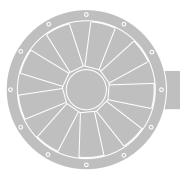
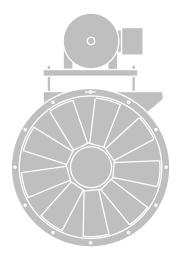




# **AVA** Adjustable Pitch Vane Axial Fan



Page
Introduction
Mounting Options
Product Nomenclature3
Duty Levels
Discharge Cones
Lorenized Fan Finish Specification4
AVAD Specification and Dimension Data5
AVAB Specification and Dimension Data6
Accessories



### AVAD/AVAB Adjustable Pitch Vane Axial Fan

Cook adjustable pitch vane axial fans are available in direct and belt drive models offering high efficiencies and high static pressures in a space-efficient inline package. The AVA is available in sizes 35 inch through 79 inch with flow rates of 400 CFM to 213,403 CFM and static pressures up to 13 inches. The AVA features cast aluminum airfoil blades that can be pitch adjusted to achieve a broad range of performance. The AVA adjustable pitch vane axial fan is available with a full range of accessories allowing it to be adapted to many different applications.



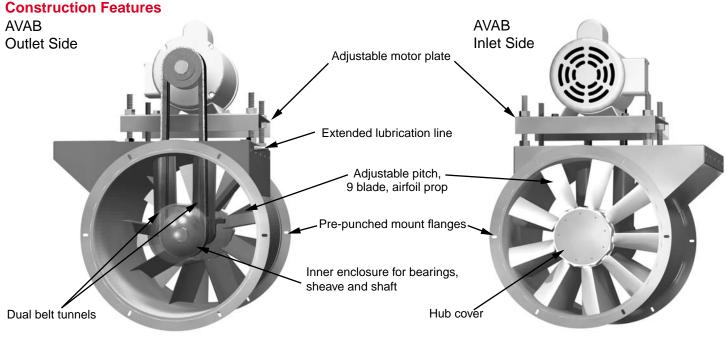
AVAD



AVAB

- High efficiency nine blade cast aluminum propeller assembly with airfoil blade design.
- Minimum 3/16" steel housing with continuously welded seams, and integral inlet and outlet flanges pre-punched for mounting.
- Copper lubrication lines are standard on belt drive units and also standard on direct drive units when applicable.
- The motor plate is attached to a heavy welded sub-base and features threaded studs for positive belt tensioning.
- Direct drive units feature a totally enclosed motor installed in a motor tunnel surrounded by welded straightening vanes.
- Belt drive units feature an inner drum that encloses the driven sheave, shaft and bearings. The low-drag dual tunnels, separating belts from the airstream, also protect the extended lubrication lines. Removable covers provide access to the shaft, bearings and belts.
- All steel fan components feature a Lorenized™ powder coat finish.
- Bearings are designed and tested specifically for use in air handling applications. Bearings are heavy duty regreasable ball or roller type in a cast iron pillow block housing selected for a minimum L50 life in excess of 500,000 hours for horizontal units and L50 life in excess of 250,000 hours for vertical units at maximum cataloged operating speed, horsepower and static pressure.
- Drives utilize oil and heat resistant, non-static belts and precision machined cast iron sheaves which are keyed and securely attached to the wheel and motor shafts. Drives are sized for 150 percent of motor horsepower.
- Power (BHP) ratings for all belt drive fans includes drive loss to ensure accurates selection of the motor.
- Accurate performance is assured through compliance with the AMCA Certified Ratings Program. The AVAD and AVAB are licensed to bear the AMCA Seal for Air and Sound Performance.

### Information AVAD/AVAB



#### **Mounting Options** Vertical



Vertical mounting brackets provide for vertical installation, floor or ceiling mount, with upblast or downblast configuration. Vibration isolators can be used with the mounting configurations. Ceiling brackets with downblast configuration shown.

#### Lorenized<sup>™</sup> Fan Finish Specification

lators.

All steel fan components shall be finished with 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. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

Standard Color - Gray Final Coat Thickness - Minimum 2 mils

#### **Polyester Powder Testing Information**

Property	Test Method
Impact Resistance	ASTM D2794
Pencil Hardness	ASTM D3363
Crosshatch Adhesion	ASTM D3359 Method B
Humidity Resistance	ASTM D2247
Salt Spray	ASTM B117
Continuous Service Temperature	N/A

**Ceiling Horizontal** 



Side-angle supports provide for suspension of the

#### Roof Exhauster



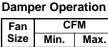
AVAD and AVAB, when used with butterfly damper, panel and curb. can be mounted as a roof exhauster. Allow 1/8" static pressure resistance for damper. (See table, **CFM Limitation for** Damper Operation, for

additional information.)

#### **Product Nomenclature**

Sample - 57AVAB-19

- 57 Prop Diameter in inches. Sizes range from 35 to 79. AVA - Adjustable Pitch Vane Axial
- B Drive Type D - Direct Drive
  - B Belt Drive
- 19 Prop angle in degrees



**CFM Limitation for** 

	Size	Min.	Max.
I	35	8800	21700
I	39	10900	26700
I	44	13600	33600
Ī	49	17000	41900
Ī	57	22800	56200
I	63	27800	68400
I	71	35200	86700
l	79	43600	107200

Mounting feet, bolted to the inlet and outlet flanges, can be field rotated for different motor positions. The mounting

feet provide a solid base

for mounting to the floor,

ceiling or wall. They can

be used with vibration iso-

Floor, Ceiling, Wall

or Platform

unit. The supports can be used with vibration isolators.

Value

100 inch-pounds 2H (Mar or Gouge) 100 percent

1000+ Hours 1000+ Hours 230°F (110°C)

### AVAD/AVAB Information

#### **Duty Levels**

Fan	Duty	Bore	Bearing					HP Rang	jes Per Bla	de Angle				
Size	Duty	Size	Туре	10°	13°	16°	19°	22°	25°	28°	31°	34°	37°	40°
35	1	1-3/16	1	1-2	1-2	1-3	1-3	1-3	1-3	1-3	1-3	1-5	1-5	1-5
35	2	1-11/16	1	3	3-5	5	5	5-7.5	5-10	5-10	5-10	7.5-10	7.5-10	7.5-10
35	3	2-7/16	1	5-10	7.5-10	7.5-10	7.5-10	10	15	15-20	15-20	15-20	15-20	15-25
35	4	1-15/16	2	15-30	15-40	15-50	15-50	15-60	20-60	25-60	25-75	25-75	25-75	30-75
39	1	1-3/16	1	1-2	1-2	1-2	1-3	1-3	1-3	1-3	1-3	1-5	1-5	1-5
39	2	1-11/16	1	3	3-5	3-5	5	5	5-7.5	5-10	5-10	7.5-10	7.5-10	7.5-10
39	3	2-7/16	1	5-7.5	7.5-10	7.5-10	7.5-10	7.5-10	10	15-20	15-20	15-20	15-20	15-20
39	4	1-15/16	2	10-25	15-40	15-50	15-60	15-60	15-60	25-60	25-75	25-75	25-75	25-75
44	1	1-11/16	1	2-3	2-3	2-5	2-5	2-5	2-7.5	2-7.5	2-7.5	2-7.5	2-10	2-10
44	2	2 -7/16	1	5-7.5	5-7.5	7.5-10	7.5-10	7.5-10	10-15	10-15	10-15	10-20	15-20	15-20
44	3	2-3/16	2	10-50	10-50	15-60	15-60	15-60	20-75	20-75	20-75	25-75	25-75	25-75
44	4	2-11/16	2	-	60-75	75-100	75-100	75-100	100	100	100	100	100	100
49	1	1-11/16	1	3	3	3	3-5	3-5	3-5	3-7.5	3-7.5	3-7.5	3-7.5	3-7.5
49	2	2 -7/16	1	5-7.5	5-7.5	5-7.5	7.5-10	7.5-10	7.5-10	10-15	10-15	10-15	10-20	10-20
49	3	2-3/16	2	10-40	10-60	10-60	15-60	15-60	15-60	20-60	20-60	20-60	25-60	25-60
49	4	2-15/16	2	-	-	75	75-100	75-100	75-100	75-100	75-100	75-100	75-100	75-100
57	1	1-11/16	1	-	-	3	3	3	3	3-5	3-5	3-5	3-5	3-5
57	2	2-7/16	1	3-5	3-5	5-7.5	5-7.5	5-10	5-10	7.5-10	7.5-10	7.5-10	7.5-15	7.5-15
57	3	2-3/16	2	7.5-40	7.5-40	10-50	10-50	15-50	15-50	15-50	15-50	15-50	20-50	20-50
57	4	2-11/16	2	50-75	50-75	60-75	60-100	60-100	60-125	60-125	60-125	60-125	60-125	60-125
57	5	2-15/16	2	-	-	-	-	-	150	150	150-200	150-200	150-200	150-200
63	1	2 -7/16	1	3-5	3-5	3-7.5	3-7.5	3-10	3-10	3-10	3-15	3-15	3-15	3-15
63	2	2 -3/16	2	7.5-30	7.5-40	10-40	10-50	15-50	15-50	15-50	20-50	20-50	20-50	20-50
63	3	2-11/16	2	40-60	50-75	50-75	60-100	60-100	60-125	60-125	60-125	60-125	60-125	60-125
63	4	3 -3/16	2	-	100	100-125	125	125-150	-	-	-	-	-	-
63	5	2-15/16	2	-	-	-	-	-	150	150	150-200	150-200	150-200	150-200
71	1	2 -7/16	2	7.5-40	7.5-40	7.5-50	7.5-60	7.5-60	7.5-75	7.5-75	7.5-75	7.5-75	7.5-75	7.5-75
71	2	2-15/16	2	50-60	50-75	60-75	75	75-100	100-200	100-200	100-200	100-200	100-200	100-200
71	3	3 -3/16	2	75	100	100	100-125	125	-	-	-	-	-	-
71	4	3-11/16	2	100-150	125-150	125-200	150-200	150-200	-	-	-	-	-	-
79	1	2 -7/16	2	10-30	10-40	10-40	10-50	10-60	10-60	10-100	10-100	10-100	10-100	10-100
79	2	2-15/16	2	40-60	50-60	50-75	60-75	75-100	75-100	125-150	125-200	125-200	125-200	125-200
79	3	3 -3/16	2	75	75	100	100-125	125	125-150	200	-	-	-	-
79	4	3-11/16	2	100	100-150	125-200	150-200	150-200	200	-	-	-	-	-

Bearing Type 1 - Heavy duty pillow block ball bearing. Bearing Type 2 - Heavy duty pillow block spherical roller bearing.

#### Inlet/Outlet Cones

Cones are used on the fixed pitch vane axial fan to adapt it to larger or smaller size ducts on both the inlet and outlet sides. For example, a Diverging Outlet Cone, as illustrated in Figure A, connects the fan to a larger duct resulting in static regain. The Static Regain table provides examples of the regain for a cone with an angle of 25 degrees to 30 degrees and varying fan outlet velocities.

For other diverging outlet cones, an approximate determination of static regain can be obtained if the following formula is used.

$$SP_2 = SP_1 + .45(VP_1 - VP_2)$$

A Converging Inlet Cone, as illustrated in Figure B, is used to connect a large duct to the fan inlet. Due to the tapered shape of the cone, friction loss is negligible. To determine this slight difference in static pressure, the following formula can be used.

 $SP_2 = SP_1 - .08(VP_1 - VP_2)$ 

A Converging Outlet Cone, as illustrated in Figure C, is used to connect a small duct to the outlet flange of the fan. The across-the-cone change in velocity pressure is added to the fan's static pressure. To determine the change in static pressure, the following formula can be used.

$$SP_2 = SP_1 - (VP_1 - VP_2)$$

#### Static Regain

Velocity (FPM)	SP (in inches)	Velocity (FPM)	SP (in inches)	Velocity (FPM)	(in i
1000	.012	2750	.099	4500	
1250	.020	3000	.117	4750	
1500	.029	3250	.138	5000	
1750	.040	3500	.160	5250	
2000	.052	3750	.183	5500	
2250	.065	4000	.207	5750	
2500	.081	4250	.233	6000	

SP inches)	Velocity (FPM)	VP (in inches)
.261	500	.0156
.290	600	.0225
.323	700	.0305
.356	800	.0400
.392	900	.0504

.0625

.0758

.0900

.106

.122

.141

1000

1100

1200

1300

1400

1500

	V	_		
Small Duct	Fan		/erging itlet ne	Large Duct
Figure A	Air	Flow	$\rightarrow$	
VP <sub>1</sub>	VP <sub>2</sub>			
	ing Fa	an	Sn	nall

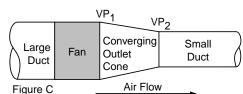
VP<sub>2</sub>

Duct



Inlet

Duct



Velocity Pressure -	VP=(velocity/4005) <sup>2</sup>
---------------------	---------------------------------

•		-(10000	<i>y</i> /1000)
5)		Velocity (FPM)	VP (in inches)
		1600	.160
		1700	.181
		1800	.203
	1	1900	.226
		2000	.250
		2250	.316
		2500	.391
		2750	.473
		3000	.562
		3250	.661
		3500	.768

	Velocity (FPM)	VP (in inches)
1	3750	.880
1	4000	1.000
1	4250	1.130
1	4500	1.265
1	4750	1.410
1	5000	1.560
1	5250	1.720
1	5500	1.890
	5750	2.060
1	6000	2.250

.428

.467

### Specifications and Dimension Data AVAD

**Description** - Fan shall be a direct drive, adjustable pitch, vane axial fan.

- **Certifications** Fan shall be manufactured at an ISO 9001 certified facility. 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 and sound performance.
- **Construction** Fan shall be of bolted and welded construction utilizing corrosion resistant fasteners. Housing shall be minimum 7 gauge steel with continuously welded seam. Housing shall incorporate minimum 2" x 2" x 1/4" welded inlet and outlet flanges pre-punched for mounting. Housing shall include welded steel discharge vanes surrounding a "C" face mount motor tunnel. Copper lube lines shall be extended from motor bearings to the outside of the housing when applicable. Unit shall bear an engraved aluminum nameplate.
- **Coating** All steel fan components shall be Lorenized<sup>™</sup> with 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. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.
- **Propeller** Propeller shall be an adjustable pitch, cast aluminum, 9 blade airfoil design, factory set to required pitch. Individual blades shall be cast with a threaded fastener and feature a conical section to secure the blade to the cast aluminum hub and to provide provision for pitch adjustment. The propeller hub shall be keyed and locked to the shaft utilizing a split taper bushing and retaining plate. Propeller shall be balanced in accordance with AMCA Standard 204-96, *Balance Quality and Vibration Levels for Fans*, Category BV-3.

Motor - Motor shall be heavy duty type furnished at the specified voltage and phase.

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

### Adjustable Pitch Vane Axial Fan Direct Drive





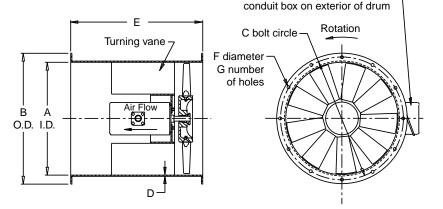
Loren Cook Company certifies that the AVAD shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.



Type AVAD is furnished standard with UL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.



Type AVAD is furnished standard with  $_{\rm C}{\rm UL}$  listing (Power Ventilator) when furnished with factory supplied motor.



#### AVAD Dimension Data

AVAD Size	A	В	С	D	E	F	G	TEFC Max. Frame Size	Approx. Ship Wt. Lbs.*
35	35-1/2	39-7/8	38	7 ga.	30	9/16	12	256TC	380
39	39-3/8	43-7/8	41-7/8	7 ga.	30	9/16	12	256TC	435
44	44-1/8	49-5/8	47-3/8	7 ga.	34	9/16	12	326TC	620
49	49-1/4	54-3/4	52-1/2	7 ga.	34	9/16	12	326TC	680
57	57-1/8	62-5/8	60-3/8	1/4	42	9/16	12	405TC	1175
63	63	68-1/2	66-1/4	1/4	42	11/16	16	405TC	1285
71	70-7/8	77-5/8	75	1/4	54	11/16	16	449TC	2020
79	78-3/4	85-1/2	82-7/8	1/4	54	11/16	16	449TC	2215

Extended electric leads with

All dimensions in inches. \*Less motor.

### AVAB Specifications and Dimension Data

### Adjustable Pitch Vane Axial Fan Belt Drive





Loren Cook Company certifies that the AVAB 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.



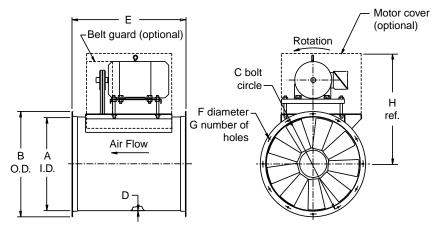
Type AVAB is furnished standard with UL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.



Type AVAB is furnished standard with  $_{\rm C}{\rm UL}$  listing (Power Ventilator) when furnished with factory supplied motor.

**Description** - Fan shall be a belt drive, adjustable pitch, vane axial fan.

- **Certifications** Fan shall be manufactured at an ISO 9001 certified facility. 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 and sound performance.
- **Construction** Fan shall be of bolted and welded construction utilizing corrosion resistant fasteners. Housing shall be minimum 3/16" steel with continuously welded seam. Housing shall incorporate minimum 2" x 2" x 1/4" continuously welded inlet and outlet flanges pre-punched for mounting. Housing shall include welded steel discharge vanes and aerodynamically designed dual belt tunnels. Copper lube lines shall be extended from the bearings to the outside of the housing. Adjustable motor plate shall be attached to a welded motor sub-base and shall utilize threaded studs for positive belt tensioning. Unit shall bear an engraved aluminum nameplate.
- **Coating** All steel fan components shall be Lorenized<sup>™</sup> with 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. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.
- **Propeller** Propeller shall be an adjustable pitch, cast aluminum, 9 blade airfoil design, factory set to required pitch. Individual blades shall be cast with a threaded fastener and feature a conical section to secure the blade to the cast aluminum hub and to provide provision for pitch adjustment. The propeller shall be keyed and locked to the shaft utilizing a split taper bushing and retaining plate. Propeller shall be balanced in accordance with AMCA Standard 204-96, *Balance Quality and Vibration Levels for Fans*, Category BV-3.
- **Motor** Motor shall be heavy duty type 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 or roller type in a cast iron pillow block housing selected for a minimum L50 life in excess of 500,000 hours for horizontal units, and L50 life in excess of 250,000 hours for vertical units at maximum cataloged operating speed.
- **Blower Shaft** Blower shaft shall be AISI C-1045 hot rolled and accurately turned, ground and polished. Shafting shall be sized for a critical speed of at least 125 percent of maximum RPM.
- **Belts and Drives** Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron, fixed pitch type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150 percent of the installed motor horsepower.
- **Product** -Fan shall be model AVAB as manufactured by Loren Cook Company of Springfield, Missouri.



#### **AVAB** Dimension Data

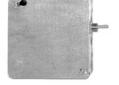
AVAB Size	Α	В	С	D	E	F	G	н	ODP Max. Motor Frame	Approx. Ship Wt. Lbs.*
35	35-1/2	39-7/8	38	3/16	43	9/16	12	35-1/8	365T	820
39	39-3/8	43-15/16	41-7/8	1/4	43	9/16	12	37-1/8	365T	940
44	44-1/8	49-5/8	47-3/8	1/4	47	9/16	12	42-5/8	405T	1440
49	49-1/4	54-3/4	52-1/2	1/4	47	9/16	12	43-91/6	405T	1520
57	57-1/8	62-5/8	58-7/8	1/4	61	9/16	12	44-5/8	445T	2150
63	63	68-1/2	66-1/4	1/4	61	11/16	16	46-3/4	445T	2400
71	70-7/8	77-5/8	75	3/8	72	11/16	16	64-1/4	445T	3850
79	78-3/4	85-9/16	82-7/8	3/8	72	11/16	16	67-1/4	445T	4200

All dimensions in inches. \*Less motor.

## Accessories AVAD/AVA

#### **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.



NEMA 1







NEMA 1

(lockable)

NEMA 4

NEMA 3R NEMA 7

NEMA 9

#### Belt Guard



A belt guard is designed to cover the top, front and sides of the drive assembly. Belt quards are constructed of minimum 18 gauge Lorenized<sup>™</sup> steel and have an open back to allow for inspection or belt tightening. Belt guards are factory installed.

#### Inlet/Outlet Guard



Inlet/outlet guards are used in non-ducted installations to protect personnel and prevent debris from entering the fan.

#### **Motor Cover**



The motor cover encloses the motor and drive assembly and serves as an OSHA belt guard. The motor cover is constructed of 18 gauge Lorenized<sup>™</sup> steel. Motor covers are factory installed.

#### **Inlet/Outlet Companion** Flange

Inlet/outlet companion Flanges are available for use in conjunction with the standard flanged inlet/outlet. The inlet/outlet companion flange is attached to the adjacent ductwork to provide an exact mate to the flanged connection on the fan.

#### Inlet/Outlet Flex Duct Connector



Flex duct connectors are available for the inlet or outlet of the AVAD/AVAB. These connectors provide a flexible connection between the fan and the attached ductwork. This reduces the transmission of noise and vibration to the ductwork as well as allowing for slight misalignment and easy removal of the fan without disturbing the rigid ductwork. Flex duct connectors are constructed of reinforced neoprene fabric and aluminum bands.

#### Mounting Feet

Mounting feet, bolted to the inlet and outlet flanges, provide a solid base for mounting to the floor, ceiling or wall. The mounting feet can be used with vibration isolators.

#### Mounting Brackets

Mounting brackets are securely welded in place in either the vertical or horizontal discharge configurations and are based upon the specific location requirements. The bracket design allows for use with vibration isolators in all configurations, when required.

#### Inlet Bell

An inlet bell provides for more uniform airflow to the fan blades and is normally used when no inlet ductwork is present. When a nonducted vane axial fan is installed without an inlet bell, system effect will occur due to the uneven loading of the fan blades.

#### Inlet Cone/Outlet Cone

Normally used to adapt ductwork to a specific size vane axial fan. Depending on the location of the installation, the velocity pressure change can equate to static pressure regain or static pressure loss.

#### Sound Muffler

A sound muffler can be mounted on both the inlet or outlet of the unit and is used for sound critical applications. The sound muffler is not for use with wet atmospheres, velocities greater than 5000 FPM, and temperatures above 250°F.

#### **Bufferfly Dampers**

Butterfly dampers provide for a weatherproof closure for outdoor vertical discharge applications. The dampers must be used in conjunction with optional curb panel for roof curb mounting.

#### Curb Panel

A curb panel, when used in conjunction with optional butterfly dampers, converts the unit to a vane axial roof upblast unit. The curb panel is used for mounting on a roof curb.

#### Inspection Door

An inspection door allows for ease of access to the propeller when the unit is installed in a system.

#### Thrust Restraints Kit

Thrust restraints minimize fan movement when the unit thrust ratio exceeds weight ratio. Thrust restraints require isolators. The kit includes two mounting brackets, welded to the fan housing, and two brackets shipped loose for duct work mounting.

### **AVAD/AVAB** Accessories

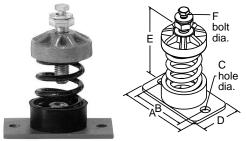
# Spring Isolator - Ceiling Mounted



	6	
	ß	
		≯⋋
В.	A	
	$\sim$	

Unit	Rated Load (lbs.)	Spring. Rate (lbs./in.)	Α	В	С	D	Approx. Ship Wt. Lbs.
SC-35	35	23	3-11/16	2-1/4	5-1/4	1/2	2
SC-70	70	51	3-11/16	2-1/4	5-1/4	1/2	2
SC-125	125	100	3-11/16	2-1/4	5-1/4	1/2	2
SC-245	245	206	3-11/16	2-1/4	5-1/4	1/2	2
SC-370	370	370	3-11/16	2-1/4	5-1/4	1/2	2
SC-500	500	500	3-11/16	2-1/4	5-1/4	5/8	2
SC-1000	1000	870	5-9/16	3-5/8	8-9/16	3/4	5
All dimensions in	n inches.						

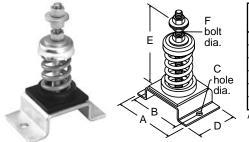
#### Free Standing Spring Isolator - Floor Mounted



Unit	Rated Load (Ibs.)	Spring. Rate (Ibs./in.)	Α	В	С	D	E	F	Approx. Ship Wt. Lbs.
SF-70	70	51	2-5/8	**	11/16	2-5/8	3-1/2	3/8	2
SF-120	120	98	4-1/2	3-1/2	9/16	2-1/2	3-1/2	3/8	2
SF-220	220	196	4-1/2	3-1/2	9/16	2-1/2	3-1/2	3/8	2
SF-370	370	366	4-1/2	3-1/2	9/16	2-1/2	3-1/2	3/8	2
SF-625	625	419	7	5-1/2	11/16	4	4-1/2	3/8	4
SF-1250	1250	1096	7	5-1/2	11/16	4	4-3/4	3/8	5

All dimensions in inches. Isolators listed are designed to provide a minimum of 50 percent of overload capacity. A single hole is provided at the center of the plate.

### **Restrained Spring Isolator - Floor Mounted**

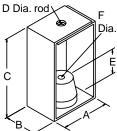


Unit	Rated Load (Ibs.)	Spring. Rate (Ibs./in.)	Α	В	С	D	Е	F	Approx. Ship Wt. Lbs.
RS-70	70	51	4-3/4	3-3/4	7/16	3	5	1/2	3
RS-120	120	98	4-3/4	3-3/4	7/16	3	5	1/2	3
RS-220	220	196	4-3/4	3-3/4	7/16	3	5	1/2	3
RS-370	370	366	4-3/4	3-3/4	7/16	3	5	1/2	3
RS-625	625	419	8	6-1/2	11/16	4	7-1/2	5/8	6
RS-1250	1250	1096	8	6-1/2	11/16	4	7-1/2	5/8	7

All dimensions in inches. Isolators listed are designed to provide a minimum of 50 percent of overload.

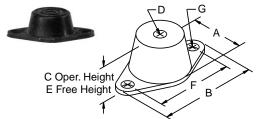
#### **Rubber-in-Shear Isolator - Ceiling Mounted**





Unit	Rated Load (Ibs.)	А	В	С	D	Е	F	Approx. Ship Wt. Lbs.
RC-75	75	2-5/32	1-1/2	2-23/32	11/16	15/32	3/8	1
RC-125	125	2-5/32	1-1/2	2-23/32	11/16	15/32	3/8	1
RC-175	175	3-5/32	2-1/4	5-11/16	3/4	1-31/64	3/4	2
RC-300	300	3-5/32	2-1/4	5-11/16	3/4	1-31/64	3/4	2
RC-450	450	3-5/32	2-1/4	5-11/16	3/4	1-31/64	3/4	2
RC-700	700	4	4-3/4	8	3/4	1-1/2	3/4	3
RC-1100	1100	4	4-3/4	8	3/4	1-1/2	3/4	5
All dimensions	s in inches.							

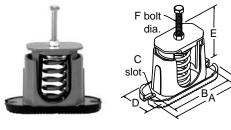
#### **Rubber-in-Shear Isolator - Floor Mounted**



Unit	Rated Load (lbs.)	A	В	С	D	Е	F	G	Approx. Ship Wt. Lbs.
RF-55	55	1-13/16	3-3/16	1-7/64	5/16 NC	1-1/2	2-3/8	11/32	1
RF-120	120	2-3/8	3-7/8	1-1/4	3/8 NC	1-3/4	3	11/32	1
RF-220	220	2-3/8	3-7/8	1-1/4	3/8 NC	1-3/4	3	11/32	1
RF-375	375	2-3/8	3-7/8	1-1/4	3/8 NC	1-3/4	3	11/32	1
RF-600	600	3-1/4	5-1/2	2	1/2 NC	2-1/2	4-1/8	9/16	2
RF-1100	1100	3-1/4	5-1/2	2	1/2 NC	2-1/2	4-1/8	9/16	2
All dimonsio	ns in inchos								

All dimensions in inches.

#### **Housed Spring Isolator - Floor Mounted**



Unit	Rated Load (lbs.)	Spring. Rate (Ibs./in.)	Α	В	С	D	Е	F	Approx. Ship Wt. Lbs.
HF-120	120	98	6-1/8	5-5/8	5/16	2-1/8	3-1/2	3/8	2
HF-220	220	196	6-1/8	5-5/8	5/16	2-1/8	3-1/2	3/8	2
HF-320	320	302	6-1/8	5-5/8	5/16	2-1/8	3-1/2	3/8	2
HF-370	370	366	6-1/8	5-5/8	5/16	2-1/8	3-1/2	3/8	2
HF-500	500	500	6-1/8	5-5/8	5/16	2-1/8	3-1/2	3/8	2
HF-700	700	700	6-1/8	5-5/8	5/16	2-1/8	3-1/2	3/8	2
HF-800	800	588	9	7-1/2	7/16	3-1/2	5	5/8	13
HF-1000	1000	826	9	7-1/2	7/16	3-1/2	5	5/8	13

All dimensions in inches. Isolators listed are designed to provide a minimum of 50 percent of overload capacity.



### LOREN COOK COMPANY

2015 E. DALE STREET SPRINGFIELD, MO 65803-4637 417.869.6474 FAX 417.862.3820 lorencook.com