



STEPHANY
HVAC SUPPLY

THE PREFERRED
SUPPLIER OF
HVAC
PRODUCTS
IN THE TRI-STATE AREA



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supply@sai-hvac.com

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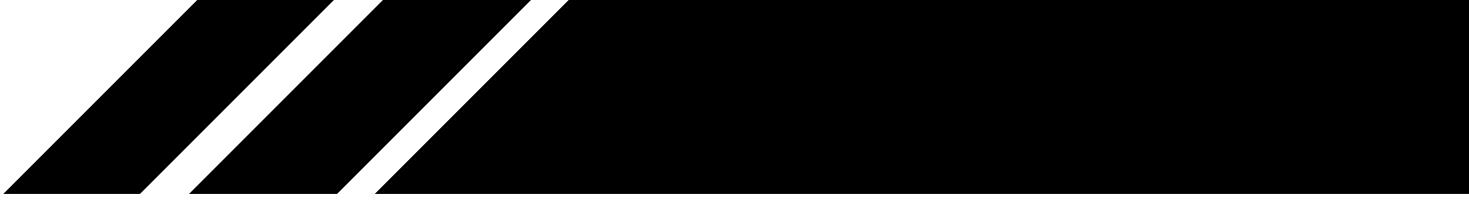
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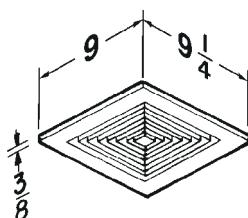
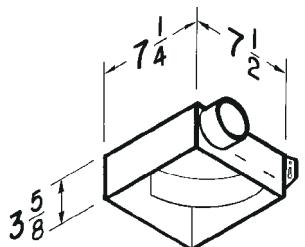
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Bathroom Fans

Optional Accessories:

- Sloped Roof Cap
- Speed Controller
- Occupany Sensor
- In-Line Adaptor Kit
- Humidity Wall Control

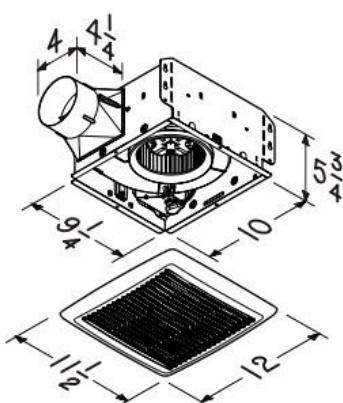


MODEL 688

MODEL	CFM	SONES	VOLTAGE	PRICE
688	50	4	115/1/60	\$209.00

Optional Accessories:

- Sloped Roof Cap
- Speed Controller
- Occupany Sensor
- In-Line Adaptor Kit
- Humidity Wall Control



NOTE: Dimensions shown are in inches.

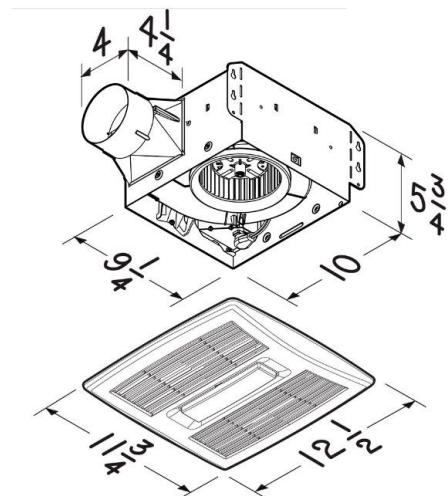


MODEL A110

MODEL	CFM	SONES	VOLTAGE	PRICE
A110	110	3	115/1/60	\$210.00

Optional Accessories:

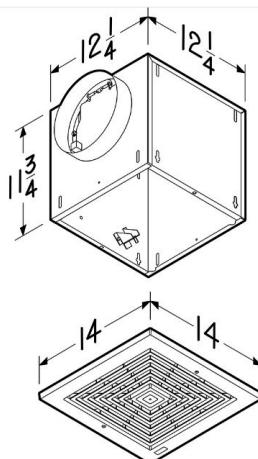
- Sloped Roof Cap
- Speed Controller
- Occupany Sensor
- In-Line Adaptor Kit
- Humidity Wall Control



MODEL	CFM	SONES	VOLTAGE	PRICE
AE50110DCL	50-110	0.3-0.9	115/1/60	\$330.00

Optional Accessories:

- Sloped Roof Cap
- Speed Controller
- Occupany Sensor
- In-Line Adaptor Kit
- Humidity Wall Control

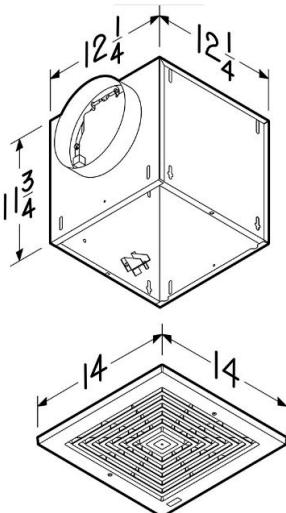


MODEL	CFM	SONES	VOLTAGE	PRICE
L200	200	1.7	115/1/60	\$460.00

Bathroom Fans

Optional Accessories:

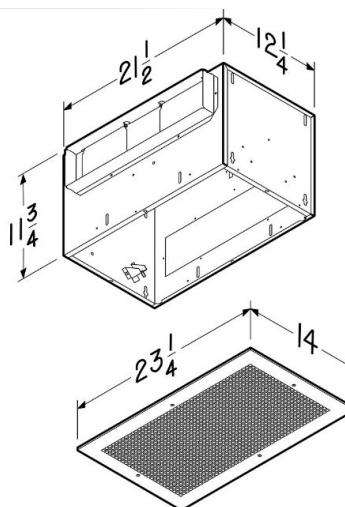
- Sloped Roof Cap
- Speed Controller
- Occupany Sensor
- In-Line Adaptor Kit
- Humidity Wall Control



MODEL	CFM	SONES	VOLTAGE	PRICE
L300	300	2.9	115/1/60	\$495.00

Optional Accessories:

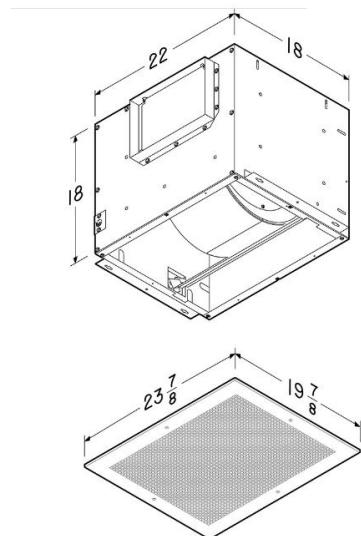
- Sloped Roof Cap
- Speed Controller
- Occupany Sensor
- In-Line Adaptor Kit
- Humidity Wall Control



MODEL	CFM	SONES	VOLTAGE	PRICE
L500	500	3.3	115/1/60	\$965.00

Optional Accessories:

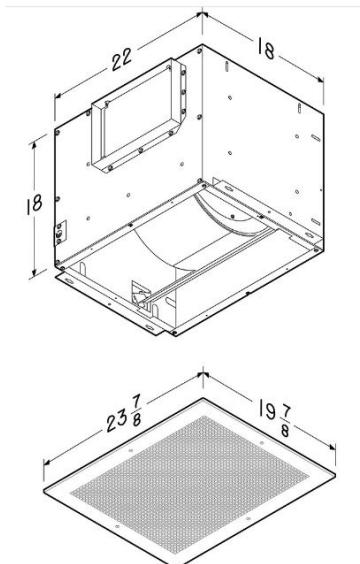
- Sloped Roof Cap
- Speed Controller
- Occupany Sensor
- In-Line Adaptor Kit
- Humidity Wall Control



MODEL	CFM	SONES	VOLTAGE	PRICE
L900	900	4.1	115/1/60	\$1,395.00

Optional Accessories:

- Sloped Roof Cap
- Speed Controller
- Occupany Sensor
- In-Line Adaptor Kit
- Humidity Wall Control



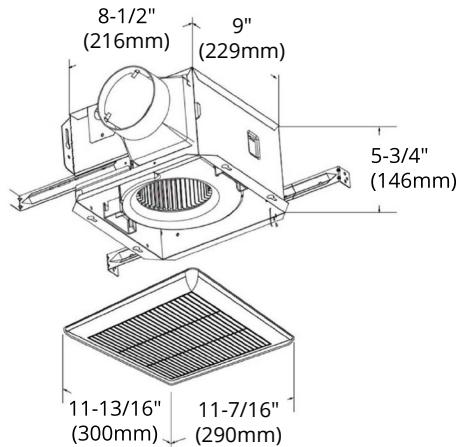
MODEL	CFM	SONES	VOLTAGE	PRICE
L1500	1500	8.4	115/1/60	\$1,560.00

DC Cabinet Fans

MODEL ODD-100S

Optional Accessories:

- Sloped Roof Cap
- Speed Controller
- Occupany Sensor
- In-Line Adaptor Kit
- Humidity Wall Control

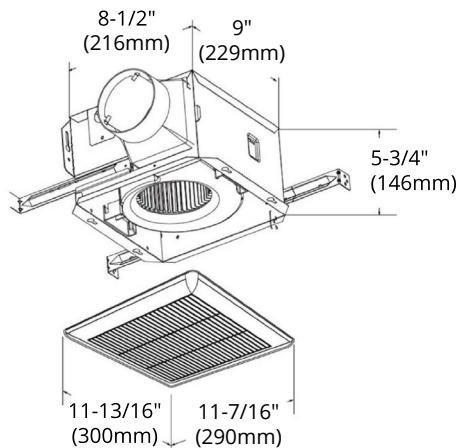


- Air and sound delivery meet the ENERGY STAR®, HVI certified ratings as per the fan curves attached

MODEL	CFM	SONES	VOLTAGE	PRICE
ODD-100S	54.5-100	0.1-0.7	115/1/60	\$253.00

Optional Accessories:

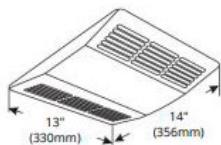
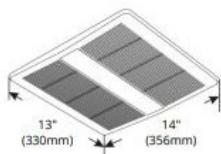
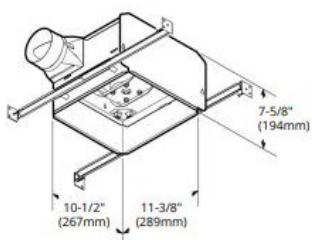
- Sloped Roof Cap
- Speed Controller
- Occupany Sensor
- In-Line Adaptor Kit
- Humidity Wall Control



MODEL	CFM	SONES	VOLTAGE	PRICE
ODD-100HS+MS	54.5-100	0.1-0.7	115/1/60	\$338.00

Optional Accessories:

- Sloped Roof Cap
- Speed Controller
- Occupany Sensor
- In-Line Adaptor Kit
- Humidity Wall Control

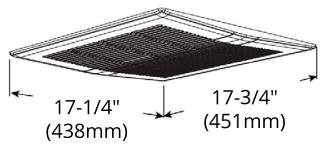
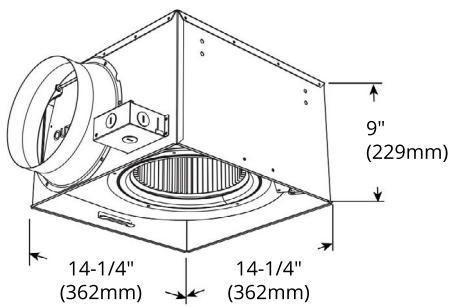


Optional Metal Grille

MODEL	CFM	SONES	VOLTAGE	PRICE
ODD-110-18PB	80-140	0.3-0.4	115/1/60	\$310.00

Optional Accessories:

- Sloped Roof Cap
- Speed Controller
- Occupany Sensor
- In-Line Adaptor Kit
- Humidity Wall Control

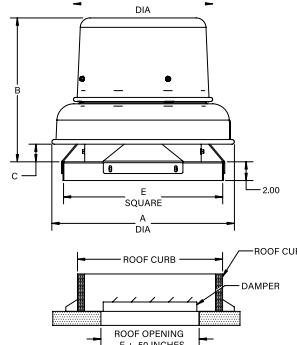


MODEL	CFM	SONES	VOLTAGE	PRICE
ODD-500-4	202-504	0.4-4.36	115/1/60	\$600.00

Downblast Fans - Direct Drive

Included Accessories:

- Birdscreen - Galvanized
- Backdraft Damper (alum.)
- Speed Controller
- 0-10 VDC Lead
- NEMA 1 Disconnect



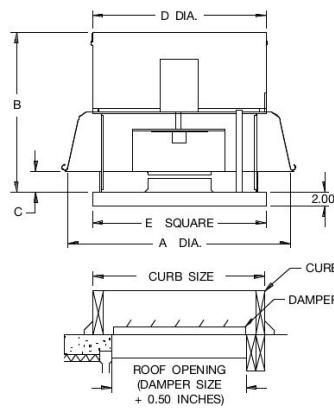
MODEL VC

MODEL	HP	CFM	SP	VOLTAGE	DIMENSION E	DIMENSION A	DIMENSION B	PRICE
VC 77	1/6 HP	50-227	.25"	115/1/60	17"x17"	19.50"	15.36"	\$1,629.00
VC 77	1/4 HP	50-227	.25"	115/1/60	17"x17"	19.50"	15.36"	\$1,639.00
VC 83	1/4 HP	227-330	.25"	115/1/60	17"x17"	19.50"	15.36"	\$1,626.00
VC 83	1/6 HP	227-330	.25"	115/1/60	17"x17"	19.50"	15.36"	\$1,616.00
VC 85	1/4 HP	330-390	.25"	115/1/60	17"x17"	19.50"	15.36"	\$1,755.00
VC 85	1/6 HP	330-390	.25"	115/1/60	17"x17"	19.50"	15.36"	\$1,745.00
VC 89	1/6 HP	390-510	.25"	115/1/60	17"x17"	22.00"	17.30"	\$2,118.00
VC 89	1/4 HP	390-510	.25"	115/1/60	17"x17"	22.00"	17.30"	\$2,128.00
VC 98	1/4 HP	510-755	.25"	115/1/60	17"x17"	22.00"	17.30"	\$2,135.00
VC 112	1/4 HP	755-1155	.25"	115/1/60	17"x17"	22.00"	17.30"	\$1,828.00
VC 120	1/4 HP	1155-2264	.25"	115/1/60	17"x17"	22.00"	17.30"	\$2,037.00



Included Accessories:

- Birdscreen - Galvanized
- Backdraft Damper (alum.)
- Speed Controller
- 0-10 VDC Lead
- NEMA 1 Disconnect



MODEL DCRD

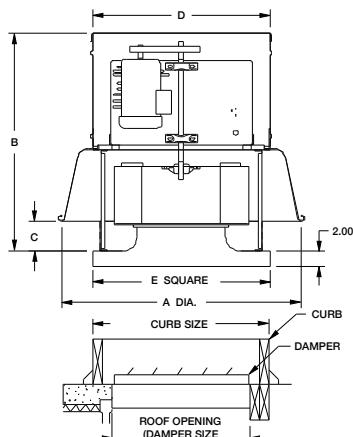
MODEL	HP	CFM	SP	VOLTAGE	DIMENSION E	DIMENSION A	DIMENSION B	PRICE
DCRD 120BE	1/2 HP	450-1793	.25"	115/1/60	20"X20"	27.50"	22.38"	\$2,627.00
DCRD 130BE	3/4 HP	364-2513	.25"	115/1/60	24"X24"	27.50"	23.25"	\$2,895.00
DCRD 140BE	3/4 HP	459-2872	.25"	115/1/60	24"X24"	27.50"	23.50"	\$2,928.00
DCRD 160BE	1 HP	1089-2801	.25"	115/1/60	24"X24"	30.44"	27.25"	\$4,415.00
DCRD 180BE	1 HP	3729-4515	.25"	115/1/60	30"X30"	38.38"	30.25"	\$5,647.00



Downblast Fans - Belt Drive

Included Accessories:

- Birdscreen - Galvanized
- Backdraft Damper (alum.)
- Variable Speed V-Belt 1.5 SF
- NEMA 1 Disconnect



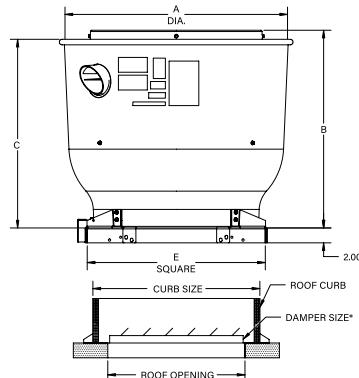
MODEL	HP	CFM	SP	VOLTAGE	DIMENSION E	DIMENSION A	DIMENSION B	PRICE
BCRD 180D	1-1/2 HP	4823-5230	.375"	460/3/60	30"x30"	38.38"	33.88"	\$3,526.00
BCRD 210D	2 HP	4389-4808	.375"	460/3/60	30"x30"	38.38"	34.06"	\$7,329.00
BCRD 300D	3 HP	8338-9077	.5"	460/3/60	40"x40"	51.38"	38.88"	\$11,981.00
BCRD 420D	5 HP	14403-15621	.5"	460/3/60	52"x52"	65.81"	47.81"	\$19,435.00



Upblast Fans - Roof Mount - Direct Drive

Included Accessories:

- Birdscreen - Galvanized
- Backdraft Damper (alum.)
- Speed Controller
- 0-10 VDC Lead
- NEMA 1 Disconnect



MODEL	HP	CFM	SP	VOLTAGE	DIMENSION E	DIMENSION A	DIMENSION B	PRICE
VCU 85	1/4 HP	330-390	.25"	115/1/60	17"x17"	23.50"	18.20"	\$2,105.00
VCU 89	1/4 HP	390-510	.25"	115/1/60	20"x20"	23.50"	18.20"	\$2,227.00
VCU 98	1/4 HP	510-755	.25"	115/1/60	20"x20"	23.50"	18.20"	\$2,492.00
VCU 110	1/2 HP	740-926	.25"	115/1/60	20"x20"	23.50"	18.20"	\$3,146.00
VCU 122	1/2 HP	903-1309	.25"	115/1/60	24"x24"	30.00"	26.66"	\$3,820.00

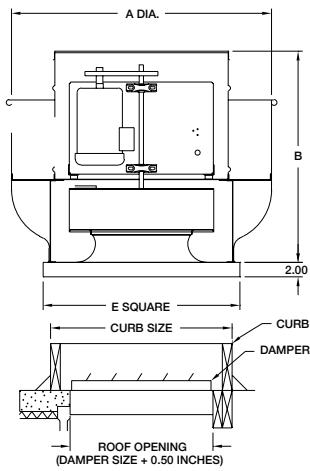


Upblast Fans - Roof Mount - Belt Drive

MODEL BCRU

Included Accessories:

- Birdscreen - Galvanized
- Backdraft Damper (alum.)
- Variable Speed V-Belt 1.5 SF
- NEMA 1 Disconnect



MODEL	HP	CFM	SP	VOLTAGE	DIMENSION E	DIMENSION A	DIMENSION B	PRICE
BCRU 210B	1-1/2 HP	5419-5988	.5"	460/3/60	34"x34"	45"	35.61"	\$3,912.00
BCRU 300B	2 HP	9534-9949	.375"	460/3/60	40"x40"	54"	38.25"	\$6,192.00
BCRU 420B	3 HP	15533-16648	.375"	460/3/60	52"x52"	69"	46.75"	\$10,045.00

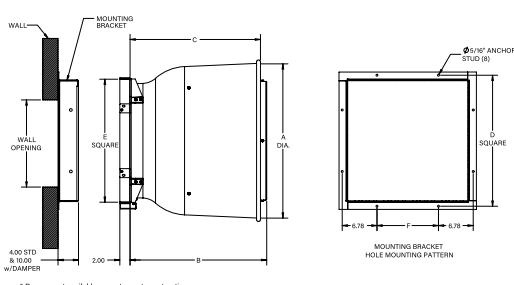


Wall Mounted Fans - Direct Drive

MODEL VCU

Included Accessories:

- Birdscreen - Galvanized
- Backdraft Damper (alum.)
- NEMA 1 Disconnect
- Speed Controller
- 0-10 VDC Lead
- Mounting Bracket



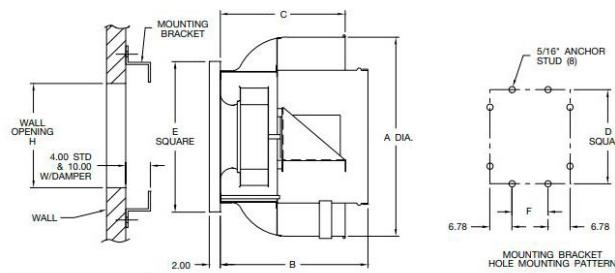
MODEL	HP	CFM	SP	VOLTAGE	DIMENSION E	DIMENSION A	DIMENSION B	PRICE
VCU 85	1/4 HP	330-390	.25"	115/1/60	17"x17"	23.50"	18.20"	\$2,089.00
VCU 89	3/4 HP	390-510	.25"	115/1/60	20"x20"	23.50"	18.20"	\$2,115.00
VCU 122	1 HP	903-1309	.25"	115/1/60	24"x24"	30.00"	26.66"	\$3,850.00



Wall Mounted Fans - Direct Drive

Included Accessories:

- Birdscreen - Galvanized
- Backdraft Damper (alum.)
- NEMA 1 Disconnect
- Speed Controller
- 0-10 VDC Lead
- Mounting Bracket



MODEL DCRW

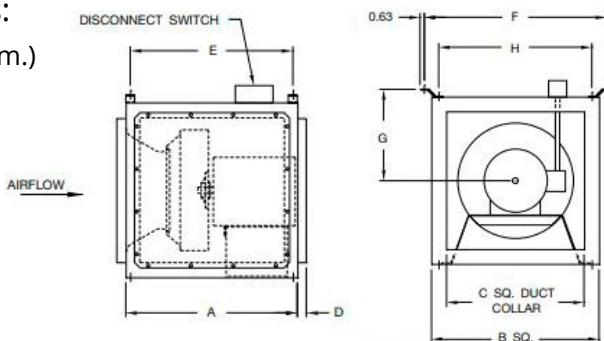
MODEL	HP	CFM	SP	VOLTAGE	DIMENSION E	DIMENSION A	DIMENSION B	PRICE
DCRW 180BE	1 HP	2504-3597	.25"	115/1/60	30"x30"	36.00"	29.17"	\$6,050.00



Square Inline - Direct Drive

Included Accessories:

- Backdraft Damper (alum.)
- Speed Controller
- NEMA 1 Disconnect
- 0-10 VDC Lead



MODEL DSI

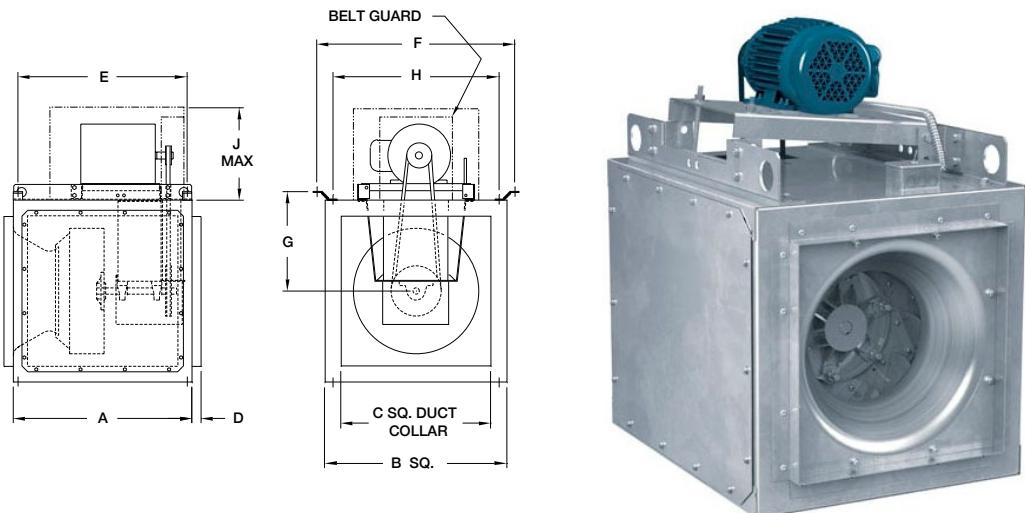
MODEL	HP	CFM	SP	VOLTAGE	DIMENSION F	DIMENSION A	DIMENSION B	PRICE
DSI 080AE	1/4 HP	321-587	.25"	115/1/60	19.50"	19.00"	15.33"	\$2,743.00
DSI 080AE	1/6 HP	321-587	.25"	115/1/60	19.50"	19.00"	15.33"	\$2,528.00
DSI 090AE	1/4 HP	510-907	.25"	115/1/60	19.50"	19.00"	15.33"	\$2,743.00
DSI 100AE	1/2 HP	520-1484	.25"	115/1/60	21.06"	20.50"	17.81"	\$2,320.00
DSI 120AE	3/4 HP	830-2041	.25"	115/1/60	22.06"	21.50"	19.38"	\$3,516.00
DSI 135AE	1 HP	819-2024	.25"	115/1/60	24.25"	23.00"	21.56"	\$3,671.00
DSI 165AE	1 HP	1805-2615	.25"	115/1/60	29.06"	26.00"	26.50"	\$5,294.00



Square Inline - Belt Drive

Included Accessories:

- Backdraft Damper (alum.)
- Variable Speed V-Belt 1.5 SF
- NEMA 1 Disconnect



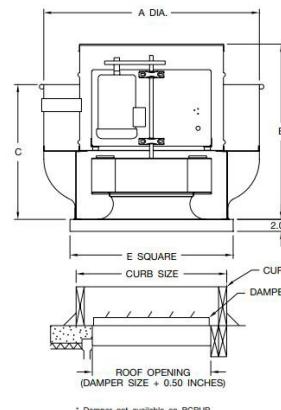
MODEL	HP	CFM	SP	VOLTAGE	DIMENSION F	DIMENSION A	DIMENSION B	PRICE
BSI 210A	1 1/2 HP	5167-5619	0.5"	460/3/60	35.06"	32.00"	32.34"	\$4,596.00
BSI 270A	3 HP	8589-10450	0.5"	460/3/60	43.00"	39.00"	40.13"	\$6,770.00
BSI 330A	5 HP	14708-16240	0.5"	460/3/60	52.31"	45.50"	48.81"	\$8,825.00



Restaurant Fans

Included Accessories:

- Restaurant Construction
(High Temp Caulk and Wiring, Etc)
- Grease Box and Drain Connection
- Variable Speed V-Belt 1.5 SF
- NEMA 3R Disconnect



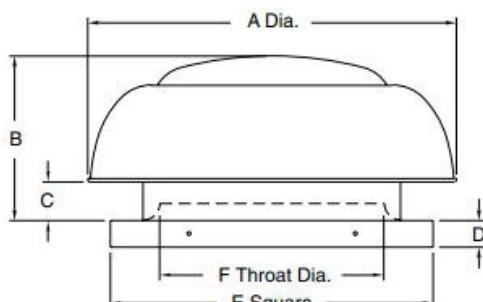
MODEL	HP	CFM	SP	VOLTAGE	DIMENSION E	DIMENSION A	DIMENSION B	PRICE
VCUB 140BE	1 HP	3043-3187	.25"	115/1/60	24"x24"	30"	27.68"	\$5,327.00
BCRUR 160BE	1 HP	3486-3668	.25"	115/1/60	24"x24"	30"	29.81"	\$10,349.00



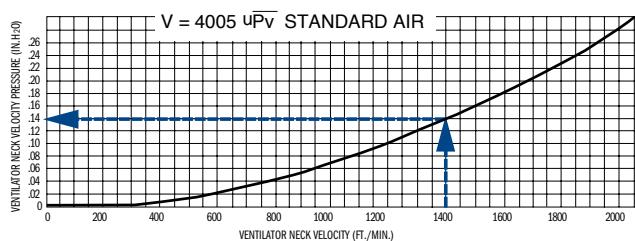
Gravity Roof Ventilators

Included Accessories:

- Birdscreen
- Optional Backdraft Damper



Static Resistance of GRV Relief and/or Intake Ventilators



1. Divide CFM by ventilator neck area to find neck velocity.
2. Locate this neck velocity at bottom of chart. Read vertically upward to intersection of curve, then horizontally to left-hand margin. Read neck velocity pressure at this point.
3. To find system resistance, multiply neck velocity pressure by appropriate resistance factor of unit. (Resistance factor shown below.)

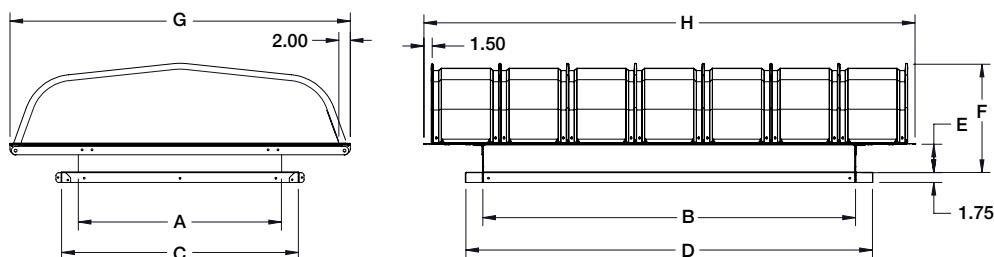
APPLICATION	RESISTANCE FACTOR
RELIEF	1.55
INTAKE	1.83

MODEL	CFM	SP	DIMENSION E	DIMENSION A	DIMENSION B	PRICE
GRV 090B	255	0.031"	16.50"	22.50"	8.25"	\$651.00
GRV 160B	830	0.031"	24"	27.50"	12.25"	\$939.00
GRV 210B	1,415	0.031"	29.50"	40.50"	12.75"	\$1,315.00



Included Accessories:

- Birdscreen
- Optional Backdraft Damper



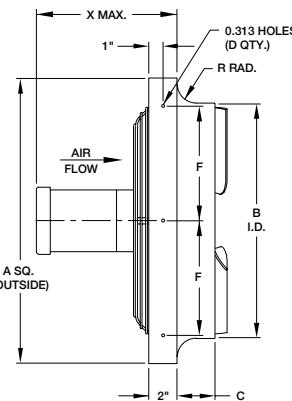
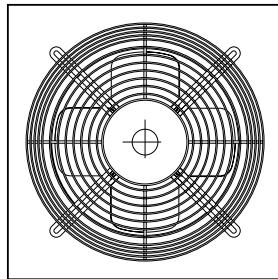
MODEL	DIMENSION F	DIMENSION GxH	DIMENSION CxD	PRICE
MGR 24X24	17.24"	38"x39"	30"x30"	\$1,814.00



Propellar Fans - Direct Drive

Included Accessories: **TCPE**

- Wall Collar Kit
- Speed Controller
- 0-10 VDC Lead
- Backdraft Damper (alum.)
- NEMA 1 Disconnect



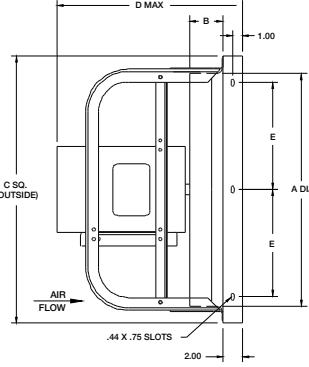
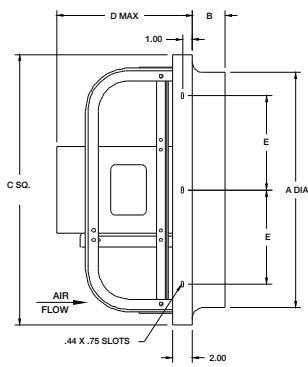
MODEL TCPE

MODEL	HP	CFM	SP	VOLTAGE	DIMENSION B	DIMENSION A	DIMENSION X	PRICE
TCPE 082AE	1/6 HP	131-203	0.125"	115/1/60	8.38"	13.25"	10.25"	\$2,485.00
TCPE 122AE	1/6 HP	295-1056	0.25"	115/1/60	12.38"	18.25"	11.50"	\$2,809.00
TCPE 162AE	3/4 HP	682-3685	0.25"	115/1/60	16.50"	23.25"	19.00"	\$3,562.00
TCPE 182AE	3/4 HP	1309-4426	0.25"	115/1/60	18.50"	25.25"	20.50"	\$3,684.00



Included Accessories:

- Backdraft Damper (alum)
- Wall Box w/ Bolted Guard
(factory assembled)
- NEMA 1 Disconnect



MODEL WPD

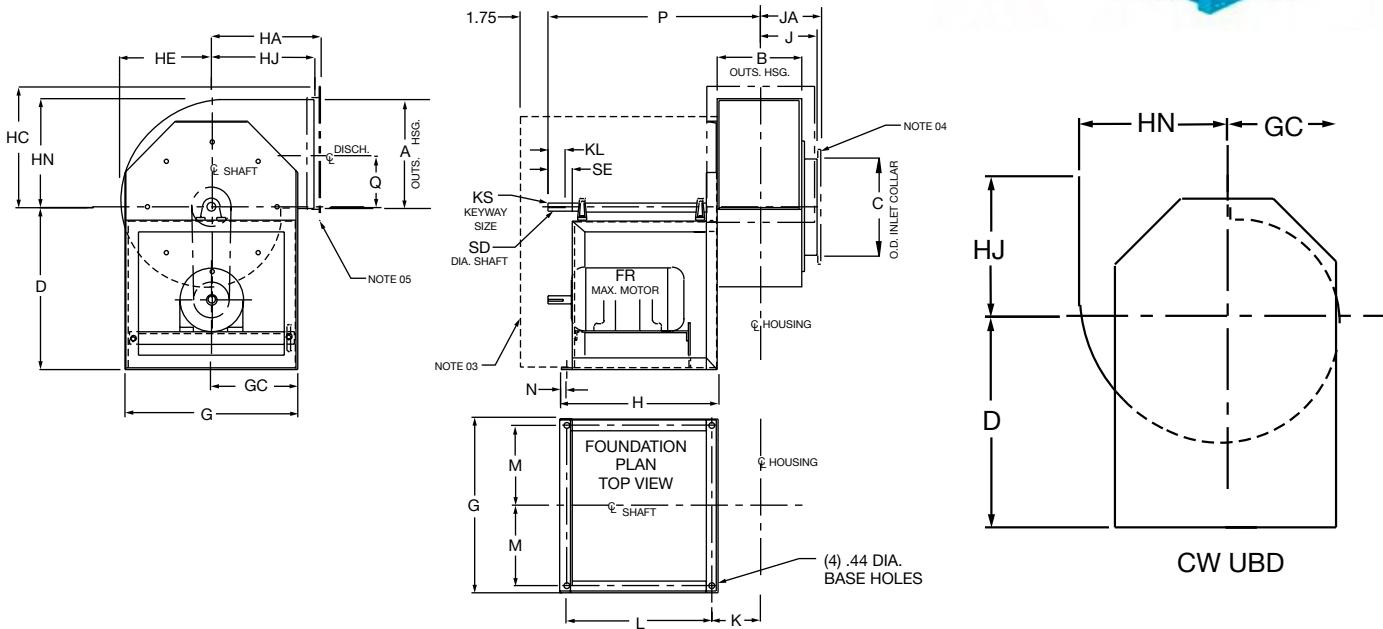
MODEL	HP	CFM	SP	VOLTAGE	DIMENSION B	DIMENSION A	DIMENSION D	PRICE
WPD 24E8	2 HP	5062-9171	0.125"	460/3/60	3.50"	24.25"	14.55"	\$3,734.00
WPD 30E4	2 HP	6681-12716	0.125"	460/3/60	4.00"	30.38"	14.75"	\$4,593.00
WPD 48E8	5 HP	16784-27277	0.125"	460/3/60	6.00"	48.38"	23.59"	\$8,928.00



Utility Set

Included Accessories:

- Access Door - Bolted
- Drain - 3/4"
- Flange - Inlet Punched
- Flange - Outlet Punched
- Weather Cover
- Extended Lube Lines to Drive Side
- **DRIVE PACKAGES AVAILABLE - CONTACT THE WAREHOUSE FOR INFORMATION AND AVAILABILITY**



* Bare Fan - Motor and Drive packages available

* Motors available ranging from 1/2 HP to 20 HP

MODEL	HP	CFM	SP	DIMENSION A	DIMENSION D	DIMENSION G	DIMENSION P
BCV 105	BARE	588-1437	2"	11.19"	14.50"	19.50"	19.19"
BCV 135	BARE	840-3990	2"	14.31"	15.75"	17.50"	20.31"
BCV 165	BARE	1256-5966	2"	17.44"	19.00"	20.50"	23.75"
BCV 245	BARE	2760-13110	2"	25.94"	28.00"	29.75"	29.00"
BCV 300	BARE	4136-19646	2"	31.81"	27.50"	36.13"	40.38"
BCV 365	BARE	6128-29108	2"	38.75"	33.50"	64.56"	50.56"

MODEL	DIMENSION HA	DIMENSION HC	DIMENSION HE	DIMENSION HJ	DIMENSION HN	DIMENSION JA	PRICE
BCV 105	9.06"	12.13"	9.17"	9"	11.13"	5.50"	\$4,454.00
BCV 135	10.75"	15.25"	11.63"	10.25"	14.25"	12.00"	\$5,079.00
BCV 165	13.13"	18.38"	14.13"	10.25"	14.25"	13.19"	\$5,733.00
BCV 245	19.50"	27.13"	21.00"	19.00"	25.88"	16.38"	\$8,726.00
BCV 300	23.81"	33.25"	25.75"	23.31"	31.75"	15.50"	\$14,776.00
BCV 365	29.00"	40.13"	31.50"	28.50"	39.63"	18.00"	\$19,048.00



Fan Accessories

ACCESSORY	PRICE
GRIDSMART Speed Controller	\$115.00
Idler Sheave Assembly	\$100.00
FLOOR MOUNT RIS RVD-A	\$31.00
FLOOR MOUNT RIS RVD-B	\$31.00
FLOOR MOUNT RIS RVD-C	\$31.00
FLOOR MOUNT RIS RVD-D	\$31.00
ELASTOMER HANGER AVH-1-40	\$25.00
SPRING HANGERS HA-S-022	\$40.00
FLOOR, SPRING SMSR 50LBS	\$126.00
FLOOR, SPRING SMSR 100LBS	\$126.00
FLOOR, SPRING SMSR 395LBS	\$126.00
FLOOR, SPRING SMSR 650LBS	\$126.00
SLOPED ROOF CAP 636	\$51.00
SLOPED ROOF CAP 634M	\$105.00
SLOPED ROOF CAP 634	\$92.00
SLOPED ROOF JACK - #437	\$150.00
SC100W SPEED CONTROLLER	\$53.00
SPEED CONTROLLER 80L	\$98.00
METAL GRILLE	\$71.00
OCCUPANCY SENSOR	\$91.00
IN-LINE ADAPTOR 981L	\$60.00
IN-LINE ADAPTOR 982L	\$76.00
IN-LINE ADAPTOR 983L	\$82.00
HUMIDITY WALL CONTROL	\$105.00



Speed Controller



Idler Sheave Assembly



Floor Mount



Elastomer Hanger



Spring Hanger



Spring SMSR



Sloped Roof Cap 636



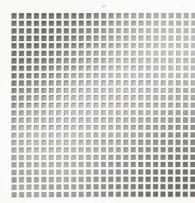
Sloped Roof Cap 634M



SC100W Speed Controller



Speed Controller 80L



Metal Grille



Occupancy Sensor



In-Line Adaptor



Humidity Wall Control

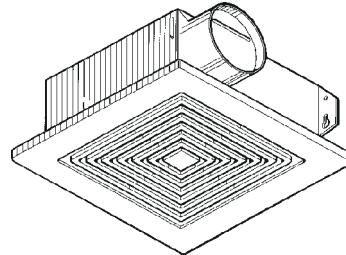


Sloped Roof Cap 634



SPECIFICATION SHEET

MODEL 688 CEILING/WALL FAN



Versatile, high quality ventilator at economy price.

FEATURES

GRILLE:

- White polymeric - blends well with any decor
- Torsion spring grille mounting - no tools required
- Metal grille kit available - purchase separately

BLOWER:

- Plug-in, permanently lubricated
- Broan-designed polymeric blower wheel
- Snap in/out motor assembly for easy cleaning - no screws to drive or drop

HOUSING:

- Compact, 25-gauge galvanized steel - attaches easily to wall of ceiling joists
- Double strength mounting flanges with keyhole slots
- Removable wiring cover - make connections away from tight corners
- No electrical knockout to remove
- Polymeric duct fitting with tapered sleeve for easy, positive duct connection
- Quiet polymeric damper prevents cold backdrafts - no metallic clatter
- cULus listed for use over bathtubs and showers when connected to a GFCI protected branch circuit.

CONTROLS DESIGNED FOR USE WITH THIS PRODUCT (purchase separately):

- Refer to Broan's catalog for a complete line of accessories to effectively adapt this fan to your construction requirements.

MODEL 1667H: Rough-in housing for Models 1688F and 1689F finish assemblies (packed 6 per carton).

MODEL	VOLTS	AMPS	SONES	CFM	DUCT
688	120	0.9	4.0	50	3" Round

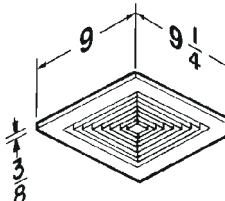
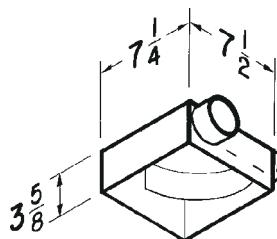
TYPICAL SPECIFICATION

Fan shall be Broan Model 688.

Unit shall have galvanized steel housing with double-strength mounting flanges. It shall be ducted vertically (horizontally) to a roof cap (wall cap).

Motor assembly shall be removable and permanently lubricated.

Air delivery shall be no less than 50 CFM and sound levels no greater than 4.0 Sones. All air and sound ratings shall be certified by HVI. Units shall be cULus Listed.



Dimensions shown are in inches.



HVI-2100 CERTIFIED RATINGS comply with new testing technologies and procedures prescribed by the Home Ventilating Institute, for off-the-shelf products, as they are available to consumers. Product performance is rated at 0.1 in. static pressure, based on tests conducted in a state-of-the-art test laboratory. Sones are a measure of humanly-perceived loudness, based on laboratory measurements.

REFERENCE	QTY.	REMARKS	Project
			Location
			Architect
			Engineer
			Contractor
			Submitted by _____ Date _____

Fan Cut Sheets

PERFORMANCE RATINGS FLEX™ SERIES FANS

HVI PERFORMANCE

Model	0.1 Ps - Static Pressure (in. H ₂ O)				0.25 Ps
	Airflow (CFM)	Sound (Sones)	Power (Watts)	Efficacy (CFM / W)	Airflow (CFM)
A80	80	2.0	43.1	1.89	67
A110	110	3.0	47.3	2.36	102

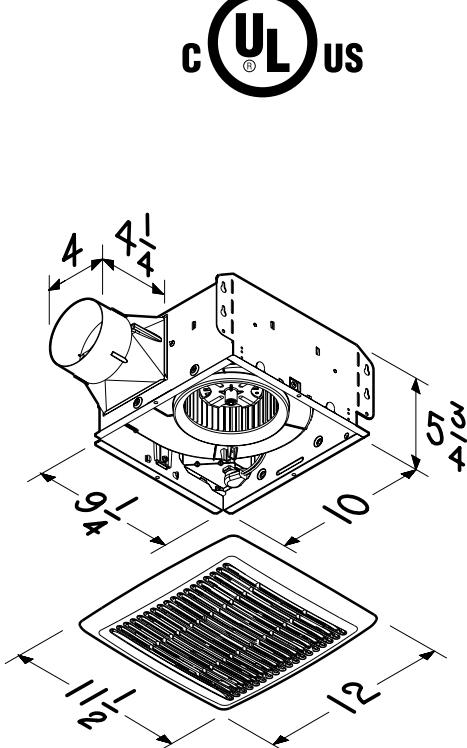


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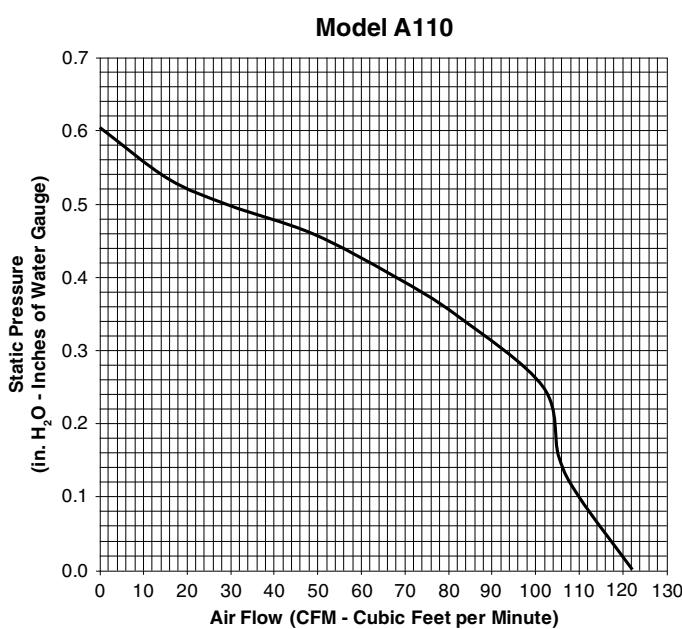
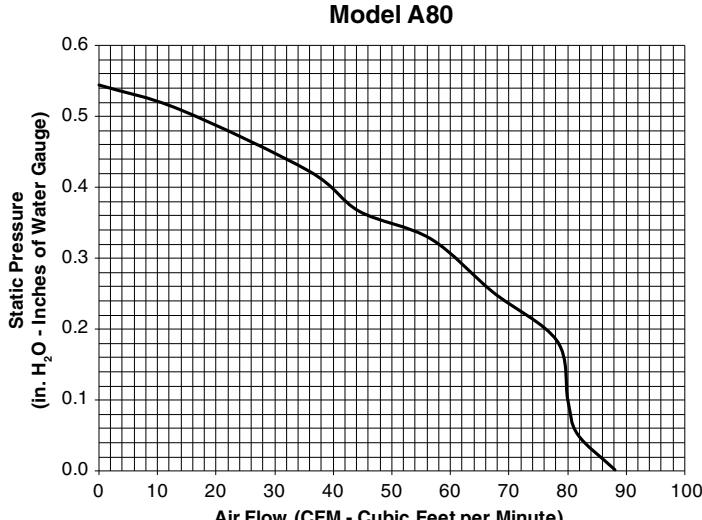
ELECTRICAL & WEIGHT

Model	Volts	Hz	Amps	Shipping Weight
A80	120	60	0.37	10.0 lb.
A110	120	60	0.40	10.0 lb.

AIR FLOW PERFORMANCE



NOTE: Dimensions shown are in inches.



Broan Hartford, Wisconsin www.broan.com 800-558-1711
Venmar Ventilation ULC Drummondville (Quebec), Canada www.broan.ca 877-896-1119

PERFORMANCE RATINGS - MODEL AE50110DCL FLEX DC™ SERIES FAN / LIGHT

HVI PERFORMANCE

Speed Setting	Static Pressure (In. H ₂ O)	Airflow (CFM)	Sound (Sones)	Power (Watts)	Efficacy (CFM/W)
50	0.1	50	< 0.3	3.4	14.7
	0.25	36	0.5	5.3	6.7
80	0.1	80	0.4	6.5	12.6
	0.25	71	0.9	9.4	7.6
110	0.1	110	0.9	10.6	10.4
	0.25	105	1.4	14.9	7.0



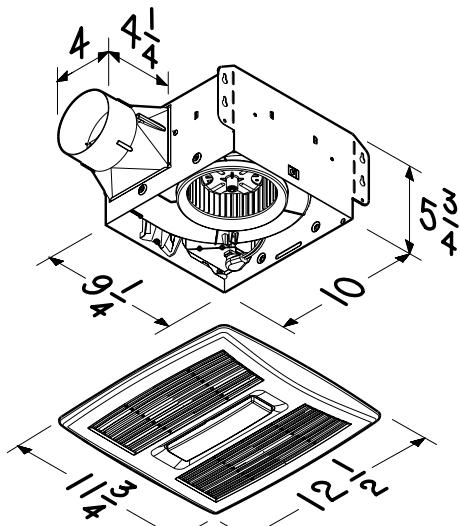
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ELECTRICAL & WEIGHT

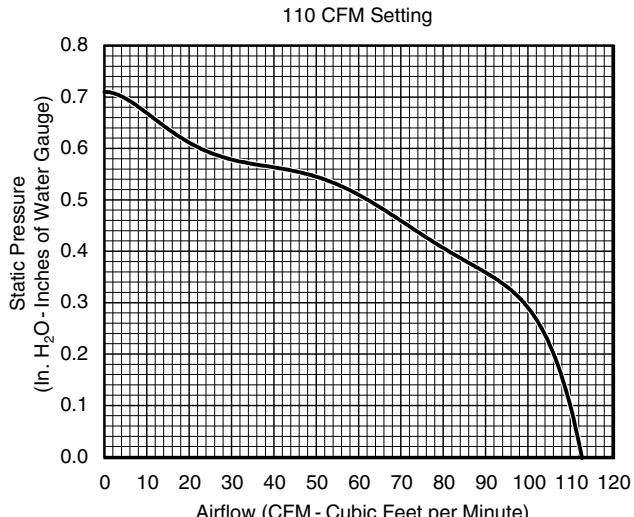
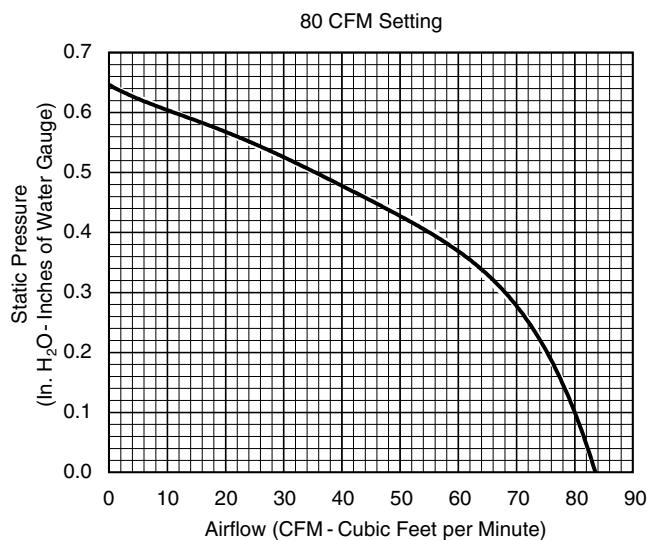
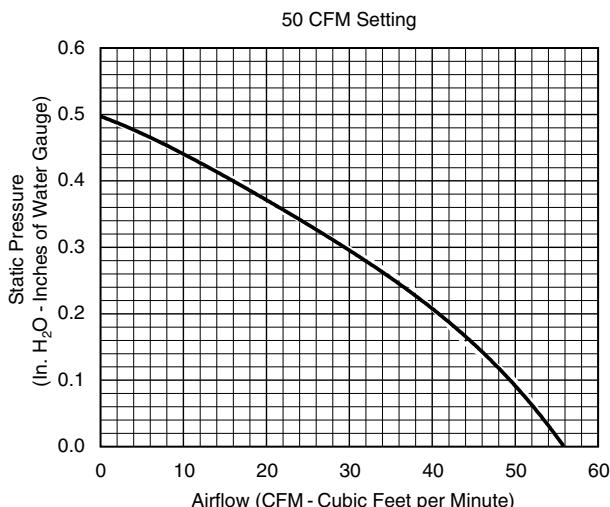
Volts	Hz	Amps	Shipping Weight
120	60	0.4	8.5 lb.



JA8-2019



AIR FLOW PERFORMANCE



BROAN®

Broan Hartford, Wisconsin www.broan.com 800-558-1711

Fan Cut Sheets

PERFORMANCE RATINGS - LOSONE SELECT® CEILING MOUNT VENTILATORS L200, L250, L300 SERIES, L300KMG

AMCA LICENSED PERFORMANCE

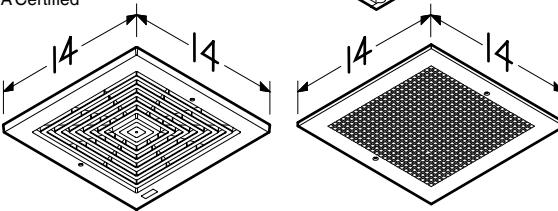
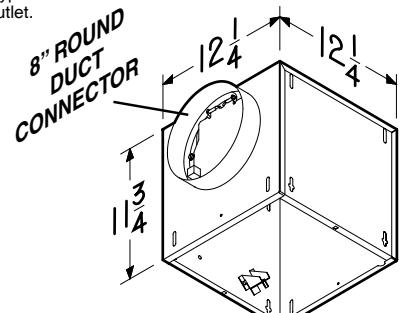
		CFM / SONES - AT STATIC PRESSURES (Ps - inches of H ₂ O)													
MODEL NO.	NOMINAL VOLTAGE	0.0" Ps	.10" Ps	.125" Ps	.250" Ps	.375" Ps	.50" Ps	.625" Ps	.750" Ps	.875" Ps	1.0" Ps	NOMINAL RPM	AMPS @60 Hz	WATTS	
L200	120 VAC	CFM Hor. SONES Hor.	231 1.6	214 1.8	210 1.7	196 2.3	186 2.9	177 3.5	165 4.1	144 4.9	113 5.3	51	740	1.8	127
		CFM Ver. SONES Ver.	224 1.5	210 1.8	207 2.0	197 2.3	187 2.7	179 3.4	167 4.0	144 4.5	99 5.1	41	760	1.8	127
L200MG	120 VAC	CFM Hor. SONES Hor.	237 1.4	218 1.8	215 1.9	199 2.4	190 3.0	180 3.6	167 4.2	144 5.1	108 5.6	47	715	1.8	127
		CFM Ver. SONES Ver.	228 1.5	213 1.7	209 1.8	198 2.3	190 2.8	182 3.4	168 4.1	145 4.6	105 5.1	56	730	1.8	127
L250	120 VAC	CFM Hor. SONES Hor.	272 2.1	261 2.3	259 2.2	250 2.9	242 3.3	233 3.9	218 4.4	201 4.8	165 5.5	99	830	2.1	166
		CFM Ver. SONES Ver.	269 2.3	261 2.6	259 2.7	253 3.0	248 3.3	239 3.7	224 4.2	203 4.7	171 5.4	101	860	2.1	166
L250MG	120 VAC	CFM Hor. SONES Hor.	280 2.1	267 2.5	265 2.5	254 2.9	246 3.4	238 3.9	224 4.3	209 4.6	172 5.6	105	805	2.1	166
		CFM Ver. SONES Ver.	275 2.2	263 2.6	262 2.7	255 3.0	250 3.4	241 3.8	229 4.3	210 4.8	178 5.5	105	830	2.1	166
L300	120 VAC	CFM Hor. SONES Hor.	312 2.8	309 2.9	308 2.9	303 3.3	296 3.5	287 3.9	273 4.3	254 4.7	219 5.1	125	905	2.6	212
		CFM Ver. SONES Ver.	319 2.6	314 2.9	313 3.0	306 3.4	299 3.6	288 3.9	274 4.4	251 4.7	219 5.0	120	940	2.6	212
L300MG	120 VAC	CFM Hor. SONES Hor.	323 3.0	317 2.8	316 3.0	312 3.2	305 3.5	298 3.9	283 4.3	266 4.8	235 5.2	153	860	2.6	212
		CFM Ver. SONES Ver.	322 2.4	315 2.7	314 2.8	308 3.3	302 3.5	292 3.9	278 4.3	259 4.7	227 5.1	119	885	2.6	212
L300KMG	120 VAC	CFM Hor. SONES Hor.	286 2.8	279 3.0	277 3.1	272 3.4	268 3.8	261 4.4	253 4.8	241 5.1	222 5.5	173	790	2.6	212
		CFM Ver. SONES Ver.	287 3.3	280 3.6	277 3.7	273 4.1	266 4.7	259 5.2	247 5.6	231 6.3	208 6.8	164 6.9	815	2.6	212

Performance ratings include the effects of inlet grille and backdraft damper in the airstream. 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' (1.5m) in a hemispherical free field calculated per AMCA Std. 301. Values shown are for Installation Type B: Free inlet fan sone levels. Performance shown is for Installation Type B: Free inlet, Ducted outlet.

"Broan-NuTone LLC certifies that the models shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 (and AMCA Publication 311 if sound is also certified) and comply with the requirements of the AMCA Certified Ratings Program."

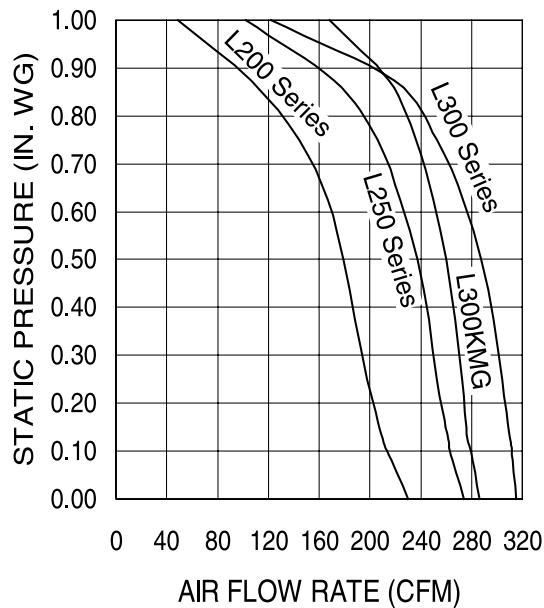


Models L200, L250, and L300 are UL listed for use over bathtubs and showers when connected to a GFCI-protected branch circuit.



BRCAN®

Broan-NuTone LLC, 926 West State Street, Hartford, Wisconsin 53027 (1-800-637-1453)
Broan-NuTone Canada, 1140 Tristar Drive, Mississauga, Ontario, L5T 1H9 (1-888-882-7626)



WEIGHT

MODEL NO.	SHIPPING WT.
L200	23.0 lbs.
L250, L300	23.1 lbs.
L200MG	23.9 lbs.
L250MG, L300MG	24.0 lbs.
L300KMG	25.2 lbs.

PERFORMANCE RATINGS - LOSONE SELECT® CEILING MOUNT VENTILATORS L400, L500, L700 SERIES

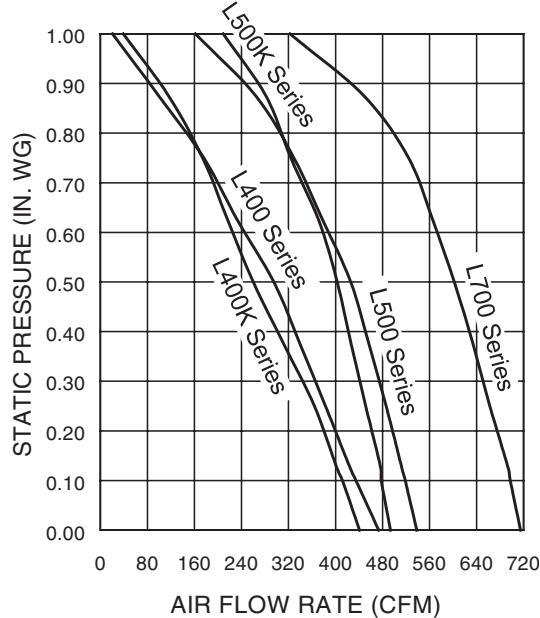
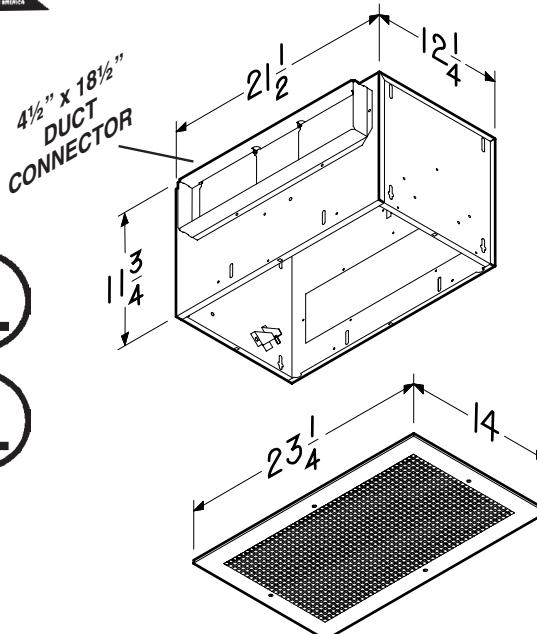
AMCA LICENSED PERFORMANCE

CFM / SONES - AT STATIC PRESSURES (Ps - inches of H ₂ O)															
MODEL NO.	NOMINAL VOLTAGE		0.0" Ps	.10" Ps	.125" Ps	.250" Ps	.375" Ps	.50" Ps	.625" Ps	.750" Ps	.875" Ps	1.0" Ps	NOMINAL RPM	AMPS @60 Hz	WATTS
L400	120 VAC	CFM Hor.	480	442	434	388	344	299	229	182	114	33	735	1.4	146
		SONES Hor.	2.0	2.4	2.3	2.8	3.3	3.8	4.5	4.8	5.4	5.6			
L400K	120 VAC	CFM Hor.	467	428	416	378	335	291	237	170	85	8	755	1.4	146
		SONES Hor.	2.3	2.6	2.6	3.0	3.5	4.0	5.1	5.5	5.7	5.9			
L500	120 VAC	CFM Hor.	442	415	406	370	330	274	230	191	130	50	675	1.4	146
		SONES Hor.	2.9	3.2	3.3	3.8	4.4	5.3	6.0	6.5	6.8	7.2			
L500K	120 VAC	CFM Hor.	440	409	399	358	294	246	203	157	102	28	680	1.4	146
		SONES Ver.	2.9	3.4	3.3	4.0	5.0	6.1	6.3	6.8	7.1	7.2			
L500K	120 VAC	CFM Hor.	538	520	514	491	463	434	389	339	282	186	810	2.2	232
		SONES Hor.	3.0	3.1	3.3	3.6	4.0	4.4	5.0	5.7	6.2	6.7			
L500K	120 VAC	CFM Ver.	539	517	512	481	451	418	367	319	247	137	865	2.2	232
		SONES Ver.	2.9	3.1	3.2	3.4	3.8	4.2	4.8	5.9	6.3	6.4			
L700	120 VAC	CFM Hor.	506	484	481	460	435	418	389	337	301	231	700	2.2	232
		SONES Hor.	4.3	4.3	4.4	5.0	5.6	6.2	7.0	7.6	8.0	8.3			
L700	120 VAC	CFM Ver.	481	472	473	443	418	388	353	311	262	187	705	2.2	232
		SONES Ver.	3.6	3.9	4.0	4.5	5.6	6.1	6.7	8.4	8.1	8.6			
L700	120 VAC	CFM Hor.	722	704	701	667	640	607	571	534	453	333	960	2.9	313
		SONES Hor.	4.5	4.6	4.7	4.8	5.0	5.2	5.6	6.2	7.1	7.2			
L700	120 VAC	CFM Ver.	708	691	687	658	628	597	560	515	444	312	985	2.9	313
		SONES Ver.	5.2	5.0	5.0	5.7	5.8	6.1	6.4	7.4	7.1	7.6			

Performance ratings include the effects of inlet grille and backdraft damper in the airstream. 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' (1.5m) in a hemispherical free field calculated per AMCA Std. 301. Values shown are for Installation Type B: Free inlet fan sone levels. Performance shown is for Installation Type B: Free inlet, Ducted outlet.



"Broan-NuTone LLC certifies that the models shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 (and AMCA Publication 311 if sound is also certified) and comply with the requirements of the AMCA Certified Ratings Program."



AIR FLOW RATE (CFM)

WEIGHT

MODEL NO.	SHIPPING WT.
L400	
L500	33.8 lbs.
L400K, L500K	36.2 lbs.
L700	33.9 lbs.



Broan-NuTone LLC, 926 West State Street, Hartford, Wisconsin 53027 (1-800-637-1453)
Broan-NuTone Canada, 1140 Tristar Drive, Mississauga, Ontario, L5T 1H9 (1-888-882-7626)

Fan Cut Sheets

PERFORMANCE RATINGS - LOSONE SELECT® CEILING MOUNT VENTILATORS L900 SERIES & L1500 SERIES

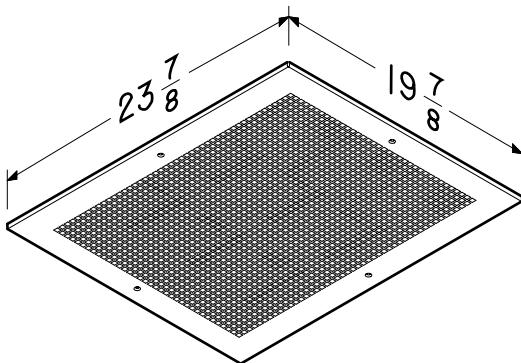
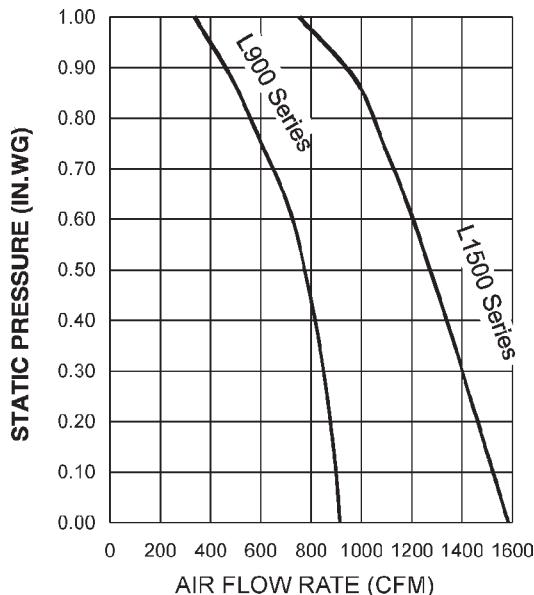
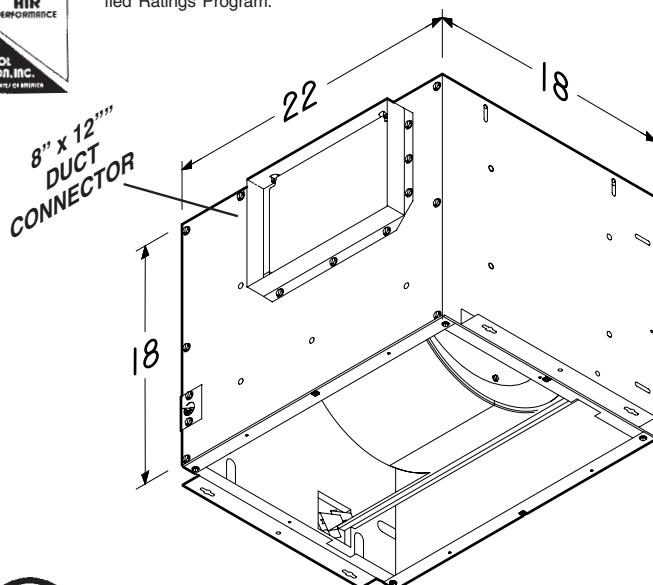
AMCA LICENSED PERFORMANCE

CFM / SONES - AT STATIC PRESSURES (Ps - inches of H ₂ O)															
MODEL NO.	NOMINAL VOLTAGE		0.0" Ps	.10" Ps	.125" Ps	.250" Ps	.375" Ps	.50" Ps	.625" Ps	.750" Ps	.875" Ps	1.0" Ps	NOMINAL RPM	AMPS @60 Hz	WATTS
L900	120 VAC	CFM Hor.	918	905	901	877	842	793	725	636	536	390	650	3.0	306
		SONES Hor.	3.8	4.0	4.1	4.0	4.2	4.3	4.4	4.9	4.5	5.3			
L1500	120 VAC	CFM Ver.	909	892	885	850	807	756	695	568	440	282	650	3.0	306
		SONES Ver.	3.8	3.4	3.4	3.5	3.6	3.7	3.9	4.2	4.3	4.4			

Performance ratings include the effects of inlet grille and backdraft damper in the airstream. 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' (1.5m) in a hemispherical free field calculated per AMCA Std. 301. Values shown are for Installation Type B: Free inlet fan sone levels. Performance shown is for Installation Type B: Free inlet, Ducted outlet.



"Broan-NuTone LLC certifies that the models shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 (and AMCA Publication 311 if sound is also certified) and comply with the requirements of the AMCA Certified Ratings Program."



WEIGHT

MODEL NO.	SHIPPING WT.
L900	64.2 lbs.
L1500	64.3 lbs.



Broan-NuTone LLC, 926 West State Street, Hartford, Wisconsin 53027 (1-800-637-1453)
Broan-NuTone Canada, 1140 Tristar Drive, Mississauga, Ontario, L5T 1H9 (1-888-882-7626)

Compact Series

MODEL ODD-100S



NEXT GENERATION
Ultimate fan solutions

ORTECH

Product Specification Sheet

HIGHLIGHTS

- Ultra Silent, High Performance DC Motor
- Very quiet fan for ceiling or wall mounted Hold and ETL evaluation
- It comes with a DC motor which is known for its high efficiency and long lasting reliability
- It holds an ETL evaluation and is HVI and ENERGY STAR® certified

SPECIFICATIONS

Model	ODD-100S					
Static Pressure in inches w.g.	0.1	0.25	0.1	0.25	0.1	0.25
Air Volume (CFM)	54.5	42.8	80	62.7	100	81.2
Noise (sones)	0.1	0.9	0.4	0.8	0.7	1.0
Fan Watts	3.3W	5.7W	4.9W	7.5W	8W	9.2W
Duct Diameter	4"					
Power Rating (V/Hz)	120/60					

- Housing Size:** 8-1/2" x 9" x 5-3/4" (216 mm x 229 mm x 146 mm)
- Grille Dimensions:** 11-13/16" x 11-7/16" (300 mm x 290 mm)

HOUSING

- Made of rugged 26 GA galvanized steel
- Detachable 4 inch polymeric collar which includes a light weight built-in back draft damper

MOTOR / BLOWER

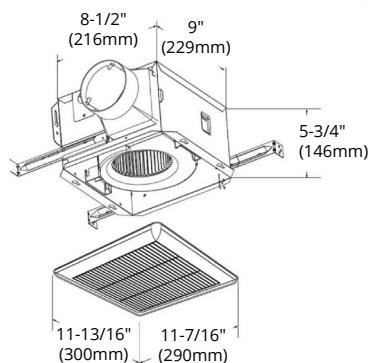
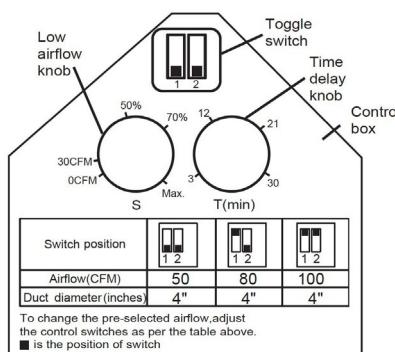
- 3 SPEED DC motor fan with low energy consumption
- 30 CFM variable 24 hour operation LOW SPEED adjustable speed controller allows accurate cfm selection
- LOW SPEED adjustable speed controller allows accurate cfm selection
- TIME DELAY preset allows the fan to continue running for an additional 3 to 30 minutes
- DC MOTOR comes with thermal cut off protection
- QUIET operates at lower rpm to ensure low sone levels

GRILLE

- The grille is low profile that has elegance and still able to maintain its simplicity

TYPICAL SPECIFICATIONS

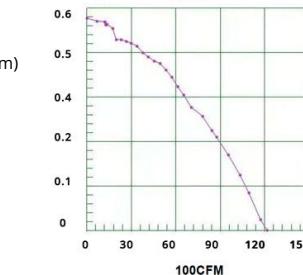
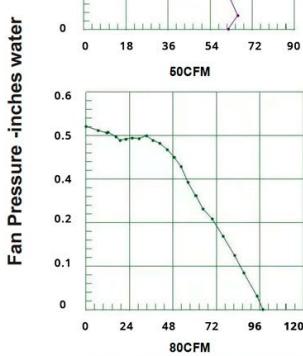
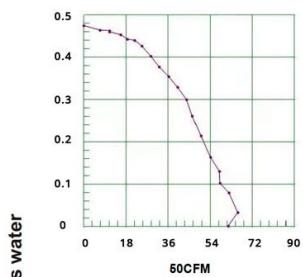
- Ceiling ventilator shall have corrosion resistance galvanized steel
- It shall be ducted to a roof vent or wall cap using 4 inch round pipe
- Blower assembly shall be removable, have a centrifugal type blower wheel and a permanently lubricated motor designed for continuous operation
- Includes an attachable non-metallic collar with built-in back draft damper
- Air and sound delivery meet the ENERGY STAR®, HVI certified ratings as per the fan curves attached



ADDITIONAL MODELS

ODD-100HS
ODD-100HS + MS

with humidity sensor
with humidity & motion sensor



Reference	QTY.	Remarks	Project:
			Location:
			Architect:
			Engineer:
			Contractor:
			Submitted by:
			Date:

Fan Cut Sheets

Compact Series

MODEL ODD-100HS | ODD-100HS+MS

NEXT GENERATION
Ultimate fan solutions

ORTECH

Product Specification Sheet



HIGHLIGHTS

- Ultra Silent, High Performance DC Motor, Built-in Humidity Sensor (both ODD-100HS and ODD-100HS+MS) and Motion sensor (ODD-100HS+MS)
- Built-in Humidity Sensor detects range from 50-100% rh
- Very quiet fan for ceiling or wall mounted Hold and ETL evaluation and conform to UL and cUL safety standards. HVI and ENERGY STAR® certified
- It comes with a DC motor which is known for its high efficiency and long lasting reliability. It holds an ETL evaluation and conforms to UL and cUL safety standards

SPECIFICATIONS

Model	ODD-100HS ODD-100HS+MS					
	0.1	0.25	0.1	0.25	0.1	0.25
Static Pressure in inches w.g.	0.1	0.25	0.1	0.25	0.1	0.25
Air Volume (CFM)	54.5	42.8	80	62.7	100	81.2
Noise (sones)	0.1	0.9	0.4	0.8	0.7	1.0
Fan Watts	3.3W	5.7W	4.9W	7.5W	8W	9.2W
Duct Diameter	4"					
Power Rating (V/Hz)	120/60					

• **Housing Size:** 8-1/2" x 9" x 5-3/4" (216 mm x 229 mm x 146 mm)

• **Grille Dimensions:** 11-13/16" x 11-7/16" (300 mm x 290 mm)

• **Fan Weight:** 7 lb

HOUSING

- Made of rugged 26 GA galvanized steel
- Detachable 4 inch polymeric collar which includes a light weight built-in back draft damper

MOTOR / BLOWER

- 50-100% ADJUSTABLE Humidity Sensor
- 3 SPEED DC motor fan with low energy consumption
- 30 CFM variable 24 hour operation LOW SPEED adjustable speed controller allows accurate cfm selection
- LOW SPEED adjustable speed controller allows accurate cfm selection
- DC MOTOR comes with thermal cut off protection
- QUIET operates at lower rpm to ensure low sone levels

GRILLE

- The grille is low profile that has elegance and still able to maintain its simplicity

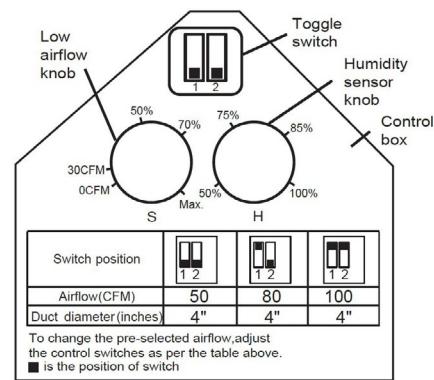
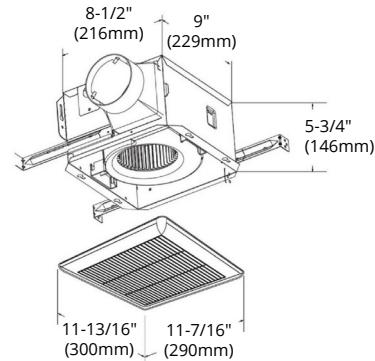
TYPICAL SPECIFICATIONS

- Ceiling ventilator shall have corrosion resistance galvanized steel
- It shall be ducted to a roof vent or wall cap using 4 inch round pipe
- Blower assembly shall be removable, have a centrifugal type blower wheel and a permanently lubricated motor designed for continuous operation
- Includes an attachable non-metallic collar with built-in back draft damper
- Air and sound delivery meet the ENERGY STAR® certified ratings as per the fan curves attached

ADDITIONAL MODELS

ODD-100HS
ODD-100HS+MS

with humidity sensor
with humidity & motion sensor



Reference	QTY.	Remarks	Project:
			Location:
			Architect:
			Engineer:
			Contractor:
			Submitted by:
			Date:

Universal Series

MODEL ODD-110-18PB



- Optional**
- Light
 - Metal Grille
 - LED Light
-

NEXT GENERATION

Ultimate fan solutions

CRTECH

Product Specification Sheet

HIGHLIGHTS

This fan includes a built-in adjustable humidity sensor from 30-100%RH as standard

- Three fans in one housing your choice 80-110-140 CFM
- All speeds have been individually performance tested and certified by HVI
- To select your CFM choice, simply shift the slide shift control to the required position
- LOW SPEED adjustable controller allows the contractor to adjust the airflow to the minimum required ventilation to meet the new building codes requirements
- HIGH SPEED time delay allows the fan to run an additional preset number of minutes which helps exhaust addition fowl air to satisfy the home owners' comfort

SPECIFICATIONS

Model	ODD-110-18PB					
Static Pressure in inches w.g.	0.1	0.25	0.1	0.25	0.1	0.25
Air Volume (CFM)	80	80	110	110	140	140
Noise (sones)	0.3	N/A	0.3	N/A	0.4	N/A
Fan Watts	5.6W		8.5W		13W	
Duct Diameter			6"			
Power Rating (V/Hz)			120/60			

HOUSING

- Made of rugged 26 GA galvanized steel
- High quality metal detachable "quick connect" collar
- Heavy duty 4 point mounting brackets adjustable up to 24" joist centers without vibration

MOTOR / BLOWER

- Totally enclosed brushless DC motor technology.
Most efficient using only 8~16W for all the above performances
- Operates at lower RPMs to give you ultra quiet performance
- Motor comes with a built-in overload disconnect for safety and longer motor life
- This fan is ETL and cETL listed for tub/shower enclosed when used with a GFCI branch circuit

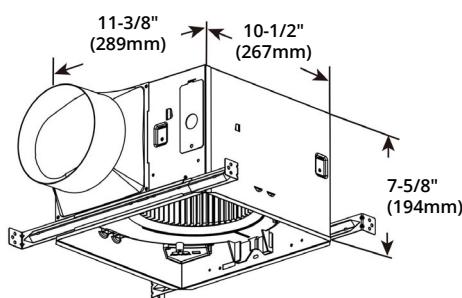
GRILLE

- Comes with torsion spring clips that helps mount grille evenly
- Made of a rugged polymeric resin that is known for its long life durability
- The Premium grille is low profile that has elegance and still able to maintain its simplicity

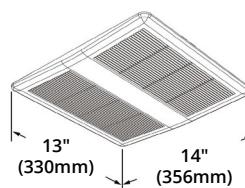
ADDITIONAL OPTIONS

- Motion Sensing grille

**ODD-110-18PB
Fan Dimensions
Diagram**

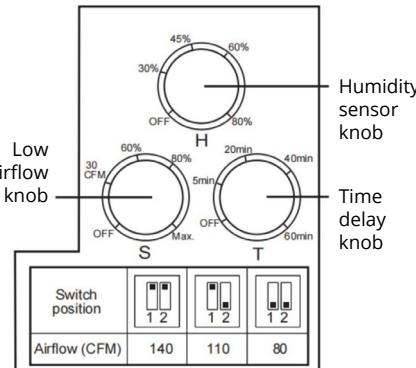


**Optional Grille
Dimensions
Diagram**



To change the pre-selected airflow, adjust the control switches as per the table above.
■ is the position of switch.

- **Housing Size:**
10-1/2" x 11-3/8" x 7-5/8"
(267 mm x 289 mm x 194 mm)
- **Grille Dimensions:**
13" x 14" (330 mm x 356 mm)
- **Fan Weight:** 10.1 lb



Fan Cut Sheets

Supreme Series

MODEL ODD-500-4



ORTECH

Product Specification Sheet

HIGHLIGHTS

- Holds an ETL evaluation and conforms to UL and cUL safety standards
- It comes with a DC motor which is known for its high efficiency and long lasting reliability
- Ventilating fan should be ceiling mounted and capable of exhausting air quietly and efficiently

SPECIFICATIONS

Model	ODD-500-4							
Static Pressure in inches w.g.	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25
Air Volume (CFM)	202	153	302	251	401	336	504	445
Noise (sones)	0.4	1.4	1.4	1.9	2.8	2.9	4.6	5.7
Fan Watts	12W	18W	22W	27W	38W	41W	66W	70W
Duct Diameter	8"							
Power Rating (V/Hz)	120/60							

• **Housing Size:** 14-1/4" x 14-1/4" x 9" (362 mm x 362 mm x 229 mm)

• **Grille Dimensions:** 17-1/4" x 17-3/4" (438 mm x 451 mm)

HOUSING

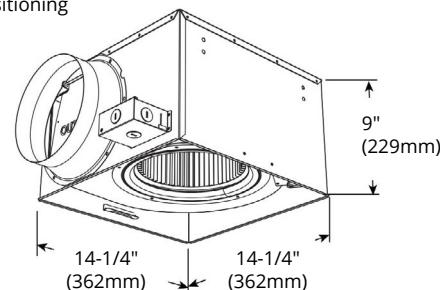
- Made of rugged 26 GA galvanized steel
- 8" diameter metal duct which includes a light-weight built-in back draft damper
- Double hanger bar mounting brackets that are adjustable up to 26 inch span allows for ideal positioning

MOTOR / BLOWER

- The motor is energy efficient
- Our Supreme series operates at lower RPM's to give you quieter operation
- Plug in permanently lubricated motor is engineered for continuous operation
- Fan shall be ETL and cETL listed for tub/shower enclosure when used with GFCI branch circuit

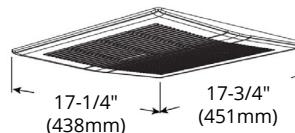
GRILLE

- Comes with torsion spring clips that helps mount grille evenly
- Made of rugged polymeric resin that is known for its long life durability



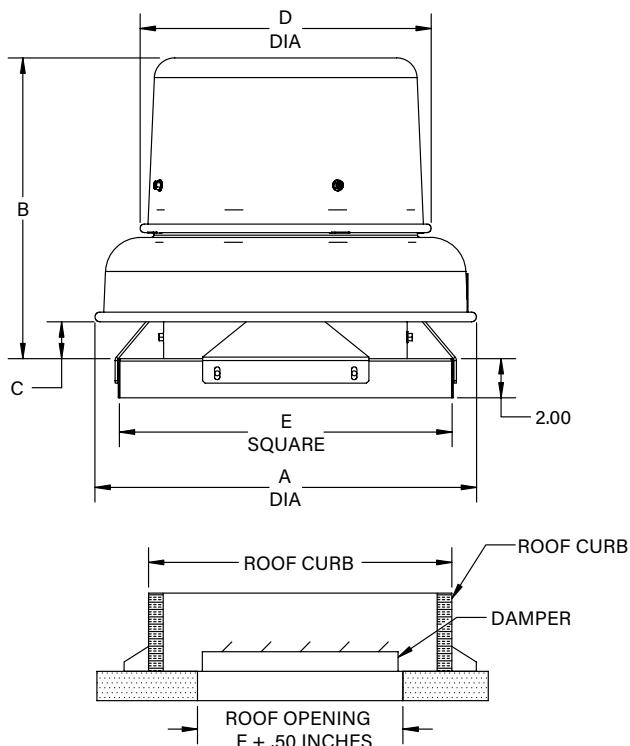
TYPICAL SPECIFICATIONS

- It shall be ducted to a roof vent or wall cap using 8 inch round duct
- Ceiling ventilator shall have corrosion resistance galvanized steel housing with 4 point mounting capability
- Blower assembly shall be removable, have a centrifugal type blower wheel and a permanently lubricated motor designed for continuous operation



DIMENSIONAL DATA

Model VC



* Damper not available on restaurant construction.

Dimensional Data and Weights

SIZE	A DIA	B	C	D DIA	E INSIDE	DAMPER SIZE ^a	STANDARD CURB SIZE	AVG. UNIT WT. (LB.) ^b
077	19.50	15.36	1.88	14.87	17.00	10 X 10	15.5 X 15.5	40
083	19.50	15.36	1.88	14.87	17.00	10 X 10	15.5 X 15.5	36
085	19.50	15.36	1.88	14.87	17.00	10 X 10	15.5 X 15.5	36
089	22.00	17.30	2.67	17.44	17.00	10 X 10	15.5 X 15.5	41
098	22.00	17.30	2.67	17.44	17.00	10 X 10	15.5 X 15.5	41
112	22.00	17.30	2.67	17.44	17.00	10 X 10	15.5 X 15.5	43
120	22.00	17.30	2.67	17.44	17.00	10 X 10	15.5 X 15.5	43

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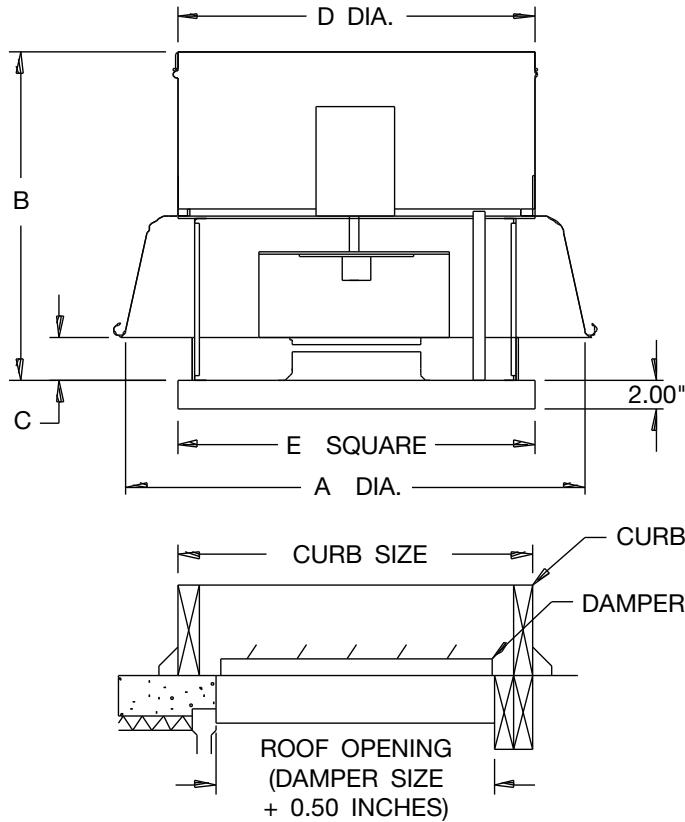
Notes:

- All dimensions are in inches unless otherwise noted.
- Dimensions are not to be used for construction.
- Outside dimensions of dampers are nominal.
- Outside dimensions of roof curb should be 1" to 1.50" less than inside curb cap dimension 'E', depending on thickness of flashing material used. If curb hinges are used, specify 1.50" difference.
- Self-flashing roof curbs are 1" larger than canted curbs.

Fan Cut Sheets

DIMENSIONAL DATA

Model DCRD, Direct Drive



Notes:

- All dimensions are in inches unless otherwise noted.
- Dimensions are not to be used for construction.
- Outside dimensions of dampers are nominal.
- Outside dimensions of roof curb should be 1" to 1.50" less than inside curb cap dimension 'E', depending on thickness of flashing material used. If curb hinges are used, specify 1.50" difference.
- Self-flashing roof curbs are 1" larger than canted curbs.

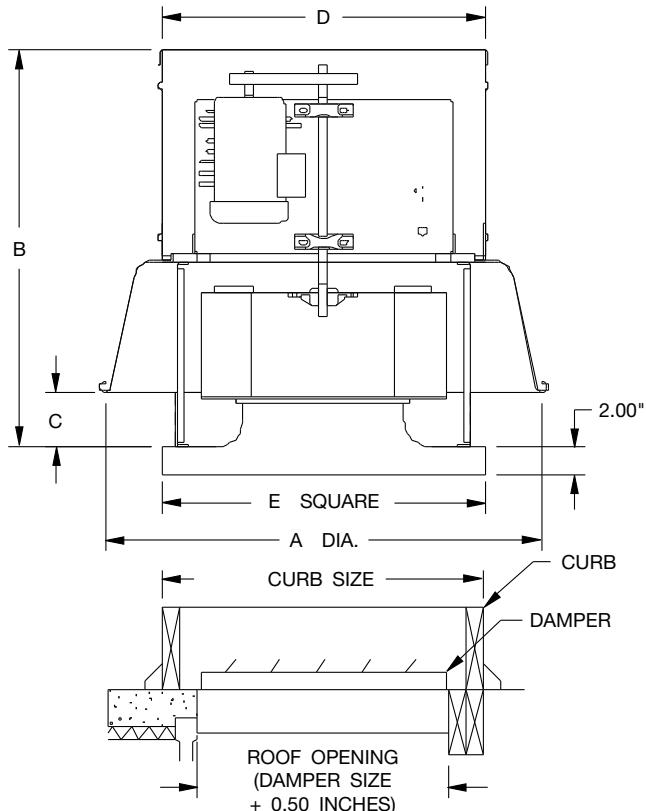
EC MOTOR SIZES	PSC MOTOR SIZES	FAN DIMENSIONS					CANTED CURB SIZE	DAMPER SIZE	AVG. SHIP WT. (LBS.)
		A	B	C	D	E			
060BE/070BE	060B/070B	18.50	15.63	2.06	15.12	17.00	15.5x15.5	10x10	30
080BE	080B	18.50	15.63	2.06	15.12	17.00	15.5x15.5	10x10	32
085BE/090BE/095BE	085B/090B/095B	21.00	19.31	2.63	15.12	17.00	15.5x15.5	10x10	43
100BE	100B	21.00	17.31	2.63	15.12	17.00	15.5x15.5	10x10	48
120BE	120B	27.50	22.38	3.63	22.00	20.00	18.5x18.5	14x14	50
130BE	130B	27.50	23.25	4.44	22.00	24.00	22.5x22.5	18x18	65
140BE	140B	27.50	23.50	4.69	22.00	24.00	22.5x22.5	18x18	67
150BE	150B	30.44	26.75	4.63	24.00	24.00	22.5x22.5	18x18	77
160BE	160B	30.44	27.25	5.19	24.00	24.00	22.5x22.5	18x18	82
170BE	170B	38.38	29.25	4.06	30.00	30.00	28.5x28.5	24x24	95
180BE	180B	38.38	30.25	5.06	30.00	30.00	28.5x28.5	24x24	100

D-4051F

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

DIMENSIONAL DATA

Model BCRD, Belt Driven


Notes:

- All dimensions are in inches unless otherwise noted.
- Dimensions are not to be used for construction.
- Outside dimensions of dampers are nominal.
- Outside dimensions of roof curb should be 1" to 1.50" less than inside curb cap dimension 'E', depending on thickness of flashing material used. If curb hinges are used, specify 1.50" difference.
- Self-flashing roof curbs are 1" larger than canted curbs.

SIZE	FAN DIMENSIONS					CANTED CURB SIZE	DAMPER SIZE	AVG. SHIP WT. (LBS.)
	A	B	C	D	E			
070D/075D	25.88	22.13	2.06	22.00	17.00	15.5x15.5	10x10	58
085D	27.50	23.94	2.38	22.00	17.00	15.5x15.5	10x10	67
100D/100DHP	27.50	23.94	2.38	22.00	20.00	18.5x18.5	14x14	74
120D	30.44	28.13	2.56	24.00	20.00	18.5x18.5	14x14	78
140D	30.44	28.25	2.81	24.00	24.00	22.5x22.5	18x18	93
140DHP	30.44	28.25	2.81	24.00	24.00	22.5x22.5	18x18	88
160D/160DHP	32.63	29.00	3.38	24.00	26.00	24.5x24.5	20x20	107
180D/180DHP	38.38	33.88	3.75	30.00	30.00	28.5x28.5	24x24	130
210D/210DHP	38.38	34.06	4.00	30.00	30.00	28.5x28.5	24x24	160
240D/240DHP	43.13	35.88	4.88	30.00	34.00	32.5x32.5	28x28	220
300D/300DHP	51.38	38.88	4.88	42.00	40.00	38.5x38.5	34x34	270
360D/360DHP	60.75	44.38	6.88	50.00	46.00	44.5x44.5	40x40	360
420D	65.81	47.81	7.00	50.00	52.00	50.5x50.5	46x46	420
480D	74.06	50.25	7.75	58.00	58.00	56.5x56.5	50x50	475

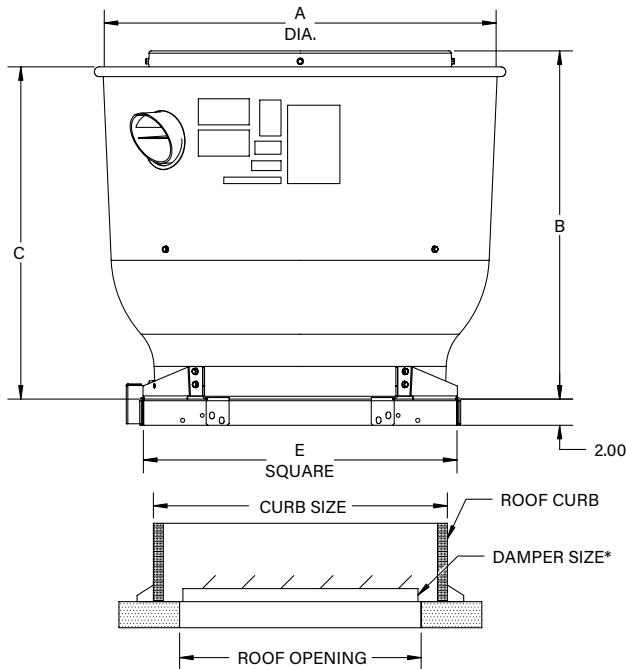
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DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Fan Cut Sheets

DIMENSIONAL DATA

Model VCU (Roof Configuration)



* Damper not available on restaurant construction.

Dimensional Data and Weights

SIZE	A	B	C	E	DAMPER SIZE ⁴	STANDARD CURB SIZE	SELF-FLASH CURB SIZE	ROOF OPENING	AVG. UNIT WT. (LB.) ⁷
085	23.50	18.20	18.00	17.00	10 x 10	15.5 x 15.5	16.5 x 16.5	10.5 x 10.5	60
089	23.50	18.20	18.00	20.00	14 x 14	18.5 x 18.5	19.5 x 19.5	14.5 x 14.5	65
098	23.50	18.20	18.00	20.00	14 x 14	18.5 x 18.5	19.5 x 19.5	14.5 x 14.5	65
110	23.50	18.20	18.00	20.00	14 x 14	18.5 x 18.5	19.5 x 19.5	14.5 x 14.5	65
112	23.50	18.20	18.00	20.00	14 x 14	18.5 x 18.5	19.5 x 19.5	14.5 x 14.5	65
122	30.00	26.66	25.44	24.00	18 x 18	22.5 x 22.5	23.5 x 23.5	18.5 x 18.5	95
124	30.00	26.66	25.44	24.00	18 x 18	22.5 x 22.5	23.5 x 23.5	18.5 x 18.5	95
135	30.00	26.66	25.44	24.00	18 x 18	22.5 x 22.5	23.5 x 23.5	18.5 x 18.5	95
140	30.00	26.66	25.44	24.00	18 x 18	22.5 x 22.5	23.5 x 23.5	18.5 x 18.5	100
150	30.00	26.66	25.44	24.00	18 x 18	22.5 x 22.5	23.5 x 23.5	18.5 x 18.5	100
157	30.00	26.66	25.44	24.00	18 x 18	22.5 x 22.5	23.5 x 23.5	18.5 x 18.5	100
165	30.00	26.66	25.44	24.00	18 x 18	22.5 x 22.5	23.5 x 23.5	18.5 x 18.5	100

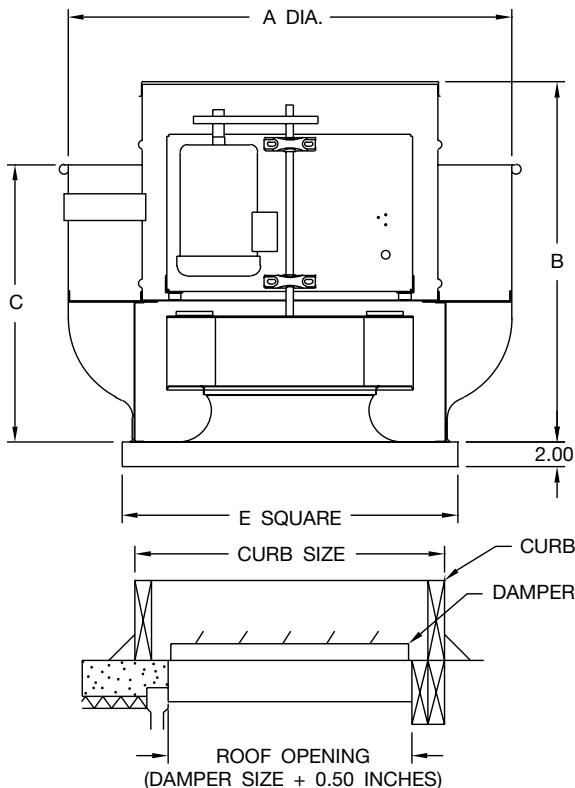
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Notes:

- All dimensions are in inches unless otherwise noted.
- Dimensions are not to be used for construction.
- Damper sizes are nominal.
- Dampers not available with Restaurant Package.
- Outside dimensions of roof curb should be 1" to 1.50" less than inside curb cap dimension 'E', depending on thickness of flashing material used. If curb hinges are used, specify 1.50" difference.
- Restaurant construction available with self-flashing, vented, 12" high curb, built to 'standard' curb size dimensions above.
- Unit weight includes an estimated motor weight.

DIMENSIONAL DATA

Models BCRU, BCRUR



* Damper not available on BCRUR.



Dimensional Data and Weights

MODEL		A	B	C	E	AVG. UNIT WT. (LBS.)
BCRU	BCRUR					
110B	110B	30.00	28.56	28.00	24.00	135
120B	120B	30.00	27.19	28.00	24.00	135
140B	140B	30.00	27.68	28.00	24.00	145
140BHP	140BHP	30.00	28.58	28.00	24.00	135
160B	160B	30.00	29.81	28.00	24.00	180
160BHP	160BHP	30.00	27.68	28.00	24.00	135
160BMP	160BMP	30.00	28.44	28.00	24.00	180
180B	180B	36.00	32.31	30.00	30.00	180
180BMP	180BMP	36.00	29.19	30.00	30.00	180
180BHP	180BHP	36.00	31.00	30.00	30.00	180
210B	210B	45.00	35.61	28.25	34.00	245
210BHP	210BHP	45.00	32.94	28.25	34.00	245
240B	240B	45.00	37.56	28.25	34.00	245
240BHP	240BHP	45.00	34.31	28.25	34.00	245
300B	300B	54.00	38.25	31.00	40.00	365
300BHP	300BHP	54.00	34.88	31.00	40.00	365
360B	360B	63.00	43.88	34.00	46.00	375
360BHP	360HP	63.00	39.68	34.00	46.00	375
420B	—	69.00	46.75	36.00	52.00	385
480B	—	75.00	49.13	39.00	58.00	490

Dampers and Roof Curbs

MODEL		DAMPER SIZE*	STANDARD CURB SIZE	SELF FLASH CURB SIZE	ROOF OPENING
BCRU	BCRUR				
110B	110B	18 x 18	22½ x 22½	23½ x 23½	18½ x 18½
120B	120B	18 x 18	22½ x 22½	23½ x 23½	18½ x 18½
140B	140B	18 x 18	22½ x 22½	23½ x 23½	18½ x 18½
160B	160B	18 x 18	22½ x 22½	23½ x 23½	18½ x 18½
180B	180B	24 x 24	28½ x 28½	29½ x 29½	24½ x 24½
210B	210B	28 x 28	32½ x 32½	33½ x 33½	28½ x 28½
240B	240B	28 x 28	32½ x 32½	33½ x 33½	28½ x 28½
300B	300B	34 x 34	38½ x 38½	39½ x 39½	34½ x 34½
360B	360B	40 x 40	44½ x 44½	45½ x 45½	40½ x 40½
420B	—	46 x 46	50½ x 50½	51½ x 51½	46½ x 46½
480B	—	50 x 50	56½ x 56½	57½ x 57½	50½ x 50½

*BCRU Only

D-4401H

D-4402H

Notes:

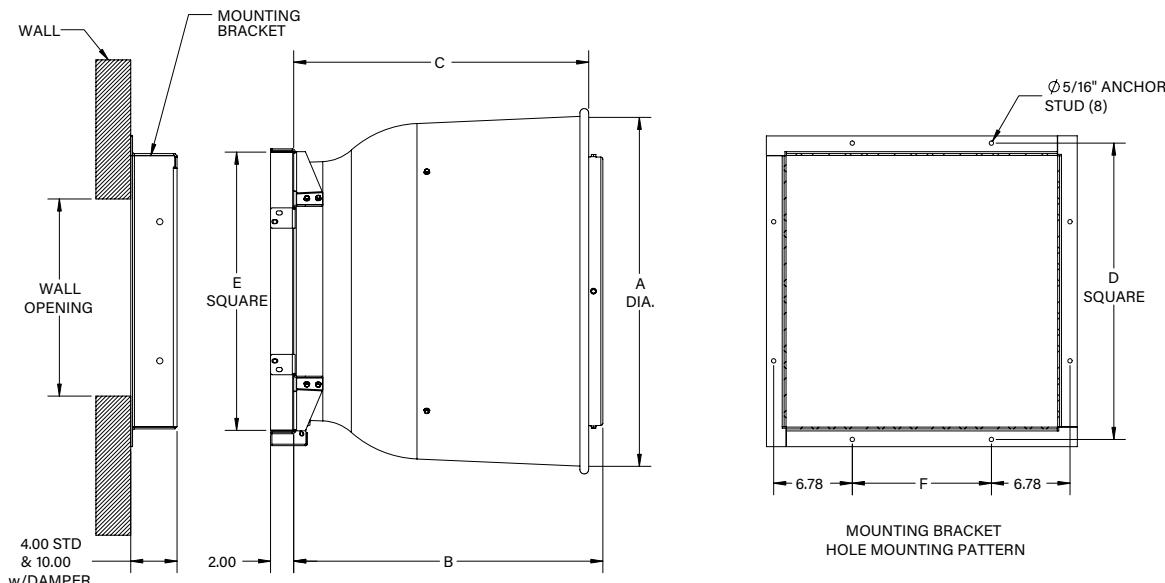
- All dimensions are in inches unless otherwise noted.
- Dimensions are not to be used for construction.
- Damper sizes are nominal.
- BCRUR (Kitchen Exhaust) provided with self flashing, vented, 12" high curb, built to 'standard' curb size dimensions above.



Fan Cut Sheets

DIMENSIONAL DATA

Model VCU (Wall Configuration)



Dimensional Data and Weights

SIZE	A	B	C	D	E	F	DAMPER SIZE ^a	WALL MTG. BRACKET	WALL OPENING	AVG. UNIT WT. (LB.) ^b
085	23.50	18.20	18.00	18.56	17.00	5.00	10 x 10	16.75 x 16.75	10.5 x 10.5	60
089	23.50	18.20	18.00	21.56	20.00	8.00	14 x 14	19.75 x 19.75	14.5 x 14.5	65
098	23.50	18.20	18.00	21.56	20.00	8.00	14 x 14	19.75 x 19.75	14.5 x 14.5	65
110	23.50	18.20	18.00	21.56	20.00	8.00	14 x 14	19.75 x 19.75	14.5 x 14.5	65
112	23.50	18.20	18.00	21.56	20.00	8.00	14 x 14	19.75 x 19.75	14.5 x 14.5	65
122	30.00	26.66	25.44	25.56	24.00	12.00	17 x 17	23.75 x 23.75	17.5 x 17.5	100
124	30.00	26.66	25.44	25.56	24.00	12.00	17 x 17	23.75 x 23.75	17.5 x 17.5	100
135	30.00	26.66	25.44	25.56	24.00	12.00	17 x 17	23.75 x 23.75	17.5 x 17.5	100
140	30.00	26.66	25.44	25.56	24.00	12.00	17 x 17	23.75 x 23.75	17.5 x 17.5	100
150	30.00	26.66	25.44	25.56	24.00	12.00	17 x 17	23.75 x 23.75	17.5 x 17.5	100
157	30.00	26.66	25.44	25.56	24.00	12.00	17 x 17	23.75 x 23.75	17.5 x 17.5	100
165	30.00	26.66	25.44	25.56	24.00	12.00	17 x 17	23.75 x 23.75	17.5 x 17.5	100

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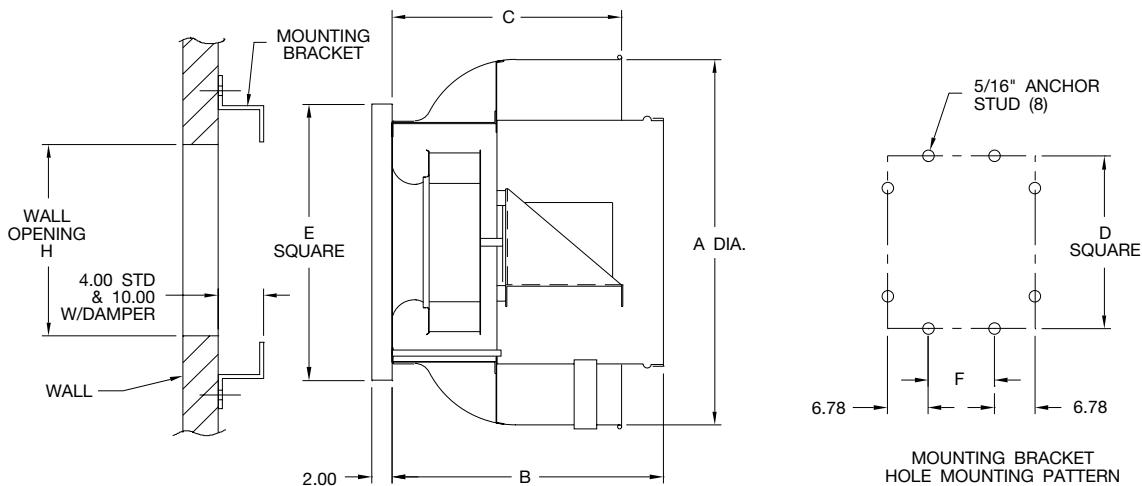
Notes:

- All dimensions are in inches unless otherwise noted.
- Dimensions are not to be used for construction.
- Damper sizes are nominal.
- Dampers not available with Restaurant Package.
- Unit weight includes an estimated motor weight.



DIMENSIONAL DATA

Models DCRW, DCRWR



* Damper not available on DCRWR.

Dimensional Data and Weights

MODEL		A	B	C	D	E	F	Avg. Unit Wt. (lb.)	Damper Size*	Wall Mtg. Bracket	Wall Opening (H)
EC MTR	PSC MTR										
073BE	071-073B	22.00	24.44	18.00	18.56	17.00	5.00	100	10 x 10	16 $\frac{3}{4}$ x 16 $\frac{3}{4}$	10 $\frac{1}{2}$ x 10 $\frac{1}{2}$
083BE	081-083B	22.00	24.44	18.00	18.56	17.00	5.00	100	10 x 10	16 $\frac{3}{4}$ x 16 $\frac{3}{4}$	10 $\frac{1}{2}$ x 10 $\frac{1}{2}$
093BE	091-093B	22.00	26.13	18.00	21.56	20.00	8.00	120	14 x 14	19 $\frac{3}{4}$ x 19 $\frac{3}{4}$	14 $\frac{1}{2}$ x 14 $\frac{1}{2}$
110BE	110B	30.00	28.31	28.00	25.56	24.00	12.00	135	17 x 17	23 $\frac{3}{4}$ x 23 $\frac{3}{4}$	17 $\frac{1}{2}$ x 17 $\frac{1}{2}$
120BE	120B	30.00	27.19	28.00	25.56	24.00	12.00	135	17 x 17	23 $\frac{3}{4}$ x 23 $\frac{3}{4}$	17 $\frac{1}{2}$ x 17 $\frac{1}{2}$
140BE	140B	30.00	27.68	28.00	25.56	24.00	12.00	145	17 x 17	23 $\frac{3}{4}$ x 23 $\frac{3}{4}$	17 $\frac{1}{2}$ x 17 $\frac{1}{2}$
160BE	160B	30.00	29.81	28.00	25.56	24.00	12.00	180	17 x 17	23 $\frac{3}{4}$ x 23 $\frac{3}{4}$	17 $\frac{1}{2}$ x 17 $\frac{1}{2}$
180BE	180B	36.00	29.17	30.00	31.56	30.00	18.00	180	24 x 24	29 $\frac{3}{4}$ x 29 $\frac{3}{4}$	24 $\frac{1}{2}$ x 24 $\frac{1}{2}$

*DCRW Only

D-4409H

D-4410F

Notes:

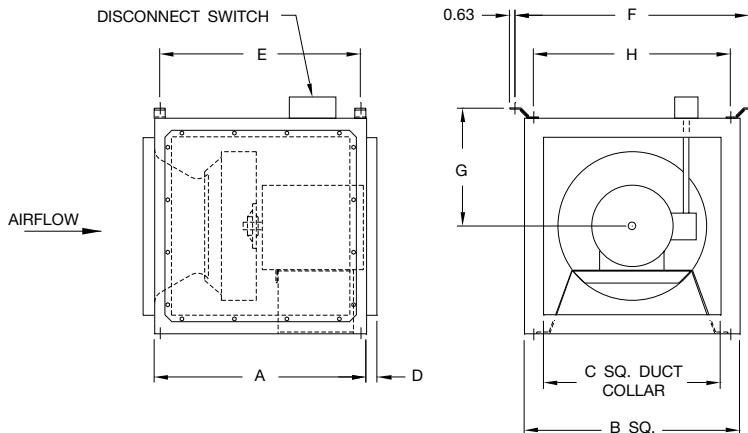
- All dimensions are in inches unless otherwise noted.
- Dimensions are not to be used for construction.
- Damper sizes are nominal.



Fan Cut Sheets

DIMENSIONAL DATA

Model DSI, Direct Drive



MODEL DSI	EC MOTOR SIZES	A	B	C	D	E	F	G	H	DAMPER SIZE	Avg. SHIP WT. (LBS.)	SIDE DISCHARGE SIZE
080A	080AE	19.00	15.33	11.88	1.00	16.50	19.50	8.63	13.56	12.00 x 12.00	93	11.88 x 11.88
090A	090AE	19.00	15.33	11.88	1.00	16.50	19.50	8.63	13.56	12.00 x 12.00	96	11.88 x 11.88
100A	100AE	20.50	17.81	13.88	1.00	19.00	21.06	10.38	16.00	14.00 x 14.00	106	13.88 x 13.88
120A	120AE	21.50	19.38	15.88	1.00	20.00	22.06	11.13	17.00	16.00 x 16.00	127	15.88 x 15.88
135A/135AN	135AE/ANE	23.00	21.56	17.88	1.00	21.50	24.25	12.19	19.16	18.00 x 18.00	132	17.88 x 17.88
150A/150AN	150AE/ANE	24.00	23.82	19.88	1.00	22.50	26.38	13.29	21.31	20.00 x 20.00	157	19.88 x 19.88
165A/165AN	165AE/ANE	26.00	26.50	22.88	1.00	24.50	29.06	14.64	24.00	23.00 x 23.00	167	22.88 x 22.88

Notes:

- All figures are in inches unless noted otherwise.
- Dimensions are not to be used for construction.

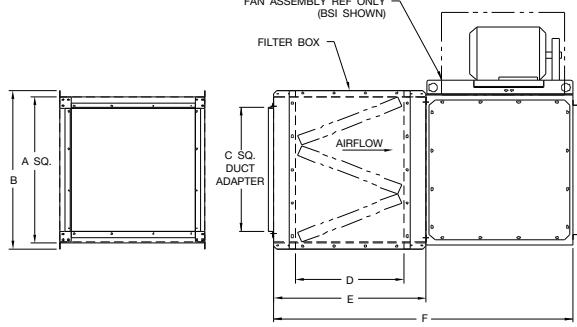
2. Average ship weight is for fan and motor assembly.

D-4210J

Filter Box Assembly

SIZE	A SQ.	B	C	D	E	F	FILTER SIZE	FILTER QTY.	Avg. SHIP WT. (LBS.)
080/090	16.00	18.50	11.88	21.44	28.38	47.38	25x16x2	1	99
100	18.06	20.56	13.88	19.88	26.75	47.25	25x16x2	1	113
120/120HP	19.62	22.12	15.88	24.50	31.38	52.88	25x16x2	2	148
135/135HP	21.75	24.25	17.88	24.00	32.00	55.00	25x20x2	2	181
150/150HP	23.94	26.44	19.88	23.75	32.00	56.00	25x20x2	2	200
165/165HP	26.62	29.12	22.88	19.56	28.00	54.00	25x20x2	3	203
180/180HP	29.12	31.62	23.88	19.25	26.50	55.00	25x20x2	3	220
210/210HP	32.44	34.94	27.88	21.00	31.00	63.00	25x16x2	4	290
225/225HP	34.25	36.75	29.88	24.00	33.00	67.00	25x16x2	6	397
245/245HP	37.75	40.25	32.88	18.88	30.00	56.50	25x20x2	2	439
							25x16x2	2	
270/270HP	40.25	42.75	35.88	23.00	33.00	72.00	25x20x2	6	568
300/300HP	44.25	46.75	39.88	24.00	33.00	74.50	25x20x2	8	654
330/330HP	48.94	51.44	43.88	23.50	34.00	79.50	25x16x2	12	842
365/365HP	50.25	52.75	45.88	19.75	30.50	77.38	25x20x2	12	850
402/402HP	55.50	58.00	51.88	24.75	36.00	88.00	25x20x2	12	1150
							25x16x2	6	

D-4205-1

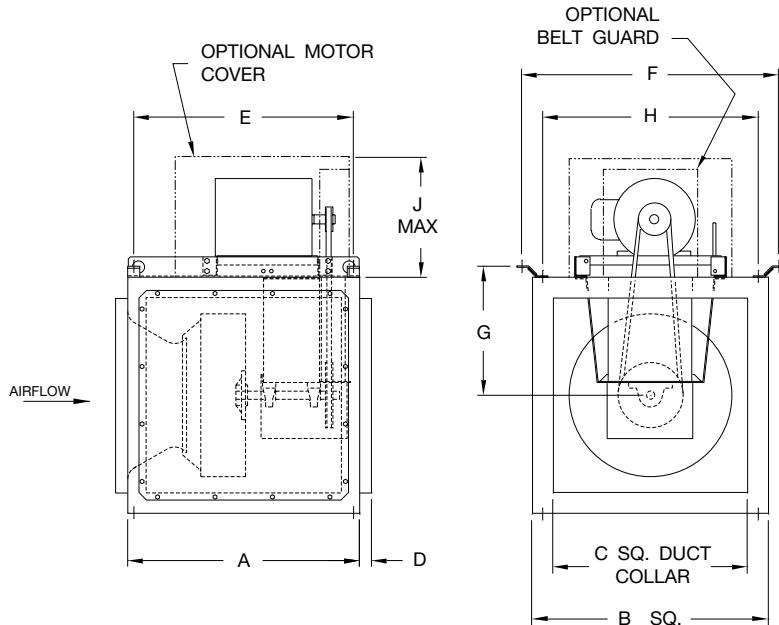


Notes:

- All figures are in inches unless noted otherwise.
- Filter box option is shipped separately for field installation.
- For filter box information, see page 7.

DIMENSIONAL DATA

Model BSI, Belt Driven



MODEL BSI	A	B	C	D	E	F	G	H	J	DAMPER SIZE	AVG. SHIP WT. (LBS.)	SIDE DISCHARGE SIZE
080A	19.00	15.33	11.88	1.00	16.50	19.50	8.63	13.56	12.00	12.00 x 12.00	93	11.88 x 11.88
090A	19.00	15.33	11.88	1.00	16.50	19.50	8.63	13.56	12.00	12.00 x 12.00	96	11.88 x 11.88
100A	20.50	17.81	13.88	1.00	19.00	21.06	10.38	16.00	12.00	14.00 x 14.00	106	13.88 x 13.88
120A/120AHP	21.50	19.38	15.88	1.00	20.00	22.06	11.13	17.00	12.00	16.00 x 16.00	127	15.88 x 15.88
135A/135AHP	23.00	21.56	17.88	1.00	21.50	24.25	12.19	19.16	12.75	18.00 x 18.00	132	17.88 x 17.88
150A/150AHP	24.00	23.82	19.88	1.00	22.50	26.38	13.29	21.31	12.75	20.00 x 20.00	157	19.88 x 19.88
165A/165AHP	26.00	26.50	22.88	1.00	24.50	29.06	14.64	24.00	14.56	23.00 x 23.00	167	22.88 x 22.88
180A/180AHP	28.50	29.00	23.88	1.50	27.00	31.56	15.89	26.50	16.25	24.00 x 24.00	193	23.88 x 23.88
210A/210AHP	32.00	32.34	27.88	1.50	30.50	35.06	17.54	30.00	16.25	28.00 x 28.00	223	27.88 x 27.88
225A/225AHP	34.00	34.00	29.88	1.50	32.50	36.89	18.45	31.81	18.50	30.00 x 30.00	287	25.88 x 28.88
245A/245AHP	36.50	37.50	32.88	1.50	35.00	40.38	20.20	35.31	18.50	33.00 x 33.00	352	27.88 x 31.88
270A/270AHP	39.00	40.13	35.88	1.50	37.50	43.00	21.45	37.88	20.00	36.00 x 36.00	394	29.88 x 33.88
300A/300AHP	41.50	44.13	39.88	1.50	39.50	47.62	23.83	41.88	20.00	40.00 x 40.00	442	29.88 x 37.88
330A/330AHP	45.50	48.81	43.88	1.50	43.50	52.31	26.19	46.56	20.00	44.00 x 44.00	554	31.88 x 39.88
365A/365AHP	48.50	50.13	45.88	1.50	46.50	53.63	26.84	47.88	20.00	46.00 x 46.00	665	32.88 x 41.88
402A/402AHP	52.00	55.25	51.88	1.50	50.00	58.88	29.47	53.13	20.00	52.00 x 52.00	743	34.88 x 46.88

D-4205J

Notes:

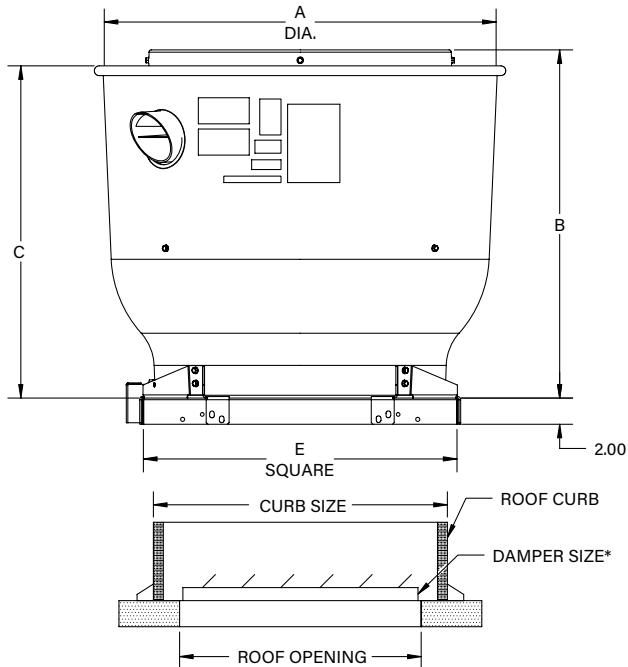
- All figures are in inches unless noted otherwise.
- Average ship weight is for fan and motor assembly.
- Dimensions are not to be used for construction.

TCF
TWIN CITY FAN

Fan Cut Sheets

DIMENSIONAL DATA

Model VCUB (Roof Configuration)



* Damper not available on restaurant construction.

Dimensional Data and Weights

SIZE	A	B	C	E	DAMPER SIZE ⁴	STANDARD CURB SIZE	SELF-FLASH CURB SIZE	ROOF OPENING	AVG. UNIT WT. (LB.) ⁶
122	30.00	26.66	25.44	24.00	18 x 18	22.5 x 22.5	23.5 x 23.5	18.5 x 18.5	135
124	30.00	26.66	25.44	24.00	18 x 18	22.5 x 22.5	23.5 x 23.5	18.5 x 18.5	135
135	30.00	26.66	25.44	24.00	18 x 18	22.5 x 22.5	23.5 x 23.5	18.5 x 18.5	135
140	30.00	26.66	25.44	24.00	18 x 18	22.5 x 22.5	23.5 x 23.5	18.5 x 18.5	135
150	30.00	26.66	25.44	24.00	18 x 18	22.5 x 22.5	23.5 x 23.5	18.5 x 18.5	135
157	30.00	26.66	25.44	24.00	18 x 18	22.5 x 22.5	23.5 x 23.5	18.5 x 18.5	135
165	30.00	26.66	25.44	24.00	18 x 18	22.5 x 22.5	23.5 x 23.5	18.5 x 18.5	135

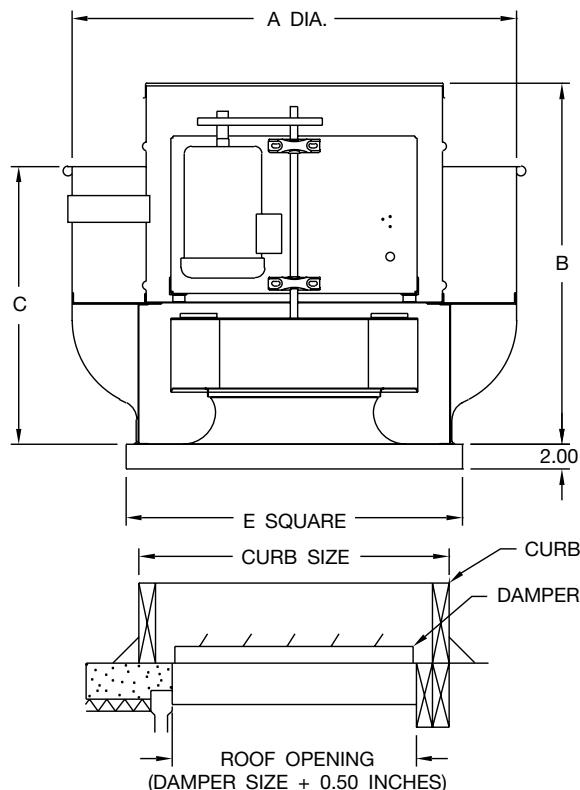
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Notes:

1. All dimensions are in inches unless otherwise noted.
2. Dimensions are not to be used for construction.
3. Damper sizes are nominal.
4. Dampers not available with Restaurant Package.
5. Restaurant construction available with self-flashing, vented, 12" high curb, built to 'standard' curb size dimensions above.
6. Unit weight includes an estimated motor weight.

DIMENSIONAL DATA

Model BCRUR



* Damper not available on BCRUR.



Dimensional Data and Weights

MODEL	A	B	C	E	AVG. UNIT WT. (LBS.)
BCRU	BCRUR				
110B	110B	30.00	28.56	28.00	24.00
120B	120B	30.00	27.19	28.00	24.00
140B	140B	30.00	27.68	28.00	24.00
140BHP	140BHP	30.00	28.58	28.00	24.00
160B	160B	30.00	29.81	28.00	24.00
160BHP	160BHP	30.00	27.68	28.00	24.00
160BMP	160BMP	30.00	28.44	28.00	24.00
180B	180B	36.00	32.31	30.00	30.00
180BMP	180BMP	36.00	29.19	30.00	30.00
180BHP	180BHP	36.00	31.00	30.00	30.00
210B	210B	45.00	35.61	28.25	34.00
210BHP	210BHP	45.00	32.94	28.25	34.00
240B	240B	45.00	37.56	28.25	34.00
240BHP	240BHP	45.00	34.31	28.25	34.00
300B	300B	54.00	38.25	31.00	40.00
300BHP	300BHP	54.00	34.88	31.00	40.00
360B	360B	63.00	43.88	34.00	46.00
360BHP	360HP	63.00	39.68	34.00	46.00
420B	—	69.00	46.75	36.00	52.00
480B	—	75.00	49.13	39.00	58.00
					490

Dampers and Roof Curbs

MODEL	DAMPER SIZE*	STANDARD CURB SIZE	SELF FLASH CURB SIZE	ROOF OPENING
BCRU	BCRUR			
110B	110B	18 x 18	22½ x 22½	23½ x 23½
120B	120B	18 x 18	22½ x 22½	23½ x 23½
140B	140B	18 x 18	22½ x 22½	23½ x 23½
160B	160B	18 x 18	22½ x 22½	23½ x 23½
180B	180B	24 x 24	28½ x 28½	29½ x 29½
210B	210B	28 x 28	32½ x 32½	33½ x 33½
240B	240B	28 x 28	32½ x 32½	33½ x 33½
300B	300B	34 x 34	38½ x 38½	39½ x 39½
360B	360B	40 x 40	44½ x 44½	45½ x 45½
420B	—	46 x 46	50½ x 50½	51½ x 51½
480B	—	50 x 50	56½ x 56½	57½ x 57½

*BCRU Only

D-4401H

D-4402H

Notes:

- All dimensions are in inches unless otherwise noted.
- Dimensions are not to be used for construction.
- Damper sizes are nominal.
- BCRUR (Kitchen Exhaust) provided with self flashing, vented, 12" high curb, built to 'standard' curb size dimensions above.



Fan Cut Sheets



GRAVITY VENTILATORS

Spun Aluminum Model GRV



Available For Quickship

The GRV series relief ventilators are low silhouette spun aluminum units that match the appearance of spun aluminum power roof ventilators.

The GRV provides for natural gravity ventilation and may also be used as an intake. For intake units, a minimum curb height of 12" is recommended.

Sizes & Capacities

GRV relief ventilators are available in 12 sizes, models 090B through 480B. Performance capabilities include a broad capacity range up to 25,100 CFM, with static pressure capabilities to $\frac{3}{8}$ in. w.g.



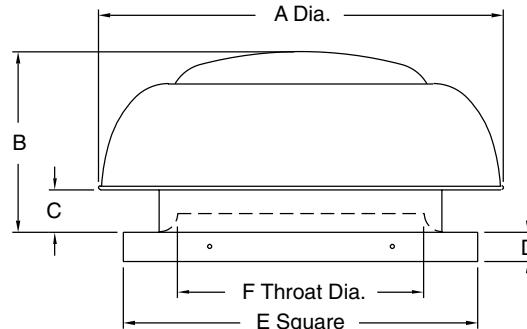
Model GRV

Construction Features

- Spun aluminum cover
- Curb cap constructed of aluminum
- Galvanized steel bird screen is standard on all units

Accessories

- Backdraft damper (gravity or motorized)
- Roof curbs
- Curb hinge
- Special coatings
- Aluminum bird screen
- Aluminum insect screen



GRV SIZE	DIMENSIONS (INCHES)						DAMPER SIZE	CANTED CURB SIZE	NECK AREA (SQ. FT.)	AVERAGE SHIP WEIGHT (LB.)	
	A	B	C	D	E INSIDE	F					
090B	22.50	8.25	1.50	2.00	16.50	9.00	10 x 10	15.0 x 15.0	0.44	17	
120B	27.50	11.25	2.00		24.00	12.13	18 x 18	22.5 x 22.5	0.80	20	
160B			3.00			16.25			1.44	25	
180B	32.25	12.25	4.00		29.50	18.25	24 x 24	28.0 x 28.0	1.82	30	
210B			4.50			21.25			2.46	47	
240B	40.50	16.00	5.00		35.50	24.25	30 x 30	34.0 x 34.0	3.21	55	
270B		16.50	5.50			27.38			4.09	67	
300B		19.00				30.38			5.03	75	
320B	50.00	19.50	6.00	3.00	42.50	32.38	36 x 36	41.0 x 41.0	5.72	107	
360B						36.38			7.22	135	
420B	60.00	21.50			52.00	42.38	46 x 46	50.5 x 50.5	9.79	187	
480B	74.00	27.25	6.50		58.00	48.38	46 x 46	56.5 x 56.5	12.76	225	

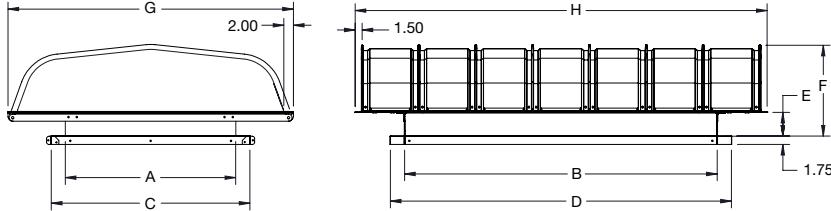
DIMENSIONAL DATA

Fan Cut Sheets

PERFORMANCE DATA

Modular Hooded Model MGR

Shaded sizes ship knocked down.
Assembly Required.

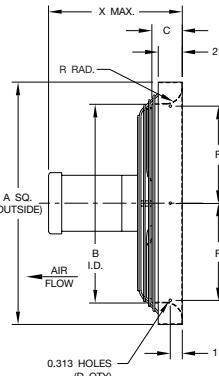
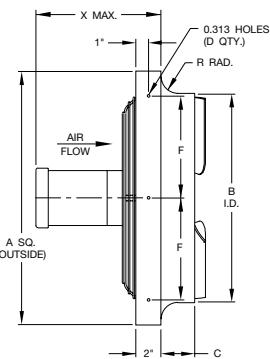
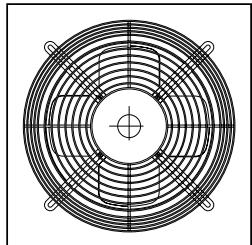


Throat Size (AxB)	Curb Cap Size (CxD)	Base Height (E)	Hood Height (F)	Hood Size (GxH)	Throat Area (ft²)	Hood Area (ft²)	Weight (lbs)	Ducted Static Pressure Drop (in. w.g.)																	
								0.002	0.006	0.01	0.016	0.022	0.031	0.04	0.05	0.062	0.075	0.09							
								Unducted Static Pressure Drop (in. w.g.)																	
								0.005	0.011	0.02	0.031	0.045	0.061	0.08	0.101	0.125	0.151	0.179							
								Hood Velocity (ft/min)																	
								200	300	400	500	600	700	800	900	1000	1100	1200							
								CFM																	
24x24	30x30	5	17.24	38x39	4.00	4.50	72	900	1350	1800	2250	2700	3150	3600	4050	4500	4950	5400							
24x30	30x36	5	17.24	38x51	5.00	6.33	86	1266	1899	2533	3166	3799	4433	5066	5699	6333	6966	7599							
24x36	30x42	5	17.24	40x51	6.00	6.00	90	1200	1800	2400	3000	3600	4200	4800	5400	6000	6600	7200							
24x42	30x48	5	17.24	38x63	7.00	7.17	105	1433	2150	2866	3583	4300	5016	5733	6450	7167	7883	8600							
24x48	30x54	5	17.24	42x63	8.00	7.83	113	1566	2349	3133	3916	4699	5483	6266	7049	7833	8616	9399							
24x54	30x60	5	17.24	40x75	9.00	9.00	124	1800	2700	3600	4500	5400	6300	7200	8100	9000	9900	10800							
24x60	30x66	5	17.24	44x75	10.00	10.00	132	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000							
24x66	30x72	5	17.27	42x87	11.00	11.17	152	2233	3350	4466	5583	6700	7816	8933	10050	11167	12283	13400							
24x72	30x78	5	19.35	45x87	12.00	11.92	162	2383	3575	4766	5958	7150	8341	9533	10725	11917	13108	14300							
24x78	30x84	5	17.27	43x99	13.00	13.00	182	2600	3900	5200	6500	7800	9100	10400	11700	13000	14300	15600							
24x84	30x90	5	17.27	46x99	14.00	14.00	190	2800	4200	5600	7000	8400	9800	11200	12600	14000	15400	16800							
24x90	30x96	5	17.27	44x111	15.00	15.00	211	3000	4500	6000	7500	9000	10500	12000	13500	15000	16500	18000							
30x30	36x36	5	17.24	44x51	6.25	7.08	95	1416	2124	2833	3541	4249	4958	5666	6374	7083	7791	8499							
30x36	36x42	5	17.23	49x51	7.50	7.50	106	1500	2250	3000	3750	4500	5250	6000	6750	7500	8250	9000							
30x42	36x48	5	17.24	46x63	8.75	8.75	121	1750	2625	3500	4375	5250	6125	7000	7875	8750	9625	10500							
30x48	36x54	5	19.33	52x63	10.00	10.00	132	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000							
30x54	36x60	5	17.23	49x75	11.25	11.25	146	2250	3375	4500	5625	6750	7875	9000	10125	11250	12375	13500							
30x60	36x66	5	19.35	54x75	12.50	12.50	166	2500	3750	5000	6250	7500	8750	10000	11250	12500	13750	15000							
30x66	36x72	5	17.27	51x87	13.75	13.67	174	2733	4100	5466	6833	8200	9566	10933	12300	13667	15033	16400							
30x72	36x78	5	17.25	49x99	15.00	15.00	190	3000	4500	6000	7500	9000	10500	12000	13500	15000	16500	18000							
30x78	36x84	5	19.35	52x99	16.25	15.75	212	3150	4725	6300	7875	9450	11025	12600	14175	15750	17325	18900							
30x84	36x90	5	17.27	51x111	17.50	17.75	227	3550	5325	7100	8875	10650	12425	14200	15975	17750	19525	21300							
30x90	36x96	5	19.35	54x111	18.75	18.75	240	3750	5625	7500	9375	11250	13125	15000	16875	18750	20625	22500							
36x36	42x42	5	19.33	58x51	9.00	9.00	124	1800	2700	3600	4500	5400	6300	7200	8100	9000	9900	10800							
36x42	42x48	5	19.35	54x63	10.50	10.33	139	2066	3099	4133	5166	6199	7233	8266	9299	10333	11366	12399							
36x48	42x54	5	19.33	62x63	12.00	12.17	156	2433	3650	4866	6083	7300	8516	9733	10950	12167	13383	14600							
36x54	42x60	5	19.35	58x75	13.50	13.50	173	2700	4050	5400	6750	8100	9450	10800	12150	13500	14850	16200							
36x60	42x66	5	19.35	55x87	15.00	14.75	186	2950	4425	5900	7375	8850	10325	11800	13275	14750	16225	17700							
36x66	42x72	5	19.35	60x87	16.50	16.17	197	3233	4850	6466	8083	9700	11316	12933	14550	16167	17783	19400							
36x72	42x78	5	19.35	58x99	18.00	18.00	212	3600	5400	7200	9000	10800	12600	14400	16200	18000	19800	21600							
36x78	42x84	5	19.35	63x99	19.50	19.83	240	3966	5949	7933	9916	11899	13883	15866	17849	19833	21816	23799							
36x84	42x90	5	19.35	60x111	21.00	21.00	253	4200	6300	8400	10500	12600	14700	16800	18900	21000	23100	25200							
36x90	42x96	5	24.35	64x111	22.50	22.50	280	4500	6750	9000	11250	13500	15750	18000	20250	22500	24750	27000							
36x96	42x102	5	19.37	62x123	24.00	24.33	277	4866	7299	9733	12166	14599	17033	19466	21899	24333	26766	29199							
36x102	42x108	5	24.37	65x123	25.50	25.33	313	5066	7599	10133	12666	15199	17733	20266	22799	25333	27866	30399							
42x42	48x48	5	19.33	63x63	12.25	12.33	153	2466	3699	4933	6166	7399	8633	9866	11099	12333	13566	14799							
42x48	48x54	5	19.35	60x75	14.00	14.00	176	2800	4200	5600	7000	8400	9800	11200	12600	14000	15400	16800							
42x54	48x60	5	24.35	67x75	15.75	15.75	206	3150	4725	6300	7875	9450	11025	12600	14175	15750	17325	18900							
42x60	48x66	5	24.35	64x87	17.50	17.50	221	3500	5250	7000	8750	10500	12250	14000	15750	17500	19250	21000							
42x66	48x72	5	24.35	70x87	19.25	19.25	234	3850	5775	7700	9625	11550	13475	15400	17325	19250	21175	23100							
42x72	48x78	5	24.35	67x99	21.00	21.00	250	4200	6300	8400	10500	12600	14700	16800	18900	21000	23100	25200							
42x78	48x84	5	24.35	72x99	22.75	22.58	288	4516	6774	9033	11291	13549	15808	18066	20324	22583	24841	27099							
42x84	48x90	5	24.35	69x111	24.50	24.25	303	4850	7275	9700	12125	14550	16975	19400	21825	24250	26675	29100							
42x90	48x96	5	24.37	67x123	26.25	26.25	316	5250	7875	10500	13125	15750	18375	21000	23625	26250	28875	31500							
42x96	48x102	5	24.37	71x123	28.00	27.83	329	5566	8349	11133	13916	16699	19483	22266	25049	27833	30616	33399							
42x102	48x108	5	24.37	69x135	29.75	29.83	344	5966	8949	11933	14916	17899	20883	23866	26849	29833	32816	35799							
42x108	48x114	5	24.37	73x135	31.50	31.75	358	6350	9525	12700	15875	19050	22225	25400	28575	31750	34925	38100							
48x48	54x54	5	24.35	68x75	16.00	16.00	208	3200	4800	6400	8000	9600	11200	12800	14400	16000	17600	19200							
48x54	54x60	5	24.35	76x75	18.00	18.00	229	3600	5400	7200	9000	10800	12600	14400	16200	18000	19800	21600							
48x60	54x66	5	24.35	73x87	20.00	20.25	245	4050	6075	8100	10125	12150	14175	16200	18225	20250	22275	24300							
48x66	54x72	5	24.35	79x87	22.00	21.75	260	4350	6525	8700	10875	13050	15225	17400	19575	21750</td									

Fan Cut Sheets

DIMENSIONAL DATA

TCPE



EXHAUST

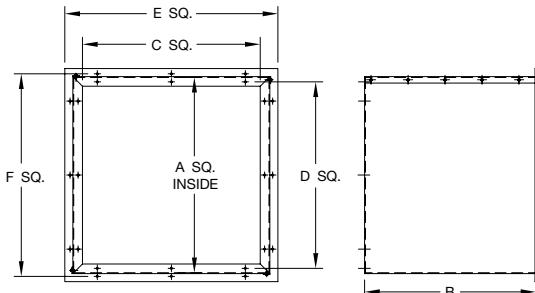
SUPPLY

SIZE	A (IN.)	B I.D. (IN.)	C (IN.)	D QTY.	F	R RAD.	X MAX.	Y MAX.	DAMPER SIZE	PROP DIA.	MIN. WALL OPENING SQ	Avg. Ship Wt. (LB)
080A, 081A, 082A, 082AE	13.25	8.38	1.25								13.75	15
100A, 101A, 102A, 102AE	15.25	10.38	1.50	8	4.00	0.75	10.25	12.25	10 x 10	8.00	15.75	20
120A, 121A, 122A, 122AE	18.25	12.38	2.00		5.00	0.75	11.25	13.25	12 x 12	10.00	18.75	26
140A, 141A, 142A, 142AE	21.25	14.50	2.75		6.50	0.875	11.50	13.50	15 x 15	12.00	21.75	29
160A, 161A, 162A, 162AE	23.25	16.50	3.00	12	8.00	1.00	19.00	21.00	18 x 18	14.00	23.75	37
180A, 181A, 182A, 182AE	25.25	18.50	3.00		9.00	1.13	19.00	21.00	20 x 20	16.00	25.75	47
200A, 201A, 202A, 202AE	27.25	20.63	3.00		10.00	1.25	19.00	21.00	22 x 22	18.00	27.75	51
240A, 241A, 242A, 242AE	30.25	24.63	3.00		11.00	1.50	20.50	22.50	24 x 24	20.00	30.75	62

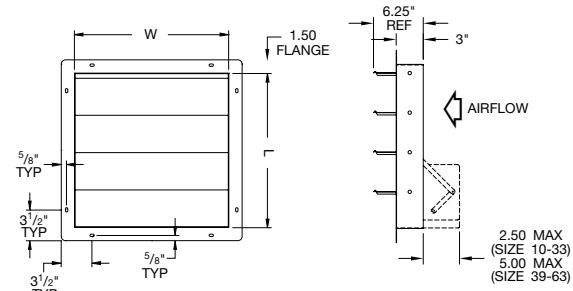
Dimensions are not to be used for construction.

D4800C
D4805A

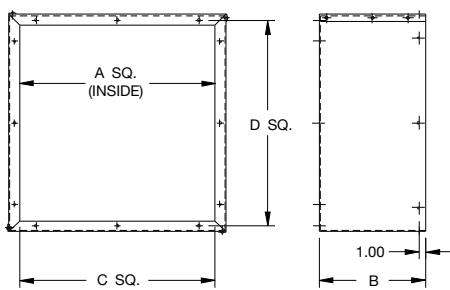
Wall Box with Removable Screen



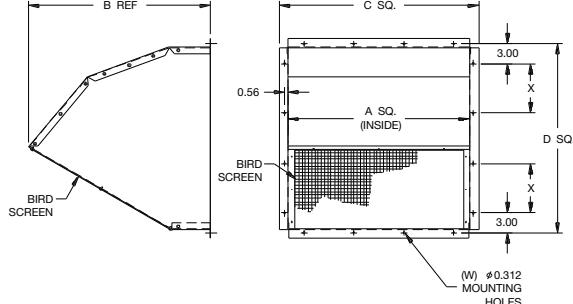
Backdraft Damper



Wall Collar



Weatherhood with Bird Screen



SIZE	WALL BOX						WALL COLLAR				BACKDRAFT DAMPER		WEATHERHOOD				
	A	B	C	D	E	F	A	B	C	D	W x L	A	B	C	D	W	X
080A, 081A, 082A, 082AE	13.50	24.54	10.60	11.75	16.62	15.50	13.50	14.00	10.63	12.00	10.00 x 10.00	10.88	13.90	13.63	12.00	8	6.00
100A, 101A, 102A, 102AE	15.50	24.54	12.60	13.75	18.62	17.50	15.50	14.00	12.63	14.00	12.00 x 12.00	12.88	15.60	15.63	14.00	8	8.00
120A, 121A, 122A, 122AE	18.50	24.54	15.60	16.75	21.62	20.50	18.50	14.00	15.63	17.00	15.00 x 15.00	15.88	17.80	18.63	17.00	8	11.00
140A, 141A, 142A, 142AE	21.50	34.54	18.60	19.75	24.62	23.50	21.50	14.00	18.63	20.00	18.00 x 18.00	18.88	20.50	21.63	20.00	12	7.00
160A, 161A, 162A, 162AE	23.50	34.54	20.60	21.75	26.62	25.50	23.50	14.00	20.63	22.00	20.00 x 20.00	20.88	21.90	23.63	22.00	16	5.38
180A, 181A, 182A, 182AE	25.50	34.54	22.60	23.75	28.62	27.50	25.50	14.00	22.63	24.00	22.00 x 22.00	22.88	23.60	25.63	24.00	16	6.00
200A, 201A, 202A, 202AE	27.50	39.54	24.60	25.75	30.62	29.50	27.50	14.00	24.63	26.00	24.00 x 24.00	24.88	25.40	27.63	26.00	16	6.63
240A, 241A, 242A, 242AE	30.50	39.54	27.60	28.75	33.62	32.50	30.50	14.00	27.63	29.00	27.00 x 27.00	27.88	28.00	30.63	29.00	16	7.63

D4800-6 - Wall Box

E-DMPR-E - Damper

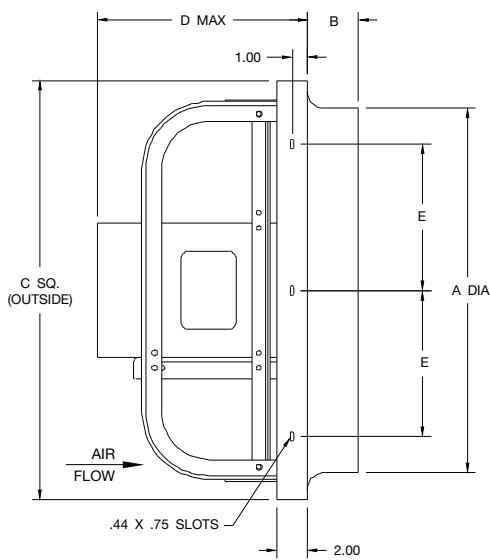
D4800-5 - Collar

D4800-3 - Hood

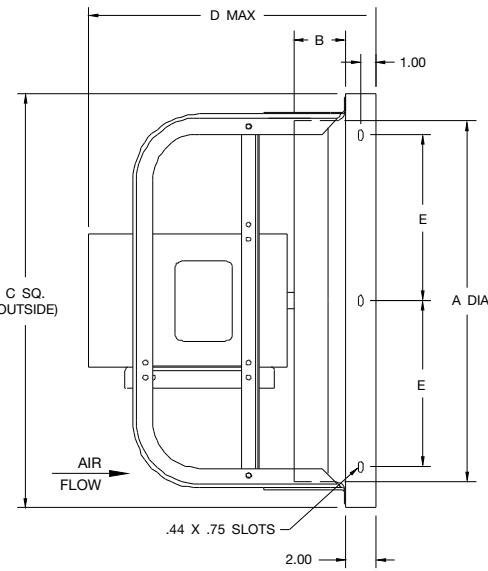
Fan Cut Sheets

DIMENSIONAL DATA

Direct Drive - WPD



Exhaust Airflow



Supply Airflow

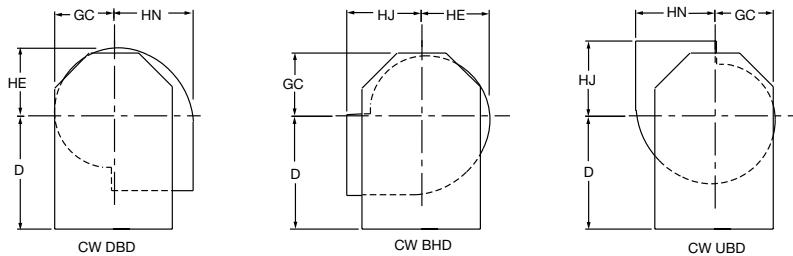
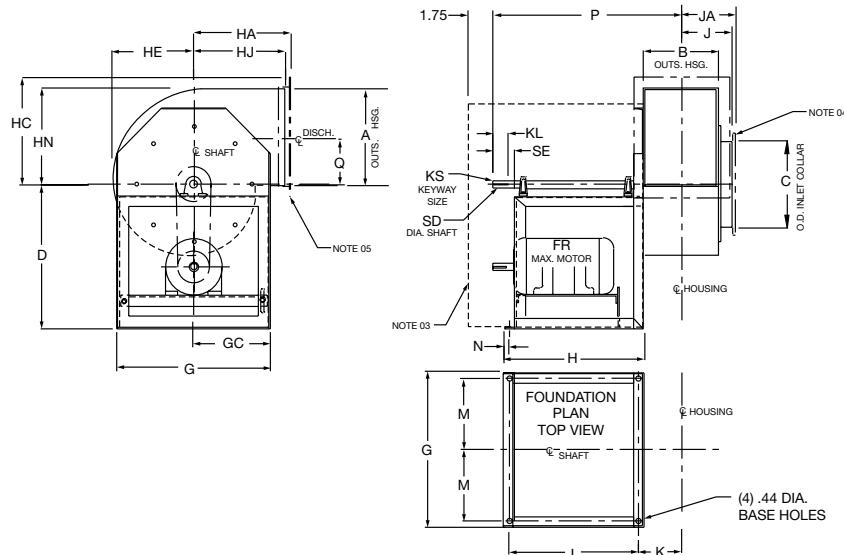
SIZE	A	B	C SQ.	D MAX		DAMPER SIZE	MAX MOTOR FRAME
				EXHAUST	SUPPLY		
14	14.25	2.75	17.00	11.18	14.88	14 x 14	56
16	16.25	3.00	20.00	11.18	14.88	17 x 17	56
18	18.25	3.00	22.00	11.18	14.88	19 x 19	56
21	21.25	3.50	25.00	14.41	17.36	22 x 22	145T
24	24.25	3.50	28.00	14.55	17.36	25 x 25	184T
30	30.38	4.00	36.00	14.74	19.05	33 x 33	184T
36	36.38	5.00	42.00	15.67	19.93	39 x 39	215T
42	42.38	5.50	48.00	23.59	30.00	45 x 45	254T
48	48.38	6.00	54.00	23.59	30.00	51 x 51	254T

D4810-12A
D4810-13A



Fan Cut Sheets

BCV (Class I & II, Sizes 90 – 105)



NOTES:

1. Housing sides and scroll are 14 GA.
2. 'CW' rotation is shown. 'CCW' rotation is similar but opposite.
3. Optional weather cover shown.
4. Optional inlet flange per AS12403 (FCV).
5. Optional discharge flange per AC14986 (BCV) & AS11741 (FCV).
6. Optional inlet screens per AS15506.

SIZE	A	B	C	D	FR	G	GC	H	HA	HC	HE	HJ	HN
90 BCV	11.19	8.63	10.75	14.50	145T	16	8	13.44	9.50	12.13	9.06	9	11.13
105 BCV	11.19	8.63	10.75	14.50	145T	16	8	13.44	9.50	12.13	9.06	9	11.13
105 FCV	12.00	7.00	10.50	14.50	145T	16	8	13.44	9.50	11.56	9.38	9	10.56

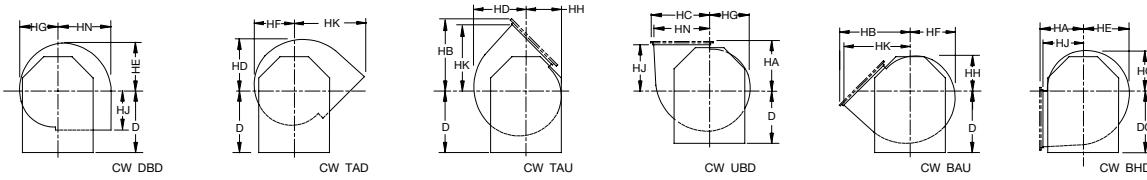
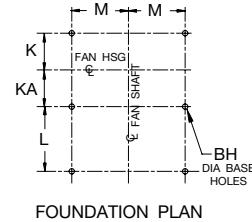
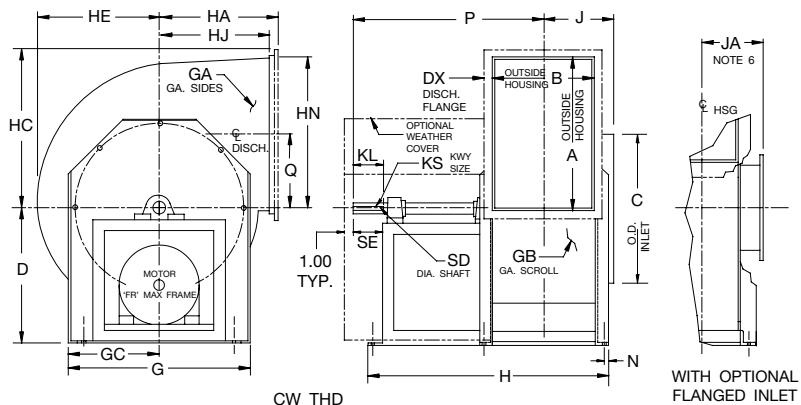
DIMENSIONS ARE SUBJECT TO CHANGE. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

AC13485E

Fan Cut Sheets

DIMENSIONAL DATA

BCV (Class I & II, Sizes 122 – 365)



NOTES:

- Flanged outlet is optional on Sizes 122-200. Flanged outlet is standard on Sizes 222-365 (except on TAD & DBD).
- 'CW' rotation is shown. 'CCW' rotation is similar but opposite.
- Shaft diameter is increased to 1.187 on Hi-temp. fans which require shaft coolers.
- All units are rotatable to all positions (except Sizes 300-365 with "D" centerline height are not rotatable to BHD).
- 'FL' is NEMA 'C' max motor length.
- Optional inlet flange punching per AS363.

SIZE	A	B	BH	C	D		DG		DX	FL	FR	G	GA	GB	GC	H		HA	HB	HC	HD	HE	HF	HG
					CL I	CL II	CL I	CL II								CL I	CL II							
122	13.00	9.75	0.44	13.13	14.50	17.63	14.50	17.63	1.00	14.75	145T	16.00	14	14	8.00	24.50	32.00	9.75	16.75	13.94	11.19	10.56	9.94	9.31
135	14.31	10.81	0.44	14.25	15.75	19.13	15.75	19.13	1.00	14.75	145T	17.50	14	14	8.75	25.63	34.81	10.75	18.38	15.25	12.31	11.63	10.94	10.25
150	15.88	11.94	0.44	15.75	17.75	19.38	17.75	19.38	1.00	17.00	184T	19.00	14	14	9.50	28.75	36.00	11.94	20.31	16.81	13.75	12.88	12.13	11.38
165	17.44	13.19	0.44	17.50	19.00	19.38	19.00	19.38	1.00	17.00	184T	20.50	14	14	10.25	30.13	37.31	13.13	22.25	18.38	15.06	14.13	13.31	12.50
182	19.38	14.56	0.44	19.25	21.00	21.88	21.00	21.88	1.25	20.50	215T	22.50	12	14	11.25	34.38	43.44	14.50	24.81	20.56	16.69	15.69	14.75	13.81
200	21.19	15.94	0.56	21.31	22.75	22.75	22.75	22.75	1.25	20.50	215T	25.00	12	14	12.50	35.75	44.81	15.81	27.00	22.38	18.38	17.31	16.25	15.19
222	23.56	17.69	0.56	23.94	25.50	25.50	25.50	25.50	1.25	18.75	215T	27.25	12	14	13.63	40.75	47.13	17.69	30.00	24.75	20.44	19.06	17.94	16.81
245	25.94	19.44	0.56	26.00	28.00	28.00	28.00	28.00	1.25	19.75	215T	29.75	12	14	14.88	43.50	48.81	19.50	33.00	27.13	22.38	21.00	19.75	18.50
270	28.63	21.38	0.56	28.25	30.50	30.50	30.50	30.50	1.50	21.75	215T	33.00	12	14	16.50	47.38	53.00	21.44	36.44	30.06	24.69	23.19	21.81	20.44
300	31.81	23.81	0.56	31.63	27.50	27.50	34.25	34.25	1.50	24.50	215T	36.13	10	12	18.06	52.88	56.00	23.81	40.31	33.25	27.44	25.75	24.25	22.75
330	35.13	26.06	0.56	34.75	30.00	30.00	37.25	37.25	1.50	26.00	256T	38.88	10	12	19.44	56.13	61.75	26.25	44.44	36.56	30.13	28.38	26.69	25.00
365	38.75	28.88	0.56	38.50	33.50	41.00	41.00	41.00	1.50	32.25	286T	43.75	10	12	21.88	64.56	64.56	29.00	48.88	40.13	33.50	31.50	29.63	27.75

SIZE	HH	HJ	HK	HN	J	JA	K	KA	KL	KS		L		M	N	P	SD		SE		MAX. MTR.			
										CL I	CL II	CL I	CL II				CL I	CL II	CL I	CL II	CL I	CL II		
122	8.69	9.25	15.69	12.94	7.44	11.44	5.75	5.75	2.00	.25x.13	.25x.13	12.00	18.50	6.75	0.50	19.75	26.50	6.44	1.000	1.187	2.75	2.75	145T	184T
135	9.56	10.25	17.31	14.25	8.00	12.00	6.31	6.31	2.00	.25x.13	.25x.13	12.00	20.25	7.38	0.50	20.31	29.56	7.13	1.000	1.187	2.75	3.38	145T	215T
150	10.63	11.44	19.25	15.81	9.06	12.56	6.88	6.88	2.50	.25x.13	.25x.13	13.88	20.25	8.25	0.50	23.13	30.13	7.88	1.000	1.187	3.25	3.38	184T	215T
165	11.69	12.63	21.19	17.38	9.69	13.19	7.50	7.50	2.50	.25x.13	.25x.13	13.88	20.00	8.75	0.63	23.75	30.75	8.69	1.000*	1.187	3.25	3.38	184T	215T
182	12.88	14.00	23.56	19.31	10.88	13.94	8.19	8.19	3.00	.25x.13	.38x.19	16.75	24.75	9.63	0.63	27.94	36.81	9.63	1.187	1.437	3.75	4.00	215T	256T
200	14.13	15.31	25.75	21.13	11.56	14.63	8.88	8.88	3.00	.38x.19	.38x.19	16.75	24.63	10.63	0.63	28.63	37.50	10.56	1.437	1.437	3.75	4.00	215T	256T
222	15.69	17.19	28.75	23.50	12.44	15.50	10.00	10.00	3.00	.38x.19	.38x.19	19.00	23.88	11.13	0.88	27.63	38.38	11.75	1.437	1.437	3.75	4.00	215T	256T
245	17.25	19.00	31.75	25.88	13.31	16.38	10.88	10.88	3.00	.38x.19	.38x.19	20.00	23.88	11.63	0.88	29.00	39.25	12.94	1.437	1.687	3.75	4.00	215T	256T
270	19.06	20.94	35.00	28.56	14.25	17.31	11.81	11.81	3.25	.38x.19	.38x.19	22.00	26.13	13.13	0.88	31.69	43.13	14.25	1.437	1.687	4.00	4.63	215T	286T
300	21.25	23.31	38.94	31.75	15.50	15.50	13.31	13.31	3.00	.50x.25	.50x.25	24.00	25.38	12.13	1.13	40.38	44.44	15.81	1.937	1.937	3.75	4.63	215T	286T
330	23.31	25.75	43.00	35.06	16.63	16.63	14.44	14.44	3.00	.50x.25	.50x.25	25.00	28.88	12.13	1.13	42.50	49.69	17.50	1.937	2.187	3.75	5.25	256T	326T
365	25.88	28.50	47.44	39.63	18.00	18.00	15.81	17.63	4.00	.50x.25	.63x.31	28.88	38.88	14.13	1.13	50.56	51.06	19.25	1.937	2.437	4.75	5.25	286T	326T

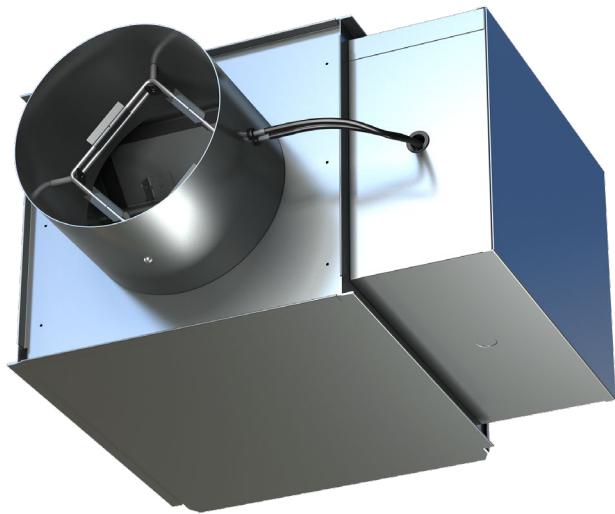
AC9260N

DIMENSIONS ARE NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

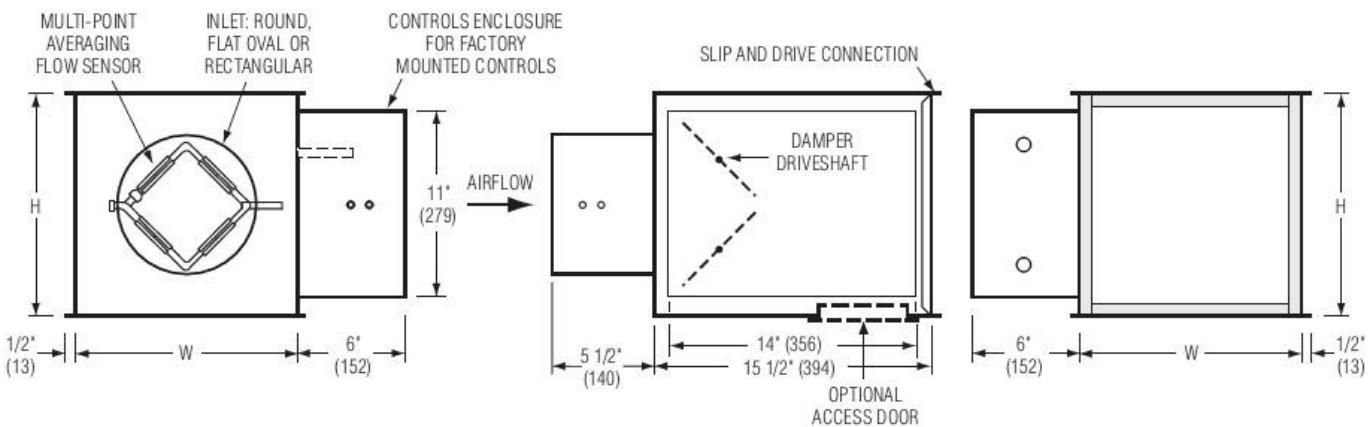
Single Duct VAV Terminals

Features:

- Steri-Liner internal insulation
- 22 gauge zinc coated steel housing.
- Mechanically sealed and gasketed, leak resistant construction
- Rectangular discharge opening with slip and drive cleat duct connection
- Gauge taps are standard
- Control Enclosure
- Removable multi-point Diamond Flow Sensor
- Access Door



MODEL D3001



UNIT SIZE	CFM RANGE	IMPERIAL UNITS (INCHES)				PRICE
		OUTLET		INLET	LENGTH	
		W	H	A	*L	
6"	0-550	10"	10"	6"	21"	\$403
8"	0-1100	12"	12.5"	8"	21"	\$438
10"	0-1840	14"	12.5"	10"	21"	\$487
12"	0-2500	18"	12.5"	12"	21.75"	\$526
14"	0-3125	24"	12.5"	14"	21.75"	\$641
16"	0-3725	28"	12.5"	16"	21.75"	\$674

*With slip and drive installed

Single Duct VAV Terminals

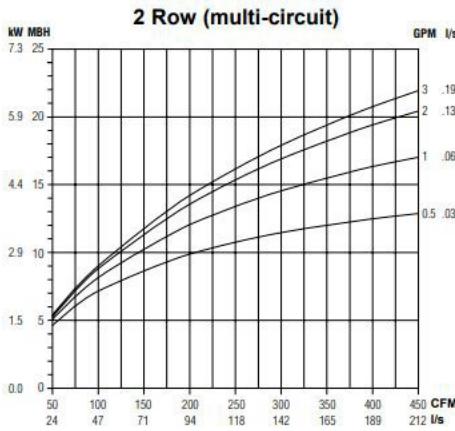
Features:

- 2-row water coil
- Meets the requirements of NFPA 90A and UL 181.
- Right-hand controls location is standard (shown) when looking in direction of airflow. Optional left hand controls mounting is available

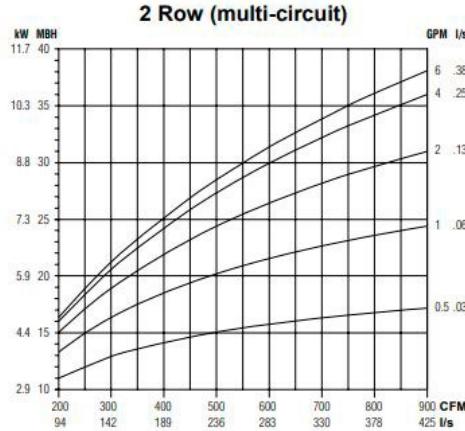
UNIT SIZE	WIDTH	HEIGHT	PRICE
6"	10"	10"	\$403
8"	12"	12.5"	\$438
10"	14"	12.5"	\$487
12"	18"	12.5"	\$526
14"	24"	12.5"	\$641
16"	28"	12.5"	\$673



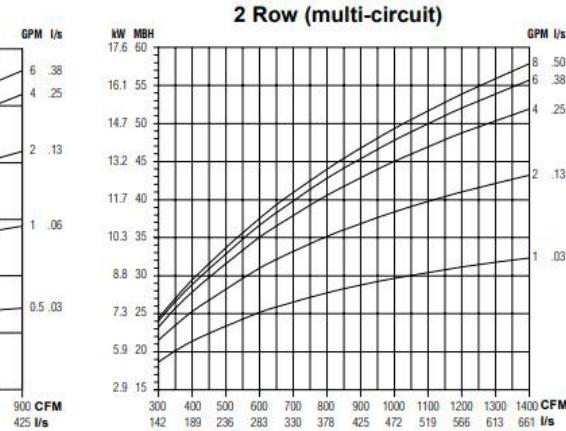
6-INCH COIL GMP



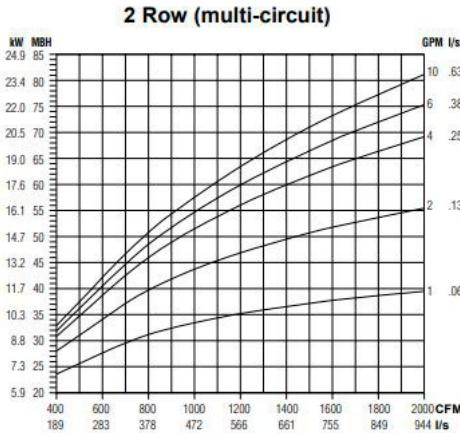
8-INCH COIL GMP



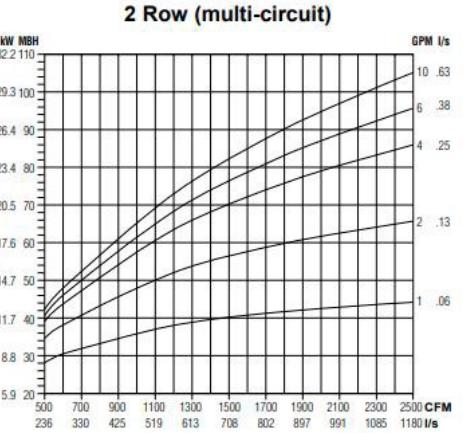
10-INCH COIL GMP



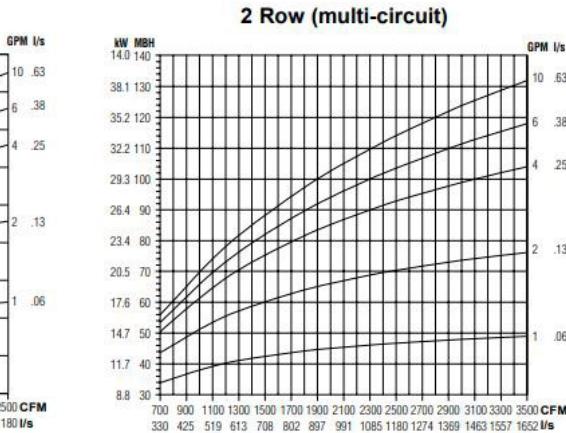
12-INCH COIL GMP



14-INCH COIL GMP



16-INCH COIL GMP



Supply Grilles

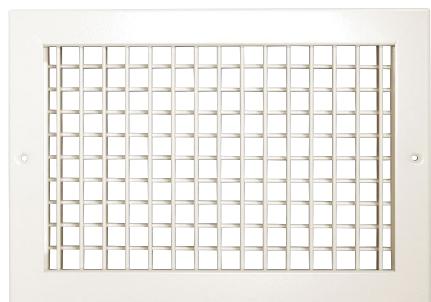
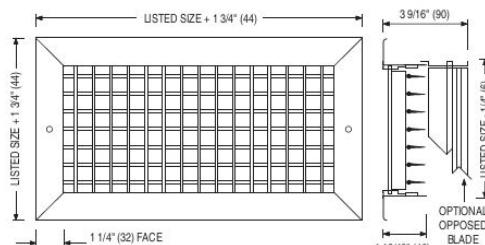
Features:

- Double deflection supply
- 3/4" spacing
- Adjustable blades - Vertical front bars
- Opposed blade damper (optional)
- White powder coat finish

CFM range is only a guide. Maximum at 35 NC and 0.10" SP

*Note: OBD Damper made in multiple sections

Opposed Blade Dampers available.

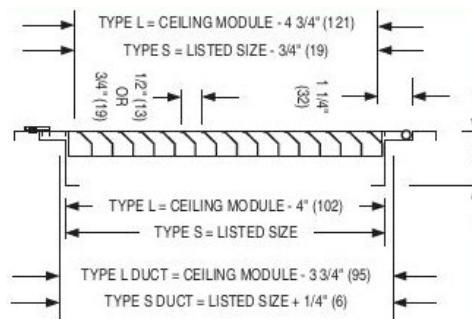


SIZE	CFM RANGE	PRICE	SIZE	CFM RANGE	PRICE	SIZE	CFM RANGE	PRICE
6"x6"	55-220	\$39.00	14"x10"	245-970	\$58.00	20"x10"	335-1420	\$77.00
8"x4"	55-215	\$35.00	14"x12"	320-1280	\$62.00	20"x12"	400-1610	\$82.00
8"x6"	80-320	\$39.00	14"x14"	335-1420	\$68.00	24"x6"	320-1100	\$72.00
8"x8"	115-470	\$44.00	16"x6"	220-840	\$52.00	24"x8"	355-1180	\$77.00
10"x4"	250-350	\$39.00	16"x8"	245-900	\$58.00	24"x10"	400-1340	\$88.00
10"x6"	100-410	\$44.00	16"x10"	270-1080	\$63.00	24"x12"	540-1600	\$96.00
10"x8"	140-500	\$44.00	16"x12"	335-1420	\$68.00	24"x16"	400-1760	\$122.00
10"x10"	180-620	\$50.00	16"x16"	480-1500	\$91.00	24"x20"	935-3730	\$158.00
12"x4"	80-310	\$39.00	18"x6"	245-900	\$58.00	24"x24"	1080-3000	\$198.00
12"x6"	115-470	\$44.00	18"x8"	270-920	\$63.00	30"x6"	320-1280	\$92.00
12"x8"	180-620	\$50.00	18"x10"	320-1280	\$72.00	30"x8"	420-1300	\$102.00
12"x10"	205-800	\$53.00	18"x12"	400-1340	\$77.00	30"x10"	580-3230	\$117.00
12"x12"	270-920	\$58.00	18"x14"	353-1420	\$88.00	30"x12"	680-1900	\$126.00
14"x4"	90-360	\$39.00	18"x18"	625-2080	\$110.00	36"x12"	835-2400	\$154.00
14"x6"	140-500	\$50.00	20"x6"	205-750	\$63.00	30"x16"	935-3730	\$160.00
14"x8"	205-750	\$52.00	20"x8"	245-900	\$69.00	36"x18"	1290-3500	\$219.00

Filter Grilles

Features:

- Hinged Frame
- Accepts 1" Filter (not included)
- White powder coat finish

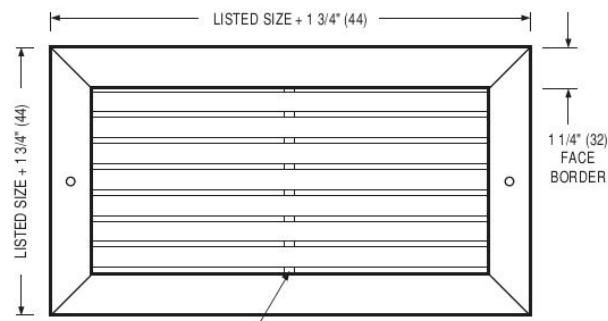


SIZE	TYPE MOUNT	PRICE
25"x14"	Surface	\$137.00
16"x16"	Surface	\$109.00
25"x16"	Surface	\$154.00
20"x20"	T Bar	\$175.00
25"x20"	Surface	\$187.00
44"x20"	T Bar	\$354.00

Return Grilles

Features:

- Single deflection return
- Fixed 45° blades 3/4" spacing
- White powder coat finish
- Horizontal front blades



SIZE	CFM RANGE	PRICE	SIZE	CFM RANGE	PRICE	SIZE	CFM RANGE	PRICE
6"x6"	36-150	\$20.00	16"x10"	182-455	\$42.00	24"x10"	300-1600	\$50.00
8" 4"	36-198	\$20.00	16"x12"	236-600	\$48.00	24"x12"	360-1980	\$58.00
8"x6"	52-200	\$25.00	16"x16"	320-780	\$56.00	24"x16"	490-2695	\$77.00
8"x8"	78-250	\$31.00	16"x24"	490-2695	\$39.00	24"x20"	622-3421	\$92.00
10"x6"	68-230	\$31.00	16"x30"	622-3241	\$44.00	24"x24"	722-3971	\$121.00
10"x8"	92-300	\$31.00	18"x6"	120-660	\$50.00	24"x36"	1116-6138	\$179.00
10"x10"	120-360	\$36.00	18"x8"	182-500	\$28.00	30"x8"	295-1625	\$61.00
12"x4"	52-286	\$31.00	18"x10"	214-642	\$48.00	30"x12"	450-2480	\$77.00
12"x6"	78-250	\$31.00	18"x12"	268-1474	\$48.00	30"x16"	622-3421	\$96.00
12"x8"	78-429	\$35.00	18"x14"	320-1760	\$48.00	30"x20"	800-4300	\$116.00
12"x10"	138-483	\$36.00	18"x18"	380-2100	\$39.00	30"x24"	930-5115	\$148.00
12"x12"	182-500	\$39.00	20"x6"	130-759	\$50.00	30"x30"	1250-6875	\$184.00
12"x18"	268-1474	\$48.00	20"x8"	190-1100	\$42.00	36"x12"	556-3058	\$96.00
12"x24"	360-1680	\$56.00	20"x10"	236-1298	\$48.00	36"x18"	858-4719	\$135.00
14"x6"	92-300	\$36.00	20"x12"	300-1620	\$48.00	36"x24"	1116-6138	\$187.00
14"x8"	138-400	\$36.00	20"x16"	416-2288	\$66.00	36"x36"	1700-7000	\$321.00
14"x10"	762-486	\$39.00	20"x20"	500-2695	\$84.00	46"x22"	1250-6875	\$192.00
14"x12"	450-780	\$44.00	22"x10" *	268-1474	\$50.00	48"x12"	722-3971	\$192.00
14"x14"	236-600	\$50.00	22"x22" *	622-3241	\$116.00	48"x24"	1400-7000	\$221.00
16"x6"	104-592	\$34.00	24"x6"	172-950	\$48.00	48"x36"	2000-9000	\$221.00
16"x8"	162-450	\$37.00	24"x8"	236-1298	\$48.00	-	-	-

CFM range is only a guide. Maximum at 35 NC and 0.10" SP

*Note: OBD damper made in multiple sections

Opposed Blade Dampers available.

Linear Slot Diffuser & Insulated Plenums

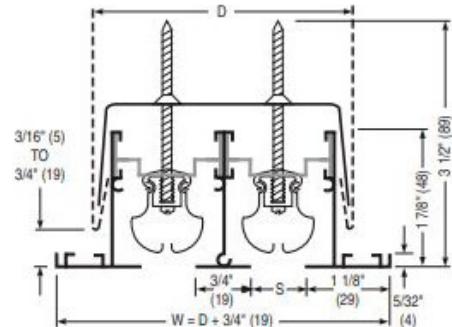
Features:

- Extruded aluminum design
- 1" slot width, 2 slot
- Join units together for continuous appearance
- Factory plenums available
- End caps (pair) included
- "Ice Tong" pattern controller

SIZE	CFM RANGE	PRICE
24" x 2 Slot	50-250	\$99.00
48" x 2 Slot	100-500	\$189.00



Type C
Flange Frame / Concealed Mounting



Features:

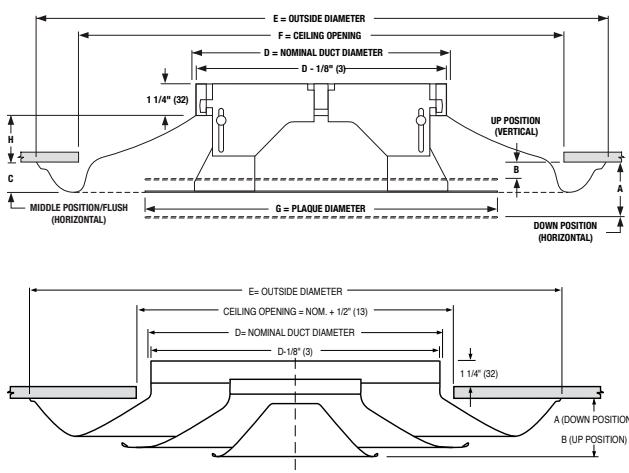
- Low profile design
- Fiberglass liner
- Engineered performance

SIZE	PLENUM		INLET	PRICE
	W	H		
24" x 2 Slot	4.25"	11"	6"	\$71.00
48" x 2 Slot	4.25"	11"	8"	\$110.00

Round Diffuser

Features:

- Heavy gauge spun steel
- Three position cone (Model RNR)
- Adjustable horizontal discharge pattern
- White powder coat finish



RNR

RUNI

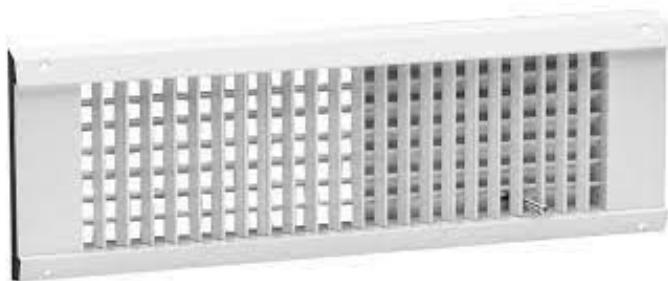
SIZE	CFM RANGE	RNR PRICE	RUNI PRICE
6" Neck	100-200	\$141.00	\$ 144.00
8" Neck	150-300	\$148.00	\$ 183.00
10" Neck	300-500	\$162.00	\$ 208.00
12" Neck	500-650	\$184.00	\$ 232.00
14" Neck	650-850	\$209.00	\$ 311.00

*Note: Radial Blade Damper & Butterfly Damper available.

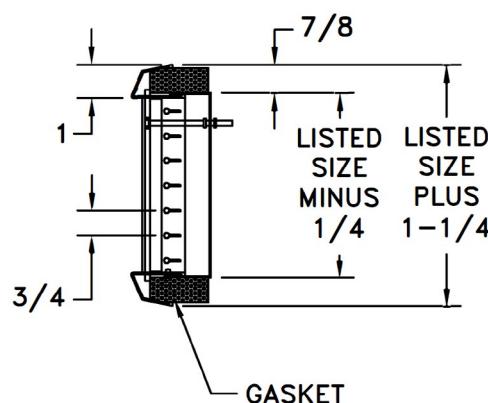
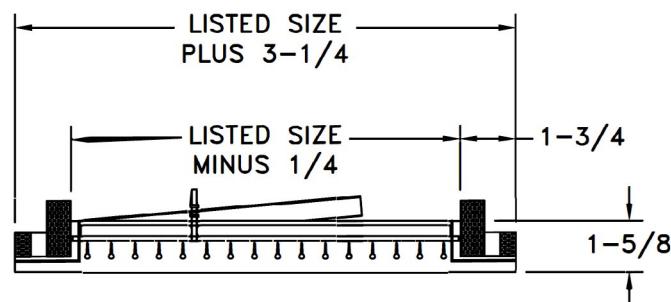
Spiral Grilles

Features:

- Double Deflection
- Adjustable Blades
- Extruded Aluminum



SIZE	DUCT DIA. MIN.	PRICE
12"x4"	10"	\$229.00
18"x4"	10"	\$297.00
12"x6"	12"	\$240.00
18"x6"	12"	\$309.00

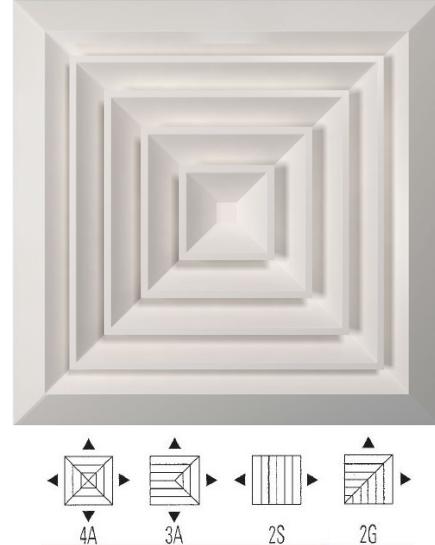
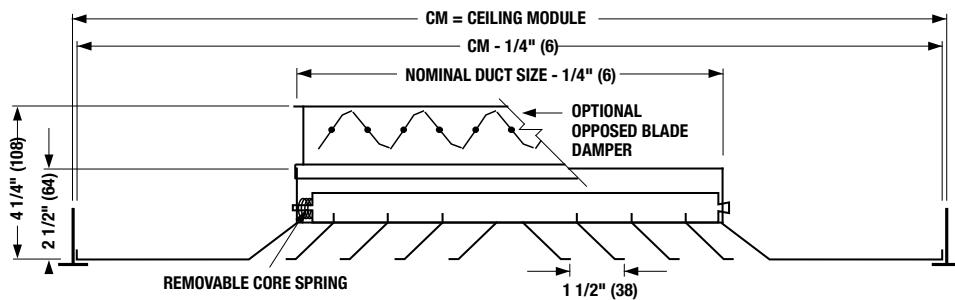


MODEL USVH1

Directional Diffuser

Features:

- Square neck, removable core
- Various throw patterns available
- White baked powder coat finish
- Lay-in panel



MODEL 6500

SIZE	PATTERNS STACKED					CFM RANGE	PRICE
	4A	3A	2S	1S	2G		
6"x6"	●	●	●	●	●	100-200	\$94.00
9"x9"	●	●	●	●	●	150-400	\$105.00
12"x12"	●	●	●	●	●	300-600	\$132.00
15"x15"	●					500-900	\$163.00

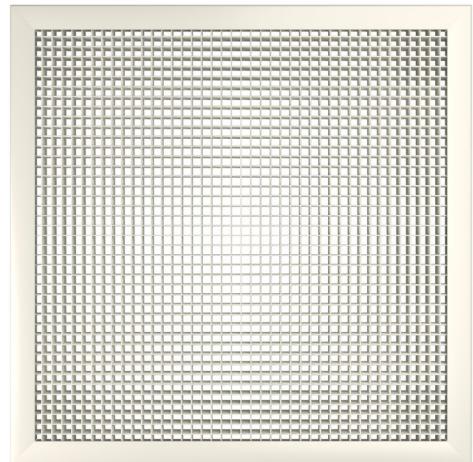
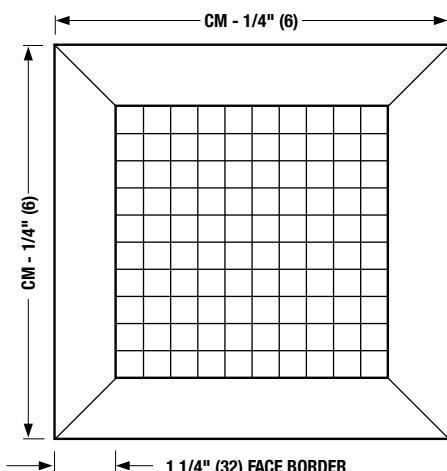
Supply/Return Air Diffusers

Features:

- Aluminum eggcrate construction
- 1/2" x 1/2" x 1/2" grid size
- White powder coat finish

SIZE	CFM RANGE	PRICE
6"x6"	0-200	\$25.00
8"x8"	0-400	\$28.00
10"x10"	0-600	\$38.00
*10"x10" T-Bar	0-600	\$65.00
12"x12"	0-900	\$45.00
14"x14"	0-1500	\$50.00
16"x16"	0-2000	\$70.00
*22"x22" T-Bar	0-3600	\$110.00
*22"x10" T-Bar	0-1500	\$55.00
*46"x22" T-Bar	0-6250	\$258.00

*24"x24" Lay-in-panel

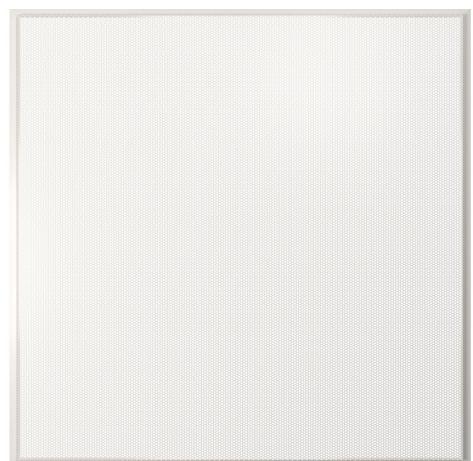
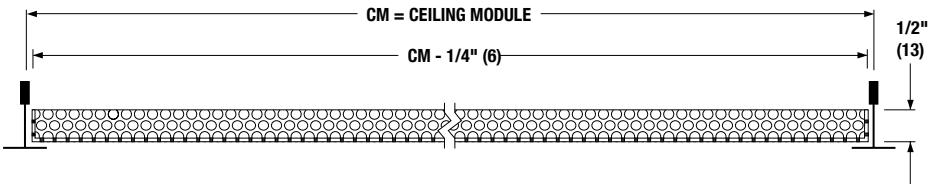


*Note: Opposed Blade Damper available.

*Plaster Frames available.

Features:

- Perforated face only
- Lay-in frame
- White powder coat finish

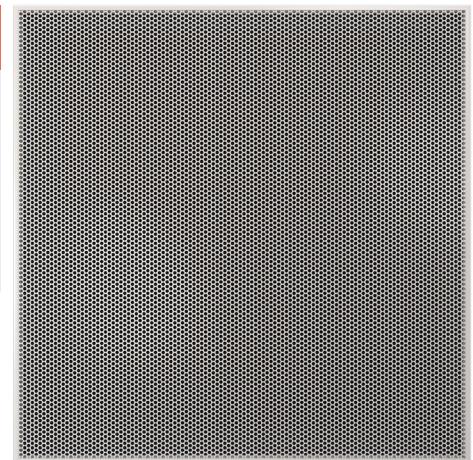
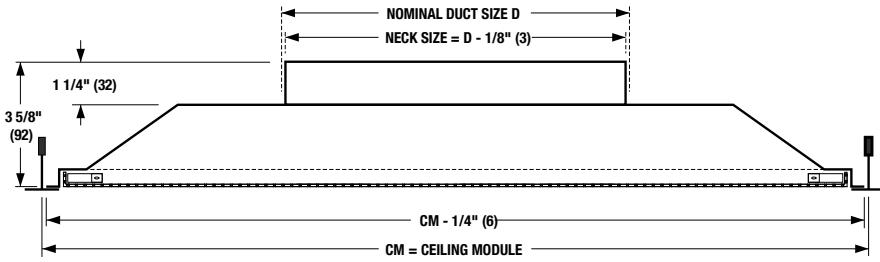


SIZE	CFM RANGE	PRICE
24"X12" LAY-IN (PANEL ONLY)	0-1000	\$24.00
24"X24" LAY-IN (PANEL ONLY)	0-2000	\$42.00

Features:

- Perforated face
- Round neck
- Lay-in frame
- White powder coat finish

24"x24" LAY-IN PANEL			
SIZE	CFM RANGE	4360 RETURN	4320 SUPPLY
6" Neck	0-150	\$76.00	\$90.00
8" Neck	0-250	\$76.00	\$90.00
10" Neck	0-400	\$76.00	\$90.00
12" Neck	0-600	\$76.00	\$90.00
14" Neck	0-800	\$76.00	\$90.00
22"x10"	0-1200	\$24.00	-
22"x22"	0-2800	\$42.00	-



*Note: Opposed Blade Damper available.

Stamped Faced Diffusers

Features:

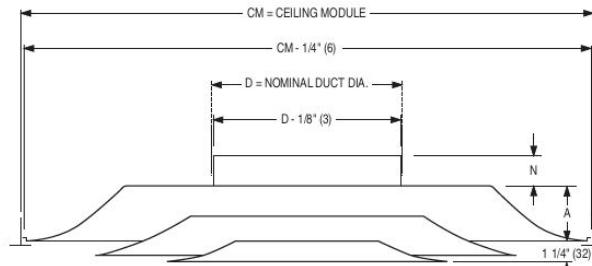
- All steel construction
- Three concentric cones
- Frame compatible with standard 1"
- or narrow 9/16" flat T-Bar
- RNS 12"x12" four concentric cones



*Radial Blade Damper & Butterly Dampers

*Plaster Frames available.

Type L Lay-In T-Bar



CFM RANGE	12"X12" SURFACE MOUNT SIZE	PRICE	24"X24" LAY-IN PANEL SIZE	PRICE
100-200	6" NECK	\$62.00	6" NECK	\$84.00
200-360	8" NECK	\$62.00	8" NECK	\$84.00
550-550	-	-	10" NECK	\$84.00
550-780	-	-	12" NECK	\$84.00
800-1200	-	-	14" NECK	\$84.00

Architectural Plaque Diffusers

Features:

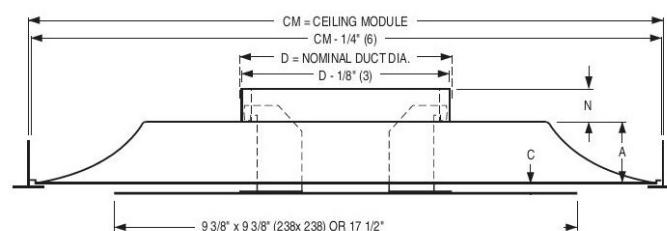
- Round neck
- All steel construction
- Double-skinned face plate
- Wrapped panel
- White powder coat finish



*Radial Blade Damper & Butterly Damper available.

*Plaster Frames available.

Type L Lay-In T-Bar

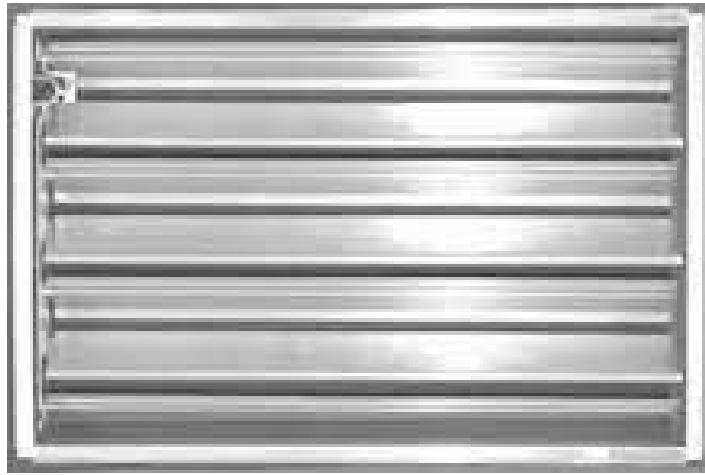


CFM RANGE	12"X12" SURFACE MOUNT SIZE	PRICE	24"X24" LAY-IN PANEL SIZE	PRICE
100-200	6" NECK	\$62.00	6" NECK	\$93.00
150-350	8" NECK	\$62.00	8" NECK	\$93.00
250-550	-	-	10" NECK	\$93.00
400-700	-	-	12" NECK	\$93.00
600-1000	-	-	14" NECK	\$93.00

Opposed Blade Dampers

Features:

- Screwdriver operated
- Steel
- Mill finish standard



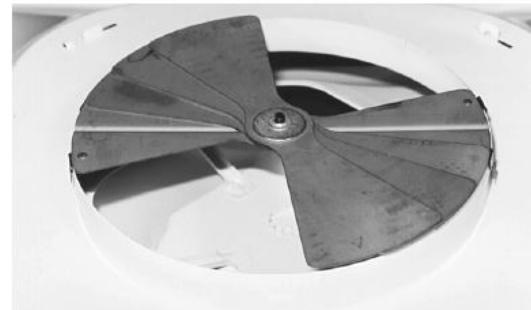
SIZE	PRICE	SIZE	PRICE	SIZE	PRICE
6"x6"	\$22.00	16"x10"	\$38.00	24"x6"	\$44.00
8"x4"	\$22.00	16"x12"	\$40.00	24"x8"	\$46.00
8"x6"	\$22.00	16"x16"	\$46.00	24"x10"	\$48.00
8"x8"	\$22.00	16"x24"	\$58.00	24"x12"	\$50.00
9"x9"	\$30.00	16"x30"	\$74.00	24"x16"	\$58.00
10"x4"	\$30.00	18"x6"	\$38.00	24"x20"	\$90.00
10"x6"	\$30.00	18"x8"	\$40.00	24"x24"	\$96.00
10"x8"	\$30.00	18"x10"	\$42.00	24"x36"	\$126.00
10"x10"	\$30.00	18"x12"	\$44.00	30"x6"	\$55.00
12"x4"	\$30.00	18"x14"	\$48.00	30"x8"	\$76.00
12"x6"	\$30.00	18"x16"	\$52.00	30"x12"	\$80.00
12"x8"	\$32.00	18"x18"	\$54.00	30"x16"	\$74.00
12"x10"	\$32.00	20"x6"	\$40.00	30"x20"	\$105.00
12"x12"	\$32.00	20"x8"	\$42.00	30"x24"	\$111.00
12"x18"	\$44.00	20"x10"	\$44.00	30"x30"	\$111.00
12"x24"	\$50.00	20"x12"	\$48.00	36"x12"	\$87.00
14"x4"	\$34.00	20"x16"	\$60.00	36"x18"	\$105.00
14"x6"	\$34.00	20"x20"	\$66.00	36"x24"	\$126.00
14"x8"	\$34.00	22"x10"	\$46.00	36"x36"	\$207.00
14"x10"	\$34.00	22"x22"	\$76.00	46"x22"	\$162.00
14"x12"	\$34.00	-	-	48"x12"	\$96.00
14"x14"	\$34.00	-	-	48"x24"	\$186.00
15"x15"	\$46.00	-	-	48"x36"	\$255.00
16"x6"	\$36.00	-	-	48"x48"	\$366.00
16"x8"	\$38.00	-	-	-	-

Radial Blade/Butterfly Dampers

Features:

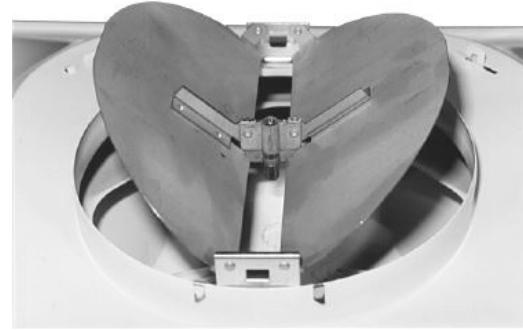
- Round neck damper
- Steel
- Mill finish standard

SIZE	BUTTERFLY PRICE	RADIAL PRICE
6" Neck	\$23.00	\$19.00
8" Neck	\$29.00	\$21.00
10" Neck	\$36.00	\$23.00
12" Neck	\$45.00	\$25.00
14" Neck	\$55.00	-



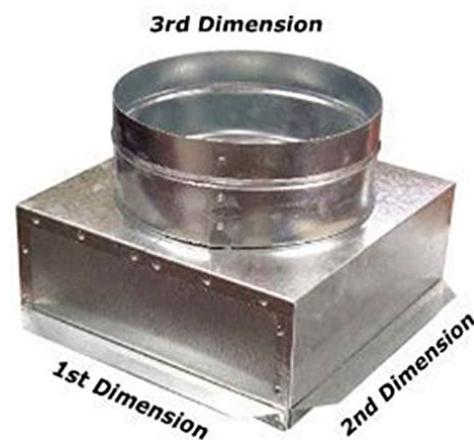
Features:

- Premium performance
- Adjustable friction pivots hold the blades at required setting
- Steel



Square to Round Adapters

3/4" FLANGED - GRILLE MOUNT			
SIZE	PRICE	SIZE	PRICE
6"x6"x6" Round	\$21.00	12"x12"x6" Round	\$31.00
8"x8"x6" Round	\$24.00	12"x12"x8" Round	\$31.00
8"x8"x8" Round	\$24.00	12"x12"x10" Round	\$38.00
9" x 9" x 6" Round	\$25.00	12"x12"x12" Round	\$38.00
9" x 9" x 8" Round	\$25.00	15"x15"x12" Round	\$34.00
10"x10"x6" Round	\$30.00	15"x15"x14" Round	\$34.00
10"x10"x8" Round	\$30.00	22"x10" Blank	\$35.00
10"x10"x10" Round	\$30.00	22"x22" Blank	\$53.00



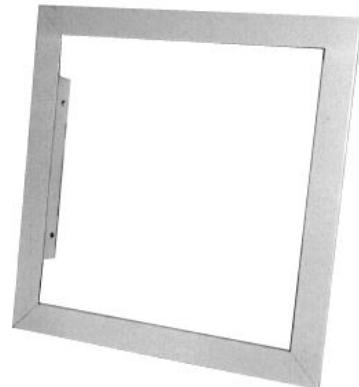
MODEL SR/SR-O

Plaster Frame

Features:

- Aluminum Construction
- To use with lay-in diffuser
- White powder coat finish

SIZE	PRICE
12"x12"	\$40.00
24"x12"	\$52.00
24"x24"	\$60.00



MODEL DFA

Return Air Crosstalk Attenuator

Features:

- Economical and light-weight design
- Fits standard grille size
- Easy installation site on ceiling grid
- Compact design takes up minimal space in return plenum
- 1" (25) fiberglass insulation (standard)
- Sight proof



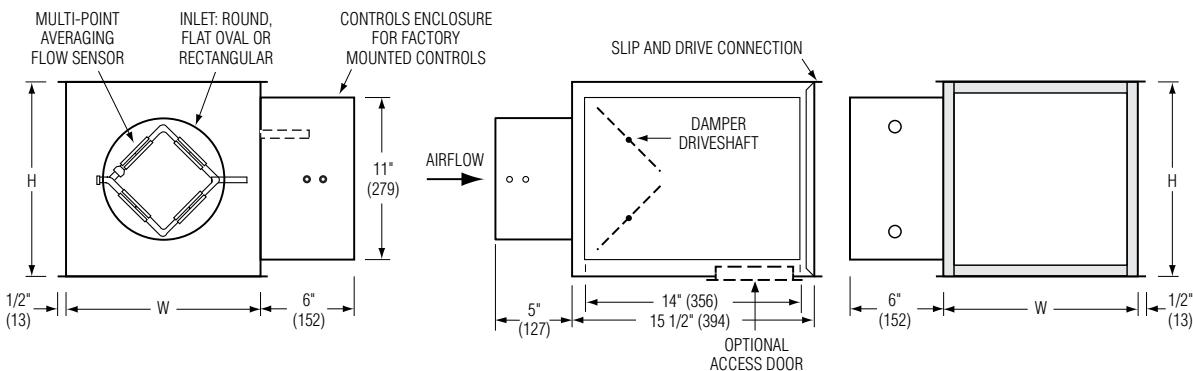
SIZE	PRICE
12"x12"	\$136.00
24"x12"	\$158.00
24"x24"	\$202.00

MODEL RACA

Air Distribution Cut Sheets



SINGLE DUCT TERMINAL UNIT DIGITAL CONTROLS • PRESSURE INDEPENDENT CONSTANT OR VARIABLE VOLUME MODEL: D3001



Dimensional Data

Unit Size	Airflow Range* cfm (l/s)	W	H	Inlet Size
4	0 - 225 (0 - 106)	10 (254)	10 (254)	3 7/8 (98) Round
5	0 - 400 (0 - 189)	10 (254)	10 (254)	4 7/8 (124) Round
6	0 - 550 (0 - 260)	10 (254)	10 (254)	5 7/8 (149) Round
7	0 - 800 (0 - 378)	12 (305)	12 1/2 (318)	6 7/8 (175) Round
8	0 - 1100 (0 - 519)	12 (305)	12 1/2 (318)	7 7/8 (200) Round
9	0 - 1400 (0 - 661)	14 (356)	12 1/2 (318)	8 7/8 (225) Round
10	0 - 1840 (0 - 868)	14 (356)	12 1/2 (318)	9 7/8 (251) Round
12	0 - 2500 (0 - 1180)	18 (457)	12 1/2 (318)	12 15/16 x 9 13/16 (329 x 249) Oval
14	0 - 3125 (0 - 1475)	24 (610)	12 1/2 (318)	16 1/16 x 9 13/16 (408 x 249) Oval
16	0 - 3725 (0 - 1758)	28 (711)	12 1/2 (318)	19 3/16 x 9 13/16 (487 x 249) Oval
24 x 16	0 - 8330 (0 - 3931)	38 (965)	18 (457)	23 7/8 x 15 7/8 (606 x 403) Rect.

* Maximum airflow limit is based upon 1.5" w.g. (373 Pa) max. differential pressure signal from Flow Sensor.

Standard Features:

- 22 ga. (0.86) galvanized steel casing, mechanically sealed, low leakage construction.
- 16 ga. (1.63) corrosion-resistant steel inclined opposed blade damper with extruded PVC seals (single blade on size 4, 5, 6), 45° rotation, CW to close. Tight close-off. Damper leakage is less than 2% of the terminal rated airflow at 3" w.g. (750 Pa).
- 1/2" (13) dia. plated steel drive shaft. An indicator mark on the end of the shaft shows damper position.
- Multi-point averaging Flow Sensor. Supplied with balancing tees.
- Rectangular discharge with slip and drive cleat duct connection.
- Full NEMA 1 type controls enclosure for factory mounted controls.

- 3/4" (19), dual density insulation, exposed edges coated to prevent air erosion. Meets the requirements of NFPA 90A and UL 181.

- Right-hand controls location is standard (shown) when looking in direction of airflow. Optional left hand controls mounting is available.

- Model D3001 can be installed horizontally, vertical or at any angle. Operation is not affected by position.

Digital Controls:

- Factory mounted (supplied by others)
 - Field mounted (supplied by others)
 - Nailor EZvav
- See separate submittal.

Options and Accessories:

- Fiber-free liner.
 - Perforated metal liner.
 - Solid metal liner.
 - Steri-liner.
 - Steri-liner + Perforated metal liner.
 - 1" (25) liner.
 - FMI Removable insert type Flow Sensor.
 - Bottom access door.
 - 24 VAC control transformer.
 - 20 ga. (1.00) construction.
 - Toggle disconnect switch.
 - Controls enclosure for field mounted controls.
 - Hanger brackets.
 - Dust tight enclosure seal.
 - Ultra low leakage casing.
- Seismic Certification:
- Seismic Source International (Standard)
 - HCAI (formerly OSHPD, California)
- Special features: _____ .

Page 1 of 2.
Dimensions are in inches (mm).

SCHEDULE TYPE:	
PROJECT:	
ENGINEER:	
CONTRACTOR:	

DATE	B SERIES	SUPERSEDES	DRAWING NO.
11 - 2 - 22	3000	10 - 6 - 21	D3001-1

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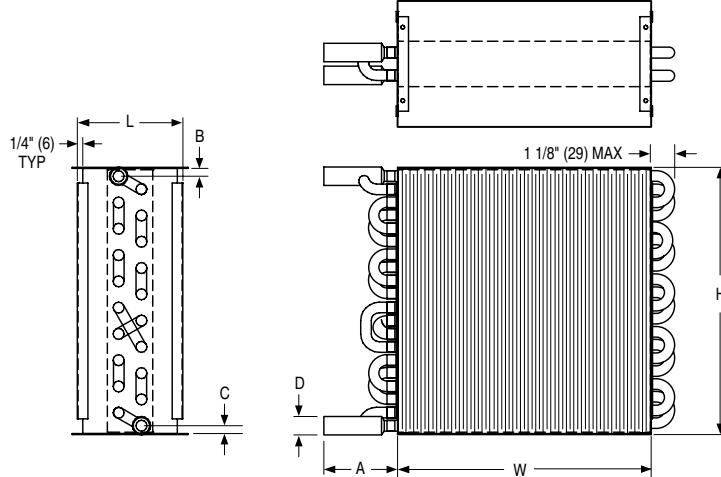
Air Distribution Cut Sheets



SINGLE DUCT TERMINAL UNIT HOT WATER REHEAT COILS FOR USE WITH MODELS: (D, A or P) 30RW MODEL SERIES: 30HWC

Description:

- 0.0045" (0.11) Aluminum sine-wave corrugation and rippled fins, 10 fins per inch.
- 1/2" (13) O.D. copper tubes, 0.016" (0.41) wall thickness.
- 20 ga. (1.00) galvanized steel casing.
- 1/2" (13), 7/8" (22) or 1 3/8" (35) O.D. copper male solder sweat connections.
- Connection is slip and drive to ductwork, both sides.
- Leakage tested to 360 psi (2481 kPa).
- AHRI Certified.



Dimensional Data

Unit Size	W	H	1 Row					2 Row						
			Part No.	L	A	B	C	D	Part No.	L	A	B	C	D
4, 5, 6	10 (254)	10 (254)	V30HWC106	5 (127)	3 (76)	13/32 (10)	1 1/32 (26)	1/2 (13)	V30HWC206	5 (127)	4 (102)	13/32 (10)	13/32 (10)	7/8 (22)
7, 8	12 (305)	12 1/2 (318)	V30HWC108	5 (127)	3 (76)	13/32 (10)	1 1/32 (26)	1/2 (13)	V30HWC208	5 (127)	3 1/2 (89)	3/8 (10)	3/8 (10)	7/8 (22)
9, 10	14 (356)	12 1/2 (318)	V30HWC110	5 (127)	3 (76)	13/32 (10)	1 1/32 (26)	1/2 (13)	V30HWC210	5 (127)	3 1/2 (89)	3/8 (10)	3/8 (10)	7/8 (22)
12	18 (457)	12 1/2 (318)	V30HWC112	5 (127)	3 (76)	13/32 (10)	1 1/32 (26)	1/2 (13)	V30HWC212	5 (127)	3 1/2 (89)	13/32 (10)	13/32 (10)	7/8 (22)
14	24 (610)	12 1/2 (318)	V30HWC114	5 (127)	3 (76)	3/8 (10)	1 (25)	1/2 (13)	V30HWC214	5 (127)	3 1/2 (89)	3/8 (10)	3/8 (10)	7/8 (22)
16	28 (711)	12 1/2 (318)	V30HWC116	5 (127)	4 3/4 (121)	3/8 (10)	1 (25)	7/8 (22)	V30HWC216	5 (127)	4 3/4 (121)	11/16 (17)	11/16 (17)	7/8 (22)
24 x 16	38 (965)	18 (457)	V30HWC124	5 (127)	4 3/4 (121)	9/16 (14)	1 3/16 (30)	7/8 (22)	V30HWC224	5 (127)	4 3/4 (121)	7/8 (22)	7/8 (22)	7/8 (22)

Unit Size	W	H	3 Row					4 Row						
			Part No.	L	A	B	C	D	Part No.	L	A	B	C	D
4, 5, 6	10 (254)	10 (254)	V30HWC306	7 1/2 (191)	4 1/4 (108)	23/32 (18)	23/32 (18)	7/8 (22)	V30HWC406	7 1/2 (191)	4 1/4 (108)	11/16 (17)	11/16 (17)	7/8 (22)
7, 8	12 (305)	12 1/2 (318)	V30HWC308	7 1/2 (191)	4 1/4 (108)	23/32 (18)	23/32 (18)	7/8 (22)	V30HWC408	7 1/2 (191)	4 1/4 (108)	11/16 (17)	11/16 (17)	7/8 (22)
9, 10	14 (356)	12 1/2 (318)	V30HWC310	7 1/2 (191)	4 1/4 (108)	11/16 (17)	11/16 (17)	7/8 (22)	V30HWC410	7 1/2 (191)	4 1/4 (108)	11/16 (17)	11/16 (17)	7/8 (22)
12	18 (457)	12 1/2 (318)	V30HWC312	7 1/2 (191)	4 1/4 (108)	23/32 (18)	23/32 (18)	7/8 (22)	V30HWC412	7 1/2 (191)	4 1/4 (108)	23/32 (18)	23/32 (18)	7/8 (22)
14	24 (610)	12 1/2 (318)	V30HWC314	7 1/2 (191)	4 1/4 (108)	11/16 (17)	11/16 (17)	7/8 (22)	V30HWC414	7 1/2 (191)	4 1/4 (108)	23/32 (18)	23/32 (18)	7/8 (22)
16	28 (711)	12 1/2 (318)	V30HWC316	7 1/2 (191)	4 1/4 (108)	11/16 (17)	11/16 (17)	7/8 (22)	V30HWC416	7 1/2 (191)	4 1/4 (108)	23/32 (18)	23/32 (18)	7/8 (22)
24 x 16	38 (965)	18 (457)	V30HWC324	7 1/2 (191)	4 3/4 (121)	1 1/8 (29)	1 1/8 (29)	1 3/8 (35)	V30HWC424	7 1/2 (191)	4 3/4 (121)	1 1/8 (29)	1 1/8 (29)	1 3/8 (35)

Weights:

Unit Size	1 Row			2 Row			3 Row			4 Row		
	Dry Coil Weight (lbs)	Water Weight (lbs)	Water Volume (gal)	Dry Coil Weight (lbs)	Water Weight (lbs)	Water Volume (gal)	Dry Coil Weight (lbs)	Water Weight (lbs)	Water Volume (gal)	Dry Coil Weight (lbs)	Water Weight (lbs)	Water Volume (gal)
4, 5, 6	5	0.16	0.02	7	0.43	0.06	10	0.65	0.09	12	0.81	0.11
7, 8	7	0.21	0.03	9	0.53	0.07	11	0.80	0.11	14	1.01	0.14
9, 10	7	0.23	0.03	10	0.58	0.08	12	0.87	0.12	15	1.11	0.15
12	8	0.28	0.04	11	0.67	0.09	13	1.01	0.14	17	1.30	0.17
14	10	0.35	0.05	13	0.82	0.11	16	1.23	0.17	20	1.58	0.21
16	12	0.65	0.09	16	1.32	0.18	19	1.67	0.23	23	1.77	0.24
24 x 16	19	0.96	0.13	28	2.49	0.34	43	4.53	0.61	51	5.19	0.70

SCHEDULE TYPE:

Page 1 of 1.

Dimensions are in inches (mm).

PROJECT:

DATE B SERIES SUPERSEDES DRAWING NO.

ENGINEER:

9 - 6 - 19 3000 11 - 3 - 17 D30HWC-1

CONTRACTOR:

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Air Distribution Cut Sheets



**SINGLE DUCT TERMINAL UNIT
HOT WATER REHEAT COILS**
FOR USE WITH MODELS: (D, A or P)30RW
MODEL SERIES: 30HWC

Weights:

Unit Size	1 Row			2 Row			3 Row			4 Row		
	Dry Coil Weight (lbs)	Water Volume (gal)	Water Volume (gal)	Dry Coil Weight (lbs)	Water Volume (gal)	Water Volume (gal)	Dry Coil Weight (lbs)	Water Volume (gal)	Water Volume (gal)	Dry Coil Weight (lbs)	Water Volume (gal)	Water Volume (gal)
4, 5, 6	5.17	0.16	0.02	6.62	0.43	0.06	9.97	0.65	0.09	11.15	0.81	0.11
7, 8	6.52	0.21	0.03	8.50	0.53	0.07	12.72	0.80	0.11	14.44	1.01	0.14
9, 10	7.08	0.23	0.03	9.25	0.58	0.08	13.59	0.87	0.12	15.75	1.11	0.15
12	8.19	0.28	0.04	10.80	0.67	0.09	15.82	1.01	0.14	18.41	1.30	0.17
14	9.89	0.35	0.05	13.08	0.82	0.11	19.18	1.23	0.17	22.34	1.58	0.21
16	11.23	0.65	0.09	15.59	1.32	0.18	21.96	1.67	0.23	25.01	1.77	0.24
24 x 16	17.40	0.96	0.13	25.43	2.49	0.34	36.52	4.53	0.61	42.58	5.19	0.70

Note: 8.34 lbs / gallon of water.

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

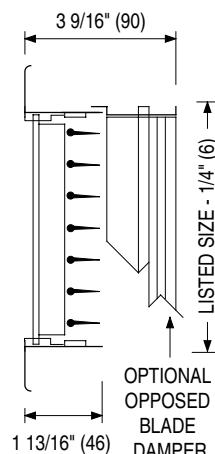
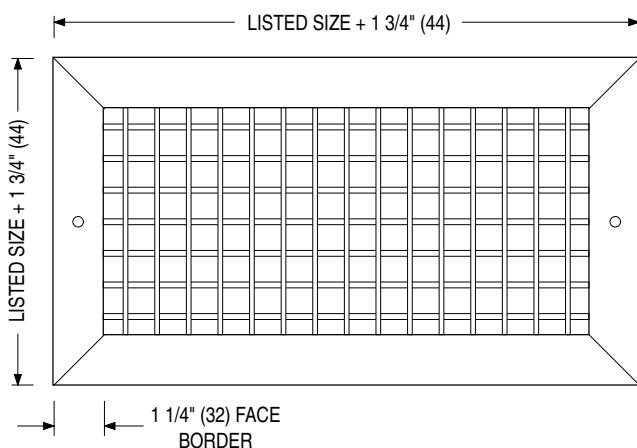
Page 2 of 2.
Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
3 - 30 - 17	3000	12 - 17 - 09	D30HWC-1

Air Distribution Cut Sheets



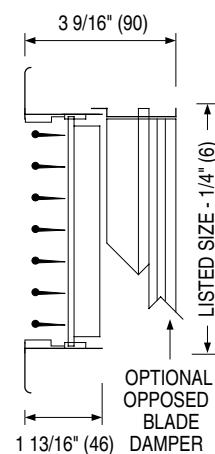
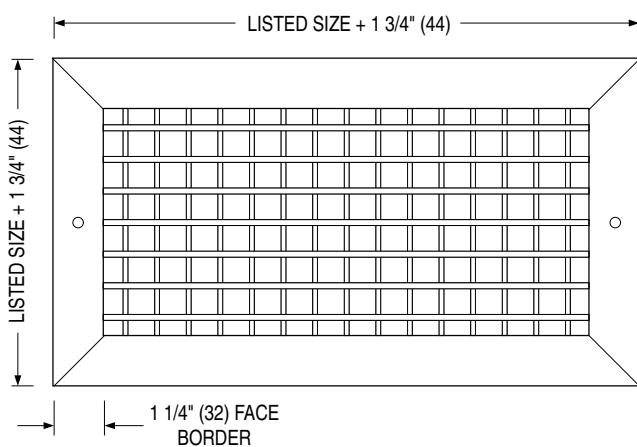
STEEL SUPPLY GRILLES & REGISTERS DOUBLE DEFLECTION • ADJUSTABLE MODELS: 61DV(-O) AND 61DH(-O)



- Frame/Border Type S:**
Surface Mount

- Model 61DV**
Double Deflection Grille
Vertical Front Blades

- Model 61DV-O**
Double Deflection Register
Vertical Front Blades
(Includes O. B. Damper)



- Frame/Border Type S:**
Surface Mount

- Model 61DH**
Double Deflection Grille
Horizontal Front Blades

- Model 61DH-O**
Double Deflection Register
Horizontal Front Blades
(Includes O. B. Damper)

DESCRIPTION:

- Construction: Corrosion-resistant steel. Roll-formed frame mechanically interlocked with mitered corners for strength. Two sets of perpendicular roll-formed 'teardrop' blades on 3/4" (19) centers provide air pattern control in two planes. Blades are individually pivoted to ensure positive positioning when adjusted to desired deflection setting.
- Optional roll-formed steel opposed blade damper has a screw driver slot operator accessible through face of register.
- Minimum size is 4" x 4" (102 x 102). Maximum size is 48" x 36" (1219 x 914).
- Type S Surface mount frame has a 1 1/4" (32) face border and a 1" (25) overlap margin.
- Standard fastening is Type A countersunk screw holes.
- Standard finish is AW Appliance White.

OPTIONS:

- Finish:

SP Special _____.
- Fastening (Type S):

Type C Concealed mounting straps

Type D Concealed screw holes in neck

Type N None.
- PF Plaster sub-frame
- IS Insect screen
- Other _____.

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Page 1 of 2
Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
9-24-19	6100	2-1-11	6100-2

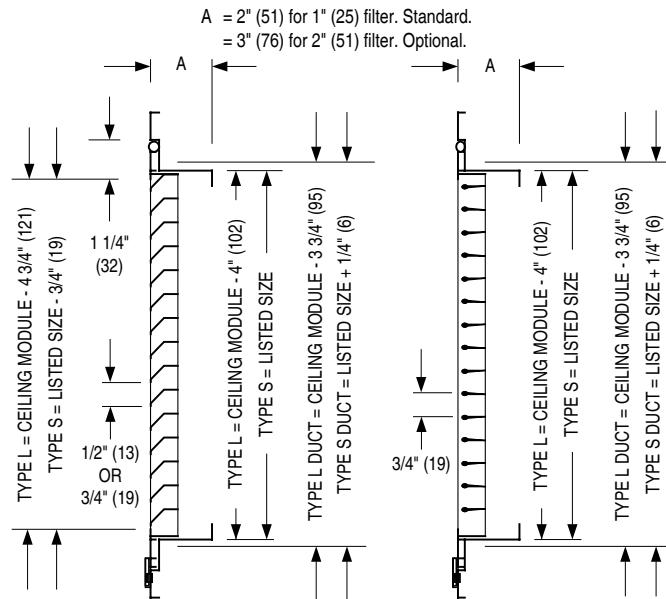
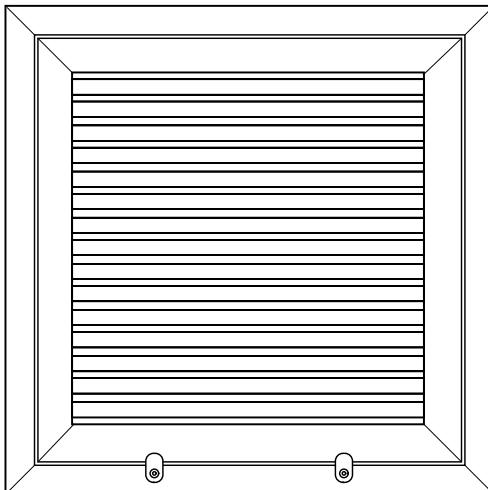
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Air Distribution Cut Sheets



STEEL FILTER RETURN GRILLES FIXED LOUVERED BLADES MODELS: 61FB45, 61FB55 AND 61FBS

TYPE S = LISTED SIZE + 3 3/4" (95)
TYPE L = CEILING MODULE - 1/4" (6)



MODELS:

- 61FB45 45° deflection, 3/4" (19) spacing
- 61FB55 45° deflection, 1/2" (13) spacing
- 61FBS 0° deflection, 3/4" (19) spacing

FRAME/BORDER:

- Type S Surface Mount
- Type L Lay-in T-Bar

DESCRIPTION:

1. Material: Corrosion-resistant steel.
2. Provision for 1" (25) filter (by others) is standard.
3. Type S available in nominal sizes 6" x 4" (152 x 102) through 36" x 24" (914 x 610) maximum in 1" (25) increments. Type L is available in ceiling module sizes: 12" x 12", 24" x 12", 24" x 24", 36" x 12", 36" x 24" and 48" x 24" (305 x 305, 610 x 305, 610 x 610, 914 x 305, 914 x 610 and 1219 x 610). Metric available.
4. Blades are parallel to width (first dimension).
5. Core is hinged and secured by 1/4 turn latches.
Core panel is hinged on width dimension at top as standard (HT).
For other hinging requirements, specify one of the following:
 - HB Hinged Bottom
 - HL Hinged Left (facing grille)
 - HR Hinged Right (facing grille)

6. Type N standard fastening is with sheet metal screws, (by others), through the neck of the outer frame for Type S Surface Mount installation.

7. Standard Finish: AW Appliance White.

OPTIONS:

1. Finish:
 - SP Special _____.
2. F2 Provision for 2" (51) filter (by others).
3. Core Fastening:
 - KK Knurled knob
 - QT 1/4 turn slotted fastener
4. Installation Fastening:
 - Type A Countersunk screwholes on face of outer frame (Type S Model).

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Page 1 of 2
Dimensions are in inches (mm).

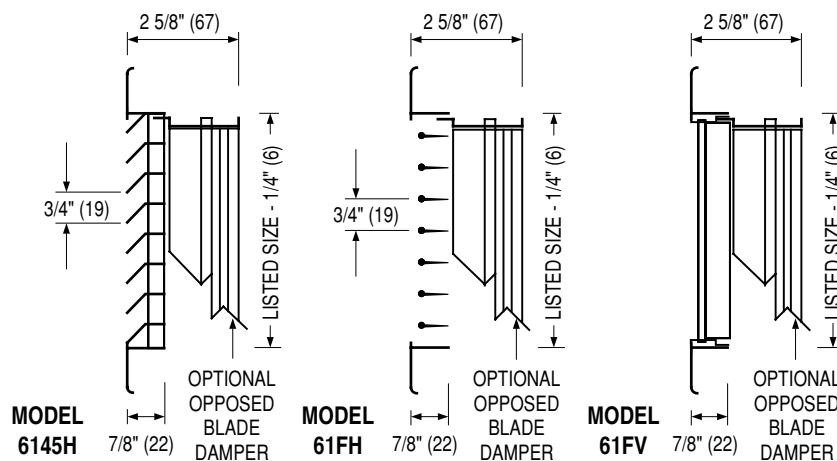
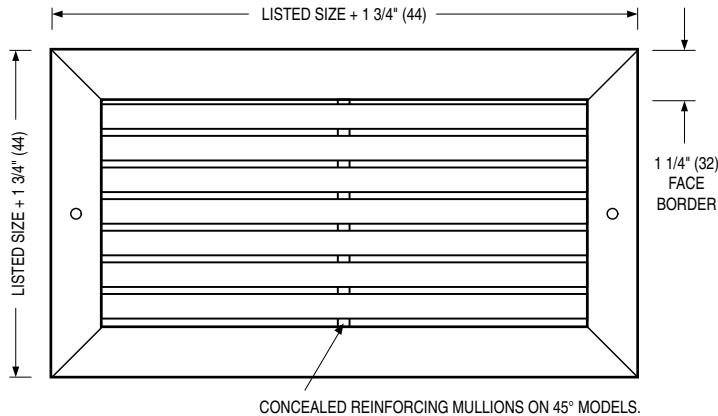
DATE	B SERIES	SUPERSEDES	DRAWING NO.
9-24-19	61F	2-1-11	61F-1

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Air Distribution Cut Sheets



STEEL RETURN GRILLES & REGISTERS FIXED BLADES • 3/4" (19) SPACING MODELS: 6145H(-O), 6145V(-O), 61FH(-O) AND 61FV(-O)



DESCRIPTION:

- Construction: Corrosion-resistant steel. Roll-formed frame mechanically interlocked with reinforced mitered corners for strength. Roll-formed blades on 3/4" (19) centers are fixed at 0 or 45 degrees to match and compliment the supply grilles and registers. 45 degree model utilizes a concealed rear reinforcing mullion (max. 16" (406) centers) and a single blade pack that provides a continuous louvered appearance. 0 degree models utilize a visible face mullion when blade length exceeds 16" (406).
- Optional roll-formed steel opposed blade damper has a screwdriver slot operator accessible through face of register.
- Minimum size is 4" x 4" (102 x 102).
Maximum size is 48" x 36" (1219 x 914).
- Type S Surface mount frame has a 1 1/4" (32) face border and a 1" (25) overlap margin.
- Standard fastening is Type A countersunk screw holes.
- Standard finish is AW Appliance White.

OPTIONS:

- Finish:
 - SP Special _____.
- Fastening (Type S):
 - Type C Concealed mounting straps
 - Type D Concealed screw holes in neck
 - Type N None.
- PF Plaster sub-frame
- IS Insect screen
- Other _____.

SCHEDULE TYPE:

PROJECT:

ENGINEER:

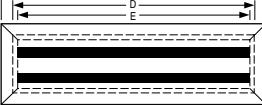
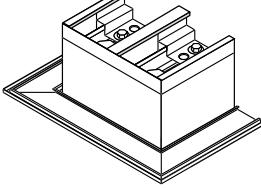
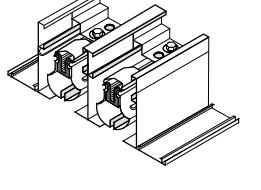
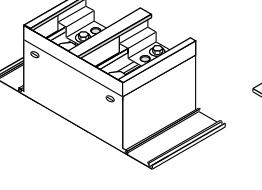
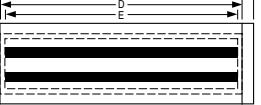
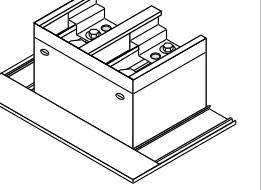
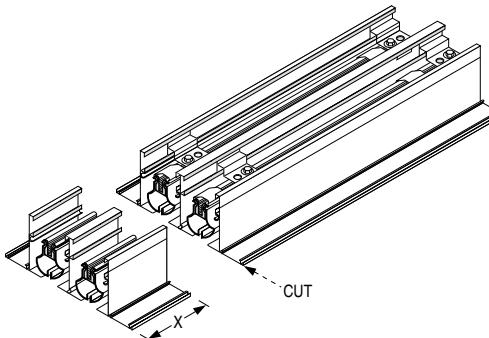
CONTRACTOR:

Page 1 of 3
Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
10 - 1 - 19	6100	2 - 1 - 11	6100-3

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Air Distribution Cut Sheets

 Nailor[®] <i>Industries Inc.</i>		LINEAR SLOT DIFFUSERS (IMPERIAL UNITS – INCHES) EXTRUDED ALUMINUM MODEL SERIES: 5000 FRAME TYPES A, B, C, D											
Duct Width D Dimension S = slot width	Frame Type	No. of Slots	5050 5050R	5075 5075R	5010 5010R	5015 5015R							
	A	S = 1/2"	S = 1/2"	S = 3/4"	S = 1"	S = 1 1/2"							
	1	1 5/8"	1 7/8"	2 1/8"	2 5/8"								
	2	2 7/8"	3 3/8"	3 7/8"	4 7/8"								
	3	4 1/8"	4 7/8"	5 5/8"	7 1/8"								
	4	5 3/8"	6 3/8"	7 3/8"	9 3/8"								
	5	6 5/8"	7 7/8"	9 1/8"	11 5/8"								
	6	7 7/8"	9 3/8"	10 7/8"	13 7/8"								
	7	9 1/8"	10 7/8"	12 5/8"	16 1/8"								
	8	10 3/8"	12 3/8"	14 3/8"	18 3/8"								
	9	11 5/8"	13 7/8"	16 1/8"	20 5/8"								
	10	12 7/8"	15 3/8"	17 7/8"	22 7/8"								
	B												
	C	No. of Slots	5050 5050R	5075 5075R	5010 5010R	5015 5015R							
	1	2"	2 1/4"	2 1/2"	3"								
	2	3 1/4"	3 3/4"	4 1/4"	5 1/4"								
	3	4 1/2"	5 1/4"	6"	7 1/2"								
	4	5 3/4"	6 3/4"	7 3/4"	9 3/4"								
	5	7"	8 1/4"	9 1/2"	12"								
	6	8 1/4"	9 3/4"	11 1/4"	14 1/4"								
	7	9 1/2"	11 1/4"	13"	16 1/2"								
	8	10 3/4"	12 3/4"	14 3/4"	18 3/4"								
	9	12"	14 1/4"	16 1/2"	21"								
	10	13 1/4"	15 3/4"	18 1/4"	23 1/4"								
	D												
SPECIFY	M - Mitered End Cap (Std.)  		O - Open End  		C - Flat End Cap  		F - Flanged End Cap  						
End Caps Configuration	<input type="checkbox"/> MM <input type="checkbox"/> FF <input type="checkbox"/> MO <input type="checkbox"/> FO <input type="checkbox"/> MC <input type="checkbox"/> FC <input type="checkbox"/> OO <input type="checkbox"/> OC <input type="checkbox"/> CC												
Overall Length Dimensions and End Cap Position													
Frame Type		M		F		M F	O	C C	O O				
	E	L	E	L	E	L †	E	L	E	L			
A, B	D - 1/2	D + 1	D - 1/2	D + 1 1/2	D - 1/4	D + 1/2	D - 3/16	D + 9/16	D	D			
C	D - 1/2	D + 1	D - 1/2	D + 1 1/2	D - 1/4	D + 1/2	D - 3/16	D + 9/16	D	D			
D	D - 1/2	D + 1/2	D - 1/2	D + 1	D - 1/4	D + 1/4	D - 3/16	D + 7/16	D	D			
† Configurations FO and FC: Add 1/4.													
D = Duct length E = End cap position L = Overall length													
Field Trimming of Diffusers													
 <p>If "X" is less than 3" (76) at either end (6" [152] total), standard Model 5000 or 5000R can be field-cut.</p> <ul style="list-style-type: none"> Factory-Cut Diffusers Model 5000 or 5000R are ordered for a specific length from the factory, but can be trimmed as much as 6" (152) in length, (3" [76] from each end) with a fine tooth, high speed carbon steel metal cutting blade. 													
SCHEDULE TYPE:					Dimensions are in inches (mm).								
PROJECT:													
ENGINEER:					DATE	B SERIES	SUPERSEDES	DRAWING NO.					
CONTRACTOR:					11 - 1 - 12	5000	10 - 25 - 07	5000-1B					

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Air Distribution Cut Sheets



LINEAR SLOT DIFFUSER PLENUMS ADAPTORS FOR MODEL SERIES 5000 LINEAR SLOT "ICE TONG" DIFFUSER • 1 - 4 SLOT MODELS: 5350, 5375, 5310 AND 5315(MP)

1 THROUGH 4 SLOT

STANDARD MODELS:

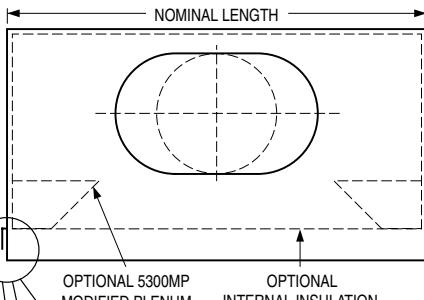
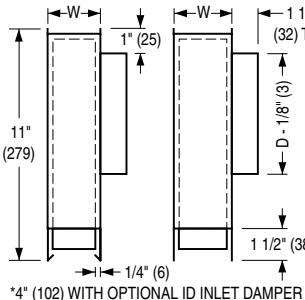
- 5350 • 1/2" (13) Slot
- 5375 • 3/4" (19) Slot
- 5310 • 1" (25) Slot
- 5315 • 1 1/2" (38) Slot

MODIFIED PERFORMANCE MODELS:

- 5350MP • 1/2" (13) Slot
- 5375MP • 3/4" (19) Slot
- 5310MP • 1" (25) Slot
- 5315MP • 1 1/2" (38) Slot

Hemmed Leg Frame Types:
C, D, J, N

Straight Leg Frame Types:
A, B, E, F, FL, G,
H, H2, KA, K1, K2, M, T



Nominal Length		Standard Nominal Inlets (D)	
inches	mm	inches	mm
20	508		
24	610	4, 5, 6, 8, 10	102, 127, 152, 203, 254
30	762		
36	914		
48	1219	6, 8, 10, 12, 14	152, 203, 254, 305, 356
60	1524		
72	1829		

Inlets 4" thru' 8" (102 thru 203) are round and 10" thru' 14" (254 thru 356) are flat oval.
Equivalent oval: 10" (254) = 11" x 7 7/8" (279 x 200); 12" (305) = 14 1/8" x 7 7/8" (359 x 200);
14" (356) = 17 5/16" x 7 7/8" (440 x 200).

Model	No. of Slots	Plenum Width (W) For Various Frame Types							
		Imperial Units (inches)				Metric Units (mm)			
		A, B, FL, KA, K1, K2, M, T	C, D, F, J, H, H2, N	E	G	A, B, FL, KA, K1, K2, M, T	C, D, F, J, H, H2, N	E	G
5350	1	1 1/2	2	2 1/4	2 1/2	38	51	57	64
		1 3/4	2 1/4	2 1/2	2 3/4	44	57	64	70
		2	2 1/2	2 3/4	3	51	64	70	76
		2 1/2	3	3 1/4	3 1/2	64	76	83	89
5350	2	2 3/4	3 1/4	3 1/2	3 3/4	70	83	89	95
		3 1/4	3 3/4	4	4 1/4	83	95	102	108
		3 3/4	4 1/4	4 1/2	4 3/4	95	108	114	121
		4 3/4	5 1/4	5 1/2	5 3/4	121	133	140	146
5350	3	4	4 1/2	4 3/4	5	102	114	121	127
		4 3/4	5 1/4	5 1/2	5 3/4	121	133	140	146
		5 1/2	6	6 1/4	6 1/2	140	152	159	165
		7	7 1/2	7 3/4	8	178	191	197	203
5350	4	5 1/4	5 3/4	6	6 1/4	133	146	152	159
		6 1/4	6 3/4	7	7 1/4	159	171	178	184
		7 1/4	7 3/4	8	8 1/4	184	197	203	210
		9 1/4	9 3/4	10	10 1/4	235	248	254	260

NOTES:

- Construction: Corrosion-resistant steel.
- Nailor Series 5300 Plenums are designed specifically for field attachment to the 5000 Series Linear Slot Diffuser. They ensure optimum use of the 5000 Series VAV performance, providing a tight horizontal air pattern even at low volumes. Optional MP models incorporate integral baffles, which provide a reduction in throw and increased spread of the air pattern.
- End caps can be turned up to allow plenums to be installed on continuous runs. Simple installation with a flexible duct connection.

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

ACCESSORIES (OPTIONAL):

1a. Internal Insulation:

- 5350I(MP) 1/2" (13) slot.
- 5375I(MP) 3/4" (19) slot.
- 5310I(MP) 1" (25) slot.
- 5315I(MP) 1 1/2" (38) slot.

- 1b. FGI 1/4" (6) coated fiberglass.
- FFI 3/8" (10) fiber-free foam.

- 2. EX External Foil Back Insulation
- ID Inlet Damper w/HLQ

- 4. NI No Inlet

Dimensions are in inches (mm).

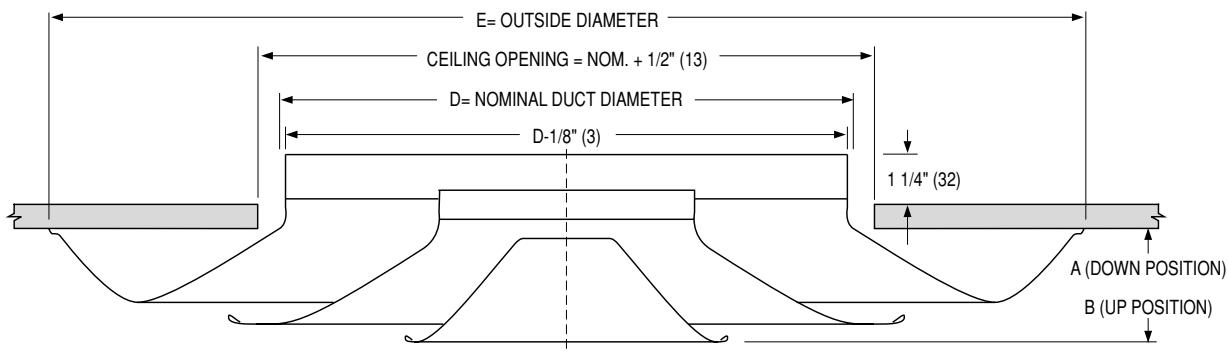
DATE	B SERIES	SUPERSEDES	DRAWING NO.
12 - 23 - 19	5300	9 - 6 - 17	5300-1

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Air Distribution Cut Sheets



ROUND CEILING DIFFUSERS SPUN STEEL CONSTRUCTION • ADJUSTABLE HORIZONTAL DISCHARGE PATTERN MODEL: RNR



DESCRIPTION:

1. Material: Corrosion-resistant steel.
2. The Nailor RNR series round ceiling diffusers feature three concentric cones in all sizes to offer a balanced appearance where different sizes are used in the same area.
3. The diffusers deliver the air in a true 360° radial horizontal pattern and provide excellent performance in variable air volume systems.
4. A spring clip arrangement permits quick, easy installation and removal of the inner cone assembly.
5. Discharge settings are easily field set by sliding the inner cone assembly up or down. The core is securely retained by a spring loaded friction arrangement.
6. Adjustable horizontal discharge settings allow the diffusers to accommodate different flow conditions. Position A (cones down) provides maximum capacity at minimum NC levels while position B (cones up) provides higher induction and more air movement.
7. Designed for both heating and cooling applications.
8. An optional round opposed blade damper is screwdriver-operated through the face of the unit.
9. Standard finish is AW appliance white.

OPTIONS:

- SC Safety chain
- GK Foam gasket
- EQ Earthquake tabs

Finish

- SP Special. Specify _____.

Dimensional Data

Listed Size	Imperial Units (inches)			Metric Units (mm)		
	A	B	E	A	B	E
6	1 3/4	1 1/8	11 5/8	44	29	295
8	2 1/8	1 1/2	14 3/8	54	38	365
10	2 7/8	2 1/8	17 15/16	73	54	456
12	3 1/8	2 3/8	21 5/8	79	60	549
14	3 3/8	2 5/8	25 1/4	86	67	641
16	4	3 1/4	29	102	83	737
18	4 3/4	3 7/8	33 1/2	121	98	851
20	5 7/8	4 7/8	37 1/4	149	124	946
24	7 3/4	6 5/8	43 7/8	197	168	1114

SCHEDULE TYPE:

Dimensions are in inches (mm).

PROJECT:

ENGINEER:

DATE

B SERIES

SUPERSEDES

DRAWING NO.

CONTRACTOR:

8 - 30 - 05

RNR

19 - 9 - 00R

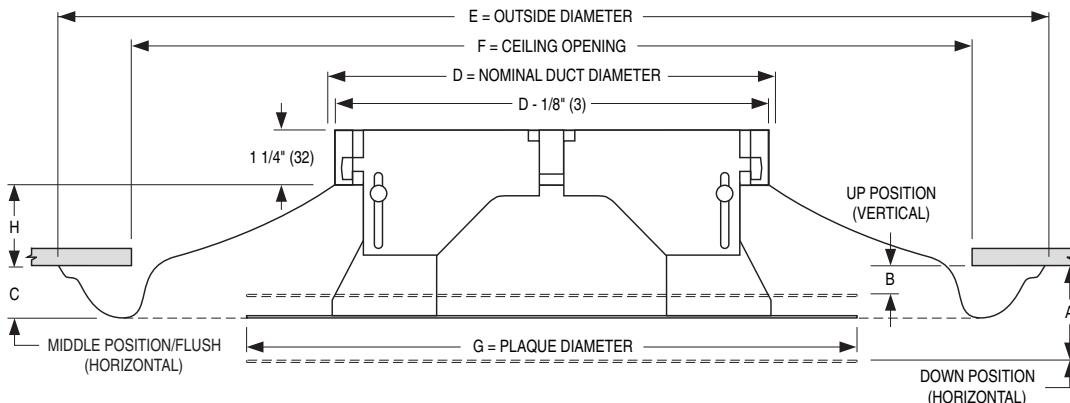
RNR-1

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Air Distribution Cut Sheets



ARCHITECTURAL CEILING DIFFUSERS ROUND PLAQUE • STEEL ADJUSTABLE HORIZONTAL TO VERTICAL DISCHARGE MODEL: RUNI



Dimensional Data

Listed Size	Imperial Units (inches)							Metric Units (mm)						
	A	B	C	E	F	G	H	A	B	C	E	F	G	H
6	1 3/4	1/4	3/4	14 1/8	12	9	7/8	44	6	19	359	305	229	22
8	2	1/2	1	18 3/4	16	12	1 1/4	51	13	25	476	406	305	32
10	2 1/4	11/16	13/16	22 3/4	20	15	1 1/2	57	17	30	581	508	381	38
12	2 3/4	15/16	111/16	27 3/8	24	18	1 7/8	70	24	43	695	610	457	48
14	3	1	1 3/4	32	28	21	1 7/8	76	25	44	813	711	533	48
16	3 3/8	1	2	36 1/4	32	24	2 1/8	86	25	51	921	813	610	54

DESCRIPTION:

- Material: Corrosion-resistant steel outer cone and bracketry. Aluminum face.
- The Nailor RUNI, round ceiling diffusers have been especially designed to provide the appearance required for architectural excellence as well as high engineering performance. The smooth heavy duty face plaque is 1/8" (0.125) thick aluminum for strength and lightness. These diffusers are suitable for both architectural ceilings and exposed duct applications.
- Designed for both heating and cooling applications. The air discharge pattern is fully adjustable between horizontal and vertical. In the fully open (down) setting, capacity is maximized and throw is horizontal. In the fully closed (up) setting, air projects vertically down from the diffuser.
- The diffusers deliver the air in a true 360° radial horizontal pattern and provide excellent performance in variable air volume systems.
- A spring clip arrangement permits quick, easy installation and removal of the inner cone assembly.
- Discharge setting is simply adjusted by sliding the inner face plaque assembly up or down. The core is securely retained by a spring loaded friction arrangement. There are no screws to reposition.
- Designed for both heating and cooling applications.
- An optional duct mounted round opposed blade damper is screwdriver-operated.
- Standard finish is AW appliance white.

OPTIONS:

- SC Safety chain
 GK Foam gasket
 EQT Earthquake tabs

Finish:

- SP Special. Specify _____.

SCHEDULE TYPE

Dimensions are in inches (mm).

PROJECT

ENGINEER

DATE

B SERIES

SUPERSEDES

DRAWING NO.

CONTRACTOR

1 - 21 - 10

UNI

9 - 14 - 09

RUNI-1

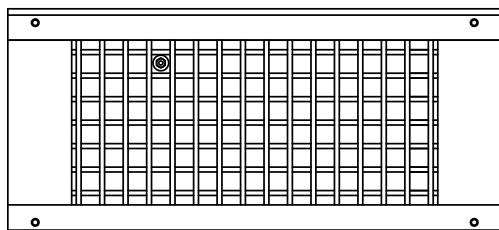
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Air Distribution Cut Sheets

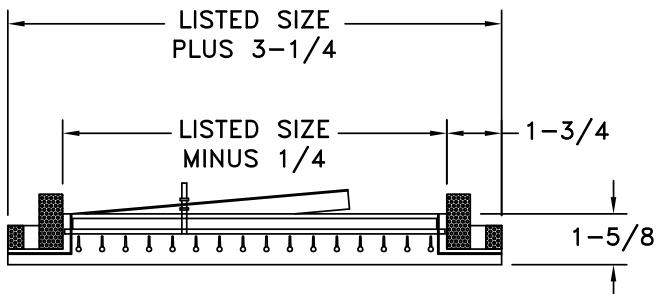
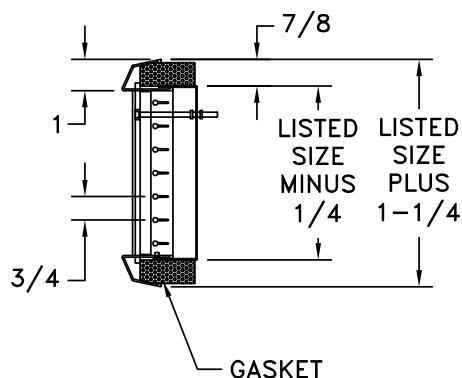


SUBMITTAL DRAWING

- SINGLE (VERTICAL) AND DOUBLE (VERTICAL & HORIZONTAL) DEFLECTION
- ADJUSTABLE BLADES
- GASKETS ON MARGIN
- EACH SIZE COVERS A RANGE OF SPIRAL DUCT DIAMETERS (SEE CHART BELOW)
- OPTIONAL AIR SCOOP WITH FACE SCREW ADJUSTMENT
- MINIMUM SIZE 10 X 3, MAXIMUM SIZE 36 X 10 (SEE CHART BELOW)
- FINISH: WHITE (W) ENAMEL OR SATIN ANODIZED (SA)



USVH3 SHOWN



MAXIMUM DUCT DIAMETER FOR ALL SIZES IS 36"

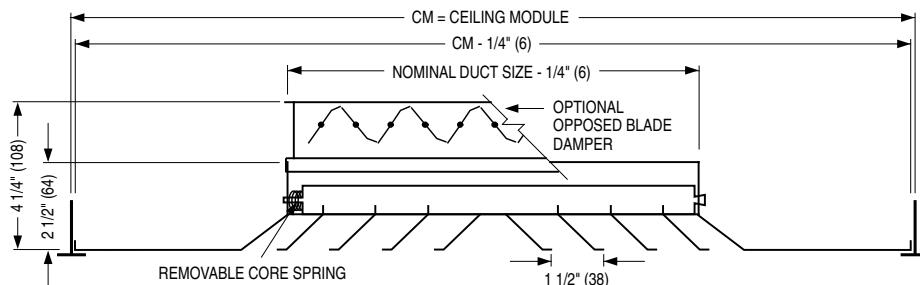
HEIGHT OF REGISTER	3"	4"	6"	8"	10"	
MIN: MAX DUCT DIAMETER	10" : 36"	10" : 36"	12" : 36"	20" : 36"	24" : 36"	
JOB NAME:	SUBMITTED BY:				DATE: 12/20/2018	SD-9720
LOCATION:					USV/USVH	
ARCHITECT:					Single And Double Deflection	
ENGINEER:					Aluminum	
CONTRACTOR:					Universal Spiral Duct Diffuser	

Air Distribution Cut Sheets



PATTERN CEILING DIFFUSERS STEEL • SQUARE, RECTANGULAR OR ROUND NECK MODELS: 6500 AND 6500-O TYPE L

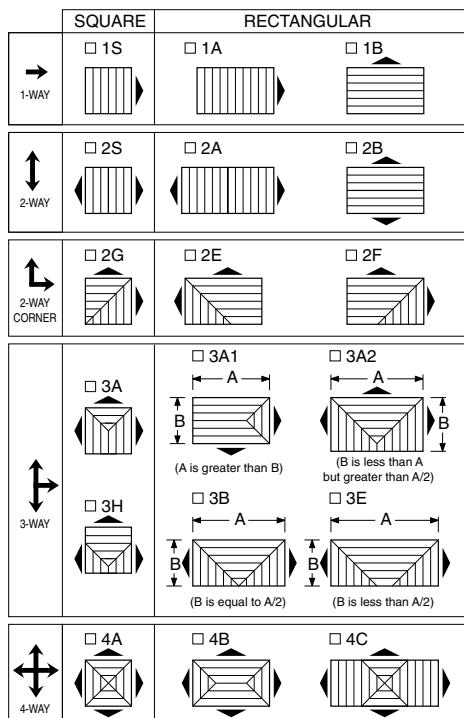
TYPE L LAY-IN T-BAR



If the ceiling module is not 3" (76) or 6" (152) larger than the neck size of the diffuser in both dimensions, a module sized extended panel will be added.
 Minimum duct size: 6 x 6 (152 x 152).
 Maximum duct size: see table.
 Available in 3" (76) increments only.

IMPERIAL MODULES		METRIC MODULES	
Imperial Units (in.)	Metric Units (mm)	Metric Units (mm)	Metric Units (mm)
CM	Maximum Duct Size	CM	Maximum Duct Size
12 x 12	9 x 9	305 x 305	229 x 229
20 x 20	15 x 15	508 x 508	381 x 381
24 x 12	21 x 9	610 x 305	533 x 229
24 x 24	21 x 21	610 x 610	533 x 533
48 x 24	45 x 21	1219 x 610	1143 x 533

CORE STYLE SELECTION



Patterns are shown in plan view (looking down into inlet).

DESCRIPTION:

- Material: Corrosion-resistant steel.
- Model 6500 is a high capacity ceiling diffuser available in 1, 2, 3 or 4-way blow patterns to provide a tight horizontal airflow pattern from maximum to minimum airflow. Ideal for VAV applications.
- Spring-loaded removable core.
- Standard finish is AW Appliance White.

OPTIONS:

SQUARE AND RECTANGULAR NECK

- Steel opposed blade damper. Model 6500-O.

ROUND NECK

- SR Square to round transition collar
- SR-O Square to round transition collar for use over O.B.D.
- 4275 Radial Opposed Blade Damper (round)
- 4250 Radial Sliding Blade Damper (round)
- 4675 Butterfly Damper (round)

EXTERNAL INSULATION

- EX External Foil-Back Insulation, installed-R-4.2.
- MIB Molded Insulation Blanket, -R-6.0. ('MIB' is available for Frame Types L, TL and F with a 24 x 24 CM only, 15 x 15 max. neck size and a 'SR' square-to-round transition collar).

OPTIONAL FINISH:

- SP Special. Specify _____.

SCHEDULE TYPE:

Dimensions are in inches (mm).

PROJECT:

ENGINEER:

CONTRACTOR:

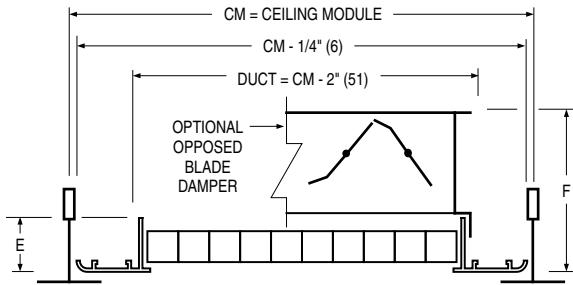
DATE	B SERIES	SUPERSEDES	DRAWING NO.
2 - 8 - 18	6500	1 - 16 - 17	6500-3

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Air Distribution Cut Sheets

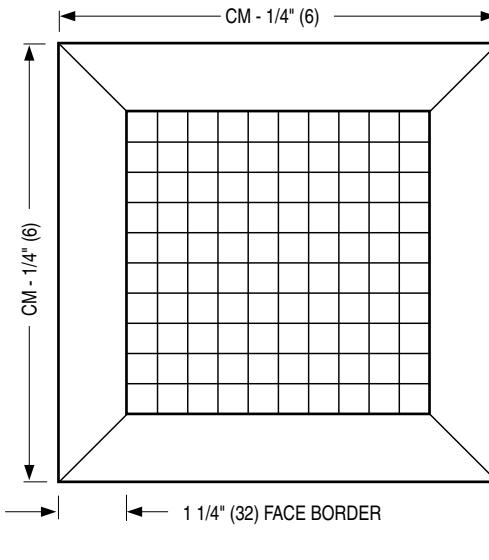
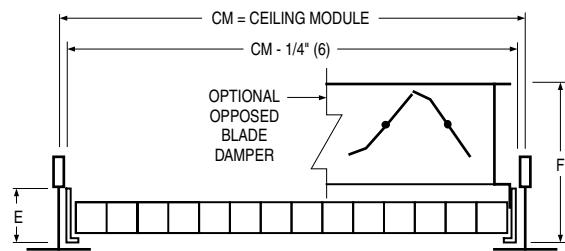


ALUMINUM EGGCRATE RETURN GRILLES AND REGISTERS LAY-IN T-BAR MODELS: 51EC(-O) TYPES L, A AND C



TYPE L ALUMINUM FRAME/BORDER

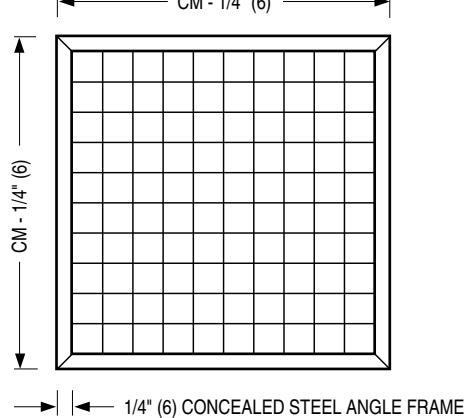
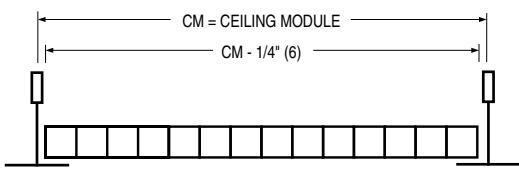
Model 51EC Grille Model 51EC-O Register



TYPE A CONCEALED ANGLE FRAME (non-ducted applications)

Model 51EC Grille Model 51EC-O Register

DIMENSION	STANDARD FRAME WITH 1/2 x 1/2 x 1/2 STD. CORE	WITH 1/2 x 1/2 x 1 OR 1 x 1 x 1 OPTIONAL CORE
E	7/8" (22)	1 1/4" (32)
F	2 5/8" (67)	3" (76)



TYPE C CORE ONLY (for non-ducted applications) Model 51EC

DESCRIPTION:

- Construction: Extruded aluminum heavy gauge frame mechanically interlocked with hairline mitered corners for strength on Type L. 1/2 x 1/2 x 1/2 (13 x 13 x 13) aluminum grid core (code CA) is standard on all models. A high capacity return or exhaust outlet with maximum free area for minimum pressure drop and sound generation.
- Optional roll-formed steel opposed blade damper has a screw driver slot operator accessible through face of register.
- Minimum size is 4" x 4" (102 x 102). Maximum size is 48" x 48" (1219 x 1219) for Types L and A. Maximum size is 48" x 24" (1219 x 610) for Type C. Nominal List Size = Ceiling Module Size.
- Standard finish is AW Appliance White.

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

OPTIONS:

- Finish:
 - SA Satin (clear) anodized frame/mill core (Type L)
 - SP Special _____.
- OA Aluminum opposed blade damper (model suffix)
- Non-standard core:
 - CB 1/2 x 1/2 x 1 (13 x 13 x 25)
 - CC 1 x 1 x 1 (25 x 25 x 25)
- Other _____.

Dimensions are in inches (mm).

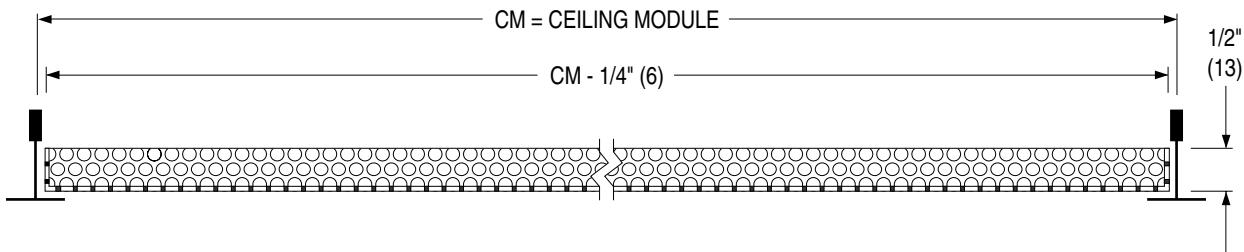
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Air Distribution Cut Sheets



PERFORATED CEILING DIFFUSERS RETURN PANEL MODELS: 4302, 4302A

TYPE L Lay-in



Available Ceiling Module Sizes

Ceiling Module CM	
Imperial Modules (inches)	Metric Modules (mm)
12 x 12	300 x 300
16 x 16	400 x 400
20 x 20	500 x 500
24 x 12	600 x 300
24 x 24	600 x 600
48 x 24	1200 x 600

DESCRIPTION:

1. Material: Corrosion-resistant steel.
2. Model 4302 perforated return is designed for non-ducted return or exhaust air applications.
3. Panels match Models 4320, 4320CB, 4320F and 4320M in appearance after installation.
4. Installs in Lay-in T-Bar ceiling systems.
5. Perforated face has 3/16" diameter holes on 1/4" staggered centres.
6. Standard finish is AW Appliance White.

OPTIONS:

- Aluminum construction. (Model 4302A).
Finish:
 SP Special _____.

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

DATE

B SERIES

SUPERSEDES

DRAWING NO.

29 - 3 - 00R 4300 30 - 4 - 99 4302

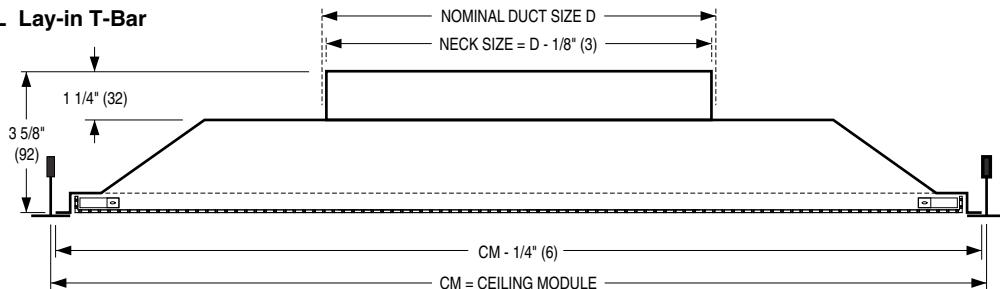
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Air Distribution Cut Sheets



PERFORATED CEILING DIFFUSERS RETURN • FLUSH FACE • ROUND OR SQUARE NECK MODELS: 4360, 4360A, 4360AA

TYPE L Lay-in T-Bar



Available Combinations of Ceiling Module vs. Neck Size

Imperial Modules	Metric Modules	Nominal Duct Size D			
		Round Neck		Square Neck	
		Imperial Units (inches)	Metric Units (mm)	Imperial Units (inches)	Metric Units (mm)
12 x 12	300 x 300	6, 8	152, 203	6 x 6, 8 x 8	152 x 152, 203 x 203
16 x 16	400 x 400	6, 8, 10, 12	152, 203, 254, 305	6 x 6, 8 x 8, 10 x 10, 12 x 12	152 x 152, 203 x 203, 254 x 254, 305 x 305
24 x 12	600 x 300	6, 8	152, 203	6 x 6, 8 x 8, 18 x 6	152 x 152, 203 x 203, 457 x 152
20 x 20	500 x 500	6, 8, 10, 12, 14	152, 203, 254, 305, 356	6 x 6, 8 x 8, 10 x 10, 12 x 12, 14 x 14	152 x 152, 203 x 203, 254 x 254, 305 x 305, 356 x 356
24 x 24	600 x 600	6, 8, 10, 12, 14, 15, 16, 18	152, 203, 254, 305, 356, 381, 406, 457	6 x 6, 8 x 8, 10 x 10, 12 x 12, 14 x 14, 15 x 15, 16 x 16, 18 x 18	152 x 152, 203 x 203, 254 x 254, 305 x 305, 356 x 356, 381 x 381, 406 x 406, 457 x 457
48 x 24	1200 x 600	6, 8, 10, 12, 14, 15, 16, 18	152, 203, 254, 305, 356, 381, 406, 457	6 x 6, 8 x 8, 10 x 10, 12 x 12, 14 x 14, 15 x 15, 16 x 16, 18 x 18	152 x 152, 203 x 203, 254 x 254, 305 x 305, 356 x 356, 381 x 381, 406 x 406, 457 x 457

DESCRIPTION:

- Material: Corrosion-resistant steel. (Model 4360 is standard).
- Designed to match supply air models 4320, 4320CB, 4320F and 4320M in appearance and construction detail, except that the air pattern controllers are not required and are omitted. This version is for ducted return applications; for connection to flexible or rigid round duct or square duct.
- Removable face has concealed latches for easy access to optional damper.
- Perforated face has 3/16" (5) diameter holes on 1/4" (6) staggered centres.
- Standard finish is AW Appliance White.

OPTIONS:

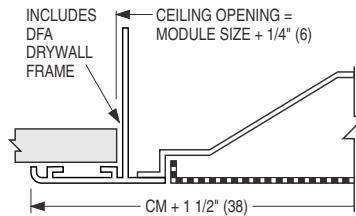
- Aluminum perforated face/steel backpan. (Model 4360A).
- Aluminum perforated face and backpan. (Model 4360AA).
- EX External Foil-Back Insulation, installed - R-4.2 (24 x 24 max.).
- EXB External Foil-Back Insulation, ships loose - R-4.2 (24 x 24 max.).
- MIB Molded Insulation Blanket - R-6.0 (24 x 24 only).

Finish:

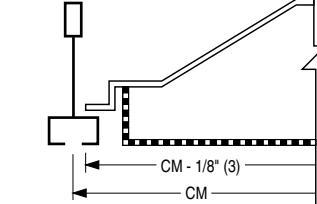
- BA Black back pan with Appliance White face.
- SP Special _____.

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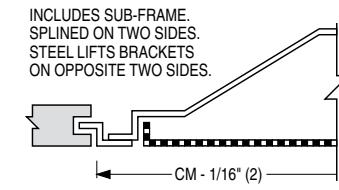
TYPE S Surface Mount



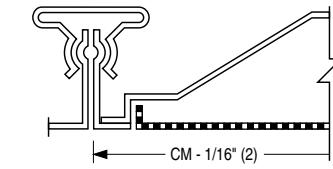
TYPE F Fineline® T-Bar



TYPE SP Spline



TYPE M Metal Pan (Snap-in)



Dimensions are in inches (mm).

SCHEDULE TYPE:	
PROJECT:	
ENGINEER:	
CONTRACTOR:	

DATE	B SERIES	SUPERSEDES	DRAWING NO.
3 - 10 - 16	4300	5 - 11 - 15	4360-2

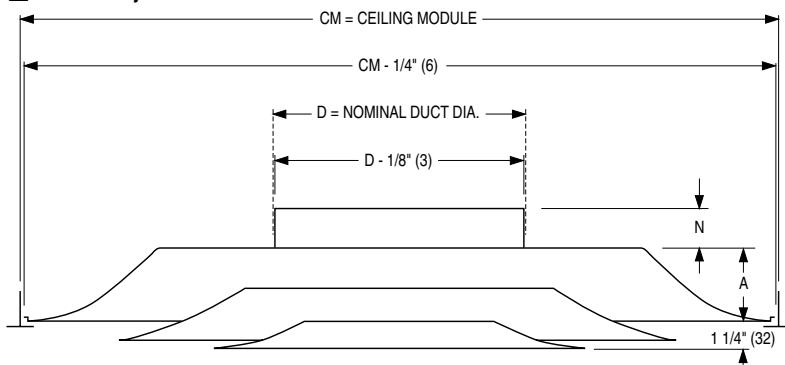
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Air Distribution Cut Sheets



SQUARE CEILING DIFFUSERS FIXED PATTERN • LOUVERED FACE STEEL • ROUND NECK • 3 CONE MODEL: RNS3

TYPE L Lay-in T-Bar



Dimensional Data

Ceiling Module CM		Imperial Units (inches)			Metric Units (mm)				
Imperial Modules	Metric Modules	Duct Size D	N	A	B	Duct Size D	N	A	B
24 x 24	600 x 600	6, 8, 10, 12, 14, 15	1 1/4	2 5/16	22	152, 203, 254, 305, 356, 381	32	59	559

DESCRIPTION:

- Material: Heavy gauge, corrosion-resistant steel.
- The diffuser delivers the air in a true 360° radial horizontal pattern. Designed to minimize smudging and streaking of ceiling.
- Excellent for VAV systems. The uniform near horizontal jets from the louvered cones maintain effective air motion over a considerable range of air volumes.
- The models consist of three die-formed concentric cones in all sizes which eliminate mitered corners and provide uniform appearance in all neck sizes.
- The inner cone assembly is held in place by four hook corner posts that positively engage into slots in the backpan. The core can be removed from the backpan for diffuser installation.
- Diffuser has a removable plug for screwdriver adjustment of the optional damper.
- Standard finish is AW Appliance White.

OPTIONS:

- EX External Foil-Back Insulation, installed - R-4.2
- EXB External Foil-Back Insulation, ships loose - R-4.2
- MIB Molded Insulation Blanket - R-6.0 (24 x 24 only)
- EIC Extended Inlet Collar (2.25") with bead
- EQT Earthquake Tabs

Finish:

- SP Special. Specify _____.

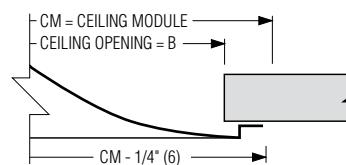
QB Quadrant Blanks:

- QB3 3-Way Blow
- QC2 2-Way Corner Blow
- QB2 2-Way Opposite Blow
- QB1 1-Way Blow

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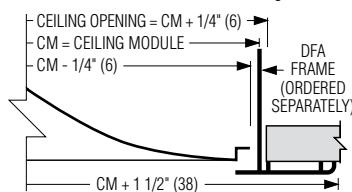
TYPE L Surface Mount

Hard duct connection recommended.

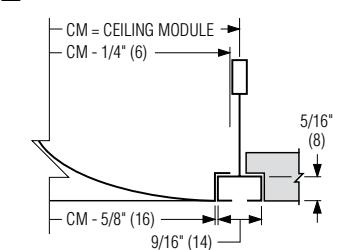


TYPE L Surface Mount With DFA

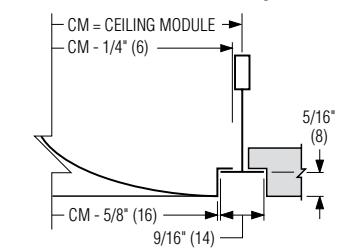
Drywall/Plaster frame. Recommended for flexible duct connection and ceiling access.



TYPE F Fineline® 9/16" Bolt Slot T-Bar



TYPE F Fineline® 9/16" Tegular T-Bar



SCHEDULE TYPE:

Dimensions are in inches (mm).

PROJECT:

ENGINEER:

DATE

B SERIES

SUPERSEDES

DRAWING NO.

CONTRACTOR:

10 - 29 - 19

RNS

4 - 20 - 17

RNS3

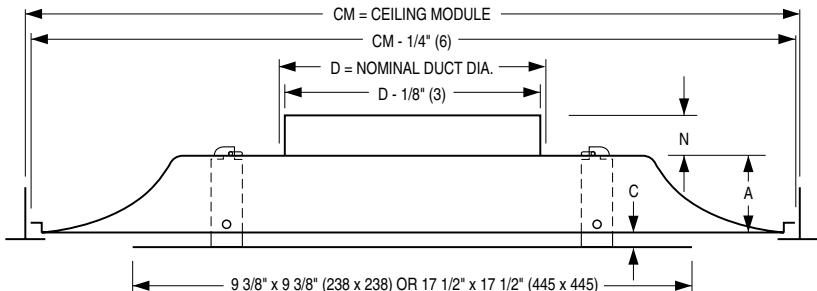
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Air Distribution Cut Sheets



ARCHITECTURAL CEILING DIFFUSERS SQUARE PLAQUE • CORNER POSTS ROUND NECK • STEEL MODEL: UNI2

TYPE L Lay-in T-Bar



Dimensional Data

Ceiling Module CM		Imperial Units (inches)					Metric Units (mm)						
Imperial Modules	Metric Modules	Duct Size D	N	A	B	C	F	Duct Size D	N	A	B	C	F
12 x 12	300 x 300	4*	3 1/4	1	11	5/8	13	102*	83	25	279	16	330
		5, 6, 7, 8	1 1/4					127, 152, 178, 203	32		32		
24 x 24	600 x 600	6, 8, 10, 12, 14, 15	1 1/4	2 5/16	22	3/8	N/A	152, 203, 254, 305, 356, 381	32	59	559	10	N/A

* Supplied with a reducer.

DESCRIPTION:

- Material: Corrosion-resistant steel.
- The UNI2 Diffuser has been designed to provide both the unobtrusive appearance for architectural excellence and engineered performance.
- The diffuser delivers a tight 360° radial horizontal pattern allowing high turn down ratios with no dumping. Excellent for VAV systems.
- The diffuser features a stamped one-piece outer-cone backpan which eliminates mitered corners. The inner face panel features a hemmed edge for strength and a clean appearance. The hemmed edge also mechanically captures the hanger brackets. This design eliminates welding and assures a clean smooth blemish free painted finish under all lighting conditions.
- The face panel is held in place by four hook corner posts that positively engage into slots in the backpan. The panel can be removed from the backpan for diffuser installation and to provide access to an optional inlet damper.
- Standard finish is AW Appliance White.

OPTIONS:

- EX External Foil-Back Insulation, installed - R-4.2
- EXB External Foil-Back Insulation, ships loose - R-4.2
- MIB Molded Insulation Blanket - R-6.0 (24 x 24 only)
- EIC Extended Inlet Collar (2.25") with bead
- EQT Earthquake Tabs

Finish:

- SP Special. Specify _____.

QB Quadrant Blanks:

- QB3 3-Way Blow QB2 2-Way Opposite Blow
- QC2 2-Way Corner Blow QB1 1-Way Blow

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SCHEDULE TYPE:

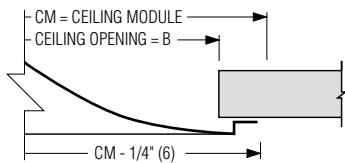
PROJECT:

ENGINEER:

CONTRACTOR:

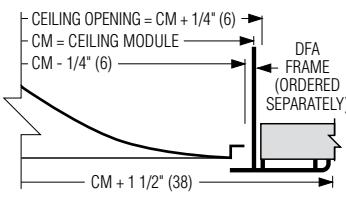
TYPE L Surface Mount

Hard duct connection recommended.



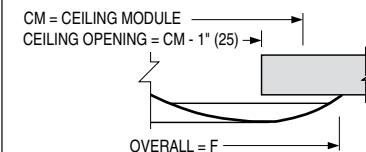
TYPE L Surface Mount With DFA

Drywall/Plaster frame. Recommended for flexible duct connection and ceiling access.

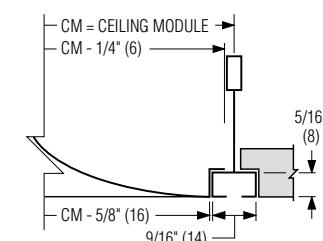


TYPE S Surface Mount

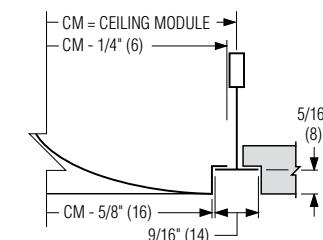
(12 x 12 [305 x 305] module only)



TYPE F Fineline® 9/16" Bolt Slot T-Bar



TYPE F Fineline® 9/16" Tegular T-Bar



Dimensions are in inches (mm).

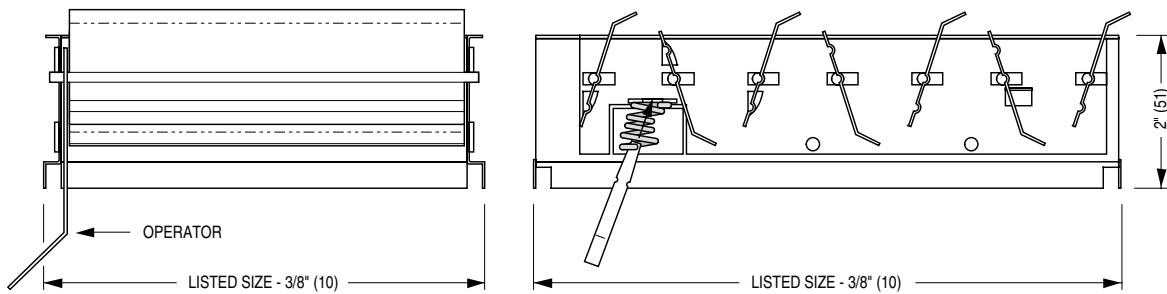
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Air Distribution Cut Sheets



**AIR BALANCING DEVICES
OPPOSED BLADE DAMPER • STEEL • NECK
MOUNTED FOR SQUARE AND RECTANGULAR NECKS
MODEL: OBD TYPE DL & GL**

TYPE DL Lever Operator



OBD-L Long Blades (parallel to long dimension)

OBD-S Short Blades (parallel to short dimension)

Minimum Size = 6" x 4" (152 x 102)

Maximum Size = 24" x 24" (610 x 610)

DESCRIPTION:

1. Material: Roll-formed, corrosion-resistant steel. Mill finish.
2. Type DL designed to mount directly on the neck of Nailor 6500, 6400 and 6200 Series Pattern Diffusers in square and rectangular neck applications. Supplied with steel barbed S-clips for easy field mounting. Type DL operating lever is accessible from the face side of the diffuser and permits balancing without removing the diffuser inner core assembly.
3. Gang operated blades on 1" (25) centers move simultaneously in opposite directions and close at 45° to permit precise metering of the air with a minimal disturbance to the air pattern.

OPTIONS:

Type GL Lever Operator

Similar in design except operator handle is straight. May be used on angled deflection 5100, 6100 and 7100 Series Return Grilles and 4900 Series Linear Bar Grilles. When used on linear bar grilles, dampers are sized: Nominal – 1/2" (13). In all cases; specify grille model. Grille Model _____.

SPECIAL FEATURES:

_____.

SCHEDULE TYPE:

Dimensions are in inches (mm).

PROJECT:

ENGINEER:

CONTRACTOR:

DATE	B SERIES	SUPERSEDES	DRAWING NO.
8-11-20	ACC.DIF/GR	10-9-99R	ACC.ABD-6

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Air Distribution Cut Sheets



SQUARE TO ROUND TRANSITION COLLARS STEEL • DIFFUSER ACCESSORY MODELS: SR, SR-O

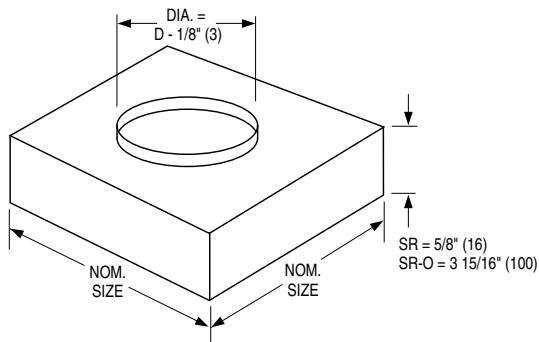
DESCRIPTION:

Transition collars are for use with any Nailor square neck diffuser where a round duct connection is desired. Round necks are sized for flexible or hard duct connection. SR's ship loose for field installation and are supplied with barbed S-clips.

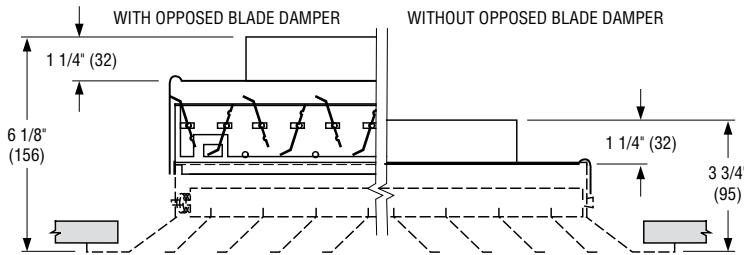
- Model SR
For direct attachment to diffuser neck. Round dampers may be added to neck.
- Model SR-O
For use over a square neck opposed blade damper.

CONSTRUCTION:

22 ga. corrosion-resistant steel.



Square Neck Size (inches)	Round Neck Size D (inches)
6 x 6	4, 5, 6
8 x 8	4, 5, 6, 7, 8
9 x 9	6, 7, 8, 9
10 x 10	6, 7, 8, 9, 10
12 x 12	6, 8, 9, 10, 12
14 x 14	6, 8, 9, 10, 12, 14
15 x 15	6, 8, 10, 12, 14, 15
16 x 16	6, 8, 10, 12, 14, 15, 16
18 x 18	6, 8, 10, 12, 14, 15, 16, 18
20 x 20	6, 8, 10, 12, 14, 15, 16, 18, 20
21 x 21	6, 8, 10, 12, 14, 15, 16, 18, 20
22 x 22	6, 8, 10, 12, 14, 16, 18, 20
24 x 24	6, 8, 10, 12, 14, 15, 16, 18, 20, 22, 24



Example illustrated is Model 6500 Pattern Diffuser.

SCHEDULE TYPE:	Dimensions are in inches (mm).		
PROJECT:			
ENGINEER:	DATE	B SERIES	SUPERSEDES
CONTRACTOR:	3 - 4 - 16	ACC	DRAWING NO. 10 - 27 - 05 ACC-SR

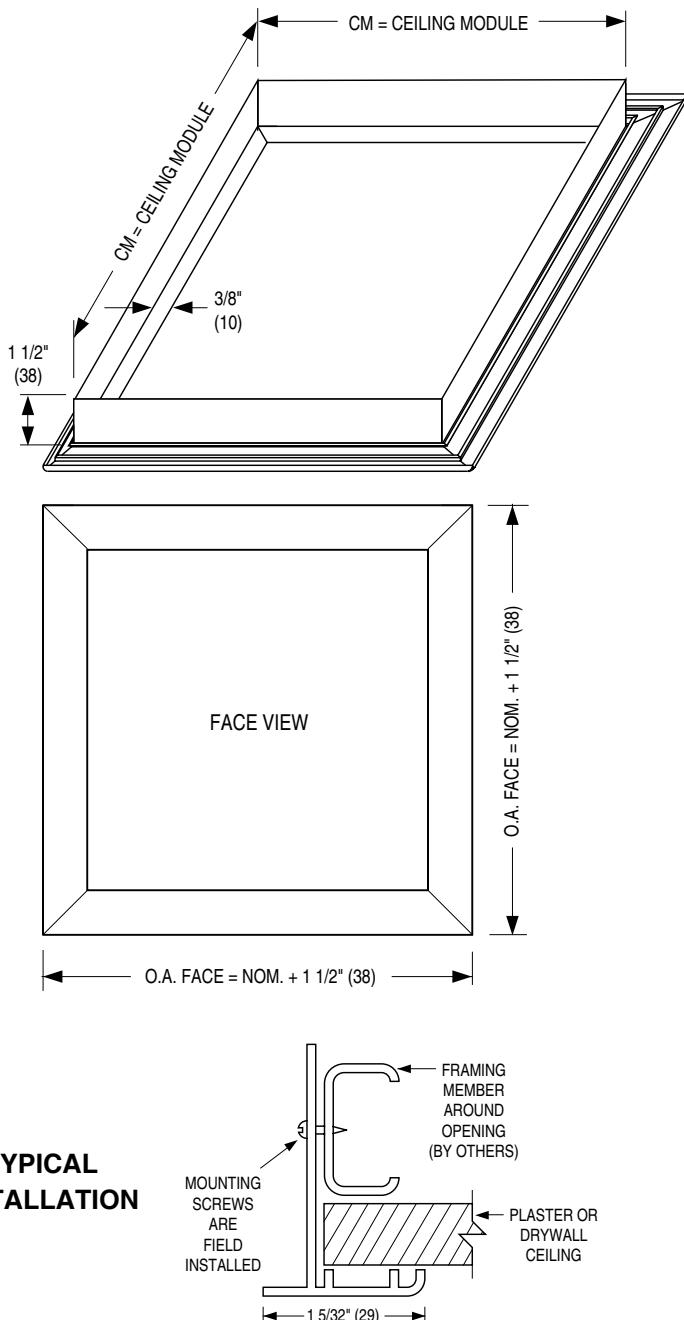
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Air Distribution Cut Sheets



CEILING DIFFUSER ACCESSORIES DRYWALL/PLASTER FRAME • ALUMINUM MODEL: DFA

ALUMINUM SURFACE MOUNT ADAPTOR FRAME FOR MODEL SERIES RNS, 4300, 4600 OR UNI LAY-IN T-BAR DIFFUSERS



DESCRIPTION:

The Model DFA is for mounting in finished drywall or plaster ceilings to accept any standard lay-in type diffuser.

It allows the retrofit of lay-in diffusers and simplified installation of flexible duct in surface mount applications.

Model DFA is installed quickly and easily and is suitable for variable ceiling thicknesses. Installation requires framing of the opening with "C" channel or wood for attachment with mounting screws (by others).

The finished appearance is professional and aesthetically pleasing.

Model DFA simplifies and reduces installation time compared with surface mount type diffusers.

A major benefit is that the diffuser allows ceiling access for maintenance purposes in lieu of separate access doors.

Material: Aluminum extrusion with staked and mitered corners.

Standard Finish: AW Appliance White.

OPTIONS:

Finish:

SP Special _____ .

AVAILABLE CEILING MODULES:

IMPERIAL MODULES		METRIC MODULES
Imperial Units (inches)	S.I. Units (mm)	S.I. Units (mm)
12 x 12	305 x 305	300 x 300
16 x 16	406 x 406	400 x 400
20 x 20	508 x 508	500 x 500
24 x 12	610 x 305	600 x 300
24 x 24	610 x 610	600 x 600
36 x 24	914 x 610	900 x 600
48 x 12	1219 x 305	1200 x 300
48 x 24	1219 x 610	1200 x 600
60 x 12	1524 x 305	1500 x 300

Ceiling opening = CM + 1/4" (6)

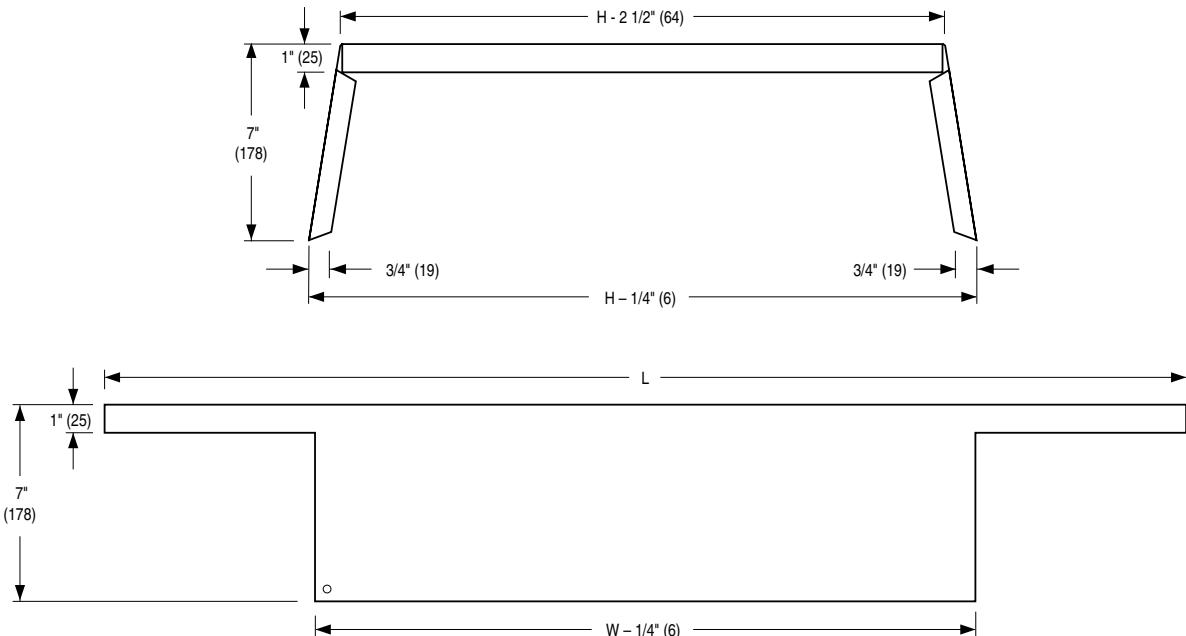
SCHEDULE TYPE:	Dimensions are in inches (mm).		
PROJECT:			
ENGINEER:	DATE	B SERIES	SUPERSEDES
CONTRACTOR:	10-3-19	ACC-DIF.	19-5-00R

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Air Distribution Cut Sheets

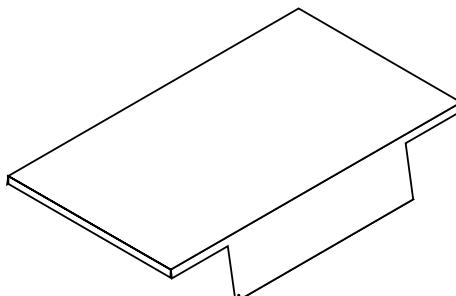


RETURN AIR CROSSTALK ATTENUATOR STEEL • RETURN AIR GRILLES MODEL: RACA



DIMENSIONAL DATA:

CM Ceiling Module	W	H	L
12" x 12" (305 x 305)	12" (305)	12" (305)	26 1/2" (673)
24" x 12" (610 x 305)	24" (610)	12" (305)	38 1/2" (978)
20" x 20" (508 x 508)	20" (508)	20" (508)	34 1/2" (876)
24" x 24" (610 x 610)	24" (610)	24" (610)	38 1/2" (978)
30" x 30" (762 x 762)	30" (762)	30" (762)	44 1/2" (1130)
48" x 24" (1219 x 610)	48" (1219)	24" (610)	62 1/2" (1588)



DESCRIPTION:

Nailor Model RACA Return Air Crosstalk Attenuator is designed to greatly reduce the amount of sound transferred from the return air plenum through open vents or return grilles, into the adjoining space. For use with non-ducted return grilles in Lay-in T-Bar applications, the RACA allows return air to flow through with minimal pressure drop, while reducing the sound transmission by 7 – 10 NC. Constructed of 22 gauge galvanized steel, the compact, light weight design takes up minimal space in the return plenum, rests on the ceiling grid for easy installation and works effectively as a light shield. Available with 1" (25) fiberglass insulation as standard or optional 1" (25) fiber-free closed cell foam insulation. The RACA fits standard grille sizes and is ideal for interior offices, conference rooms, hotel rooms as well as recording studios.

FEATURES:

- Economical and light-weight design.
- Fits standard grille sizes.
- Easy installation sits on ceiling grid.
- Compact design takes up minimal space in return plenum.
- 1" (25) fiberglass insulation (standard).

OPTION:

- FF1 1" (25) Fiber-free closed cell foam.

SCHEDULE TYPE:

Dimensions are in inches (mm).

PROJECT:

ENGINEER:

CONTRACTOR:

DATE	B SERIES	SUPERSEDES	DRAWING NO.
11-7-19	ACC	12-7-15	RACA

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Aluminum Backdraft Dampers

Features:

- Aluminum construction
- Heavy duty channel frame
- Interconnected blade linkage
- Counter balance optional
- AMCA certified performance

SIZE	PRICE	SIZE	PRICE
8"x8"	\$135.00	22"x22"	\$292.00
10"x10"	\$160.00	24"x12"	\$193.00
12"x12"	\$160.00	24"x16"	\$223.00
14"x14"	\$193.00	24"x24"	\$292.00
16"x8"	\$160.00	28"x28"	\$347.00
16"x12"	\$171.00	30"x30"	\$402.00
16"x16"	\$193.00	36"x24"	\$345.00
18"x12"	\$185.00	36"x36"	\$452.00
18"x18"	\$243.00	48"x24"	\$584.00
20"x20"	\$243.00	*48"x48"	\$1,063.00



MODEL 1370

*Consists of 2-piece sections

Aluminum Brick Vents

Features:

- Extruded aluminum
- Blades at 45°
- Masonry grip at top and bottom
- Insect screen
- Additional sizes, styles, and finishes available. Allow 7-10 days for delivery

SIZE	PRICE
8"x7.75"	\$141.00
12"x4.75"	\$132.00
12"x7.75"	\$163.00
16.5"x4.75"	\$157.00
16.5"x7.75"	\$194.00



MODEL 16BVC

Extruded Aluminum Louvers

Features:

- Aluminum bird screen
- Channel frame
- 4" deep, drainable blade
- Mill finish
- AMCA certified performance

SIZE	MAX. CFM @ 800 FPM	SQ. FT. OF FREE AREA	PRICE
12"x12"	256	0.32	\$242.00
16"x12"	468	0.59	\$268.00
16"x16"	576	0.72	\$297.00
18"x12"	412	0.52	\$268.00
18"x18"	796	1.00	\$335.00
20"x20"	947	1.15	\$335.00
24"x12"	576	0.72	\$294.00
24"x16"	912	1.14	\$332.00
24"x24"	1584	1.98	\$408.00
30"x30"	2609	3.26	\$623.00
36"x24"	2456	3.07	\$524.00
36"x36"	3896	4.87	\$746.00
48"x24"	3040	3.80	\$603.00
48"x36"	5280	6.60	\$909.00
48"x48"	7248	9.06	\$1,083.00



MODEL 1604D

Low Leak Control Dampers

Features:

- Frame: 5" x 7/8" x 16" gauge galvanized steel formed hat channel with frame mounting holes.
- Blades: 6" wide 16 gauge galvanized steel on 5.5" centers - vinyl seals
- Linkage: Concealed side
- Bearings: .5" diameter celcon

OPERATOR MODEL	VOLTAGE	MAX. SQ. FT. RATING	PRICE
120V Actuator	120	6	\$451.00
24V Actuator	24	6	\$387.00
Hand Quad	-	-	\$50.00

*Actuator mounts directly on damper shaft.
No additional linkage required



MODEL 1020

SIZE	PRICE	SIZE	PRICE
10"x10"	\$169.00	24"x16"	\$232.00
12"x12"	\$169.00	24"x24"	\$325.00
16"x8"	\$175.00	30"x30"	\$442.00
16"x12"	\$182.00	36"x24"	\$363.00
16"x16"	\$210.00	36"x36"	\$512.00
18"x12"	\$185.00	48"x24"	\$410.00
18"x18"	\$271.00	48"x36"	\$576.00
20"x20"	\$271.00	48"x48"	\$735.00
24"x12"	\$198.00	-	-

Radiation Dampers

MODEL 55EA

Features:

- Round ceiling radiation damper
- UL classified
- Galvanized steel blades
- Roll-formed collar: galvanized steel is standard
- Standard link 165 degree



Optional 212 degree link available

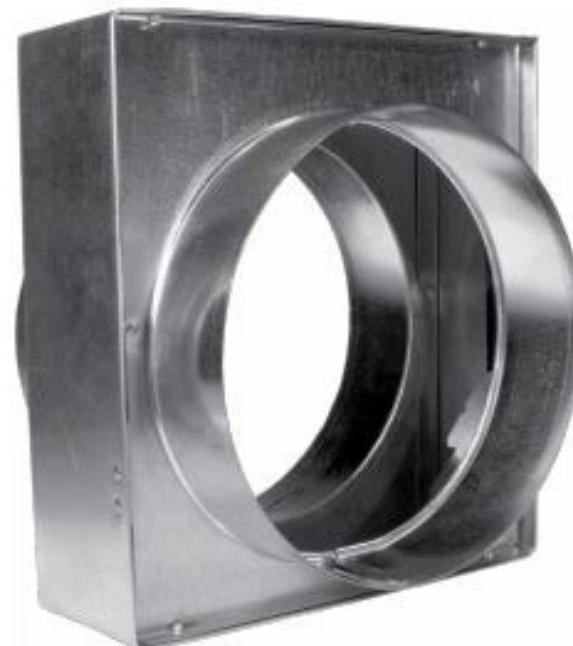


UL Fire Dampers

MODEL 75CH

Features:

- Model 75CH Round 1.5 Hour
- UL listed Fire Damper
- Galvanized steel with welded construction
- UL listed 165°F links



TYPE C

SIZE	PRICE
6" Round	\$117.00
8" Round	\$132.00
10" Round	\$154.00
12" Round	\$169.00
14" round	\$220.00
16" round	\$220.00

Optional 212 degree link available

UL Fire Dampers

Features:

- Model 75AH 1.5 Hour
- UL listed
- Galvanized steel construction with UL listed 165° links
- Vertical or horizontal mounting
- Stainless steel springs assure closing against airflow

MODEL 75AH



**TYPE A
75AH**



**TYPE B
75BH**

SIZE	PRICE	SIZE	PRICE	SIZE	PRICE	SIZE	PRICE
6"x6"	\$48.00	14"x10"	\$72.00	18"x18"	\$117.00	24"x16"	\$113.00
8"x6"	\$51.00	14"x12"	\$75.00	20"x6"	\$72.00	24"x20"	\$131.00
8"x8"	\$54.00	14"x14"	\$104.00	20"x8"	\$78.00	24"x24"	\$143.00
10"x4"	\$57.00	16"x6"	\$66.00	20"x10"	\$84.00	30"x6"	\$104.00
10"x6"	\$54.00	16"x8"	\$78.00	20"x12"	\$96.00	30"x8"	\$107.00
10"x8"	\$57.00	16"x10"	\$72.00	20"x16"	\$104.00	30"x30"	\$220.00
10"x10"	\$63.00	16"x12"	\$75.00	20"x20"	\$116.00	36"x12"	\$128.00
12"x6"	\$48.00	16"x14"	\$90.00	22"x10"	\$96.00	36"x18"	\$173.00
12"x8"	\$57.00	16"x16"	\$90.00	22"x22"	\$143.00	36"x24"	\$191.00
12"x10"	\$66.00	18"x6"	\$72.00	24"x6"	\$81.00	36"x36"	\$259.00
12"x12"	\$69.00	18"x8"	\$78.00	24"x8"	\$90.00	48"x24"	\$241.00
14"x6"	\$66.00	18"x10"	\$84.00	24"x10"	\$96.00	-	-
14"x8"	\$69.00	18"x12"	\$96.00	24"x12"	\$104.00	-	-

Combo Fire/Smoke Dampers

Features:

- Vertical/Horizontal mounting
- 120VAC actuator
- Class I leakage @ 350°F
- 16" sleeve length
- 20 gauge sleeve
- 165°F fusible link



SIZE	PRICE
12"x12"	\$946.00
18"x18"	\$1,098.00
24"x12"	\$1,021.00
24"x24"	\$1,188.00

MODEL 1221

Drywall Access Doors

Features:

- Door and mounting frame made from 16 gauge steel
- Door is flush to frame with reinforced edges
- Frame: Flange to be 1" wide, mounting frame to have anchor straps
- Hinge: Concealed
- Fire Rating: UL - 1.5 hour "B" label
- Latch: Screwdriver operated cam latch
- Finish: Steel: 5 stage iron phosphate preparation with prime coat of white baked enamel



MODEL	SIZE	PRICE
FB5060	12"x12"	\$234.00
	16"x16"	\$280.00
	18"x18"	\$307.00
	24"x24"	\$373.00

MODEL FB5060 (Fire-Rated)

Drywall Access Door

Features:

- Material: 16"x16" and smaller:
16 gauge door, 18 gauge mounting frame.
- Over 16"x16": 14 gauge door:
16 gauge mounting frame
- Door Panel: Flush to frame - round safety corners
- Hinge: Continuous, concealed
- Latch: Screwdriver operated cam latch

MODEL	SIZE	PRICE
UF5000	8"x8"	\$50.00
	12"x12"	\$58.00
	14"x14"	\$81.00
	16"x16"	\$89.00
	18"x18"	\$97.00
	24"x24"	\$135.00



Duct Access Doors

Features:

- Door Panel: 24 gauge galvanized steel
(22 gauge on 14x14 and larger)
- Frame: 24 gauge galvanized steel
- Insulation: 1" thick fiberglass .75# density
- Gasket: 1/8" neoprene
- Latches: Zinc plated
- Cam: Camlock fasteners



Spiral Access Door



DUCT DIAMETER	DOOR SIZE	PRICE
5"-6"	4"X8"	\$90.00
7"-9"	4"X8"	\$90.00
10"	12"X8"	\$115.00
12"-14"	12"X8"	\$115.00
15"-16"	12"X8"	\$115.00
18"-20"	16"X12"	\$132.00

MODEL	SIZE	PRICE
CAD	6"x6"	\$35.00
	8"x8"	\$38.00
	10"x10"	\$42.00
	12"x12"	\$46.00
	14"x14"	\$50.00
	16"x12"	\$58.00
	16"x16"	\$62.00
	18"x18"	\$66.00
	20"x20"	\$67.00
	24"x24"	\$79.00

Dampers/Louvers/Access Doors Cut Sheets



BACKDRAFT DAMPER

STANDARD PERFORMANCE • MEDIUM DUTY
EXTRUDED ALUMINUM BLADES & FRAME
MODEL: 1370

Model 1370 is a standard performance gravity operated backdraft damper for use in light to medium duty commercial HVAC applications. Backdraft dampers are used in systems to pass airflow in one direction and to prevent airflow in the opposite direction.

Corrosion-resistant extruded aluminum construction highlights the model's features which include a reinforced mitered corner frame that resists racking, and aerodynamic blades that overlap the jambs for maximum weather protection. Extruded PVC blade seals provide quiet closure as well as extra weather protection. Blade linkage is concealed in jamb for low pressure drop and provides smooth operation at system velocities of up to 1500 fpm.

STANDARD CONSTRUCTION:

FRAME: 2" (51) wide x .090" (2.3) nominal wall thickness type 6063-T5 extruded aluminum. Corners are mitered.

BLADES: .050" (1.3) nominal wall thickness type 6063-T5 extruded aluminum on 3 5/8" (92) centers.

LINKAGE: Concealed in jamb.

BEARINGS: Synthetic type.

BLADE SEALS: Extruded PVC.

FINISH: Mill.

MINIMUM SIZE: 6" x 6" (152 x 152).

MAXIMUM SIZE: Single Section: 40" x 48" (1016 x 1219).
Multiple section: Unlimited.

MAXIMUM

TEMPERATURE: 200°F (93°C).

MAXIMUM BACK

PRESSURE: 3 to 6 in. w.g. (see page 2).

MAX. SYSTEM

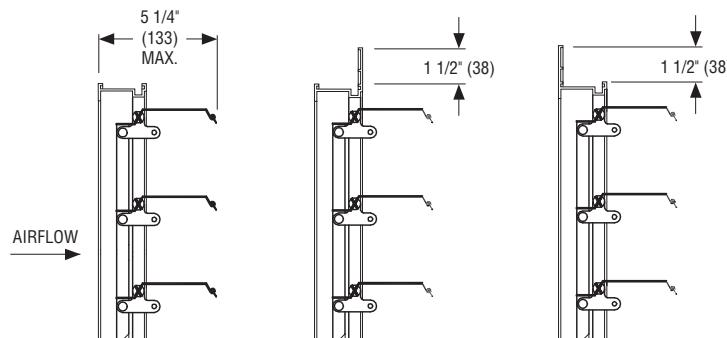
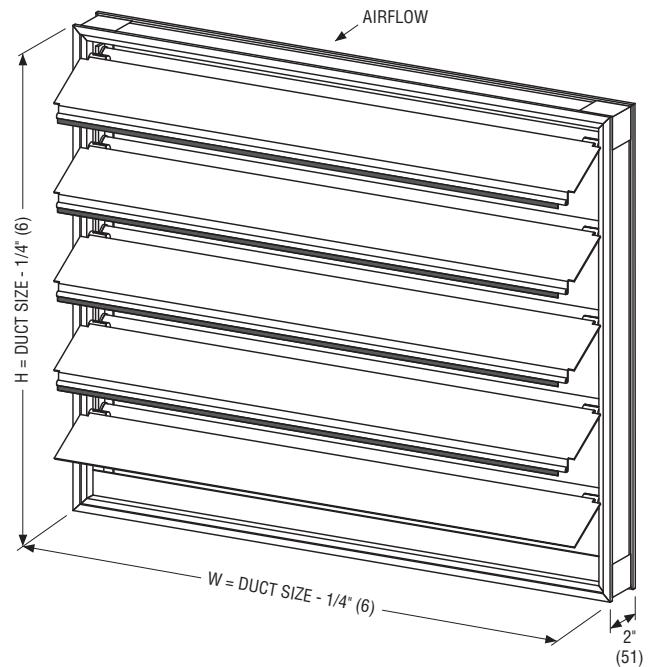
VELOCITY: 1500 fpm (2500 fpm maximum spot velocity).

MOUNTING:

- VM Vertical mount (standard)
- HMU Horizontal mount (airflow up only)

OPTIONS:

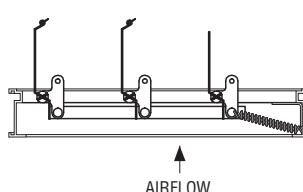
- FF Front flange
- FFB Front flange with bolt holes
- FR Rear flange
- FRB Rear flange with bolt holes
- GBS Bird screen, galvanized
- AIS Insect screen, aluminum
- Special features: _____



Channel Frame
(Duct Mount)
(Standard CF)

Front Flange
(on discharge side)
(Option FF)

Rear Flange
(on intake side)
(Option FR)



Horizontal Mount – Airflow up only (Option HMU)
(Available on all frame styles)

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

Page 1 of 2
Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
1 - 1 - 12	1300	10 - 1 - 04	1370

Nailor Industries Inc. reserves the right to change any information concerning product or pricing without notice.

Dampers/Louvers/Access Doors Cut Sheets



BRICK VENTS CAST ALUMINUM • 4" (102) DEEP MODEL 16BVC

Nailor 16BV Series Brick Vents provide a permanent, secure means of ventilating foundations, crawl spaces and other utility areas. Model 16BVC features corrosion resistant cast aluminum alloy construction that is suitable for load bearing applications, ideal for new construction. Deep louvered blades exhibit a minimum 39% free area and provide for minimal through-viewing. A rear water stop and full width weepage opening minimize water penetration, and top and bottom drips prevent water from staining the brick. Standard insect screen prevents unwanted pests from entering through the vent.

STANDARD CONSTRUCTION:

FRAME: 4" (102) deep, #319 cast aluminum, minimum .125" (3) thickness.

BLADES: #319 cast aluminum, minimum .125" (3) thickness, with cast face mullions on 8" (203) centers.

SCREEN: 7 x 7 aluminum mesh insect screen.

FINISH: Mill. Optional finishes are available.

STD. SIZES: Width x Height

8" x 2 1/4" (203 x 57)

8 1/4" x 4 15/16" (210 x 125)

8" x 7 7/8" (203 x 200)

12" x 2 3/4" (305 x 70)

12" x 3 1/2" (305 x 89)

12" x 5" (305 x 127)

12" x 7 3/4" (305 x 197)

16 1/2" x 2 3/8" (419 x 60)

16" x 4" (406 x 102)

16" x 4 15/16" (406 x 125)

16" x 6" (406 x 152)

16" x 7 3/4" (406 x 197)

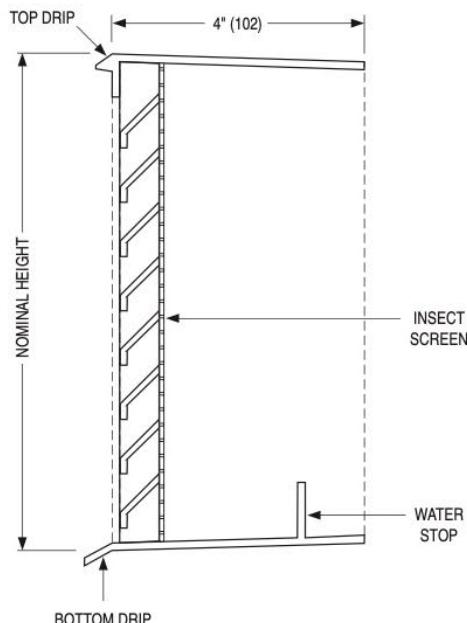
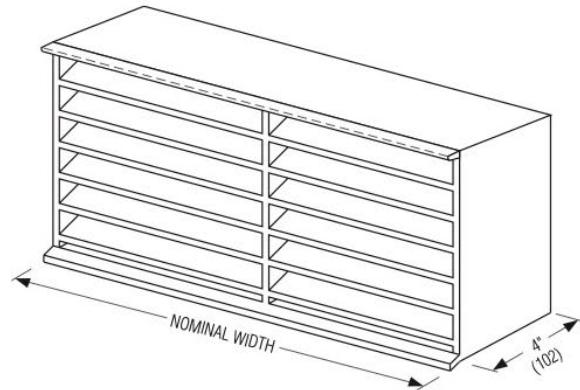
OPTIONS:

DSB Damper (single blade) with exterior set-screw operator.

ES Extended Sleeve.

BEF Baked Enamel Finish. Color: _____.

KYF Kynar 500® Finish. Color: _____.



SCHEDULE TYPE:	Dimensions are in inches (mm).			
PROJECT:				
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.
CONTRACTOR:	11 - 21 - 03	1600	11 - 4 - 03	16BVC-1

Nailor Industries Inc. reserves the right to change any information concerning product or pricing without notice.

Dampers/Louvers/Access Doors Cut Sheets



EXTRUDED ALUMINUM STATIONARY LOUVER 4" (102) DEEP • DRAINABLE BLADE MODEL: 1604D

Model 1604D, Drainable blade type louver, provides excellent weather protection in a 4" (102) deep frame, with good air performance and pleasing aesthetics that compliment any structure's exterior styling. Suitable for use in exhaust and low to medium velocity intake applications, the drainable blade design utilizes rain gutters that divert collected water down concealed side downspouts and out the sill. Blades are reinforced with full length integral bosses for superior strength and the design provides good air performance through it's large free area as well as maximum protection against the elements. Model 1604D is available with channel or flanged type frame to suit most architectural and mechanical installation requirements and is AMCA Licensed.

STANDARD CONSTRUCTION:

- FRAME:** 4" (102) deep, Type 6063-T5 extruded aluminum, .080" (2.03) nominal wall thickness. Integral downspouts and caulking slot provided.
- BLADES:** Type 6063-T5 extruded aluminum, .080" (2.03) nominal wall thickness, with reinforcing bosses.
- BLADE ANGLE:** Fixed at 37 degrees.
- BLADE SPACING:** Approx. 4" (102) on centers.
- BLADE SUPPORT BRACKETS:** Concealed type, factory installed on rear of louver on maximum 60" (1524) centers. Reinforced with 1 1/2" x 2" (38 x 51) angle (adds approx. 2" [51] to overall louver depth).
- MULLIONS:** Concealed type allowing continuous line appearance up to 120" (3048) wide. Larger assemblies require separate visible frames with downspouts.
- SCREEN:** 3/4" x .051 (19 x 1.3) expanded, flattened aluminum bird screen in removable frame, inside (rear) mount (adds approximately 3/8" [10] to louver depth).
- FINISH:** Mill.
- MINIMUM SIZE:** 12" W x 12" H (305 x 305).
- MAXIMUM SINGLE SECTION SIZE:** 120" W x 84" H (3048 x 2134) or 84" W x 120" H (2134 x 3048). 70 sq. ft. (6.5²). Larger louvers will require field assembly of smaller sections.

OPTIONS:

- | | | | |
|--------------------------------------|------------------------------|-------------------------------------|-------------------------|
| <input type="checkbox"/> FL | Flanged Frame. | <input type="checkbox"/> ESI | Extended Sill. |
| <input type="checkbox"/> BSSS | Type 304 S.S. Bird Screen. | <input type="checkbox"/> FR1 | 1" (25) Filter Rack. |
| <input type="checkbox"/> BSN | No Bird Screen. | <input type="checkbox"/> FR2 | 2" (51) Filter Rack. |
| <input type="checkbox"/> ISA | Aluminum Insect Screen. | <input type="checkbox"/> PAC | Perimeter Anchor Clips. |
| <input type="checkbox"/> ISSS | Type 304 S.S. Insect Screen. | <input type="checkbox"/> Other: | _____. |
| <input type="checkbox"/> WE | Welded Construction. | | |

OPTIONAL FINISHES:

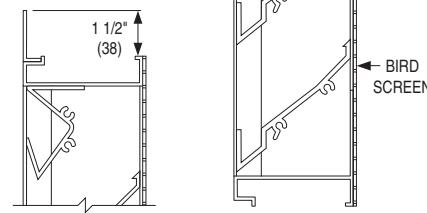
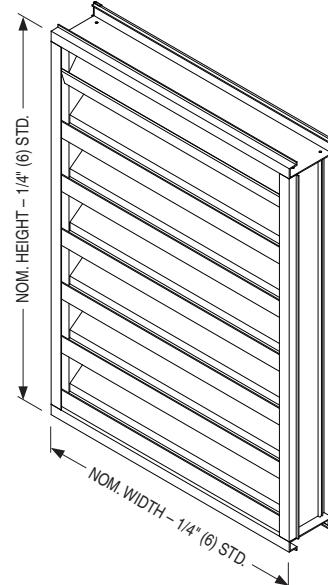
- | | |
|--------------------------------------|--|
| <input type="checkbox"/> PC3 | Powder Coat AAMA 2603. Color: _____. |
| <input type="checkbox"/> PC4 | High Performance Powder Coat AAMA 2604 (Equivalent to 50% Kynar®). Color: _____. |
| <input type="checkbox"/> PC5 | Fluoropolymer Powder Coat AAMA 2605 (Equivalent to 70% Kynar®). Color: _____. |
| <input type="checkbox"/> PCC | Prime Coat. |
| <input type="checkbox"/> AN04 | Clear Anodized 204-R1. |
| <input type="checkbox"/> AN15 | Clear Anodized 215-R1. |

Color Anodized:

- | | | | |
|--------------------------------------|---------------|--------------------------------------|----------------|
| <input type="checkbox"/> ANLB | Light Bronze. | <input type="checkbox"/> ANMB | Medium Bronze. |
| <input type="checkbox"/> ANDB | Dark Bronze. | <input type="checkbox"/> ANBK | Black. |

OPTIONAL W x H SIZING (1/4" [6.5] Undersize standard):

- | | |
|-------------------------------------|------------------------|
| <input type="checkbox"/> U00 | Exact Size. |
| <input type="checkbox"/> U38 | Undersize 3/8" (9.5). |
| <input type="checkbox"/> U50 | Undersize 1/2" (12.7). |



FLANGED FRAME (FL)
(OPTIONAL)

SCHEDULE TYPE:			
PROJECT:	Page 1 of 3 Dimensions are in inches (mm).		
ENGINEER:	DATE B SERIES SUPERSEDES DRAWING NO.		
CONTRACTOR:	7 - 11 - 13 1600 9 - 16 - 11 1604D		

Nailor Industries Inc. reserves the right to change any information concerning product or pricing without notice.

1604D August. 2013.

Dampers/Louvers/Access Doors Cut Sheets



LOW LEAKAGE CONTROL DAMPER STEEL • STANDARD PERFORMANCE MODELS: 1010 & 1020

The 1010/20 Series are Nailor's most widely used low leakage dampers and are the standard choice for use in the majority of low to medium velocity and pressure commercial HVAC systems. They are low cost, high quality dampers that meet or exceed the majority of standard specification requirements. They meet the frequently specified leakage criteria of less than 10 cfm per sq. ft at 4" w.g. (0.5% at 2000 fpm). The design features include a sturdy hat channel frame with die-formed corner gussets for reinforcement and structural strength equivalent to 13 gauge channel type frames, a vee groove blade design that maximizes strength and zero maintenance concealed linkage (out of the air stream) for reduced pressure drop and air turbulence.

STANDARD CONSTRUCTION:

- Frame:** 5" x 7/8" x 16 ga. (127 x 22 x 1.6) galvanized steel hat channel with die-formed corner gussets. Low profile (flat top and bottom) on dampers 10" (254) high and under.
- Blades:** 6" (152) wide on 5 1/2" (140) centers. 16 ga. (1.6) galv. steel vee groove design. Parallel or opposed action.
- Linkage:** Concealed type totally enclosed within the frame and out of the airstream. Plated steel.
- Bearings:** 1/2" (13) dia. Celcon®.
- Axes:** 1/2" (13) dia. plated steel double bolted to blades.
- Drive Shaft:** 6" (152) long x 1/2" (13) dia. rigid drive shaft on all single section dampers. A 1/2" (13) or 1" (25) dia. factory installed jackshaft is standard on all multiple section dampers. See multi-section detail 1000 MSI.
- Blade Seals:** Dual durometer bulb type extruded PVC.
- Jamb Seals:** Compression type cambered metal.
- Temperature Range:** -50°F to +180°F (-46°C to +82°C).

Sizes (Duct W x H):

Minimum		Maximum	
Single Section		Single Section	Multiple Section
Single Blade 6" x 4" (152 x 102)	Two Blades (parallel or opposed) 8" x 10" (203 x 254)	48" x 72" (1219 x 1829)	Unlimited

OPTIONS:

- BO Ollite bearings
- 304 Stainless Steel construction
- AMP Actuator mounting side plate
- DLO Lock-on drive shaft
- Other _____.

Nailor offers a wide selection of pneumatic and electric actuators for factory or field installation.

Performance Data - Air Leakage (Damper Closed)

Damper Width	Maximum System Pressure	Maximum System Velocity	Leakage*	
			% of Max. Flow	Cfm/Sq. Ft.
48" (1219)	2.5" w.g.	2000 fpm	.18	3.5
36" (914)	3.0" w.g.	2000 fpm	.20	4.0
24" (610)	4.0" w.g.	2000 fpm	.23	4.5
12" (305)	5.0" w.g.	2000 fpm	.33	6.6

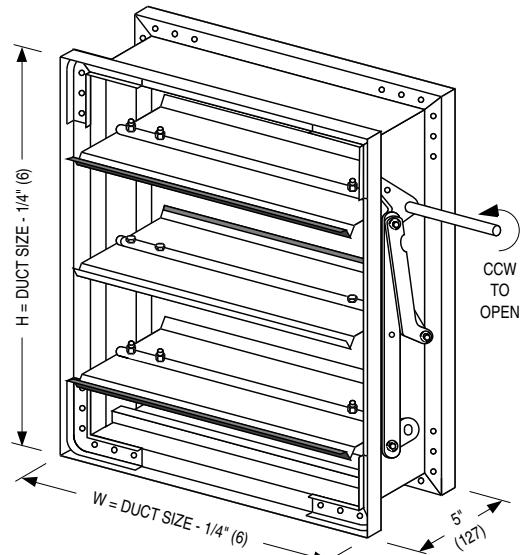
* Leakage information is based upon a pressure differential of 1" w.g. tested per AMCA Standard 500-D, Fig. 5.5.

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:



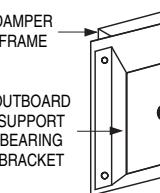
MODEL

1010

PARALLEL

BLADE

+ jackshaft
standard
on multiple
section
dampers.
Jackshaft
securely
bolted to
frame.

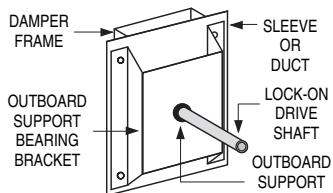
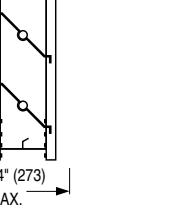


MODEL

1020

OPPOSED

BLADE



Optional lock-on drive shaft support bracket detail.

The low profile frame illustrated is used to maximize free area available on units 10" (254) high and under.

Pressure Drop (in. w.g.)

Damper Size	Approach Velocity (fpm)			
	750	1000	1500	2000
24" x 24" (610 x 610)	.016	.030	.07	.14
36" x 36" (914 x 914)	.013	.023	.05	.09
48" x 48" (1219 x 1219)	.010	.020	.03	.07

Tested per AMCA Standard 500-D, Fig. 5.3.

Dimensions are in inches (mm).

DATE	A SERIES	SUPERSEDES	DRAWING NO.
12-4-12	1000	6-30-04	1000-1

Dampers/Louvers/Access Doors Cut Sheets

Ceiling Radiation Damper

Submittal



Series 55

SL And EA CRD

Specifications

UL Classification:

UL Classified UL 555C - For use in non-combustible installations rated 3 hours or less

Profile:

22Ga 1 Piece Rollformed Frame And Blades

Material:

Galvanized Steel

Fusible Link:

165° F Rated Link - Standard
212° F Rated Link - Optional

Fusible Link Type:

Standard Link Attachment (SL) - On 4" Diameter And Up
Easy Access Attachment (EA) - On 5" Diameter And Up

Sizes:

55SL Available in Sizes From 4'0 to 24'0
55EA Available in Sizes From 5'0 to 24'0

Thermal Blanket:

Ceramic Thermal Blanket Provided On Units With CRD Blade Areas Of Greater Than 84 Sq. In.

Job: _____

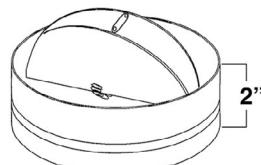
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Submitted to: _____

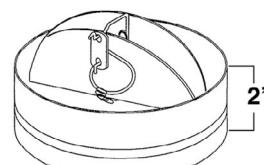
Submittal Prepared by: _____

Approve Date: _____

Date: _____



55 SL



55 EA

This product meets the requirements for ceiling dampers established by:

UL Standard 555C
NFPA Standard 90A
ICC Building Codes



3226-1650-0103

SMART



Aire Technologies, Inc.

1502 Industrial Drive, Monongahela, PA 15063

1-866-421-AIRE

atiorders@airetechnologies.com

AireTechnologies.com

Providing Solutions To The HVAC Industry

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412-449-1342

STEPHANY SUPPLY

All prices are list. Please call for multiplier

Dampers/Louvers/Access Doors Cut Sheets

Fire Damper

Submittal



Series 75

Type A - Static Fire Damper

Specifications

UL Classification:

UL Classified UL 555 - **1½ Hour Rating**, Static For Use In Installations Rated Less Than 3 Hours

Profile:

Standard Profile - 4¼" 22Ga 1 Piece Rollformed Frame

Material:

Galvanized Steel - Standard
Stainless Steel - Optional

Blades:

Blades in Air-Stream - Type A Damper

Orientation:

Available for Vertical and Horizontal Installations

Sizes:

Available In Single-Section Sizes:

Vertical - 4" x 4" to 60" x 60"
Horizontal - 4" x 4" to 40" x 60"

Available In Multi-Section Sizes:

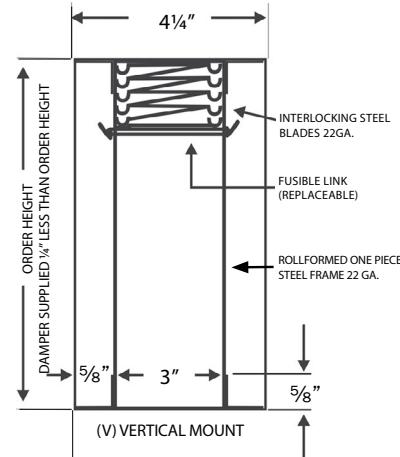
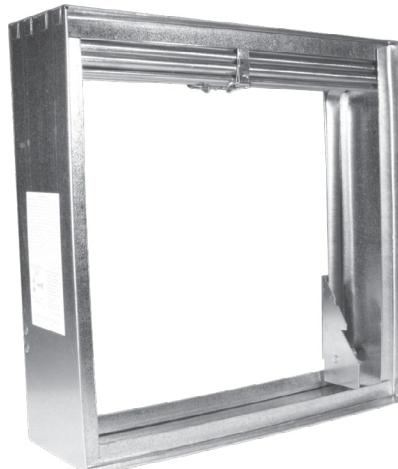
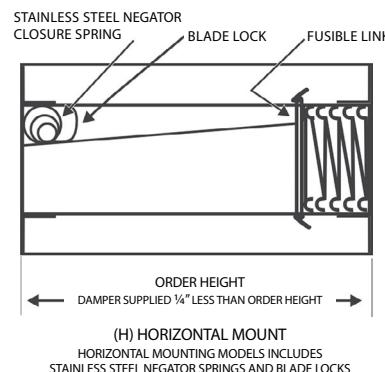
Vertical - Up to 120" x 120"
Horizontal - Up to 120" x 120"

Fusible Link:

165°F Rated Link - Standard
212°F Rated Link - Optional

22 Ga Optional Sleeves:

12" Sleeve - Standard
8", 12", 17", 20", or 24" lengths - Optional



This product meets the requirements for fire dampers established by:

**UL Standards 555
NFPA Standard 90A
ICC Building Codes**



SMART



3225-1650: 0107

Aire Technologies, Inc.

1502 Industrial Drive, Monongahela, PA 15063

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atiorders@airetechnologies.com

AireTechnologies.com

Providing Solutions To The HVAC Industry

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Dampers/Louvers/Access Doors Cut Sheets



COMBINATION FIRE/SMOKE DAMPER
 AIRFOIL BLADE • HIGH PERFORMANCE
 1 1/2 HR. LABEL • ULTRA-LOW LEAKAGE
MODELS: 1220 AND 1221 (TYPE A)



QUALIFICATIONS:

- UL 555 & CAN/ULC-S112 CLASSIFIED DYNAMIC FIRE DAMPER 1 1/2 hr. Label (File # R9492).
- UL 555S CLASSIFIED SMOKE DAMPER (File # R9492) Leakage Class I or II at 250°F or 350°F elevated temperature.
- City of New York. MEA # 366-03-M.
- California State Fire Marshal: Fire Damper Listing No. 3225-0935:0106.
- Meets NFPA 80, 90A, 92, 101 and 105 as well as IBC and NBC (Canada) Building Code requirements.
- Maximum velocity: Up to 4000 fpm @ 8" w.g. (20 m/s @ 2 kPa).

The 1220 Series dampers are ideal for applications where building codes require both a fire damper for the protection of ductwork penetrations in walls or floors that have a fire resistance rating of up to 2 hours and also require a leakage rated damper for operational smoke control in static or dynamic smoke management systems.

The 1220 Series has been especially designed and tested to provide premium performance and is AMCA licensed. It offers the lowest leakage class available and is qualified for installation with airflow in either direction and inverted mounting. Airfoil blade design and elimination of blade sills, top and bottom, provide a low pressure drop design. Unique, inter-locking double skin blade design provides flame and smoke seal under fire conditions.

STANDARD CONSTRUCTION:

Frame: 5" x 7/8" x 16 ga. (127 x 22 x 1.6) galvanized steel hat channel.

Blades: 14 ga. (2.0) equivalent galvanized steel formed airfoil on 5 1/2" (140) centers. Opposed action.

Linkage: Concealed in frame. 12 ga. (2.7) plated steel.

Bearings: 1/2" (13) dia. self-lubricating oilite bronze.

Axes: 1/2" (13) dia. plated steel double bolted to blades.

Jackshaft: 1/2" (13) dia. cadmium plated steel.

Jamb Seals: Stainless steel.

Heat Responsive Device (Controlled Closure):

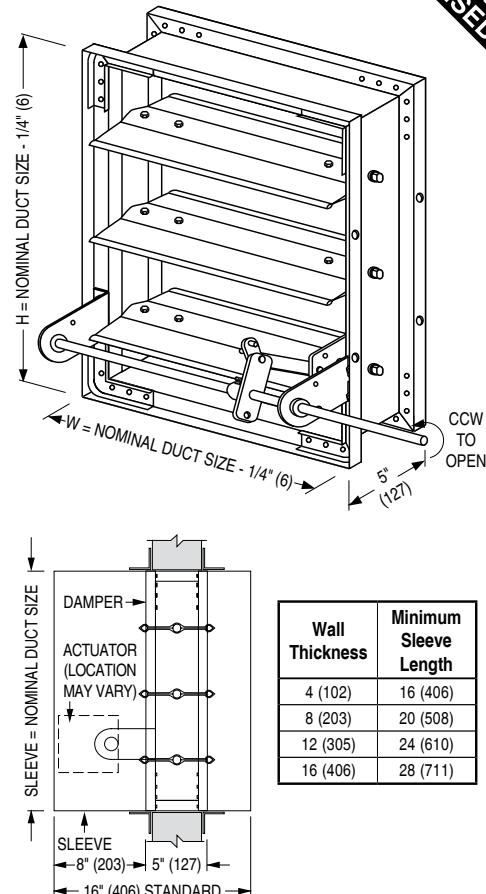
ERL (Electric Resettable Link) is standard on dampers with electric actuators: 250°F (121°C) standard. 165°F (74°C), 212°F (100°C) and 350°F (176°C) available.

PRL (Pneumatic Replaceable Link) is standard on dampers with pneumatic actuators: 212°F (100°C) standard. 165°F (74°C) and 280°F (138°C) available.

Sizes (Duct W x H):

Velocity/ Pressure Rating	Elevated Temp. °F	Minimum		Maximum			
		Single Section		Single Section		Multiple Section	
		Vertical/Horizontal	Vertical	Horizontal	Vertical	Horizontal	
24, 34, 36, 46	250/350	8" x 8" (203 x 203). 6" x 6" (152 x 152) with low profile frame (maximum size is (maximum size is	36" x 48" (914 x 1219)	32" x 48" (813 x 1219)	144" x 96" (3658 x 2438)	128" x 96" (3251 x 2438)	
48	250		36" x 48" (914 x 1219)	32" x 48" (813 x 1219)	144" x 96" (3658 x 2438)	128" x 96" (3251 x 2438)	
48	350	18" x 6" [457 x 152].	36" x 24" (914 x 610)	32" x 24" (813 x 610)	144" x 48" (3658 x 1219)	128" x 48" (3251 x 1219)	

Note: Dampers with duct heights less than 6" (152) (8" [203] if width is over 18" [457]) require a Type 'B' sleeve enclosure (Model 1222). Duct sizes less than 8" (203) in width require a Type 'C' enclosure (Model 1223).



BASE MODEL SELECTION:

- 1220 With side actuator mounting plate
- 1221 Standard factory sleeve (caulked to UL requirements) 16" long x 20 ga. (406 x 1.0) (18 ga. (1.3) for dampers over 84" (2134) in width).
- 1221 Non-standard sleeve. Specify _____ length ____ ga. Available up to 36" (914) dependent upon wall thickness and 10 through 20 ga. (3.5 through 1.0).

For installation instructions, see IOM-1220INST.

Page 1 of 2
 Dimensions are in inches (mm).

SCHEDULE TYPE:	DATE	B SERIES	SUPERSEDES	DRAWING NO.
PROJECT:				
ENGINEER:				
CONTRACTOR:	7 - 26 - 21	1200	6 - 14 - 13	1220-1

Nailor Industries Inc. reserves the right to change any information concerning product or pricing without notice.

Spiral Pipe & Gasketed Fittings

Features:

- Larger sizes (up to 70") & heavier gauges available
- Optional materials - Stainless steel, PVC, paint grip, aluminum
- Optional construction - Double wall, solid or perforated liner, insulated
- Meets all SMACNA standards

*Spiral access doors & spiral grilles available.

90°



Tee



45°



Endcap



Pipe



Connector



Reducer



Saddle Tap



DIAMETER	10' PIPE	90 ELBOWS -SHORT & LONG RADIUS	45	TEE	ENDCAP	PIPE OR FTG CONN.	REDUCER	SADDLE TAP
**4"	\$54.00	\$40.00	\$30.00	\$128.00	\$17.00	\$5.00	*	*
5"	\$67.00	\$33.00	\$28.00	-	\$17.00	\$17.00	\$53.00	\$33.00
6"	\$80.00	\$39.00	\$31.00	\$181.00	\$18.00	\$17.00	\$53.00	\$36.00
7"	\$93.00	\$45.00	\$35.00	-	\$20.00	\$18.00	\$45.00	\$40.00
8"	\$104.00	\$51.00	\$39.00	\$196.00	\$21.00	\$19.00	\$49.00	\$42.00
9"	\$119.00	\$60.00	\$45.00	-	\$24.00	\$21.00	\$52.00	*
10"	\$132.00	\$71.00	\$52.00	\$216.00	\$27.00	\$21.00	\$57.00	\$51.00
12"	\$157.00	\$98.00	\$64.00	\$232.00	\$32.00	\$23.00	\$64.00	\$56.00
14"	\$183.00	\$125.00	\$80.00	\$272.00	\$38.00	\$27.00	\$72.00	\$63.00
16"	\$220.00	\$158.00	\$100.00	\$291.00	\$45.00	\$28.00	\$82.00	\$70.00
18"	\$296.00	\$269.00	\$193.00	\$308.00	\$87.00	\$30.00	\$129.00	\$171.00
20"	\$328.00	\$317.00	\$231.00	\$325.00	\$94.00	\$31.00	\$138.00	*
22"	\$361.00	\$346.00	\$260.00	\$354.00	\$101.00	\$41.00	\$151.00	*
24"	\$393.00	\$396.00	\$300.00	\$374.00	\$111.00	\$43.00	\$164.00	*

*Pricing available upon request

*4" materials non-gasketed

Snaplock Pipe & Fittings

Reducer



5' Pipe



90°



Endcap



STOD



Volume Damper



ATD



SIZE	ATP	ATD	STO	STOD	REDUCERS
4"	\$9.00	\$59.00	*	\$168.00	\$50.00
5"	\$10.00	\$59.00	*	\$174.00	\$21.00
6"	\$10.00	\$60.00	\$20.00	\$176.00	\$24.00
7"	\$11.00	\$72.00	\$21.00	\$193.00	\$26.00
8"	\$12.00	\$72.00	\$21.00	\$195.00	\$29.00
9"	\$12.00	\$97.00	\$25.00	\$260.00	\$31.00
10"	\$13.00	\$99.00	\$27.00	\$262.00	\$34.00
12"	\$14.00	\$117.00	\$31.00	\$328.00	\$37.00
14"	\$15.00	\$132.00	\$34.00	\$369.00	\$41.00
16"	\$16.00	\$149.00	\$38.00	\$455.00	\$45.00
18"	\$64.00	\$211.00	\$168.00	\$545.00	\$69.00
20"	\$67.00	*	\$174.00	*	\$74.00
22"	\$70.00	*	\$181.00	*	\$82.00
24"	\$73.00	*	\$188.00	*	\$89.00

SIZE	5' PIPE	ALUMINUM 5' PIPE	ALUMINUM 90	26 GAUGE 90	END CAP	DAMPER
4"	\$72.00	\$35.00	\$22.00	\$22.00	\$17.00	\$13.00
5"	\$91.00	*	*	\$26.00	\$18.00	\$14.00
6"	\$92.00	\$60.00	\$35.00	\$26.00	\$19.00	\$16.00
7"	\$106.00	*	*	\$30.00	\$21.00	\$17.00
8"	\$120.00	*	*	\$34.00	\$23.00	\$18.00
9"	\$135.00	*	*	\$46.00	\$25.00	\$22.00
10"	\$151.00	*	*	\$54.00	\$31.00	\$27.00
12"	\$187.00	*	*	\$76.00	\$36.00	\$36.00
14"	\$215.00	*	*	\$105.00	\$42.00	*
16"	*	*	*	\$140.00	\$82.00	*
18"	*	*	*	*	\$88.00	*

*Pricing available upon request

Flexible Air Duct Class 1



DUCT TIES & CLAMPS

MODEL	MATERIAL	LENGTH	MAX. DIA.	PACK QTY	PRICE
AL-36	Nylon Cable Tie	36"	9"	50	\$51.00
AL-48	Nylon Cable Tie	48"	13"	50	\$75.00
SS 8	Stainless	27"	8"	Each	\$6.00
SS 12	Stainless	40"	12"	Each	\$8.00

KM FLEX VENT

Reinforced Silver Jacket

Pressure Ratings

Positive: Up to 10" W.G.

Negative: up to 1" W.G.

Velocity: 5000 fpm

Temperature Range: -20°F to 250°F

Material: Outer vapor barrier made of bi-directional reinforced metalized silver jacket. Insulated with a thick blanket of fiberglass insulation. Inner core formed with laminated polyester film

encapsulating a heavy corrosion resistant steel wire helix.

SIZE	
4" Round	10" Round
5" Round	12" Round
6" Round	14" Round
7" Round	16" Round
8" Round	18" Round
9" Round	20" Round

Pricing per 25ft increments
R 8 Available. Call for pricing.

**Due to market volatility,
please contact us for
current pricing**

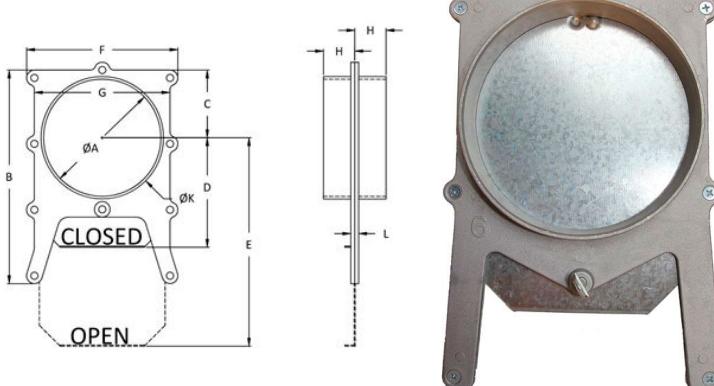
SIZE	
4" Round	10" Round
5" Round	12" Round
6" Round	14" Round
7" Round	16" Round
8" Round	18" Round
9" Round	20" Round

Pricing per 25ft increments
Call for pricing.

Accessories

Blast Gate Cut-Offs Full Gate Style

- Constructed of a totally rustproof aluminum alloy that is weldable
- Working temperature 650° - 700°F
- Lock the slide in any position
- Two piece casting will permit easy disassembly for maintenance and difficult installations



SIZE	A	B	C	D	E	F	G	H	K	L	PRICE
3"	2 7/8"	5 1/4"	1 3/4"	2 3/8"	4 3/4"	4"	3 3/8"	1 3/8"	2 5/8"	7/16"	*
4"	3 7/8"	6 3/4"	2 1/4"	3 1/2"	6 3/4"	5"	4 3/8"	1 1/8"	3 3/4"	5/16"	\$44.00
5"	4 15/16"	8 5/8"	2 3/4"	5"	9 1/4"	6"	5 3/8"	1 1/8"	4 5/8"	3/8"	\$61.00
6"	5 15/16"	10 1/4"	3 1/4"	5 1/4"	10"	7 1/4"	6 1/2"	1 1/2"	5 5/8"	3/8"	\$76.00
7"	6 7/8"	11 1/4"	3 3/4"	5 3/4"	11 3/4"	8"	7 1/4"	1 1/4"	6 3/4"	3/8"	\$100.00
8"	7 15/16"	12 5/8"	4 1/4"	6 3/4"	14"	9 5/8"	8 3/8"	1 3/4"	7 1/2"	7/16"	\$111.00
9"	8 7/8"	16"	5"	7 5/8"	15 3/4"	10 3/4"	9 1/2"	2"	8 9/16"	7/16"	\$164.00
10"	9 15/16"	17 7/8"	5 3/4"	7 5/8"	17"	11 3/4"	10 1/2"	2 1/8"	9 1/2"	9/16"	\$201.00
12"	11 7/8"	20 1/2"	6 1/2"	10 1/2"	21 3/4"	13 3/4"	10 1/2"	2 1/2"	11 1/2"	1/2"	\$252.00

*Pricing available upon request

Sealants and Adhesive Applications

100% RTV Silicone Sealant

Features:

- Qualifies for LEED® Credit
- 1000/o Anti-Microbial Formula
- Food Grade Compliant
- FDA/USDA Compliant
- Non-Sag & Slump
- Bond to clean metal, glass, many types of wood, silicone resins, vulcanized silicone rubber, ceramics and plastic surfaces without priming.

RTV SILICONE SEALANT	PRICE
10.3 oz. Aluminum color	\$18.00



Sealant Water Based

Features:

- Qualifies for LEED® Credit
- Very User Friendly
- Resists Mold and Mildew
- For Outdoor and Indoor Use
- Does Not Drip and Sag
- Paintable
- UL 181 A-M B-M listed
- Tested in accordance with and meets requirements of NFPA 90A & 90B

DUCT SEAL - WATER BASED	PRICE
1 gallon	\$35.00
10.03 oz.Tube	\$5.64



Accessories

GRIPPER	PRICE
Two-Way Grippers	\$6.00
Wire Rope, 10ft long	\$5.00
Wire Rope Spool (500')	\$193.00
Starter Kit	\$1,157.00
FLEXIBLE DUCT CONNECTOR	
ZLL 3 x 3 x 3 (100' per box)	\$455.00
E-Z RAIL	
2" x 10' Pieces	\$23.00
DOUBLE WALL VANE	
2" x 10' Pieces	\$22.00
TAPE	
Duct Tape 2" x 180'	\$28.00
Aluminum Tape 3" x 50'	\$29.00
FSK Tape 3" x 100'	\$28.00



Roof Curbs

Features:

Standard Construction

- 18 gauge galvanized steel
- 1-1/2" x 3 Lb density fiberglass insulation
- Wood nailer
- Unitized construction
- All welded construction
- Self-flashing design

12" HIGH CURBS	PRICE	18" HIGH CURB	PRICE
12"x12"	\$168.00	12"x12"	\$161.00
16"x16"	\$203.00	*	*
19"x19"	\$227.00	*	*
20"x20"	\$239.00	*	*
22"x22"	\$258.00	*	*
27"x27"	\$302.00	*	*
27.5"x12" (Double Portal)	\$342.00	*	*



*Pricing available upon request

*Custom Sizes/Heights available upon request (7-10 day lead-time)

Covers & Rubber Caps



Single Opening



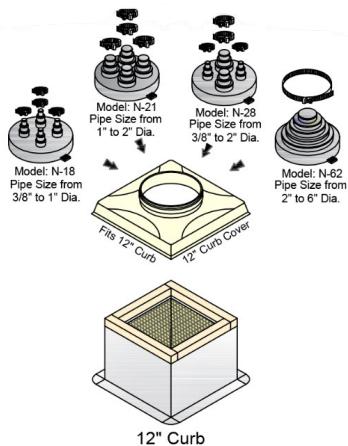
Double Opening



N55



N182



COVER	PIPE	PRICE
Single		\$113.00
Double		\$251.00
RUBBER CAPS	PIPE	PRICE
N62	(1) - 2" - 6"	\$105.00
N28	(2) - 3/8" - 1" & 2 - 1" - 2"	\$105.00
N21	(4) - 1"-2"	\$105.00
N18	(4) - 3/8" 1"	\$105.00
PORTAL CAPS & COVERS		PRICE
N55	Cap & Cover , (5) - 1/2" - 2-1/2"	\$227.00
N182	Cap & Cover, (1) - 8" - 12" pipe	\$403.00

Deckmate & Equipment Rails



Deckmate

Features:

- 18 Gauge Galvanized
- Welded Construction
- Self-flashing Design
- Standard 12" High



Equipment Rails

MODEL	OD OF PIPE	HGT. OF FLASHING	PRICE
DM1	3/8" - 2"	4 3/4"	\$58.00
DM3	1/4" - 4"	7 3/4"	\$74.00
DM5	4" - 7"	10 3/4"	\$115.00
DM7	6" - 11"	14 12/2"	\$172.00
DM8	7" - 13"	16 1/2"	\$224.00
DM9	10" - 18"	25 3/8"	\$358.00

LENGTH	PRICE
12"	\$149.00
18"	\$175.00
24"	\$215.18
36"	\$269.30
60"	\$383.25

*Note: Custom sizes available
7-8 days shipping

Terms and Conditions

Terms and Conditions

All sales by Stephany Associates Inc. and Stephany Supply are subject to the following terms and conditions. Terms or conditions appearing in buyer's purchase orders that are contrary to the following, shall not be binding on either Stephany Associates Inc. or Stephany Supply unless specifically agreed to in writing.

Order Acceptance:

All orders for any products ordered directly from any of our manufacturers for non-stock products are not able to be returned for any credit. Canceling orders on non-stock items after an order is placed, the customer is responsible for all cancellation charges. Anything ordered on a quick build (quick ship) are not able to be cancelled after the order has been placed.

Shipments and Pricing:

All prices, unless otherwise specified, are F.O.B. to Stephany Supply. In the case of orders that are drop shipped from one of our manufacturing facilities, the price is F.O.B at the manufacturer. None of the pricing and or quoted prices include Federal, State or Local taxes, which may be imposed on the sale of our product. All taxes which may be applied by any taxing authority because of this purchase shall be paid by the Customer. All quotations are valid for 15 business days. Published catalog prices are subject to change without notice. We exclude on all quote's installation, start-up, calibration, etc. unless specifically stated in a written and agreed upon quotation. All sales are expressly conditioned on the Customer's acceptance of the Terms and Conditions of Sale set forth herein. All shipments are made F.O.B. shipping point. Delivery to the initial carrier constitutes delivery and passage of title to the buyer.

Delivery:

Scheduled ship dates given are best estimates. Stephany Associates Inc. and Stephany Supply will not be held liable in any form if these dates are not kept unless specifically agreed to in writing prior to order entry.

Requested shipped items will be sent best way via UPS or designated carrier on a prepaid and add basis. Air freight or bus shipments will be sent only on a C.O.D. basis.

Customer is responsible for checking all shipments for shortages and/or visible damage and advising the carrier of any discrepancies on the delivery receipt within 24 hours.

Material Damage and Freight Claims:

Once the shipment leaves Stephany supply and or any of our manufacturers, it is the customer's responsibility to file claims for loss or damages incurred during transportation regardless of who chooses the freight carrier. All paperwork will be provided to the customer and any documentation needed to file proper claim. Stephany Associates or Stephany Supply does not assume liability or responsibility for final settlement or collection of any claims but will work with the customer to help find a fair resolution.

Terms and Conditions

Returns:

Any orders with non-stock items are unable to be returned for any credit. Any product that is returned must be current stocking products, undamaged and in the same condition as it left Stephany Supply. There must be prior approval from Stephany Supply to accept a return, and must include quote and or picking ticket, brought back to our facility and no shipments from 3rd party freight companies will be accepted. The fee for restocking is 25% 10 business days after the products leave Stephany Supply. The amount being credited will be determined by the original selling price of the order.

Payment:

All invoices are net thirty days from date of invoice. A service charge will be added after thirty days until full payment is received. Also, all reasonable legal and collection fees shall be assessed in the event it becomes necessary to collect an indebtedness.

Warranty:

Stephany Associates Inc. and Stephany Supply make no expressed warranties as to the goods sold, but extends to the buyer the manufacturer's standard warranty. Stephany Associates and Stephany Supply will not be held responsible for any warranty claims outside of these standard terms.