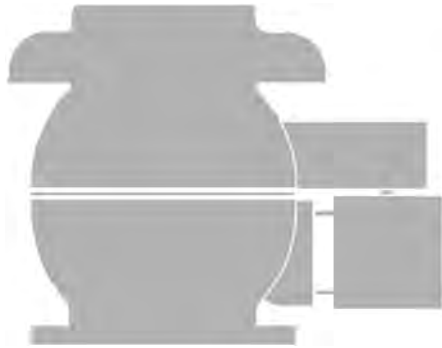
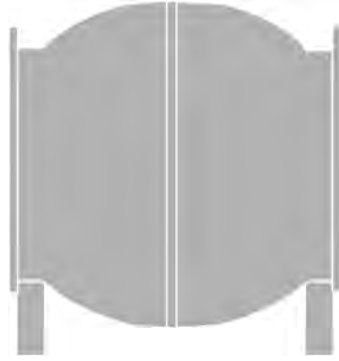


CV

Inline and Roof Mounted Fans



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CVD (Direct Drive Inline)	5
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INTRODUCTION

Loren Cook Company's Centri-Vane® and Centri-Vane® Stretch are constructed of aluminum and designed for straight-through air flow. Performance ranges from 50 to 31,200 CFM with static pressures to 6" w.g. The Centri-Vane® belt drive is offered in 9 sizes from 12 to 36. The Centri-Vane® direct drive is offered in 7 sizes from 8 to 20 in duct mounted inline configuration.



CVD



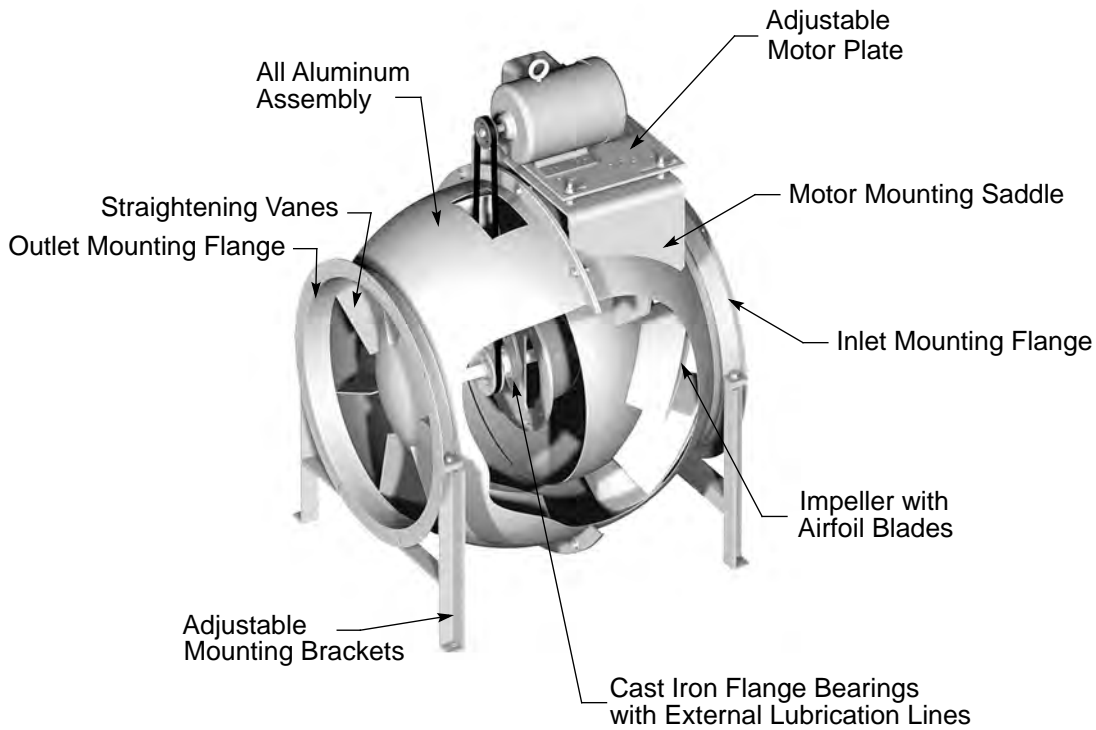
CVB



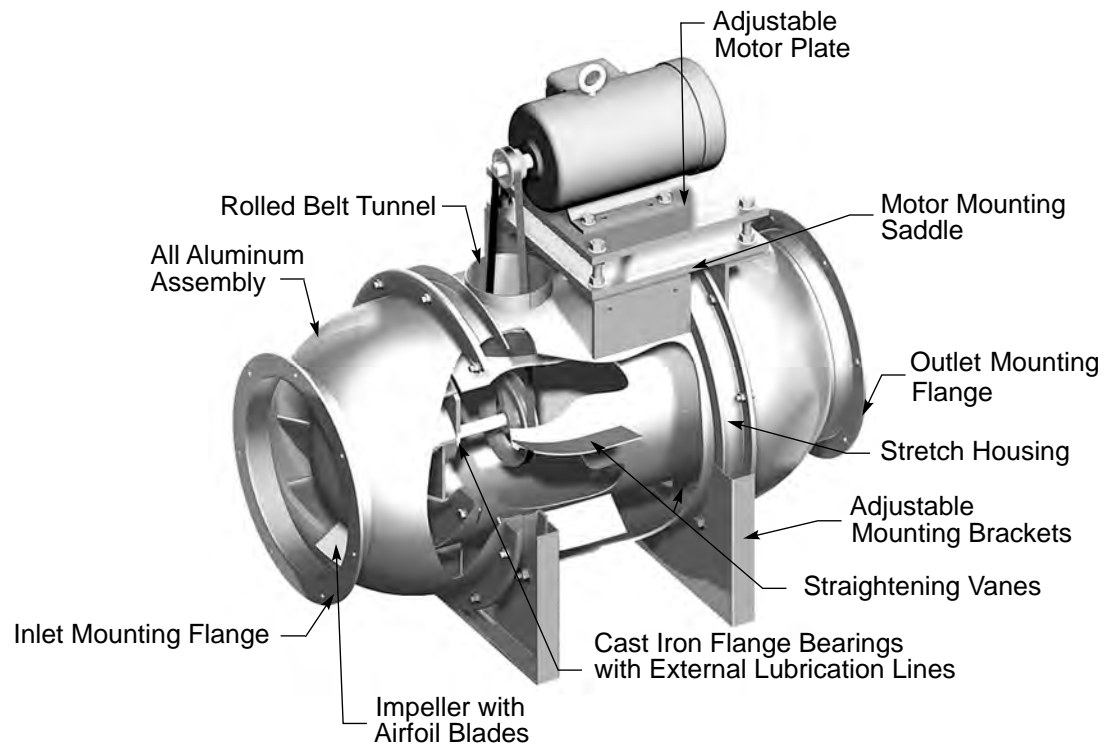
CVS

- Specially designed mixed-flow wheel provides unique performance with stable operation from free air to shutoff.
- True airfoil blades provide non-overloading horsepower characteristics.
- All aluminum construction reduces unit weight and associated installation costs.
- Adjustable mounting brackets permit mounting in any desired position.
- Compact straight-through design saves valuable floor space compared to a conventional centrifugal blower.
- Straightening vanes insure linear movement of air at the fan discharge providing higher efficiency and lower overall noise levels.
- UL / cUL 705 listing is standard on all Centri-Vane® units.
- Models CVB and CVD are licensed to bear the AMCA Certified Ratings Seal for Sound and Air Performance.
- Model CVS is licensed to bear the AMCA Certified Ratings Seal for Air Performance.

CVB



CVS



Description: Fan shall be a spun aluminum, duct mounted, direct driven, mixed-flow fan.

Certifications: Fan shall be listed by Underwriters Laboratories (UL 705) and UL listed for Canada (cUL 705). Fan shall bear the AMCA Certified Ratings Seal for Sound and Air Performance.

Construction: The fan shall be bolted and welded construction utilizing corrosion resistant fasteners. The spun aluminum housing shall be constructed of minimum .100 thick marine alloy aluminum with inlet and outlet flanges. Straightening vanes shall be utilized for uniform airflow. The adjustable mounting brackets shall be constructed of minimum .125 thick aluminum with extruded rubber isolation between bracket and fan housing. Unit shall bear an engraved aluminum nameplate and shall be shipped in ISTA Certified Transit Tested Packaging.

Wheel: Wheel shall be a non-overloading design utilizing airfoil blades for maximum efficiency. The aluminum airfoil blades shall be welded to a spun aluminum dome. The dome shall be bolted to an aluminum hub assembly. The hub shall be keyed and locked to the fan shaft utilizing two setscrews. Wheel shall be balanced in accordance with AMCA Standard 204-05, Balance Quality and Vibration Levels for Fans.

Motor: Motor shall be heavy duty type with permanently lubricated sealed bearings and furnished at the specified voltage, phase and enclosure.

Product: Fan shall be model CVD as manufactured by Loren Cook Company of Springfield, Missouri.

Centri-Vane® All Aluminum Mixed-Flow Fan Direct Drive



Dimensions

Size	A	B	C	D	E	F	G	Wheel Diameter	Thickness of Alum.	Approx. Ship. Wt.
8	8	13-1/4	13-7/16	7	1-5/16	11-1/4	10-1/4	10-1/4	.100	35
10	1	15	16-3/16	8-11/16		13	12-1/4	12-15/16	.125	65
12	1	17-1/8	19-1/4	9-15/16		15-1/8	14-1/8	15-9/16		82
14	1	19-1/8	22	11-7/16		17-1/8	16-1/4	18-1/4		93
16	1	21-9/16	24-7/8	12-11/16		19-9/16	18-1/4	20-15/16		120
18	1	24-1/2	27-3/4	14		22-1/2	20-3/8	23-9/16		166
20	2	26-3/8	30-1/2	15-3/4		24-3/8	22-1/2	26-1/4		206

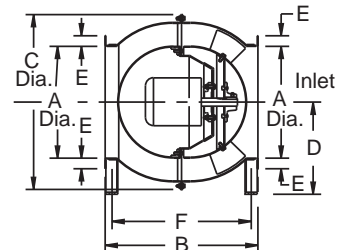
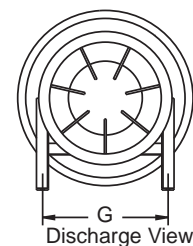
All dimensions in inches. Weights in pounds.



Loren Cook Company certifies that the CVD shown herein is 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 and comply with the requirements of the AMCA Certified Ratings Program.



Model CVD is furnished standard with UL 705 and cUL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.



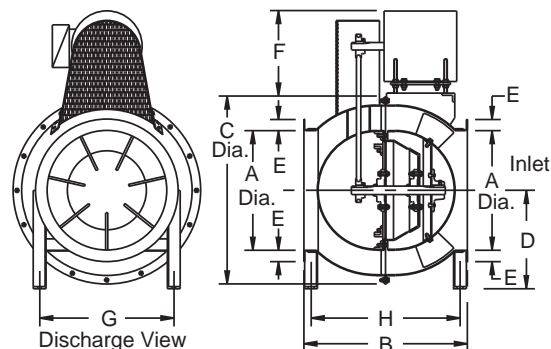
Centri-Vane® All Aluminum Mixed-Flow Fan Belt Drive



Loren Cook Company certifies that the CVB shown herein is 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 and comply with the requirements of the AMCA Certified Ratings Program.



Model CVB is furnished standard with UL 705 and cUL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.



Description: Fan shall be a spun aluminum, duct mounted, belt driven, mixed-flow fan.

Certifications: Fan shall be listed by Underwriters Laboratories (UL 705) and UL listed for Canada (cUL 705). Fan shall bear the AMCA Certified Ratings Seal for Sound and Air Performance.

Construction: The fan shall be bolted and welded construction utilizing corrosion resistant fasteners. The spun aluminum housing shall be constructed of minimum .125 thick marine alloy aluminum with inlet and outlet flanges. Straightening vanes shall be utilized for uniform airflow. Extended lube lines shall be furnished for lubrication of fan bearings. Aluminum adjustable motor mounting plate shall utilize threaded studs for positive belt tensioning. The adjustable mounting brackets shall be constructed of minimum .125 thick aluminum with extruded rubber isolation between bracket and fan housing. Unit shall bear an engraved aluminum nameplate and shall be shipped in ISTA Certified Transit Tested Packaging.

Wheel: Wheel shall be a non-overloading design utilizing airfoil blades for maximum efficiency. The aluminum airfoil blades shall be welded to a spun aluminum dome. The dome shall be bolted to an aluminum hub assembly. The hub shall be keyed and locked to the fan shaft utilizing two setscrews. Wheel shall be balanced in accordance with AMCA Standard 204-05, Balance Quality and Vibration Levels for Fans.

Motor: Motor shall be NEMA Design B with Class B insulation rated for continuous duty and furnished at the specified voltage, phase and enclosure.

Bearings: Bearings shall be designed and tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball type in a cast iron housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

Belts and Drives: Belts shall be oil and heat resistant, static conducting. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150% of the installed motor horsepower. The variable pitch motor drive must be factory set to the specified fan RPM.

Product: Fan shall be model CVB as manufactured by Loren Cook Company of Springfield, Missouri.

CVB Dimension Data

Size	A	B	C	D	E	F Max.
12	12	17-1/8	19-1/8	9-15/16	1-5/16	11-1/4
14	14	19-1/8	22	11-7/16		
16	16	21-9/16	24-7/8	12-11/16		
18	18	24-1/2	27-3/4	14		
20	20	26-3/8	30-1/2	15-3/4	1-9/16	13-1/4
24	24	31-1/4	36-1/2	18-5/8		
28	28	36	42	21-1/2		
32	32	40-7/8	48	24-7/16		
36	36	44-1/4	53-3/8	26-3/4		

Size	G	H	Wheel Diameter	Maximum Motor Frame	Thickness of Alum.	Approx. Ship. Wt. - lbs.
12	14-1/8	15-1/8	15-9/16	182T	.125	68
14	16-1/4	17-1/8	18-1/4			81
16	18-1/4	19-9/16	20-15/16	184T		93
18	20-3/8	22-1/2	23-9/16			175
20	22-1/2	24-3/8	26-1/4	213T		204
24	26-3/4	29-1/4	31-9/16	215T		279
28	30-3/4	34	36-7/8			381
32	35-3/16	38-7/8	42-3/16		495	
36	39-3/8	42-1/4	47-1/2		617	

All dimensions in inches. Weights in pounds, less motor.

Centri-Vane® Stretch All Aluminum Mixed-Flow Fan Belt Drive

Description: Fan shall be a spun aluminum, duct mounted, belt driven mixed-flow fan.

Certifications: Fan shall be listed by Underwriters Laboratories (UL 705) and UL listed for Canada (cUL 705). Fan shall bear the AMCA Certified Ratings Seal for Air Performance.

Construction: The fan shall be bolted and welded construction utilizing corrosion resistant fasteners. The spun aluminum housing shall be constructed of minimum .125 thick marine alloy aluminum with inlet and outlet flanges. Straightening vanes shall be utilized for uniform airflow. Extended lube lines shall be furnished for lubrication of fan bearings. Aluminum adjustable motor mounting plate shall utilize threaded studs for positive belt tensioning. The adjustable mounting brackets shall be constructed of minimum .100 thick aluminum. Unit shall bear an engraved aluminum nameplate and shall be shipped in ISTA Certified Transit Tested Packaging.

Wheel: Wheel shall be a non-overloading design utilizing airfoil blades for maximum efficiency. The aluminum airfoil blades shall be welded to a spun aluminum dome. The dome shall be bolted to an aluminum hub assembly. The hub shall be keyed and securely attached to the fan shaft utilizing two setscrews. Wheel shall be balanced in accordance with AMCA Standard 204-05, Balance Quality and Vibration Levels for Fans.

Motor: Motor shall be NEMA Design B with Class B insulation rated for continuous duty and furnished at the specified voltage, phase and enclosure.

Bearings: Bearings shall be designed and tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball type in a cast iron housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

Belts and Drives: Belts shall be oil and heat resistant, static conducting. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150% of the installed motor horsepower. The variable pitch motor drive must be factory set to the specified fan RPM.

Product: Fan shall be model CV-S as manufactured by Loren Cook Company of Springfield, Missouri.



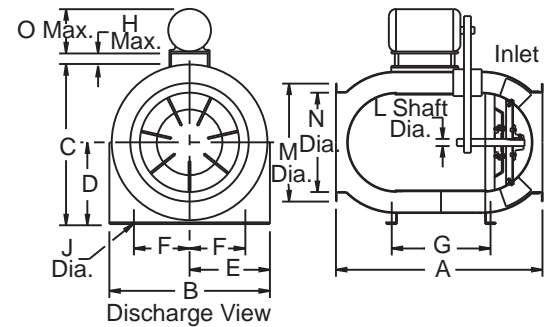
Loren Cook Company certifies that the CV-S shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.



Model CV-S is furnished standard with UL 705 and cUL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.

CV-S Dimension Data

Size	A	B	C	D	E	F	G	H
12	32-7/8	21-7/16	20-1/4	10-3/4	10-23/32	6-3/4	13-1/4	3-5/8
14	36	24-3/16	23	12-1/8	12-3/32	8-1/4	14-3/8	4-1/8
16	39-9/16	27-9/16	26-1/8	13-13/16	13-25/32	10	14-1/2	4-1/8
18	43-5/8	30-7/16	29	15-1/4	15-7/32	11-1/2	15-5/8	3-7/8
20	46-5/8	33-3/16	31-3/4	16-5/8	16-11/32	13	16-3/4	3-7/8
24	53-3/4	40	37-3/4	19-1/2	20	17	19	4-1/4
28	60-3/4	46	43-1/2	22-1/2	23	20	21	4-1/8
32	67-7/8	51	49-3/8	25-1/2	25-1/2	23	23-1/2	4-3/8
36	73-1/2	57	54-15/16	28-1/4	28-1/2	26	25-3/4	4-5/8

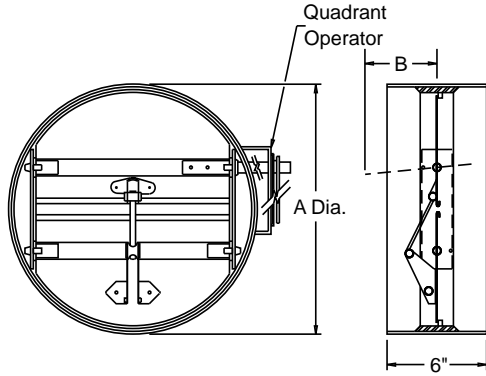


Size	J	L	M	N	O	Wheel Diameter	Max. Mtr. Frame	Approx. Ship. Wt. - lbs.	
12	9/16	1	14-5/8	12	9	15-9/16	182T	95	
14			16-5/8	14		18-1/4	184T	114	
16			18-5/8	16		20-15/16	213T	130	
18			20-5/8	18	10-1/2	23-9/16	213T	245	
20			22-5/8	20		26-1/4	215T	285	
24	11/16	1-3/16	27-1/8	24	13	31-9/16	215T	390	
28			31-1/8	28		36-7/8	254T	533	
32			35-1/8	32		42-3/16	256T	693	
36			1-15/16	39-1/8		36	47-1/2	256T	863

All dimensions in inches. Weights in pounds, less motor.

ACCESSORIES

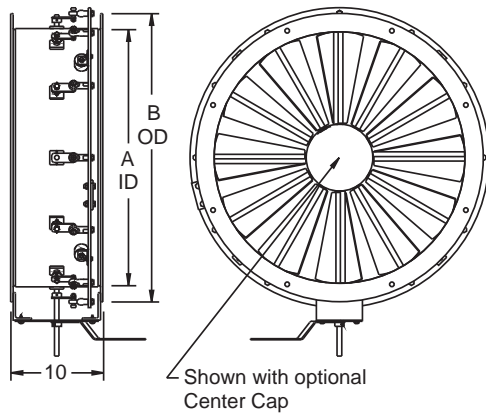
Volume Control Damper



Size	Catalog Number	A Diameter	B Open Height
80	8	8	1-23/32
100	10	10	2
120	12	12	2-3/4
140	14	14	3-13/32
160	16	16	4-3/32
180	18	18	4-3/16
200	20	20	4-9/16
240	24	24	5-27/32
280	28	28	7-9/32
320	32	32	8-1/8
360	36	36	9-5/8

All dimensions in inches.

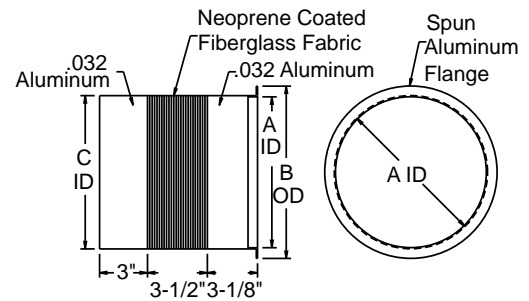
Inlet Vane Damper



Size	A	B
12	12-1/4	14-5/8
14	14-1/4	16-5/8
16	16-1/4	18-5/8
18	18-1/4	20-5/8
20	20-1/4	22-5/8
24	24-1/4	26-3/4
28	28-1/4	30-3/4
32	32-1/4	34-3/4
36	36-1/4	38-3/4

All dimensions in inches.

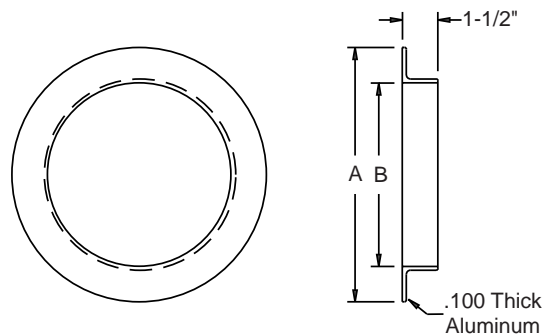
Flexible Duct Connector



Size	A	B	C
8	8-3/16	10-11/16	8-1/2
10	10-3/16	12-11/16	10-1/2
12	12-3/16	14-11/16	12-1/2
14	14-3/16	16-11/16	14-1/2
16	16-3/16	18-11/16	16-1/2
18	18-3/16	20-11/16	18-1/2
20	20-3/16	22-11/16	20-1/2
24	24-3/16	27-3/16	24-1/2
28	28-3/16	31-3/16	28-1/2
32	32-3/16	35-3/16	32-1/2
36	36-3/16	39-3/16	36-1/2

All dimensions in inches.

Companion Flange



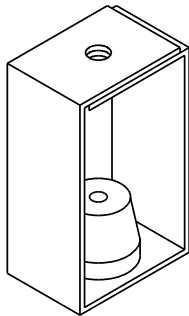
Size	A	B
8	10-11/16	8-3/16
10	12-11/16	10-3/16
12	14-11/16	12-3/16
14	16-11/16	14-3/16
16	8-11/16	16-3/16
18	20-11/16	18-3/16
20	22-11/16	20-3/16

All dimensions in inches.

Size	A	B
24	26-11/16	24-3/16
28	30-11/16	28-3/16
32	34-11/16	32-3/16
36	38-11/16	36-3/16

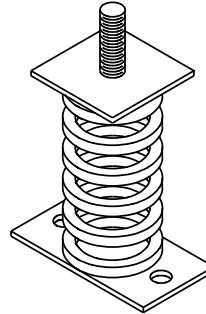
Isolators

Rubber-in-Shear- Ceiling Mounted



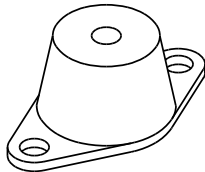
Unit	Rated Load
RC-75	75
RC-125	125
RC-175	175
RC-300	300

Free Standing Spring - Floor Mounted



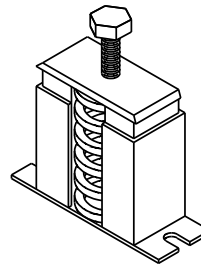
Unit	Rated Load	Spring. Rate (lbs./in.)
SF-70	70	51
SF-120	120	98
SF-220	220	196
SF-370	370	366

Rubber-in-Shear - Floor Mounted



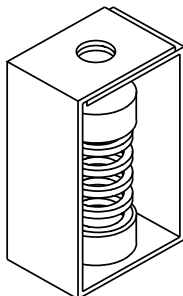
Unit	Rated Load
RF-55	55
RF-120	120
RF-220	220
RF-375	375

Housed Spring - Floor Mounted



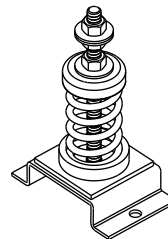
Unit	Rated Load	Spring. Rate (lbs./in.)
HF-120	120	98
HF-220	220	196
HF-320	320	302
HF-370	370	366

Spring - Ceiling Mounted



Unit	Rated Load	Spring. Rate (lbs./in.)
SC-35	35	23
SC-70	70	51
SC-125	125	100
SC-245	245	206
SC-370	370	370

Restrained Spring - Floor Mounted



Unit	Rated Load	Spring. Rate (lbs./in.)
RS-70	70	51
RS-120	120	98
RS-220	220	196
RS-370	370	366

Optional Coatings

LORENIZED™ is an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Coating must exceed 1,000 hour salt spray under ASTM B117 test method.

Cook Epoxy Powder is an electrostatically applied, baked epoxy powder coating. Final coating thickness is 2.5 - 3.5 mils. For outdoor applications an optional UV resistant topcoat is available to prevent cosmetic chalking of the coating.

Cook Phenolic Epoxy Powder is an electrostatically applied, baked phenolic epoxy powder coating. Final coating thickness is 2 - 4 mils. For outdoor applications an optional UV resistant topcoat is required to prevent deterioration of the coating.

Cook Easy Clean Powder is an electrostatically applied, baked modified epoxy silicone powder producing a high temperature "non-stick" coating. Final coating thickness is 1.3 - 1.7 mils.

Air Dry Phenolic (Heresite VR-504) is a conventional spray applied phenolic resin coating. Final coating thickness is 4 - 6 mils. For outdoor applications an optional UV resistant topcoat (Heresite UC-5500) is required to prevent deterioration of the coating.

Refer to the corrosion resistance guide in the **Compute-A-Fan®** software for a listing of the coatings above and their resistance to a variety of chemicals. Additional special coatings are available.

ACCESSORIES

Disconnect Switches

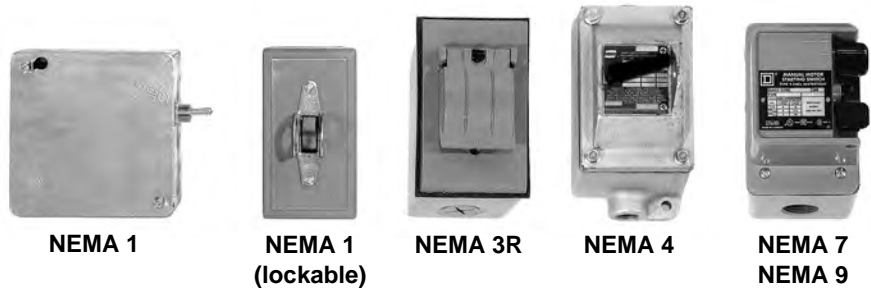
NEMA 1 - Indoor general purpose.

NEMA 1 (Lockable) - Indoor general purpose with locking capability.

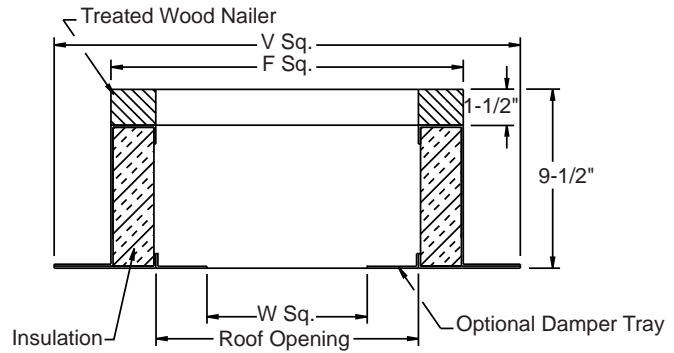
NEMA 3R - Exterior mount, rain-tight.

NEMA 4 - Watertight and dust-tight.

NEMA 7 and NEMA 9 - Lockable, indoor, explosion proof.



RCG/RCA Roof Curb



Size	Catalog Number		F Sq.	V Sq.	W Sq.	Roof Opening
	Galvanized	Aluminum				
12	RCG-18	RCA-18	18-1/2	22-1/2	11-3/4	15-1/2
14, 16	RCG-22	RCA-22	22-1/2	26-1/2	15-3/4	19-1/2
18, 20	RCG-26	RCA-26	26-1/2	30-1/2	19-3/4	23-1/2
24	RCG-30	RCA-30	30-1/2	34-1/2	23-3/4	27-1/2
28	RCG-34	RCA-34	34-1/2	38-1/2	27-3/4	31-1/2
32	RCG-40	RCA-40	40-1/2	44-1/2	33-3/4	37-1/2
36	RCG-46	RCA-46	46-1/2	50-1/2	39-3/4	43-1/2

All dimensions in inches.

Additional Accessories:

- Safety Screen Inlet or Outlet
- Weather Cover
- Belt Guard



LOREN COOK COMPANY

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