

2021 Stock Catalog and Price List

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

Charlotte Warehouse Coming in 2021!



STEAM SPECIALTIES

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CENTRIFUGAL DIRECT DRIVE ROOF EXHAUSTERS

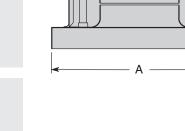


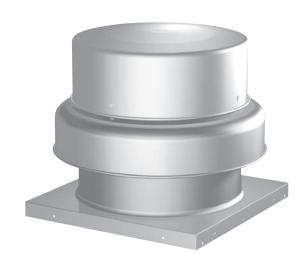


DIFFUSERS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS

FLEXIBLE DUCT / SNAPLOCK & ACC.





DIMENSIONAL DATA

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

*May vary depending upon motor size.

В

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

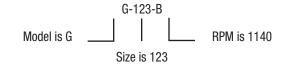
- Roof curbs 12" high. See page 10.
- Backdraft damper, Model 100. See page 22.
- Speed controls. See page 24.

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							
А	1725							
В	1140							
С	860							
D	1550							
G	1300							
Е	1050							



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PERFORMANCE DATA AND PRICING **MODEL G**



				STATIC PRESSURE IN INCHES OF W.G. / CAPACITY (CFM)								40"-0		100 Damper		
				0.000				0.625	Price Each	12" Curb		100 Da	ımper			
MODEL		RPM	TS	Sone BHP	Sone BHP	Sone BHP	Sone BHP	Sone BHP	Sone BHP	Sone BHP		Size	ADD	Size	ADD	
	E	1050	2234	138	90	73										
G-060 1/60 HP		1030	2234	1.9 .004		1.7 .005										
	G	1300	2765	170	135	125					\$322	17	\$56	8 x 8	\$42	
3 Speed		1000	2700	2.9 .008		· ·					, QOLL		Ψοσ		Ψ	
	D	1550	3297	203	173	166	120				-					
				4.3 .013			3.9 .016									
	Е	1050	2234	253	196 1.7 .008	179 1.5 .008										
G-070				2.5 .007 314	268	1.5 .008 257	171									
1/30 HP	G	1300	2765	4.1 .013							\$322	17	\$56	8 x 8	\$42	
3 Speed				374	337	327	274	190			-					
	D	1550	3297	5.6 .002				4.2 .025								
				335	268	249	134	1.2 .020								
	E	1050	2990	3.8 .012			3.5 .017									
G-080			.=	415	361	348	272	175					4=0		\$45	
1/20 HP	G	1300	3701	5.4 .022	5.4 .026	5.4 .027	5.4 .032	5.4 .033			\$357	17	\$56	10 x 10		
3 Speed		1550	4410	495	450	439	379	314	238							
	D	1550	4413	7.3 .038	7.4 .042	7.4 .044	7.4 .050	7.4 .055	7.4 .057							
	Е	1050	2990	520	441	420	292				\$357 17					
G-090		1050 299	2990	3.8 .014	3.7 .019	3.7 .020	3.6 .024					\$357	ı			
1/15 HP	G	1300	3701	644	580	565	478	373					\$357	17	\$56	10 x 10
3 Speed	u	1300	3701	5.4 .027	5.4 .033							''	\$30	10 x 10	φ 4 5	
о ороса	D	1550	4413	768	713	701	633	557	472	338						
				7.5 .046			7.4 .063	7.4 .070	7.4 .076	7.4 .074		++				
	E	1050	2990	717	605	570	389									
G-095			3701	4.9 .029	4.6 .034		4.5 .037	400	101							
1/8 HP	G	1300		7.4 .056	801	780 6.8 .063	640 6.5 .069	493	184		\$357 17	\$56	10 x 10	\$45		
3 Speed				7.4 .056 1059	6.8 .061 986	6.8 .063 969	863	6.4 .071 745	6.4 .049 623	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	11.4 .14	11.2 .15		11.3 .16	11.3 .16	\$592	17	\$56	10 x 10	\$45	
				1307	1280	1250	1192	1135	1076	1013						
G-099-VG4X	1/4 HP	1725	5052	13.6 .23		13.5 .23	13.4 .24		12.9 .25	12.6 .25	\$820	19	\$60	12 x 12	\$48	
0.400.0.4	(0.110			966	900	883	805	702	507	1210	4==0		400	1.0 .0		
G-103-B 1	/6 HP	1140	3320	6.6 .07	6.1 .07	6.0 .08	5.7 .09	5.1 .09	4.1 .08		\$576	19	\$60	12 x 12	\$48	
0 100 4 1	/A LID	1705	5004	1483	1450	1427	1374	1321	1274	1219	0000	10	000	1010	Φ40	
G-103-A 1	/4 HP	1725	5024	12.5 .26	12.4 .27	12.1 .27	11.7 .28	11.5 .29	11.3 .30	10.6 .31	\$603	19	\$60	12 x 12	\$48	
G-103-VG4X	1// HD	1725	5052	1462	1425	1405	1351	1298	1250	1193	\$857	19	\$60	12 x 12	\$48	
u-105-vu4/	1/4 111	1723	3032	12.2 .25	12.2 .25	11.9 .26	11.5 .27	11.2 .28	10.9 .29	10.3 .29	ψυστ	13	φυυ	12 / 12	ΨΨΟ	
G-123-B 1	/6 HP	1140	3898	1383	1325	1300	1213	1112	993	831	\$577	19	\$60	12 x 12	\$48	
Q 120 D 1		1140	0000	8.4 .12	8.4 .12	8.4 .13	8.4 .14	8.1 .14	7.9 .14	7.8 .14	ΨΟΙΙ	10	φου	12 x 12	Ψ+0	
G-123-A 1	/2 HP	1725	5899	2093	2050	2038	1984	1928	1871	1810	\$650	19	\$60	12 x 12	\$48	
		20		17.4 .40		17.2 .42			16.7 .46	16.7 .47	Ψ000		400	1.2 % 1.2	Ψ.0	
G-123-VG5X	1/2 HP	1725	5052	2093	2052	2038	1984	1928	1871	1810	\$932	19	\$60	12 x 12	\$48	
				17.4 .40	17.4 .40		17.0 .44			16.4 .47						
G-133-B 1	/6 HP	1140	3917	1618	1560	1535	1444	1340	1211	8.5 .17	\$658	19	\$60	12 x 12	\$48	
		-		10.0 .15 2115	9.9 .15 2050	9.8 .16 2008	9.6 .16 1905	9.2 .17 1792	8.8 .17 1660	8.5 .17 1488						
G-143-B 1	/3 HP	1140	4365	11.0 .28	10.9 .30	10.9 .30		10.4 .31	9.4 .31	10.4 .29	\$863	22	\$65	16 x 16	\$54	
				2875	2830	2797	2719	2644	2566	2487						
G-143-VG7X	3/4 HP	1550	5935	17.7 .71		18.0 .73				15.0 .78	\$1102	22	\$65	16 x 16	\$54	
Model SW (C.)	lmn) Co	lid Ctata	Spood Cor					0			ტვი					
Model 5W (6 A		iiu state t		ILI UI							\$39					
Damper Motor	r Pack MP	100 120/	60/1V								\$80					
												1				

Performance shown is for Model G without ducts.



CENTRIFUGAL BELT DRIVE ROOF EXHAUSTERS



DIFFUSERS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

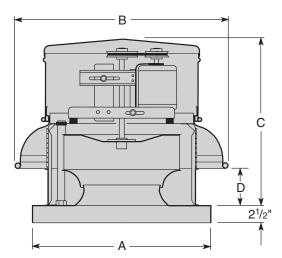
FLEXIBLE DUCT / SNAPLOCK & ACC.



DIMENSIONAL DATA

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

*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 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						

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R CO	Ĭ.
S	/S

PERFORMANCE DATA AND PRICING **MODEL GB**



					STATIC PRESS					Price	12" F	loof Curb	100 Damper		Starters						
	MODEL	HP	PH	RPM	0.000 Sone BHP	0.125 Sone BHP	0.250 Sone BHP	0.375 Sone BHP	0.500 Sone BHP	0.625 Sone BHP	Each	Size	ADD	Model	ADD	STD	W/DI				
					376	353	339	316	297	273						310					
	GB-071-4	1/4	1	1725		11.0 0.13					\$628	19	\$60	12 x 12	\$48		\$16				
					864	821	793	756	719	679											
	GB-081-4	1/4	1	1725		12.3 0.17					\$628	19	\$60	12 x 12	\$48		\$16				
					1187	1100	1052	990	909	810											
	GB-101-4	1/4	1	1400	8.9 .12	8.5 .13	8.1 .14	7.8 15	7.6 16	7.4 16	\$649	19	\$60	12 x 12	\$48		\$16				
					1692	1625	1557	1484	1404	1315											
	GB-121-4	1/4	1	1395	12.5 0.21			12.2 0.25			\$700	19	\$60	12 x 12	\$48		\$16				
_					1866	1794	1718	1637	1545	1435											
	GB-131-4	1/4	1	1315		12.8 0.23					\$896	19	\$60	12 x 12	\$48		\$16				
						2335			2158	1 '											
	GB-131-5	1/2	1	1685	2391		2279	2219		2020	\$959	19	\$60	12 x 12	\$48		\$16				
_		\vdash							15.7 0.52	15.4 0.53							-				
	GB-141-4	1/4	1	860	1595	1457	1304	1085			\$740										
_					7.1 0.12	-			4000	1100	'										
	GB-141-3	1/3	1	1140	2115	2008	1905	1800	1660	1488	\$776	22	\$65	16 x 16	\$54		\$16				
						11.3 0.32			· · · · · · · · · · · · · · · · · · ·		ļ .		·		ΨΟΙ						
	GB-141-5	1/2	1	1360	2523	2433	2347	2259	2166	2062	\$789										
_		Ľ				14.3 0.50					,										
	GB-161-5	1/2	1	1140	3367	3094	3072	2922	2761	2587	\$1131	22	\$65	16 x 16	\$54		\$16				
	GB 101 0	.,,_		1110		14.7 0.50		13.8 0.53	13.5 0.53	13.0 0.53	Ψιισι		ΨΟΟ	10 % 10	ΨΟΙ		Ψις				
	GB-180-4	1/4	1	730	2839	2667	2469	2213	1882		\$989										
	GB 100 4	1/-		700	7.4 0.26	7.1 0.15		5.8 0.17			Ψοσο			18 x 18			\$16				
	GB-180-3	1/3	1	810	3150	2997	2832	2624	2375	2053	\$1024		\$91		8 \$70		ψ.σ				
	GD 100 3	1/0		010	8.8 0.35	8.3 0.31	8.0 0.33	7.3 0.35	7.6 0.35	7.2 0.34	Ψ1024										
	GB-180-5	1/2	4	940	3655	3527	3388	3234	3052	2844	\$1038	30									
	GD-100-3	1/2	1	940	12.7 0.55	12.4 0.47	12.1 0.49	11.3 0.52	10.4 0.54	10.0 0.55	\$1030						\$16				
	CD 100 7	0/4	1	1055	4102	3989	3867	3742	3596	3432	\$1111										
	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	\$1136										
	00 100 10		_	4405	4608	4507	4401	4290	4179	4046						\$501	\$69				
	GB-180-10	1	3	1185	19.0 0.91	18.4 0.94	17.8 0.96	17.4 0.98	17.1 1.03	16.7 1.05	\$1581										
					4261	4013	3744	3477	3141	2643											
	GB-200-5	1/2	1	770		11.0 0.53					\$1372						\$16				
			1		4759	4548	4289	4068	3811	3504	\$1464						•				
	GB-200-7	3/4	3	860		13.3 0.74					+										
			-		5340	5157	4927	4720	4520	4285	Ψ1407	30	\$91	18 x 18	\$70						
	GB-200-10	1	3	965		16.0 1.04					\$1631					\$501	\$69				
					6032	5870	5682	5473	5301	5124						φυσι	φυε				
	GB-200-15	11/2	3	1090							\$1657										
		\vdash				19.6 1.50			<u> </u>	 							-				
	GB-240-10	1	3	730	6702	6427	6158	5861	5507	5077	\$2006										
		\vdash				15.0 1.01					\vdash										
	GB-240-15	11/2	3	825	7575	7331	7092	6844	6574	6261	\$2033	34	\$104	24 x 24	\$125	\$501	\$69				
						18.6 1.44				1 '	ļ										
	GB-240-20	2	3	910	8355	8134	7916	7700	7467	7215	\$2068										
_						23 1.92			21 2.03	20 2.05											
	GB-300-7	3/4	1	475	7694	7197	6616	5955	5095		\$2374						\$16				
	2D 000 1	0/ 7	3	770	11.4 0.72	10.6 0.75		8.8 0.77	8.1 0.74		\$2407										
	GB-300-10	1	3	530	8585	8149	7640	7094	6456	5668	\$2541										
	UD-300-10	<u> </u>	<u>ی</u>	550	13.4 1.00	12.9 1.03	12.2 1.06	11.5 1.07	10.7 1.07		φ2341	40									
	CD 200 15	11/0	ú	600	9719	9334	8907	8446	7952	7388	¢0EG7		¢100	20 1/ 20	ዕ 150						
	GB-300-15	11/2	3	600	15.9 1.45	15.4 1.49	14.9 1.52	14.3 1.54	13.8 1.55	13.2 1.55	\$2567	40	\$123	30 x 30	\$158	\$501	\$69				
	00.000.00		_	00-	10772	10424	10060	9648	9228	8773							φυσο				
	GB-300-20	2	3	665		18.2 2.02					\$2602										
																	1				
	GB-300-30	3	3	760	12311	12007	11704	11357	10997	10629	\$2883										

op - 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.

BELT DRIVEN CENTRIFUGAL UPBLAST ROOF EXHAUSTERS



VARIABLE SPEED DRIVES & STARTERS

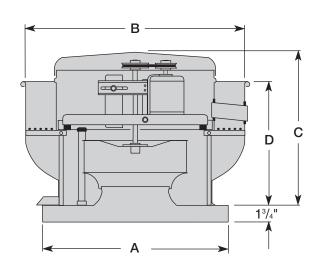
DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

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DIMENSIONAL DATA

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



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	STATIC PRESSURE IN INCHE	S OF W.G. / CA 0.375	PACITY (CFM) 0.500	0.625	Price	Bird Screen	12" Ro	oof Curb	*100 Damp		St	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/DI
CUBE-101-4	1/4	1	1660	1413 12.6 0.21	1364 1313 12.2 0.22 11.19 0.23	1251	1189	1125	\$898	\$34	19	\$60	12 x 12	\$48		\$16
CUBE-121-4	1/4	1	1410	1665 11.1 0.21	1595 1528 11.6 0.22 12.2 0.23	1463	1398	1315	\$1182							
CUBE-121-3	1/3	1	1545	1824 12.8 0.28	1760 1699 13.4 0.29 14.0 0.30	1639	1580	1518	\$1227	\$34	19	\$60	12 x 12	\$48		\$16
CUBE-121-5	1/2	1	1725	2037 15.6 0.39	1979 1923	1869	1816	1763	\$1245							
CUBE-141-4	1/4	1	1105	2001	1905 1793 10.8 0.24 10.6 0.25	1667	1515	1318 9.9 0.26	\$980							
CUBE-141-3	1/3	1	1210	2192	2106 2006 12.2 0.31 11.7 0.32	1896	1773	1628	\$1016	\$38	22	\$65	16 x 16	φ Ε Λ		\$16
CUBE-141-5	1/2	1	1390	2518 14.9 0.45	2445 2362 14.7 0.47 14.2 0.48	2271 13.2 0.50	2174 12.9 0.51	2068 12.5 0.51	\$1032	φοο	22	φυυ	10 x 10	φ04		φις
CUBE-141-7	3/4	1	1595		2826 2757 19.0 0.70 18.5 0.72				\$1104							
CUBE-161-5	1/2	1	1110	3191 15.0 0.47	3072 2941 14.6 0.51 14.2 0.53				\$1421							\$16
CUBE-161-7	3/4	1	1170		3250 3129 15.9 0.59 15.4 0.61				\$1513	\$38	22	\$65	16 x 16	\$54		Ψια
1017	J, 1	3	1265	3636 18.5 0.70	3532 3425 18.1 0.74 17.7 0.77			3035 16.5 0.79	\$1546						\$501	\$69
CUBE-180-4	1/4	1	745	9.2 0.22		7.4 0.26		1007	\$1502							
CUBE-180-3	1/3	1	820		2915 2759 10.4 0.32 10.0 0.34			1867 8.5 0.32	\$1548							\$16
CUBE-180-5	1/2	1	940		3388 3243 13.5 0.47 13.1 0.49				\$1565	\$64	30	\$91	18 x 18	\$70		
CUBE-180-7	3/4	3	1075	4061 16.5 0.67 4477	3919 3786 16.2 0.70 15.8 0.73 4348 4224	3666 15.7 0.75 4108	3554 15.5 0.78 4005	3345 15.1 0.78 3903	\$1657 \$1690						\$501	\$69
CUBE-180-10	1	3	1185		17.9 0.93 17.1 0.96 4321 3096				\$1824		_				φυσι	φυ
CUBE-200-3	1/3	1	665			7.5 0.35 3413		2518	\$1706							\$16
CUBE-200-5	1/2	1	760		11.7 0.51 10.9 0.52 4676 4439			9.0 0.50	\$1723 \$1816							ψ
CUBE-200-7	3/4	3	875	16.3 0.75 5400	16.3 0.77 15.2 0.78 5175 4958				\$1848	\$64	30	\$91	18 x 18	\$70		
CUBE-200-10	1	3	960		18.4 1.01 17.7 1.03 5991 5798				\$1982						\$501	\$69
CUBE-200-15	11/2		1100		23.0 1.51 23.0 1.53 6628 6451				\$2009						φσσ.	
CUBE-200-20	2	3	1210	25 1.97 5303	24 2.00 23 2.03 4960 4540			22 2.09	\$2043							
CUBE-240-5	1/2	1	585		10.5 0.49 9.5 0.51 5762 5461			4202	\$2350 \$2442							\$16
CUBE-240-7	3/4	3	670		13.4 0.74 12.8 0.76 6370 6133				\$2351	NI/A	0.4	¢104	04 11 04	ተተ ባር		
CUBE 240-15	11/2	3	735	16.6 0.92 7660	15.9 0.97 15.5 0.99 7399 7184	15.1 1.01 6947	14.6 1.03 6615	13.9 1.04 6304	\$2485	N/A	34	φ1U4	24 x 24	φ1 25	\$501	\$69
CUBE-240-15 CUBE-240-20	2	3	930	8431	19.0 1.46 18.6 1.49 8194 7985	18.2 1.51 7798	17.6 1.54 7536	7233	\$2511 \$2546							
CUBE-300-10	1	3	530	8625	23.0 1.93 23.0 1.98 8231 7772	7245	6636	5879	\$3037							
CUBE-300-15			605	9845	12.7 0.95 12.2 1.00 9500 9127	8705	8226	7708	\$3063							
CUBE-300-20	2	3	665	10822	16.4 1.40 15.7 1.46 10508 10193	9808	9411	8968	\$3098	N/A	40	\$123	30 x 30	\$158	\$501	\$69
CUBE-300-30	3	3	765	20.0 1.77 12449	19.7 1.85 18.6 1.92 12176 11904 1.92 1.93	11607	11273	10939	\$3379							
Grease Containe				24 2.70 38	24 2.78 23 2.86	22 2.94	22 3.00	21 3.06	\$135							
ar Judo Jonium	,,,,	iviou	51 77 00						\$80	-						

^{*}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.

REGISTERS / GRILLES /

DIRECT DRIVE CENTRIFUGAL EXHAUST FANS

Opening

 $10^{1}/_{2} \times 10^{1}/_{2}$

 $12^{1}/_{2} \times 12^{1}/_{2}$

 $12^{1}/_{2} \times 12^{1}/_{2}$

 $14^{1}/_{2} \times 14^{1}/_{2}$

 $18^{1}/_{2} \times 18^{1}/_{2}$



VARIABLE SPEED DRIVES & STARTERS

DIFFUSERS / TRANSITIONS

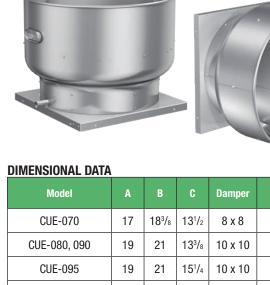
VAV TERMINALS / HOT WATER COILS

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

CUE-101, 121

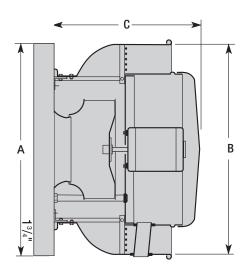
CUE-141

VIBRATION ISOLATION



19

22



281/4

293/4

24⁷/₈

287/8

12 x 12

16 x 16

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



					S	TATIC P	RESSU	RE IN	INCHES	OF W.	.G. / C <i>i</i>	PACIT	Y (CFM)					Roof Curb		330		10	0
			0.	000	0.1	100	0.1	25	0.2	50	0.3	375	0.5	600	0.6	625	Price Each	Wall Bracket	Roof	Curb	WALL D		ROOF DA	
MODEL		RPM	Sone	ВНР	Sone	ВНР	Sone	ВНР	Sone	ВНР	Sone	ВНР	Sone	ВНР	Sone	ВНР	Luon	Didokot	Size	ADD	Size	ADD	Size	ADD
	Е	1050	2	50	19	93	17	71																
		1030	2.5	.007	1.7	.008	1.5	.008																
CUE-070	G	1300	3	09	20	67	25	55	15	52							\$360	\$43	17	\$56	8 x 8	\$56	8 x 8	\$42
1/30 HP		1000	4.1	.013	3.4	.015	3.2	.015	2.7	.013							4000	Ψισ		ΨΟΟ	0 % 0	Ψοσ	OKO	Ψ.Ε
	D	1550	3	69		34	32		26		16	60					-							
			5.6	.023	.53	.025	5.2	.025	4.7	.026	4.2	.021												
	E	1050	3	25		35	24		13								-							
			3.8	.012	3.6		3.6	.015		.016							-							
CUE-080	G	1300	4	03	-	55	34		27			73					\$418	\$44	19	\$60	10 x 10	\$61	10 x 10	\$45
1/20 HP			5.4	.022	5.4		5.4	.026		.031														
	D	1550		80	4		43		37			14	23				-							
			7.3	.037		.041	7.4	.042		.047	7.4	.053	7.4	.054										
	Е	1050		49		70	45		30															
			3.8	.019	3.7	.023	3.7	.024	3.6	.027							_							
CUE-090 1/15 HP	G	1300		80	6	_	60		51		39						\$418	\$44	19	\$60	10 x 10	\$61	10 x 10	\$45
1/13 ПР			5.4	.035	5.4		5.4	.042	5.5	.048		.052					-		+ 19					
	D	1550		11		57	74		67		60		50		34		-							
			7.5	.060	7.4		7.4	.068		.076	7.4	.083	7.4	.088	7.4	.084								
	Е	1050		11		03	57		38															
			4.9	.032	4.6	.036	4.6	.037	4.5	.037	4		-10											
CUE-095 1/8 HP	G	1300	7.4	80	6.9	.066	6.8	.067	64	.072	6.4	.071	6.4	.054			\$429	\$44	19	\$60	10 x 10	\$61	10 x 10	\$45
170111				.061 049		33 33	96		86		74		6.4		1/	 12	-							
	D	1550	9.6	.103	9.4		9.4	.111	9.1			.121	8.0	_		.106								
CUE-095-\	ICCV			167	11		10		10)5	80			30								
1/6 HP		1725	11.3		11.1		11.0	.15	10.5		9.9	.17	9.8	.17	9.6	.17	\$686	\$44	19	\$60	10 x 10	\$61	10 x 10	\$45
0115 404 1	10.10			168		40	14		13		13		12		0.0									
CUE-101-V 1/4 HP		1725	13.3	.24	13.0		12.9	.26	11.5		12.0	.28	11.7	.29			\$1028	\$44	19	\$60	12 x 12	\$66	12 x 12	\$48
CUE-121-V	IG5G		20)37	20	00	19	79	19	23	18	 69	18	 16	17	63								
1/2 HP		1725	15.6	.39	15.8		16.1	.40	16.7		17.3		17.9	_	18.2		\$1096	\$44	19	\$60	12 x 12	\$66	12 x 12	\$48
CUE-141-V	/G7G			388		65	27		26			94	25											
3/4 HP		1550	18.7	.63	18.2	.63	17.8	.64	17.5	.66	17.7	.68	14.9	.69			\$1308	\$48	22	\$65	16 x 16	\$77	16 x 16	\$54
Model 5V	N (6 A	mp) Sol	id Stat	e Spee	d Con	roller	(070-0	95)									\$39							
	•	• • • •			Speed Controller (070-095)												<u> </u>]						

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

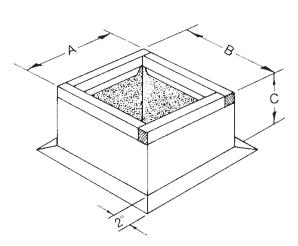


CURBS, RAILS AND ADAPTERS



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
17	15¹/₂	15¹/₂	12	1000
19	171/2	171/2	12	1000
22	201/2	201/2	12	1200
24	221/2	221/2	12	1200
26	241/2	241/2	12	1200
*30	281/2	281/2	12	1330
*34	321/2	321/2	12	1470
*40	381/2	381/2	12	1600
*46	441/2	441/2	12	1730
*52	50 ¹ / ₂	50 ¹ / ₂	12	1870
*58	56 ¹ / ₂	56 ¹ / ₂	12	2000

12

12

1000

\$48 \$52 \$56 \$60

\$72 \$79 \$91 \$104 \$123 \$142

\$182

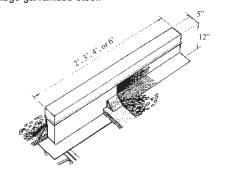
12

12

*Curb sizes 30 thru 58 must ship Motor Freight.

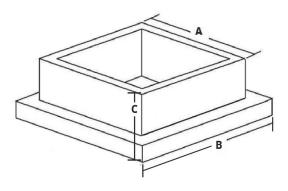
EQUIPMENT RAILS 12" TALL – NO CANT SURFACE MOUNT STYLE

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.



Length	Price Each
2'	\$53
3'	\$80
4'	\$107
*6'	\$160

^{*}Must ship Motor Freight.



Model	A	В	С	Price Each
850616	17	19	7	\$103
850618	19	22	7	\$112
823055	22	26	7	\$129

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.

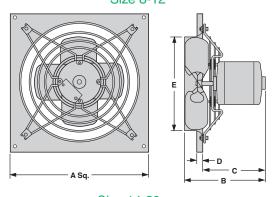
PERFORMANCE DATA AND PRICES

				STATIC PRE	SSURE/CFM		Price	320 D/	AMPER	WALL HOUSIING	
Model	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	\$267	10 x 10	\$68	\$175	
SE1-10-440-D	1/12	1550	924	800	763	624	\$275	12 x 12	\$74	\$175	
SE1-12-432-D	1/8	1550	1449	1309	1271	1042	\$304	14 x 14	\$80	\$178	
SE1-14-440-B	1/6	1160	1604	1406	1350	908	\$523	16 x 16	\$91	\$181	
SE1-16-426-B	1/6	1160	2235	2058	2012	1710	\$538	18 x 18	\$97	\$190	
SE1-18-429-B	1/4	1160	3238	2987	2908	2434	\$605	20 x 20	\$121	\$199	
SE1-20-428-B	1/3	1160	4227	4030	3974	3621	\$696	22 x 22	\$146	\$208	

Performance ratings are AMCA certified

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

Size 8-12



Size 14-20)
← A sq. — →	$ \begin{array}{c} & B \\ & C \\ & C \\ \end{array} $
	E

DIMENSIONAL DATA

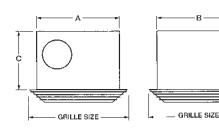
Model	A	В	С	D	E	Damper
SE1-8-440-D	13¹/ ₈	7	5	1	83/8	10 x 10
SE1-10-440-D	15¹/8	83/4	5	1	10 ³ /8	12 x 12
SE1-12-432-D	18¹/ ₈	10³/ ₄	81/4	1	12 ³ /8	14 x 14
SE1-14-440-B	201/8	11 ¹ / ₄	81/2	1	14 ³ / ₈	16 x 16
SE1-16-426-B	221/8	11 ³ / ₄	87/8	1	16³/ ₈	18 x 18
SE1-18-429-B	241/8	14	10 ⁷ /8	1	18³/ ₈	20 x 20
SE1-20-428-B	261/8	15	11	1	201/2	22 x 22

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. Model SP-6 features adjustable steel mounting brackets and forward curved wheels.

DIMENSIONAL DATA

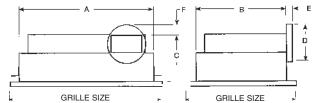
Model	A	В	C	D	E	Grille Size	Wt.
SP-6	91/4	10	53/4	4	33/8	12 x 11 ³ /8	8

For complete dimensional information, see submittal drawings.

PERFORMANCE DATA

Model	RPM	AMD	Watts		CI	FM/STATIC PI	RESSURE IN I	NCHES OF W.	G.		Price
Model	KPW	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		¢107
5P-0	1200	0.40	43	Sones	2.0	2.0	2.3	2.6	2.9		\$107

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



DIMILIADIONAL DE	אות							
Model	A	В	*C	D	E	Std Grille	Decorative Grille	Unit Wt.
B50, 70, 80	13 ⁷ /8	11¹/2	7	6	1 ¹ /4	14 ⁷ /8 x 13 ¹ /4	15¹/4 sq.	9
B90, 110, 150, 200	13 ⁷ /8	11 ¹ /2	7	6	1 ¹ /4	14 ⁷ /8 x	15¹/4 sq.	10

For complete dimensional information, see submittal drawings.

PERFORMANCE DATA

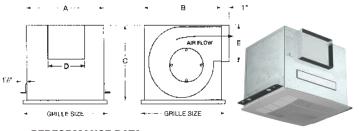
Model	RPM	AMP	Watts				CFM/ST	ATIC PRESSL	JRE IN INCHE	S OF W.G.				Price
Model	KPW	AIVIP	(Input)		0.000	0.100	0.125	0.250	0.375	0.500	0.625	0.750	1.000	Each
SP-B50	625	0.50	37.8	CFM	67	54	51	40	29					000
96-P20	023	0.50	37.0	Sones	1.2	1.4	1.4	2.0	3.0					\$88
CD D70	075	0.10	474	CFM	89	75	71	54	35					0100
SP-B70	675	0.16	17.1	Sones	0.8	0.8	0.9	1.4	2.0					\$100
CD DOO	000	0.10	10.0	CFM	94	81	77	62	46					#100
SP-B80	900	0.16	18.6	Sones	0.8	0.9	0.9	1.3	2.0					\$100
CD DOO	700	0.10	01.1	CFM	104	92	89	72	57					# 100
SP-B90	700	0.18	21.1	Sones	1.0	1.0	1.0	1.5	2.0					\$100
OD D440	050	4 4 4	00.0	CFM	133	114	110	97	95	94	91	85	50	0111
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	\$111
3D D4E0	1050	1.70	100	CFM	160	156	155	154	152	149	147	138	92	0140
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	\$148
CD D000	1100	0.00	170	CFM	197	195	194	191	187	184	181	166	128	D1 40
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	\$148
Model 5W	(6 Amp) So	lid State Sp	eed Control	er (SP-6,	SP-B50 - B	-200, SP-A5	0 - A900)							\$39
Model 10V	V (10 Amp)	Solid State	Speed Cont	roller (SP-	A1050 - A1	550)								\$74

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



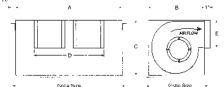
Model SP ceiling exhaust fans are whisper quiet centrifugal fans for offices, toilets and general ventilation. Housings are corrosion resistant galvanized steel with an interior lined with sound absorbing insulation for quiet operation. Grilles are white and attach to fan housing with two screws. Grilles 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	ATA		MODEL SPA110-A780						
Model	A	В	С	D	E	Grille Size	Unit Wt.		
A50, 70, 90	13 ¹ / ₄	105/8	9	(3	14 ⁷ /8 x 13 ¹ / ₄	12		
A110, 125, 190	13 ¹ / ₄	105/8	9	8	6	14 ⁷ /8 x 13 ¹ / ₄	17		
A200, 250, 290, 390	14	11 ⁷ /8	11 ¹ / ₄	8	8	14 ⁷ /8 x 13 ¹ / ₄	24		
A410, 510	18	143/8	141/2	8	8	19 ³ / ₈ x 16 ³ / ₈	31		
A700	235/8	11 ⁵ /8	11 ⁵ /8	19 ¹ / ₂	8	25 ¹ / ₈ x 13 ¹ / ₂	34		
A710, 780	18	143/8	141/2	10	8	19 ³ / ₈ x 16 ³ / ₈	34		

ERFORM	MANCE D)ATA						A/ IC	5, 700	10 14	178 14 /2	10	0 1978	X 10 /8 ·	34
Model	RPM	AMP	Watts				CF	M/STATIC P	RESSURE IN	INCHES OF	W.G.				Pric
Model		Aim	(Input)		0.000	0.100	0.125	0.250	0.375	0.500	0.625	0.750	0.875	1.000	Eac
SP-A50	790	0.33	25.9	CFM	89	66	61	31							\$15
OI -AJU	730	0.55	25.5	Sones	0.4	0.6	0.6	0.9							Ψι
SP-A70	790	0.14	15.6	CFM	88	74	71	54							\$16
01 -A70	730	0.14	13.0	Sones	0.3	0.3	0.3	0.3							۱۱۹
SP-A90	870	0.14	16.9	CFM	114	101	98	80							\$10
3F-A90	070	0.14	10.9	Sones	0.3	0.3	0.3	0.4							ااف
SP-A110	950	0.16	19.4	CFM	130	119	115	98							\$1
SF-ATTU	930	0.10	19.4	Sones	0.3	0.3	0.3	0.5							ااف
SP-A125	1010	0.19	23	CFM	144	130	127	109							\$2
3F-A123	1010	0.19	23	Sones	0.4	0.4	0.4	0.6							φ2
CD 4100	1400	0.45	54.0	CFM	229	214	210	186	156						60
SP-A190	1400	0.45	54.2	Sones	2.5	2.1	2.1	1.8	1.6						\$2
OD 4000	000	0.47	50.4	CFM	267	246	242	224	199	162	109	68			0.0
SP-A200	900	0.47	56.1	Sones	2.0	2.0	2.0	2.5	3.0	3.5	4.0	4.5			\$2
00.4050	1000	0.50		CFM	294	274	271	250	230	201	147	92			
SP-A250	1000	0.56	67	Sones	2.5	2.5	2.5	3.0	3.5	4.0	5.0	5.0			\$2
00.4000	1050	0.70	00.7	CFM	315	293	287	257	231	207	175	124			
SP-A290	1050	0.72	80.7	Sones	2.5	2.5	2.5	3.0	3.0	3.5	3.5	4.5			\$2
00.4000	1050	4.04	105	CFM	410	395	391	368	345	325	307	279			
SP-A390	1350	1.34	135	Sones	4.5	4.5	4.5	4.5	5.0	5.0	5.5	5.5			\$2
OD 4440	4000	4.74	404	CFM	443	413	405	351	306						00
SP-A410	1000	1.74	121	Sones	3.5	3.0	3.0	3.0	3.5						\$2
OD 4540	1070	0.00		CFM	557	512	501	439	392	325					
SP-A510	1070	3.30	224	Sones	5.0	4.5	4.5	4.5	4.5	4.0					\$3
00.4700	4400	0.00	0.50	CFM	757	730	723	700	679	649	613	560	494	396	
SP-A700	1100	3.20	350	Sones	5.0	5.0	5.0	5.5	5.5	6.0	6.0	6.5	6.5	6.5	\$4
00 4740	1000	4.40		CFM	752	714	701	653	588	486	320				٠.
SP-A710	1080	4.40	285	Sones	6.0	6.0	6.0	6.0	6.0	5.5	5.5				\$4
				CFM	812	782	775	741	704	665	625	581			T.
SP-A780	1600	3.30	348	0	0.5	0.5	0.5	0.0	20	0.0	0.0	0.0	1		\$4





<u>DIMENSIONA</u>	<u>L Data</u>		MODEL SPA900-A1550					
Model	Α	В	C	D	E	Grille Size	Wt.	
A900-A1550	233/4	143/8	141/2	17 ⁷ / ₁₆	8	25 x 16 ³ / ₈	56	

Model	RPM	AMP	Watts			CF	M/STATIC PR	ESSURE IN IN	CHES OF W.G				Price
Monei	nr w	AWIF	(Input)		0.000	0.100	0.125	0.250	0.375	0.500	0.625	0.750	Each
CD AOOO	050	4.00	005	CFM	955	907	896	841	773	701			фC10
SP-A900	950	4.00	285	Sones	4.0	5.0	5.0	5.0	5.0	5.0			\$612
CD 41050	1005	0.00	400	CFM	1125	1059	1043	964	885	796	662		фC10
SP-A1050	1095	6.30	420	Sones	6.0	6.0	6.0	6.0	5.5	5.5	5.5		\$612
CD 41410	1450	7.40	700	CFM	1455	1415	1404	1353	1307	1262	1218	1174	фC10
SP-A1410	1450	7.40	786	Sones	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	\$612
CD 41550	1010	0.00	010	CFM	1607	1558	1558	1506	1449	1407	1369	1323	ф С 77
SP-A1550	1610	8.60	818	Sones	10.5	10.0	10.0	10.0	10.0	10.5	11.5	13.0	\$677

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

DIFFUSERS / TRANSITIONS REGISTERS / GRILLES /

VAV TERMINALS / HOT WATER COILS

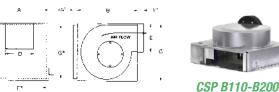
ELECTRIC HEATERS / FILTERS & ACCESSORIES

VIBRATION ISOLATION

STEAM SPECIALTIES

CSP A110-A780

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.



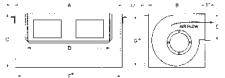
DIMENSIONAL DATA MODEL CSP B110-A780

				Outlet		Inlet		
Model	A	В	C	D	E	F	G	Wt.
B110, 150, 200	13 ⁷ /8	11 ¹ / ₂	7	6	1 ¹ / ₄	13 ¹ / ₂	31/4	10
A110, 125, 190	12 ⁷ /8	105/8	9	8	6	12	91/4	16
A200, 250, 290, 390	14	117/8	11 ¹ / ₄	8	8	12 ⁷ /8	10	23
A410, 510	18	14 ³ / ₈	14 ¹ / ₂	8	8	16 ⁷ /8	13 ¹ / ₄	36
A700	235/8	11 ⁵ / ₈	11 ⁵ / ₈	19 ¹ / ₂	8	225/8	10 ¹ / ₂	34
A710. 780	18	143/8	141/2	10	8	16 ⁷ /8	131/4	36

*Inlet Dimensions **Ontional Discharge Posititon

ERFORM	MANCE D	ATA						^Inlet Dimens For complete		rtional Discharge ormation, see su		S.			
Model	RPM	AMP	Watts				CF	M/STATIC P	RESSURE IN	INCHES OF	W.G.				Price
Model	nr IVI	AIVIF	(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							\$118
001 5110				Sones	1.5	1.5	1.5	2.0							ΨΠΟ
CSP-B150	1050	1.7	129	CFM	151	150	149	148							\$131
				Sones	2.0	2.0	2.0	2.0							****
CSP-B200	1100	2.2	173	CFM	186	184	184	182							\$147
				Sones	3.0	3.0	3.0	3.0							****
CSP-A110	950	0.62	20	CFM	124	112	110	102	77						\$186
				Sones	0.8	0.8	0.8	0.9	0.9						
CSP-A125	1100	0.63	33	CFM	138	126	124	114	91						\$186
				Sones	1.1	1.1	1.1	1.0	1.2						
CSP-A190	1400	1.10	55	CFM	215	202	198	180	159	121					\$220
				Sones	2.0	1.5	2.0	2.0	2.5	2.5					
CSP-A200	900	0.43	58	CFM	254	231	226	203	178	145	109	70			\$222
				Sones	0.6	0.4	0.5	0.9	1.0	1.3	1.5	1.5			
CSP-A250	1000	0.79	67	CFM	266	246	241	221	205	187	165	132			\$222
				Sones	0.9	1.0	1.0	2.0	2.5	3.0	2.5	2.5			
CSP-A290	1050	0.71	102	CFM	318	299	292	265	248	229	201	144			\$245
				Sones	1.1	1.2	1.3	2.0	2.5	3.5	3.0	3.0			
CSP-A390	1350	1.33	161	CFM	412 2.0	400	397 2.0	382 2.5	363 3.0	339	324 4.5	309 4.5			\$259
				Sones	447	2.0 441	403	364	317	4.0 217	4.5	4.5			
CSP-A410	1000	1.87	132	Sones	1.5	1.5	1.5	2.0	2.0	2.0					\$276
				CFM	545	514	506	464	405	324					
CSP-A510	1070	3.11	218	Sones	2.5	2.0	2.0	2.0	2.0	2.5					\$335
				CFM	766	755	752	739	726	702	678	635	549	418	
CSP-A700	1100	3.20	352	Sones	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5	2.5	4.0	\$410
				CFM	737	698	688	635	567	475	334	2.0	2.0	7.0	
CSP-A710	1080	4.40	333	Sones	2.5	2.5	2.5	2.5	2.0	2.0	2.0				\$419
				CFM	813	784	777	742	707	672	638	603	567	527	
CSP-A780	1600	3.77	496	Sones	3.0	3.0	3.0	3.0	3.0	2.0	3.0	3.0			\$419





DIMENICIONAL	DATA	MODEI	CCD	Agnn_	11550	

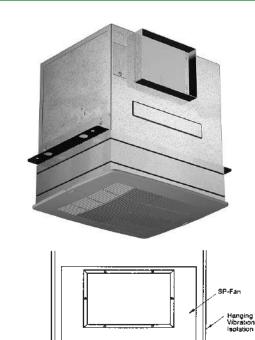
Model	A	В	C	D	E	F	G	Wt.
900, 1050, 1410, 1550	233/4	143/8	141/2	183/4	8	225/8	131/4	59

**Optional Discharge Posititon *Inlet Dimensions

LILI OILIV	IMITOL	חוח													
Model	RPM	AMP	Watts				CFM	/STATIC PRI	ESSURE IN I	NCHES OF V	V.G.				Price
Wouci	111 141	Aivii	(Input)		0.000	0.100	0.125	0.250	0.375	0.500	0.625	0.750	0.875	1.000	Each
CCD 4000	950	4.07	205	CFM	908	852	841	782	715	631					ФC10
CSP-A900	950	4.87	335	Sones	1.4	1.4	1.4	2.0	2.5	3.0					\$612
CSP-A1050	1095	6.65	469	CFM	1182	1110	1093	1013	922	832	743				\$612
65P-A1000	1095	0.00	409	Sones	2.5	2.5	2.5	2.5	2.5	2.5	2.5				\$012
CCD 41410	1450	7.00	071	CFM	1584	1543	1533	1483	1439	1395	1345	1293	1238	1181	фC10
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	\$612
CSP-A1550	1610	8.32	913	CFM	1672	1618	1604	1543	1484	1427	1367	1307	1240	1172	\$677
U007-A100U	1010	0.32	913	Sones	5.0	4.5	4.5	4.5	4.5	4.0	4.0	4.5	4.5	4.5	\$077
Model 5W (6 A	Amp) Solid S	State Speed	Controller (CSP	-B110 - B200,	CSP-A110 - A	1900)									\$39
Model 10W (1	0 Amp) Soli	d State Spee	ed Controller (C	SP-A1050 - A1	550)										\$74

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 ¹ / ₂	11 ¹ /8	22	\$65
B50-B-200 A200-A390	320	14 ³ / ₈	12¹/₄	22	\$71
A410-A510 A710-A780	350	187/16	14 ¹⁵ / ₁₆	22	\$99

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



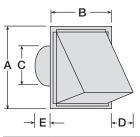
DRIVES & STARTERS

MODEL RJ Pitched Roof Cap

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

Model	For use with sizes	A	В	С	D	Е	Throat Dia.	Price Each
RJ-4	B50-B80	11	91/4	8 ¹ / ₄	55/16	41/2	4 in. Dia.	\$34
RJ-6x9	B90-B200 A50-A390	183/4	141/4	141/2	10³/8	61/2	6 x 9	\$41
RJ-10x10	A410-A1050	18 ¹ / ₂	271/2	15³/ ₄	235/8	91/2	10 x 10	\$92

All dimensions in inches.

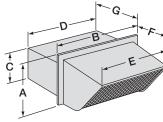


MODEL WC & SDWVA (Rounded Connection) **Hooded Wall Cap**

- 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	\$27
WC-6	B90-B200 A50-A190	8	8	6	41/8	5	\$33
WC-8	A200-A510	11	11	8	5 ¹ /8	31/2	\$51
SDWVA-10	10" Round	131/2	13	10	7	81/2	\$60
SDWVA-12	12" Round	141/2	14	12	9	81/2	\$71

All dimensions in inches.

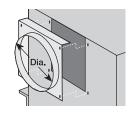


MODEL WC (Rectangular Connection) Hooded Wall Cap

- · 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 ¹ / ₂	123/4	31/2	101/4	11 ¹ /8	41/4	5	\$30
WC-8x8	200-510	10 ¹ / ₄	10 ¹ / ₄	81/4	81/4	81/4	63/4	5	\$48
WC-18x8	700-1550	10 ¹ / ₄	20 ¹ / ₄	81/4	18 ¹ / ₄	18 ¹ / ₄	63/4	5	\$58

All dimensions in inches.



MODEL RDC Round Duct Connector

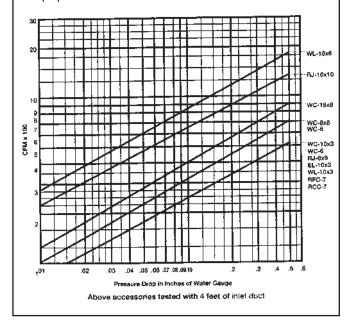
- · Replaces the standard square discharge duct connector and damper
- Uses existing mounting holes
- · Galvanized steel construction
- RDC-8 does not include a damper

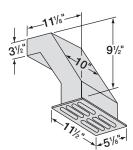
Model	For use with sizes	Dia.	Price Each
RDC-6	A110-A190	6	\$20
RDC-8	A200-A510	8	\$26

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.





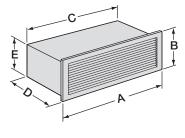
MODEL EL - 10X3

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	\$48

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.

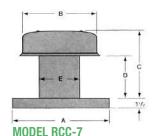
Model	For use with sizes	Α	В	C	D	E	Price Each
WL-10x3	50-290	12	5 ¹ / ₄	10	73/4	31/2	\$144
WL-18x6	390-1550	193/4	8	18	9	6	\$194

All dimensions in inches

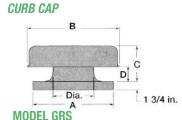
SP AND CSP ACCESSORIES



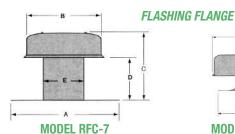
ROOF DISCHARGE ACCESSORIES



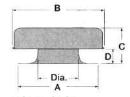
- Weathertight aluminum construction
- Integral birdscreen
- Built in curb cap
- Requires roof curb



- 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



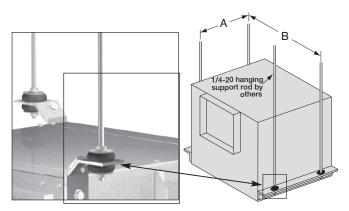
MODEL GRSF

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

		WIT	TH 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	\$114
GRS-8	50-390	19	201/2	71/4	11/2	81/4	\$142
GRS-10	410-710	19	201/2	73/4	2	10¹/₄	\$155
GRS-12	780-1050	22	29	10	31/2	121/4	\$164
GRS-16	1410-2150	26	29	11	41/4	16 ⁵ / ₁₆	\$232
GRS-20	3600	30	351/2	11 ¹ / ₄	33/4	205/16	\$287

	WITH FLASHING FLANGE													
Model	For use with sizes	A	В	ВС		Throat Dia.	Price Each							
RFC-7	50-390	18	12	10	63/8	7	\$106							
GRSF-8	50-390	23	201/2	71/4	11/2	81/4	\$132							
GRSF-10	410-710	23	201/2	73/4	2	101/4	\$146							
GRSF-12	780-1050	26	29	10	31/2	121/4	\$154							
GRSF-16	1410-2150	30	29	11	41/4	16 ⁵ / ₁₆	\$216							
GRSF-20	3600	34	351/2	11 ¹ / ₄	33/4	205/16	\$270							

HANGING VIBRATION ISOLATORS



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

SP/CSP Size	Α	В	Price Each
B50-B200	41/2	15 ⁵ /8	\$23
A50-A190	51/2	145/8	\$23
A200-A390	63/4	151/2	\$23
A410, A510 A710, A780	91/4	195/8	\$23
A700	51/2	25 ¹ / ₈	\$23
A900-A1050 A1410-A1550	91/4	253/8	\$23

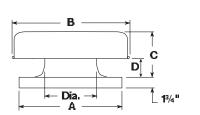
All dimensions in inches.

ROOF VENTILATORS



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

gsa.						DIMIL	DIMENSIONAL DATA AND I HIGES								
	MODEL	A	В	С	D	Throat	Throat area	Price	12" Cu	Roof irb	100 Da Re	amper lief	410 Damper Intake		
						Dia.	(FT ²)	Each	Model	ADD	Size	ADD	Size	ADD	
	GRS-8	19	201/2	71/4	11/2	81/4	0.37	\$142	19	\$60	8 x 8	\$42	8 x 8	\$77	
	GRS-10	19	201/2	73/4	2	101/4	0.57	\$155	19	\$60	10 x 10	\$45	10 x 10	\$78	
	GRS-12	22	29	10	31/2	121/4	0.82	\$164	22	\$65	12 x 12	\$48	12 x 12	\$78	
	GRS-15	22	29	10	31/2	141/4	1.12	\$224	22	\$65	16 x 16	\$54	16 x 16	\$102	
	GRS-16	26	29	11	41/4	165/16	1.45	\$232	26	\$79	16 x 16	\$54	16 x 16	\$102	
	GRS-18	30	351/2	73/4	13/4	201/4	1.83	\$279	30	\$91	18 x 18	\$70	18 x 18	\$123	
	GRS-20	30	351/2	11¹/₄	33/4	205/16	2.25	\$287	30	\$91	18 x 18	\$70	18 x 18	\$123	
	GRS-24	34	381/4	11	4	241/2	3.24	\$425	34	\$104	24 x 24	\$125	24 x 24	\$145	

General Ventilation Design Ventilation Rates for Acceptable Indoor Air Quality

Space	Outdoor Air Required (People/ (CFM/person) 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			

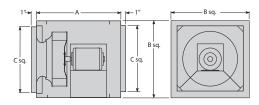
^{*}Adapted from ASHRAE Standard 62-1989 "Ventilation for Acceptable Indoor Air Quality".

INLINE CENTRIFUGAL FANS



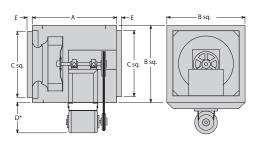


MODEL SO DIRECT DRIVE DIMENSIONS



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

MODEL BSQ BELT DRIVE DIMENSIONS



Unit Size	A	В	C	D*	E
BSQ 70-80-90	21	17 ¹ /8	13 ⁷ /8	9	1
BSQ 100	21	17¹/8	13 ⁷ /8	9	1
BSQ 120	21	19 ¹ /8	15 ⁷ /8	9	1
BSQ 140	22	23 ¹ /8	19 ⁷ /8	9	1
BSQ 160	26	26 ¹ /8	22 ⁷ /8	11	1
BSQ 180	28	271/8	237/8	11	11/2

^{*}Varies with motor size.

MODEL SO AND BSO

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.

Model BSQ Belt Drive

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

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.



INS / 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

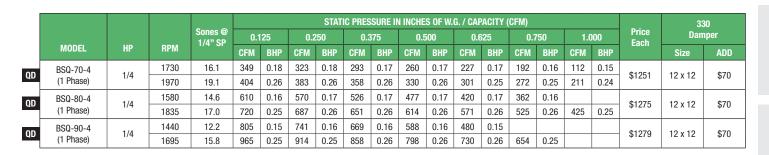


							STATIC PR	ESSURE IN I	INCHES OF \	N.G. / CAPA	CITY (CFM)			-	
					Max.	0.000	0.100	0.125	0.250	0.375	0.500	0.625	Price Each	33 Dan	
MODEL		HP	RPM	TS	ВНР	Sones	Sones	Sones	Sones	Sones	Sones	Sones		Size	ADD
CO OO VCCV		1/16	1705	4412	OFF	503	461	451	405	350	294		ტიიი	10 v 10	ተ ርር
SQ-80-VG6X		1/16	1725	4412	.055	8.4	8.5	8.6	8.6	8.6	8.7		\$893	12 x 12	\$66
	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			\$527	12 x 12	\$66
30-30	u	1/23	1300	3701	.040	5.4	5.4	5.4	5.5	5.6			ψυΖΙ	12 1 12	ΨΟΟ
	D	1/10	1550	4412	.068	738	673	654	564	457	334				
		1/10	1000	7712	.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			\$527	12 x 12	\$66
30-93	u	1/13	1300	3701	.059	7.6	6.8	6.7	6.4	6.4			φυΖΙ	12 X 12	
	D	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	\$932	12 x 12	\$66
3Q-95-VG0X		1/0	1723	3030	.100	11.3	11.1	11.0	10.6	10.1	9.8	9.2	φουζ	12 X 12	φυυ
SQ-100-A		1/4	1725	5052	.250	1454	1413	1402	1349	1292	1227	1156	\$754	14 x 14	\$71
3Q-100-A		1/4	1723	3032	.230	13.1	12.5	12.4	11.9	11.5	11.1	10.7	ψ134	14 7 14	Ψ11
SQ-120-VG5X		1/2	1725	5927	.41	1948	1897	1883	1818	1754	1692	1628	\$1312	16 x 16	\$77
3Q-120-VU3X		1/2	1725	3321	.41	14.7	14.4	14.1	13.8	13.6	13.5	13.5	ψισιζ	10 x 10	ΨΠ
BAS 1P Magnetic	c Start	er										W/DIS	- \$164		
Hanging Rubber Vibration Isolator Kit (HVI-250)											\$65				
Base Rubber Vibration Isolator Kit (BVI-250)											\$89				
Mounting Brackets (800201) \$42											\$42				
Model 5W (6 Am	p) Soli	d State S	peed Cor	itrol (thru	Size 100)							\$39		

SQ & BSQ ACCESSORIES



BSQ PERFORMANCE DATA - MOTORS & DRIVES FACTORY MOUNTED



BSQ PERFORMANCE DATA - MOTORS & DRIVES FIELD MOUNTED



2.92

2.95

ACCESSORIES

3

3 1645 28

6565

6474



\$2314

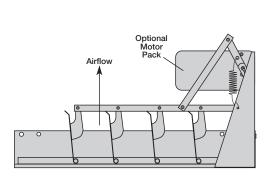
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DESCRIPTION	Fan Size	Price Each
Hanging Rubber Vibration Isolator Kit HVI-250	BSQ 70-140	\$83
Hanging Rubber Vibration Isolator Kit HVI-440	BSQ 160-180	\$120
Base Rubber Vibration Islator Kit BVI-250	BSQ 70-140	\$114
Base Rubber Vibration Isolator Kit BVI-440	BSQ 160-180	\$150
Mounting Bracket 800201	SQ & BSQ	\$53

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.

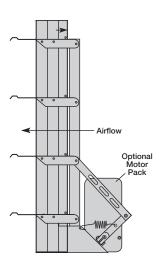


	Damper Size Sq.	Price Each	Add Motor Pack
	8 x 8	\$42	\$80
7	10 x 10	\$45	\$80
	12 x 12	\$48	\$80
	16 x 16	\$54	\$80
	18 x 18	\$70	\$80
	24 x 24	\$125	\$80
QD	30 x 30	\$158	\$80

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	\$68	\$154
12 x 12	\$74	\$154
14 x 14	\$80	\$154
16 x 16	\$91	\$154
18 x 18	\$97	\$154
20 x 20	\$121	\$154
22 x 22	\$146	\$154

Motor Pack is MP300/120/60/1V

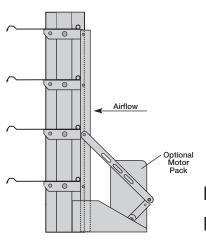
MODEL 320

- 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.

op - 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.

BACKDRAFT DAMPERS



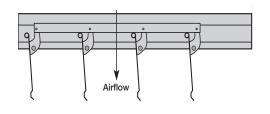


	Damper Size Sq.	Price Each	Add Motor Pack
	8 x 8	\$56	\$154
	9 x 9	\$61	\$154
	10 x 10	\$61	\$154
	12 x 12	\$66	\$154
	14 x 14	\$71	\$154
	16 x 16	\$77	\$154
QD	18 x 18	\$114	\$154
QD	20 x 20	\$114	\$154
QD	23 x 23	\$138	\$154
QD	24 x 24	\$138	\$154

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.



Damper Size Sq.	Price Each
8 x 8	\$77
10 x 10	\$78
12 x 12	\$78
16 x 16	\$102
18 x 18	\$123
24 x 24	\$145

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

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

ELECTRIC HEATERS / FILTERS & ACCESSORIES

FAN SPEED CONTROL

[] GREENHECK

Vari-Speed

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: \$39.00

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

Price Each: \$74.00



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.

	GREEN
FAN SPEE	ED CONTROL
Model 867008– Va	ari Green Remote Dial Re

etrofit Kit. Requires 2 x 4 handy box by others.

Price Each: \$235.00

Speeds	Model	НР	Volts	PH	Price
1	MS-1	1/2	120	1	\$7
1	MS-16 w/pl	1/2	120	1	\$25
1	MS-4	2	200/277	1	\$14

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: \$101.00

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: \$24.00

Model	HP	Volts	PH	Price			
STANDARD							
NITS -1	up to 1/2	120	1	\$8			
NITS -2	3/4 to 1	120	1	\$11			
NITS -3	1-1/2 to 2	120	1	\$31			
NITS -4	1/4 to 2	200/277	1	\$14			
NITS -6	up to 7-1/2	230/460	3	\$42			
WEATHERPR	00F						
N3RTS-1	1/4 to 2	120	1	\$77			
N3RTS-6	up to 7-1/2	230/460	3	\$83			

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	\$164	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	\$501	2 HP	2 HP	5 HP	00	
MSAC-1-18/J-40	\$531	5 HP	7.5 HP	10 HP	0	
MSAC-1-32/J-40	\$562	7.5 HP	10 HP	20 HP	1	

ELECTRONIC OVERLOAD W/DISCONNECT - NEMA 1 ENCLOSURES						
Model	Price Each		Three Phase		NEMA	
IVIOUCI	I HOC Lacii	208V	230V	460V	Size	
MSAC-1-9/J-G2.5-40	\$695	.5 HP	.5 HP	1 HP	00	
MSAC-1-9/J-G4-40	\$695	.75 HP	.75 HP	2 HP	00	
MSAC-1-9/J-G6-40	\$695	1 HP	1.5 HP	3 HP	00	
MSAC-1-18/J-G8-40	\$725	2 HP	2 HP	5 HP	0	
MSAC-1-18/J-G13-40	\$725	3 HP	3 HP	7.5 HP	0	
MSAC-1-18/J-G17-40	\$725	3 HP	5 HP	10 HP	0	
MSAC-1-32/J-G26-40	\$736	7.5 HP	7.5 HP	15 HP	1	
MSAC-1-32/J-G32-40	\$736	7.5 HP	10 HP	20 HP	1	

FANS / DAMPERS / CURBS

> ABLE SPEED S & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

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-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	P-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 D)rives				

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



VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFLISFRS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

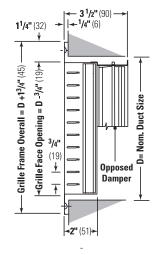
FLEXIBLE DUCT / SNAPLOCK & ACC.

SPIRAL PIPE & ACCESSORIES

ELECTRIC HEATERS / FILTERS & ACCESSORIES

VIBRATION ISOLATION

STEAM SPECIALTIES



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	\$37	\$33	16 x 10	720	\$78	\$63	24 x 10	1300	\$98	\$84
8 x 6	260	\$43	\$39	18 x 6	480	\$65	\$55	24 x 12	1440	\$108	\$93
10 x 4	220	\$43	\$39	18 x 8	720	\$74	\$59	24 x 16	1720	\$132	\$111
10 x 6	340	\$48	\$39	18 x 10	855	\$83	\$67	30 x 8	1200	\$112	\$100
12 x 4	260	\$48	\$41	18 x 12	1070	\$92	\$76	30 x 10	1400	\$129	\$109
12 x 6	390	\$53	\$42	20 x 6	550	\$72	\$58	30 x 12	1800	\$144	\$125
12 x 8	480	\$60	\$50	20 x 8	750	\$81	\$66	30 x 16	2180	\$174	\$154
14 x 6	370	\$57	\$48	20 x 10	945	\$87	\$71	36 x 8	1440	\$133	\$111
14 x 8	550	\$64	\$53	20 x 12	1045	\$94	\$78	36 x 12	1950	\$165	\$141
16 x 6	415	\$64	\$50	24 x 6	750	\$79	\$63	36 x 16	2530	\$203	\$174
16 x 8	650	\$72	\$58	24 x 8	945	\$92	\$76	36 x 18	3000	\$222	\$194

*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.....\$19.00

12 oz aerosol can (White or Aluminum)

HANS / DAMPERS

VARIABLE SPEE DRIVES & STARTE

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

STEAM SPECIALTIES

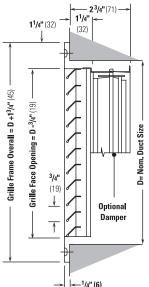
RETURN GRILLES AND REGISTERS





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	\$39	\$32					
8 x 8	235	\$43	\$32					
10 x 10	370	\$50	\$39					
12 x 12	400	\$56	\$42					

	→ ←'	/4" (6)									
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	\$29	\$21	14 x 14	710	\$45	\$33	24 x 18	1400	\$73	\$48
8 x 8	235	\$31	\$21	16 x 8	490	\$39	\$30	24 x 24	1700	\$87	\$58
10 x 6	240	\$31	\$21	16 x 10	550	\$44	\$32	30 x 12	1100	\$72	\$50
10 x 8	280	\$33	\$24	16 x 16	960	\$56	\$37	30 x 24	2150	\$108	\$76
10 x 10	370	\$35	\$27	18 x 12	805	\$48	\$36	30 x 30	3000	\$128	\$86
12 x 6	250	\$33	\$24	18 x 18	1000	\$62	\$42	36 x 18	2150	\$104	\$75
12 x 8	375	\$35	\$24	20 x 20	1300	\$70	\$46	36 x 24	2800	\$122	\$82
12 x 12	550	\$39	\$30	22 x 22	1600	\$78	\$53	36 x 30	3000	\$142	\$95
14 x 6	280	\$33	\$24	24 x 8	710	\$48	\$36	36 x 36	3600	\$160	\$109
14 x 8	420	\$35	\$27	24 x 12	925	\$58	\$39	48 x 24	3300	\$187	\$139

*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......\$19.00

12 oz aerosol can (White or Aluminum)

FANS / DAMPERS / CURBS

> VARIABLE SPEED DRIVES & STARTERS

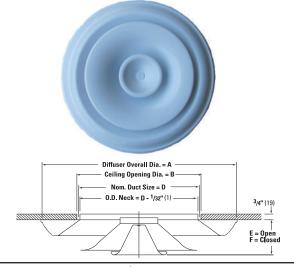
MISCELLANEOUS AIR DISTRIBUTION PRODUCTS



MODEL RCDE

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

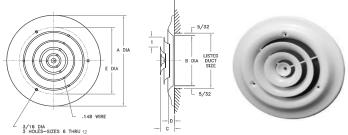
Size	Nominal CFM	Price Each	A	В	D	E	F
6	200	\$82	11 1/8	6 1/2	6	1 3/4	1 1/8
8	280	\$86	14 3/4	8 1/2	8	2 1/8	1 1/2
10	490	\$94	18 1/4	10 1/2	10	2 7/8	2 1/8
12	705	\$104	22	12 1/2	12	3 1/8	2 3/8



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	\$15	\$11	\$20
8	225	\$17	\$13	\$20
10	345	\$22	\$16	\$25
12	500	\$29	\$21	\$34



Size	A DIA	B DIA	C	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

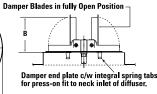
VOLUME CONTROL DAMPERS

- 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	\$14	\$15
8	\$15	\$17
10	\$15	\$19
12	\$17	\$21
14	\$26	\$30

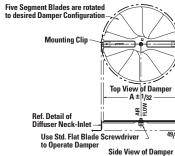






Model VCR8E





Model VCR9

*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

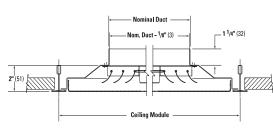
STEAM SPECIALTIES

PERFORATED STEEL CEILING DIFFUSERS



MODEL PDC TEE-BAR LAY-IN SUPPLY

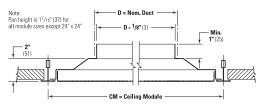
- All steel construction with a white (B12) powder coat finish
- Flush mounting in 24 x 24 lay-in tee-bar ceilings
- Approved for use in fire rated ceilings
- Four-way, adjustable pattern controllers
- Hinged, removable perforated face
- One piece plenum with one inch integrally drawn inlet collar
- 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	\$55
8	275	\$55
10	390	\$60
12	550	\$60
14	675	\$67
16	875	\$71

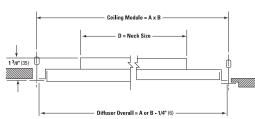




MODEL PDDR RETURN ROUND NECK

Neck Size	Nominal CFM*	Price Each
6	130	\$41
8	240	\$41
10	375	\$41
12	525	\$41
14	700	\$41
16	800	\$54





*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	\$39			
10 x 10	12 x 12	425	\$32			

FANS / DAMPERS / CURBS

LOUVER FACED CEILING DIFFUSERS



DRIVES & STARTERS

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

FLEXIBLE DUCT / SNAPLOCK & ACC.

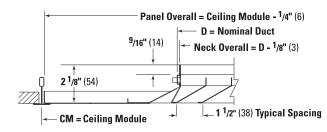
VIBRATION ISOLATION

STEAM SPECIALTIES





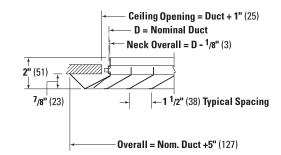
- Flush mounting in 24 x 24 lay-in tee-bar ceiling
- Four-way pattern cores with miter-cut corners
- Spring-loaded snap-out core
- Optional snap-in opposed blade damper



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	\$60	\$54	15 x 15	900	\$108	\$91
9 x 9	400	\$72	\$60	18 x 18	1200	\$109	\$93
12 x 12	600	\$89	\$76				

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	\$46	\$40	15 x 15	900	\$93	\$76
9 x 9	400	\$58	\$46	18 x 18	1200	\$116	\$94
12 x 12	600	\$75	\$60				

*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

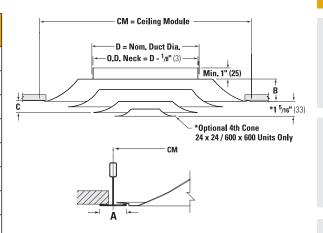




MODEL SCD TEE-BAR LAY-IN

- · 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	\$63
8	24 x 24	400	\$63
10	24 x 24	575	\$63
12	24 x 24	775	\$63
14	24 x 24	975	\$63
6	12 x 12	235	\$44
8	12 x 12	350	\$44
AFI (R6) Insulation Blanket	12 x 12		\$13
AFI (R6) Insulation Blanket	24 x 24		\$14
Center Cone		_	\$11





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

Neck Size	Panel Size	Nominal CFM*	Price Each
6	24 x 24	250	\$58
8	24 x 24	375	\$58
10	24 x 24	545	\$58
12	24 x 24	725	\$58
14	24 x 24	950	\$58
6	12 x 12	235	\$44
8	12 x 12	350	\$44
AFI (R6) Insulation Blanket	12 x 12		\$13
AFI (R6) Insulation Blanket	24 x 24		\$14

^{*}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





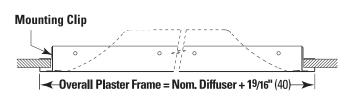


VIBRATION ISOLATION



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

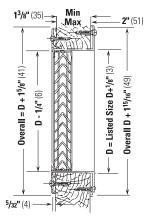


Size	Price Each
12 x 12	\$32
24 x 12	\$36
24 x 24	\$41

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	\$74
18 x 12	350	\$85
18 x 18	500	\$119
24 x 24	700	\$191

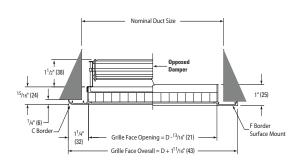


Auxiliary Frame Assembly

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	\$33
8 x 8	400	\$36
10 x 10	650	\$42
12 x 12	900	\$49
14 x 14	1150	\$63



^{*}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

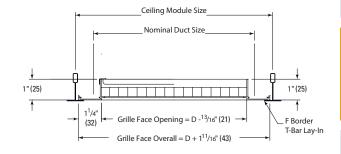




MODEL 80 CUBE CORE RETURN GRILLE

- 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	\$39
22 x 22	24 x 24	2700	\$66
46 x 22	48 x 24	4000	\$143

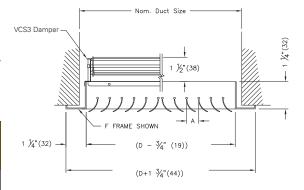




MODEL SCVD SUPPLY REGISTERS

- 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	\$46	10 x 10	350	\$59
8 x 8	225	\$48	12 x 12	450	\$67





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	\$22
12 x 4	415	\$24
10 x 6	500	\$26
12 x 6	550	\$27
12 x 8	700	\$30
14 x 8	800	\$31
16 x 8	900	\$32

^{*}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

VAV TERMINALS / HOT WATER COILS

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

MISCELLANEOUS RETURN GRILLES

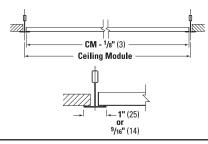




MODEL PFRF PERFORATED PANEL

- 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	Panel Size Nominal CFM* Pr	
24 x 12	575	\$17
24 x 24	2550	\$24



MODEL 10A SURFACE MOUNT RETURN

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

── Nom. Size ──→	
← Nom ¹³ / ₁₆ " (21) →	() () () () () () () () () () () () () (
	1/4" (6) 11/8" (28)
Perforated Face Face Opening = D - 11/z" (38) (33)	
Nom. + 111/16" (43)	→

Neck Size	Overall Face Size Nominal CFM*		Price Each
6 x 6	7 ¹¹ / ₁₆ x 7 ¹¹ / ₁₆	185	\$32
8 x 8	8 ¹¹ / ₁₆ x 8 ¹¹ / ₁₆	275	\$36
10 x 10	11 ¹¹ / ₁₆ x 11 ¹¹ / ₁₆	425	\$42
12 x 12	13 ¹¹ / ₁₆ x 13 ¹¹ / ₁₆	635	\$49
14 x 14	15 ¹¹ / ₁₆ x 15 ¹¹ / ₁₆	830	\$59
16 x 16	17 ¹¹ / ₁₆ x 17 ¹¹ / ₁₆	1125	\$67
18 x 18	19 ¹¹ / ₁₆ x 19 ¹¹ / ₁₆	1450	\$75



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°

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

Neck Size	Panel Size	Nominal CFM*	Aluminum (B12) Price Each	Steel (B12) Price Each
22 x 10	24 x 12	800	\$42	\$36
22 x 22	24 x 24	1600	\$67	\$53
22 x 46	24 x 48	2750	\$138	\$114

*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

FILTER GRILLES





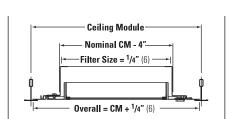
MODEL 80FF CUBE CORE LAY-IN TEE-BAR

- 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	\$114

MODEL 10FF PERFORATED FACE LAY-IN





Ceiling Module

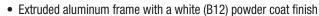
— Nominal CM - 4"—— Filter Size = D -1/4" (6) -

Overall = CM - 1/4" (6)

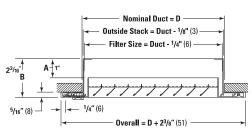
- Perforated face for lay-in ceilings
- Steel construction with a white (B12) powder coat finish
- · Hinged core and latches for easy cleaning

Neck Size	Panel Size	Nominal CFM*	Price with Filter
20 x 20	24 x 24	2000	\$91

MODEL 630FF SURFACE MOUNT



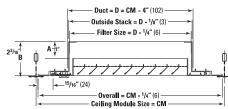
- 45° blades
- · Hinged core and latches for easy filter cleaning



Filter Size	Neck Size	Nominal CFM*	Price with Filter
12 x 12	12 ³ /8 x 12 ³ /8	575	\$66
20 x 20	20 ³ /8 x 20 ³ /8	1400	\$104
24 x 12	24 ³ /8 x 12 ³ /8	1000	\$93
24 x 24	24 ³ /8 x 24 ³ /8	1800	\$126



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	\$111
20 x 44	24 x 48	3000	\$190

^{*}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

DRIVES & STARTERS

MISCELLANEOUS AIR DISTRIBUTION PRODUCTS



2 ¹/2"_ ₂₂ (64)

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 ¹⁵/16" (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	\$382	
10"	400	30	\$382	
12"	500	30	\$382	

Ceiling Module

Nom. Duct

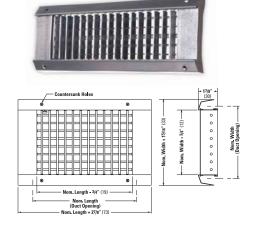
Nom. Duct - 1/4" (3)

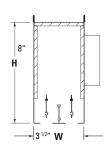
Diffuser Plagu

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	\$82	16 x 6	14/24	500	\$102
10 x 6	14/24	350	\$87	18 x 6	14/24	550	\$107
12 x 4	8/24	300	\$84	18 x 8	20/24	800	\$112
14 x 6	14/24	450	\$96	20 x 6	14/24	600	\$112
16 x 4	8/24	350	\$95	20 x 8	20/24	850	\$117
20 x 4	8/24	450	\$102	24 x 6	14/24	700	\$132
24 x 4	8/24	550	\$116	24 x 8	20/24	900	\$138







MODEL TBD1475 SLOT DIFFUSERS

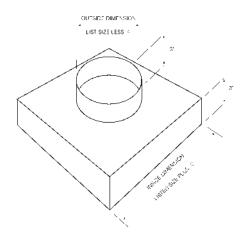
- Designed for tee bar lay-in ceilings
- Adjustable air pattern controllers with 3/4 in. slots
- Internally insulated with neoprene coated fiberglass insulation

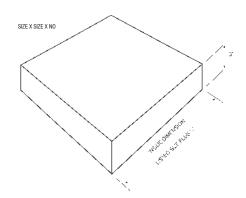
Length	A Width	Inlet	# of Slots	Nominal CFM*	Price Each
24"	3 1/2"	8" flat oval	2	160	\$91
48"	3 1/2"	8" flat oval	2	225	\$122
48"	3 1/2"	10" flat oval	2	275	\$122

^{*}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	\$8	12 x 12 x 12	\$11	20 x 20 x 14	\$20
6 x 6 x 6	\$8	15 x 15 x 10	\$14	20 x 20 x 16	\$20
8 x 8 x 6	\$9	15 x 15 x 12	\$14	20 x 20 x 18	\$20
8 x 8 x 7	\$9	15 x 15 x 14	\$14	*21 x 21 x N0	\$17
8 x 8 x 8	\$9	16 x 16 x 14	\$16	*22 x 22 x N0	\$17
9 x 9 x 6	\$10	18 x 18 x 12	\$17	22 x 22 x 6	\$21
9 x 9 x 7	\$10	18 x 18 x 14	\$17	22 x 22 x 8	\$21
9 x 9 x 8	\$10	18 x 18 x 16	\$17	22 x 22 x 10	\$21
9 x 9 x 9	\$10	18 x 18 x 18	\$17	22 x 22 x 12	\$21
10 x 10 x 8	\$10	*20 x 20 x N0	\$17	22 x 22 x 14	\$21
10 x 10 x 9	\$10	20 x 20 x 6	\$20	22 x 22 x 16	\$21
10 x 10 x 10	\$10	20 x 20 x 8	\$20	22 x 22 x 18	\$21
12 x 12 x 8	\$11	20 x 20 x 10	\$20		
12 x 12 x 10	\$11	20 x 20 x 12	\$20		

^{*}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"	\$5	10" x 9"	\$7
6" x 5"	\$5	12" x 8"	\$7
8" x 6"	\$6	12" x 10"	\$7
8" x 7"	\$6	14" x 10"	\$11
10" x 8"	\$7	14" x 12"	\$11

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° arc, providing throttling capability in all positions.

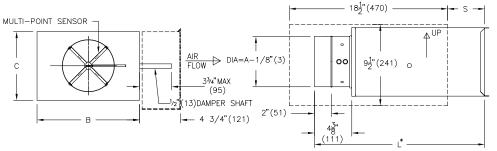
Controls by Others terminal incorporates many unique features. Most of these standard features are expensive options for other manufacturers. The Controls By Others incorporates the Patented FlowStar airflow sensor along with a Nema 1 enclosure and 120-volt transformer.

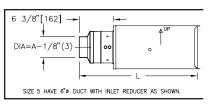
PERFORMANCE DATA AND PRICING

Size	Nom. CFM	Min. PS	*Controls by Others Each
5	250	.01	\$231
6	400	.08	\$231
8	600	.04	\$260
10	1100	.05	\$280
12	1800	.07	\$292
14	2300	.07	\$348

^{*}Terminal provided with controls enclosure (no controls) and 120V transformer.

CONTROLS BY OTHERS





		IMPE	nches		
UNIT SIZE	OUTLET		INLET	LEN	GTH
	В	С	Α	L	S
5	12	8	5	22 1/8	
6	12	0	6		
8	12	10	8	20.1/0	3 13/16
10	14	12 1/2	10	20 1/8	
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 / HOT WATER COILS

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" 0.D.Sweat Connection for 5" & 6" VAV Boxes	\$74
WCSXV1R-8	1-Row Hot Water Coil with 1/2" O.D.Sweat Connection for 8" VAV Boxes	\$74
WCSXV1R-10	1-Row Hot Water Coil with 1/2" O.D.Sweat Connection for 10" VAV Boxes	\$91
WCSXV1R-12	1-Row Hot Water Coil with 1/2" O.D.Sweat Connection for 12" VAV Boxes	\$123
WCSXV1R-14	1-Row Hot Water Coil with 1/2" O.D.Sweat Connection for 14" VAV Boxes	\$149
WCSXV2R-5,6	2-Row Hot Water Coil with 7/8" O.D.Sweat Connection for 5" & 6" VAV Boxes	\$99
WCSXV2R-8	2-Row Hot Water Coil with 7/8" O.D.Sweat Connection for 8" VAV Boxes	\$106
WCSXV2R-10	2-Row Hot Water Coil with 7/8" O.D.Sweat Connection for 10" VAV Boxes	\$134
WCSXV2R-12	2-Row Hot Water Coil with 7/8" O.D.Sweat Connection for 12" VAV Boxes	\$170
WCSXV2R-14	2-Row Hot Water Coil with 7/8" O.D.Sweat Connection for 14" VAV Boxes	\$237

BALANCING DAMPERS



VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINAL: HOT WATER CO

FLEXIBLE DUCT / SNAPLOCK & ACC.

SPIRAL PIPE & ACCESSORIES

ELECTRIC HEATERS / FILTERS & ACCESSORIES

VIBRATION ISOLATION

STEAM SPECIALTIES

MODEL MD-25/35 MANUAL BALANCING DAMPER

- 22 ga. galvanized steel construction
- 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	\$45	MD-25	24 x 12	\$64
MD-25	12 x 8	\$49	MD-35	14 x 14	\$86
MD-25	12 x 10	\$49	MD-35	18 x 18	\$111
MD-25	12 x 12	\$51	MD-35	24 x 18	\$115
MD-25	18 x 12	\$57	MD-35	24 x 24	\$129

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"	\$40
MDRS-25	8	6"	\$44
MDRS-25	10	6"	\$47
MDRS-25	12	6"	\$49
MDRS-25	14	6"	\$52

CONTROL DAMPERS



MODEL CD-36 LOW LEAKAGE CONTROL DAMPER



- 16 ga. galvanized steel construction, 6 in. opposed blades
- EPDM blade seals, metal compression jamb seals
- Includes outboard support bearing and control shaft
- · Actuator or hand quadrant sold separately

Sleeve or Duct
Control Shaft
Outboard Support Bearing

Size W x H	Price Each	Size W x H	Price Each
12 x 12	\$110	30 x 24	\$218
18 x 12	\$120	36 x 24	\$228
24 x 12	\$127	30 x 30	\$274
14 x 14	\$135	36 x 36	\$319
18 x 18	\$173	42 x 42	\$407
24 x 18	\$179	48 x 48	\$456
24 x 24	\$201	Hand Quadrant (HQR050)	\$9

MODEL CDRS-25 ROUND LOW LEAKAGE CONTROL DAMPER



- Easily installs in spiral duct
- · Polyethylene blade seal ensures low leakage
- · Frame constructed of 20 ga. galvanized steel



Model	Size	Frame Length	Price Each
CDRS-25	6	6"	\$81
CDRS-25	8	6"	\$84
CDRS-25	10	6"	\$89
CDRS-25	12	6"	\$93
CDRS-25	14	6"	\$97
Hand Quadrant (HQR050)			\$9
2" Stand-off			\$4

VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

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 ²	\$189
TFB-120-S	120V	4.5 FT ²	\$215
LF-24-S	24V	8 FT ²	\$224
LF-120-S	120V	8 FT ²	\$246
NFBUP-S	24V - 240V	15 FT ²	\$314
AFBUP-S	24V - 240V	33 FT ²	\$368

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 \$133.00

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APA151 Annunciator



RTS2

Accessory	Description	Price Each
RTS151	Remote Test Station for testing remotely located smoke detector	\$36
APA151	Piezo Annunciator, audible signal appliance for alarm service, red alarm LED, green power LED, audible alarm	\$29
RTS2	Multi-signaling Duct Accessory with Audible Alarm	\$88
AOS	Add on strobe for RTS2	\$43
DST-1.5	Sampling Tube, 1 1/2 ft.	\$7
DST-3	Sampling Tube, 3 ft.	\$10
DST-5	Sampling Tube, 5 ft.	\$12

CEILING RADIATION DAMPERS

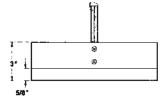


MODEL CFD CEILING RADIATION DAMPER

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

STANDARD FRAME

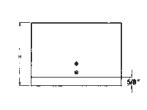




Model	Size*	Price Each		
CFD3.5	6 x 6	\$33		
CFD3.5	8 x 8	\$36		
CFD2	9 x 9	\$42		
CFD3.5	10 x 4	\$37		
CFD3.5	10 x 6	\$39		
CFD2	10 x 10	\$42		
CFD2	12 x 6	\$37		
CFD2	12 x 12	\$50		
CFD2	15 x 15	\$62		
CFD2	18 x 18	\$66		
CFD4	21 x 21	\$94		
CFD4	22 x 22	\$94		
CFD4	24 x 24	\$101		

EXTENDED FRAME





Model	Size*	Ext. Frame Height (H)	Price Each	
CFD3.5	6 x 6	6"	\$38	
CFD3.5	8 x 8	6"	\$41	
CFD2	9 x 9	6"	\$49	
CFD2	10 x 10	6"	\$49	
CFD2	12 x 12	8"	\$59	
CFD2	15 x 15	8"	\$73	
CFD2	18 x 18	8"	\$78	
CFD4	21 x 21	8"	\$111	
CFD4	22 x 22	8"	\$111	

^{*}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"	\$39	CFDR2	12"	6 1/2"	\$59
CFDR3.5	8"	6 1/2"	\$43	CFDR2	14"	6 1/2"	\$65
CFDR3.5	10"	6 1/2"	\$47	CFDR2	16"	11 1/2"	\$73

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. \$18.00 each

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

FIRE DAMPERS



DRIVES & STARTERS **VARIABLE SPEED**

DIFFUSERS / TRANSITIONS REGISTERS / GRILLES /

VAV TERMINALS / HOT WATER COILS

FLEXIBLE DUCT / SNAPLOCK & ACC.

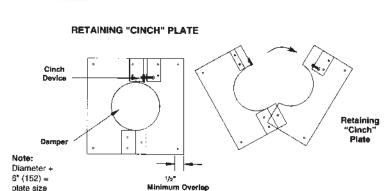
ELECTRIC HEATERS / FILTERS & ACCESSORIES

VIBRATION ISOLATION

STEAM SPECIALTIES



- UL 555 classified damper with 1¹/₂ 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



of wall/floor opening

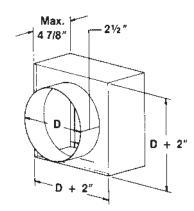
Collar Diameter (in.)	Sleeve Length	Price Each		
6	14"	\$83		
8	14"	\$94		
10	14"	\$102		
12	14"	\$110		
14	14"	\$120		
16	14"	\$130		

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

MODEL IBD2R/HV ROUND FIRE DAMPER



- 11/2 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 21/2 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	\$62			
8	10 x 10	\$68			
10	12 x 12	\$78			
12	14 x 14	\$85			
14	16 x 16	\$111			

Type IBD2R dampers are furnished 1/8 in. smaller than given duct and collar dimensions.

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

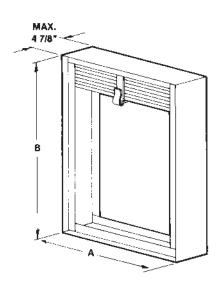
FIRE DAMPERS



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	\$24	12 x 12	\$32
8 x 6	\$24	14 x 12	\$40
10 x 6	\$24	16 x 12	\$40
12 x 6	\$24	18 x 12	\$43
14 x 6	\$30	20 x 12	\$46
8 x 8	\$27	24 x 12	\$46
10 x 8	\$27	14 x 14	\$45
12 x 8	\$27	16 x 14	\$45
14 x 8	\$32	18 x 14	\$48
16 x 8	\$32	20 x 14	\$53
18 x 8	\$37	24 x 14	\$53
20 x 8	\$42	16 x 16	\$45
10 x 10	\$30	20 x 16	\$53
12 x 10	\$30	24 x 16	\$53
14 x 10	\$37	18 x 18	\$54
16 x 10	\$37	24 x 18	\$61
18 x 10	\$42	20 x 20	\$64
20 x 10	\$45	24 x 24	\$64

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

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

^{*}More Sizes and styles available. See page 48.

> VARIABLE SPEED DRIVES & STARTERS

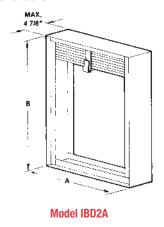
REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

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

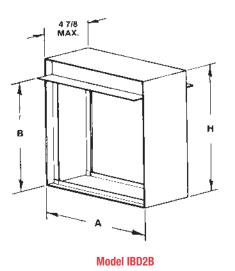
Style B prices are in bold print.

	WIDTH IN INCHES												
		12	16	20	24	28	32	36	40	44	48		
	6	47	60	78	78	89	98	101	107	113	120	6	
	U	55	69	91	91	103	114	117	124	132	139	U	
	8	54	63	82	82	95	101	107	116	120	126	8	
	O	62	73	95	95	110	117	124	135	139	146	U	
	10	60	72	89	89	101	104	113	120	126	132	10	
Н	10	69	84	103	103	117	121	132	139	146	153	10	Н
E	12	63	78	92	92	104	110	116	126	132	141	12	E
	12	73	91	106	106	121	128	135	146	153	164	12	1
G	16	75	89	104	104	116	123	129	138	148	157	16	G
Н	10	87	103	121	121	135	142	150	160	171	182	10	Н
Т	20	89	107	126	126	141	151	161	170	182	195	20	T
	20	103	124	146	146	164	175	186	197	212	226	20	
	24	89	107	126	126	141	151	161	170	182	195	24	1
N	24	103	124	146	146	164	175	186	197	212	226	24	N
	28	98	113	141	141	151	173	189	201	214	229	28	
1	20	114	132	164	164	175	201	219	233	248	266	20	1
N	32	104	120	148	148	167	195	217	232	249	264	32	N
C	32	121	139	171	171	194	226	251	269	288	306	32	C
Н	36	110	126	157	157	182	217	245	264	283	301	36	Н
Ε	30	128	146	182	182	212	251	285	306	328	350	30	Ε
S	40	116	132	167	167	195	232	264	283	301	321	40	S
	40	135	153	194	194	226	269	306	328	350	372	40	
	44	123	141	176	176	210	249	283	301	321	339	44	
		142	164	204	204	244	288	328	350	372	394		
	48	132 151 189 189 22	226	264	301	321	339	358	48				
	40	153	175	219	219	262	306	350	372	394	415	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	32	41	53	53	60	67	69	73	77	81	6	
	0	40	50	66	66	74	82	85	90	95	100	0	
	8	36	43	56	56	64	69	73	79	81	86	8	
	0	45	53	69	69	80	85	90	98	100	106	0	
	10	41	49	60	60	69	71	77	81	86	90	10	
Н	10	50	61	74	74	85	87	95	100	106	111	10	Н
Е	12	43	53	62	62	71	75	79	86	90	96	12	Ε
I	12	53	66	77	77	87	93	98	106	111	119	12	
G	16	51	60	71	71	79	83	88	94	100	107	16	G
Н	10	63	74	87	87	98	103	108	116	124	132	10	Н
T	20	60	73	86	86	96	102	109	116	124	133	20	T
	20	74	90	106	106	119	127	135	143	153	164	20	20
1	24	60	73	86	86	96	102	109	116	124	133	24	1
N	24	74	90	106	106	119	127	135	143	153	164	24	N
	20	67	77	96	96	102	118	128	137	145	156	20	
1	28	82	95	119	119	127	145	159	169	179	192	28	1
N	32	71	81	100	100	114	133	147	158	169	180	32	N
C	32	87	100	124	124	140	164	182	195	209	222	32	C
н	36	75	86	107	107	124	147	167	180	192	205	36	н
Ε	30	93	106	132	132	153	182	206	222	237	253	30	Ε
s	40	79	90	114	114	133	158	180	192	205	218	40	S
Ĭ	40	98	111	140	140	164	195	222	237	253	269	40	Ĭ
	44	83	96	120	120	143	169	192	205	218	231	44	
	44	103	119	148	148	177	209	237	253	269	285	44	
	40	90	102	128	128	154	180	205	218	231	243	40	
	48	111	127	159	159	190	222	253	269	285	301	48	



Available in Dynamic
Consult your Hoffman & Hoffman Salesperson for pricing

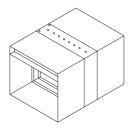
Detailed drawings and installation instructions available at www.ruskin.com

FIRE DAMPERS-QUICK SHIP-24 HOURS

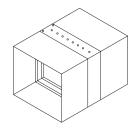


MODEL IBD20A & B INTEGRAL SLEEVE FIRE DAMPER

- 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 IBD20B



Model IBD20A

IBD20/STYLE A AND B HORIZONTAL PRICES

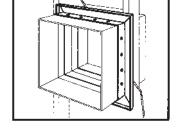
Style B prices are in bold print.

	WIDTH IN INCHES											
		12	16	20	24	28	32	36	40	44		
	_	68	86	113	113	127	141	145	154	163	_	
	6	76	96	125	125	142	157	162	171	181	6	
	8	77	91	119	119	136	145	154	168	172	8	
	0	86	101	132	132	152	162	171	186	191	0	
Н	10	86	104	127	127	145	150	163	172	181	10	Н
Ε	10	96	116	142	142	162	166	181	191	201	10	E
1	12	91	113	132	132	150	159	168	181	190	12	П
G	12	101	125	147	147	166	176	186	201	211	12	G
Н	16	108	127	150	150	168	177	186	199	212	16	Н
T	10	121	142	166	166	186	196	206	221	236	10	T
	20	127	154	181	181	204	217	231	245	263	20	
1	20	142	171	201	201	226	241	257	272	292	20	1
N	24	127	154	181	181	204	217	231	245	263	24	N
	24	142	171	201	201	226	241	257	272	292	24	
1	28	141	163	204	204	217	249	272	290	308	28	1
N	20	157	181	226	226	241	277	302	322	342	20	N
C	32	150	172	212	212	240	281	312	334	358	32	C
Н	32	166	191	236	236	267	312	347	372	398	32	н
Ε	36	159	181	226	226	263	312	353	380	407	36	Ε
S	30	176	201	251	251	292	347	393	422	452	30	S
	40	168	190	240	240	281	334	380	407	434	40	
	40	186	211	267	267	312	372	422	452	482	40	
	44	177	204	254	254	303	358	407	434	462	44	
	77	196	226	282	282	337	398	452	482	513		

IBD20/STYLE A AND B VERTICAL PRICES

Style B prices are in bold print.

	WIDTH IN INCHES											
		12	16	20	24	28	32	36	40	44		
	_	53	67	88	88	99	110	113	120	127		
	6	61	77	100	100	113	125	129	137	145	6	
	_	60	70	92	92	106	113	120	130	134		
	8	69	81	105	105	121	129	137	149	153	8	
Н	40	67	81	99	99	113	117	127	134	141	10	Н
Ε	10	77	92	113	113	129	133	145	153	161	10	E
1	40	70	88	103	103	117	124	130	141	148	10	1
G	12	81	100	117	117	133	141	149	161	169	12	G
Н	16	84	99	117	117	130	137	144	155	165	16	4.C H
T	16	96	113	133	133	149	157	165	177	189	16	T
	20	99	120	141	141	158	169	180	190	204	20	
1	20	113	137	161	161	181	193	206	218	234	20	1
N	24	99	120	141	141	158	169	180	190	204	24	N
	24	113	137	161	161	181	193	206	218	234	24	
1	28	110	127	158	158	169	194	211	225	239	28	1
N	20	125	145	181	181	193	222	242	257	273	20	N
C	32	117	134	165	165	187	218	243	260	278	32	C
Н	32	133	153	189	189	214	249	277	297	318	32	Н
Ε	36	124	141	176	176	204	243	275	296	317	36	Ε
S	30	141	161	201	201	234	277	314	338	362	30	S
	40	130	148	187	187	218	260	296	317	337	40	
	40	149	169	214	214	249	297	338	362	386	40	
	44	137	158	197	197	236	278	317	337	359	44	
	44	157	181	226	226	269	318	362	386	411	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

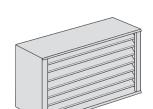
VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS



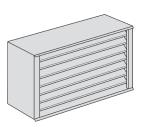
SPIRAL PIPE & ACCESSORIES



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	\$79			
LBV168	16 x 7 3/4	\$88			



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	\$75
EX128	12 x 7 3/4	\$87
EX157	15 5/8 x 7 3/4	\$100



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	\$75	
FL128	12 x 7 3/4	\$87	
FL1212	12 x 11 3/4	\$110	
FL157	15 5/8 x 7 3/4	\$100	

STATIONARY ALUMINUM LOUVERS

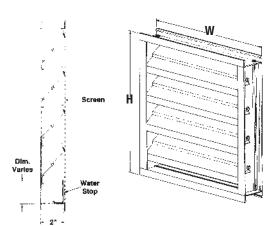


MODEL ELF211 THINLINE STATIONARY LOUVER



- 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.





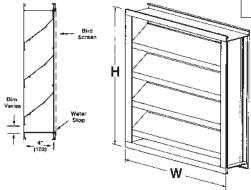
Size W x H	Free Area (Ft²)	Price Each
12 x 12	0.26	\$114
18 x 12	0.45	\$129
24 x 12	0.76	\$142



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	\$157	30 x 30	2.59	\$328
24 x 18	0.93	\$179	36 x 30	3.15	\$365
24 x 24	1.49	\$198	36 x 36	3.85	\$395
30 x 24	1.90	\$217	42 x 42	5.18	\$483
36 x 24	2.31	\$240	48 x 48	7.10	\$574



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.

> SPIRAL PIPE ACCESSORIES

ELECTRIC HEATERS / FILTERS & ACCESSORIES

VIBRATION ISOLATION

STEAM SPECIALTIES

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

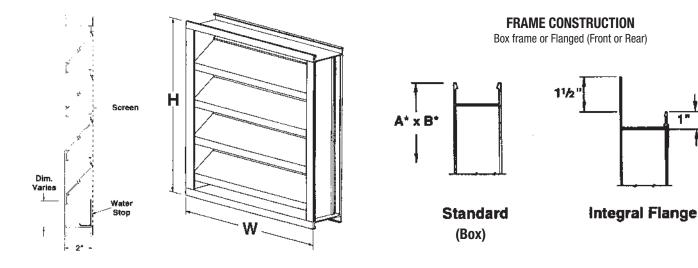
		WIDTH IN INCHES										
		12	18	24	30	36	42	48	54	60		-
	12	159	179	197	215	233	249	271	347	372	12	
	16	179	199	222	244	264	286	316	405	436	16	
H	20	197	222	249	275	302	324	358	463	499	20	H E
I G	24	210	242	273	304	336	365	403	519	562	24	I G
H	28	289	334	378	423	465	515	566	577	625	28	Н
T	32	307	360	412	459	508	562	620	631	689	32	
I N	36	331	385	443	497	553	606	674	689	750	36	I N
	40	353	416	474	533	593	654	725	745	810	40	1 .
N	44	358	430	488	582	615	676	752	799	873	44	N
C H	48	389	454	521	589	658	723	803	853	933	48	C H
E	52	414	486	557	629	705	772	859	909	991	52	E
5	56	443	519	589	669	752	821	913	962	1045	56	•
	60	470	550	629	710	792	873	962	1018	1105	60	

ORDERING INSTRUCTIONS

SCREEN: front □ rear □ bird □ insect □

FRAME: box □ front 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

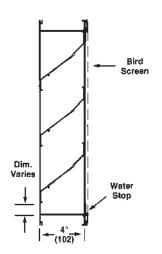
					W	DTH IN INCH	IES					
		12	18	24	30	36	42	48	54	60		
	12	130	141	157	172	186	199	217	275	297	12	
	16	141	159	174	195	212	226	251	320	347	16	
H	20	157	174	199	219	239	260	284	369	396	20	H
I G	24	168	193	219	242	266	291	320	412	445	24	I G
Н	28	228	264	302	336	369	407	450	459	497	28	H
T	32	244	286	327	365	405	445	492	501	548	32	
I N	36	262	307	351	394	438	481	535	548	596	36	I N
Ī	40	282	331	378	423	472	519	575	591	644	40	
N	44	284	342	389	436	490	537	598	635	694	44	N
C	48	309	360	414	467	523	573	638	678	741	48	C H
E	52	329	387	441	499	562	611	683	721	785	52	E
3	56	351	412	467	530	598	651	725	765	828	56	- 5
	60	374	436	499	564	629	694	765	808	875	60	

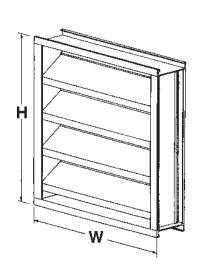
ORDERING INSTRUCTIONS

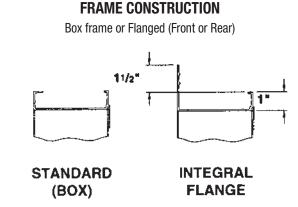
SCREEN: front □ rear □ bird □ insect □

FRAME: box □ front 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 / LOUVEI ACCESS DOORS / ACTU/

L PIPE SSORIES

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
- Neoprene gasket and cam locks for tight closure
- · Starter tab for easy installation

Nominal Size	Price Each	Nominal Size	Price Each
6" x 6"	\$11	14" x 14"	\$20
8" x 8"	\$12	16" x 16"	\$24
10" x 10"	\$14	18" x 18"	\$28
12" x 12"	\$15	24" x 24"	\$42





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

Nominal Size	Price Each	Nominal Size	Price Each
6" x 6"	\$11	14" x 14"	\$20
8" x 8"	\$12	16" x 16"	\$24
10" x 10"	\$14	18" x 18"	\$28
12" x 12"	\$15	24" x 24"	\$42

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	\$48
8-10	3 x 7	4 x 8	\$48
12-14	7 x 11	8 x 12	\$63
16-18	7 x 11	8 x 12	\$63
20-24	11 x 15	12 x 16	\$88



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"	\$54
12 x 12	12 3/8 x 12 3/8	14 5/8 x 14 5/8	1 1/2"	\$67
18 x 18	18 3/8 x 18 3/8	20 5/8 x 20 5/8	1 1/2"	\$83
24 x 24	24 3/8 x 24 3/8	26 5/8 x 26 5/8	1 1/2"	\$160



STYLE AP-FR 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"	\$152
12 x 12	12 3/8 x 12 3/8	14 x 14	2 9/16"	\$158
18 x 18	18 3/8 x 18 3/8	20 x 20	2 9/16"	\$203
24 x 24	24 3/8 x 24 3/8	26 x 26	2 9/16"	\$248



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"	\$30
12 x 12	12 1/4 x 12 1/4	14 x 14	1 1/2"	\$34
18 x 18	18 1/4 x 18 1/4	20 x 20	1 1/2"	\$51
24 x 24	24 1/4 x 24 1/4	26 x 26	1 1/2"	\$76

DRIVES & STARTERS

DIFFUSERS / TRANSITIONS REGISTERS / GRILLES /

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	\$80	14	\$162
8	\$97	16	\$193
10	\$113	18	\$238
12	\$134		
NS300 - 1-3/4 IN X 300 FT HANGING NOVA STRAP\$18			

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	\$123	12	\$208
8	\$149	14	\$244
10	\$178	16	\$291
NS300 – 1-3/4 IN X 300 FT HANGING NOVA STRAP\$18			

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	\$51	12	\$90
8	\$63	14	\$97
10	\$77		
NS300 - 1-3/4 IN X 300 FT HANGING NOVA STRAP\$18			

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	\$46	14	\$103
8	\$55	16	\$119
10	\$69	18	\$138
12	\$86	20	\$169
NS300 - 1 3/4 in y 300 ft Hanging NOVA Strap \$18			



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	\$61	12	\$111
8	\$75	14	\$128
10	\$90	16	\$154
NS300 - 1 3/4 in x 300 ft Hanging NOVA Strap\$18			

STEAM SPECIALTIES

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	\$14
8	7 7/8	7	\$16
10	9 7/8	7	\$18
12	11 7/8	7	\$22
14	13 7/8	7	\$24
16	15 7/8	7	\$30
18	17 7/8	7	\$41

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	\$19
8	7 7/8	7	\$22
10	9 7/8	7	\$25
12	11 7/8	7	\$29
14	13 7/8	7	\$31
16	15 7/8	7	\$38
18	17 7/8	7	\$51

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	\$22
8	7 7/8	13	6 x 12	\$25
10	9 7/8	13	8 x 14	\$29
12	11 7/8	13	10 x 16	\$35
14	13 7/8	13	12 x 18	\$41
16	15 7/8	13	14 x 20	\$47

SNAPLOCK PIPE AND ACCESSORIES



SNAPLOCK PIPE

Description	Price Each
4" 5FT 26 GA	\$9
6" 5FT 26 GA	\$12
8" 5FT 26 GA	\$16
10" 5FT 26 GA	\$19
12" 5FT 26 GA	\$23
14" 5FT 26 GA	\$28
	4" 5FT 26 GA 6" 5FT 26 GA 8" 5FT 26 GA 10" 5FT 26 GA 12" 5FT 26 GA



90° ADJUSTABLE ELBOWS

Size	Description	Price Each
4	4" 26 GA Elbow	\$4
6	6" 26 GA Elbow	\$4
8	8" 26 GA Elbow	\$5
10	10" 26 GA Elbow	\$8
12	12" 26 GA Elbow	\$10
14	14" 26 GA Elbow	\$14



END CAPS

Size	Description	Price Each
4	4" 28 GA End Cap	\$5
6	6" 28 GA End Cap	\$6
8	8" 28 GA End Cap	\$6
10	10" 28 GA End Cap	\$8
12	12" 28 GA End Cap	\$9
14	14" 28 GA End Cap	\$10





TAKEOFFS

Model	Size	Description	Price Each
ATD	4	4" Takeoff with Damper	\$9
ATD	6	6" Takeoff with Damper	\$8
ATD	8	8" Takeoff with Damper	\$9
ATD	10	10" Takeoff with Damper	\$14
ATD	12	12" Takeoff with Damper	\$17
ATD	14	14" Takeoff with Damper	\$20
ATSD	4	4" Takeoff with Damper & Scoop	\$14
ATSD	6	6" Takeoff with Damper & Scoop	\$14
ATSD	8	8" Takeoff with Damper & Scoop	\$16
ATSD	10	10" Takeoff with Damper & Scoop	\$21
ATSD	12	12" Takeoff with Damper & Scoop	\$29
ATSD	14	14" Takeoff with Damper & Scoop	\$36

VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS

DAMPERS / LOUVERS / ACTUATORS

SNAPLOCK PIPE ACCESSORIES



TEES

Size	Description	Price Each
4	4" 26 GA Tee	\$19
6	6" 26 GA Tee	\$20
8	8" 26 GA Tee	\$26
10	10" 26 GA Tee	\$30
12	12" 26 GA Tee	\$31
14	14" 26 GA Tee	\$34



WYES

Size	Description	Price Each
4	4" 28 GA Wye	\$13
6	6" 28 GA Wye	\$13
8	8" 28 GA Wye	\$13
10	10" 28 GA Wye	\$16
12	12" 28 GA Wye	\$25
14	14" 28 GA Wye	\$34

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	\$8
6	10-20	\$8
8	12-16	\$10
10	12-18	\$16
12	16-20	\$19
14	16-22	\$22

ACCESSORIES



7.00200011120		
Model	Description	Price Each
SUPERSEAL 1	UL 181-B 1 Gallon Duct Sealant	\$25
BB2	2 Inch Bristle Brush	\$1
BB3	3 Inch Bristle Brush	\$2
PPT10X1/2	Pro Point Screw (1000 Per Bucket)	\$33
PPT10X3/4	Pro Point Screw (1000 Per Bucket)	\$33
PPT10X1	Pro Point Screw (1000 Per Bucket)	\$34
DCL516	2 5/8" Long Chuck For 5/16" Hex Head	\$7

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"	\$1.75	12"	\$3.00
6"	\$1.95	14"	\$3.30
8-9"	\$2.40	16"	\$3.50
10"	\$2.60	18"	\$3.80
		20"	\$4.00



NYLON CLAMPS

- Self-locking, 175 lb. tensile strength
- 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
\$.40	\$.39	\$.38



MODEL DIT-2 TENSIONING TOOL

- Heavy duty construction
- Mechanical advantage assures tight clamping action

Model	Price Each
DIT-2	\$60

VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

VAV TERMINALS / HOT WATER COILS

STEAM SPECIALTIES

TAPE AND SEALANTS



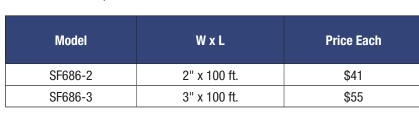
DUCT TAPE

- 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	\$23
PC857-3	3" x 60 yards	\$34
AF100-A-2.5	2.5" x 60 yards	\$24

MASTIC TAPE

• SF686 Mastic Tape UL 181-B-FX





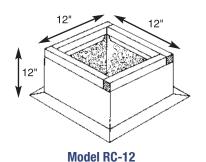
DYN-O-WRAP

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



Model	Description	Price Each
DW24-200	24 inch DYN-O-WRAP	\$32

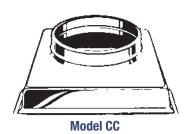
PIPE PORTAL SYSTEMS



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	\$50
CC Curb Cover	\$71









Cap Model	Accommodates Pipe Sizes	Price Each
C-126 (1 pipe)	Single pipe 2" thru 6"	\$66
C-212 (4 pipe)	Two pipes 3/8" thru 1" Two pipes 1" thu 2"	\$66
C-481 (4 pipe)	Four pipes 3/8" thru 1"	\$66

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.



•	•
_	
\lumi.	-Flach

Model	Price Each
Alumi-Flash	\$81



DRIVES & STARTERS

DIFFUSERS / TRANSITIONS REGISTERS / GRILLES /

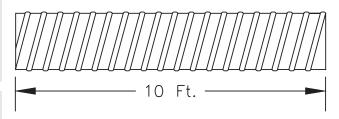
VAV TERMINALS / HOT WATER COILS

DAMPERS / LOUVERS / ACCESS DOORS / ACTUATORS

FLEXIBLE DUCT / SNAPLOCK & ACC.

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

- 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	\$19
ESSP4	4	10.8	26	\$25
ESSP5	5	13.5	26	\$30
ESSP6	6	16.2	26	\$36
ESSP8	8	21.6	26	\$46
ESSP10	10	27.0	26	\$58
ESSP12	12	32.4	26	\$68
ESSP14	14	37.8	26	\$79
ESSP16	16	43.2	26	\$90
ESSP18	18	48.6	26	\$101
ESSP20	20	54.0	26	\$111
ESSP22	22	59.4	26	\$122
ESSP24	24	64.8	26	\$135

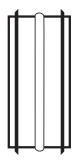
Part Number	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
PBT4	4	0.4	26	\$16
PBT5	5	0.5	26	\$17
PBT6	6	0.6	26	\$18
PBT8	8	0.8	26	\$19
PBT10	10	1.1	26	\$21
PBT12	12	1.3	1.3 26	
PBT14	14	2.6	26	\$64
PBT16	16	2.9	26	\$75
PBT18	18	3.3	26	\$86
PBT20	20	3.5	24	\$95
PBT22	22	3.9	3.9 24	
PBT24	24	4.2	24	\$119

ESSP3	3	8.1	26	\$19	
ESSP4	4	10.8	26	\$25	
ESSP5	5	13.5	26	\$30	
ESSP6	6	16.2	26	\$36	
ESSP8	8	21.6	26	\$46	
ESSP10	10	27.0	26	\$58	
ESSP12	12	32.4	26	\$68	
ESSP14	14	37.8	26	\$79	
ESSP16	16	43.2	26	\$90	
ESSP18	18	48.6	26	\$101	
ESSP20	20	54.0	26	\$111	
ESSP22	22	59.4	26	\$122	
ESSP24	24	64.8	26	\$135	
BELLMOUTH					

STEAM SPECIALTIES

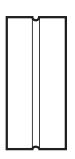
SELF-SEALING SPIRAL PIPE FITTINGS By Eastern Sheet Metal





PIPE COUPLING

Part Number	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
PCPT3	3	0.3	26	\$9
PCPT4	4	0.4	26	\$9
PCPT5	5	0.5	26	\$10
PCPT6	6	0.5	26	\$10
PCPT8	8	0.7	26	\$10
PCPT10	10	0.9	26	\$11
PCPT12	12	1.1	26	\$12
PCPT14	14	1.3	26	\$13
PCPT16	16	1.4	26	\$14
PCPT18	18	1.6	26	\$16
PCPT20	20	2.3	24	\$20
PCPT22	22	2.5	24	\$21
PCPT24	24	2.7	24	\$22



FITTING COUPLING

Part Number	Duct Diameter	Wt. Each (lbs.) Ga.		Price Each
FCPT3	3	0.3	26	\$3
FCPT4	4	0.4	26	\$3
FCPT5	5	0.5	26	\$3
FCPT6	6	0.5	26	\$3
FCPT8	8	0.7	0.7 26	
FCPT10	10	0.9	26	\$4
FCPT12	12	1.1	26	\$5
FCPT14	14	1.3	1.3 26	
FCPT16	16	1.4	1.4 26	
FCPT18	18	1.6	26	\$7
FCPT20	20	2.3	24	\$10
FCPT22	22	2.5 24		\$10
FCPT24	24	2.7	24	\$11

SELF-SEALING SPIRAL PIPE FITTINGS



DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

FLEXIBLE DUCT / SNAPLOCK & ACC.

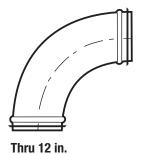
Thru 12 in.

VIBRATION ISOLATION

STEAM SPECIALTIES

By Eastern Sheet Metal







90 DEGREE ELBOW

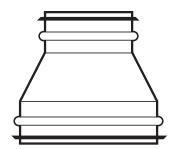
Part Number	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
PE90T3	3	1.1	26	\$22
PE90T4	4	1.7	26	\$24
PE90T5	5	2.5	26	\$28
PE90T6	6	3.4	26	\$28
PE90T8	8	5.5	26	\$39
PE90T10	10	8.2	26	\$48
E90T12	12	11.1	26	\$64
E90T14	14	12.0	26	\$99
E90T16	16	15.3	26	\$115
E90T18	18	19.1	26	\$143
E90T20	20	29.7	24	\$181
E90T22	22	42.9	42.9 24	
E90T24	24	50.0	24	\$242



	45 DEG.	ELBOW			
	Part Number	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
	PE45T3	3	0.6	26	\$18
	PE45T4	4	1.0	26	\$19
Above 12 in.	PE45T5	5	1.4	26	\$21
	PE45T6	6	1.8	26	\$21
	PE45T8	8	3.0	26	\$25
	PE45T10	10	4.4	26	\$31
	PE45T12	12	6.0	26	\$38
	E45T14	14	6.6	26	\$60
	E45T16	16	8.4	26	\$68
	E45T18	18	10.3	26	\$80
	E45T20	20	16.0	24	\$101
	E45T22	22	19.0	24	\$114

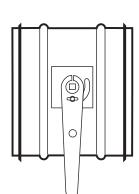
SELF-SEALING SPIRAL PIPE FITTINGS By Eastern Sheet Metal





CONCENTRIC REDUCER

Part Number	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
PRDT43	4 to 3	0.4	26	\$28
PRDT53	5 to 3	0.6	26	\$28
PRDT54	5 to 4	0.6	26	\$28
PRDT64	6 to 4	0.9	26	\$29
PRDT65	6 to 5	0.8	26	\$29
PRDT86	8 to 6	1.4	26	\$31
PRDT106	10 to 6	2.0	26	\$33
PRDT108	10 to 8	1.8	26	\$33
PRDT128	12 to 8	2.5	26	\$35
PRDT1210	12 to 10	2.2	26	\$35
RDT148	14 to 8	4.9	26	\$55
RDT1410	14 to 10	4.7	26	\$56
RDT1412	RDT1412 14 to 12		26	\$58
RDT1610	16 to 10	5.7	26	\$61
RDT1612	16 to 12	5.4	26	\$62
RDT1614	16 to 14	5.7	26	\$64
RDT1812	18 to 12	6.5	26	\$69
RDT1814	18 to 14	6.1	26	\$69
RDT1816	18 to 16	6.4	26	\$71
RDT2014	20 to 14	9.4	24	\$81
RDT2016	20 to 16	8.7	24	\$81
RDT2018	20 to 18	9.2	24	\$83
RDT2216	22 to 16	10.4	24	\$87
RDT2218	22 to 18	9.7	24	\$87
RDT2220	22 to 20	10.1	24	\$91
RDT2418	24 to 18	11.5	24	\$93
RDT2420	24 to 20	10.7	24	\$94
RDT2422	24 to 22	10.9	24	\$97



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	\$42
DT8	8	2.5	22	\$45
DT10	10	2.9	22	\$54
DT12	12	3.4	22	\$64
DT14	14	3.8	22	\$64

3



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

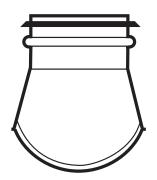
SELF-SEALING SPIRAL PIPE FITTINGS	9
By Eastern Sheet Metal	



Part Number	Tap Diameter	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
PFTCT44	4	4	0.4	26	\$15
PFTCT46	4	6	0.4	26	\$15
PFTCT48	4	8	0.4	26	\$15
PFTCT410	4	10	0.5	26	\$15
PFTCT412	4	12	0.5	26	\$15
PFTCT66	6	6	0.8	26	\$17
PFTCT68	6	8	0.8	26	\$17
PFTCT610	6	10	0.8	26	\$17
PFTCT612	6	12	0.8	26	\$17
PFTCT614	6	14	0.8	26	\$17
PFTCT616	6	16	0.8	26	\$17
PFTCT88	8	8	1.2	26	\$20
PFTCT810	8	10	1.2	26	\$20
PFTCT812	8	12	1.2	26	\$20
PFTCT814	8	14	1.2	26	\$20
PFTCT816	8	16	1.2	26	\$20
PFTCT818	8	18	1.2	26	\$20
PFTCT820	8	20	1.2	24	\$20
PFTCT822	8	22	1.2	24	\$20
PFTCT824	8	24	2.1	24	\$20
PFTCT1010	10	10	2.1	26	\$21
PFTCT1012	10	12	2.1	26	\$21
PFTCT1014	10	14	2.1	26	\$21
PFTCT1016	10	16	2.1	26	\$21
PFTCT1018	10	18	2.1	26	\$21
PFTCT1020	10	20	2.1	24	\$22
PFTCT1022	10	22	2.1	24	\$22
PFTCT1024	10	24	2.1	24	\$22
PFTCT1212	12	12	2.7	26	\$24
PFTCT1214	12	14	2.7	26	\$26
PFTCT1216	12	16	2.7	26	\$26
PFTCT1218	12	18	2.7	26	\$26
PFTCT1220	12	20	2.7	24	\$27
PFTCT1222	12	22	2.7	24	\$27
PFTCT1224	12	24	2.7	24	\$28

SELF-SEALING SPIRAL PIPE FITTINGS By Eastern Sheet Metal

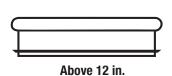




CONICAL TAP

Part Number	Tap Diameter	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
FTCT1414	14	14	11.5	26	\$35
FTCT1416	14	16	12.7	26	\$35
FTCT1418	14	18	13.9	26	\$35
FTCT1420	14	20	19.3	24	\$35
FTCT1422	14	22	20.8	24	\$35
FTCT1424	14	24	22.4	24	\$35
FTCT1616	16	16	13.8	26	\$37
FTCT1618	16	18	15.1	26	\$37
FTCT1620	16	20	20.9	24	\$37
FTCT1622	16	22	22.5	24	\$37
FTCT1624	16	24	24.2	24	\$37
FTCT1818	18	18	16.2	26	\$42
FTCT1820	18	20	22.5	24	\$42
FTCT1822	18	22	24.3	24	\$42
FTCT1824	18	24	26.0	24	\$42





END CAP

END ON				
Part Number	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
PECT3	3	0.3	26	\$15
PECT4	4	0.4	26	\$15
PECT5	5	0.6	26	\$16
PECT6	6	0.7	26	\$17
PECT8	8	1.0	26	\$19
PECT10	10	1.4	26	\$21
PECT12	12	1.8	26	\$23
ECT14	14	2.6	26	\$31
ECT16	16	3.1	26	\$36
ECT18	18	3.7	26	\$41
ECT20	20	5.5	24	\$44
ECT22	22	6.4	24	\$47
ECT24	24	7.3	24	\$52



DRIVES & STARTERS VARIABLE SPEED

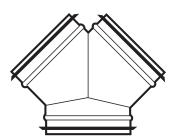
DIFFUSERS / TRANSITIONS REGISTERS / GRILLES /

FLEXIBLE DUCT / SNAPLOCK & ACC.

VIBRATION ISOLATION

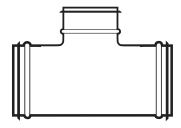
STEAM SPECIALTIES

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



Y-BRANCH

Part Number	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
YT3	3	1.6	26	\$48
YT4	4	2.4	26	\$53
YT5	5	3.3	26	\$59
YT6	6	4.4	26	\$64
YT8	8	6.8	26	\$76
YT10	10	9.8	26	\$92
YT12	12	13.3	26	\$109
YT14	14	17.4	26	\$123
YT16	16	22.0	26	\$142
YT18	18	27.1	26	\$164
YT20	20	41.7	24	\$203
YT22	22	49.5	24	\$228
YT24	24	58.0	24	\$264



TFF

ILL				
Part Number	Duct Diameter	Wt. Each (lbs.)	Ga.	Price Each
TT3	3x3x3	1.4	26	\$32
TT4	4x4x4	2	26	\$33
TT5	5x5x5	3	26	\$37
TT6	6x6x6	3.2	26	\$38
TT8	8x8x8	4.5	26	\$44
TT10	10x10x10	6	26	\$50
TT12	12x12x12	7.8	26	\$57
TT14	14x14x14	9.6	26	\$65
TT16	16x16x16	11.7	26	\$73
TT18	18x18x18	13.9	26	\$83
TT20	20x20x20	20.8	24	\$115
TT22	22x22x22	24.1	24	\$125
TT24	24x24x24	27.6	24	\$135

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	\$7	
HF02-10	Loop Hanger Size 2 100 lbs	10 ft	\$8	
HF02-15	Loop Hanger Size 2 100 lbs	15 ft	\$10	
HF02-20	Loop Hanger Size 2 100 lbs	20 ft	\$11	
HF02-30	Loop Hanger Size 2 100 lbs	30 ft	\$14	
HF03-5	Loop Hanger Size 3 200 lbs	5 ft	\$9	
HF03-10	Loop Hanger Size 3 200 lbs	10 ft	\$10	
HF03-15	Loop Hanger Size 3 200 lbs	15 ft	\$12	
HF03-20	Loop Hanger Size 3 200 lbs	20 ft	\$14	
HF03-30	Loop Hanger Size 3 200 lbs	30 ft	\$17	
XP02-10	Loop Hanger Size 2 100 lbs with Button	10 ft	\$10	
XP02-20	Loop Hanger Size 2 100 lbs with Button	20 ft	\$12	
DT2-LG-10	Duct Trapeze Loop Hanger 100 lbs	10 ft	\$10	
DT2-LG-15	Duct Trapeze Loop Hanger 100 lbs	15 ft	\$11	
DT2-LG-20	Duct Trapeze Loop Hanger 100 lbs	20 ft	\$12	
DT2-LG-30	Duct Trapeze Loop Hanger 100 lbs	30 ft	\$15	
HF-SG-3/8-NO 2	Stud Hanger Size 2 100 lbs	10 ft	\$9	
HF-SG-3/8-NO 2	Stud Hanger Size 2 100 lbs	15 ft	\$10	
HF-SG-3/8-NO 3	Stud Hanger Size 3 200 lbs	10 ft	\$11	
HF-SG-3/8-NO 3	Stud Hanger Size 3 200 lbs	15 ft	\$13	
HF-SG-3/8-NO 3	Stud Hanger Size 3 200 lbs	30 ft	\$18	
Cutter	Wire Rope Cutter		\$29	
TOOL-4-5BX	Tensioning Tool		\$97	
* Cable Kits Sold 10 Per Bag (Minimum Purchase 1 Bag)				

^{*} Cable Kits Sold 10 Per Bag (Minimum Purchase 1 Bag)

FANS / DAMPERS / CURBS

> VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

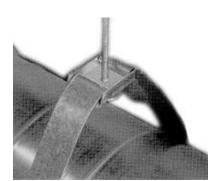
SPIRAL HANGING SYSTEMS AND BLAST GATES

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	\$3
CL18	Cable Lock	WC4	\$5
CL23	Cable Lock	WC6	\$8
KV12	Bracket Assembly with CL12	WC3	\$6
WC3	3/32" Wire Rope 500 Ft. Roll	150 lb	\$174
WC4	1/8" Wire Rope 500 Ft. Roll	250 lb	\$195
WC6	3/16" Wire Rope 250 Ft. Roll	640 lb	\$232



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	\$42
Bracket	Accepts 5/16" - 3/8" Rod	660 lb	\$2



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	\$13
C1042	4" Blast Gate	\$14
C1062	6" Blast Gate	\$21
C1082	8" Blast Gate	\$35
C10102	10" Blast Gate	\$83
C10122	12" Blast Gate	\$89

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.



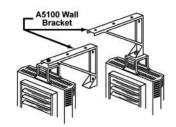
Model	KW	BTUH (000)	Heater Voltage	Control ⁽¹⁾ Voltage	Phase (2)	Price Each
HF2B5103	2.5/3.3	8.5/11.2	208/240	208/240	3/1	\$604
HF2B5105	3.7/5.0	12.8/17.1	208/240	208/240	3/1	\$631
HF2B5107CA1	5.6/7.5	19.2/25.6	208/240	24	3/1	\$972
HF2B5110CA1	7.5/10.0	25.6/34.1	208/240	24	3/1	\$1071
G1G5103	3.3	11.2	277	277	1	\$604
G1G5105	5.0	17.1	277	277	1	\$631
P3P5103CA1	3.3	11.2	480	24	3	\$770
P3P5105CA1	5.0	17.1	480	24	3	\$835
P3P5107CA1	7.5	25.6	480	24	3	\$1049
P3P5110CA1	10.0	34.1	480	24	3	\$1111
P3P5115CA1	15.0	51.2	480	24	3	\$1793
P3P5120CA1	20.0	68.3	480	24	3	\$2367

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	Model Description For Use With:		Price Each
A5105	Horizontal Mounting Bracket	3.3 & 5.0 KW Heaters	\$92
A5120	Horizontal Mounting Bracket	7.5 - 20 KW Heaters	\$105
V5105	Vertical Mounting Bracket	3.3 - 5.0 KW Heaters	\$177
V5120	Vertical Mounting Bracket	7.5 - 20 KW Heaters	\$217
T5100	Field installed internal t'stat	for all except HF2B5103, 05 3 ph	\$110
T5102	Field installed internal t'stat	HF2B5103,05 3 ph	\$148
TW1512	HD line voltage wall t'stat	3 phase heaters	\$173
S2022H10AB	Line voltage wall t'stat	1 phase heaters	\$31
RK120EAA	Low voltage wall t'stat	24V control units	\$17
DCS202/5100	Power Disconnect Switch	2 Pole; 20 AMP; 120-277 VAC	\$121
DCS403/5100	Power Disconnect Switch	3 Pole; 40 AMP; 120-600 VAC	\$290
DCS603/5100	Power Disconnect Switch	3 Pole; 60 AMP; 600 VAC	\$397





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	\$551
HF3323	1.125/1.5	3840/5120	208/240/1	\$560
HF3324	1.5/2.0	5120/6284	208/240/1	\$560
HF3325	2.25/3.0	7763/10,350	208/240/1	\$560
HF3326	3.0/4.0	10,350/13,800	208/240/1	\$560
G3324	2.0	6284	277/1	\$560
G3325	3.0	10,350	277/1	\$560
G3326	4.0	13,800	277/1	\$560

ACCESSORIES

Model	Description	Price Each
3320EX33	Surface Mounting Sleeve	\$80
3310	Rough-In Box For Advance Installation	\$88

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 ¹ / ₂ x 19 ¹ / ₂ x ³ / ₄	12	\$4
16 x 20 x 2	15 ¹ / ₂ x 19 ¹ / ₂ x 1 ³ / ₄	12	\$4
20 x 20 x 2	19 ¹ / ₂ x 19 ¹ / ₂ x 1 ³ / ₄	12	\$5
16 x 25 x 2	16 ¹ / ₂ x 24 ¹ / ₂ x 1 ³ / ₄	12	\$5
20 x 25 x 2	19 ¹ / ₂ x 24 ¹ / ₂ x 1 ³ / ₄	12	\$5
12 x 24 x 2	11 ³ / ₈ x 23 ³ / ₈ x 1 ³ / ₄	12	\$4
24 x 24 x 2	23 ³ / ₈ x 23 ³ / ₈ x 1 ³ / ₄	12	\$6
12 x 24 x 4	11 ³ / ₈ x 23 ³ / ₈ x 3 ³ / ₄	12	\$6
24 x 24 x 4	23 ³ / ₈ x 23 ³ / ₈ x 3 ³ / ₄	6	\$11



DIMENSIONAL DATA AND PRICES

Model	Nominal Size	Actual Size	Filters Per Case	Price Each
95PH	12 x 24 x 12	11 ³ / ₈ x 23 ³ / ₈ x 11 ¹ / ₂	2	\$61
95PH	24 x 24 x 12	23 ³ / ₈ x 23 ³ / ₈ x 11 ¹ / ₂	1	\$88

FILTER MEDIA ROLLS

Nominal Size	Description	Price Each
24 X 90 X ³ / ₄	Merv 7 Filter Media Roll	\$77
36 X 90 X ³ / ₄	Merv 7 Filter Media Roll	\$112
60 X 90 X 1	Merv 8 Filter Media Roll	\$207

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	\$26
24 x 24	\$28

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	\$1
WF611	Up or Down	4" deep filter	4	\$2
PFC-2	Up	2" deep 30% as a prefilter to a cartridge (no header)	4	\$1
PFC-4	Up	4" deep 30% as a prefilter to a cartridge (no header)	4	\$1
PCA-2	Up or Down	2" deep filter	4	\$2
PCA-3	Up or Down	2" deep 30% as a prefilter to a cartridge	4	\$2
PCA-4	Up or Down	4" deep filter	4	\$2
PCA-5	Up or Down	4" deep 30% as a prefilter to a cartridge	4	\$2
12611	Up or Down	12" cartridge without prefilter	4	\$5

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"	\$95
2002	0 - 2.0"	\$95
2006	0 - 6.0"	\$95
A-605	N/A	\$58

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	Manometer No. 25 Range .05 - 3"	
A-310A	3-way vent valve (2 per gauge)	\$27
A-101	Red Gauge Oil, .826 sp. gr.	\$12

FANS / DAMPERS / CURBS

> Variable speed Drives & Starters

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

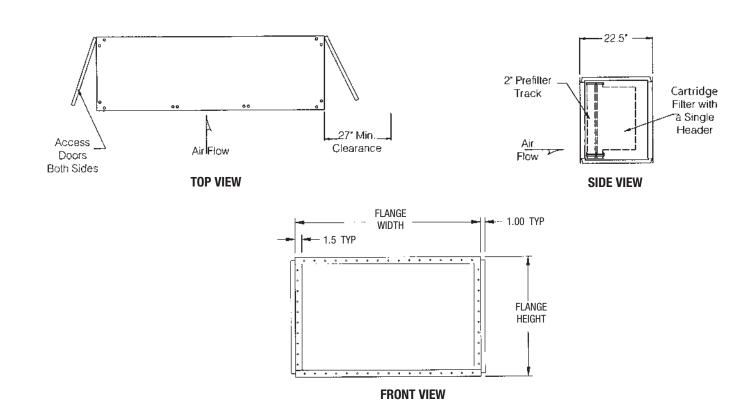
SIDE ACCESS FILTER HOUSINGS



- · 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

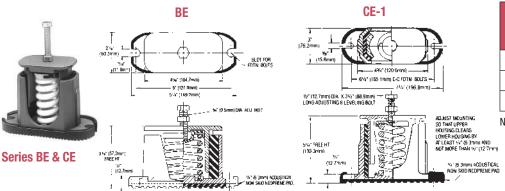
Model	Actual Size	Prefilters Required Per Unit	Cartridge Filters Required Per Unit	Price Each	S T O C K
1 x 1	23 ³ /8"W x 27 ¹ / ₄ "H	(1) - 24 x 24 x 2	(1) - 24 x 24 x 12	\$803	G
1 x 2	46 ³ / ₄ "W x 27 ¹ / ₄ "H	(2) - 24 x 24 x 2	(2) - 24 x 24 x 12	\$1100	G



VIBRATION MOUNTINGS

STEEL SPRING MOUNTINGS

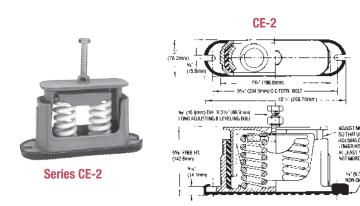
Types BE & CE-1 are single spring mountings including enclosed cast housings and external adjustment bolt



Туре	Spring Size	Price Each
BE	C50-C370	\$60
CE-1	D120-D510	\$83
CE-1	D675-D1360	\$91

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

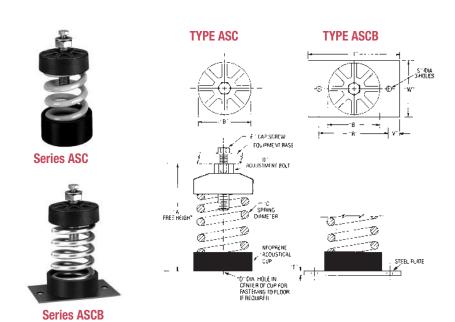
Type CE-2 mounts include two springs and maximum load is two times values in chart for a single spring



Туре	Spring Size	Price Each
CE-2	D510	\$128
CE-2	D675-D1360	\$144

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	\$40
ASCB	C50-C370	\$46

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

ASC & ASCB Dimensions: in. (mm)

the control of the co							
Α	В	C	D	E			
4 ¹ / ₂ " (114.3)	2 ³ /8" (60.3)	2" (50.8)	⁵ /8" (16.0)	³ / ₈ " (9.5)			
L	W	Т	R	s	V		
4 ¹ / ₂ " (114.3)	2 ¹ / ₂ " (63.5)	¹ / ₈ " (3.18)	3 ¹ / ₂ " (89.0)	⁷ / ₁₆ " (11.2)	¹ / ₂ " (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.

B F Max Rod (Not provided) Steel Washer Resilient Washer Resilient Washer Resilient washer

HS Dimensions: in. (mm)

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

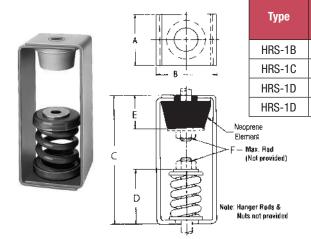
Туре	Spring Size	Price Each
HS-1B	B20-B85	\$20
HS-1C	C50-C370	\$30
HS-1D	D120-D510	\$39
HS-1D	D675-D1360	\$47

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	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.



HRS Dimensions: in. (mm)

Spring Size

B20-B85

C50-C370

D120-D510

D675-D1360

Price

Each

\$28

\$44

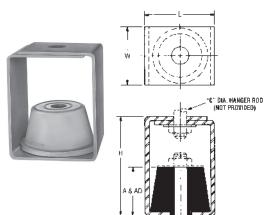
\$66

\$74

TYPE & SIZE	A	В	C	D	E	F
HRS-1B-B20-B85	21/4"	23/4"	5 ¹ /4"	2 ⁷ /8"	¹⁵ /16"	3/8"
11110-10-020-000	(75.0)	(69.8)	(133.3)	(73.0)	(23.8)	(9.5)
HRS-1C-C50-C370	3"	31/4"	7"	3"	1 ¹¹ /16"	5/8"
11h3-16-630-6370	(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"
11h3-1D-D120-D1300	(76.2)	(95.2)	(254.0)	(111.0)	(53.9)	(19.0)

VIBRATION MOUNTINGS

NEOPRENE-IN-SHEAR HANGERS

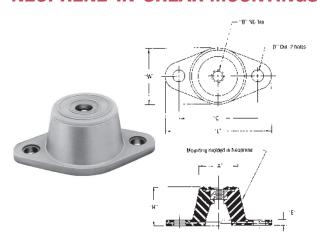


Туре	Max Load Blue	Max Load Black	Max Load Red	Max Load Green	Price Each
HR-A	35 lbs	45 lbs	75 lbs	120 lbs	\$11
HR-B	HR-B —		240 lbs	380 lbs	\$32

HR Dimensions: in. (mm)

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

NEOPRENE-IN-SHEAR MOUNTINGS



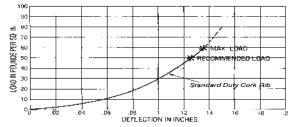
Туре	Max Load Blue	Max Load Black	Max Load Red	Max Load Green	Max Load Gray	Price Each
R-1	35 lbs	45 lbs	70 lbs	120 lbs		\$18
R-2	135 lbs	170 lbs	240 lbs	380 lbs	_	\$19
R-3	_	250 lbs	525 lbs	750 lbs	1100 lbs	\$45

R Dimensions: in. (mm)

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

ELASTOMERIC & SHEAR-FLEX PADS





ELASTOMERIC PADS				
Size	Price Each			
18" x 18" x 1"	\$159			
6" x 6" x 1"	\$18			
4" x 4" x 1"	\$8			
2" x 2" x 1"	\$2			



EL D'ADRICA LINCOLUNC I	50 (10 m)	D4 06	MAX LOAD
	"J"	DEFECTION IN INCHES	- os i

Size	Price Each
18" x 18" x 3/8"	\$96

SHEAR-FLEX PADS

FANS / DAMPERS / CURBS

VARIABLE SPEED DRIVES & STARTERS

REGISTERS / GRILLES / DIFFUSERS / TRANSITIONS

SPIRAX SARCO PRESSURE REDUCING VALVES

25 SERIES PILOT & TEMPERATURE OPERATED REGULATORS

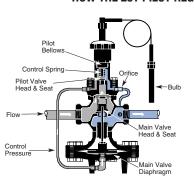
Efficient, reliable and accurate, no other regulator contains as many quality features as the 25 Series. Whether it is used for regulating temperatures, pressure, or both, it is responsive and exact. Designed with the user in mind, it is more versatile than any regulator available to the industry.



PRESSURE PILOT

Pressure Pilot Type	Downstream Pressure	Price Each
25-P Yellow	3-30 psig	\$592
25-P Blue	20-100 psig	\$592
25-P Red	80-250 psig	\$592

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

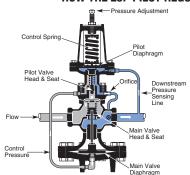
Main Valve Type	Size	Price Each
	1/2"	\$880
	3/4"	\$957
25	1"	\$1077
25	1 1/4"	\$1316
	1 1/2"	\$1624
	2"	\$2093

TEMPERATURE PILOT



Temperature Pilot Type	Temperature Range	Price Each
	100-160°F	\$1411
T2	120-180°F	\$1411
	160-220°F	\$1411

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.

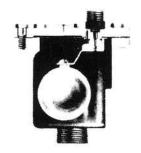
HOW TO ORDER

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"	\$225



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

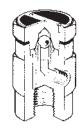
Size	Price Each	Size	Price Each
3/8"	\$46	1 1/4"	\$63
1/2"	\$39	1 1/2"	\$74
3/4"	\$41	2"	\$117
1"	\$48		



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"	\$201
VS-204	1/2"	\$306



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"	\$172
VB21-Stainless	1/2"	\$343

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.

> SPIRAL PIPE ACCESSORIES

ELECTRIC HEATERS / FILTERS & ACCESSORIES

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"	\$250
1/2"	\$370
3/4"	\$474
1"	\$639



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"	\$254	FT-30	3/4"	\$316	FT-75	1"	\$486
FT-15	1"	\$314	FT-30	1"	\$344	FT-75	1 1/4"	\$743
FT-15	1 1/4"	\$383	FT-30	1 1/2"	\$656	FT-75	1 1/2"	\$752
FT-15	1 1/2"	\$540	FT-30	2"	\$1141	FT-125	3/4"	\$435
FT-15	2"	\$1022	FT-75	3/4"	\$431	FT-125	1"	\$486



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"	\$177
B2-125	3/4"	\$371



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"	\$371

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.

8/20

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 services.

- 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 waive 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 a 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' fees, 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 ser
- 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. 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 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.

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Flexible Duct



Warehouse Stock Equipment Orders
Call 800-334-0254 or 336-252-1710/1723
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