



COOK

SUBMITTAL

PROJECT: 16 LOTS BREWING CO

LOCATION: Newport, KY

ENGINEER: Marque Engineering

CONTRACTOR: Mechanical Optimizers

SUBMITTED BY: Steve Forbeck
Controlled Air Inc.
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Cincinnati, OH 45241

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E-MAIL: steve@controlled-air.com

DATE: 1/5/2023

LOREN COOK COMPANY



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417.869.6474 • fax 417.869.2520
lorencook.com



COOK



MARK: EF-1

PROJECT: 16 LOTS BREWING CO

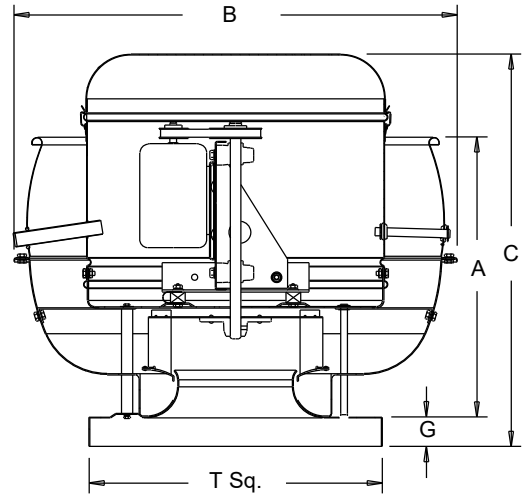
DATE: 1/5/2023

ACRU-HP

Upblast Centrifugal Exhaust Ventilator Roof Mounted/Belt Drive

STANDARD CONSTRUCTION FEATURES:

All aluminum housing - Backward inclined all aluminum wheel - Two piece top cap with stainless steel quick release latches - One piece bottom spinning - Welded curb cap corners - Birdscreen - Vibration isolators - Lifting Lugs - Permanently lubricated ball bearing motors - Oil and heat resistant, static conducting belts - Adjustable pitch drives through 5 hp motor - Corrosion resistant fasteners - Regreasable bearings in a cast iron pillow block housing, rated at 200,000 hours average life - All fans factory adjusted to specified fan RPM - Transit tested packaging. Standard motors ship factory installed.



Performance (*Bhp includes 12% drive loss)

Qty	Catalog Number	Flow (CFM)	SP (inwc)	Fan RPM	Power* (HP)	FEG
1	150RH6B	780	2.00	1821	.628	n/a(<1HP)

Altitude (ft): 1004 Temperature (F): 70

Motor Information

HP	RPM	Volts/Ph/Hz	Enclosure	FLA	Mounted
3/4	1725	208/3/60	ODP -SE	3.5	Yes

FLA based on NEC (2017) Table 430.250

Sound Data Inlet Sound Power by Octave Band

1	2	3	4	5	6	7	8	LwA	dBA	Sones
86	83	76	71	68	69	67	61	76	65	15.1

- Distance from Sound source 5 ft

Accessories:

- DRIVES (1.5 SF) @ 1821 RPM
- DISCONNECT NEMA 1 PRE-WIRED
- BD-18 DAMPER
- ROOF CURB RCG 22 18H -C+T+N
- SPARE BELT SET

Dimensions (inches)

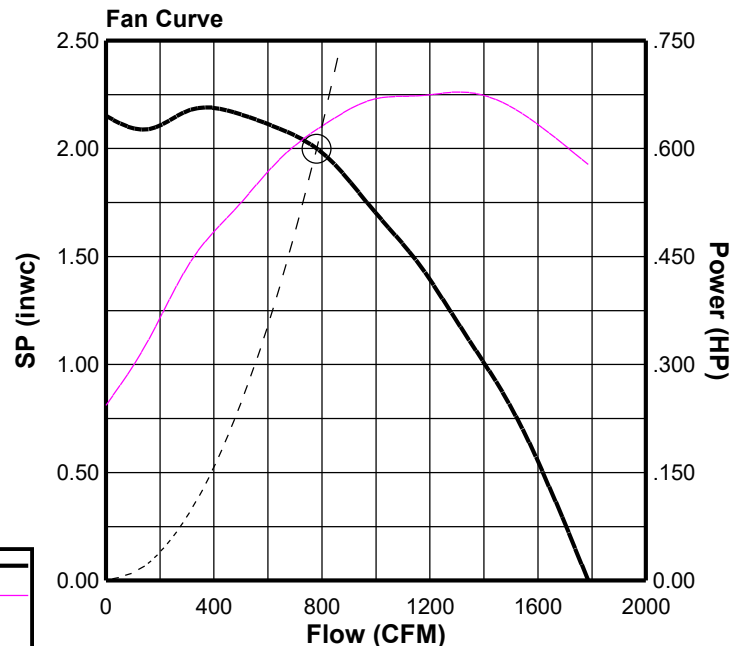
A	20-15/16
B	34-11/16
C	27-1/2
G	2
T Sq.	24
Roof Open. Sq.*	19-1/2

NOTE: Accessories may affect dimensions shown.

Weight(lbs)***	Shipping	150	Unit	125
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* Roof opening size for curbs supplied by Cook only.

***Includes fan, motor & accessories.





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ACRU-HP

Performance (*Bhp includes 12% drive loss)

Catalog Number	Flow (CFM)	SP (inwc)	Fan RPM	Power* (HP)	FEG	OVEL (fpm)	TSPD (fpm)	SE	Temp (°F)	ALT (ft)
150RH6B	780	2.00	1821	.628	n/a(<1HP)	290	7151	44%	70	1004

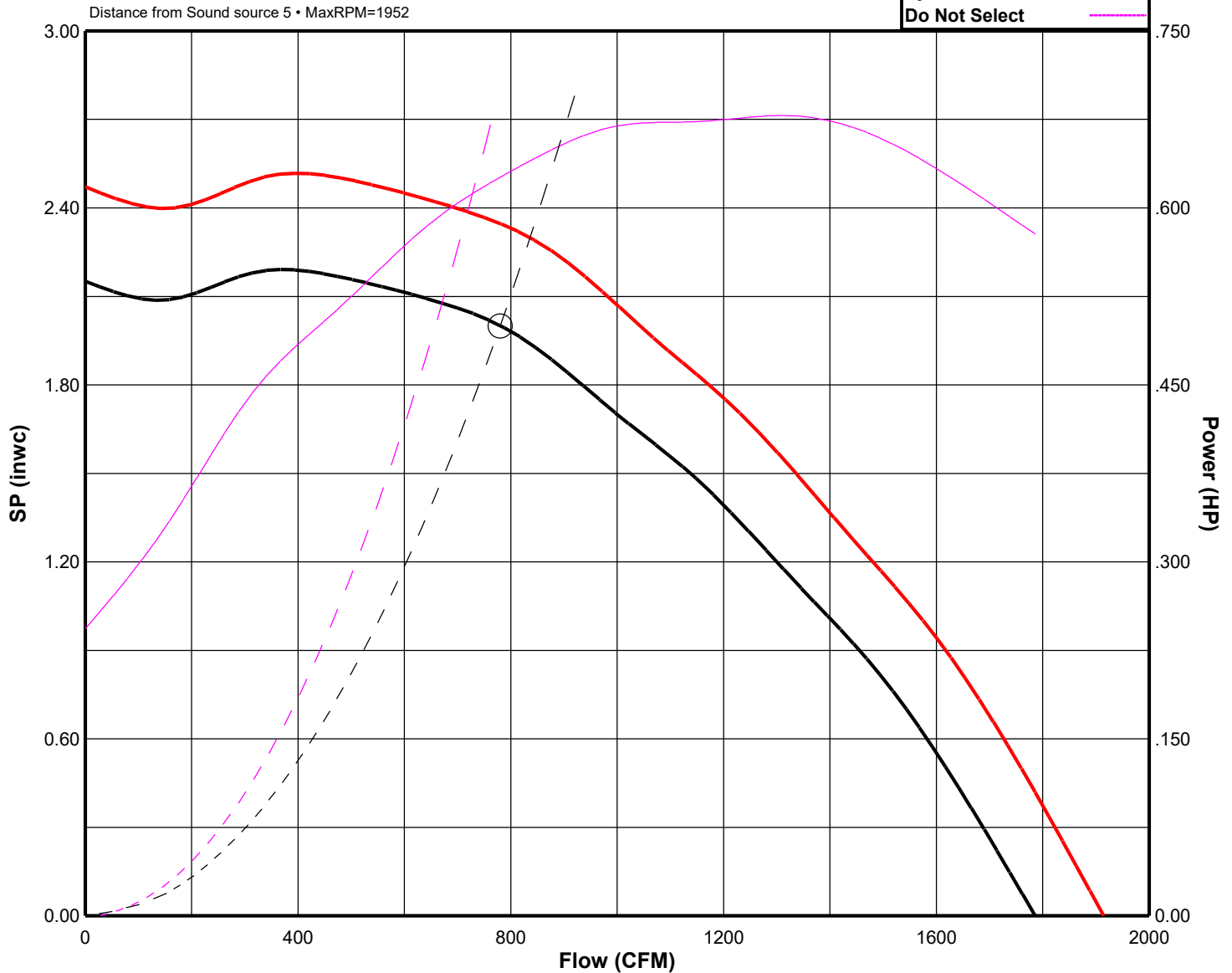
Motor Information

HP	RPM	Volts/Ph/Hz	Enclosure	FLA	Mounted
3/4	1725	208/3/60	ODP -SE	3.5	Yes

FLA based on NEC (2017) Table 430.250

Fan Curve Legend

CFM vs SP (1821)	—
MaxRPM(1952)	—
CFM vs HP	—
Point of Operation	○
System Curve	- - -
Do Not Select	- · - · -





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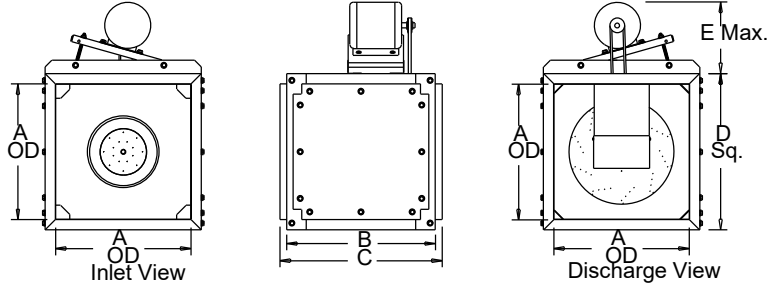
DATE: 1/5/2023

SQN-B

Centrifugal Square Inline Belt Drive

STANDARD CONSTRUCTION FEATURES:

All aluminum wheel - Galvanized steel housing - Three removable access doors - Closed cell neoprene gasketing - Inlet and discharge duct collars - Universal mounting feet - Regreasable bearings in a cast housing rated at 200,000 hours average life - Permanently lubricated ball bearing motor - Adjustable pitch drives through 5 HP - All fans factory adjusted to specified fan RPM - Transit tested packaging.



Performance (*Bhp includes 16% drive loss)

Qty	Catalog Number	Flow (CFM)	SP (inwc)	Fan RPM	Power* (HP)	FEG
1	70SQN-B	270	1.00	2392	.261	n/a(<1HP)

Altitude (ft): 1004 Temperature (F): 70

Motor Information

HP	RPM	Volts/Ph/Hz	Enclosure	FLA	Mounted
1/3	1725	115/1/60	ODP -SE	7.2	Yes

FLA based on NEC (2017) Table 430.248

Sound Data Sound Power by Octave Band

	1	2	3	4	5	6	7	8	LwA	dBA	Sones
Inlet	79	81	79	74	69	63	59	53	76	64	13.3
Outlet	91	86	79	76	73	70	65	56	79	68	17.8

- Distance from Sound source 5 ft

Accessories:

- DRIVES (1.5 SF) @ 2392 RPM
- DISCONNECT NEMA 1 PRE-WIRED
- BD-12 DAMPER
- BELT GUARD
- INSULATED HOUSING
- RC-75 SET(4) - ISOLATORS

Dimensions (inches)

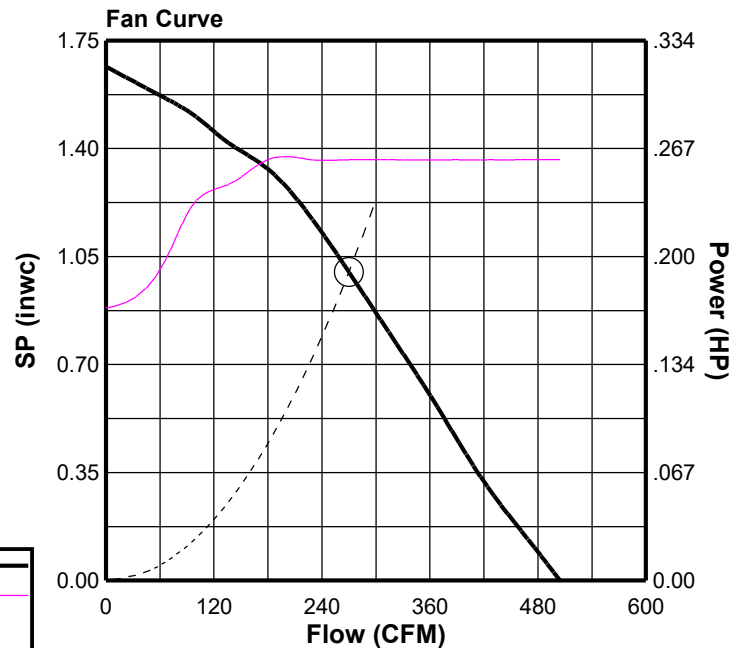
A	12
B	20
C	22
D	14
E	12-1/2

NOTE: Accessories may affect dimensions shown.

Weight(lbs)***	Shipping	114	Unit	49
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***Includes fan, motor & accessories.

See sound calc for insulated housing



Fan Curve Legend

CFM vs SP	—
CFM vs HP	—
Point of Operation	○
System Curve	- - -



Octave Bands

OB 1:	91 - 3	= 88
OB 2:	86 - 3	= 83
OB 3:	79 - 3	= 76
OB 4:	76 - 3	= 73
OB 5:	73 - 3	= 70
OB 6:	70 - 3	= 67
OB 7:	65 - 3	= 62
OB 8:	56 - 3	= 53

*Adjustment used was Insulated Housing

Sound Power:

$$LwA = 76.2$$

Sound Pressure**:

Distance from
Sound Source = 5 feet
dBA = 64.7

Hemispherical Sones = 14.6

Spherical Sones = **11.5**

**The sound ratings shown are at 5 ft. in a hemispherical free field calculated per AMCA Standard 301.



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SQN-B

Performance (*Bhp includes 16% drive loss)

Catalog Number	Flow (CFM)	SP (inwc)	Fan RPM	Power* (HP)	FEG	OVEL (fpm)	TSPD (fpm)	SE	Temp (°F)	ALT (ft)
70SQN-B	270	1.00	2392	.261	n/a(<1HP)	270	6262	19%	70	1004

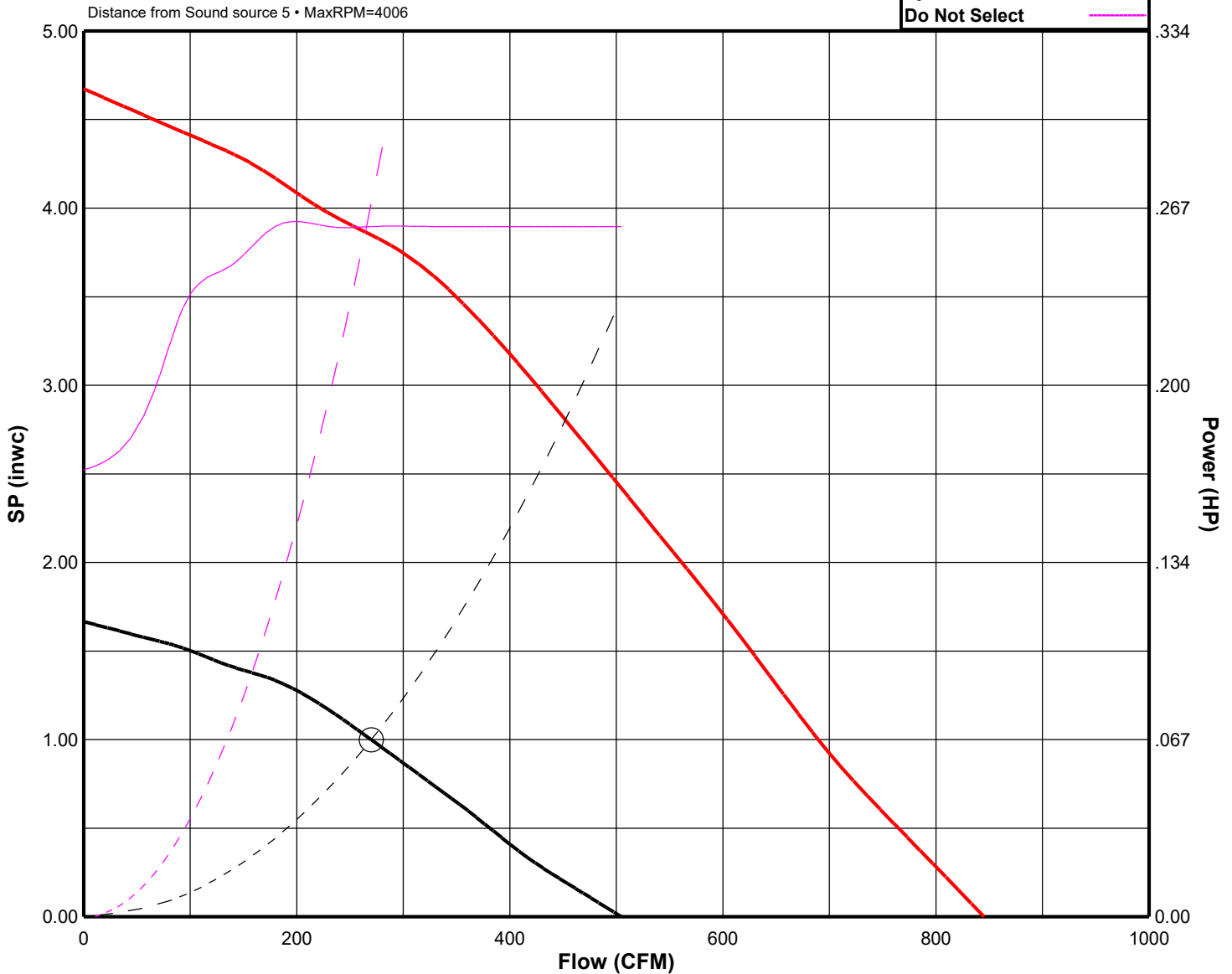
Motor Information

HP	RPM	Volts/Ph/Hz	Enclosure	FLA	Mounted
1/3	1725	115/1/60	ODP -SE	7.2	Yes

FLA based on NEC (2017) Table 430.248

Fan Curve Legend

CFM vs SP (2392)	—
MaxRPM(4006)	—
CFM vs HP	—
Point of Operation	○
System Curve	- - -
Do Not Select	—





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BD

Gravity Backdraft Damper

STANDARD CONSTRUCTION FEATURES:

.020 Aluminum blades - .060 aluminum frame -
Aluminum hinge pins - Nylon bushings.

Notes:

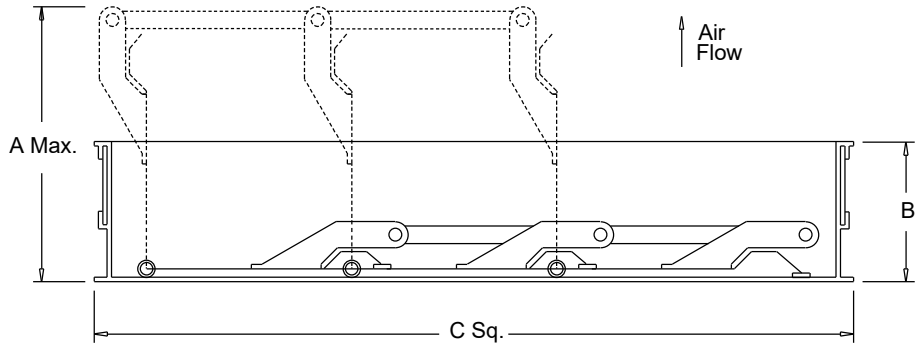
Max. operating temperature 200 Deg F (95 Deg C).

Max. discharge velocity 2000 fpm.

Sizes 36 thru 60 are shipped as 2 panels.

Sizes 66 and 78 are shipped as 6 panels.

These may require assembly.



Dimensions (inches)

Mark	Qty	Description	A Max.	B	C Sq.	# Panels
EF-1	1	BD-18 DAMPER	5-3/16	1-7/8	17-3/4	1
SF-1	1	BD-12 DAMPER	5-3/16	1-7/8	11-3/4	1



RCG

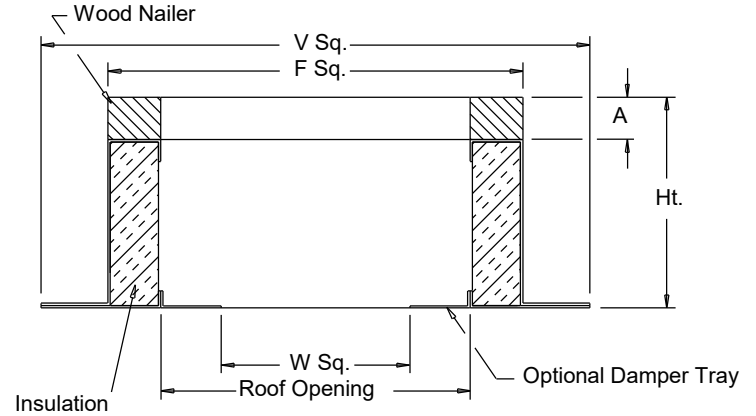
Galvanized Steel Roof Curb

STANDARD CONSTRUCTION FEATURES:

18 gauge galvanized steel - 1-1/2",
3 lbs. density thermal and acoustical
insulation - Continuously welded corners -
Wood nailer.

Options:(As noted below*)

- 1) No wood nailer (deduct 1-1/2" for actual height).
- 2) Damper tray.
- 3) Liner.
- 4) Gasket on wood nailer.
- 5) Lorenized coating.
- 6) Enamel coating.
- 7) Burglar bars.



Dimensions (inches)

Mark	Qty	Description	Ht	Options*	A	F Sq.	V Sq.	W Sq.	Roof Opening
EF-1	1	RCG 22	18	2;	1-1/2	22-1/2	26-1/2	15-3/4	19-1/2



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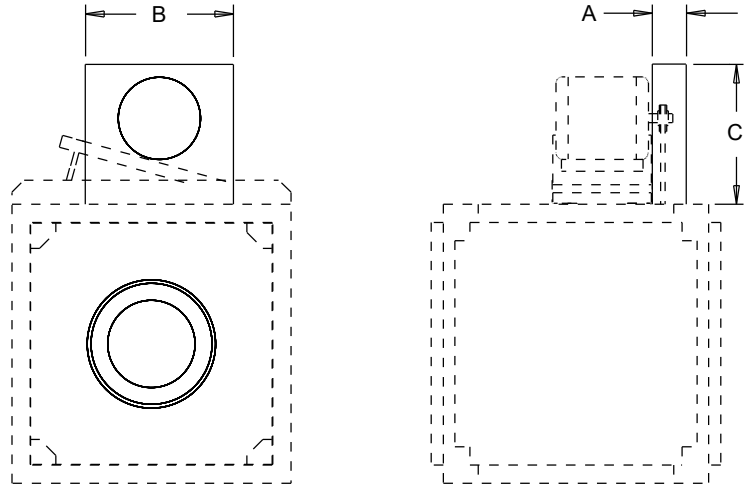
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Belt Guard

STANDARD CONSTRUCTION FEATURES:

18 gauge Galvanized steel



Dimensions (inches)

Mark	Qty	Description	A	B	C
SF-1	1	BELT GUARD	3-3/8	7-3/8	12-3/8



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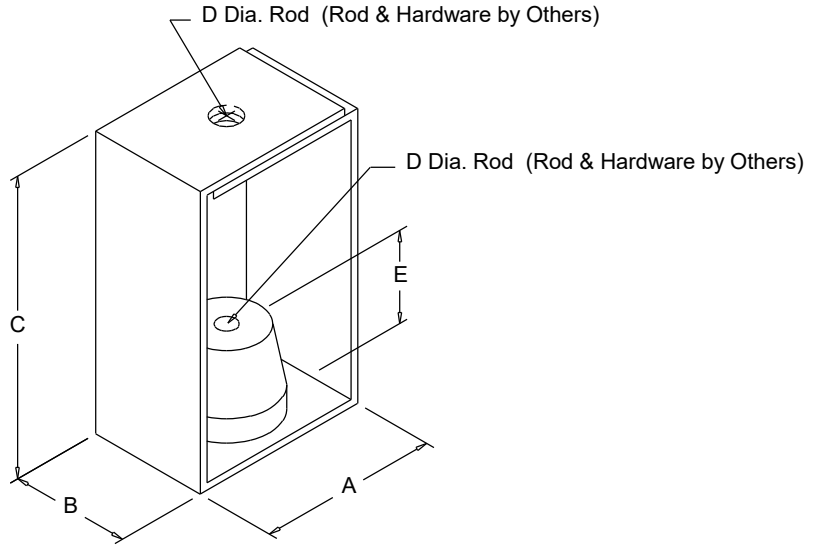
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RIS CEILING

Rubber-In-Shear
Isolator
Ceiling Mounted

NOTE:

Dimensions are for informational
purposes only - Not for construction.



Dimensions (inches)

Mark	Qty	Description	A	B	C	D	E
SF-1	1	RC-75 SET(4)	2.15	1.50	2.72	0.38	0.45



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Limited Warranty

Loren Cook Company warrants that your Loren Cook fan was manufactured free of defects in materials and workmanship, to the extent stated herein. For a period of one (1) year after date of shipment, we will replace any parts found to be defective without charge, except for shipping costs which will be paid by you.

This warranty is granted only to the original purchaser placing the fan in service.

This warranty is void if the fan or any part thereof has been altered or modified from its original design or has been abused, misused, damaged or is in worn condition or if the fan has been used other than for the uses described in the company manual. This warranty does not cover defects resulting from normal wear and tear.

To make a warranty claim, notify Loren Cook Company, General Offices, 2015 East Dale Street, Springfield, Missouri 65803-4637, explaining in writing, in detail, your complaint and referring to the specific model and serial numbers of your fan. Upon receipt by Loren Cook Company of your written complaint, you will be notified, within thirty (30) days of our receipt of your complaint, in writing, as to the manner in which your claim will be handled. If you are entitled to warranty relief, a warranty adjustment will be completed within sixty (60) business days of the receipt of your written complaint by Loren Cook Company.

This warranty gives only the original purchaser placing the fan in service specifically the right. You may have other legal rights which vary from state to state.

For fans provided with motors, the motor manufacturer warrants motors for a designated period stated in the manufacturer's warranty. Warranty periods vary from manufacturer to manufacturer. Should motors furnished by Loren Cook Company prove defective during the designated period, they should be returned to the nearest authorized motor service station. Loren Cook Company will not be responsible for any removal or installation costs.