



# Grilles/Registers/Diffusers Submittals

**Job Name:** Heartland Apothecary Clean Room Renovation  
**Job Location:** Cincinnati  
**Customer:** Perfection Group  
**Date Printed:** 5/29/2025  
**Spec Section:** 15 - HVAC

**Contact:** 3930 VIRGINIA AVE  
CINCINNATI, OH 45227



**All-In-One**  
**Detailed Submittal Schedule**  
**Grilles/Registers/Diffusers**

#	Qty	Model	Tag	Unit Size	Border	Pattern	Fastening	Finish
4	1	730DSS	LWEG	8.000, 4.000	F	L	A	#4
F - Sidewall Application 1 1/4" (32) Flat Frame   L - Front Louver Blades parallel to Long Dimension   A -								
5	1	730DSS	LWEG	20.000, 10.000	F	L	A	#4
F - Sidewall Application 1 1/4" (32) Flat Frame   L - Front Louver Blades parallel to Long Dimension   A -								
6	1	730DSS	LWEG	12.000, 8.000	F	L	A	#4
F - Sidewall Application 1 1/4" (32) Flat Frame   L - Front Louver Blades parallel to Long Dimension   A -								
3	1	730DSS	LWRG	24.000, 18.000	F	S	A	#4
F - Sidewall Application 1 1/4" (32) Flat Frame   S - Front Louver Blades parallel to Short Dimension   A -								



## Performance Notes

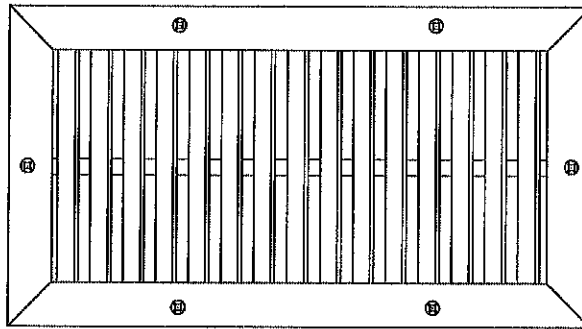
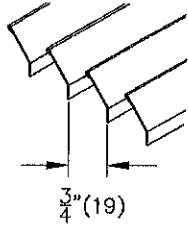
Date Printed: 5/29/2025

1. Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets".
2. Throw data is based on the temperature differential ( $Dt$ ), in degrees Fahrenheit ( $^{\circ}F$ ), between supply air temperature and room temperature.
3. Throw values, in feet (ft), are provided at terminal air velocities of 150 fpm, 100 fpm, and 50 fpm for supply applications.
4. The NC, sound pressure level, is based on a room absorption of 10dB re  $10^{-12}$  Watts in each octave band.
5. Blanks (--) indicate an NC level below 15.
6. Air flow is in cubic feet per minute (cfm).
7. Static pressure ( $P_s$ ), velocity pressure ( $P_v$ ), and total pressure ( $P_t$ ) are in inches of water (in. w.g.).

**730DSS Louvered SS Return Register – 3/4" Blade Spacing, 45° Single Deflection**

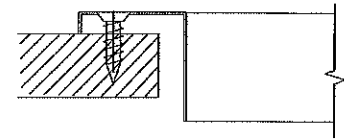
**Core Style:**

45° Single Deflection



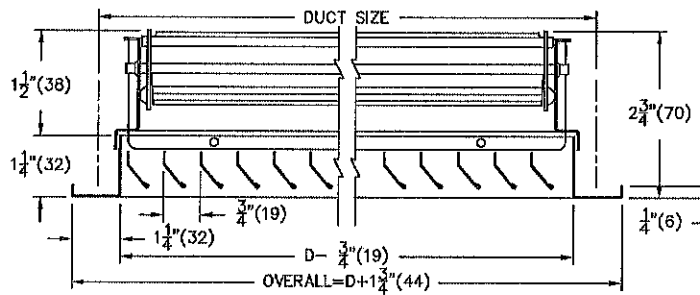
**Fastening:**

A: Countersunk Screwholes with Screw



**Border: F**

1 1/4" (32) Flat Frame



**Material:**

- 304 Stainless Steel

**Finish:**

- Frame: #4 - Brushed Stainless Steel
- Blades: 2B finish

**Notes:**

- Blades Parallel to Short dimension
- 45° Deflection roll formed blades on 3/4" (19) centers
- VCS3SS opposed blade damper, MILL finish stainless steel
- Factory tolerance ± 1/32" (1)

**PROJECT:** Heartland Apothecary Clean Room Renovation

**ENGINEER:**

**DESCRIPTION:** SS Return Regist W/Ss.Damp,45deg Blades,3/4" Spcng

730DSS///24.000/18.000/F/S///A/#4

**SUBMITTAL NO:** 258374

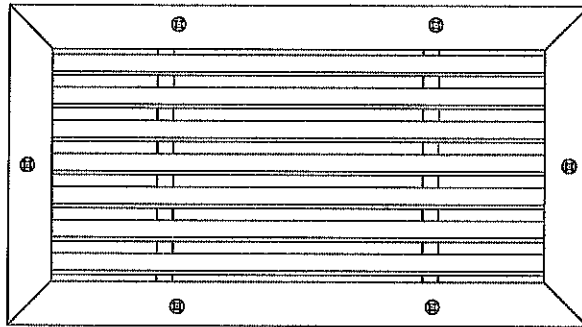
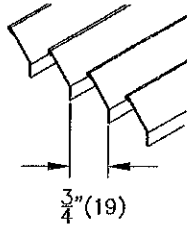
**CUSTOMER:** Perfection Group

**SUBMITTAL DATE:** 5/29/2025

**730DSS Louvered SS Return Register – 3/4" Blade Spacing, 45° Single Deflection**

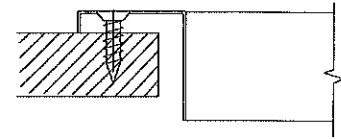
**Core Style:**

45° Single Deflection



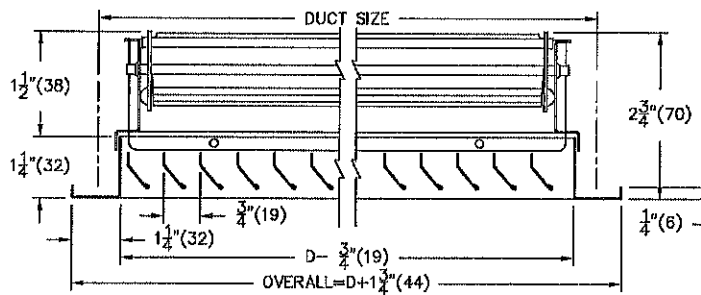
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730DSS///8.000,20.000,12.000/4.000,10.000,8.000/F/L///A/#4

**SUBMITTAL NO:** 258374

**CUSTOMER:** Perfection Group

**SUBMITTAL DATE:** 5/29/2025



# SUBMITTAL SHEET

## Heathland Apothecary

9947 Kingston Pike.  
Knoxville TN 37922

Architect: \_\_\_\_\_

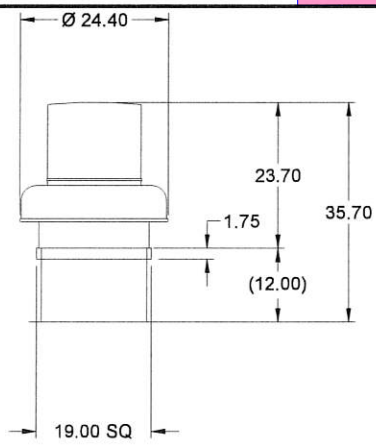
Engineer: Steven Daniel Zimny

GC: Perfection Group

Title: Exhaust Fan Submittals

The logo for Perfection Group, featuring a stylized 'P' with a degree symbol and a yellow square, followed by the text 'PERFECTION GROUP' in a bold, sans-serif font.
<input type="checkbox"/> Approved as Submitted
<input type="checkbox"/> Approved as Noted
<input type="checkbox"/> Revise and Resubmit
Job # _____
Date: <u>5-27-25</u>
Signed: _____

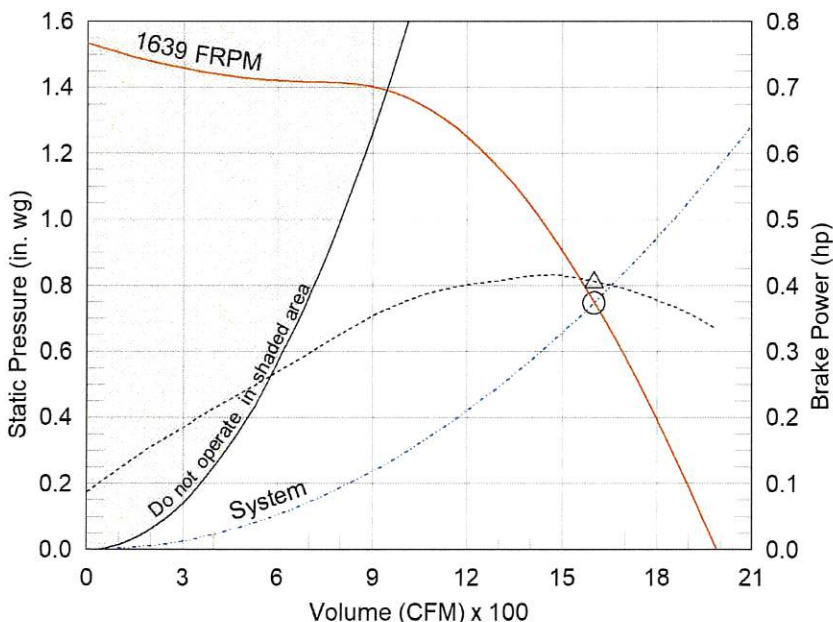
**Model: G-120-VG**  
Direct Drive Centrifugal Roof Exhaust Fan



Dimensional	
Quantity	1
Weight w/o Acc's (lb)	44
Weight w/ Acc's (lb)	54
Weight w/ Acc's and Curb (lb)	70
Standard Curb Cap Size (in.)	19 x 19
Optional Damper (in.)	12 x 12
Roof Opening (in.)	15.5 x 15.5

OVERALL HEIGHT MAY BE GREATER DEPENDING ON MOTOR, ADAPTER, AND/OR HINGE BASE.

Performance	
Requested Volume (CFM)	1,600
Actual Volume (CFM)	1,600
Total External SP (in. wg)	0.746
Fan RPM	1639
Operating Power (hp)	0.4
Elevation (ft)	981
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.072
Tip Speed (ft/min)	5,604
Static Eff. (%)	46



Misc Fan Data	
Fan Energy Index (FEI)	-
Outlet Velocity (ft/min)	1,720

Motor	
Motor Mounted	Yes
Size (hp)	1/2
Voltage/Cycle/Phase	115/60/1
Enclosure	ODP
Motor RPM	1725
Efficiency Rating	High
Windings	1
FLA (Amps)	6.4
Min. Circuit Ampacity (MCA)	8
Max. Overcurrent Protection (MOP)	15
Short Circuit Current Rtg (SCCR)	5 kA

- △ Operating Bhp point
- Operating point at Total External SP
- Fan curve
- System curve
- Brake horsepower curve

**Static Pressure Calculations**

External SP	0.125 in. wg
Damper	0.621 in. wg
<b>Total External SP</b>	<b>0.746 in. wg</b>

**Notes:**

All dimensions shown are in units of in.  
\*NEC FLA, MCA and MOP are for reference only – based on tables 430.248 or 430.25 of National Electric Code 2020. Actual motor FLA may vary, for sizing thermal overload, consult factory. MCA and MOP values shown only account for the motor, not accessories (damper actuator, field supplied VFD, etc).  
LwA - A weighted sound power level, based on ANSI S1.4 dBA - A weighted sound pressure level, based on 11.5 dB attenuation per Octave band at 5 ft - dBA levels are not licensed by AMCA International  
Sones - calculated using ANSI/AMCA 301 at 5 ft

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	73	74	83	77	67	68	63	59	78	67	14.8



## Model: G-120-VG

### Direct Drive Centrifugal Roof Exhaust Fan

#### Standard Construction Features:

- Aluminum housing - Backward inclined composite (sizes 60-95) or aluminum (sizes 97-300) wheel - Aluminum curb cap with prepunched mounting holes - Birdscreen - Ball bearing motors (sizes 85-300 and all Vari Green), sleeve bearing motors (sizes 60-80) - Motor isolated on shock mounts - Corrosion resistant fasteners

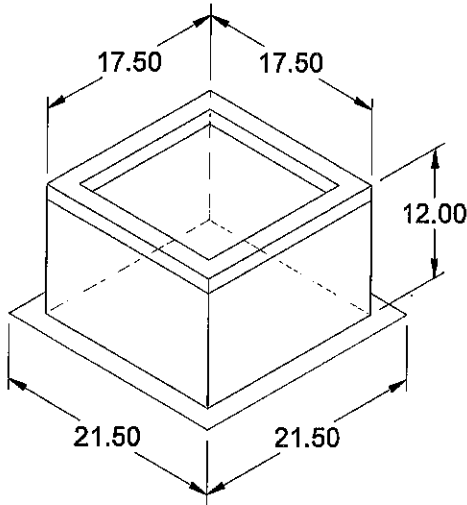
#### Selected Options & Accessories:

Motor - Vari-Green EC motor  
Control - Dial for balancing  
Standard Curb Cap Size - 19 Square  
UL/cUL 705 Listed - "Power Ventilators"  
Switch, NEMA-1, Toggle,  
Junction Box Mounted & Wired in weather-protected motor compartment  
Foam Curb Seal (Factory Applied)  
Birdscreen: Galvanized, nom. 84% Free Area  
Aluminum Wheel Material  
Conduit Chase Qty 1  
Unit Warranty: 1 Yr (Standard)  
Damper Shipped Loose, WD-100-PB-12X12, Gravity Operated, Not Coated, Nominal Size

#### Selected Sub Marks

*See individual submittals for full details*  
GPI-19-G12

***The Vari-Green Motor included in this order has a 'Multi-Voltage' ability. The red wire on the motor is called a 'Voltage Doubler', and when it is connected the motor can be powered by 115V. If the Red wire is disconnected, then the motor can be powered with 208-230/277V. The motor will leave the factory with the voltage doubler wired per the order.***



## Model: GPI

### Roof Curb

#### Standard Construction Features:

- Roof Curb fits between the building roof and the fan mounted directly to the roof support structure - Constructed of either 18 ga galvanized steel or 0.064 in. aluminum - Straight Sided without a cant - 2 in. mounting flange - 3 lb density insulation - Height - Available from 12 in. to 42 in. as specified in 0.5 in. increments. Notes: - The maximum roof opening dimension should not be greater than the "Actual" top outside dimension minus 2 in., - The minimum roof opening dimension should be at least 2.5 in. more than the damper dimension or recommended duct size. - The Roof Opening Dimension may or may not be the same as the Structural Opening Dimension. - Damper Tray is optional and must be specified. Tray size is same as damper size. - Security bars are optional and must be specified. Frames and gridwork are all 12 ga steel.

#### General

Tag	Qty	Model	Sizing Method	Undersizing (in.)	Weight (lb)	Shipped Assembled	Union Label
	1	GPI-19	Nominal	1.5	16	Yes	No Preference

#### Dimensions

Curb Height (in.)	Nominal Outside Width (in.)	Nominal Outside Length (in.)	Actual Outside Width (in.)	Actual Outside Length (in.)	Actual Inside Width (in.)	Actual Inside Length (in.)	Hinge Base Width* (in.)	Hinge Base Length* (in.)
12	19	19	17.5	17.5	14	14	18	18

\*May not be applicable

#### Accessories

Material	Security Bars	Liner	Insulation (in.)	Insulation R Value
Galvanized	No	No	1	R4.3