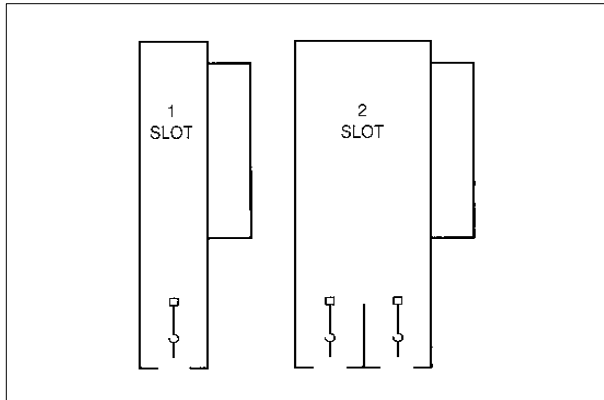


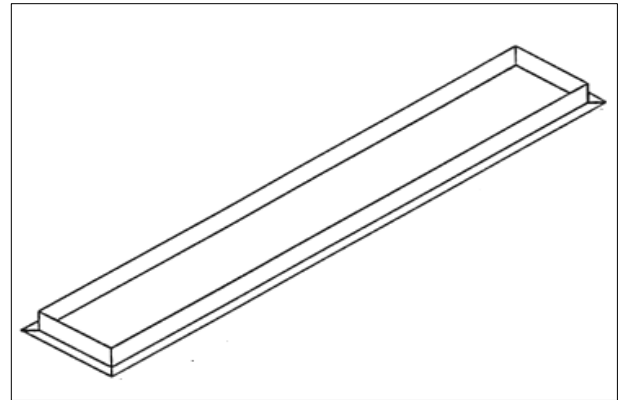
PLENUM SLOT DIFFUSER

MODEL : SD

- * Slot diffusers with integral TB plenum
- * Surface mount frame available
- * Quiet and efficient
- * Adjustable air pattern
- * 1 1/2" slot
- * Non-insulated
- * Flat black finished face



** Height = inlet size + 3"



Plaster frame out - 1 Slot = nominal length + 1/4" x 3 1/2"
 - 2 Slot = nominal length + 1/4" x 6 1/2"

MODEL	SLOT	LENGTH	WIDTH	INLET	CFM RANGE	PRICE	ADD FOR S/M FRAME
SD124	1	23 3/4	3 1/4	8"	0 - 100		
SD136	1	35 3/4	3 1/4	8"	0 - 120		
SD148	1	47 3/4	3 1/4	8"	0 - 200		
SD160	1	59 3/4	3 1/4	10"	0 - 260		
SD224	2	23 3/4	6 1/4	8"	0 - 180		
SD236	2	35 3/4	6 1/4	10"	0 - 210		
SD248	2	47 3/4	6 1/4	12"	0 - 360		
SD260	2	59 3/4	6 1/4	12"	0 - 430		

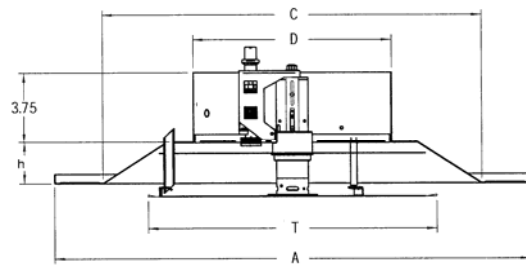
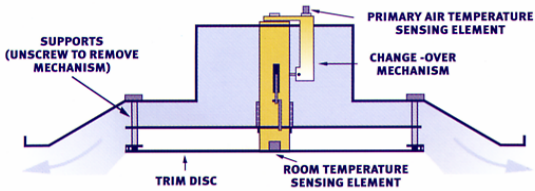
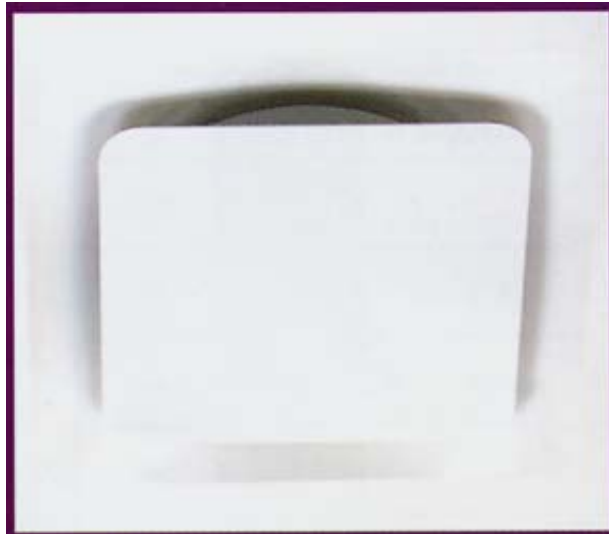
VAV DIFFUSER



CREATING THE RIGHT ATMOSPHERE

MODEL : VSD

- * Thermally powered
- * Self contained
- * No external power source required
- * Heating / cooling change over
- * Adjustable from 68 to 75 degrees F
- * 10 year warranty



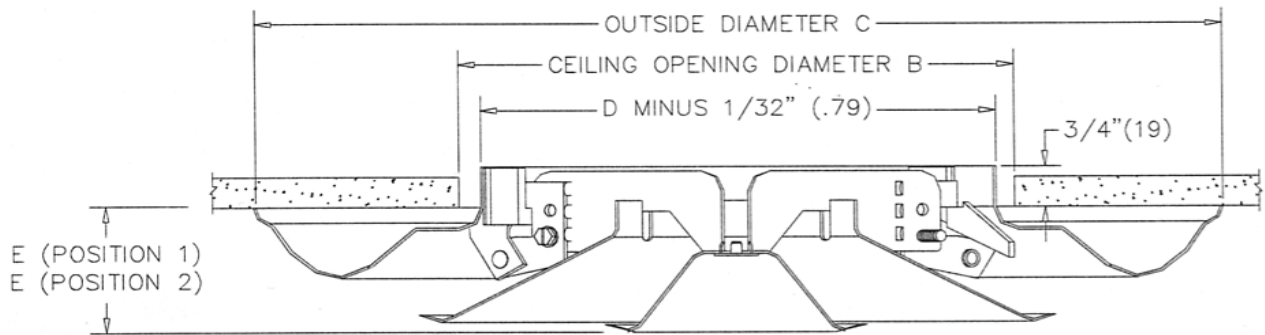
DIMENSIONS				
NECK SIZE (D)	A	T	C	CONE HEIGHT (h)
8" , 10" , 12"	24 X 24	14"	19"	2.2"

MODEL	PANEL	ROUND NECK	DIFFUSER PRICE	SURFACE MOUNT FRAME
VSD 08	24 X 24	8"		
VSD 10	24 X 24	10"		
VSD 12	24 X 24	12"		

ROUND CEILING DIFFUSER

MODEL : RM1

- * Spun steel construction
- * Three concentric cones
- * Two horizontal discharge patterns
- * Removable inner core
- * Designed for exposed duct or hard ceilings
- * White electrocoat finish



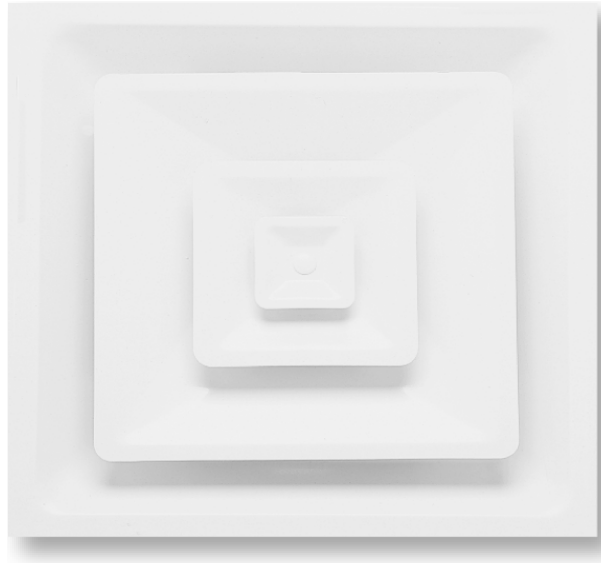
DIMENSIONAL DATA (inches)				DIFFUSER PRICE	PRD10 RADIAL DAMPER
NECK SIZE	C	E1	E2		
6"	11 1/8	1 1/8	1 3/4		
8"	14 3/4	1 1/2	2 1/8		
10"	18 1/4	2 1/8	2 7/8		
12"	22	2 3/8	3 1/8		
14"	26	2 5/8	3 3/8		
16"	29	3 1/4	4		
18"	32 1/2	3 7/8	4 3/4		

Ceiling Opening B = Duct Diameter + 1/2"

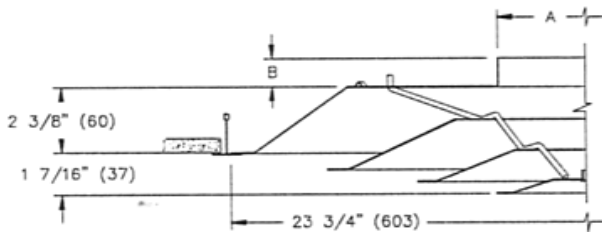
SQUARE CEILING DIFFUSER

MODEL : 1400

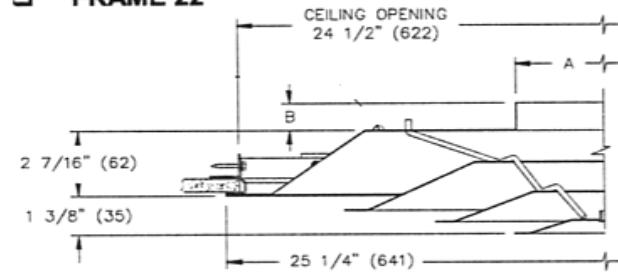
- * Steel construction
- * High performance
- * Square face
- * Round neck
- * Louvered 4-cone diffuser
- * 360 degree diffusion
- * White electrocoat finish



□ FRAME 23



□ FRAME 22

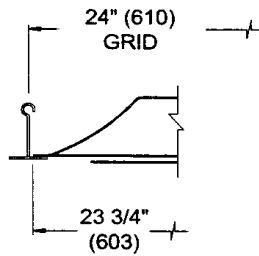
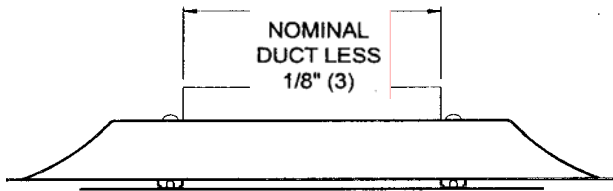


1400	PANEL	ROUND NECK	DIFFUSER PRICE	SURFACE MOUNT FRAME	RP12 DAMPER	PRN100 DAMPER	PRD10 DAMPER
2406	24 X 24	6"					
2408	24 X 24	8"					
2410	24 X 24	10"					
2412	24 X 24	12"					
2414	24 X 24	14"					
2415	24 X 24	15"					
2006	20 x 20	6"					
2008	20 x 20	8"					
2010	20 x 20	10"					
1206	12 X 12	6"					
1208	12 X 12	8"					

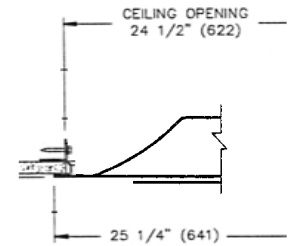
ARCHITECTURAL CEILING DIFFUSER

MODEL : PLQ

- * Steel construction
- * High performance
- * Square plaque face
- * Round neck
- * Removable inner core
- * 360 degree diffusion
- * White electrocoat finish



□ FRAME 23



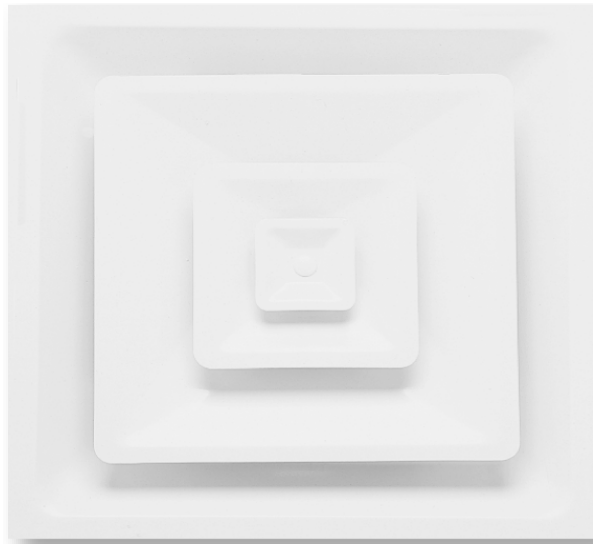
□ FRAME 22

PLQ	PANEL	ROUND NECK	DIFFUSER PRICE	SURFACE MOUNT FRAME	RP12 DAMPER	PRN100 DAMPER	PRD10 DAMPER
2406	24 X 24	6"					
2408	24 X 24	8"					
2410	24 X 24	10"					
2412	24 X 24	12"					
2414	24 X 24	14"					
2415	24 X 24	15"					
1206	12 X 12	6"					
1208	12 X 12	8"					

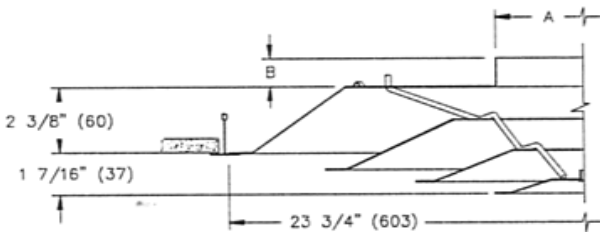
ALUMINUM SQUARE CEILING DIFFUSER

MODEL : 51400

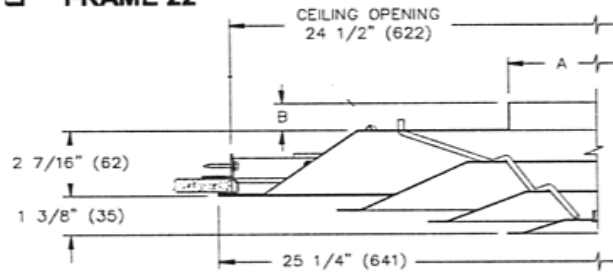
- * Aluminum construction
- * High performance
- * Square face
- * Round neck
- * Louvered 4-cone diffuser
- * 360 degree diffusion
- * White electrocoat finish



□ FRAME 23



□ FRAME 22



51400	PANEL	ROUND NECK	DIFFUSER PRICE	SURFACE MOUNT FRAME	RP12 DAMPER	PRN100 DAMPER	PRD10 DAMPER
2406	24 X 24	6"					
2408	24 X 24	8"					
2410	24 X 24	10"					
2412	24 X 24	12"					
2414	24 X 24	14"					
2415	24 X 24	15"					

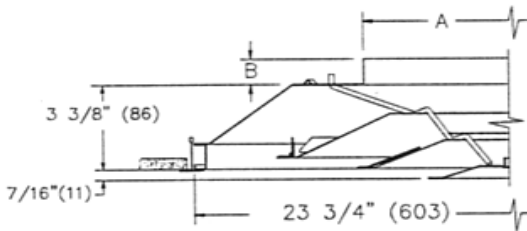
ADJUSTABLE SQUARE CEILING DIFFUSER

MODEL : 1400A

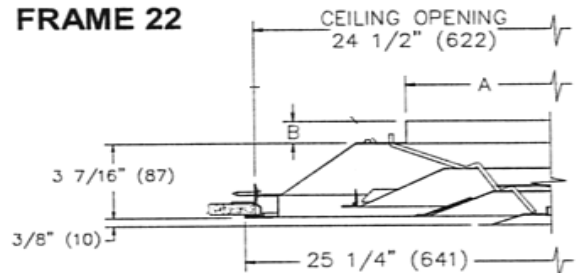
- * Steel construction
- * High performance
- * Square face
- * Round neck
- * Adjustable core - louvered face
- * Adjustable vertical to horizontal pattern
- * White electrocoat finish



□ FRAME 23



□ FRAME 22

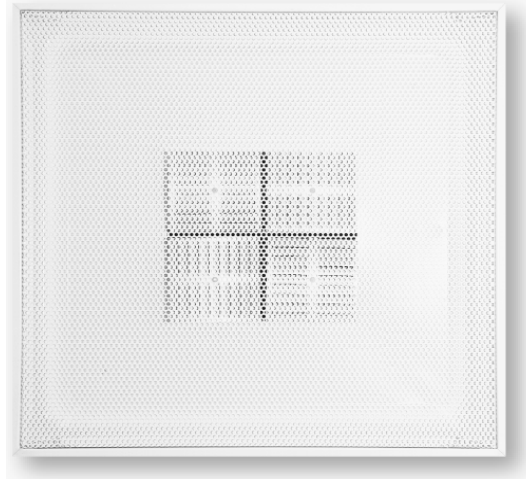


1400A	PANEL	ROUND NECK	DIFFUSER PRICE	SURFACE MOUNT FRAME	RP12 DAMPER	PRN100 DAMPER	PRD10 DAMPER
2406	24 X 24	6"					
2408	24 X 24	8"					
2410	24 X 24	10"					
2412	24 X 24	12"					
2414	24 X 24	14"					
2415	24 X 24	15"					

PERFORATED CEILING DIFFUSER

MODEL : 6600

- * **Steel construction**
- * **Adjustable discharge pattern**
- * **1, 2, 3, & 4 way pattern**
- * **Flush face**
- * **Round neck**
- * **Removable face with spring latches**
- * **White electrocoat finish**

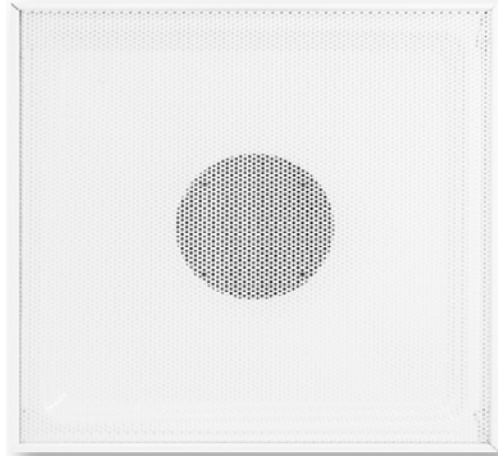


MODEL	PANEL	ROUND NECK	DIFFUSER PRICE	SURFACE MOUNT FRAME
2406 6600	24 X 24	6"		
2408 6600	24 X 24	8"		
2410 6600	24 X 24	10"		
2412 6600	24 X 24	12"		
2414 6600	24 X 24	14"		
2006 6600	20 X 20	6"		
2008 6600	20 X 20	8"		
2010 6600	20 X 20	10"		
2012 6600	20 X 20	12"		
2014 6600	20 X 20	14"		
1206 6600	12 X 12	6"		
1208 6600	12 X 12	8"		

PERFORATED CEILING RETURNS

MODELS : 6690 / 6490 / S80P / 6790

- * Steel construction
- * Lay-in frame / Surface mount / Panel only
- * Flush face
- * Round & square neck (6690 / 6490)
- * Removable face (6690 / 6490)
- * OBD available (S80P)
- * White electrocoat finish

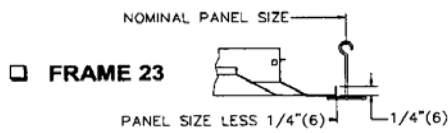
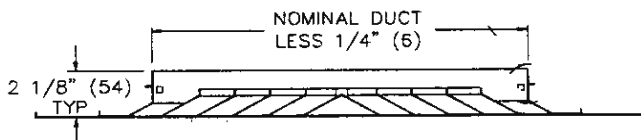
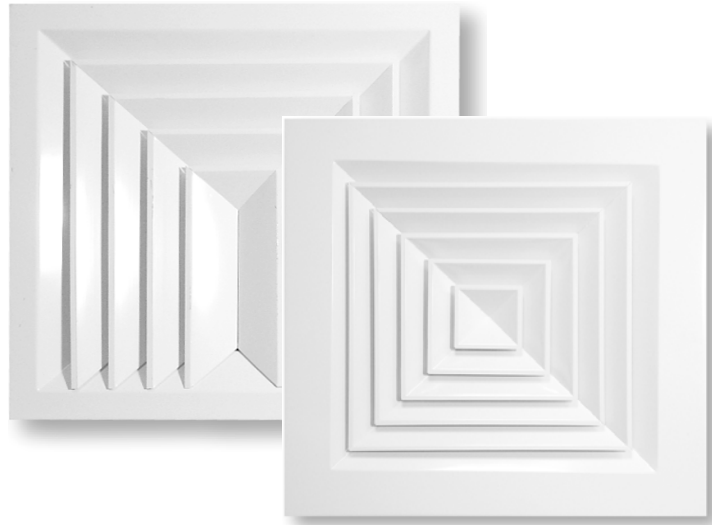


MODEL	FRAME	PANEL	NECK SIZE	PRICE	SURFACE MOUNT FRAME
6490	LAY IN	24 X 24	22 X 22		
6490	LAY IN	24 X 12	22 X 10		
6490	LAY IN	12 X 12	10 X 10		
6490	LAY IN	48 X 24	46 X 22		
6690	LAY IN	12 X 12	6"		
6690	LAY IN	12 X 12	8"		
6690	LAY IN	24 X 24	6"		
6690	LAY IN	24 X 24	8"		
6690	LAY IN	24 X 24	10"		
6690	LAY IN	24 X 24	12"		
6690	LAY IN	24 X 24	14"		
6690	LAY IN	24 X 24	16"		
S80P	S / M	8 X 8	6 X 6		
S80P	S / M	10 X 10	8 X 8		
S80P	S / M	12 X 12	10 X 10		
S80P	S / M	14 X 14	12 X 12		
S80P	S / M	26 X 14	24 X 12		
S80P	S / M	26 X 26	24 X 24		
6790	L/I PANEL	12 X 12	N/A		
6790	L/I PANEL	24 X 12	N/A		
6790	L/I PANEL	20 X 20	N/A		
6790	L/I PANEL	24 X 24	N/A		
6790	L/I PANEL	48 X 24	N/A		

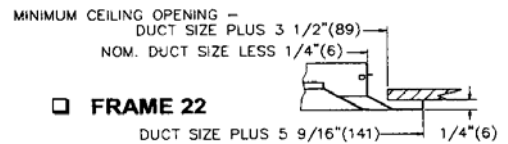
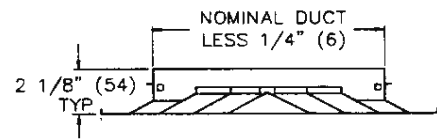
PATTERN CEILING DIFFUSER

MODEL : SH

- * Square neck
- * Fixed pattern
- * Removable core
- * 1,2,3,4 & Corner blow patterns
- * Square to round adapters available
- * OBD available
- * White electrocoat finish



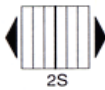
Lay-in



Surface mount



1S



2S



3A



4A



2G

SURFACE MOUNT STYLE				
NECK SIZE	DIFFUSER PRICE	OBD PRICE	SQUARE TO ROUND ADAPTER PRICE	SURFACE MOUNTING FRAME PRICE
6 X 6				
9 X 9				
12 X 12				
15 X 15				
18 X 18				

LAY IN TEE BAR STYLE				
NECK SIZE	DIFFUSER PRICE	OBD PRICE	SQUARE TO ROUND ADAPTER PRICE	SURFACE MOUNTING FRAME PRICE
6 X 6				
9 X 9				
12 X 12				
15 X 15				
18 X 18				

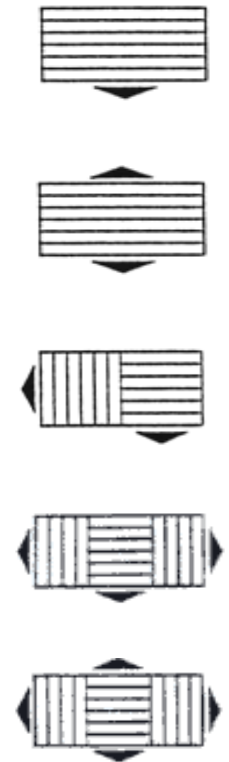
CURVED BLADE CEILING SUPPLY GRILLE

MODEL : 180

- * Steel construction
- * Adjustable curved blades
- * 1,2,3,4 & 2-way corner patterns
- * 1 1/4" Border with 1" Flange
- * White electrocoat finish



SIZE (W X H)	1-WAY / 2-WAY / 3-WAY / 4-WAY CORNER BLOW**	OBD ADD
6 X 6		
8 X 4		
8 X 6		
8 X 8		
10 X 6		
10 X 8		
10 X 10		
12 X 6		
12 X 8		
12 X 12		
14 X 6		
14 X 8		
14 X 14		
16 X 6		
16 X 8		
18 X 6		
18 X 8		

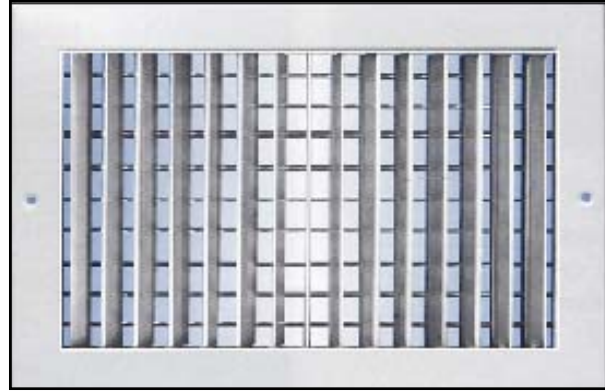


** Corner Blow in square sizes only

DOUBLE DEFLECTION SIDEWALL SUPPLY REGISTER

MODEL : 880V-OBD

- * Steel construction
- * Double deflection
- * Adjustable vertical front blades
- * Adjustable horizontal rear blades
- * Opposed blade damper
- * 1 1/4" Border with 1" flange
- * White electrocoat finish

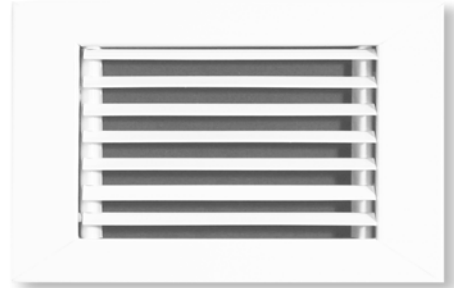


SIZE (W X H)	PRICE	SIZE (W X H)	PRICE	SIZE (W X H)	PRICE
6 X 4		30 X 6		24 X 10	
8 X 4		36 X 6		30 X 10	
10 X 4		8 X 8		36 X 10	
12 X 4		10 X 8		12 X 12	
14 X 4		12 X 8		18 X 12	
16 X 4		14 X 8		20 X 12	
18 X 4		16 X 8		24 X 12	
20 X 4		18 X 8		30 X 12	
24 X 4		20 X 8		36 X 12	
6 X 6		24 X 8		14 X 14	
8 X 6		30 X 8		18 X 14	
10 X 6		36 X 8		24 X 14	
12 X 6		10 X 10		30 X 14	
14 X 6		12 X 10		36 X 14	
16 X 6		14 X 10		16 X 16	
18 X 6		16 X 10		18 X 16	
20 X 6		18 X 10		24 X 16	
22 X 6		20 X 10		30 X 16	
24 X 6				36 X 16	

LOUVERED RETURN AIR GRILLE / REGISTER

MODEL : S80H / S80H-OBD

- * Steel construction
- * Horizontal fixed deflection vanes
- * Opposed blade damper (S80H-OBD only)
- * 1 1/4" Border with 1" flange
- * White electrocoat finish



SIZE (W X H)	S80H PRICE	S80H-OBD PRICE	SIZE (W X H)	S80H PRICE	S80H-OBD PRICE	SIZE (W X H)	S80H PRICE	S80H-OBD PRICE
6 X 4			10 X 10			16 X 16		
8 X 4			10 X 10****			18 X 16		
6 X 6			12 X 10			24 X 16		
8 X 6			14 X 10			30 X 16		
10 X 6			16 X 10			36 X 16		
12 X 6			18 X 10			18 X 18		
14 X 6			20 X 10			24 X 18		
16 X 6			22 X 10 *			30 X 18		
18 X 6			24 X 10			36 X 18		
20 X 6			30 X 10			20 X 20		
24 X 6			36 X 10			22 X 22 **		
30 X 6			12 X 12			46 X 22 ***		
36 X 6			14 X 12			12 X 24		
8 X 8			16 X 12			24 X 24		
10 X 8			18 X 12			30 X 24		
12 X 8			20 X 12			36 X 24		
14 X 8			24 X 12			48 X 24		
16 X 8			30 X 12			18 X 30		
18 X 8			36 X 12			24 X 30		
20 X 8			14 X 14			30 X 30		
24 X 8			16 X 14			18 X 36		
30 X 8			18 X 14			24 X 36		
36 X 8			24 X 14			36 X 36		
			30 X 14			24 X 48		
			36 X 14			48 X 30		
						48 X 36		

* 24 X 12 PANEL FOR LAY-IN
 ** 24 X 24 PANEL FOR LAY-IN

*** 48 X 24 PANEL FOR LAY-IN
 **** 12 X 12 PANEL FOR LAY-IN

EGGCRATE RETURN GRILLES

MODEL : EGC5 / ECC

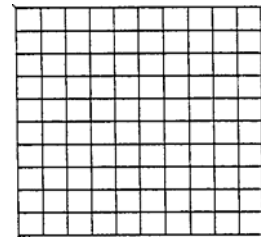
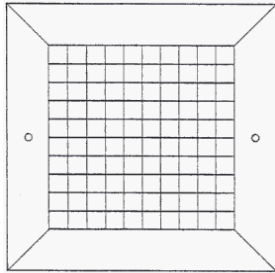
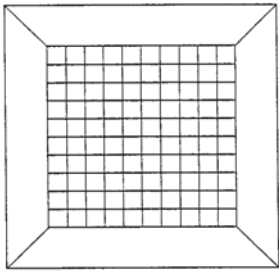
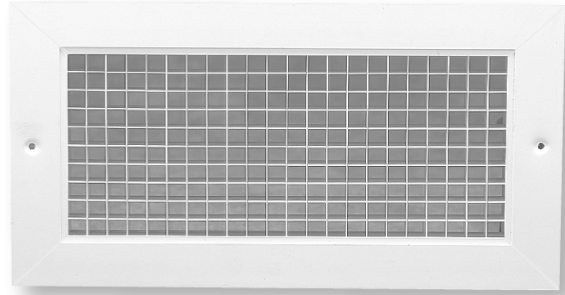
* 1/2 x 1/2 x 1/2 Core

* Available in lay-in / Surface mount / Core only

* Aluminum core / Steel frame (EGC5)

* Core only, available in white & mill finish

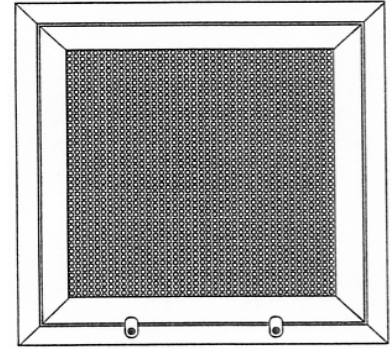
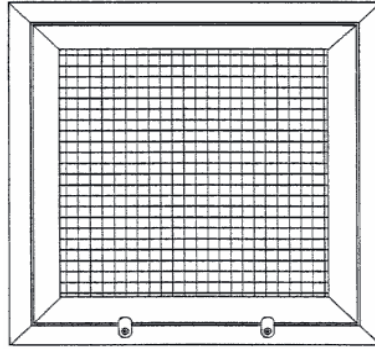
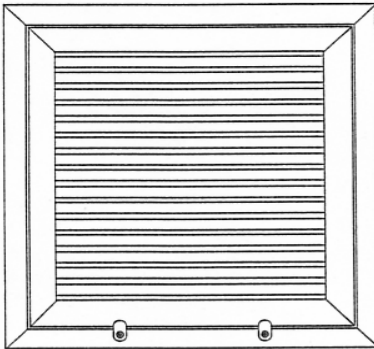
* Plastic core only, available in white



MODEL	FRAME	NECK	PANEL	FINISH	PRICE	NOTE
EGC5 L	L/N	10 X 10	12 X 12	WHITE		
EGC5 L	L/N	22 X 10	24 X 12	WHITE		
EGC5 L	L/N	22 X 22	24 X 24	WHITE		
EGC5 L	L/N	46 X 22	48 X 24	WHITE		
EGC5 S	S/M	6 X 6	8 X 8	WHITE		
EGC5 S	S/M	8 X 8	10 X 10	WHITE		
EGC5 S	S/M	10 X 10	12 X 12	WHITE		
EGC5 S	S/M	12 X 12	14 X 14	WHITE		
EGC5 S	S/M	24 X 12	26 X 14	WHITE		
EGC5 S	S/M	24 X 24	26 X 26	WHITE		
EGC5 S	S/M	36 X 24	38 X 26	WHITE		
EGC5 S	S/M	48 X 24	50 X 26	WHITE		
ECC-A	Core Only	24 X 24	24 X 24	MILL		ALUMINUM CORE
ECC-A	Core Only	48 X 24	48 X 24	MILL		ALUMINUM CORE
ECC-W	Core Only	24 X 24	24 X 24	WHITE		ALUMINUM CORE
ECC-W	Core Only	48 X 24	48 X 24	WHITE		ALUMINUM CORE
ECC-P	Core Only	24 X 12	24 X 12	WHITE		PLASTIC CORE
ECC-P	Core Only	24 X 24	24 X 24	WHITE		PLASTIC CORE
ECC-P	Core Only	48 X 24	48 X 24	WHITE		PLASTIC CORE

FILTER GRILLES

- * Aluminum / Steel construction
- * Horizontal blade / Eggcrate / Perforated face
- * Frames for 1" filters
- * Lay-in / Surface mount
- * Knurled knob / Latch fasteners
- * White finish



SIZE		MODEL	SURFACE MOUNT BAR FACE	LAY-IN MOUNT BAR FACE	LAY-IN EGGCRATE FACE	LAY-IN PERF. FACE	LAY-IN STAMP FACE
NECK	OVERALL PANEL						
12 X 12	Neck + 1 3/4	S580H FFS					
24 X 12	Neck + 1 3/4	S580H FFS					
24 X 24	Neck + 1 3/4	S580H FFS					
48 X 24	Neck + 1 3/4	S580H FFS					
20 X 8	24 X 12	S580H FFL					
20 X 20	24 X 24	S580H FFL					
44 X 20	48 X 24	S580H FFL					
20 X 20	24 X 24	EGC5 FFL					
44 X 20	48 X 24	EGC5 FFL					
20 X 20	24 X 24	S80P FFL					
44 X 20	48 X 24	S80P FFL					
20 X 20	24 X 24	TB-170 FFL					
44 X 20	48 X 24	TB-170 FFL					

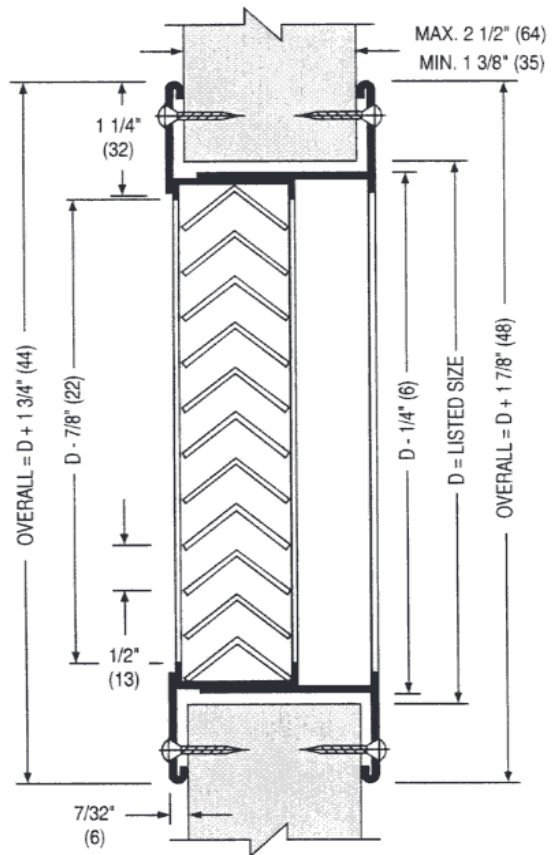
NON-VISION DOOR GRILLE

MODEL : 61DGD

- * Steel Construction
- * Double flange frame
- * 1 1/4" margin
- * Adjusts to door thickness 1 3/8" to 2"
- * Completely sight proof
- * 90 degree inverted "V" louver on 1/2" centers
- * Architecturally pleasing & unabtrusive
- * White powder coat finish



SIZE	PRICE
12 X 12	
18 X 12	
24 X 12	
16 X 16	
18 X 18	
24 X 18	
24 X 24	

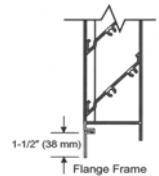


WALL LOUVERS & BRICK VENTS

Louver Model : XAD-2-45-GL

- * Aluminum construction
- * 2" deep drainable blades
- * 1 1/2" flange
- * Birdscreen

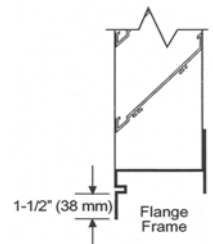
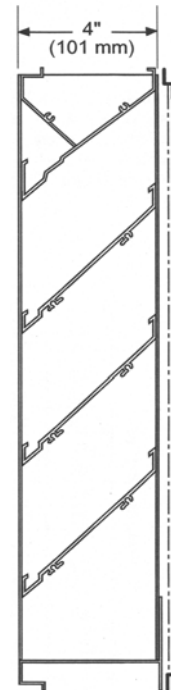
SIZE	PRICE
12 X 12	



Louver Model : XAD-4-45-GL

- * Aluminum construction
- * 4" deep drainable blades
- * 1 1/2" flange frame
- * Birdscreen

SIZE	PRICE
12 X 12	
18 X 12	
24 X 12	
16 X 16	
18 X 18	
24 X 18	
24 X 24	
36 X 24	



FREE AREA IN SQUARE FEET

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
12	0.33	0.55	0.77	0.98	1.20	1.42	1.64	1.86	2.08	2.30	2.51	2.73	2.95	3.17	3.39
18	0.60	1.00	1.40	1.79	2.19	2.59	2.99	3.39	3.79	4.19	4.58	4.98	5.38	5.78	6.18
24	0.76	1.27	1.77	2.28	2.79	3.29	3.80	4.31	4.81	5.32	5.83	6.33	6.84	7.35	7.85
30	1.03	1.71	2.40	3.08	3.77	4.45	5.14	5.83	6.51	7.20	7.88	8.57	9.25	9.94	10.62
36	1.30	2.16	3.03	3.89	4.76	5.62	6.49	7.36	8.22	9.09	9.95	10.82	11.68	12.55	13.41
42	1.46	2.43	3.41	4.38	5.35	6.33	7.30	8.27	9.25	10.22	11.19	12.17	13.14	14.11	15.09
48	1.73	2.88	4.03	5.18	6.34	7.49	8.64	9.79	10.94	12.10	13.25	14.40	15.55	16.70	17.86
54	2.00	3.33	4.66	5.99	7.33	8.66	9.99	11.32	12.65	13.99	15.32	16.65	17.98	19.31	20.65
60	2.16	3.60	5.04	6.48	7.92	9.36	10.80	12.24	13.68	15.12	16.56	18.00	19.44	20.88	22.32
66	2.43	4.05	5.67	7.28	8.90	10.52	12.14	13.76	15.38	17.00	18.61	20.23	21.85	23.47	25.09
72	2.70	4.50	6.30	8.09	9.89	11.69	13.49	15.29	17.09	18.89	20.68	22.48	24.28	26.08	27.88
78	2.86	4.77	6.67	8.58	10.49	12.39	14.30	16.21	18.11	20.02	21.93	23.83	25.74	27.65	29.55
84	3.13	5.21	7.30	9.38	11.47	13.55	15.64	17.73	19.81	21.90	23.98	26.07	28.15	30.24	32.32
90	3.40	5.66	7.93	10.19	12.46	14.72	16.99	19.26	21.52	23.79	26.05	28.32	30.58	32.85	35.11
96	3.56	5.93	8.31	10.68	13.05	15.43	17.80	20.17	22.55	24.92	27.29	29.67	32.04	34.41	36.79

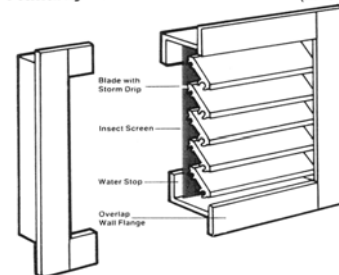
Channel Frame

Brick Vent Model : 157-FL

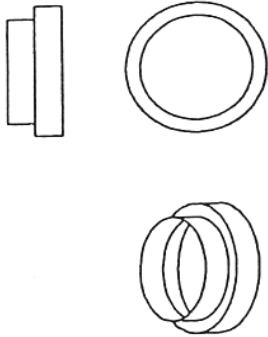
- * Aluminum construction
- * 1 1/2" deep
- * 1" flange
- * 15 5/8" x 7 3/4" (16 x 8 opening)

SIZE	PRICE
16 X 8	

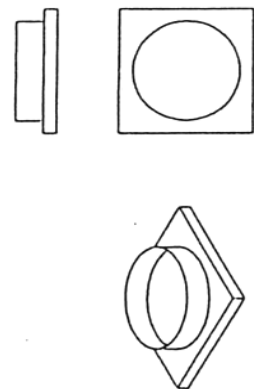
Primarily Renovation Installation (Model "FL")



SHEET METAL ADAPTERS



Round to Round Reducing (RRA)		
MODEL	SIZE	PRICE
6 RRA 5	6" TO 5"	
8 RRA 7	8" TO 7"	
8 RRA 6	8" TO 6"	
10 RRA 9	10" TO 9"	
10 RRA 8	10" TO 8"	
12 RRA 10	12" TO 10"	
12 RRA 8	12" TO 8"	
14 RRA 12	14" TO 12"	
15 RRA 14	15" TO 14"	
16 RRA 15	16" TO 15"	
16 RRA 14	16" TO 14"	



Square to Round Reducers (SRA)		
MODEL	SIZE	PRICE
6X6 SRA 6	6X6 TO 6"	
8X8 SRA 6	8X8 TO 6"	
8X8 SRA 8	8X8 TO 8"	
9X9 SRA 8	9X9 TO 8"	
9X9 SRA 9	9X9 TO 9"	
10X10 SRA 6	10X10 TO 6"	
10X10 SRA 8	10X10 TO 8"	
10X10 SRA 10	10X10 TO 10"	
12X12 SRA 6	12X12 TO 6"	
12X12 SRA 8	12X12 TO 8"	
12X12 SRA 10	12X12 TO 10"	
12X12 SRA 12	12X12 TO 12"	
15X15 SRA 12	15X15 TO 12"	
15X15 SRA 14	15X15 TO 14"	
15X15 SRA 15	15X15 TO 15"	
18X18 SRA 12	15X15 TO 15"	
18X18 SRA 14	18X18 TO 14"	
18X18 SRA 16	18X18 TO 16"	
18X18 SRA 18	18X18 TO 18"	
22X22 SRA 6	22X22 TO 6"	
22X22 SRA 8	22X22 TO 8"	
22X22 SRA 10	22X22 TO 10"	
22X22 SRA 12	22X22 TO 12"	
22X22 SRA 14	22X22 TO 14"	
22X22 SRA 16	22X22 TO 16"	
22X22 SRA 18	22X22 TO 18"	
22X10 SRA 6	22X10 TO 6"	
22X10 SRA 8	22X10 TO 8"	
22X10 SRA 10	22X10 TO 10"	
24X12 SRA 8	24X12 TO 8"	
24X12 SRA 10	24X12 TO 10"	
24X12 SRA 12	24X12 TO 12"	

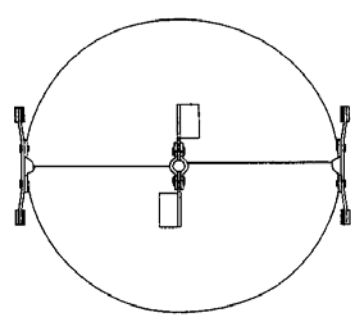
DIFFUSER ACCESSORIES - DAMPERS

BUTTERFLY DAMPER

Model : RP12

- * Steel construction
- * Adjustable from diffuser face
- * Mounts directly to diffuser collar

ROUND NECK SIZE	PRICE
6"	
8"	
10"	
12"	
14"	

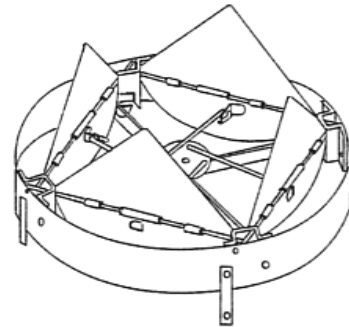


RADIAL OPPOSED BLADE DAMPER

Model : PRD10

- * Steel construction
- * Four gang operated damper blades
- * Duct mounts above diffuser

ROUND NECK SIZE	PRICE
6"	
8"	
10"	
12"	
14"	

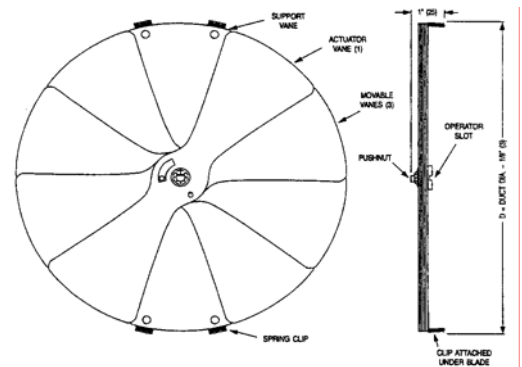


RADIAL SLIDING DAMPER

Model : PRN100

- * Steel construction
- * Cost efficient volume control
- * Mounts directly to diffuser collar

ROUND NECK SIZE	PRICE
6"	
8"	
10"	
12"	
14"	

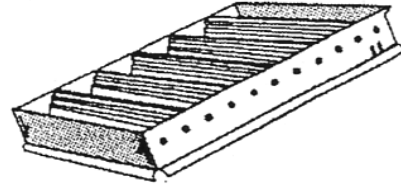


GRILLE ACCESSORIES

OPPOSED BLADE DAMPERS FOR DIFFUSERS & GRILLES

Model : OBD

- * Steel construction
- * Clips to mount to grille or diffuser
- * Gang operated opposed blade dampers



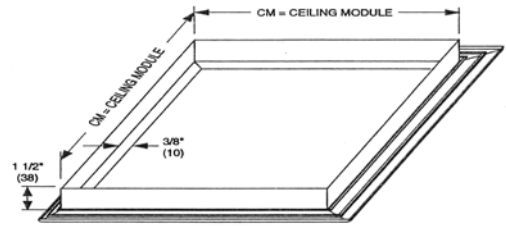
SIZE	PRICE
6 X 4	
8 X 4	
6 X 6	
8 X 6	
8 X 8	
9 X 9	
10 X 6	
10 X 8	
10 X 10	
12 X 6	
12 X 8	
12 X 12	
14 X 6	

SIZE	PRICE
14 X 8	
14 X 14	
15 X 15	
16 X 6	
16 X 8	
18 X 6	
18 X 8	
18 X 12	
18 X 18	
22 X 10	
22 X 22	
24 X 12	
24 X 24	

AUXILARY FRAMES

Models : 5HCF23

- * DFA for plaster and sheetrock ceilings
- * SP for spline ceiling applications



MODEL	SIZE	PRICE
2424 5HCF23	24 X 24	
2412 5HCF23	24 X 12	
1212 5HCF23	12 X 12	
24 X 24 SP	24 X 24	
12 X 12 SP	12 X 12	

TOUCH UP PAINT

TOUCH UP SPRAY PAINT	PRICE
Appliance White (can)	

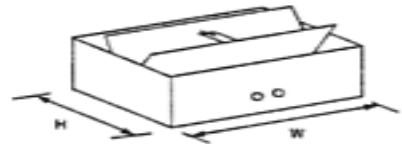
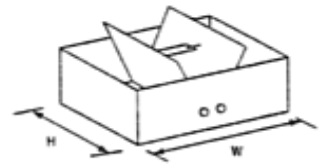
CEILING RADIATION DAMPERS

Models : CD-R/S Square & Rectangular / CD-RD Round

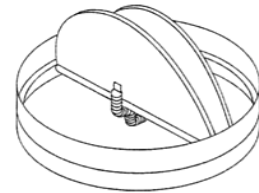
- * 22 gauge galvanized steel
- * UL Listed with fusible link (212 degree F standard)
- * Fire blanket accessory CK-2000-1 available for CD-RD and where required for CD-R/S



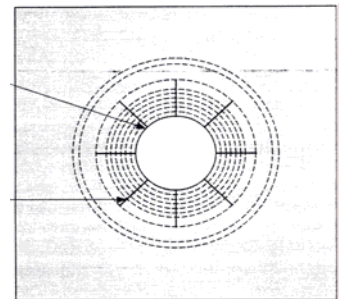
SQUARE NECK - CD-R/S	
SIZE	PRICE
6 X 6	
8 X 8	
9 X 9	
10 X 10	
12 X 12	
15 X 15	
18 X 18	
20 X 20	
22 X 10	
22 X 22	



RECTANGULAR NECK - CD-R/S	
8 X 4	
10 X 6	
12 X 6	
14 X 6	
16 X 6	
14 X 8	
16 X 8	



ROUND NECK - CD-RD	
6"	
7"	
8"	
9"	
10"	
12"	
14"	

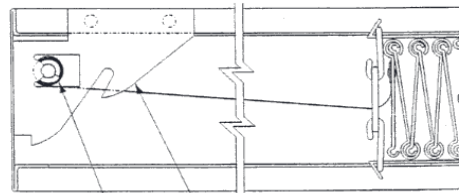
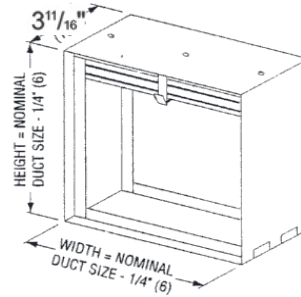


FIRE BLANKET - CK-2000-1	
24 X 24	

FIRE DAMPERS - RECTANGULAR NO SLEEVE

MODEL : FD-HA

- * Galvanized steel construction
- * Horizontal / vertical
- * 1 1/2 hour UL labeled
- * For use in 2 hour fire separations or less
- * Spring loaded damper blades
- * Type A - blades in airstream



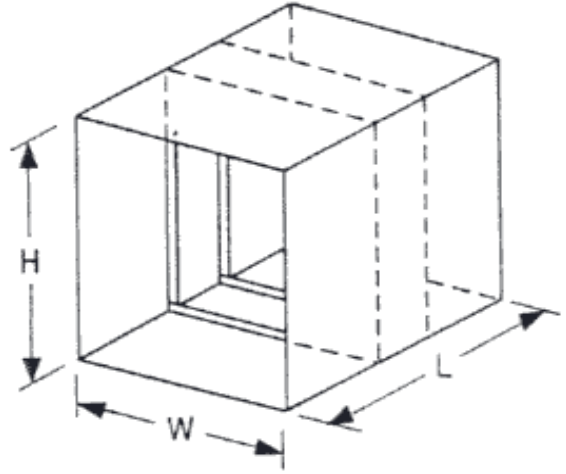
STAINLESS STEEL CLOSURE SPRING CURTAIN BLADE LOCKING RAMP

SIZE (W X H)	PRICE	SIZE (W X H)	PRICE	SIZE (W X H)	PRICE
6 X 6		30 X 8		14 X 14	
8 X 6		36 X 8		16 X 14	
10 X 6		10 X 10		18 X 14	
12 X 6		12 X 10		20 X 14	
14 X 6		14 X 10		24 X 14	
16 X 6		16 X 10		16 X 16	
18 X 6		18 X 10		18 X 16	
20 X 6		20 X 10		20 X 16	
24 X 6		22 X 10		24 X 16	
30 X 6		24 X 10		18 X 18	
36 X 6		30 X 10		20 X 18	
8 X 8		36 X 10		24 X 18	
10 X 8		12 X 12		30 X 18	
12 X 8		14 X 12		36 X 18	
14 X 8		16 X 12		20 X 20	
16 X 8		18 X 12		24 X 20	
18 X 8		20 X 12		22 X 22	
20 X 8		24 X 12		24 X 24	
24 X 8		30 X 12		30 X 24	
		36 X 12		36 X 24	

FIRE DAMPERS - RECTANGULAR WITH SLEEVE

MODEL : FD-HA-S12

- * Galvanized steel construction
- * 12" Integral sleeve with mounting angles
- * Horizontal / vertical
- * 1 1/2 hour UL labeled
- * For use in 2 hour fire separations or less
- * Spring loaded damper blades
- * Type A - blades in airstream

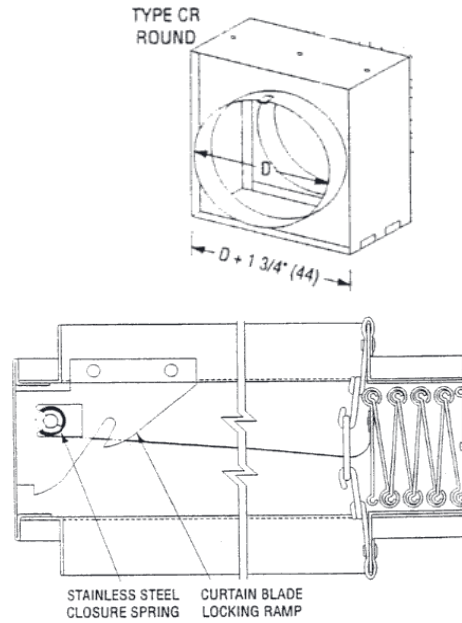


SIZE (W X H)	PRICE	SIZE (W X H)	PRICE	SIZE (W X H)	PRICE
6 X 6		30 X 8		14 X 14	
8 X 6		36 X 8		16 X 14	
10 X 6		10 X 10		18 X 14	
12 X 6		12 X 10		20 X 14	
14 X 6		14 X 10		24 X 14	
16 X 6		16 X 10		16 X 16	
18 X 6		18 X 10		18 X 16	
20 X 6		20 X 10		20 X 16	
24 X 6		22 X 10		24 X 16	
30 X 6		24 X 10		18 X 18	
36 X 6		30 X 10		20 X 18	
8 X 8		36 X 10		24 X 18	
10 X 8		12 X 12		30 X 18	
12 X 8		14 X 12		36 X 18	
14 X 8		16 X 12		20 X 20	
16 X 8		18 X 12		24 X 20	
18 X 8		20 X 12		22 X 22	
20 X 8		24 X 12		24 X 24	
24 X 8		30 X 12		30 X 24	
		36 X 12		36 X 24	

FIRE DAMPERS - ROUND DUCT NO SLEEVE

MODEL : FD-HAR

- * Galvanized steel construction
- * Round duct transitions
- * Horizontal / vertical
- * 1 1/2 hour UL labeled
- * For use in 2 hour fire separations or less
- * Spring loaded damper blades
- * Type C - 100% free area

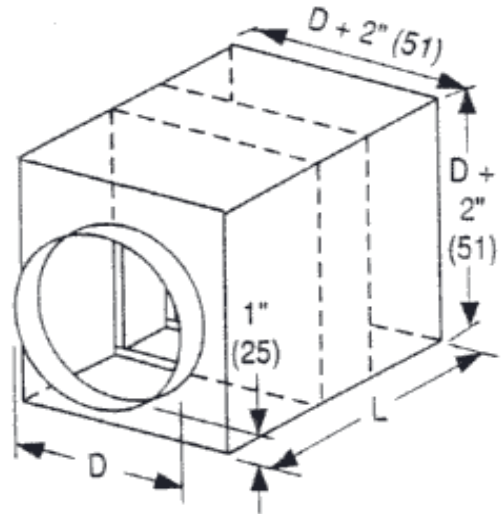


SIZE (W X H)	PRICE
6"	
7"	
8"	
9"	
10"	
12"	
14"	
16"	
18"	

FIRE DAMPERS - ROUND DUCT WITH SLEEVE

MODEL : FD-HAR-S12

- * Galvanized steel construction
- * Round duct transitions
- * 12" Integral sleeve with mounting angles
- * Horizontal / vertical
- * 1 1/2 hour UL labeled
- * For use in 2 hour fire separations or less
- * Spring loaded damper blades
- * Type C - 100% free area

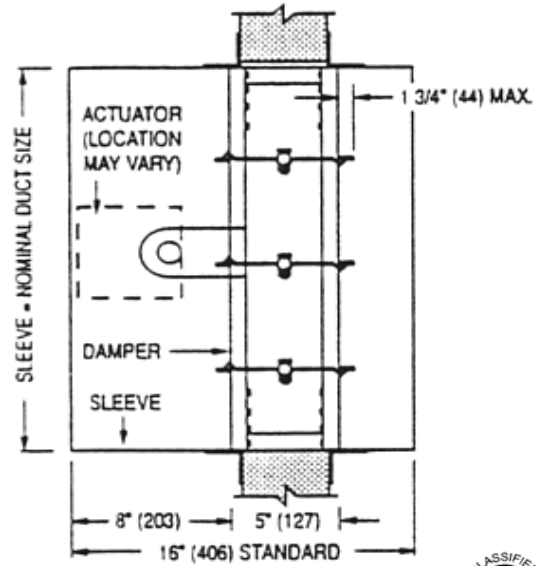


SIZE (W X H)	PRICE
6"	
7"	
8"	
9"	
10"	
12"	
14"	
16"	
18"	

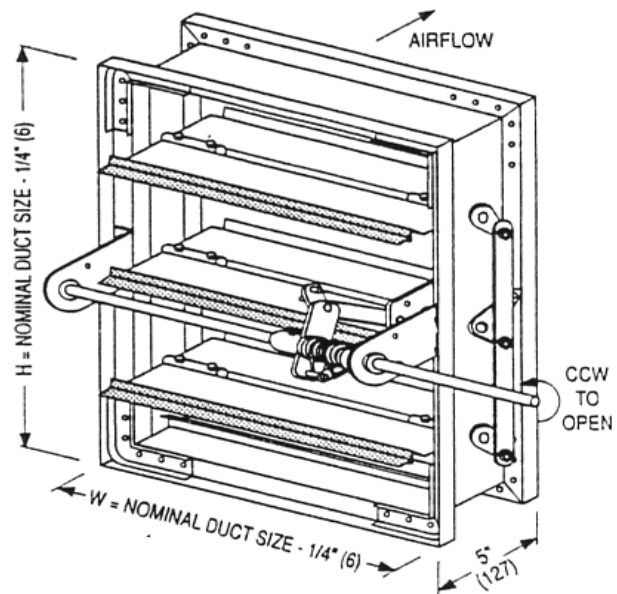
COMBINATION FIRE / SMOKE DAMPER

MODEL : FSD-3V-212

- * Galvanized steel construction
- * For use in fire and smoke control systems
- * UL Listed - Meets UL555
- * 16" - 20 guage sleeve and angles
- * Available with 120 volt or 24 volt actuator
- * Square to round adapters available for
Round pipe applications



SIZE	PRICE
8 X 8	
12 X 12	
18 X 18	
24 X 12	
24 X 24	



FIRE DAMPER - FIRE / SMOKE DAMPER ACCESSORIES

REPLACEMENT FUSE LINKS		
MODEL	FUSE DEGREE	PRICE
165 Link	165 Degrees	
212 Link	212 Degrees	
286 Link	286 Degrees	

ACCESS DOOR LABELS		
MODEL	LABLE	PRICE
FD FIRE LABEL	FIRE DAMPER	
FD SMOKE LABEL	FIRE / SMOKE DAMPER	

- * Mark inspection doors and access panels
- * White background & florescent red lettering
- * Size 3" x 1 1/2"

**FIRE / SMOKE
DAMPER**

**FIRE
DAMPER**

ELECTRIC ACTUATORS FOR CONTROL DAMPERS & COMBINATION FIRE / SMOKE DAMPERS		
MODEL	DESCRIPTION	PRICE
FSLF 120	120 Volt Replacement	**
FSLF 24	24 Volt Replacement	**

- * Two position, Power open, Spring closed, Both right & left hand drive compatible
- * Can be used on dampers 6 square feet and less
- * Larger motors available by special order
- ** Call for price

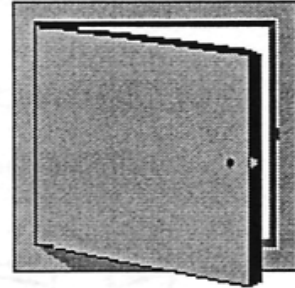
ACCESS DOOR PRODUCTS

FIRE RATED ACCESS PANEL

Model : CIT - K

- * Steel construction and prime coat
- * UL Listed 1 1/2 hour rated for 2 hour fire walls
- * Full length hinges and constant force closure springs

SIZE	PRICE
12 X 12	
16 X 16	
18 X 18	
24 X 24	

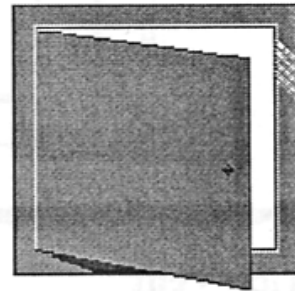


ALL PURPOSE ACCESS PANEL

Model : CNT - C

- * Steel construction and prime coat
- * For drywall, plastered and masonry surfaces
- * Full length hinges and screwdriver cam latch

SIZE	PRICE
8 X 8	
12 X 12	
14 X 14	
16 X 16	
18 X 18	
24 X 24	

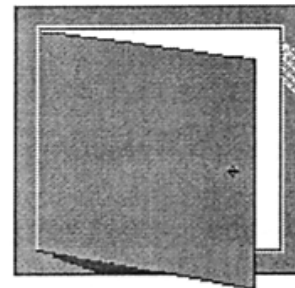


ALL PURPOSE STAINLESS STEEL ACCESS PANEL

Model : CNT - C - SS

- * All stainless steel construction version of CNT - C

SIZE	PRICE
8 X 8	
12 X 12	
16 X 16	
18 X 18	
24 X 24	

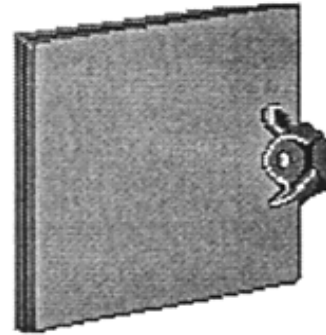


DUCT ACCESS DOOR PRODUCTS

RECTANGULAR DUCT ACCESS DOOR

Model : HAD

- * Double wall galvanized steel construction
- * 1" thick insulated, dual gasketing
- * Peening method installation
- * Full length hinge and cammed operated latch

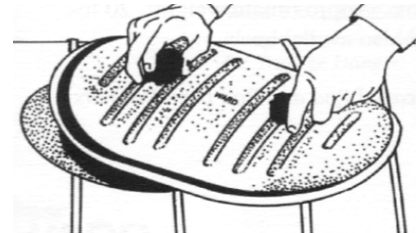


SIZE	PRICE
6 X 6	
8 X 8	
10 X 10	
12 X 12	
14 X 14	
16 X 16	
18 X 18	
24 X 24	

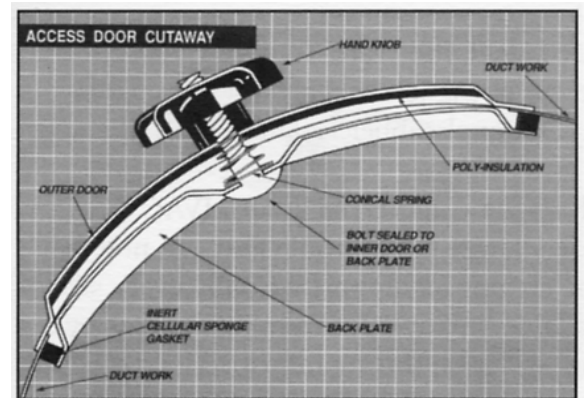
ROUND DUCT ACCESS DOOR

Model : RAD

- * 22 guage galvanized steel construction
- * Insulated
- * Gasketed - 20" w.g.
- * Door size 10 x 6 oval
- * Easy installation and easy access



DUCT DIAMETER	PRICE
6"	
8"	
10"	
12"	
14"	
16"	
18"	



SPRING VIBRATION ISOLATION

**SPRING HANGERS
STYLE "SH"**



- * Rectangular steel housing
- * Steel spring cup
- * Neoprene washer

**OPEN SPRING MOUNTS
STYLE "SW"**



- * Open spring mounted
- * Built-in leveling bolt
- * Nonskid neoprene sound pad

**HOUSED SPRING MOUNT
STYLE "AFS"**



- * Cast aluminum telescoping housing
- * Lateral neoprene stabilizers
- * Leveling bolts & spring cup
- * Nonskid neoprene sound pad

SPRING DESIGNATIONS & SPECIFICATIONS						PRICE		
Spring Size	Spring Rate	Maximum Load	Maximum Deflection	Color	Weight	MODEL SH	MODEL SW	MODEL AFS
B-10	100	142	1.4	Brown	2#			
B-20	200	220	1.1	Black	2#			
B-30	300	324	1.1	Blue	2#			
B-50	500	540	1.1	Orange	2#			
C-26	265	404	1.5	Yellow	5#			
C-40	400	512	1.3	White	5#			
C-50	500	600	1.2	orange	5#			
C-65	650	800	1.2	Brown	5#			
C-95	967	1200	1.2	Green	5#			

OTHER VIBRATION ISOLATION

**NEOPRENE HANGER
STYLE "RH"**



MODEL	RATED LOAD	PRICE
RHA-60	60	
RHA-120	120	

- * Rectangular steel housing
- * Neoprene element
- * Max rod or bolt size 1/2"

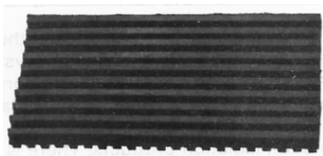
**NEOPRENE FLOOR MOUNT
STYLE "RF"**



MODEL	RATED LOAD	PRICE
RFB-200	0-200	
RFB-500	0-500	

- * Hardened elastomer for floor mount
- * Threaded for 3/8" bolt

DYNA PAD



NEOPRENE / CORK	
SIZE	PRICE
3 X 3	

- * Neoprene and cork sandwich
- * Max loading of 50 psi
- * Other sizes available from factory

FIREX DUCT SMOKE DETECTORS

"Worth Asking For"

- * **Universal voltage model**
 115 VAC
 24 VAC
 24 VDC
- * **Ionization detector head (photoelectric detector available)**
- * **(2) Form "C" contacts and (1) trouble contact**
- * **Visual indicators**
- * **Manual test / reset switch**
- * **Dual tube air sampling**
- * **Duck mount template and screws**
- * **UL 268A Listed**
- * **Factory tube alignment**
- * **Rugged steel back box with see-thru plastic cover**
- * **Built-in power supply**
- * **Less labor intensive**



MODEL	DESCRIPTION	PRICE
ION-2650	Universal ION Duct Detector	
ST - 30	30" Sample Tube	
ST - 60	48" Sample Tube	
ST - 120	72" Sample Tube	
536	Remote Alarm LED, Test / Reset Switch	
543	Remote Alarm LED, Pilot LED, with Horn	
544	Remote Alarm Horn, LED, Keyed Test / Reset	
Additional accessories available by special order(see below)		



535



536



537



538



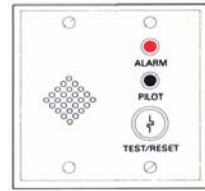
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540

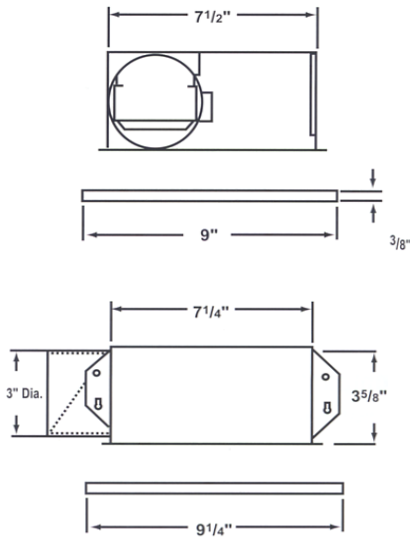


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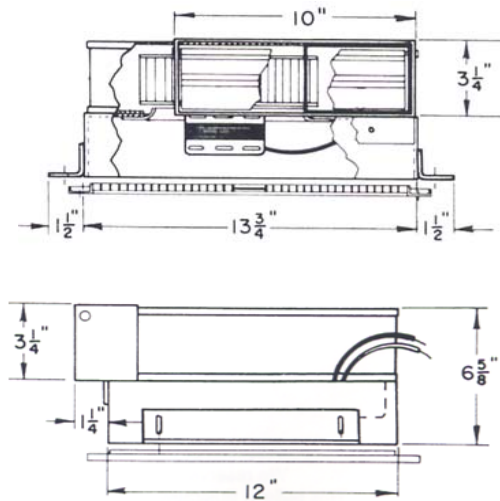


544

ZEPHYR CEILING EXHAUST FANS



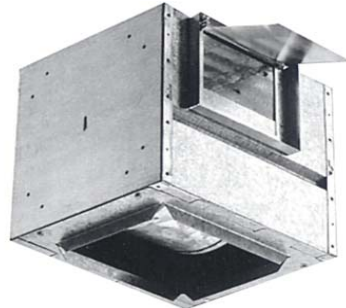
Model No.	SONES at 0.0" Ps	CFM at Static Pressure (P _S - Inches of H ₂ O)						Volts	Watts	Nominal RPM	Duct Dia.
		0.0	.1	.125	.25	.375	.5				
Z1	3.4	56	51	50	46	41	32	120	55	1700	3"



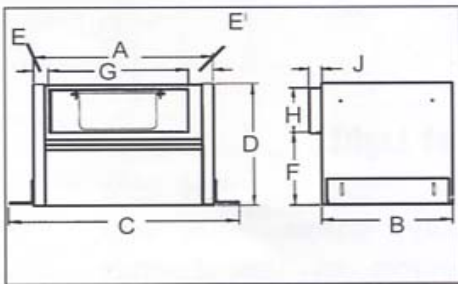
Model Number	Max Watts	Motor 60Hz AC	Motor RPM	Shipping Weight (lbs.)	FAN CAPACITY - CUBIC FEET PER MINUTE								
					SP	0.0"	.10"	.125"	.250"	.375"	.500"	.625"	.750"
ZT	48	115/1	1200	19	CFM	91	88	88	85	75	49	-	-
					SONES	1.8	2.2	2.3	2.8	3.0	3.2	-	-
					RPM	840	930	970	1110	1280	1460	-	-
ZJ1	125	115/1	1200	19	CFM	149	156	157	158	160	153	138	117
					SONES	2.0	2.3	2.4	3.0	3.4	3.4	3.6	3.5
					RPM	760	1000	1020	1150	1240	1360	1450	1520

MODEL	PRICE
Z1	
ZT	
ZJ1	\$90.00

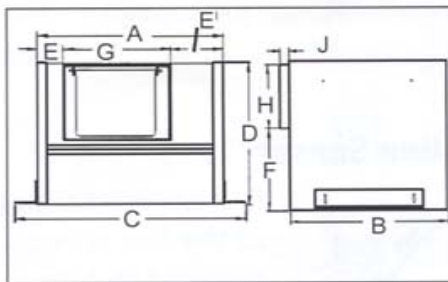
ZEPHYR CEILING EXHAUST FANS



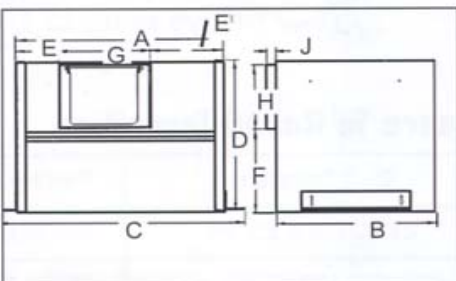
Z3, Z5, Z6



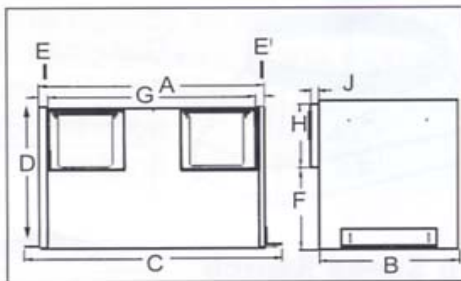
Z8, Z81



Z10



Z101, Z102, Z12, Z121



Model	Housing							Outlet Duct			Grill		TDA Panel		
	A	B	C	D	E	E'	F	G	H	J	K	L	X	Y	Z
Z3,5,6	12 1/2	9 1/8	16	9 1/8	1 1/4	1 1/4	5 3/8	10	3 1/4	3/4	11	13 3/4	10	6	1 5/8
Z8,81	13 7/8	11 3/8	17 3/8	11 3/8	1 7/8	4	5 1/4	8	6	3/4	13 1/4	14 7/8	10	8	1 9/16
Z10	18	14 1/8	21 1/2	14 1/8	3 5/8	6 3/8	8	8	6	3/4	15 1/2	19 3/8	14	10	2
Z12, 101, 102, 121	24	14 1/8	27 1/2	14 1/8	1	1	8	22	6	3/4	15 1/2	25	20	10	2

ALL DIMENSIONS IN INCHES

MODEL PRICE

Z3H

Z5H

Z6 S/H

Z8 S/H

Z81S

Z10 S/H

Z12S

Z101S

Z102S

Z102H

Z121S

Z12H

ZEPHYR & ZEPHYR INLINE PERFORMANCE DATA

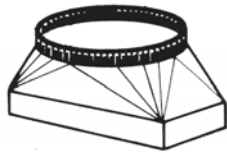
Zephyr ⁴ Model No.	MAX. WATT	Amps	RPM ¹	FAN CAPACITY - CUBIC FEET PER MINUTE								
				SP	0.000"	0.125"	0.250"	0.375"	0.500"	0.625"	0.750"	
Z3H	39	0.5	1550	CFM	109	83						
				SONES ²	1.7	2.3						
Z5H	79	1	1550	CFM	192	163	128	93				
				SONES ²	2.5	2.7	2.8	2.8				
Z6S ⁵	47	0.6	1050	CFM	123	101	82					
				SONES ²	0.9	1.4	1.8					
Z6H ⁵	108	1.4	1550	CFM	230	196	166	122				
				SONES ²	3.3	3	3	3.1				
Z8S ⁶	77	1	1050	CFM	272	247	231	217	199			
				SONES ²	2.1	2.4	2.9	3.3	3.6			
Z81S	77	0.9	1050	CFM	310	273	239	213	182	136	73	
				SONES ²	2.5	2.7	2.9	3.3	3.7	4.2	4.3	
Z8H ⁶	130	1.6	1550	CFM	426	401	377	357	341	328	304	
				SONES ²	4.5	4.7	4.7	5.1	5.6	5.8	5.8	
Z10S ⁷	243	2.5	1050	CFM	469	441	423	403	387	367	347	
				SONES ²	4.5	4.8	5.1	5.4	5.6	5.8	6	
Z101S	153	1.6	1050	CFM	612	537	467	405	222	116		
				SONES ²	3.9	3.6	3.9	4.6	5.5	6		
Z10H ⁷	390	3.6	1550	CFM	728	694	664	638	613	591	565	
				SONES ²	8.6	8.6	8.6	8.7	8.6	8.8	8.8	
Z102S	269	4.5	1050	CFM	816	747	691	602	335			
				SONES ²	5.8	5.8	5.4	5	4.9			
Z12S	260	2.9	1050	CFM	901	855	812	755	683	552		
				SONES ²	5.8	5.9	6.3	6.5	6.5	6		
Z121S	370	3.6	1050	CFM	1083	1062	1024	949	838	686	270	
				SONES ²	7	6.9	6.6	6.1	5.7	5.3	4.6	
Z102H	812 (BHP 0.53)	7.5	1550	CFM	1435	1385	1338	1294	1247	1203	1163	
				SONES ²	11.8	11.7	11.9	11.9	11.7	11.3	11	
Z12H	851 (BHP 0.65)	7.9	1550	CFM	1566	1511	1464	1417	1364	1307	1251	
				SONES ²	13.5	13.3	12.9	12.7	12.3	12	11.7	

Zephyr ⁴ Model	MAX. WATT	Amps	RPM ¹	FAN CAPACITY - CUBIC FEET PER MINUTE										
				SP	0.000"	0.125"	0.250"	0.375"	0.500"	0.625"	0.750"	1.000"	1.250"	1.500"
Z3H (TDA)	42	0.5	1550	CFM	107	81								
				SONES ³	1.7	1.9								
Z5H (TDA)	83	1	1550	CFM	199	171	143	104						
				SONES ³	1.9	2	2.1	2.1						
Z6S (TDA) ⁵	46	0.6	1050	CFM	127	93	66							
				SONES ³	0.9	1.2	1.6							
Z6H (TDA) ⁵	108	1.4	1550	CFM	227	192	157	113						
				SONES ³	2.7	2.7	2.8	2.9						
Z8S (TDA) ⁶	75	1	1050	CFM	255	228	208	190	165	139	110			
				SONES ³	1.8	1.9	2.4	2.8	3.3	3.6	3.7			
Z81S (TDA)	84	0.9	1050	CFM	307	274	252	228	198	152	95			
				SONES ³	2.2	2.2	2.5	2.9	3.1	3.3	3.5			
Z8H (TDA) ⁶	132	1.6	1550	CFM	402	376	350	335	318	301	277			
				SONES ³	4.1	3.9	3.9	4.2	4.4	4.6	4.9			
Z10S (TDA) ⁷	234	2.5	1050	CFM	456	423	391	367	350	337	320	268	128	
				SONES ³	4.1	4.5	4.7	4.9	5.2	5.4	5.7	6.2	6.4	
Z101S (TDA)	152	1.6	1050	CFM	609	521	438	373	272	130				
				SONES ³	3.2	3.4	4.3	4.6	5.2	5.6				
Z10H (TDA) ⁷	372	3.6	1550	CFM	700	661	626	593	558	528	504	455	368	
				SONES ³	8	8	7.9	7.9	8	8.2	8.1	8	7.8	
Z102S (TDA)	273	4.5	1050	CFM	780	720	660	592	336					
				SONES ³	4.6	5.7	5.6	4.8	4.7					
Z12S (TDA)	263	2.9	1050	CFM	886	829	786	735	660	526	180			
				SONES ³	5.5	5.7	5.6	5.8	5.7	5.3	4.7			
Z121S (TDA)	344	3.6	1050	CFM	1089	1043	981	899	802	672	404			
				SONES ³	6.5	6.5	6.3	6	5.7	5.3	4.4			
Z102H (TDA)	810 (BHP 0.53)	7.5	1550	CFM	1397	1348	1301	1253	1206	1162	1121	1034	916	611
				SONES ³	10.7	10.5	10.7	10.6	10.4	10.1	9.9	9.6	9.4	9
Z12H (TDA)	812 (BHP 0.53)	7.9	1550	CFM	1519	1475	1430	1386	1343	1300	1254	1146	1017	697
				SONES ³	12.7	12.4	12.2	11.7	11.5	11.2	10.9	10.5	10.2	9.6

ZEPHYR ACCESSORY GUIDE

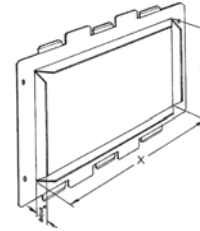
MODEL	DESCRIPTION	ZEPHYR MODEL								PRICE
		Z1	ZT ZJ1	Z3 H Z5 H Z6 H	Z8 Z81 S	Z10	Z101 S	Z102 S Z121 S	Z102 H Z12 H	
<u>SPEED CONTROLS</u>										
LT 30		*	*	*	*		*			
LT 40									*	
LT 50						*		*		
<u>ROOF CAPS</u>										
SL 20	8" Aluminum Sloped Roof Cap			*	*	*				
WCF 08	8" Aluminum Flashed Cap			*	*	*				
WCF 12	12" Aluminum Flashed Cap						*	*		
WCC 08	8" Aluminum Curb Cap			*	*	*				
WCC 12	12" Aluminum Curb Cap						*	*		
<u>WALL CAPS</u>										
WC 10	3-1/4 X 10		*	*						
RWC 04	4" Aluminum	*								
RWC 06	6" Aluminum		*	*						
RWC 08	8" Galvanized				*	*				
RWC 10	10" Galvanized						*			
RWC 12	12" Galvanized							*		
<u>DUCT TRANSITIONS</u>										
56337MM	3-1/4 X 10 TO 6"		*	*						
56340MM	6 X 8 TO 8"				*	*				
56385MM	22 X 6 TO 12"						*	*		
<u>IN-LINE ADAPTER KITS</u>										
20722	TDA 3, 5, 6			*						
20723	TDA 8, 81				*					
20724	TDA 10					*				
20725	TDA 12, 101, 102, 121						*	*	*	

ZEPHYR ACCESSORY GUIDE



SQUARE TO ROUND TRANSITION

Fan Model	Fan Outlet	Round Dia.
ZT, ZJ1, Z3, Z5, Z6	3 1/4 x 10	6"
Z8, Z81, Z10	8 x 6	8"
Z12, Z101, Z102, Z121	22 x 6	12"

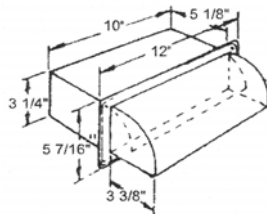


TDA INLINE ADAPTER

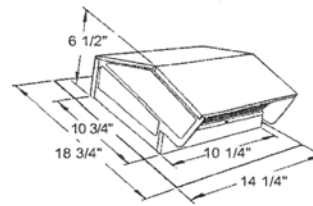
Fan Model	X	Y
Z3, Z5, Z6	10	6
Z8, Z81	10	8
Z10	14	10
Z12, Z101 Z102, Z121	20	10

WALL AND SLOPED ROOF CAPS

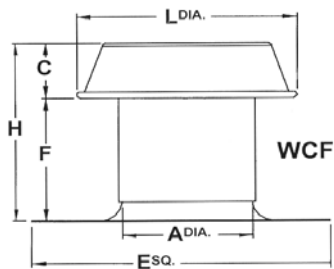
WC 10



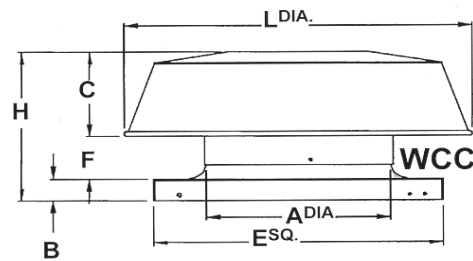
SL-20



FLASHED ROOF CAP



CURB MOUNTED CAP



MODEL	A (THROAT)	B	C	E SQ	F	H	L-DIA
WCF08	9	N/A	5 1/2	21 1/4	8	13 1/2	18 1/2
WCF12	13	N/A	7	24	10	17	25
WCC08	9	1 1/2	5 1/2	18 1/2	4	11	18 1/2
WCC12	13	2	7	20 1/2	4	13	25

BELT DRIVE ROOFTOP EXHAUST FAN

PENN BARRY MODEL : DX-B

- * Heavy gauge aluminum construction
- * Non over-loading aluminum impellers
- * Belts are static free, heat resistant, and oil resistant
- * Prelubricated Bearings, duplex split pillow block
- * Factory wired NEC, NBFU, and U.L.
- * Continious duty, open drip proof, single speed motors
- * Negative pressure motor colling system
- * Disconnect switch
- * Birdscreen



FAN		DAMPER		ROOF CURB		MOTOR	
MODEL	PRICE	SIZE	PRICE	SIZE	PRICE	HP	VOLTAGE
DX 08 B		11.25 X 11.25		17 X 17		1/4	115/1/60
DX 11 B		15.75 X 15.75		19 X 19		1/4	115/1/60
DX 14 B		15.75 X 15.75		23 X 23		1/4	115/1/60

BELT DRIVE ROOFTOP EXHAUST FAN

RPM		PERFORMANCE DATA																	
		CFM vs. Static Pressure (in.wg)																	
		.000		.125		.250		.375		.500		.625		.750		.875			
		Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	BHP	Sone	BHP	Sone	BHP	Sone		
DX08B	655	505		351															
		3.4	.02	2.7	.02														
	700	540		399															
		3.8	.03	3.1	.03														
	745	574		444		247													
		4.3	.03	3.5	.04	3.0	.03												
	790	609		487		330													
		4.6	.04	3.9	.04	3.3	.04												
	835	644		530		393													
5.0		.05	4.2	.05	3.6	.05													
880	678		271		446		207												
	5.5	.06	4.7	.06	4.0	.06	3.6	.05											
925	713		611		496		329												
	6.0	.07	5.2	.07	4.5	.07	4.0	.07											
DX11B	675	1164		959		638													
		4.9	.05	4.3	.06	3.6	.06												
	700	1207		1011		737													
		5.1	.06	4.6	.07	3.9	.07												
	725	1250		1062		813													
		5.5	.07	4.9	.07	4.3	.08												
	750	1293		1113		880		252											
		5.8	.07	5.3	.08	4.7	.09	4.1	.05										
	800	1379		1213		1007		672											
		6.6	.09	6.1	.10	5.5	.10	5.0	.10										
	825	1422		1263		1067		775											
		6.8	.10	6.3	.10	5.7	.11	5.2	.11										
850	1465		1312		1126		874												
	7.0	.11	6.5	.11	5.9	.12	5.4	.12											
900	1552		1407		1238		1028		665										
	7.8	.13	7.2	.13	6.5	.14	6.0	.15	5.7	.13									
950	1638		1502		1347		1159		884										
	8.5	.15	7.9	.16	7.3	.16	6.7	.17	6.3	.17									
1000	1724		1596		1451		1282		1080		706								
	9.2	.17	8.7	.18	8.0	.19	7.3	.20	7.0	.20	6.8	.18							
DX14B	680	1849		1582		1212													
		7.3	.08	6.7	.09	6.0	.09												
	842	2290		2077		1835		1522		1104									
		9.7	.15	9.0	.17	8.3	.18	7.4	.18	6.3	.17								
	910	2475		2276		2070		1793		1495		831							
10.7		.19	10.1	.21	9.5	.22	8.8	.23	7.6	.22	6.9	.18							
958	2606		2415		2226		1977		1699		1355								
	11.8	.23	11.2	.24	10.6	.26	10.0	.26	8.8	.26	7.6	.25							

DIRECT DRIVE ROOFTOP EXHAUST FAN

PENN BARRY MODEL : DX-D

- * Heavy gauge aluminum construction
- * Aluminum impellers
- * Heavy duty yet lightweight design
- * Motor compartment utilizes fan forced cooling system
- * Multi-speed motor with thermal overload protection
- * Speed controller included for high speed motor
- * Factory wired polarized disconnect plug
- * Birdscreen



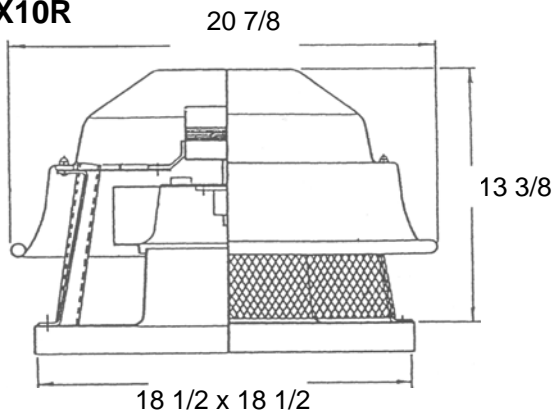
FAN		DAMPER		ROOF CURB		MOTOR	
MODEL	PRICE	SIZE	PRICE	SIZE	PRICE	HP	VOLTAGE
DX 10R		11.25 X 11.25		17 X 17		1/12	115/1/60
DX 11R		11.25 X 11.25		17 X 17		1/7	115/1/60

PERFORMANCE DATA																
FAN MODEL	HP	RPM	TIP SPD.	CFM vs. Static Pressure												MAX WATTS
				.000"		.125"		.250"		.375"		.500"		.625"		
				CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	CFM	Sone	
DX10S	1/25	1300	3361	385	3.9	316	3.5	257	4.8	207	5.1	168	5.2	129	5.6	82
DX10R	1/12	1550	4007	559	6.1	501	5.9	446	6.1	394	6.5	338	6.8	267	7.0	121
DX11V	1/25	1050	3058	388	1.8	223	2.2	148	3.1	112	3.7	80	4.5	49	5.3	111
DX11S	1/11	1300	3786	503	3.4	397	3.6	320	4.3	262	5.0	201	5.5	149	6.0	142
DX11R	1/7	1550	4514	736	6.7	659	6.4	577	6.6	502	6.9	432	7.6	356	7.9	201

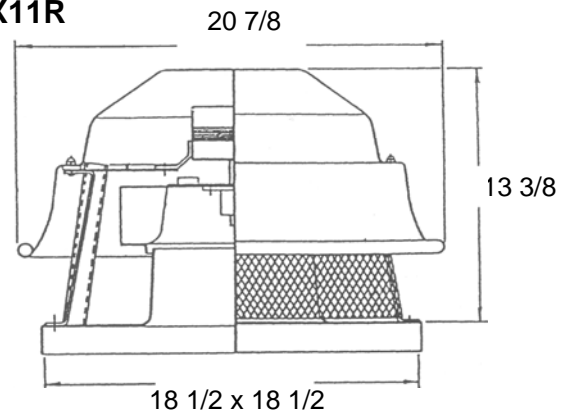
** Do not use speed controllers on low speed (V) or medium Speed(S); Only on High Speed (R)

ROOFTOP EXHAUST FAN DIMENSIONAL DATA

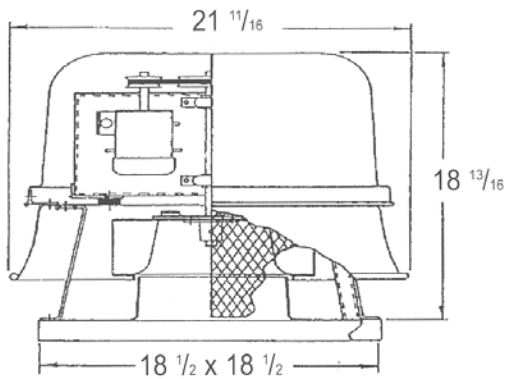
DX10R



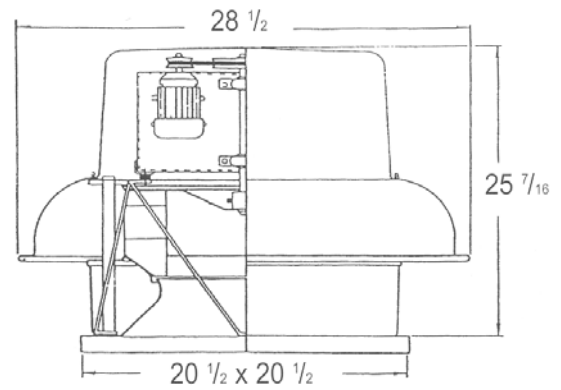
DX11R



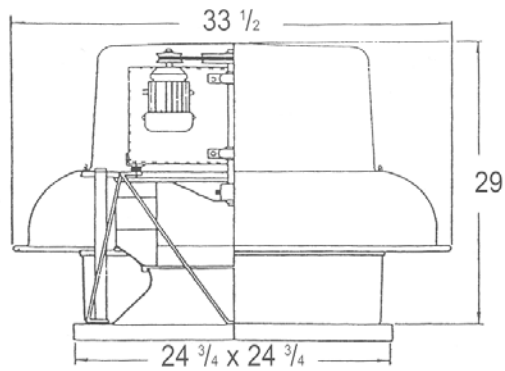
DX08B



DX11B



DX14B



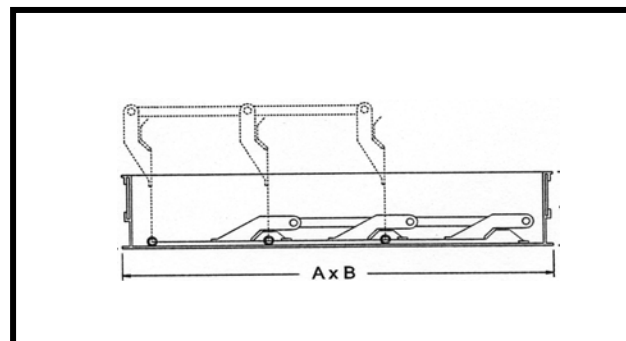
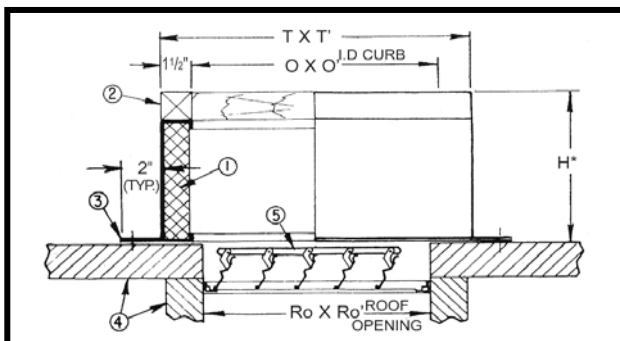
FLAT ROOF CURBS

MODEL : RF CURB

- * 18 Guage galvanized steel
- * All welded construction
- * 12 height
- * Insulated
- * 1 5/8" wood nailer



MODEL	SIZE (O.D.)	DIMENSIONS					PRICE
		J	K	N	M	H	
C27	27 X 27 X 12	33.5	27	22.5	19.5	12	
C23	23 X 23 X 12	30.5	23	19.5	16.5	12	
C19	19 X 19 X 12	27.5	19	16.5	13.5	12	
C17	17 X 17 X 12	22.5	17	11.5	8.5	12	



ELECTRIC UNIT HEATERS



CONSTRUCTION:

- Heavy gauge welded steel cabinet with powder coated finish and control compartment housing a master terminal board with a hinged and latched access door, simplifying wiring, installation & maintenance.

HEATING ELEMENT:

- Copper clad steel sheath element with continuously brazed steel fins formed to allow side draw through air flow.

OVERHEAT PROTECTION:

- All units come equipped with automatic reset type limit controls to de-energize the heater should an over-temperature situation occur.

FAN and MOTOR:

- Totally enclosed, 1-speed, 1-phase, permanently lubricated, thermally protected motors with unit bearings on 3 KW - 20 KW models.
- Totally enclosed, 2-speed, 1-phase, permanently lubricated, thermally protected motors with sleeve bearings on 25 KW - 50 KW models.
- All motors mounted with rubber insulators to minimize vibration & noise.
- Fan over-ride purges unit of residual heat at shutdown.

LOUVER ASSEMBLY:

- Louvers are individually adjustable for directional control of air flow up to 15° from straight horizontal.
- Optional diffusers available for down flow (vertical discharge) applications.

TEMPERATURE CONTROLS:

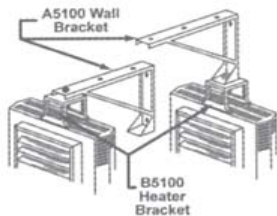
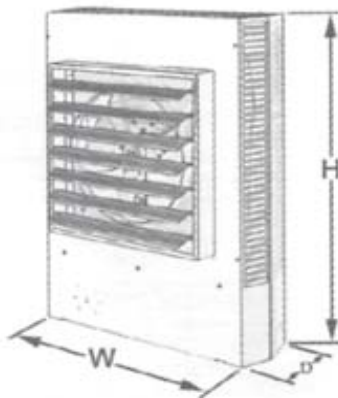
- Optional low voltage and line voltage thermostats available with an adjustable temperature range of 40°F to 90°F.
- Units with model numbers ending in CA1 are factory wired for low voltage controls.
- 25 KW through 50 KW units are designed for two stage heating operation.

INSTALLATION:

- Unit Heaters can be mounted for horizontal or vertical discharge.

FIELD INSTALLED OPTIONS:

- In-unit or wall mounted temperature control thermostats - low or line voltage.
- Summer fan switch to operate the fan only.
- Power disconnect switch.
- Heat stratification thermostat.



HORIZONTAL DISCHARGE

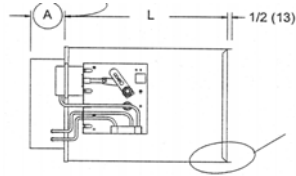
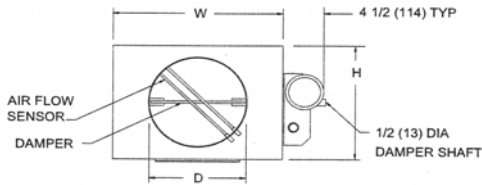
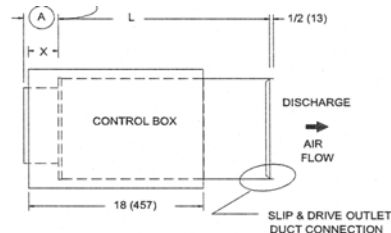
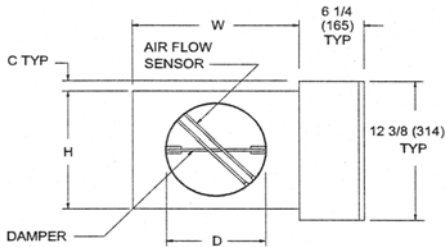
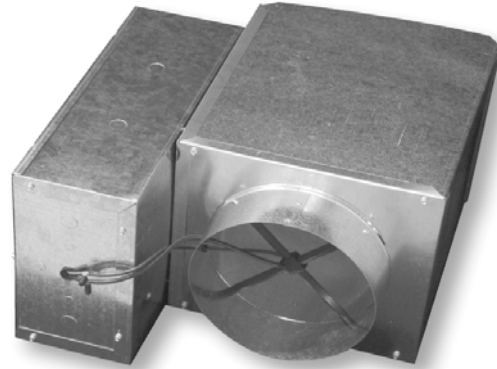
MODEL	KW	VOLTAGE	DIMENSIONS			PRICE
			H	W	D	
P35103CA1	3	480 / 3	17 3/4	14 15/32	6 1/2	
P35105CA1	5	480 / 3	17 3/4	14 15/32	6 1/2	
P35110CA1	10	480 / 3	24 5/16	21 1/2	6 1/2	

ACCESSORY	DESCRIPTION	PRICE
T5100	INTEGRAL SINGLE POLE THERMOSTAT	
A5105	MOUNTING BRACKET - 3.3 TO 5 KW	
A5120	MOUNTING BRACKET - 7.5 TO 10 KW	

SINGLE DUCT VAV

MODEL : LMHS-D / LMHS-P

- * LineaCross multi-point averaging inlet sensor
- * No controls (LMHS-D)
- * Pneumatic control (LMHS-P)
- * Slip and drive duct connections
- * Controls enclosure (LMHS-D)
- * Compact size

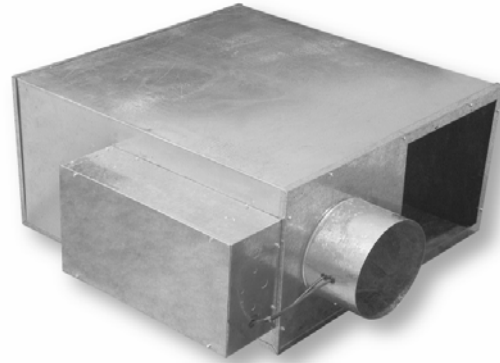


UNIT SIZE	CFM RANGE	DIMENSIONS (INCHES)		PRICE	
		WIDTH (W)	HEIGHT (H)	MODEL LMHS-D NO CONTROLS (BOX W/ SENSOR ONLY)	MODEL LMHS-P WITH SENSOR AND 3011 PNEUMATIC CONTROLLER
6	85 - 500	10	10		
8	180 - 1000	12	12 1/2		
10	250 - 1435	14	12 1/2		
12	320 - 2185	18	12 1/2		
14	470 - 2745	24	12 1/2		
16	590 - 3730	28	12 1/2		

FAN POWERED TERMINAL UNITS

MODEL : QFV

- *
- *
- *
- *
- *
- *



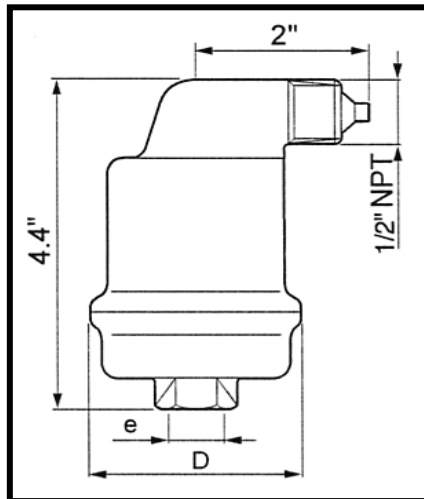
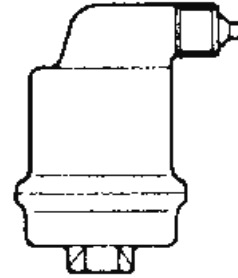
PAGE UNDER CONSTRUCTION
PLEASE CALL FOR PRICING AND AVAILABILITY
OF STOCK FAN POWERED BOXES

AIR SEPERATORS AND AUTO AIR VENTS

SPIROTHERM

MODEL : SPIROTOP AUTO AIR VENT

- * Auto dry vent
- * No drain line required
- * Solid brass construction
- * 20 year warranty



Specifications:	
Body	Brass
Vent Head	Brass
Float	Non-Ferrous
Seal	Viton
O Ring	Viton
Max. Working Pressure	150 psig
Max. Operating Temperature	270°F
Notes:	

Pipe Size		1/2"
Thread	FPT	1/2"
D	(inches)	2 - 5/8
H	(inches)	4 - 3/8
P	(inches)	1/2"
Weight	(lbs)	2.0
Model No.		VTP050FT

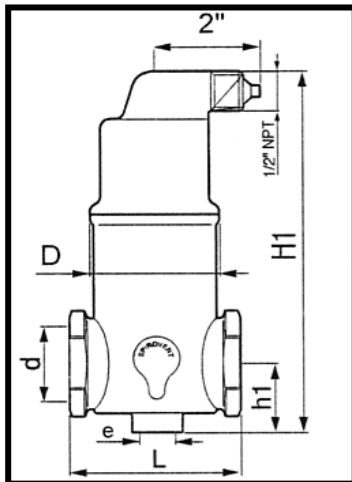
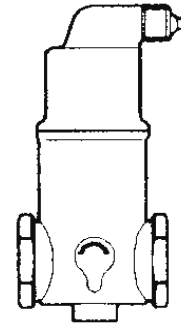
PRICE :

AIR SEPERATORS AND AUTO AIR VENTS

SPIROTHERM

MODEL : SPIROVENT JR. AIR SEPERATOR

- * Coalescing air separator and dry vent
- * No drain line required
- * Removes 100% of the free air
- * Removes 100% of the entrained air
- * Removes 99.6% of the dissolved air
- * Solid brass construction
- * 20 year warranty



<u>Specifications:</u>	
Body	Brass
Vent Head	Brass
Float	Non-Ferrous
Seal	Viton
O Ring	Viton
Coalescing Medium	Copper
Max. Working Pressure	150 psig
Max. Operating Temperature	270°F
<u>Notes:</u>	

d (Pipe Size NPT)	3/4"	1"	1 1/4"	1 1/2"
D (inches)	2.6	2.6	2.6	2.6
H1 (inches)	6.0	7.0	7.8	9.1
h1 (inches)	0.8	1.4	1.5	1.6
L (inches)	3.4	3.5	3.5	3.5
e (inches)	N/A	1/2	1/2	1/2
Weight (lbs)	2.9	3.3	3.6	4.1
Rec. Flow (gpm)	6	10	15	30
Model No.	VJR-075FT	100TM	125TM	150TM

PRICE :

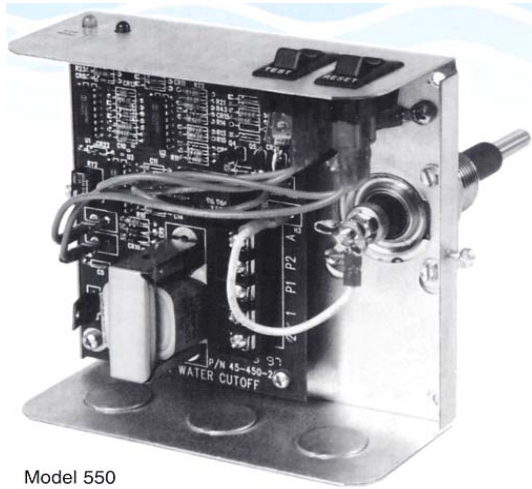
LOW WATER CUT-OFFS FOR HOT WATER BOILERS



THE PRINCIPAL OF RELIABLE OPERATION



THE PROBE MAKES THE DIFFERENCE

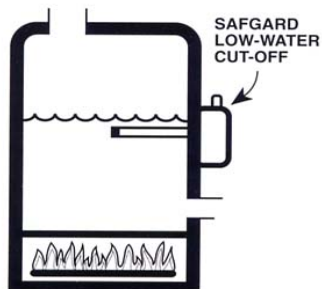
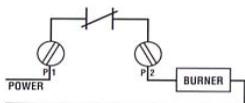


Model 550

MODEL	DESCRIPTION	PRICE
650-P	Automatic reset and test button - LWCO - Test control operation, complete with EL-1214-P probe	
550-P	Same as 650-P with manual reset and test button / light	
650	Same as 650-P above less probe	
550	Same as 550-P above less probe	
EL-1214-P	Probe only	

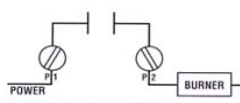
Normal Operation

When water is in contact with the probe, the control circuit is completed. Contact between Terminals P1 and P2 completes the burner circuit, allowing the burner to operate safely.



Low Water Condition

If the water level drops below the probe, the control circuit is opened. The burner circuit is interrupted, safely shutting down the burner.



CONDENSATE OVERFLOW SHUT-OFF SWITCH

MODEL : SS1 / SS2

- * Detects clogged A/C condensate drains and shuts off the system
- * Compact design installs vertically and/or horizontally at any slope
- * Sealed, Corrosion Resistant switch for long term, reliable performance
- * 4' lead wires, 3/4" plug and bushing included
- * UL Listed, complies with applicable building codes
- * Model SS2 for auxiliary outlets requires no plug, smaller footprint, and catches clogs in primary pan outlet nipple

SS1-VERTICAL



SS1-HORIZONTAL



KIT



SS2



KIT



MODEL	PRICE
SS1	
SS2	

MAP LOCATION

COLLINS WALKER INC.

11370 ANAHEIM DR.

DALLAS, TEXAS 75229

