



Submittal #41 – HVAC Fans

SNC Warehouse

Date Submitted: 2/14/25
Submitted By:
Shook Construction
Subcontract \ Supplier:
MSD
Specification Number:
233400

Item:	Description:	Drawing Number:
1	HVAC Fans	
2		
3		
4		

Shook Construction Review:

The information included in this submittal has been reviewed by Shook Construction for compliance with the requirements of the contract documents. This does not relieve the supplier and or subcontractor of adherence to the contract documents and engineer’s review comments.

A/E Review:

SHOP DRAWING / SUBMITTAL REVIEW

APPROVED APPROVED WITH CHANGES NOTED
 REVISE AND RESUBMIT REJECTED

SUBMITTAL WAS REVIEWED FOR DESIGN CONFORMITY AND GENERAL CONFORMANCE TO CONTRACT DOCUMENTS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT JOBSITE FOR TOLERANCE, CLEARANCE, QUANTITIES, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATION OF HIS WORK WITH OTHER TRADES AND FULL COMPLIANCE WITH CONTRACT DOCUMENTS

By: Doug Thoma Date: 02/17/2025

L2 Engineering, LLC



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OH LIC # 24297
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800.254.9455
msdinc.net

SUBMITTAL COVER SHEET

PROJECT

Sierra Nevada Warehouse

ENGINEER

L2

ARCHITECT

Champlin

SPECIFICATIONS NO.

ITEM

Exhaust Fans

Submittal # 010.1

- Approved
- Disapproved

Date: 2/14/2025

Submitted by: David Day



COOK

SUBMITTAL

PROJECT: SNC WAREHOUSE

ENGINEER: L2 Engineering

CONTRACTOR: MSD

SUBMITTED BY: Greg Stanaford
Controlled Air, Inc.
12009 Tramway Drive
Cincinnati, OH 45241

PHONE: 513-769-6600
E-MAIL: greg@controlled-air.com

DATE: 2/12/2025

LOREN COOK COMPANY



Corporate Offices: 2015 E. Dale Street, Springfield, MO 65803 • P.O. Box 4047, Springfield, MO 65808
417.869.6474 • fax 417.869.2520
lorencook.com



COOK



MARK: EF 01,04,05
PROJECT: SNC WAREHOUSE
DATE: 2/12/2025

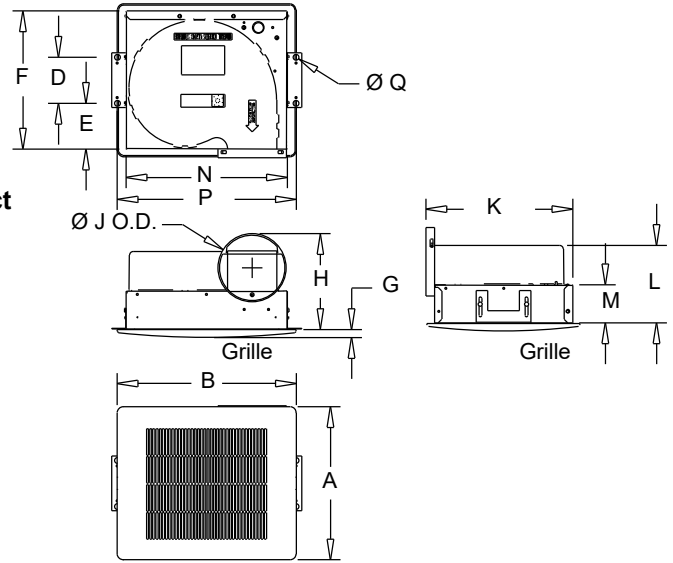
GEMINI

Ceiling Fans

100 Series

STANDARD CONSTRUCTION FEATURES:

Forward curved injection molded polypropylene fan wheel - Injection molded flame resistant fan housing with round outlet duct - 22 ga. galvanized steel inlet box - Isolation mounted motor, mounted to one piece galvanized stamped steel integral motor mount/inlet - Permanently lubricated 2-speed motor with built-in thermal overload protection and disconnect plug - Field wiring compartment with receptacle - Adjustable prepunched mounting bracket - White, high impact styrene injection molded grille - Shipped in ISTA certified transit tested packaging.



Performance

Qty	Catalog Number	Flow (CFM)	SP (inwc)	Nominal RPM	Input Watts	Speed Control
3	GC-168	90	.625	1050	45	FSC

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

Motor Information

Volts/Ph/Hz	Nameplate Amps
115/1/60	.504

Sound Data Inlet Sound Power by Octave Band

1	2	3	4	5	6	7	8	LwA	dBA	Sones
58	59	61	57	53	49	46	40	59	48	3.5

- Distance from Sound source 5 ft

Accessories:

- WHITE PLASTIC GRILLE
- FAN SPEED CONTROLLER 5 AMP 120 VOLT
- INTEGRAL BD DAMPER
- GEMINI ISOLATOR KIT - ISOLATORS

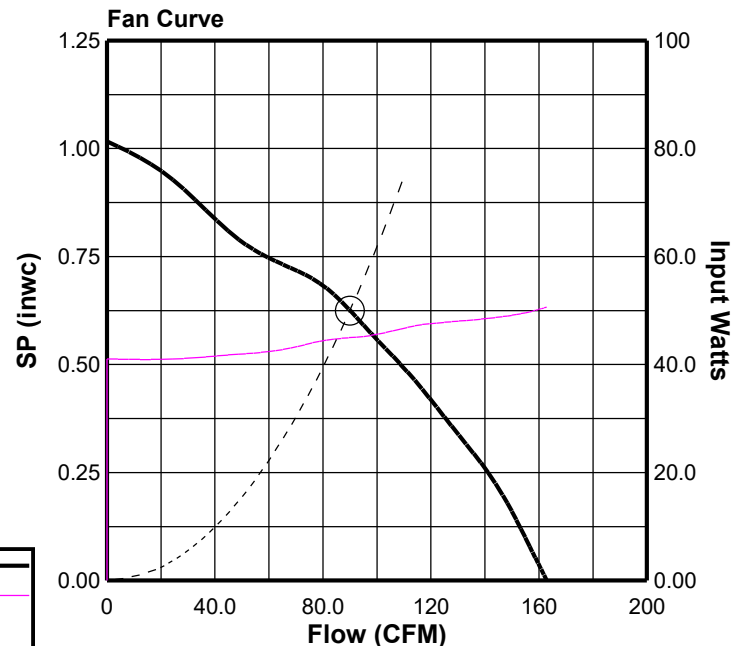
Dimensions (inches)

A Plastic	13-1/4	M	3-1/4
B Plastic	15-1/2	N	14
D	4	P	15-1/2
E	4	Q	1/2
F	12		
G	5/8		
H	8-3/8		
J O.D.	5-15/16		
K	12-3/4		
L	6-11/16		

NOTE: Accessories may affect dimensions shown.

Weight(lbs)***	Shipping	18	Unit	15

***Includes fan, motor & accessories.





COOK



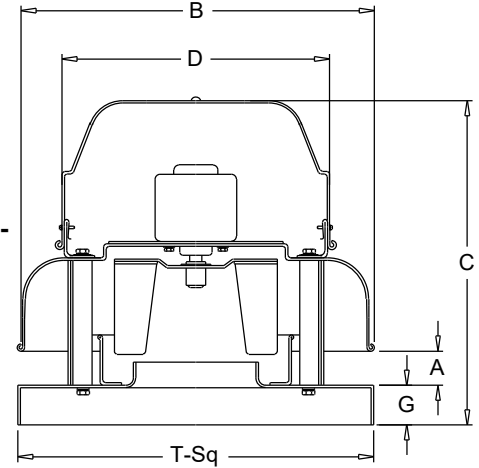
MARK: EF 02
PROJECT: SNC WAREHOUSE
DATE: 2/12/2025

ACE-D

**Downblast Centrifugal
Exhaust Ventilator
Roof Mounted/Direct Drive**

STANDARD CONSTRUCTION FEATURES:

All aluminum housing - Backward inclined all aluminum wheel - Two piece top cap with stainless steel quick release latches (sizes 120 - 300) - Welded curb cap corners - Birdscreen - Permanently lubricated ball bearing motors - Corrosion resistant fasteners - Transit tested packaging.



Performance

Qty	Catalog Number	Flow (CFM)	SP (inwc)	Fan RPM	Input Watts	FEG
1	90C15DM	313	.625	1670	91	n/a(<1HP)

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

Motor Information

HP	RPM	Volts/Ph/Hz	Enclosure	TOL
1/8	1550	115/1/60	ODP -SE	Yes

Sound Data Inlet Sound Power by Octave Band

1	2	3	4	5	6	7	8	LwA	dBA	Sones
71	67	69	63	56	55	52	51	65	54	7.3

- Distance from Sound source 5 ft

Accessories:

- DISCONNECT NEMA 1 PRE-WIRED
- BD-12 DAMPER
- ROOF CURB RCG 16 18H -C-T+N
- FAN SPEED CONTROLLER 5 AMP 120 VOLT

Dimensions (inches)

A	2-1/2
B O.D.	18-3/4
C	16-13/16
D O.D.	16-3/4
G	2
T Sq.	18
Roof Open. Sq.*	13-1/2

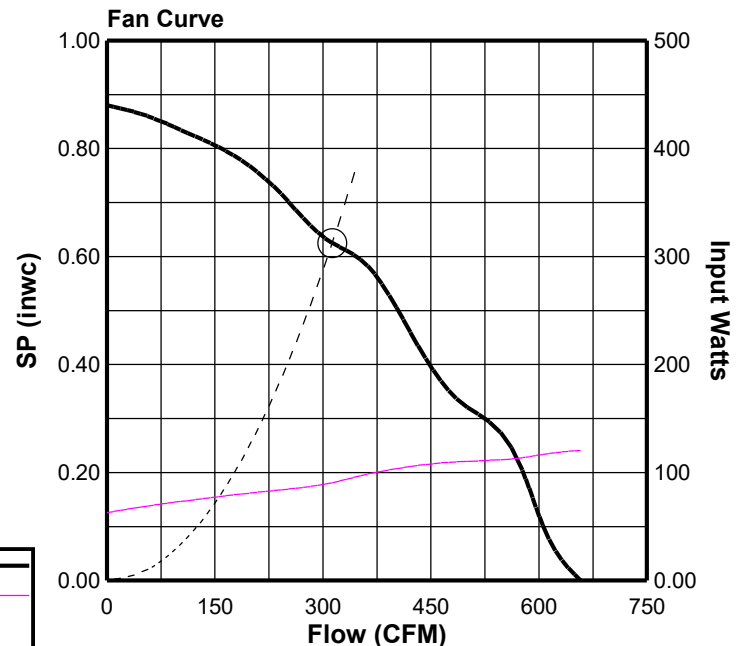
NOTE: Accessories may affect dimensions shown.

Weight(lbs)***	Shipping	66	Unit	58
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* Roof opening size for curbs supplied by Cook only.
***Includes fan, motor & accessories.

Fan Curve Legend

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





COOK



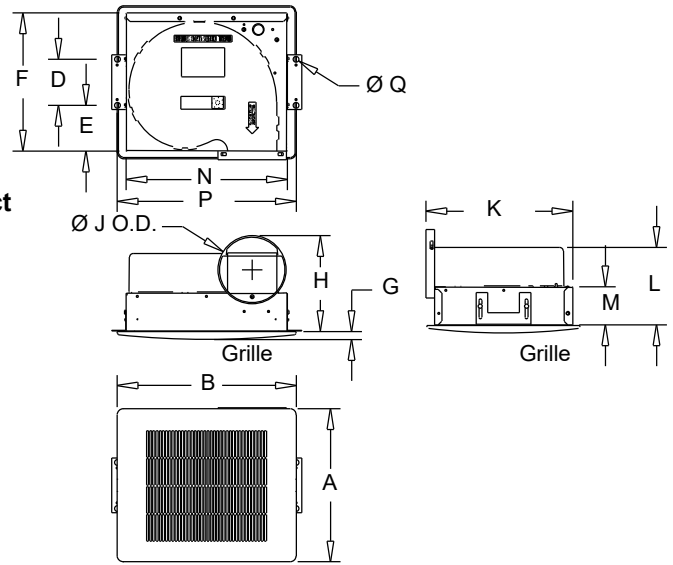
MARK: EF 03
PROJECT: SNC WAREHOUSE
DATE: 2/12/2025

GEMINI

Ceiling Fans 100 Series

STANDARD CONSTRUCTION FEATURES:

Forward curved injection molded polypropylene fan wheel - Injection molded flame resistant fan housing with round outlet duct - 22 ga. galvanized steel inlet box - Isolation mounted motor, mounted to one piece galvanized stamped steel integral motor mount/inlet - Permanently lubricated 2-speed motor with built-in thermal overload protection and disconnect plug - Field wiring compartment with receptacle - Adjustable prepunched mounting bracket - White, high impact styrene injection molded grille - Shipped in ISTA certified transit tested packaging.



Performance

Qty	Catalog Number	Flow (CFM)	SP (inwc)	Nominal RPM	Input Watts	Speed Control
1	GC-168	130	.250	993	46	FSC

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

Motor Information

Volts/Ph/Hz	Nameplate Amps
115/1/60	.504

Sound Data Inlet Sound Power by Octave Band

1	2	3	4	5	6	7	8	LwA	dBA	Sones
52	53	55	53	49	45	41	35	54	43	2.5

- Distance from Sound source 5 ft

Accessories:

- WHITE PLASTIC GRILLE
- FAN SPEED CONTROLLER 5 AMP 120 VOLT
- INTEGRAL BD DAMPER

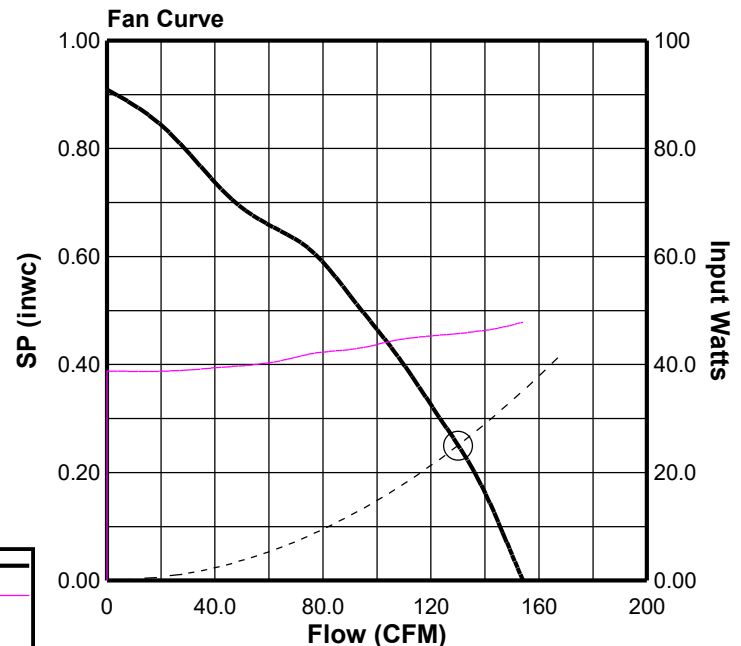
Dimensions (inches)

A Plastic	13-1/4
B Plastic	15-1/2
D	4
E	4
F	12
G	5/8
H	8-3/8
J O.D.	5-15/16
K	12-3/4
L	6-11/16
M	3-1/4
N	14
P	15-1/2
Q	1/2

NOTE: Accessories may affect dimensions shown.

Weight(lbs)***	Shipping	Unit
17	17	14

***Includes fan, motor & accessories.





COOK

MARK: **GV 01**

PROJECT: SNC WAREHOUSE

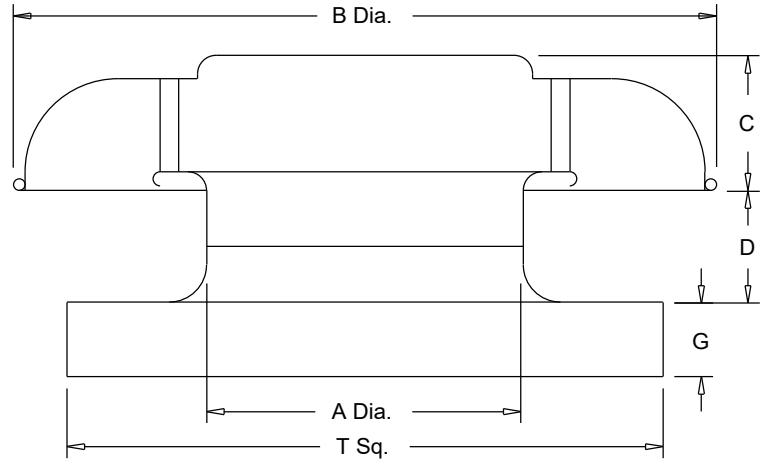
DATE: 2/12/2025

PR

Spun Aluminum Intake/Relief Ventilator

STANDARD CONSTRUCTION FEATURES:

All aluminum construction - Anti-backdraft flange - Five year warranty.



Performance

Qty	Catalog Number	Flow (CFM)	SP (inwc)
1	8 PR	180	.036

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

Accessories:

ROOF CURB RCG 16 18H -C-T+N
BIRDSCREEN

Dimensions (inches)

A Dia.	8-5/8
B Dia.	18-3/4
C	4-5/8
D	3-1/2
G	2
T Sq.	18
Roof Open.	13-1/2

NOTE: Accessories may affect dimensions shown.

Weight(lbs)***	Shipping	42	Unit	38
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***Includes accessories.

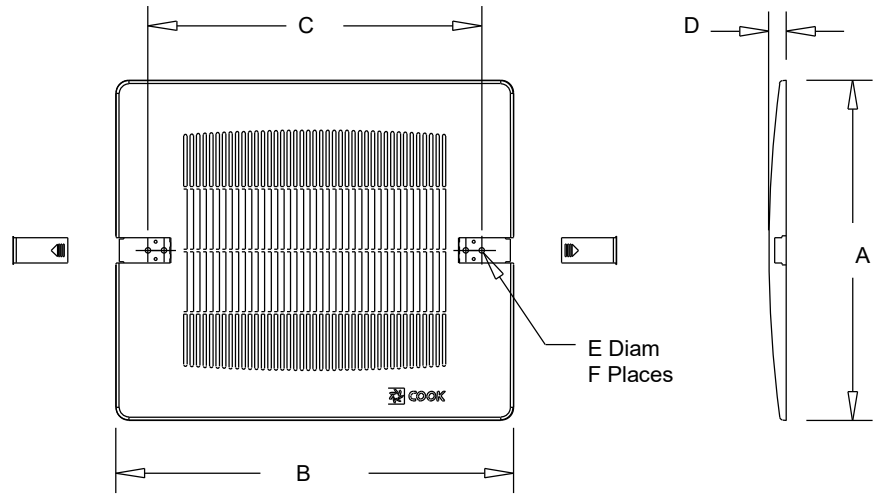


COOK

PROJECT: SNC WAREHOUSE
DATE: 2/12/2025

GEMINI

PLASTIC GRILLE



Dimensions (inches)

Mark	Qty	Description	A	B	C	D	E Diam	F Places
EF 01,04,05	3	WHITE PLASTIC GRILLE	13-1/4	15-1/2	13	1/4	1/4	4
EF 03	1	WHITE PLASTIC GRILLE	13-1/4	15-1/2	13	1/4	1/4	4



FSC

Fan Speed Controls

STANDARD CONSTRUCTION FEATURES:

PRODUCT DESCRIPTION - Through the "Quadrac" integrated semi-conductor device it is now possible to offer this system with many advantages. Fewer semi-conductor parts mean greater reliability and the passivation process used in the manufacture of the semi-conductor insures long life.

Printed circuit construction eliminates wiring difficulties and guarantees workmanship.

All of these factors serve to offer the most important of all features - quality.

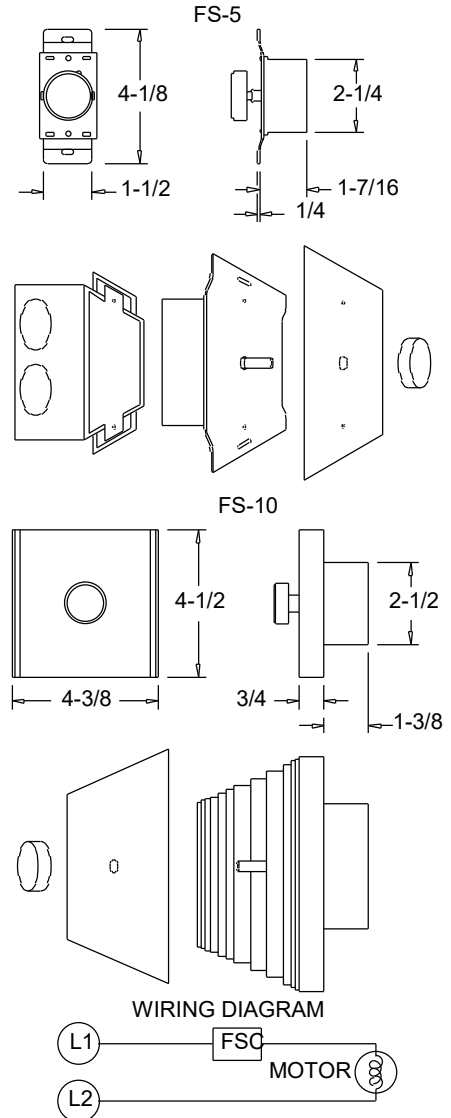
SPEED CONTROL - Positive Off/On action in the control dial. Speed range set to the customer's requirements. **CONTROL RATING** - 120 volts, 60 cycles, 1 phase. Maximum ambient temperature - 120 degree F (5 AMP, 10 AMP, 15 AMP). 220/240 volt, 50/60 cycles, 1 phase. Maximum ambient temperature - 120 degree F (5 AMP, 10 AMP). 220/240 volt model not UL listed. Fan cannot have UL listing if furnished with prewired 220/240 volt FSC. 277 volt, 60 cycles, 1 phase.

Maximum ambient temperature - 120 degree F (5 AMP). **WARNING** - Power must be turned off before installing this unit. **STANDARD INSTALLATION** - Fits any standard single gang box.

Turn off power and connect the two wires on the control to the two switch wires in the usual manner. The connection box is not supplied. **SPECIAL FEATURES** - Complete range control, solid state "Quadrac" integrated circuitry, solid state construction for long reliable operating life, saves on electric bills.

Dimensions (inches)

Mark	Qty	Description
EF 01,04,05	3	FSC 5 AMP 120 VOLT
EF 02	1	FSC 5 AMP 120 VOLT
EF 03	1	FSC 5 AMP 120 VOLT



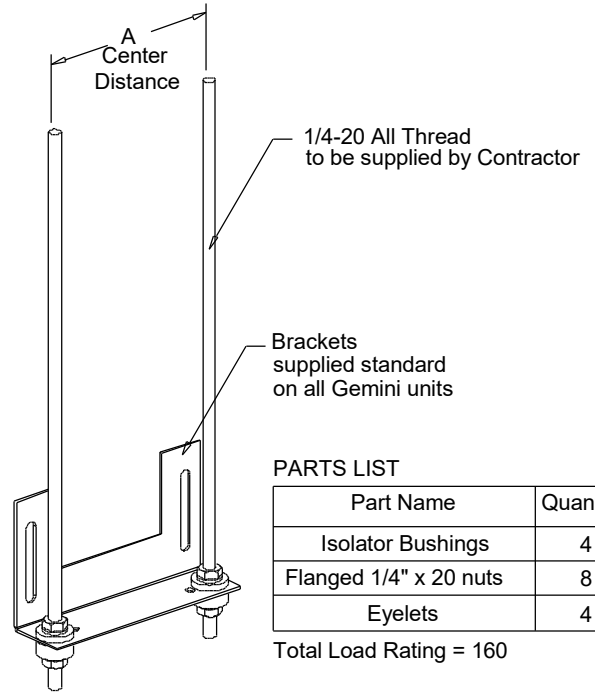


COOK

PROJECT: SNC WAREHOUSE
DATE: 2/12/2025

GEMINI

**Gemini Isolator Kit
GIK
Rubber In Shear**



PARTS LIST

Part Name	Quantity
Isolator Bushings	4
Flanged 1/4" x 20 nuts	8
Eyelets	4

Total Load Rating = 160

Dimensions (inches)

Mark	Qty	Description	Part #	A
EF 01,04,05	3	GEMINI ISOLATO	GIK	4



BD

Gravity Backdraft Damper

STANDARD CONSTRUCTION FEATURES:

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

Notes:

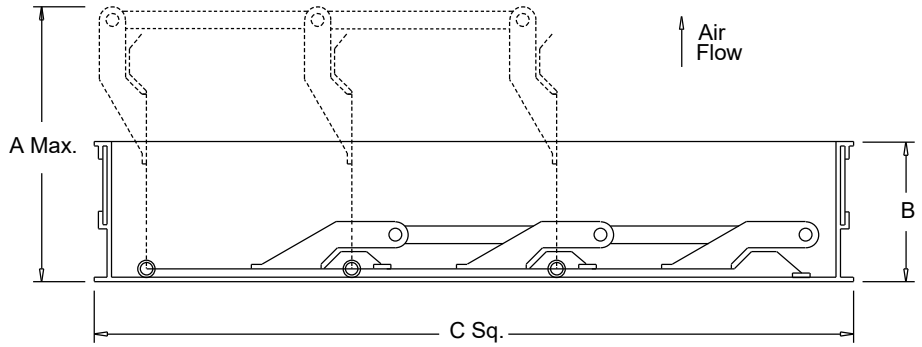
Max. operating temperature 200 Deg F (95 Deg C).

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 02	1	BD-12 DAMPER	5-3/16	1-7/8	11-3/4	1



RCG

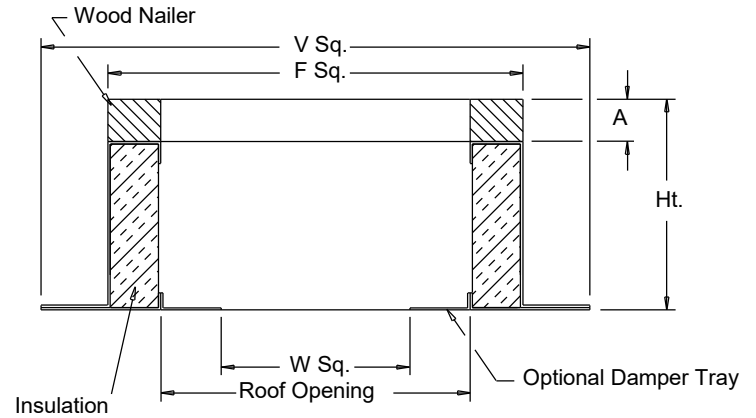
Galvanized Steel Roof Curb

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 02	1	RCG 16	18	-	1-1/2	16-1/2	20-1/2	9-3/4	13-1/2
GV 01	1	RCG 16	18	-	1-1/2	16-1/2	20-1/2	9-3/4	13-1/2