### **MODEL IBD2A & IBD2B HORIZONTAL PRICING**

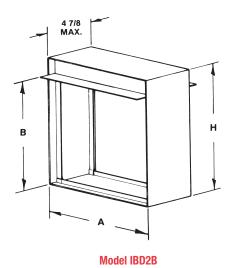
Style B prices are in bold print.

					WII	DTH IN	I INCH	IES					
		12	16	20	24	28	32	36	40	44	48		
	6	61	77	101	101	115	127	131	139	147	155	6	
	U	71	90	118	118	133	147	152	161	170	179	U	
	8	69	81	107	107	123	131	139	151	155	163	8	
	0	80	94	124	124	142	152	161	175	179	189	0	
	10	77	93	115	115	131	135	147	155	163	171	10	
Н	10	90	108	133	133	152	156	170	179	189	198	10	Н
E	12	81	101	119	119	135	143	151	163	171	183	12	Е
	12	94	118	138	138	156	166	175	189	198	212	12	I
G	16	97	115	135	135	151	159	167	179	191	203	16	G
Н	10	113	133	156	156	175	184	193	207	221	235	10	Н
Т	20	115	139	163	163	183	195	208	220	236	252	20	T
	20	133	161	189	189	212	226	241	255	274	293	20	
1	24	115	139	163	163	183	195	208	220	236	252	24	1
N	24	133	161	189	189	212	226	241	255	274	293	24	N
	28	127	147	183	183	195	224	244	260	276	296	28	
1	20	147	170	212	212	226	260	283	302	321	344	20	1
N	32	135	155	191	191	216	252	280	300	322	342	32	N
C	32	156	179	221	221	251	293	325	349	373	396	32	C
Н	36	143	163	203	203	236	280	318	342	366	390	36	н
Ε	30	166	189	235	235	274	325	368	396	424	452	30	Ε
S	40	151	171	216	216	252	300	342	366	390	415	40	S
	40	175	198	251	251	293	349	396	424	452	481	40	
	44	159	183	228	228	272	322	366	390	415	439	44	
	44	184	212	265	265	316	373	424	452	481	509	44	
	48	171	195	244	244	292	342	390	415	439	463	48	
	40	198	226	283	283	339	396	452	481	509	537	40	

### **MODEL IBD2A & IBD2B VERTICAL PRICING**

Style B prices are in bold print.

	WIDTH IN INCHES												
		12	16	20	24	28	32	36	40	44	48		
	6	42	53	69	69	78	86	89	94	100	105	6	
	U	51	65	85	85	96	106	110	116	123	130		
	8	47	55	72	72	83	89	94	102	105	111	8	
	0	58	68	89	89	103	110	116	127	130	137	0	
	10	53	64	78	78	89	92	100	105	111	116	10	
Н	10	65	78	96	96	110	113	123	130	137	143	10	Н
Е	12	55	69	81	81	92	97	102	111	116	124	12	Ε
1	12	68	85	100	100	113	120	127	137	143	154	12	1
G	16	66	78	92	92	102	108	113	122	130	138	16	G
Н	10	82	96	113	113	127	133	140	150	160	170	10	Н
T	20	78	94	111	111	124	133	141	150	161	171	20	T
	20	96	116	137	137	154	164	175	185	198	212	20	20
1	24	78	94	111	111	124	133	141	150	161	171	24	1
N	24	96	116	137	137	154	164	175	185	198	212	24	N
	28	86	100	124	124	133	152	166	177	188	202	28	
1	20	106	123	154	154	164	188	205	219	232	249	20	1
N	32	92	105	130	130	147	171	191	204	219	232	32	N
C	32	113	130	160	160	181	212	235	252	270	287	32	C
Н	36	97	111	138	138	161	191	216	232	249	265	36	Н
Ε	30	120	137	170	170	198	235	267	287	307	327	30	Ε
s	40	102	116	147	147	171	204	232	249	265	282	40	S
	40	127	143	181	181	212	252	287	307	327	349	40	
	44	108	124	155	155	185	219	249	265	282	299	44	
	44	133	154	192	192	229	270	307	327	349	369	44	
	48	116	133	166	166	199	232	265	282	299	315	40	
	48	143	164	205	205	246	287	327	349	369	389	48	



Available in Dynamic Consult your Hoffman & Hoffman Salesperson for pricing

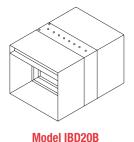
Detailed drawings and installation instructions available at www.ruskin.com

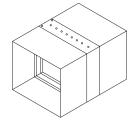
## FIRE DAMPERS-QUICK SHIP-24 HOURS



### MODEL IBD20A & B INTEGRAL SLEEVE FIRE DAMPER

- No additional sleeve needed in most installations
- 11/2 hour rating for 2 hour rated fire partitions
- Galvanized steel construction
- UL listed 165°F fuse link standard. 212°F and 285°F fuse links available
- Available with springs and latches for horizontal or vertical installation (specify when ordering)
- Ships in 24 hours if order received in Greensboro by 11:00 a.m.
   Eastern time (Not Guaranteed)
- · Please allow 3 days for delivery
- Changes or cancellation cost 100% of order value.
- Other sizes available





**Model IBD20A** 

## IBD20/STYLE A AND B HORIZONTAL PRICES

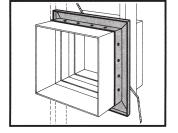
Style B prices are in bold print.

					WIDTI	H IN IN	ICHES	;				
		12	16	20	24	28	32	36	40	44		
	_	88	111	146	146	165	182	188	200	211	_	
	6	98	124	162	162	183	203	209	222	235	6	
	8	100	117	153	153	177	188	200	217	223	8	
	°	111	130	170	170	196	209	222	241	248	0	
Н	10	111	135	165	165	188	194	211	223	234	10	Н
Ε	10	124	150	183	183	209	215	235	248	260	10	Ε
1	12	117	146	171	171	194	205	217	234	246	10	1
G	12	130	162	190	190	215	228	241	260	273	12	G
Н	16	140	165	194	194	217	229	240	258	275	16	Н
T	16	156	183	215	215	241	254	267	286	305	10	T
		165	200	234	234	263	281	300	317	340	20	
1	20	183	222	260	260	293	312	333	352	378	20	20
N	24	165	200	234	234	263	281	300	317	340	24	N
	24	183	222	260	260	293	312	333	352	378	24	
1	28	182	211	263	263	281	323	352	375	398	20	1
N	20	203	235	293	293	312	359	391	416	442	28	N
C	32	194	223	275	275	311	363	404	433	463	22	C
н	32	215	248	305	305	346	404	449	481	514	32	н
Ε	36	205	234	292	292	340	404	457	492	527	36	Ε
s	30	228	260	325	325	378	449	508	547	585	30	S
	40	217	246	311	311	363	433	492	527	561	40	
	40	241	273	346	346	404	481	547	585	624	40	
	44	229	263	328	328	392	463	527	561	598	44	
	44	254	293	365	365	436	514	585	624	664	44	

## IBD20/STYLE A AND B VERTICAL PRICES

Style B prices are in bold print.

					WIDTI	H IN I	NCHES					
		12	16	20	24	28	32	36	40	44		
		69	87	114	114	128	142	146	155	164	6	
	6	78	99	130	130	147	162	167	177	188	6	
		78	91	119	119	137	146	155	169	173		
	8	89	104	136	136	157	167	177	193	198	8	
Н	10	87	105	128	128	146	151	164	173	182	10	Н
Ε	10	99	120	147	147	167	172	188	198	208	10	Ε
1	10	91	114	133	133	151	160	169	182	191	10	1
G	12	104	130	152	152	172	183	193	208	219	12	G
Н	16	109	128	151	151	169	178	187	200	214	16	Н
T	10	125	147	172	172	193	203	213	229	244	16	10 I
	20	128	155	182	182	205	218	233	246	264	20	
1	20	147	177	208	208	234	250	266	282	302	20	1
N	24	128	155	182	182	205	218	233	246	264	24	N
	24	147	177	208	208	234	250	266	282	302	24	
1	28	142	164	205	205	218	251	273	291	309	28	1
N	20	162	188	234	234	250	287	313	333	354	20	N
C	32	151	173	214	214	242	282	314	336	360	22	C
Н	32	172	198	244	244	277	323	359	385	412	32	Н
Ε	36	160	182	227	227	264	314	356	383	410	26	Ε
S	30	183	208	260	260	302	359	406	437	468	36	S
	40	169	191	242	242	282	336	383	410	437	40	
	40	193	219	277	277	323	385	437	468	499	40	
	44	178	205	255	255	305	360	410	437	465	44	
	44	203	234	292	292	349	412	468	499	531	44	



## PICTURE FRAME MOUNTING ANGLES

- · Makes damper installation quick and easy
- · Proven savings in labor cost
- · Precut and punched to fit damper exactly
- · Add 50% to cost of damper
- Detailed drawings and installation instructions available at www.ruskin.com

### **Available in Dynamic**

**BRICK VENTS** 

VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

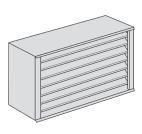
FLEXIBLE DUCT / SNAPLOCK & ACC.

SPIRAL PIPE & ACCESSORIES

### MODEL LBV CAST ALUMINUM BRICK VENT

- 4 in. deep
- · Cast aluminum, load bearing construction
- · Includes water stop and insect screen

Model	Size	Price Each
LBV88	8 x 7 3/4	\$163
LBV168	16 x 7 3/4	\$182



### MODEL EX EXTRUDED ALUMINUM BRICK VENT

- 4 in. deep
- · Extruded aluminum, load bearing construction
- Clear anodized finish
- · Includes water stop and insect screen

Model	Size	Price Each
EX808	8 1/8 x 7 3/4	\$90
EX128	12 x 7 3/4	\$104
EX157	15 5/8 x 7 3/4	\$124



### MODEL FL FLANGED EXTRUDED ALUMINUM BRICK VENT

- 1 1/2 in. deep with 1 in. flange
- Extruded aluminum, non-load bearing construction
- Includes water stop, storm drip blade and insect screen

Model	Size	Price Each	
FL808	8 1/8 x 7 3/4	\$90	
FL128	12 x 7 3/4	\$104	
FL1212	12 x 11 3/4	\$128	
FL157	15 5/8 x 7 3/4	\$124	

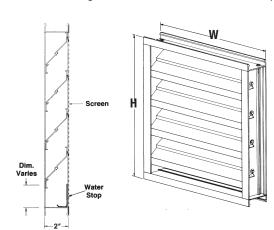
## STATIONARY ALUMINUM LOUVERS



### **MODEL ELF211 THINLINE STATIONARY LOUVER**



- 2 in. deep, .060 in. channel frame and blades
- Expanded aluminum birdscreen (on inside)
- · Standard mill finish
- More sizes available on 72 hr. shipment. See page 52.
- Flanged frames available on 72 hr. shipment. See page 52.



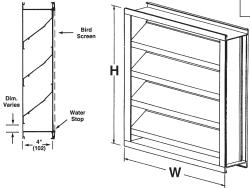
Size W x H	Free Area (Ft²)	Price Each
12 x 12	0.26	\$173
18 x 12	0.45	\$195
24 x 12	0.76	\$214



### **MODEL GFL800D STATIONARY LOUVER**

- Extruded aluminum construction
- 4 in. deep, .080 in. channel frame with caulking slots
- Blades are .080 in., drainable
- Expanded aluminum birdscreen (on inside)
- Standard mill finish
- More sizes available on 72 hr. shipment. See page 53.
- Flanged frames available on 72 hr. shipment. See page 53.

Size W x H	Free Area (Ft²)	Price Each	Size W x H	Free Area (Ft²)	Price Each
18 x 18	0.67	\$237	30 x 30	2.59	\$496
24 x 18	0.93	\$271	36 x 30	3.15	\$550
24 x 24	1.49	\$298	36 x 36	3.85	\$596
30 x 24	1.90	\$328	42 x 42	5.18	\$729
36 x 24	2.31	\$362	48 x 48	7.10	\$866



### **NOTES — ALL LOUVERS:**

- Screen adds 1/2 in. to depth.
- All louvers furnished 1/4 in. smaller than nominal opening size shown.

## **LOUVERS - 72 HOUR SHIPMENT**



VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS

> DAMPERS / LOUVERS / ACCESS DOORS / ACTUATOR

FLEXIBLE DUCT , SNAPLOCK & ACC MODEL ELF211, 2" DEEP LOUVERS AVAILABLE FOR

SHIPMENT FROM THE FACTORY IN 72 HOURS.

- Orders must be placed by 10:30 a.m. for 72 hour shipment
- Orders over \$2,000.00 may take longer than 72 hours
- · Please allow 5 days for delivery

### **Price Matrix**

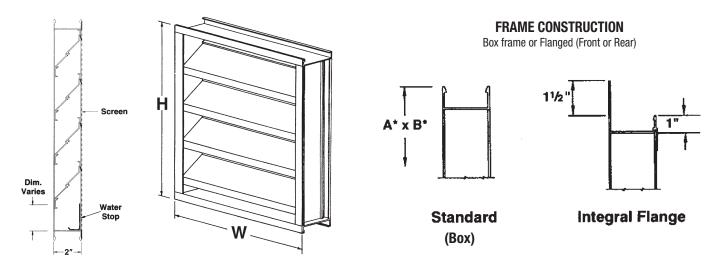
		WIDTH IN INCHES										
		12	18	24	30	36	42	48	54	60		4
	12	221	249	274	298	324	346	376	482	517	12	
	16	249	277	308	339	367	398	439	563	607	16	
H	20	274	308	346	383	420	451	498	644	694	20	H
I G	24	292	336	380	423	467	507	560	722	781	24	l G
H	28	402	464	526	588	647	716	787	803	868	28	Н
T	32	426	501	572	638	706	781	862	877	958	32	
I N	36	461	536	616	691	769	843	937	958	1043	36	I N
	40	491	579	660	741	824	909	1008	1036	1127	40	
N	44	498	598	678	809	856	940	1046	1111	1213	44	N
C H	48	542	631	725	818	915	1005	1117	1186	1298	48	C H
E	52	576	675	775	874	980	1073	1195	1263	1379	52	E S
-3	56	616	722	818	931	1046	1142	1269	1338	1453	56	3
	60	654	765	874	987	1102	1213	1338	1416	1537	60	

### **ORDERING INSTRUCTIONS**

SCREEN: front □ rear □ bird □ insect □

FRAME: box front flange front flange To Cost Of Lover For Flange\*

SIZE: width\_\_\_ height\_\_\_ actual size □ deduct 1/4" □



For performance call your Hoffman & Hoffman Salesperson or consult www.ruskin.com

## **LOUVERS - 72 HOUR SHIPMENT**



## MODEL GFL800D, 4" DEEP LOUVERS AVAILABLE FOR SHIPMENT FROM THE FACTORY IN 72 HOURS.

- Orders must be placed by 10:30 a.m. for 72 hour shipment
- Orders over \$2,000.00 may take longer than 72 hours
- · Please allow 5 days for delivery

### **Price Matrix**

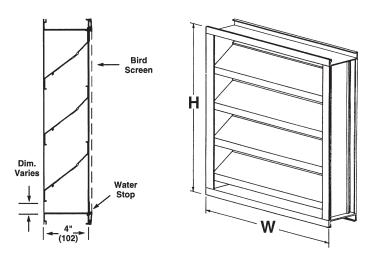
					WI	DTH IN INCH	IES					
		12	18	24	30	36	42	48	54	60		
	12	180	196	218	239	258	277	302	383	414	12	
	16	196	221	242	271	295	314	349	445	482	16	
H	20	218	242	277	305	333	361	395	513	551	20	H
I G	24	233	268	305	336	370	405	445	572	619	24	I G
Н	28	317	367	420	467	513	566	625	638	691	28	H
T	32	339	398	454	507	563	619	684	697	762	32	
I N	36	364	426	488	548	610	669	744	762	828	36	I N
	40	392	461	526	588	657	722	800	821	896	40	
N	44	395	476	542	607	681	747	831	883	965	44	N
C	48	429	501	576	650	728	797	887	943	1030	48	C
E S	52	458	539	613	694	781	850	949	1002	1092	52	E S
3	56	488	572	650	738	831	906	1008	1064	1151	56	3
	60	520	607	694	784	874	965	1064	1124	1217	60	

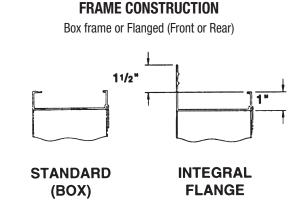
### **ORDERING INSTRUCTIONS**

SCREEN: front □ rear □ bird □ insect □

FRAME: box ☐ front flange ☐ \*Add 40% To Cost Of Lover For Flange\*

SIZE: width\_\_\_ height\_\_\_ actual size □ deduct 1/4" □





For performance call your Hoffman & Hoffman Salesperson or consult www.ruskin.com

> VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS

DAMPERS / LOUVERS, ACCESS DOORS / ACTUATO

AAL PIPE ESSORIES

FLEXIBLE DUCT / SNAPLOCK & ACC.

ELECTRIC HEATERS / FILTERS & ACCESSORIES

## **ACCESS DOORS**

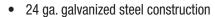


### MODEL ADC-14 CAM-TYPE ACCESS DOOR

- 24 ga. galvanized steel construction
- 1/2 in. insulation board, aluminum foil faced
- · Foam gasket and cam locks for tight closure
- · Starter tab for easy installation

Nominal Size	Price Each	Nominal Size	Price Each
6" x 6"	\$16	14" x 14"	\$29
8" x 8"	\$17	16" x 16"	\$35
10" x 10"	\$20	18" x 18"	\$40
12" x 12"	\$22	24" x 24"	\$60





- 1/2 inch insulation board, aluminum foil faced
- Foam gasket and cam locks for tight closure
- Starter tab for easy installation

Nominal Size	Price Each	Nominal Size	Price Each
6" x 6"	\$16	14" x 14"	\$29
8" x 8"	\$17	16" x 16"	\$35
10" x 10"	\$20	18" x 18"	\$40
12" x 12"	\$22	24" x 24"	\$60

# 6

## MODEL RADI ROUND SPIRAL ACCESS DOOR

- Insulated construction with neoprene gaskets
- · Synthetic knobs with metal threaded inserts for ease of turning and prevention of thread stripping
- No need for tools to open

Duct Size (in.)	Opening Size (in.)	Door Size (in.)	Price Each
6	3 x 7	4 x 8	\$81
8-10	3 x 7	4 x 8	\$81
12-14	7 x 11	8 x 12	\$106
16-18	7 x 11	8 x 12	\$106
20-24	11 x 15	12 x 16	\$148



Prices subject to change without notice. All shipments are FOB Hoffman Warehouse, freight prepaid and added to invoice.

## **ACCESS PANELS**



### STYLE K ACCESS PANEL

- For use in ceilings, masonry and dry walls
- · Convenient access to plumbing, heating and electrical systems
- Aluminum frame, 14 ga. steel panel

Door Size	Wall Opening	Overall Size	Depth	Price Each
8 x 8	8 3/8 x 8 3/8	10 5/8 x 10 5/8	1 1/2"	\$76
12 x 12	12 3/8 x 12 3/8	14 5/8 x 14 5/8	1 1/2"	\$95
18 x 18	18 3/8 x 18 3/8	20 5/8 x 20 5/8	1 1/2"	\$117
24 x 24	24 3/8 x 24 3/8	26 5/8 x 26 5/8	1 1/2"	\$226



### STYLE FIRE-RATED ACCESS PANEL

- For use in fire-rated walls and ceilings
- Provided with masonry anchors, concealed hinges, turn knob or flush key hole
- 16 ga. steel frame, 20 ga. steel panel

Door Size	Wall Opening	Overall Size	Depth	Price Each
8 x 8	8 3/8 x 8 3/8	10 x 10	2 9/16"	\$185
12 x 12	12 3/8 x 12 3/8	14 x 14	2 9/16"	\$193
18 x 18	18 3/8 x 18 3/8	20 x 20	2 9/16"	\$254
24 x 24	24 3/8 x 24 3/8	26 x 26	2 9/16"	\$318



### STYLE AHD ACCESS PANEL

- · For all surface types
- 16 ga. cold rolled steel
- · Screwdriver operated cam latch

Door Size	Wall Opening	Overall Size	Depth	Price Each
8 x 8	8 1/4 x 8 1/4	10 x 10	1 1/2"	\$44
12 x 12	12 1/4 x 12 1/4	14 x 14	1 1/2"	\$52
18 x 18	18 1/4 x 18 1/4	20 x 20	1 1/2"	\$78
24 x 24	24 1/4 x 24 1/4	26 x 26	1 1/2"	\$111

## VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINALS /







## **FLEXIBLE DUCT By Flexmaster**

**SUPERIOR QUALITY • MECHANICAL JOINED WITHOUT ADHESIVES** 



### TYPE 1MR6 - INSULATED ACOUSTIC

A factory insulated, fully lined duct for use in low and medium pressure air distribution systems. The inner core is constructed of an **acoustic** material which allows sound waves to penetrate and be absorbed by the insulation. Solid mechanical union of fabric and corrosion resistant **galvanized steel** spiral helix creates an extraordinary durable seam. Thermally insulated to an R Value of 6.0 and supplied with a reinforced metalized protective barrier. Manufactured in 25' lengths and compressed for easy handling. **Working pressure: +10" w.g.** 



Inside Dimension Inches	Price per 25' Length	Inside Dimension Inches	Price per 25' Length			
6	\$132	14	\$265			
8	\$159	16	\$316			
10	\$186	18	\$389			
12 \$220						
NS300 – 1-3/4 IN X 300 FT HANGING NOVA STRAP\$26						

### TYPE 3MR6 - HIGH PRESSURE - INSULATED

A factory insulated, fully lined duct for use in high pressure air distribution systems. The core is fabricated of a trilaminate of aluminum foil, fiberglass and aluminized polyester mechanically locked into a corrosion resistant **galvanized steel** spiral helix. Thermally insulated to an R Value of 6.0 and supplied with a reinforced metalized protective barrier. Manufactured in 25' lengths and compressed for easy handling. **Working pressure: +20" w.g.** 



Inside Dimension Inches	Price per 25' Length	Inside Dimension Inches	Price per 25' Length
6	\$187	12	\$317
8	\$226	14	\$372
10	\$271	16	\$443
NS300 – 1-3/4 IN X 300 FT HANGING NOVA STRAP\$26			

### TYPE 3NI - HIGH PRESSURE - UNINSULATED

An uninsulated flexible duct suitable for high pressure systems. Type 3NI is constructed of a coated fiberglass fabric mechanically interlocked by a corrosion resistant **galvanized steel** spiral helix on the outside of the fabric. **Working pressure: +20" w.g.** 



Inside Dimension Inches	Price per 25' Length	Inside Dimension Inches	Price per 25' Length
6	\$82	12	\$144
8	\$101	14	\$155
10	\$123		
NS300 – 1-3/4 IN X 300 FT HANGING NOVA STRAP\$26			

## **FLEXIBLE DUCT by JP Lamborn**





### TYPE MHP25R6 INSULATED DUCT

Flexible duct is constructed with a spring steel wire helix, encapsulated in a 2-ply, airtight inner core. Extra-thick insulation with a thermal value of R6 encompasses the core and a metalized, reinforced vapor barrier surrounds the entire duct. Positive pressure: 6" W.G. (4"-12") 4" W.G. (14"-20"). Negative pressure: 1" W.G. (4"-10") 1/2" W.G. (12"-20").

Inside Dimension Inches	Price per 25' Length	Inside Dimension Inches	Price per 25' Length
6	\$65	14	\$144
8	\$77	16	\$166
10	\$97	18	\$192
12	\$120	20	\$236
NS300 - 1 3/4 in x 300 ft Hanging NOVA Strap\$26			



### TYPE MHP25R8 INSULATED DUCT

Flexible duct is constructed with a spring steel wire helix, encapsulated in a 2-ply, airtight inner core. Extra-thick insulation with a thermal value of R8 encompasses the core and a metalized, reinforced vapor barrier surrounds the entire duct. Positive pressure: 6" W.G. (4"-12") 4" W.G. (14"-20"). Negative pressure: 1" W.G. (4"-10") 1/2" W.G. (12"-20").

Inside Dimension Inches	Price per 25' Length	Inside Dimension Inches	Price per 25' Length
6	\$79	12	\$143
8	\$97	14	\$165
10	\$116	16	\$198
NS300 - 1 3/4 in x 300 ft Hanging NOVA Strap\$26			

## **FLEXMASTER STICK-ON FITTINGS**



### TYPE FLD-B03-SOG STICK-ON FITTING



- · Round takeoff to sheet metal duct
- · Quality adhesive backing for quick mounting
- Neoprene sponge gasket for low leakage
- Includes damper and hand quadrant with 2" build out
- 3/8" steel shaft
- · Galvanized steel construction

FLD-B03 Size	Diameter	Length	Price Each
6	5 7/8	7	\$19
8	7 7/8	7	\$22
10	9 7/8	7	\$26
12	11 7/8	7	\$30
14	13 7/8	7	\$33
16	15 7/8	7	\$41
18	17 7/8	7	\$57

### TYPE FLDE-B03-SOG STICK-ON FITTING



- · Round takeoff to sheet metal duct
- · Quality adhesive backing for quick mounting
- Neoprene sponge gasket for low leakage
- Includes damper, hand quadrant with 2" build out and 45° extractor
- 3/8" steel shaft
- · Galvanized steel construction

FLDE-B03 Size	Diameter	Length	Price Each
6	5 7/8	7	\$25
8	7 7/8	7	\$28
10	9 7/8	7	\$31
12	11 7/8	7	\$37
14	13 7/8	7	\$40
16	15 7/8	7	\$48
18	17 7/8	7	\$65

### TYPE STO-D-B03 SIDE TAKEOFF FITTING



- For use on sheet metal duct
- · Aerodynamic design improves performance
- Prepunched holes and adhesive coated gasket
- · Includes damper and hand quadrant with 2" build out
- 3/8" steel shaft
- Galvanized steel construction

STOD -B03 Size	Diameter	Length	Rectangle Opening	Price Each
6	5 7/8	13	5 x 9	\$34
8	7 7/8	13	6 x 12	\$39
10	9 7/8	13	8 x 14	\$45
12	11 7/8	13	10 x 16	\$54
14	13 7/8	13	12 x 18	\$63
16	15 7/8	13	14 x 20	\$72

## **SNAPLOCK PIPE AND ACCESSORIES**



### **SNAPLOCK PIPE**

Size	Description	Price Each
4	4" 5FT 26 GA	\$16
6	6" 5FT 26 GA	\$21
8	8" 5FT 26 GA	\$27
10	10" 5FT 26 GA	\$32
12	12" 5FT 26 GA	\$39
14	14" 5FT 26 GA	\$47
14	14" 5FT 26 GA	



### 90° ADJUSTABLE ELBOWS

Size	Description	Price Each
4	4" 26 GA Elbow	\$6
6	6" 26 GA Elbow	\$6
8	8" 26 GA Elbow	\$9
10	10" 26 GA Elbow	\$13
12	12" 26 GA Elbow	\$16
14	14" 26 GA Elbow	\$23



### **END CAPS**

Size	Description	Price Each
4	4" 28 GA End Cap	\$9
6	6" 28 GA End Cap	\$10
8	8" 28 GA End Cap	\$11
10	10" 28 GA End Cap	\$13
12	12" 28 GA End Cap	\$15
14	14" 28 GA End Cap	\$17





### **TAKEOFFS**

Model	Size	Description	Price Each
ATD	4	4" Takeoff with Damper	\$14
ATD	6	6" Takeoff with Damper	\$13
ATD	8	8" Takeoff with Damper	\$15
ATD	10	10" Takeoff with Damper	\$22
ATD	12	12" Takeoff with Damper	\$28
ATD	14	14" Takeoff with Damper	\$33
ATSD	4	4" Takeoff with Damper & Scoop	\$24
ATSD	6	6" Takeoff with Damper & Scoop	\$24
ATSD	8	8" Takeoff with Damper & Scoop	\$26
ATSD	10	10" Takeoff with Damper & Scoop	\$34
ATSD	12	12" Takeoff with Damper & Scoop \$47	
ATSD	14	14" Takeoff with Damper & Scoop	\$58

VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS

## **SNAPLOCK PIPE ACCESSORIES**



### **TEES**

Size	Description	Price Each
4	4" 26 GA Tee	\$31
6	6" 26 GA Tee	\$34
8	8" 26 GA Tee	\$43
10	10" 26 GA Tee	\$49
12	12" 26 GA Tee	\$50
14	14" 26 GA Tee	\$56



### **WYES**

Size	Description	Price Each
4	4" 28 GA Wye	\$21
6	6" 28 GA Wye	\$21
8	8" 28 GA Wye	\$21
10	10" 28 GA Wye	\$27
12	12" 28 GA Wye	\$41
14	14" 28 GA Wye	\$55

## AIR-TITE STICK-ON SADDLE



- Round takeoff to round metal duct
- Polyethylene cross-linked fire retardant gasket
- 1 1/2" gasket and flange
- 26 gauge galvanized construction
- Includes damper and hand quadrant

Size	Fits Duct Sizes	Price Each
4	8-20	\$14
6	10-20	\$14
8	12-16	\$17
10	12-18	\$27
12	16-20	\$31
14	16-22	\$37

### **ACCESSORIES**



Model	Description	Price Each
SUPERSEAL 1	UL 181-B 1 Gallon Duct Sealant	\$38
BB2	2 Inch Bristle Brush	\$3
BB3	3 Inch Bristle Brush	\$4
PPT10X1/2	Pro Point Screw (1000 Per Bucket)	\$61
PPT10X3/4	Pro Point Screw (1000 Per Bucket)	\$61
PPT10X1	Pro Point Screw (1000 Per Bucket)	\$63
DCL516	2 5/8" Long Chuck For 5/16" Hex Head	\$14

## **CLAMPS AND TOOLS**



### STAINLESS STEEL CLAMPS

- Worm drive, swivel action
- Suitable for high or low pressure, insulated or uninsulated

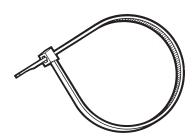
Diameter	Price Each	Diameter	Price Each
4-5"	\$4.00	12"	\$7.00
6"	\$5.00	14"	\$7.00
8-9"	\$6.00	16"	\$8.00
10"	\$6.00	18"	\$9.00
		20"	\$9.00





- 36 in. cone; join 2 together for larger diameters
- Clamps are releasable until applied with tensioning tool

Price Each for 1 - 299	Price Each for 300 - 499	Price Each for 500 - up
\$.54	\$.53	\$.52



## **MODEL DIT-2 TENSIONING TOOL**

- Heavy duty construction
- Mechanical advantage assures tight clamping action

Model	Price Each
DIT-2	\$87

VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS

STEAM SPECIALTIES

## TAPE AND SEALANTS



### **DUCT TAPE**

- PC857 Duct Tape UL 181-B-FX 82P4
- AF100-A HVAC Foil Tape UL 181-A-P/B-FX

Model	WxL	Price Each
PC857-2	2" x 60 yards	\$34
PC857-3	3" x 60 yards	\$50
AF100-A-2.5	2.5" x 60 yards	\$40

### **MASTIC TAPE**

• SF686 Mastic Tape UL 181-B-FX



Model	WxL	Price Each
SF686-2	2" x 100 ft.	\$61
SF686-3	3" x 100 ft.	\$81

## DYN-O-WRAP

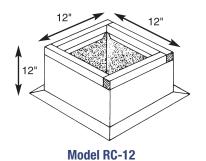
- Durable and puncture resistant
- Self-adhesive inner surface
- Excellent for ductwork
- Easily removable without leaving residue



Shurtape
181B-FX
Shurtape

Model	Description	Price Each
DW24-200	24 inch DYN-O-WRAP	\$52

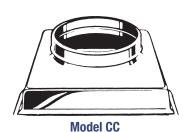
## PIPE PORTAL SYSTEMS



### PIPE FLASHING SYSTEM

This system is designed to allow both vertical and horizontal pipe movement, yet provides a maintenance free permanent installation which accommodates pipe sizes of 3/8" to 6". The system is offered in three parts: roof curb, curb cover, and rubber cap (1-pipe or 4-pipe). The curb cover is molded from ABS plastic with a laminated acrylic coating, which gives high resistance to both ozone and ultraviolet exposure. The caps are compression molded of EPDM rubber with conical shaped steps on the nipple for a taut weatherproof seal around the pipe. Caps include stainless steel clamps for added pipe seal protection.

Model	Price Each
RC-12 Curb	\$77
CC Curb Cover	\$99









Cap Model	Accommodates Pipe Sizes	Price Each
C-126 (1 pipe)	Single pipe 2" thru 6"	\$93
C-212 (4 pipe)	Two pipes 3/8" thru 1" Two pipes 1" thu 2"	\$93
C-481 (4 pipe)	Four pipes 3/8" thru 1"	\$93

### **SELF-FLASHING SYSTEM**

**Alumi-Flash for hot applied roof systems.** In some installations, the Alumi-Flash may be used in lieu of a curb. The 8" diameter top accepts any of the rubber caps. Construction is spun aluminum.



Model	Price Each
Alumi-Flash	\$113

## SELF-SEALING SPIRAL PIPE AND FITTINGS **By Eastern Sheet Metal**



VARIABLE SPEED DRIVES & STARTERS

DIFFUSERS / TRANSITIONS REGISTERS / GRILLES /

VAV TERMINALS / HOT WATER COILS

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

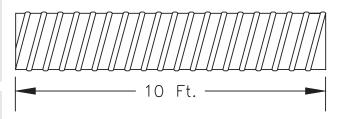
FLEXIBLE DUCT / SNAPLOCK & ACC.

VIBRATION ISOLATION

STEAM SPECIALTIES

Single wall spiral duct

- All fittings have factory installed gaskets
- Galvanized steel construction (ASTMA 527)
- Prices **DO NOT** include freight



Diameter + 4"

### STRAIGHT PIPE 10 FT. LENGTHS

Part Number	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Per 10 Ft. Length
ESSP3	3	8.1	26	\$33
ESSP4	4	10.8	26	\$42
ESSP5	5	13.5	26	\$51
ESSP6	6	16.2	26	\$57
ESSP8	8	21.6	26	\$74
ESSP10	10	27.0	26	\$92
ESSP12	12	32.4	26	\$109
ESSP14	14	37.8	26	\$126
ESSP16	16	43.2	26	\$153
ESSP18	18	48.6	26	\$171
ESSP20	20	54.0	26	\$189
ESSP22	22	59.4	26	\$208
ESSP24	24	64.8	26	\$229

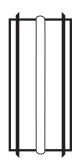
Part Number	Duct Diameter	Wt. Each (lbs.) Ga.		Price Each
PBT4	4	0.4	26	\$33
PBT5	5	0.5	26	\$33
PBT6	6	0.6	26	\$36
PBT8	8	0.8	26	\$38
PBT10	10	1.1	26	\$44
PBT12	12	1.3	26	\$46
PBT14	14	2.6	26	\$105
PBT16	16	2.9	26	\$123
PBT18	18	3.3	26	\$140
PBT20	20	3.5	24	\$156
PBT22	22	3.9	24	\$181
PBT24	24	4.2	24	\$194

Part	Duct	Wt Fach			
<b>BELLMOUTH</b>					
ESSP24	24	64.8	26	\$229	
ESSP22	22	59.4	26	\$208	
ESSP20	20	54.0	26	\$189	
ESSP18	18	48.6	26	\$171	
ESSP16	16	43.2	26	\$153	
ESSP14	14	37.8	26	\$126	
ESSP12	12	32.4	26	\$109	
ESSP10	10	27.0	26	\$92	
ESSP8	8	21.6	26	\$74	
ESSP6	6	16.2	26	\$57	
ESSP5	5	13.5	26	\$51	
ESSP4	4	10.8	26	\$42	
ESSP3	3	8.1	26	\$33	

# STEAM SPECIALTIES

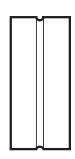
# **SELF-SEALING SPIRAL PIPE FITTINGS By Eastern Sheet Metal**





## PIPE COUPLING

Part Number	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
PCPT3	3	0.3	26	\$18
PCPT4	4	0.4	26	\$18
PCPT5	5	0.5	26	\$18
PCPT6	6	0.5	26	\$18
PCPT8	8	0.7	26	\$18
PCPT10	10	0.9	26	\$20
PCPT12	12	1.1	26	\$21
PCPT14	14	1.3	26	\$22
PCPT16	16	1.4	26	\$24
PCPT18	18	1.6	26	\$24
PCPT20	20	2.3	24	\$30
PCPT22	22	2.5	24	\$32
PCPT24	24	2.7	24	\$32



### FITTING COUPLING

Part Number	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
FCPT3	3	0.3	26	\$5
FCPT4	4	0.4	26	\$5
FCPT5	5	0.5	26	\$5
FCPT6	6	0.5	26	\$6
FCPT8	8	0.7	26	\$6
FCPT10	10	0.9	26	\$7
FCPT12	12	1.1	26	\$7
FCPT14	14	1.3	26	\$8
FCPT16	16	1.4	26	\$9
FCPT18	18	1.6	26	\$9
FCPT20	20	2.3	24	\$15
FCPT22	22	2.5	24	\$16
FCPT24	24	2.7	24	\$17

# SELF-SEALING SPIRAL PIPE FITTINGS By Eastern Sheet Metal



VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATOR

FLEXIBLE DUCT / SNAPLOCK & ACC.

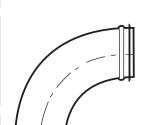
> SPIRAL PIPE & ACCESSORIES

Thru 12 in.

ELECTRIC HEATERS / FILTERS & ACCESSORIES

VIBRATION ISOLATION

STEAM SPECIALTIES





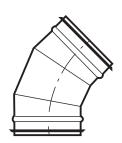


### 90 DEGREE ELBOW

Part Number	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
PE90T3	3	1.1	26	\$49
PE90T4	4	1.7	26	\$51
PE90T5	5	2.5	26	\$57
PE90T6	6	3.4	26	\$61
PE90T8	8	5.5	26	\$75
PE90T10	10	8.2	26	\$98
PE90T12	12	11.1	26	\$119
E90T14	14	12.0	26	\$135
E90T16	16	15.3	26	\$166
E90T18	18	19.1	26	\$204
E90T20	20	29.7	24	\$265
E90T22	22	42.9	24	\$303
E90T24	24	50.0	24	\$358

## 45 DEG. ELBOW

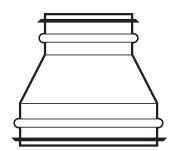




Above 12 in.

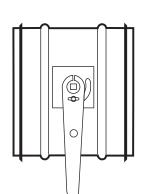
# **SELF-SEALING SPIRAL PIPE FITTINGS By Eastern Sheet Metal**





## **CONCENTRIC REDUCER**

Part Number	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
PRDT43	4 to 3	0.4	26	\$33
PRDT53	5 to 3	0.6	26	\$33
PRDT54	5 to 4	0.6	26	\$33
PRDT64	6 to 4	0.9	26	\$36
PRDT65	6 to 5	0.8	26	\$36
PRDT86	8 to 6	1.4	26	\$39
PRDT106	10 to 6	2.0	26	\$45
PRDT108	10 to 8	1.8	26	\$45
PRDT128	12 to 8	2.5	26	\$48
PRDT1210	12 to 10	2.2	26	\$49
RDT148	14 to 8	4.9	26	\$84
RDT1410	14 to 10	4.7	26	\$85
RDT1412	14 to 12	4.9	26	\$89
RDT1610	16 to 10	5.7	26	\$92
RDT1612	16 to 12	5.4	26	\$93
RDT1614	16 to 14	5.7	26	\$96
RDT1812	18 to 12	6.5	26	\$100
RDT1814	18 to 14	6.1	26	\$100
RDT1816	18 to 16	6.4	26	\$103
RDT2014	20 to 14	9.4	24	\$118
RDT2016	20 to 16	8.7	24	\$118
RDT2018	20 to 18	9.2	24	\$121
RDT2216	22 to 16	10.4	24	\$126
RDT2218	22 to 18	9.7	24	\$127
RDT2220	22 to 20	10.1	24	\$132
RDT2418	24 to 18	11.5	24	\$135
RDT2420	24 to 20	10.7	24	\$137
RDT2422	24 to 22	10.9	24	\$141



## **MODEL DT ROUND SPIRAL DAMPER**

- 22 ga. galvanized construction
- · Factory-mounted stand-off with locking hand quadrant
- Designed for spiral duct balancing applications
- · Seal becomes part of ductwork

Part Number	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
DT6	6	2.1	22	\$62
DT8	8	2.5	22	\$66
DT10	10	2.9	22	\$72
DT12	12	3.4	22	\$76
DT14	14	3.8	22	\$81



VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

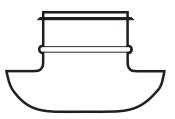
FLEXIBLE DUCT / SNAPLOCK & ACC.

ELECTRIC HEATERS / FILTERS & ACCESSORIES

VIBRATION ISOLATION

STEAM SPECIALTIES

SELF-SEALING SPIRAL PIPE FITTINGS	9
By Eastern Sheet Metal	

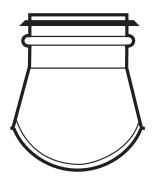


PRESSED TAP

Part Number	Tap Diameter	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
PFTCT44	4	4	0.4	26	\$27
PFTCT46	4	6	0.4	26	\$27
PFTCT48	4	8	0.4	26	\$27
PFTCT410	4	10	0.5	26	\$27
PFTCT412	4	12	0.5	26	\$27
PFTCT66	6	6	0.8	26	\$29
PFTCT68	6	8	0.8	26	\$29
PFTCT610	6	10	0.8	26	\$29
PFTCT612	6	12	0.8	26	\$29
PFTCT614	6	14	0.8	26	\$29
PFTCT616	6	16	0.8	26	\$29
PFTCT88	8	8	1.2	26	\$33
PFTCT810	8	10	1.2	26	\$33
PFTCT812	8	12	1.2	26	\$33
PFTCT814	8	14	1.2	26	\$33
PFTCT816	8	16	1.2	26	\$33
PFTCT818	8	18	1.2	26	\$33
PFTCT820	8	20	1.2	24	\$33
PFTCT822	8	22	1.2	24	\$33
PFTCT824	8	24	2.1	24	\$33
PFTCT1010	10	10	2.1	26	\$42
PFTCT1012	10	12	2.1	26	\$42
PFTCT1014	10	14	2.1	26	\$42
PFTCT1016	10	16	2.1	26	\$42
PFTCT1018	10	18	2.1	26	\$42
PFTCT1020	10	20	2.1	24	\$42
PFTCT1022	10	22	2.1	24	\$42
PFTCT1024	10	24	2.1	24	\$42
PFTCT1212	12	12	2.7	26	\$45
PFTCT1214	12	14	2.7	26	\$45
PFTCT1216	12	16	2.7	26	\$45
PFTCT1218	12	18	2.7	26	\$45
PFTCT1220	12	20	2.7	24	\$45
PFTCT1222	12	22	2.7	24	\$45
PFTCT1224	12	24	2.7	24	\$45

# **SELF-SEALING SPIRAL PIPE FITTINGS By Eastern Sheet Metal**

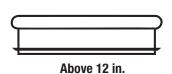




## CONICAL TAP

Part Number	Tap Diameter	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
FTCT1414	14	14	11.5	26	\$54
FTCT1416	14	16	12.7	26	\$54
FTCT1418	14	18	13.9	26	\$54
FTCT1420	14	20	19.3	24	\$54
FTCT1422	14	22	20.8	24	\$54
FTCT1424	14	24	22.4	24	\$54
FTCT1616	16	16	13.8	26	\$57
FTCT1618	16	18	15.1	26	\$57
FTCT1620	16	20	20.9	24	\$57
FTCT1622	16	22	22.5	24	\$57
FTCT1624	16	24	24.2	24	\$57
FTCT1818	18	18	16.2	26	\$61
FTCT1820	18	20	22.5	24	\$61
FTCT1822	18	22	24.3	24	\$61
FTCT1824	18	24	26.0	24	\$61





### **END CAP**

LITE UAI				
Part Number	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
PECT3	3	0.3	26	\$35
PECT4	4	0.4	26	\$35
PECT5	5	0.6	26	\$38
PECT6	6	0.7	26	\$38
PECT8	8	1.0	26	\$38
PECT10	10	1.4	26	\$48
PECT12	12	1.8	26	\$48
ECT14	14	2.6	26	\$57
ECT16	16	3.1	26	\$65
ECT18	18	3.7	26	\$69
ECT20	20	5.5	24	\$80
ECT22	22	6.4	24	\$86
ECT24	24	7.3	24	\$92



DRIVES & STARTERS VARIABLE SPEED

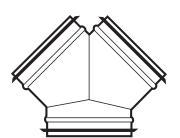
DIFFUSERS / TRANSITIONS

FLEXIBLE DUCT / SNAPLOCK & ACC.

VIBRATION ISOLATION

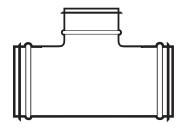
STEAM SPECIALTIES

## SELF-SEALING SPIRAL PIPE FITTINGS **By Eastern Sheet Metal**





Part Number	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
YT3	3	1.6	26	\$77
YT4	4	2.4	26	\$84
YT5	5	3.3	26	\$92
YT6	6	4.4	26	\$100
YT8	8	6.8	26	\$119
YT10	10	9.8	26	\$142
YT12	12	13.3	26	\$164
YT14	14	17.4	26	\$189
YT16	16	22.0	26	\$215
YT18	18	27.1	26	\$243
YT20	20	41.7	24	\$307
YT22	22	49.5	24	\$346
YT24	24	58.0	24	\$401



### **TFF**

ICC		·		
Part Number	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
TT3	3x3x3	1.4	26	\$53
TT4	4x4x4	2	26	\$56
TT5	5x5x5	3	26	\$60
TT6	6x6x6	3.2	26	\$63
TT8	8x8x8	4.5	26	\$72
TT10	10x10x10	6	26	\$80
TT12	12x12x12	7.8	26	\$90
TT14	14x14x14	9.6	26	\$105
TT16	16x16x16	11.7	26	\$116
TT18	18x18x18	13.9	26	\$127
TT20	20x20x20	20.8	24	\$182
TT22	22x22x22	24.1	24	\$196
TT24	24x24x24	27.6	24	\$213

## **SPIRAL HANGING SYSTEMS**

## **GRIPPLE HANGING SYSTEMS**

Gripple hangers incorporate a length of pre-cut cable with a pre-fabricated end fixing for maximum speed, efficiency and safety.



**Gripple Lock** 



**XP Loop Hanger** 



**Duct Trapeze Loop Hanger** 



Cutter



**Tensioning Tool** 

Part Number	Description	Length	* Price Per Hanger		
HF02-5	Loop Hanger Size 2 100 lbs	5 ft	\$11		
HF02-10	Loop Hanger Size 2 100 lbs	10 ft	\$13		
HF02-15	Loop Hanger Size 2 100 lbs	15 ft	\$15		
HF02-20	Loop Hanger Size 2 100 lbs	20 ft	\$17		
HF02-30	Loop Hanger Size 2 100 lbs	30 ft	\$22		
HF03-5	Loop Hanger Size 3 200 lbs	5 ft	\$14		
HF03-10	Loop Hanger Size 3 200 lbs	10 ft	\$16		
HF03-15	Loop Hanger Size 3 200 lbs	15 ft	\$18		
HF03-20	Loop Hanger Size 3 200 lbs	20 ft	\$21		
HF03-30	Loop Hanger Size 3 200 lbs	30 ft	\$26		
XP02-10	Loop Hanger Size 2 100 lbs with Button	10 ft	\$15		
XP02-20	Loop Hanger Size 2 100 lbs with Button	20 ft	\$19		
DT2-LG-10	Duct Trapeze Loop Hanger 100 lbs	10 ft	\$15		
DT2-LG-15	Duct Trapeze Loop Hanger 100 lbs	15 ft	\$17		
DT2-LG-20	Duct Trapeze Loop Hanger 100 lbs	20 ft	\$19		
DT2-LG-30	Duct Trapeze Loop Hanger 100 lbs	30 ft	\$24		
HF-SG-3/8-NO 2	Stud Hanger Size 2 100 lbs	10 ft	\$14		
HF-SG-3/8-NO 2	Stud Hanger Size 2 100 lbs	15 ft	\$16		
HF-SG-3/8-NO 3	Stud Hanger Size 3 200 lbs	10 ft	\$17		
HF-SG-3/8-NO 3	Stud Hanger Size 3 200 lbs	15 ft	\$19		
HF-SG-3/8-NO 3	Stud Hanger Size 3 200 lbs	30 ft	\$27		
Cutter	Wire Rope Cutter		\$47		
TOOL-4-5BX	Tensioning Tool		\$157		
* Cable Kits Sold 10 Per Bag (Minimum Purchase 1 Bag)					

<sup>\*</sup> Cable Kits Sold 10 Per Bag (Minimum Purchase 1 Bag)

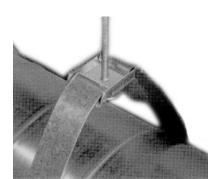
# SPIRAL HANGING SYSTEMS AND BLAST GATES

## DYNA-TITE CABLE SYSTEM



The Dyna-Tite CL23 cable lock and wire rope system is the newest, fastest, and most reliable way to secure ductwork and equipment. With this system the height of the unit can be adjusted without any tools. Galvanized construction.

Part Number	Description	Load Range	Price Each
CL12	Cable Lock	WC3	\$5
CL18	Cable Lock	WC4	\$8
CL23	Cable Lock	WC6	\$12
KV12	Bracket Assembly with CL12	WC3	\$7
WC3	3/32" Wire Rope 500 Ft. Roll	150 lb	\$261
WC4	1/8" Wire Rope 500 Ft. Roll	250 lb	\$293
WC6	3/16" Wire Rope 250 Ft. Roll	640 lb	\$347



# STRAPPING SYSTEM

With this system the steel strap is hand bent into the bracket which is self loading. Can be used with 5/16" - 3/8" rod.

Part Number	Description	Load Range	Price Each
Strapping	1" Width 20 ga. 100 ft.	320 lb	\$77
Bracket	Accepts 5/16" - 3/8" Rod	660 lb	\$4



# **BLAST GATES**

The standard FULL cut off is an aluminum cast housing to which collars have been "screwed". The screw is then ground off on the inside to keep it out of the air stream.

Part Number	Description	Price
C1032	3" Blast Gate	\$16
C1042	4" Blast Gate	\$19
C1062	6" Blast Gate	\$30
C1082	8" Blast Gate	\$49
C10102	10" Blast Gate	\$84
C10122	12" Blast Gate	\$108

# **ELECTRIC HEATERS By Markel**



# **MARKEL SERIES 5100 UNIT HEATERS**

Heaters are for vertical or horizontal mounting and include shock-proof finned tubular heating elements with built-in thermal cut-outs, individually adjustable outlet louvers and totally enclosed, permanently lubricated fan motors. Motors and line power supply are same voltage. Outward drawn discharge venturi enhances air flow. No disconnect.



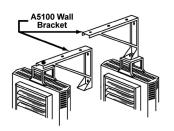
Model	KW	BTUH (000)	Heater Voltage	Control <sup>(1)</sup> Voltage	Phase (2)	Price Each
HF2B5103	2.5/3.3	8.5/11.2	208/240	208/240	3/1	\$863
HF2B5105	3.7/5.0	12.8/17.1	208/240	208/240	3/1	\$909
HF2B5107CA1	5.6/7.5	19.2/25.6	208/240	24	3/1	\$1401
HF2B5110CA1	7.5/10.0	25.6/34.1	208/240	24	3/1	\$1544
G1G5103	3.3	11.2	277	277	1	\$870
G1G5105	5.0	17.1	277	277	1	\$909
P3P5103CA1	3.3	11.2	480	24	3	\$1109
P3P5105CA1	5.0	17.1	480	24	3	\$1204
P3P5107CA1	7.5	25.6	480	24	3	\$1511
P3P5110CA1	10.0	34.1	480	24	3	\$1601
P3P5115CA1	15.0	51.2	480	24	3	\$2583
P3P5120CA1	20.0	68.3	480	24	3	\$3409

#### Notes:

- (1) 24-volt control units are supplied with low voltage control transformer and contactor.
- (2) Single or three-phase wiring on dual phase units is field interchangeable.

#### **ACCESSORIES**

Model	odel Description For Use With:		Price Each
A5105	Horizontal Mounting Bracket	3.3 & 5.0 KW Heaters	\$133
A5120	Horizontal Mounting Bracket	7.5 - 20 KW Heaters	\$153
V5105	Vertical Mounting Bracket	3.3 - 5.0 KW Heaters	\$256
V5120	Vertical Mounting Bracket	7.5 - 20 KW Heaters	\$316
T5100	Field installed internal t'stat	for all except HF2B5103, 05 3 ph	\$162
T5102	Field installed internal t'stat	HF2B5103,05 3 ph	\$219
TW1512	HD line voltage wall t'stat	3 phase heaters	\$256
S2022H10AB	Line voltage wall t'stat	1 phase heaters	\$47
RK120EAA	Low voltage wall t'stat	24V control units	\$26
DCS202/5100	Power Disconnect Switch	2 Pole; 20 AMP; 120-277 VAC	\$113
DCS403/5100	Power Disconnect Switch	3 Pole; 40 AMP; 120-600 VAC	\$214
DCS603/5100	Power Disconnect Switch	3 Pole; 60 AMP; 600 VAC	\$299





# MARKEL FAN FORCED ELECTRIC WALL HEATERS

Heavy duty heaters include finned tubular heating elements and tamper-proof grille with built-in overheat protection disconnect and thermostat. Rough-in dimensions are 14 3/16" wide x 19 15/16" high and 4" deep. Heater and wall box are packed and shipped together. Optional sleeve available for surface mounting.



Model	KW	втин	Voltage/Phase	Price Each
E3323	1.5	5120	120/1	\$813
HF3323	1.125/1.5	3840/5120	208/240/1	\$828
HF3324	1.5/2.0	5120/6284	208/240/1	\$828
HF3325	2.25/3.0	7763/10,350	208/240/1	\$828
HF3326	3.0/4.0	10,350/13,800	208/240/1	\$828
G3324	2.0	6284	277/1	\$827
G3325	3.0	10,350	277/1	\$827
G3326	4.0	13,800	277/1	\$827

#### **ACCESSORIES**

Model	Description	Price Each
3320EX33	Surface Mounting Sleeve	\$119
3310	Rough-In Box For Advance Installation	\$127

FANS / DAMPERS / CURBS

VARIABLE SPEED DRIVES & STARTERS

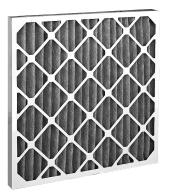
REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

FLEXIBLE DUCT / SNAPLOCK & ACC.

# **AIR FILTRATION**



## **PLEATED PREFILTERS**

- Pleated design increases dust holding capacity
- Extended replacement intervals
- Increases service life of secondary filters

### **DIMENSIONAL DATA AND PRICES**

Nominal Size	Actual Size	Filters Per Case	Price Each
20 x 20 x 1	19 <sup>1</sup> / <sub>2</sub> x 19 <sup>1</sup> / <sub>2</sub> x <sup>3</sup> / <sub>4</sub>	12	\$6
16 x 20 x 2	15 <sup>1</sup> / <sub>2</sub> x 19 <sup>1</sup> / <sub>2</sub> x 1 <sup>3</sup> / <sub>4</sub>	12	\$6
20 x 20 x 2	19 <sup>1</sup> / <sub>2</sub> x 19 <sup>1</sup> / <sub>2</sub> x 1 <sup>3</sup> / <sub>4</sub>	12	\$7
16 x 25 x 2	16 <sup>1</sup> / <sub>2</sub> x 24 <sup>1</sup> / <sub>2</sub> x 1 <sup>3</sup> / <sub>4</sub>	12	\$7
20 x 25 x 2	19 <sup>1</sup> / <sub>2</sub> x 24 <sup>1</sup> / <sub>2</sub> x 1 <sup>3</sup> / <sub>4</sub>	12	\$8
12 x 24 x 2	11 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub> x 1 <sup>3</sup> / <sub>4</sub>	12	\$6
24 x 24 x 2	23 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub> x 1 <sup>3</sup> / <sub>4</sub>	12	\$8
12 x 24 x 4	11 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub> x 3 <sup>3</sup> / <sub>4</sub>	12	\$9
24 x 24 x 4	23 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub> x 3 <sup>3</sup> / <sub>4</sub>	6	\$15



## **DIMENSIONAL DATA AND PRICES**

Model	Nominal Size	Actual Size	Filters Per Case	Price Each
95PH	12 x 24 x 12	11 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub> x 11 <sup>1</sup> / <sub>2</sub>	2	\$91
95PH	24 x 24 x 12	23 <sup>3</sup> / <sub>8</sub> x 23 <sup>3</sup> / <sub>8</sub> x 11 <sup>1</sup> / <sub>2</sub>	1	\$129

# FILTER MEDIA ROLLS

Nominal Size	Description	Price Each
24 X 90 X <sup>3</sup> / <sub>4</sub>	Merv 7 Filter Media Roll	\$89
36 X 90 X <sup>3</sup> / <sub>4</sub>	Merv 7 Filter Media Roll	\$130
60 X 90 X 1	Merv 8 Filter Media Roll	\$247

# **FILTER FRAMES AND FASTENERS**



- Universal holding frame accommodates wide range of filter sizes and types
- Variety of fasteners enables use with 1", 2" and 4" panel filters
- Galvanized construction
- Also accepts 6" and 12" deep cartridge filters

Frame Size	Price Each
12 x 24	\$41
24 x 24	\$45

Fastener Model No.	Upstream or Downstream	Fastener Used to Secure	Qty. Required per Filter	Price Each
CC611	Up or Down	1" or 2" deep filter	4	\$2
WF611	Up or Down	4" deep filter	4	\$3
PFC-2	Up	2" deep 30% as a prefilter to a cartridge (no header)	4	\$2
PFC-4	Up	4" deep 30% as a prefilter to a cartridge (no header)	4	\$2
PCA-2	Up or Down	2" deep filter	4	\$3
PCA-3	Up or Down	2" deep 30% as a prefilter to a cartridge	4	\$3
PCA-4	Up or Down	4" deep filter	4	\$3
PCA-5	Up or Down	4" deep 30% as a prefilter to a cartridge	4	\$3
12611	Up or Down	12" cartridge without prefilter	4	\$6

# **MAGNEHELIC PRESSURE GAUGES**



# **DWYER SERIES 2000 MAGNEHELIC GAUGES**

- 1/8" NPT plugs for duplicate pressure taps
- Includes rubber tubing adapters, flush mounting lugs and necessary screws
- Use accessory A-605 to convert for use as air filter gauge

Model No.	Range	Price Each
2001	0 - 1.0"	\$133
2002	0 - 2.0"	\$133
2006	0 - 6.0"	\$133
A-605	N/A	\$83

# **MANOMETERS**



## DWYER MARK II MOLDED PLASTIC MANOMETER

• Includes 8 ft. flexible, double column, plastic tubing, 2 connector fittings for 1/8" pipe thread, mounting screws, 3/4 oz. gauge oil

Model	Description	Price Each
Manometer No. 25	Range .05 - 3"	\$91
A-310A	3-way vent valve (2 per gauge)	\$40
A-101	Red Gauge Oil, .826 sp. gr.	\$19

FANS / DAMPERS / CURBS

> Variable speed Drives & Starters

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

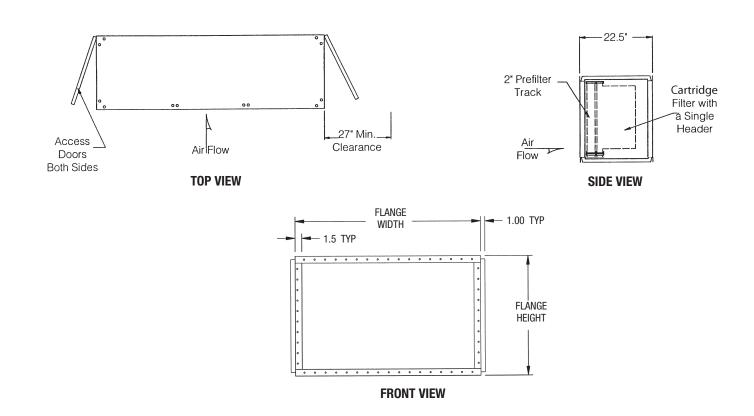
# **SIDE ACCESS FILTER HOUSINGS**



- · Unprecedented versatility and ease of maintenance
- Two stage filtration using pleated pre-filters and high efficiency rigid filters
- Constructed of durable 16 ga. galvanized construction for indoor or outdoor installation
- Pressure capability up to 3 in. WG positive or negative
- Access doors on both sides of housing for filter changeout from either side
- Fully gasketed doors and tracks
- Housing can accommodate both 6 in. cartridge filters (not stocked) and 12 in. cartridge filters (stocked)
- Filters slide into tracks. No need for holding frames or fasteners

#### **DIMENSIONAL DATA AND PRICES**

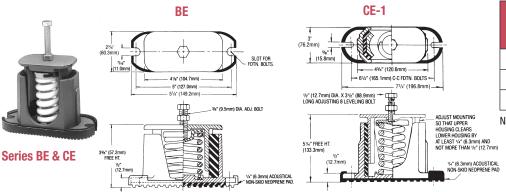
Model	Actual Size	Prefilters Required Per Unit	Cartridge Filters Required Per Unit	Price Each	S T O C K
1 x 1	23 <sup>3</sup> /8"W x 27 <sup>1</sup> / <sub>4</sub> "H	(1) - 24 x 24 x 2	(1) - 24 x 24 x 12	\$943	G
1 x 2	46 <sup>3</sup> / <sub>4</sub> "W x 27 <sup>1</sup> / <sub>4</sub> "H	(2) - 24 x 24 x 2	(2) - 24 x 24 x 12	\$1291	G



# **VIBRATION MOUNTINGS**

## STEEL SPRING MOUNTINGS

Types BE & CE-1 are single spring mountings including enclosed cast housings and external adjustment bolt

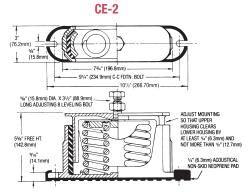


Туре	Spring Size	Price Each
BE	C50-C370	\$72
CE-1	D120-D510	\$99
CE-1	D675-D1360	\$109

Note: See Spring Chart on page 78 for maximum load.

• Type CE-2 mounts include two springs and maximum load is two times values in chart for a single spring

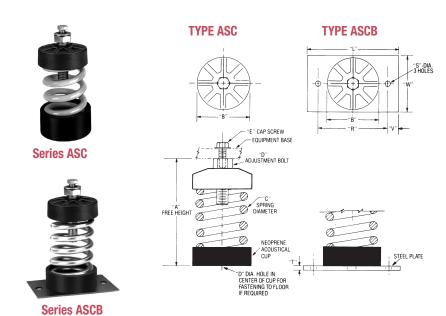




Туре	Spring Size	Price Each
CE-2	D510	\$154
CE-2	D675-D1360	\$175

Note: See Spring Chart on page 78 for maximum load.

- Type ASC is a free-standing, laterally stable spring mounting with built-in leveling bolt.
- The ASCB mount is similar to the ASC above except the bottom cup is bonded to a 4 1/2 x 2 1/2 steel plate.



Туре	Spring Size	Price Each
ASC	C50-C370	\$48
ASCB	C50-C370	\$55

Note: See Spring Chart on Page 78 for maximum load.

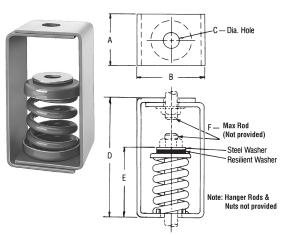
#### ASC & ASCB Dimensions: in. (mm)

()							
A	В	C	D	E			
4 <sup>1</sup> / <sub>2</sub> " (114.3)	2 <sup>3</sup> /8" (60.3)	2" (50.8)	<sup>5</sup> /8" (16.0)	<sup>3</sup> / <sub>8</sub> " (9.5)			
L	W	Т	R	s	V		
4 <sup>1</sup> /2" (114.3)	2 <sup>1</sup> / <sub>2</sub> " (63.5)	<sup>1</sup> / <sub>8</sub> " (3.18)	3 <sup>1</sup> / <sub>2</sub> " (89.0)	<sup>7</sup> / <sub>16</sub> " (11.2)	<sup>1</sup> / <sub>2</sub> " (12.7)		

# **VIBRATION MOUNTINGS**

## MODEL HS SPRING-FLEX HANGERS

Type **HS** hangers incorporate a steel spring in series with a neoprene noise isolation washer. The **HS-1D** housings are 7" high and can accommodate up to 3/4" diameter hanger rods. The **HS-1B** housings (assembled) are 4 1/2" high and accommodate up to 3/8" diameter hanger rods. All other **HS-1C** housings are 5 1/2" high and can accommodate up to 5/8" diameter rods.



### **HS Dimensions: in. (mm)**

TYPE & SIZE	A	В	С	D	E	F
HS-1B-B20-B85	21/4" (57.5)	23/4" (69.8)	<sup>9</sup> /16" (14.2)	4 <sup>1</sup> / <sub>2</sub> " (114.3)	23/4" (69.8)	<sup>3</sup> / <sub>8</sub> " (9.5)
HS-1C-C50-C370	21/4" (57.5)	3" (76.2)	<sup>13</sup> /16" (20.6)	5 <sup>1</sup> / <sub>2</sub> " (139.7)	2 <sup>15</sup> / <sub>16</sub> " (76.0)	<sup>5</sup> / <sub>8</sub> " (15.8)
HS-1D-D120-D1360	3" (76.2)	31/4" (76.2)	1 <sup>1</sup> /4" (31.75)	7" (177.8)	4 <sup>3</sup> /8" (114.0)	<sup>3</sup> / <sub>4</sub> " (19.0)

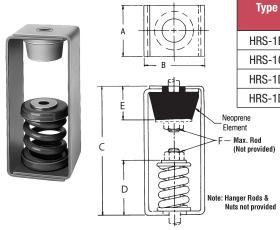
Туре	Spring Size	Price Each
HS-1B	B20-B85	\$25
HS-1C	C50-C370	\$36
HS-1D	D120-D510	\$47
HS-1D	D675-D1360	\$57

## UNIVERSAL SPRING CHART

Spring Number	Spring Color	Size	Max Load Lbs.
T1B-20	Blue	2 1/2"	20
T1B-35	Black	2 1/2"	35
T1B-50	Red	2 1/2"	50
T1B-70	Green	2 1/2"	70
T1B-85	Gray	2 1/2"	85
T1C-50	Blue	2 3/4"	50
T1C-100	Tan	2 3/4"	100
T1C-150	Red	2 3/4"	150
T1C-250	Black	2 3/4"	250
T1C-370	Yellow	2 3/4"	370
T1D-120	Black	4"	120
T1D-175	Blue	4"	175
T1D-250	Yellow	4"	250
T1D-340	Red	4"	340
T1D-510	Black	4"	510
T1D-675	Purple	4"	675
T1D-900	Green	4"	900
T1D-1200	Gray	4"	1200
T1D-1360	White	4"	1360

## MODEL HRS SPRING-FLEX HANGERS

Type **HRS** hangers combine a steel spring with a neoprene hanger element. The spring isolates low frequency mechanical vibration and the neoprene element provides excellent sound attenuation. **HRS-1D** housings are 10" high and can accommodate up to 3/4" hanger rods. **HRS-1B** housings (assembled) are 5 1/4" high and accommodate up to 3/8" diameter rods. All other **HRS-1C** housings are 7" high and can accommodate up to 5/8" diameter rods.



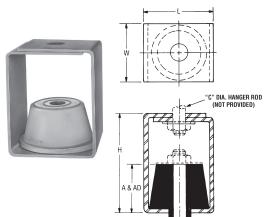
Туре	Spring Size	Price Each
HRS-1B	B20-B85	\$35
HRS-1C	C50-C370	\$54
HRS-1D	D120-D510	\$83
HRS-1D	D675-D1360	\$93

## HRS Dimensions: in. (mm)

TYPE & SIZE	A	В	С	D	Е	F
HRS-1B-B20-B85	21/4"	23/4"	5 <sup>1</sup> /4"	27/8"	<sup>15</sup> /16"	3/8"
110-10-020-003	(75.0)	(69.8)	(133.3)	(73.0)	(23.8)	(9.5)
HRS-1C-C50-C370	3"	31/4"	7"	3"	111/16"	5/8"
	(76.2)	(95.2)	(177.8)	(76.2)	(47.8)	(15.8)
HRS-1D-D120-D1360	3"	33/4"	10"	43/8"	21/8"	3/4"
11N3-10-0120-01300	(76.2)	(95.2)	(254.0)	(111.0)	(53.9)	(19.0)

# **VIBRATION MOUNTINGS**

## **NEOPRENE-IN-SHEAR HANGERS**

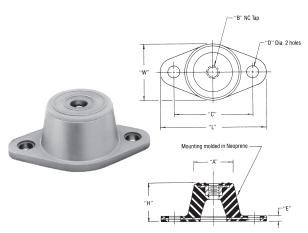


Туре	Max Load Blue	Max Load Black	Max Load Red	Max Load Green	Price Each
HR-A	35 lbs	45 lbs	75 lbs	120 lbs	\$15
HR-B	_	170 lbs	240 lbs	380 lbs	\$40

**HR Dimensions: in. (mm)** 

Туре	L	w	н	A*	AD*	С
HR-A	2 <sup>1</sup> /4" (57.2)	2" (50.8)	3" (76.2)	1 <sup>1</sup> /8" (28.6)	1 <sup>3</sup> /8" (35.0)	<sup>3</sup> / <sub>8</sub> " (9.6)
HR-B	3" (76.2)	2 <sup>1</sup> / <sub>4</sub> " (57.2)	4 <sup>1</sup> / <sub>2</sub> " (114.3)	1 <sup>3</sup> /8" (35.0)	1 <sup>7</sup> /8" (47.8)	<sup>5</sup> /8" (16.0)

## **NEOPRENE-IN-SHEAR MOUNTINGS**



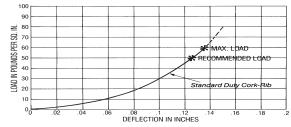
Туре	Max Load Blue	Max Load Black	Max Load Red	Max Load Green	Max Load Gray	Price Each
R-1	35 lbs	45 lbs	70 lbs	120 lbs		\$23
R-2	135 lbs	170 lbs	240 lbs	380 lbs	_	\$24
R-3	_	250 lbs	525 lbs	750 lbs	1100 lbs	\$57

R Dimensions: in. (mm)

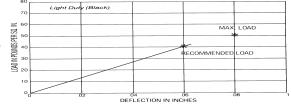
Туре	L	W	Н	A	В	С	D	E
R-1	3 <sup>1</sup> /8" (79.4)	1 <sup>3</sup> / <sub>4</sub> " (44.4)	1" (25.4)	1 <sup>1</sup> / <sub>4</sub> " (31.7)	<sup>5</sup> / <sub>16</sub> " (8.0)	2 <sup>3</sup> /8" (60.4)	<sup>11</sup> / <sub>32</sub> " (8.8)	<sup>3</sup> / <sub>16</sub> " (4.8)
R-2	3 <sup>7</sup> / <sub>8</sub> " (98.6)	2 <sup>3</sup> / <sub>8</sub> " (60.4)	1 <sup>1</sup> / <sub>4</sub> " (31.7)	1 <sup>3</sup> / <sub>4</sub> " (44.4)	<sup>3</sup> / <sub>8</sub> " (9.6)	3" (76.2)	11/32" (8.8)	<sup>7</sup> / <sub>32</sub> " (5.6)
R-3	5 <sup>1</sup> / <sub>2</sub> " (139.7)	3 <sup>3</sup> / <sub>8</sub> " (85.8)	1 <sup>3</sup> / <sub>4</sub> " (44.4)	2 <sup>1</sup> / <sub>2</sub> " (63.5)	<sup>1</sup> / <sub>2</sub> " (12.7)	4 <sup>1</sup> / <sub>8</sub> " (104.8)	<sup>9</sup> / <sub>16</sub> " (14.4)	1/4" (6.3)

# **ELASTOMERIC & SHEAR-FLEX PADS**





ELASTOMERIC PADS				
Size	Price Each			
18" x 18" x 1"	\$200			
6" x 6" x 1"	\$23			
4" x 4" x 1"	\$11			
2" x 2" x 1"	\$3			



# SHEAR-FLEX PADS Size Price Each 18" x 18" x 3/8" \$117

FANS / DAMPERS / CURBS

VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

# SPIRAX SARCO PRESSURE REDUCING VALVES

## 25 SERIES PILOT & TEMPERATURE OPERATED REGULATORS

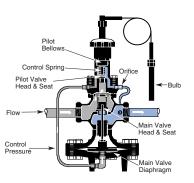
Efficient, reliable and accurate, no other regulator contains as many quality features as the 25 Series. Whether it is used for regulating temperatures, pressure, or both, it is responsive and exact. Designed with the user in mind, it is more versatile than any regulator available to the industry.



#### **PRESSURE PILOT**

Pressure Pilot Type	Downstream Pressure	Price Each
25-P Yellow	3-30 psig	\$836
25-P Blue	20-100 psig	\$836
25-P Red	80-250 psig	\$836

#### **HOW THE 25T PILOT REGULATOR WORKS**



The Spirax Sarco pilot operated temperature regulator works by converting the process temperature to a force which is balanced by the control spring. This modulates a small valve head over a seat (the pilot). The flow through this seat is directed in turn to the main valve diaphragm, where it modulates the main valve.

In order to achieve the most stable operating condition, the sensing bulb must be immersed entirely in the sensed medium. This allows the liquid in the bulb to expand through the capillary tubing into the bellows and throttles the pilot valve. This settles the pilot valve, allowing constant flow across the main diaphragm.

When process temperature rises, the pilot valve closes, and pressure is released from the main valve diaphragm through the control orifice to close the main valve. Any variations in temperature will immediately be sensed on the bulb, which will act to adjust the position of the pilot and main valve, ensuring a constant process temperature.

#### **HOW TO ORDER**

When ordering a Spirax Sarco 25T temperature regulator, include all of the following:

- Valve size by nominal pipe/flange size
- · Body material of cast iron or cast steel
- Type of senor 25T for thermostatic regulation
- Style of thermostatic bulb
- · Length of capillary tubing
- · Temperature adjustment range
- Maximum steam supply pressure. Specify low pressure pilot when inlet pressure for flanged size is 15 psig or below
- Intended application

**For example:** Spirax Sarco 1" Cast Iron Temperature Regulator, Type 25T-2 with 8 feet of tubing, temperature range of 120° to 180°F, 75 psig steam, for storage water heater.

#### **MAIN VALVE**

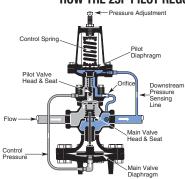
Main Valve Type	Size	Price Each
	1/2"	\$1238
	3/4"	\$1347
05	1"	\$1517
25	1 1/4"	\$1854
	1 1/2"	\$2287
	2"	\$2947

#### **TEMPERATURE PILOT**



Temperature Pilot Type	Temperature Range	Price Each			
	100-160°F	\$1987			
T2	120-180°F	\$1987			
	160-220°F	\$1987			

#### **HOW THE 25P PILOT REGULATOR WORKS**



The Spriax Sarco pilot operated pressure regulator works by balancing the downstream pressure against a control spring. This modulates a small valve head over a seat (the pilot). The flow through this seat is directed, in turn, to the main valve diaphragm, where it modulates the main valve.

In order to achieve the most stable operating condition, an external pressure sensing line must be used. This allows downstream pressure to feed back to the underside of the diaphragm, balancing the spring force, causing the pilot valve to throttle. This settles the pilot valve, allowing a constant flow across the main diaphragm. This ensures that the main valve is also settled to give a stable downstream pressure.

When downstream pressure rises, the pilot valve closes, and pressure is released from the main valve diaphragm through the control orifice, to close the main valve. Any variations in load or pressure will immediately be sensed on the pilot diaphragm, which will act to adjust the position of the main valve, ensuring a constant downstream pressure.

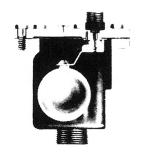
#### **HOW TO ORDER**

When ordering a Spirax Sarco 25P regulator, include all of the following:

- Valve size and connection type
- Body material, e.g. cast iron
- Set range for downstream pressure
- Steam supply pressure

**For example:** Spirax Sarco 1" Cast Iron Pressure Regulator, Type 25P for 150 psig inlet pressure, yellow spring for 3 to 30 psig reduced pressure, for 15 psig process heating.

# SPIRAX SARGO MISCELLANEOUS EQUIPMENT



## TYPE 13WS AIR ELIMINATORS

Type 13WS air eliminators are for water heating and cooling systems. The body is cast iron; the float mechanism, float, valve and seat are stainless steel.

Size	Price Each
3/4"	\$329



## TYPE IT PIPELINE STRAINERS

Type IT cast iron screwed strainers are for steam, gasses or liquids. Heavy-duty body is cast-iron reinforced with external rib for maximum strength. Standard screen is 20 mesh type 304 stainless steel

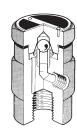
Size	Price Each	Size	Price Each
3/8"	\$69	1 1/4"	\$93
1/2"	\$58	1 1/2"	\$110
3/4"	\$60	2"	\$171
1"	\$71		



## TYPE T-202 and TYPE VS-204 THERMOSTATIC AIR VENTS

Type T-202 has brass body and stainless steel internal parts. Type VS-204 has cast iron body and stainless steel internal parts.

Туре	Size	Price Each
T-202	3/8"	\$278
VS-204	1/2"	\$423



## TYPE VB14 and VB21 VACUUM BREAKER

The VB14 and VB21 are designed to admit air to condensing vapor (steam) or liquid systems where vacuum formation may inhibit system drainage or operation.

Туре	Size	Price Each
VB14-Brass	1/2"	\$238
VB21-Stainless	1/2"	\$475

Please call the Greensboro warehouse or your Hoffman & Hoffman salesman for information on any non-stocked sizes or other Sarco products. Factory shipments for most items is less than two weeks.

FANS / DAMPERS / CURBS

VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

FLEXIBLE DUCT / SNAPLOCK & ACC.

# SPIRAX SARCO STEAM TRAPS



## TYPE TD-52 THERMO-DYNAMIC STEAM TRAPS

Type TD-52 steam traps are all stainless steel and having only one moving part and are designed with a rugged simplicity providing efficiency and reliability unsurpassed in any steam trap of its type.

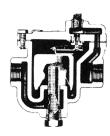
Size	Price Each
3/8"	\$347
1/2"	\$512
3/4"	\$655
1"	\$883



## TYPE F & T FLOAT AND THERMOSTATIC STEAM TRAPS

Type F & T traps provide immediate and continuous discharge of condensate, air and non-condensables from a steam system as soon as they reach the trap.

Туре	Size	Price Each	Туре	Size	Price Each	Туре	Size	Price Each
FT-15	3/4"	\$352	FT-30	3/4"	\$438	FT-75	1"	\$672
FT-15	1"	\$436	FT-30	1"	\$477	FT-75	1 1/4"	\$1029
FT-15	1 1/4"	\$530	FT-30	1 1/2"	\$908	FT-75	1 1/2"	\$1039
FT-15	1 1/2"	\$748	FT-30	2"	\$1579	FT-125	3/4"	\$601
FT-15	2"	\$1414	FT-75	3/4"	\$596	FT-125	1"	\$672



# TYPE B INVERTED BUCKET STEAM TRAPS

Type B traps provide high discharge capacities and quick action, made possible by the use of large valves and the Sarco Camlift mechanism.

Туре	Size	Price Each
B1-H-125	3/4"	\$246
B2-125	3/4"	\$514



## TYPE FA FLOAT OPERATED DRAIN TRAPS

Type FA traps provide an automatic and continuous discharge which modulates with the liquid flow to efficiently remove condensate, or any unwanted liquid, from a compressed air or other pressurized gas system.

Туре	Size	Price Each	
FA-150	3/4"	\$514	

Please call the Greensboro warehouse or your Hoffman & Hoffman salesman for information on any non-stocked sizes or other Sarco products. Factory shipments for most items is less than two weeks.

#### **TERMS AND CONDITIONS**

"H&H" shall mean Hoffman & Hoffman, Inc., and its officers, employees, and agents. "Buyer" shall mean the person or entity entering into this Agreement with H&H to purchase goods and/or

- 1. Controlling Terms & Conditions: This Agreement, upon Buyer's acceptance, is limited to the terms and conditions stated herein, despite any additional or conflicting terms and conditions contained in any purchase order, any other document presented by Buyer, or any contract document between Buyer and any third-party (i.e. an owner, other contractor, etc.), all of which additional or conflicting terms are hereby rejected by H&H. No waiver of, or modification to, these Terms and Conditions shall be valid unless made in writing and signed by an authorized of H&H. H&H salespeople are not authorized to waiver or modify any Terms and Conditions. The terms of any written proposal / quote made by H&H ("proposal") and these Terms and Conditions shall constitute the entire agreement of the parties. H&H rejects any revision of, addition to, or deletion of any term in this Agreement not specifically accepted by an authorized representative of H&H in writing.
- 2. Acceptance: Any H&H proposal expires if not accepted by Buyer within thirty (30) days from the date of the proposal. Prices are firm after acceptance provided the Buyer releases the order for production by written notice to H&H within sixty (60) days of placing the order. Otherwise, prices are subject to escalation. Typographical and clerical errors in quotations, orders and acknowledgments are subject to correction. Buyer is deemed to have accepted any H&H proposal to purchase goods or services, including these Terms and Conditions, when Buyer either (a) receives and retains an acknowledgment from H&H without written objection within ten (10) days, (b) accepts delivery of all or any part of the goods ordered, (c) provides to H&H delivery dates, shipping instructions, or other instructions evidencing acceptance, or (d) otherwise executes or assents to any proposal or these Terms and Conditions. If Buyer accepts any proposal, without the addition of any other terms and conditions or any other Buyer modification, Buyer's order shall be deemed acceptance of the proposal subject solely to H&H's terms and conditions. If Buyer's order is expressly conditioned upon H&H's acceptance or assent to terms and/or conditions other than those stated herein, return or acknowledgment of such order by H&H with H&H's Terms and Conditions attached or referenced serves as H&H's notice of objection to, and rejection of, Buyer's terms and as H&H's counter-offer to provide goods or services in accordance with the H&H proposal and H&H's Terms and Conditions. If thereafter Buyer does not reject or object in writing to H&H within ten (10) days by written notice to Legal@hoffman-hoffman.com, H&H's counter-offer will be deemed accepted by Buyer. In any event, Buyer's acceptance of all or any part of any goods ordered will constitute Buyer's acceptance of H&H's proposal subject to H&H's Terms and Conditions.
- 3. Terms of Payment / Taxes: Payment is due net thirty (30) days from the date of each H&H invoice to Buyer. Interest at the rate of 1 1/2% per month (or the highest interest rate allowed by applicable law, if lower) may be charged after the 30-day period until payment is received. H&H accepts credit card payments. If Buyer chooses to pay by credit card, Buyer is subject to an additional convenience fee of 3.0% of the total amount paid by credit card. Buyer shall pay all costs of collection incurred by H&H including, but not limited to, reasonable attorneys' fee's, collection fees, and court costs. H&H may suspend all further services and transactions (regardless of their status) without liability if Buyer's account is more than thirty (30) days past due or if Buyer's credit, in the sole judgment of H&H, is impaired at any time. Partial invoices may be submitted for any portion of completed work and/or delivered materials. While risk of loss passes to Buyer, Seller will have a purchase-money security interest in all goods (including any accessories and substitutions) purchased under this Agreement to secure payment in full of all amounts due H&H, and the underlying proposal, together with these Terms and Conditions, form a security agreement (as defined by the UCC.) Buyer shall keep all goods purchased under this Agreement fee of all taxes and encumbrances, shall not renow said goods from their original installation point and shall not assign or transfer any interest in said goods until all payments due H&H have been made. The purchase-money security interest granted herein attaches upon H&H is acceptance or acknowledgment of this Agreement and Buyer's receipt of said goods, but prior to installation. Buyer will have no rights to set off against any amounts which become payable to H&H under this Agreement or otherwise. Notwithstanding any Buyer form or document to the contrary, H&H shall not release any rights to make a lien and/or bond claim, or other claim for damages, in connection with goods purchased or se
- 4. Shipments / Claims: All shipments of goods are at Buyer's risk, f.o.b. factory, or if shipped from another location, f.o.b. point of shipment, with charges either allowed, added to invoice, or collected as noted. Any claims for damage or shortage or loss in transit must be filed by Buyer against the applicable carrier. If requested, H&H will reasonably assist the Buyer when making its claim for damages and/or losses while in transit. Claims against factory shortages will not be considered unless made within sixty (60) days after Buyer's receipt of the goods.
- 5. Approval: H&H shall not be liable in any way should any third party (such as a project architect, engineer, owner, etc.) fail to accept or approve equipment ordered by Buyer. H&H cannot guarantee to meet or equal specifications written around another make of equipment different than that purchased by Buyer.

  6. Warranties and Liability: Upon condition that H&H receives payment in full for all amounts owed, H&H extends to Buyer the manufacturer's warranty (a copy of which is available upon request), and
- 6. <u>Marranties and Liability</u>: Upon condition that H&H receives payment in full for all amounts owed, H&H extends to Buyer the manufacturer's warranty (a copy of which is available upon request), and manufacturer's warranty is in lieu of any warranties contained in any applicable project contract, conditions, plans, or specifications. H&H ITSELF MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, AS TO ANY MATTER WHATSOEVER, INCLUDING, WITHOUT LIMITATION, THE CONDITION OF THE EQUIPMENT, ITS MERCHANTABILITY, IMPLIED WARRANTIES OF DESIGN OR FITNESS FOR A PARTICULAR PURPOSE. H&H SHALL HAVE NO LIABILITY FOR ANY DIRECT DAMAGES BY REASON OF FAILURE OF THE EQUIPMENT TO OPERATE OR FAULTY OPERATION OR MISUSE OF THE EQUIPMENT, AND UNDER NO CIRCUMSTANCES SHALL H&H BE LIABLE TO BUYER OR TO ANY THIRD PARTY FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL, PUNITIVE, EXEMPLARY OR LIQUIDATED DAMAGES OR LOSSES, INCLUDING BUT NOT LIMITED TO, LOSS OF USE, INCOME, PROFIT OR PRODUCTION, LOST DATA, SPOILAGE, DELAY, OR INCREASED COST OF OPERATION. SAID EXCLUSIONS APPLY EVEN IF H&H HAS BEEN ADVISED OF SUCH POSSIBLE DAMAGES OR IF SUCH POSSIBLE DAMAGES WERE REASONABLY FORESEEABLE. Buyer acknowledges that H&H is not responsible for the design of goods or services purchased and did not participate in any project design in connection with such goods or services.
- 7. <u>Limitation of Remedy</u>: H&H shall have no liability for any damage caused by negligence, accident, misuse, improper storage, improper installation, improper service, maintenance or operation of equipment by Buyer or any third party. To the extent H&H is liable to Buyer under any legal theory (whether under warranty, negligence, strict liability or contract), Buyer's sole and exclusive remedy is limited to one of the following, which H&H shall elect in its sole and absolute discretion: (a) repair or replacement of purchased equipment or its parts by H&H or its duly authorized representative or (b) refund of the purchase price. In no event shall H&H's liability exceed the purchase price paid by Buyer under this Agreement, and Buyer waives all other remedies at law or in equity. Furthermore, Buyer waives any claim with respect to quantity or quality or goods or services purchased, unless Buyer notifies H&H in writing within ten (10) days of the date Buyer discovered, or by reasonable inspection should have discovered the basis for such claim. Under no event shall H&H owe any obligation whatsnever to any customer or client of Buyer or to any other third party.
- should have discovered, the basis for such claim. Under no event shall H&H owe any duty or have any obligation whatsoever to any customer or client of Buyer or to any other third party.

  8. <u>Hazards</u>: H&H is not responsible for the identification, detection, abatement, encapsulation or removal of hazardous substances, such as (without limitation) asbestos, products or materials containing asbestos, mold, fungi, mildew, or bacteria. At all times now and in the future, H&H takes no responsibility for and makes no representations or warranties concerning any existing or future hazardous substance or condition (i.e. mold) or the remedy or prevention thereof. Furthermore, Buyer has a duty to alert H&H of any known or likely potential hazards at any project site where H&H's representatives and affiliates may be present in connection with this Agreement.
- 9. Indemnification / Insurance: To the fullest extent permitted by law, Buyer shall indemnify, hold harmless and defend H&H and its officers, employees and agents from and against all claims, demands, liabilities, suits, judgments, awards, or expenses of any kind (including reasonable attorneys' fees and costs incurred defending such claims or demands, regardless of whether they result in legal action or are prosecuted to final judgment or award), which result or arise from Buyer's purchase, installation, or use of goods or services provided by H&H. Buyer shall indemnify H&H against, without limitation, liability arising from any acts or omissions whether deemed negligent, accidental or intentional, which is caused, in part, by the active or passive negligence or other fault of H&H. To the fullest extent permitted by law, the obligations of defense and indemnification set forth herein shall be binding upon Buyer no matter what the nature of the claim asserted may be (whether it be for negligence, warranty, strict liability, or otherwise) and shall be binding even if H&H is alleged or proven to have acted negligently; provided, however, that Buyer shall have no obligation to provide indemnification to H&H if the claim asserted arises in negligence and is finally adjudicated to have arisen solely from the negligence of H&H. Buyer shall also indemnify and hold harmless H&H from all liability for taxes owing in connection with Buyer's purchase of goods or services. The obligations and rights to indemnity herein shall not negate, abridge or reduce other such rights or obligations under law. This Agreement does not require Buyer to indemnify H&H for H&H's own negligent or intentional acts or omissions to the extent that doing so would violate applicable law. Buyer and H&H jointly authorize and request any court or arbitrator considering the enforceability of this paragraph to re-write this paragraph so that it requires Buyer to defend, indemnify, and hold H&H harmless to the fullest extent permitted by applicable law
- event does H&H waive any rights of subrogation.

  10. Claims Resolution / Governing Law: Unless H&H elects otherwise, all claims and disputes between Buyer and H&H arising out of or relating to performance of any agreement or breach thereof must be decided by binding arbitration in accordance with the Construction Industry Arbitration rules of the American Arbitration Association (AAA). Demand for Arbitration must be filed in the regional office of the AAA closest to Greensboro, North Carolina, and the filing party must serve such Notice upon the other party in accordance with AAA rules. The procedural and substantive law of the State of North Carolina must apply in and to all arbitration proceedings, and Greensboro, North Carolina, is designated as the sole and exclusive venue for such proceedings. Any award arising from such proceedings shall be final and binding upon the parties and enforceable in accordance with the Federal Arbitration Act. H&H and Buyer agree that their transactions involve interstate commerce. This Agreement shall be governed by and construed solely in accordance with the laws of the State of North Carolina, without regard to principles of conflicts of laws. H&H shall have the sole and exclusive right, at H&H's sole and absolute discretion, to waive the arbitration provision and to elect to litigate any claim or dispute in a court of appropriate jurisdiction. Unless H&H elects another court of appropriate jurisdiction in H&H's sole and absolute discretion, the state courts located in Greensboro, Guilford County, North Carolina, shall be the sole and exclusive forum for any litigation between H&H and Buyer. Buyer consents to the jurisdiction of the state and federal courts located in Greensboro, Guilford County, North Carolina.
- 11. <u>Delays / Penalties / Force Majeure</u>: Delivery dates are approximate and not guaranteed. In no event and under no circumstances whatsoever will H&H be liable for any damages or expenses caused by any failure or delay in making delivery of goods or in performing services hereunder. No penalty clause or liquidated damages of any kind (for delays or otherwise) apply to H&H unless pre-approved in writing by an H&H officer. Furthermore, in no event and under no circumstances whatsoever will H&H be liable under this Agreement for any event of force majeure, or an event or cause beyond H&H's reasonable control.
- 12. <u>Cancellations / Returns</u>: If an order is canceled through no fault of H&H, the Buyer shall reimburse H&H for all expenses, costs, damages and losses (including lost profits) incurred by H&H in connection with the order and its cancellation. Goods may not be returned except by written permission of a representative of H&H, and when so returned, shall be subject to handling and transportation charges. No warehouse goods returned after 90 days.
- 13. <u>Equal Employment Opportunity / Affirmative Action Clause</u>: H&H and Buyer shall abide by the requirements of 41 CFR 60-1.4(a), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity or national origin. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability or veteran status.
- 14. Government Contracts / Disadvantaged Business Entities: If Buyer's purchase of goods or services is in any way connected to any federal, state, or local government project, which implicates or utilizes any Small, Minority or Disadvantaged Business incentives or qualifications (or other similar laws or regulations), Buyer represents and certifies to H&H that Buyer is performing a commercially useful function on such project.
- 15. <u>Trust Funds:</u> Buyer agrees that all funds Buyer receives that result from the labor, materials, and/or equipment furnished by H&H will be considered "Trust Funds." Buyer will hold all Trust Funds in trust for the sole and exclusive benefit of H&H. Buyer will segregate Trust Funds from other funds. Buyer will account for all Trust Funds and deliver all Trust Funds to H&H. Buyer will not use Trust Funds for any purpose other than paying H&H.

# **Catalog Index**

A		G		Spiral Grilles	38
Access Doors	54	Gravity Ventilators 18		Spiral Pipe	64
Access Panels	55	Н		Spring Vibration Mountings	77
Actuators	44	Hanging Systems 71-7		Spring Vibration Hangers	
ASHRAE Ventilation Design	18	Hot Water Coils 4		Square to Round Transitions	
В		1		Starters	25
Backdraft Dampers	22-23	In-Line Fans	19-21	Stationary Louvers	51-53
Balancing Dampers	42, 67	L		Steam Regulators	80
Blast Gates	72	Louvered Ceiling Diffusers 32-33		Steam Strainers	81
Brick Vents	50	M		Steam Traps	82
С		Manometers	75	Stick-On Fittings	58
Cartridge Filters	74	P		T	
Ceiling & Cabinet Fans 12-17		Perforated Diffusers	31, 36	Table of Contents	1
Ceiling Radiation Dampers 15, 45		Pipe Portals Systems	63	Tape	62
Centrifugal Roof Exhausters 2-9		Plaster Frames	34	Terms and Conditions	83
Clamps 61		Pleated Prefilters	74	Tools	61
Concentric Reducers	39	Pressure Gauges	75	U	
Control Dampers	43	R		Unit Heaters	73
•	l-35, 37	Rectangular Fire Dampers 47-49		V	
D	. 00, 07	Registers 28	8-29, 34-35	VAV Diffusers	38
Door Grilles	34	Return Grilles	29, 36	VAV Terminals	40
		Roof Curbs	10	Volume Control Dampers	30
Drives	26-27	Round Ceiling Diffusers	s 30		
Duct Sealant	60	<b>Round Fire Dampers</b>	46		
E		S			
Elastomeric Pads	79	Sheet Metal Screws	60		
<b>Electrical Accessories</b>	24	Side Access Filter Hous	sings 76		
Equipment Rails	10	Sidewall Exhausters	8-9		
F		Sidewall Propeller Fans	s 11		
Filter Accessories	75	Slot Diffusers	38		
Filter Grilles	37	Smoke Detectors	44		
Filter Media	74	Snaplock Pipe	59-60		
Fire Dampers	46-49	Spiral Access Doors	54		

Spiral Fittings

64-70

56-57

Flexible Duct



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Fax to 336-252-1703
Email to warehouse@hoffman-hoffman.com

Replacement HVAC Equipment Parts
Call 800-332-2295 or 336-252-1707/1708
Fax to 336-252-1734
Email to parts@hoffman-hoffman.com

