



# H V A C A s s o c i a t e s , I n c

Manufacturers Agent

**CORPORATE HEADQUARTERS • SE FLORIDA**

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Florida Only Toll Free • (866)-339-2930

# S U B M I T T A L

**PROJECT:** TRU BY HILTON  
**LOCATION:** 1931 S.W. 3<sup>rd</sup>. AVE.  
**CONTRACTOR:** INTEG  
**DATE:** APRIL 07, 2020

**SUBMITTED BY:** MIKE GALLAGHER

**HVAC ASSOCIATES, INC.**  
**100 SW 5<sup>TH</sup> COURT**  
**POMPANO BEACH, FL. 33060**  
**PHONE: 954-783-4892**  
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**E-MAIL ADDRESS: [mikeg@hvacfl.com](mailto:mikeg@hvacfl.com)**  
**WEB PAGE: [www.hvacassociates.com](http://www.hvacassociates.com)**

**MANUFACTURER:** PANASONIC  
**MATERIAL:** CEILING EXHAUST FANS



Adjustable Airflow for  
Maximum Performance

**FV-11-15VK1**

## Specification Submittal Data / Panasonic Ventilation Fan

### Description

Customizable Ventilation Fan shall be low sone ceiling mount rated for continuous run. Fan shall be ENERGY STAR® rated and certified by the Home Ventilating Institute (HVI). Evaluated by Underwriters Laboratories and conform to both UL and cUL safety standards.

### Motor/Blower:

- Enclosed DC brushless motor technology rated for continuous run.
- Fan ventilation rates shall be manually adjustable for 110-130-150 CFM
- Power rating shall be 120 volts and 60 Hz.
- Fan shall be UL listed for tub/shower enclosure when used with a GFCI protected circuit and used in insulated ceiling (TYPE I.C.).
- Fan equipped with a thermal cutoff fuse.
- Removable, permanently lubricated, plug-in motor.

### Housing:

- Rust proof epoxy and polyester resin coating, 26 gauge galvanized steel body.
- Integrated 6" diameter duct adapter.
- Built-in metal flange provides blocking for penetrations through drywall as an Air Barrier, and assists with the decrease in leakage in the Building Envelope during blower door testing.
- Built in backdraft damper.
- Articulating and expandable installation bracket up to 24".

### Grille:

- Attractive design using Poly Pro material.
- Attaches directly to housing with torsion springs.
- Includes a motion sensor cap for use as a cover when the motion sensor Plug 'n Play™ module has not been selected

### Warranty:

- ALL Parts: 3 Years from original purchase date.
- DC Motor: 6 Years from original purchase date.

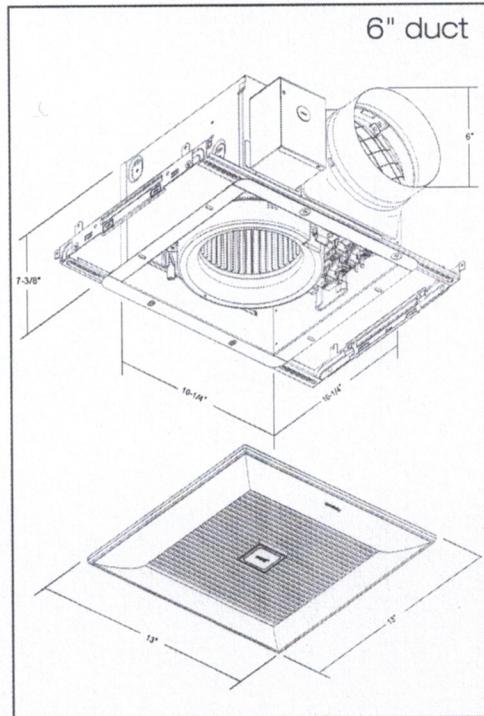
### Architectural Specifications:

Customizable Ventilation Fan shall be ceiling mount, ENERGY STAR® rated type with built-in speed selector. Select from 110/130/150 CFM and no more than <0.3 sone as certified by the Home Ventilating Institute (HVI) at 0.1 w.g. with no less than 110/130/151 CFM and no more than <0.3/0.5/0.7 sones at .25 w.g. Power Consumption shall be no greater than 6.6/9.5/12.7 watts at 0.1 w.g. and 12.7/16.8/21.1 watts at 0.25 w.g. ENERGY STAR® rated with efficiency of no less than 15.7/13.1/11.5 CFM/watt at 0.1 w.g. and 8.2/7.8/6.8 CFM/watt at 0.25 w.g. The motor shall be enclosed with brushless DC motor engineered to run continuously. DC motor speed shall automatically increase when the fan senses static pressure to maintain selected CFM. Power rating shall be 120v/60Hz. Duct diameter shall be no less than 6". Fan shall be UL and cUL listed for tub/shower enclosure when used with a GFCI protected circuit.

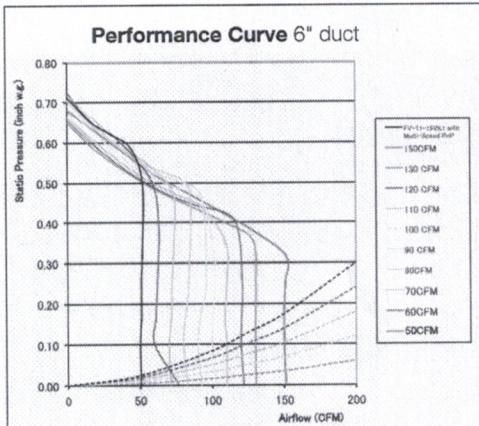
**Plug 'N Play™** modules provide up to three additional features. Select from Multi-Speed with Time Delay, Condensation Sensor, LED Night Light and Motion Sensor. Fan can be used to comply with ASHRAE 62.2, LEED, ENERGY STAR®, IAP, EarthCraft, California Title-24 and WA Ventilation Code.

### DC Motor Technology:

When fan senses static pressure, its speed is automatically increased to ensure that the desired CFM is not compromised, which allows the fan to perform as rated.



**FV-11-15VK1**



For complete Installation Instructions visit [us.panasonic.com/ventfans](http://us.panasonic.com/ventfans)

Model	Quantity	Comments	Project:
			Location: Architect: Engineer: Contractor: Submitted by: Date:



Adjustable Airflow for  
Maximum Performance

**FV-11-15VK1**

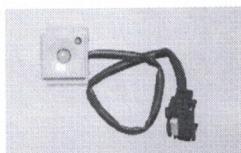
## Plug 'N Play™ Modules

Plug 'N Play™ modules provide up to three additional features. Select from Multi-Speed with Time Delay, Motion Sensor, Condensation Sensor and LED Night Light.



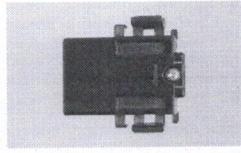
### FV-VS15VK1: Multi-Speed with Time Delay

Allows you to select the proper CFM settings to satisfy ASHRAE 62.2 continuous ventilation requirements. The fan runs continuously at a pre-set lower level (0, 50-120 CFM, in 10 CFM increments), then elevates to a maximum level of operation (110-130-150 CFM) when the wall switch is turned on, or when the motion sensor or Condensation Sensor module is activated. A High/Low delay timer returns the fan to the pre-set CFM level after a period of time set by the user.



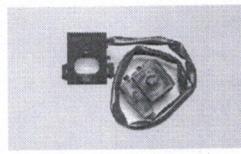
### FV-MSVK1: Motion Sensor

Automatically activates when someone enters the room. Once the settings have been applied, the fan becomes truly automatic. This module also activates a 20 minute delay off timer for the fan.



### FV-CSVK1: Condensation Sensor

Helps control bathroom condensation to prevent mold and mildew. Sensor technology detects relative humidity and temperature to anticipate dew point, automatically turning the fan on to control humidity. Built-in Relative Humidity (RH) sensitivity adjustment enables fine tuning for moist conditions and for satisfying CalGreen requirements. When the condensation sensor is used in conjunction with multi-speed functionality, the fan will kick up to high speed when the condensation sensor detects moisture in the room. This module also activates a 20 minute delay off timer for the fan.



### FV-NLVK1: LED Night Light

A photocell automatically turns on the 1 watt LED night light when darkness is sensed in the room. High/Low brightness switch enables you to fine tune the photocell to work in conjunction with the darkness level of your bathroom. This module also activates an automatic 20 minute delay off timer for the fan.

Fan Specifications		WhisperGreen Select™: FV-11-15VK1											
Static Pressure in inches w.g.	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1
Air Volume (CFM)	150	151	130	130	120	121	110	110	100	102	90	96	80
Noise (sones)	<0.3	0.7	<0.3	0.5	<0.3	0.4	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.4
Power Consumption (watts)	12.7	21.7	9.5	16.8	6.6	12.7	5.6	11.3	4.9	10.7	4.4	9.6	3.8
Energy Efficiency (CFM/Watt)	11.5	6.8	13.1	7.8	16.2	8.6	15.7	8.2	17.9	9.0	18.6	9.0	18.2
Speed (RPM)	664	904	635	891	615	884	616	889	603	886	595	891	604
Current (amps)	0.13	0.21	0.10	0.17	0.08	0.14	0.07	0.13	0.06	0.11	0.06	0.11	0.05
MAX. Current (amps)	0.33												
Power Rating (V/Hz)	120/60												
ENERGY STAR rated	Yes												

0.25=Installed Performance

Fan Specifications		FV-11-15VK1 + FV-VS15VK1 (Multi Speed Plug 'N Play™ module)													
Static Pressure in inches w.g.	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25	0.1
Air Volume (CFM)	150	151	130	130	120	121	110	110	100	102	90	96	80	84	70
Noise (sones)	<0.3	0.7	<0.3	0.5	<0.3	0.4	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.4	<0.3	0.4
Power Consumption (watts)	12.7	21.7	9.5	16.8	7.4	14.1	6.6	12.7	5.6	11.3	4.9	10.7	4.4	9.6	3.8
Energy Efficiency (CFM/Watt)	11.5	6.8	13.1	7.8	16.2	8.6	15.7	8.2	17.9	9.0	18.6	9.0	18.2	8.8	18.4
Speed (RPM)	664	904	635	891	615	884	616	889	603	886	595	891	604	911	602
Current (amps)	0.13	0.21	0.10	0.17	0.08	0.14	0.07	0.13	0.06	0.11	0.06	0.11	0.05	0.10	0.05
MAX. Current (amps)	0.33														
Power Rating (V/Hz)	120/60														
ENERGY STAR rated	Yes														

0.25=Installed Performance

Panasonic Eco Solutions Company of North America  
Eco Products Division

Two Riverfront Plaza  
Newark, NJ 07102

[us.panasonic.com/ventfans](http://us.panasonic.com/ventfans)



Most Efficient  
**2016**  
ENERGY STAR [www.energystar.gov](http://www.energystar.gov)

**Panasonic**



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# SUBMITTAL

**PROJECT:** TRU BY HILTON  
**LOCATION:** 1931 S.W. 3<sup>rd</sup>. AVE.  
**CONTRACTOR:** INTEG  
**DATE:** APRIL 07, 2020

**SUBMITTED BY:** MIKE GALLAGHER

**HVAC ASSOCIATES, INC.**  
**100 SW 5<sup>TH</sup> COURT**  
**POMPANO BEACH, FL. 33060**  
**PHONE: 954-783-4892**  
**FAX: 954-783-4893**  
**E-MAIL ADDRESS: mikeg@hvacf.com**  
**WEB PAGE: www.hvacassociates.com**

**MANUFACTURER:** ACME ENGINEERING  
**MATERIAL:** SMOKE AND GENERAL EXHAUST FANS

NOTE: MATERIALS WILL BE RELEASED TO MANUFACTURER FOR FABRICATION AND SCHEDULED AS DIRECTED BY CONTRACTOR UPON RETURN OF A REVIEWED/APPROVED SUBMITTAL. ALL SUCH MATERIAL WILL BE RELEASED AS SUBMITTED UNLESS NOTED.

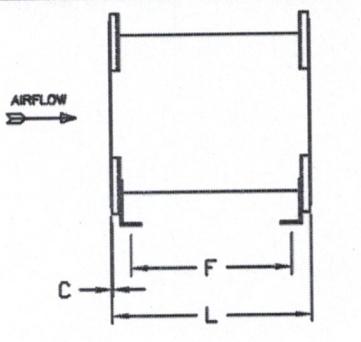


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TAG: SF-1,2

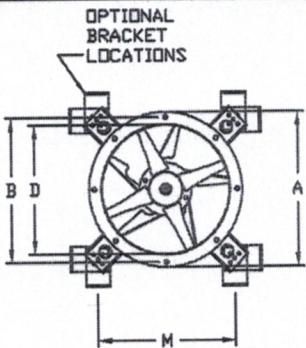
**Acme Engineering and Manufacturing Corporation**  
**P.O. Box 978, Muskogee, OK 74402**

Project:TRU HILTON SAWGRASS  
Location:  
Customer:HVAC Associates Inc  
Architect:  
Engineer:  
Contractor:  
Submitted by:Mike Gallagher



### Elevation View

C	F	L
0.14	20.37	24.41



### Front View

A	B	D	M
25.59	24.41	22.05	21.47

AVDSE

#### **Direct Drive Smoke Exhaust Van Axial**

## **Standard Construction Features**

Continuously welded steel housing  
Manual adjustable blade pitch  
Steel straightening vanes welded  
U.L. Listed- Power Vents for Smoke Control Systems  
(500F/4hrs, 500F/3 hrs)  
Heavy gauge ACME-SEAL Powder Coat Charcoal Gray steel  
housing  
Inlet and Outlet Flanges  
Universal mounting feet

## Options & Accessories

Casing Outlet Wire Guard  
ACME-SEAL Powder Coat Charcoal Gray  
NEMA 3R Not Mounted Not Wired Max 7-1/2HP Disconnect  
Switch  
Blade Angle: 59

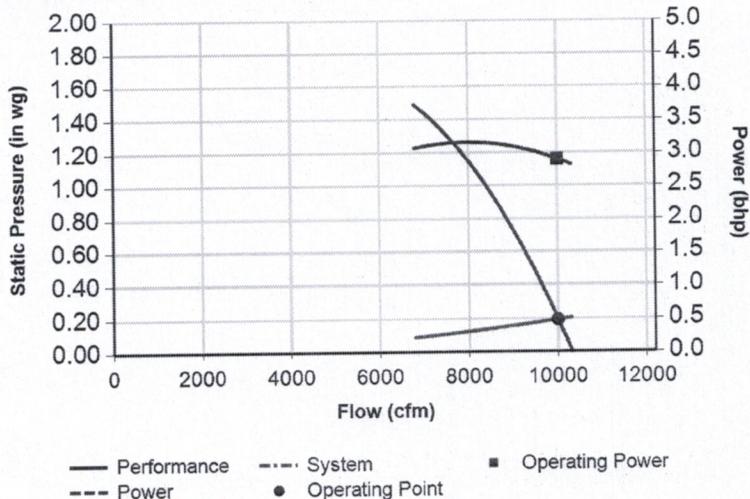


**Listed**  
Power Ventilator for  
Smoke Control System  
9MX1



AVD0560/280-8SE N 4 5 Hp 230/ Three Phase/ 60 Hz/ TEAO 1 Speed Standard Efficiency w/IC=H Motor RPM: 1800 Fan RPM:525-1750 -- Blade Angle: 59  
-- ACME-SEAL Powder Coat Charcoal Gray -- Casing Outlet Wire Guard -- NEMA 3R Not Mounted Not Wired Max 7-1/2HP Disconnect Switch

PERFORMANCE (Altitude = 0 ft, Temp = 68 Degrees F, Density = 0.075 lb/ft<sup>3</sup>)



Manufacturer reserves the right to change specifications without notice. These are typical drawings for dimensional purpose only and are correct within limits for normal installation requirements. They do not necessarily show actual construction.

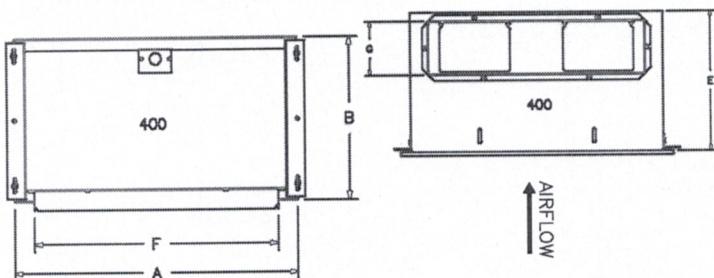


HVAC Associates Inc

## TAG: EF-D

Acme Engineering and Manufacturing Corporation  
P.O. Box 978, Muskogee, OK 74402

Print Date: 4/6/2020 2:33:16 PM Submitted by:Mike Gallagher



Plan View

A	B	F
21.50	12.25	18.50

DIMENSIONS (inches)

Elevation View

E	G
11.75	4.50

992625 - VQ0400 120/1/60

PERFORMANCE (Altitude = 0 ft, Temp = 68 Degrees F, Density = 0.075 lb/ft³)

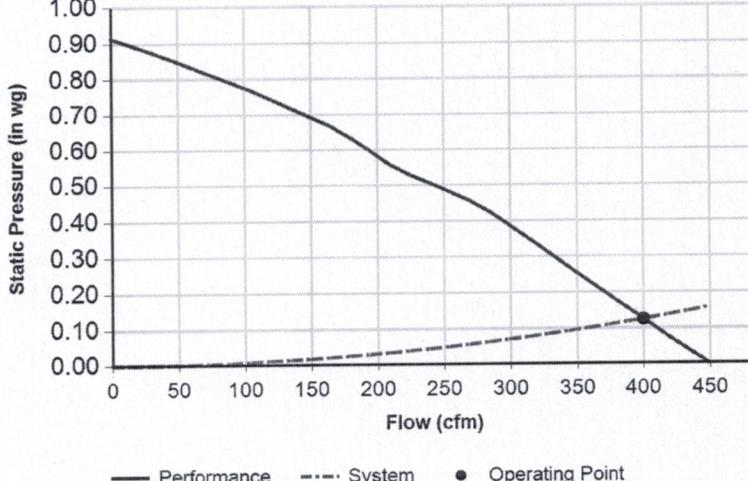
Qty	Model Size
1	VQ0400

Volume (cfm)	SP (in wg)	Watts	Speed (rpm)	TS (fpm)	OV (fpm)	Weight (lbs)	Motor Info.		Fan Rating: 507				
							HP	Volts	Phase	Hz	Encl	RPM	Sp/Wdg
400	0.125	171	688	1351	692	35.00	1/15 Hp	120	1	60	ODP	1750	1SPD

Sound Pressure		Sound Power Octave Values								Static Eff	Total Eff
Sones*	LwA dBA*	1	2	3	4	5	6	7	8		
2.0	50.9 39.4	40.1	57.8	52.4	48.5	45.8	36.9	27.7	17.2	0.00	0.00

\*in free space @5 feet/1.5 Meters

The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5ft) in a hemispherical free field calculated per AMCA Standard 301. Values are shown for Installation Type B: free inlet hemispherical sone levels. The AMCA certified ratings seal applies to sone ratings only.





HVAC Associates Inc

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P.O. Box 978, Muskogee, OK 74402

Print Date: 4/6/2020 2:33:16 PM Submitted by:Mike Gallagher

Project:TRU HILTON SAWGRASS

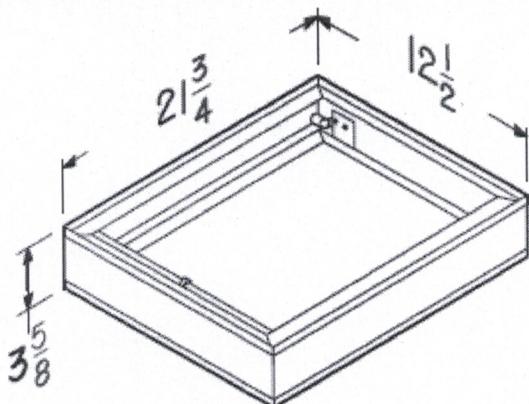
Location:

Customer:HVAC Associates Inc

Architect:

Engineer:

Contractor:



### VQSMRADD

#### Smoke/Radiation Dampers

##### Standard Construction Features

165 F fusible link

High temperature, non-asbestos, reinforced fiber thermal fabric

Stainless steel negator-type closure spring

UL-Classified for use up to 3-hour fire-rated ceiling

Galvanized steel construction

Iso View

#### DIMENSIONS (inches)

992778 - SR2 Smoke/Radiation Damper

PERFORMANCE (Altitude = 0 ft, Temp = 0 Degrees F, Density = 0.000 lb/ft<sup>3</sup>)

Qty	Model Size
1	SR2

Weight (lbs)
5.70



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Contractor:

### VQSC

#### VQ Speed Controllers

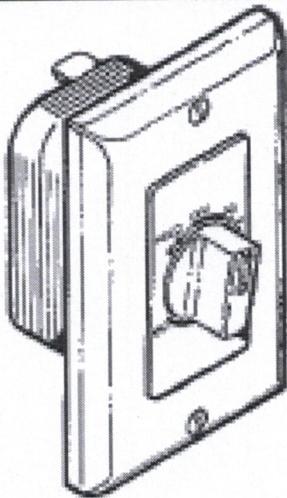
##### Standard Construction Features

120 VAC, 3.0 Amp

57V (Ivory), 57W (White)

Positive on/off position

Rotary dial for variable selection of fan speed and sound level



Iso View

#### DIMENSIONS (inches)

992786 - 57W 3 AMP Speed Control White 120 VAC

PERFORMANCE (Altitude = 0 ft, Temp = 0 Degrees F, Density = 0.000 lb/ft<sup>3</sup>)

Qty	Model Size
1	VQ57SC

Weight (lbs)
0.45



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Contractor:

207241A - 3178 VDH100 Vibration Isolation Kit

PERFORMANCE (Altitude = 0 ft, Temp = 0 Degrees F, Density = 0.000 lb/ft3)

Qty	Model Size
1	VQISOKIT

Weight (lbs)
0.30



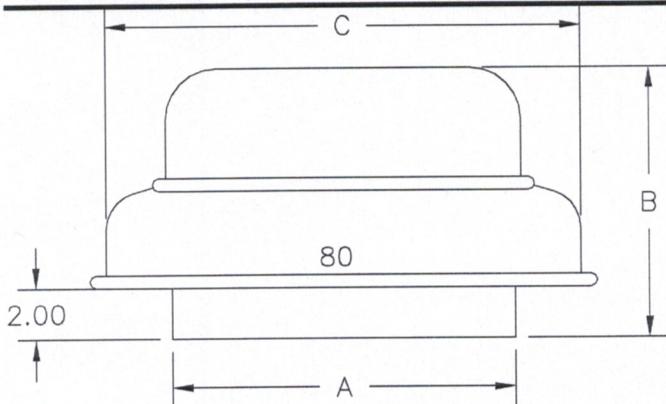
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## TAG: REF-1 THRU REF-25

Acme Engineering and Manufacturing Corporation  
P.O. Box 978, Muskogee, OK 74402

Print Date: 4/6/2020 2:33:17 PM Submitted by:Mike Gallagher

Project:TRU HILTON SAWGRASS  
Location:  
Customer:HVAC Associates Inc  
Architect:  
Engineer:  
Contractor:



DIMENSIONS (inches)

Rough Opening: 10.20 X 10.20

## PRNH

Direct Drive Centrifugal Roof Exhauster  
Hurricane

## Standard Construction Features

Miami/Dade (NOA #15-0729.19 Exp. 11-04-2020)  
Texas Department of Insurance product evaluation RV-97  
Electronically Commutated Motor (ECM)  
EC Motor comes with mounted Speed Potentiometer Dial  
Heavy gauge aluminum housing  
Conduit Post Through Bases Curb Cap  
Aluminum hood  
Galvanized Bird Screen  
Centrifugal backwardly inclined non-overloading aluminum hollow airfoil blades  
NEMA 1 Disconnect Switch Mounted & Wired  
Motor bearings are permanently lubricated  
2 Year Fan/Motor Warranty  
\*\*\*\*

## Options &amp; Accessories

High Wind Rated  
AR 8.75x8.75 Damper  
C 12.0 x 12.0 Galvanized Curb -- Self Flashing -- Curb Height 18"



Listed  
Power Ventilator  
263L



PRN070 (080-2)HEC E 4 1/4 Hp 115/ Single Phase/ 60 Hz/ OPEN 1 Speed w/TOL High Efficiency Motor RPM: 1800 -- High Wind Rated

PERFORMANCE (Altitude = 0 ft, Temp = 68 Degrees F, Density = 0.075 lb/ft<sup>3</sup>)

Qty	Model Size
25	PRN070 (080-2)HEC

Volume (cfm)	SP (in wg)	Power (bhp)	Speed (rpm)	TS (fpm)	OV (fpm)	Weight (lbs)
125	0.350	0.031	1407	3684	300	21.00

Motor Info.		Fan Rating: 705 705c					
HP	Volts	Phase	Hz	Encl	RPM	Sp/Wdg	
1/4 Hp	115	1	60	OPEN	1800	1SPD	

Sound Pressure			Sound Power Octave Values								Static Eff	Total Eff
Sones*	LWA	dBA*	1	2	3	4	5	6	7	8		
4.0	61.6	50.1	59.7	62.2	62.9	56.8	57.5	53.2	45.6	32.3	22.40	22.80

\*in free space @5 feet/1.5 Meters

The sound ratings shown are loudness values in hemispherical cones at 1.5 m (5ft) in a hemispherical free field calculated per AMCA Standard 301. Values are shown for Installation Type A: free inlet hemispherical cone levels. The AMCA certified ratings seal applies to sone ratings only.



HVAC Associates Inc

## TAG: REF-1 THRU REF-25

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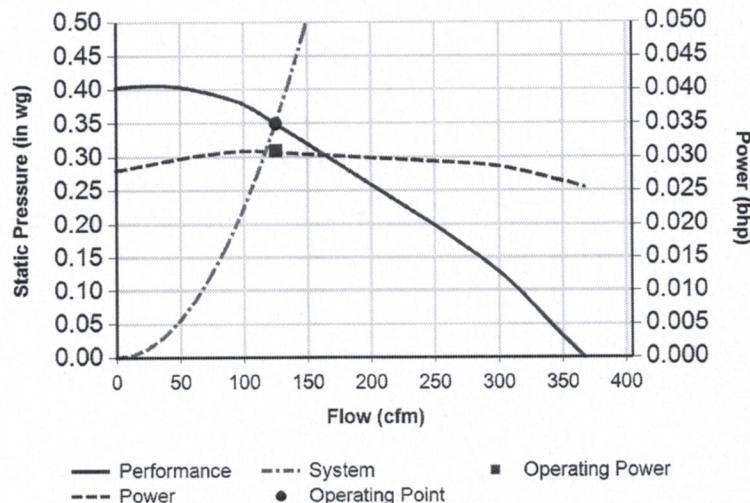
Location:

Customer:HVAC Associates Inc

Architect:

Engineer:

Contractor:



## **Hurricane PRN**

### **Description**

PRN Certified Hurricane and High Wind Products: PRNH

PRNH direct drive fans are centrifugal downblast exhausters designed for high wind and hurricane resistance applications.

PRN Hurricane series fans are certified to all three Miami-Dade procedures for static loading, missile impact, and cyclic loading. NOA# 12-0814.13 Exp. November 4, 2015.

<http://localhost/FantasticWeb/InformationFiles/OptionGroupImages/Wire%20image%20Mcmillian.jpg>

[Click for Additional Information](#)

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### **High Wind Rated**

#### **Description**

The High Wind and Hurricane fans are certified as a complete system with specified curbs (CH) and without the need for tie downs.

- Available on sizes 060-171

#### **Standard Construction**

- Heavier gauge, aluminum hoods
- Secure internal support and bracing structure
- Motors are protected by a heavy duty, aluminum barrier

#### **Required Option**

- CH Type SF (self flashing) curb for use with hurricane and high wind fans



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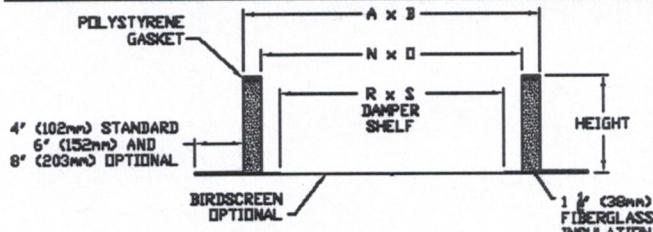
Location:

Customer:HVAC Associates Inc

Architect:

Engineer:

Contractor:



**C**

## Curb, Prefabricated

### Standard Construction Features

1-1/2" fiberglass insulation R-6 Value, 3PCF (N/A with Vented Curb)

1/4" polystyrene gasket (Top Ledge) SF Style

2 x 2 wood nailing (Top Ledge) RF Style

Constructed of 18 gauge galvanized steel or .063 Aluminum  
Continuous welded seams

Damper shelf

Integral base plate

Two-year limited warranty

### Options & Accessories

Self Flashing

Curb Height-18"

### Elevation View

A	B	N	O	R	S
12.00	12.00	9.00	9.00	6.00	6.00

### DIMENSIONS (inches)

C 12.0 x 12.0 Galvanized Curb -- Self Flashing -- Curb Height 18"

PERFORMANCE (Altitude = 0 ft, Temp = 0 Degrees F, Density = 0.000 lb/ft3)

Qty	Model Size
25	C 12.0 x 12.0

Weight (lbs)
20.00

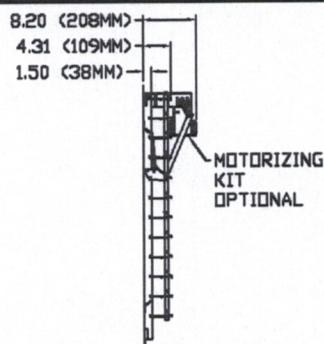


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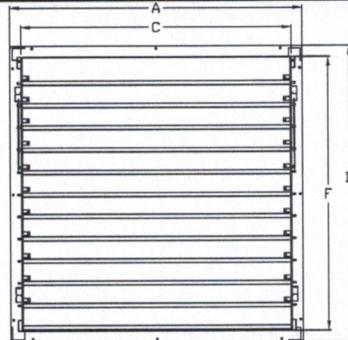
# TAG: REF-1 THRU REF-25

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Architect:  
Engineer:  
Contractor:  
Print Date: 4/6/2020 2:33:17 PM Submitted by:Mike Gallagher



Elevation View



Elevation View

A	C	D	F
8.75	5.75	8.75	5.75

## DIMENSIONS (inches)

AR 8.75x8.75 Damper

PERFORMANCE (Altitude = 0 ft, Temp = 0 Degrees F, Density = 0.000 lb/ft<sup>3</sup>)

Qty	Model Size
25	AR 8.75x8.75 Damper

AR

## Back Draft Damper

### Standard Construction Features

All aluminum multiple blade construction  
Flanged style for flushed mounting  
Maximum velocity 1500 feet per minute  
Nylon bearings and stainless steel bearing pins  
Precision balanced full opening blades  
2 Year Fan/Motor Warranty

Weight (lbs)
1.03