



Submittal

Date: 10/29/2024

WeAreBuilding.

Project: UCH Pharmacy Relocation

To: Bryan Ruby
BHDP Architecture
302 West Third St., Suite 500
Cincinnati, OH 45202

From: Logan Toft
Messer Construction Co.
2495 Langdon Farm Rd.
Cincinnati, OH 45237

Job: 213750-030
UCH Pharmacy Relocation
3188 Bellevue Ave.
Cincinnati, OH 45219

Submittal Title: Exhaust Fan (GPF-1)

Submittal Number: 233400 .01

Subcontractor: Cinfab

Prepared By: Logan Toft

Manufacturer / Supplier:

Full / Partial: Full

Type: Product Data

Spec Section Number: 233400

Sub Spec Section Number: .01

Revision: 0

Date: 10/29/2024

Messer Review

Designer Review

REVIEWED FOR SUBMITTAL



WeAreBuilding.

Submittal Number: 233400 .01

Messer Job #: 213750-030

Date: 10/29/2024

Reviewed By: Logan Toft

Comments:



SUBMITTAL DATA

Project: UCMC Pharmacy Relocation Ph.1

Project No.: 24123947

Construction Manager: Messer Construction

Architect/Engineer: BHDP / HEAPY

Submittal For: Exhaust Fans (GPF-1) Ph. 2

Specification #: 2334 00

Manufacturer: CINFAB

Supplier: CINFAB

Contact Name & Phone #: Andrew Bush (513) 808-8097

The attached submittal data has been reviewed by CINFAB for compliance with the Architect/Engineer's specifications and plan schedule for this project.

In order to maintain the project schedule, we request that this submittal be returned to CINFAB **within 10 days**.

NOTE: Material cannot be released without Architect/Engineer's approval of submittal.

Reviewed By: Andrew Bush

Date: 10/29/2024

(Please place stamp of approval here)

SUBMITTAL

Job Name: UCMC Pharmacy Phase 2 Enabling

Engineer: HEAPY

Contractor: CINFAB

Elevation: (ft) 499

Date: 10/24/2024

Submitted By: James Chandler

Email: jchandler@eapnet.com

Phone: (513)489-9494

EAP INC - 370

3930 VIRGINIA AVE

CINCINNATI, OH 45227

US

Phone: (513)489-9494

Fax: (513)489-6448

Email Address: mhunley@eapnet.com

REVIEWED BY  **HEAPY**

FOR GENERAL CONFORMANCE WITH
INFORMATION PRESENTED IN THE
CONTRACT DOCUMENTS ONLY.

APPROVED AS SUBMITTED

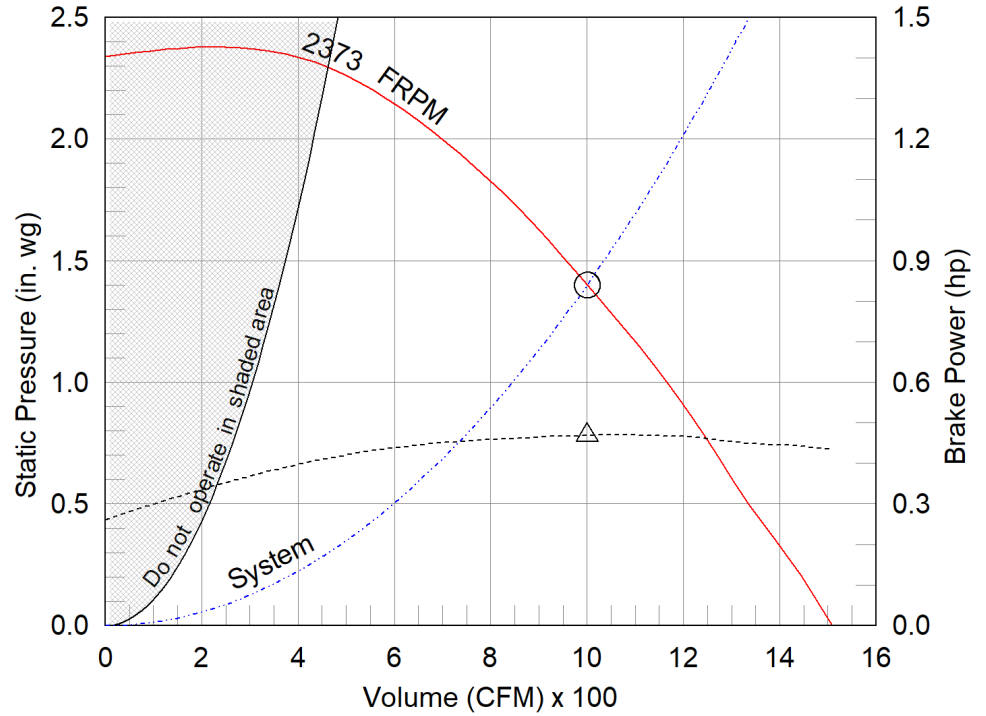
BY: Clare Shaw DATE: 11/7/2024



P.O. Box 410 Schofield, WI 54476 (715) 359-6171 FAX (715) 355-2399 www.greenheck.com

Model: FJI-10-BI-X
Centrifugal Fume Exhaust Fan

Operating Performance



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

Performance	
Quantity	1
Volume (CFM)	1,000
Total External SP (in. wg)	1.4
Operating Power (hp)	0.47
Required Power (hp)	0.47
Fan RPM	2373
Max Fan RPM	4,050
Elevation (ft)	499
Start-up Temp.(F)	70
Operating Temp.(F)	70

Fan Configuration	
Size	10
Wheel Type	BI
Arrangement	10
Class	I
Rotation	CW
Discharge Position	UB
Construction Type	PermaLock
Discharge Type	Fixed Nozzle
Spark Resistance	None
Scroll Material	Steel
Wheel Material	Steel
Inlet Cone Material	Steel

Equipment Weights	
Fan (LMD)(lb)	182
Motor/Drive (lb)	41
Accessories (lb)	109

Misc Fan Data	
Fan Energy Index (FEI)	1.34
Nozzle OV (ft/min)	1,946
Static Efficiency (%)	51
Tip Speed (ft/min)	6,524
Effective Plume Ht. (ft)	15.31
Calculation Method	Momentum Flux

Motor and Drives	
Motor	Included
Size (hp)	1
RPM	1725
Enclosure	TEFC
V/C/P	460/60/3
Frame Size	143T
Max Frame Size	145
Location	Centered
Pulley Type	Constant
Drive Loss (%)	8.7
Drives	Standard
Drive Service Factor	1.5
NEC FLA* (Amps)	2.1



Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	88	79	76	76	74	67	66	61	78	67	15.5
Outlet	97	91	86	83	73	70	65	60	84	72	23

*FLA - based on tables 150 or 148 of National Electrical Code 2002. Actual motor FLA may vary, for sizing thermal overload, consult factory.
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 AMCA 301 at 5 ft

Model: FJI-10-BI-X

Centrifugal Fume Exhaust Fan

Standard Construction Features:

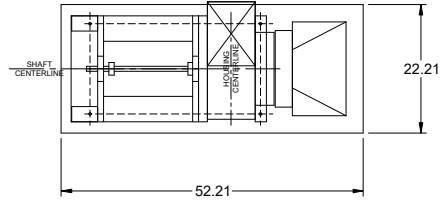
Housing: Series 21 features a Perma-Lock sealed scroll - Discharge stack - Adjustable motor plate - Corrosion resistant fasteners - Structural housing and pedestal parts phosphate and coated with Permatorator BEARINGS, SHAFT and WHEEL: Air handling quality, self-aligning, ball bearing in a pillow block housing - L(10) 80,000 bearing life - Polished, sold steel shaft – Backward inclined, flat blade centrifugal wheel

Selected Options & Accessories:

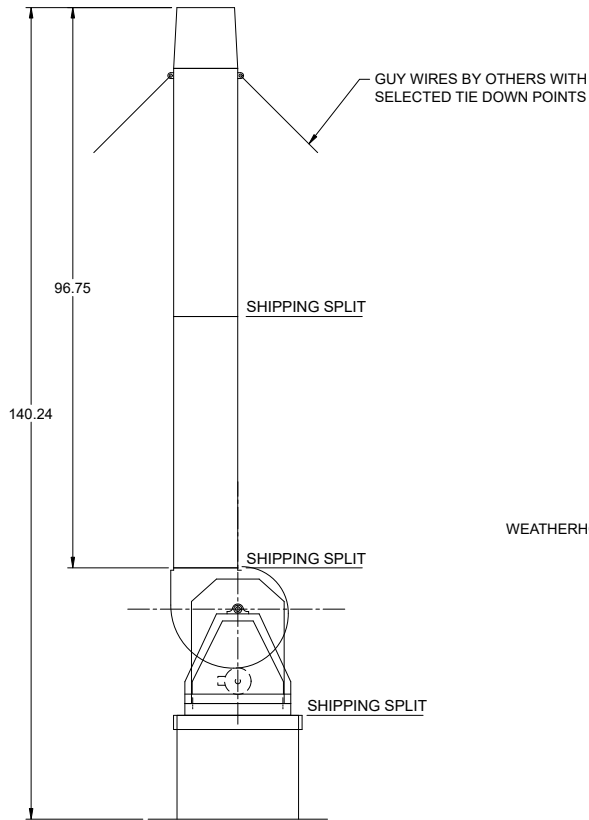
NEMA Premium Efficient Motor - meets NEMA Table 12-12
Motor VFD Rated
Motor with Shaft Grounding
Motor with Class B or Greater Insulation
Standard Drives
Coated with Permatorator, Concrete Gray-RAL 7023, Fan and Attached Accessories
Switch - NEMA-3R, Toggle, For Indoor or Outdoor Use, Mounted and Wired
UL Listed for UL/cUL-705 - "Power Ventilators"
Bearings - L(10) Life of 80k Hours
Polished Steel Shaft
Curb Cap Inlet Box w/Access door, Permatorator coating, Duct Support
Access Door - Hinged
Drain Connection - 1" Pipe Thread w/Plug
Tie Down Points (set of 4)
Inlet Connection - Slip Fit
Outlet Connection - Slip Fit
Weatherhood - Steel
Fasteners - Standard
Unit Warranty: 1 Yr (Standard)

Model: FJI-10-BI-X

Centrifugal Fume Exhaust Fan

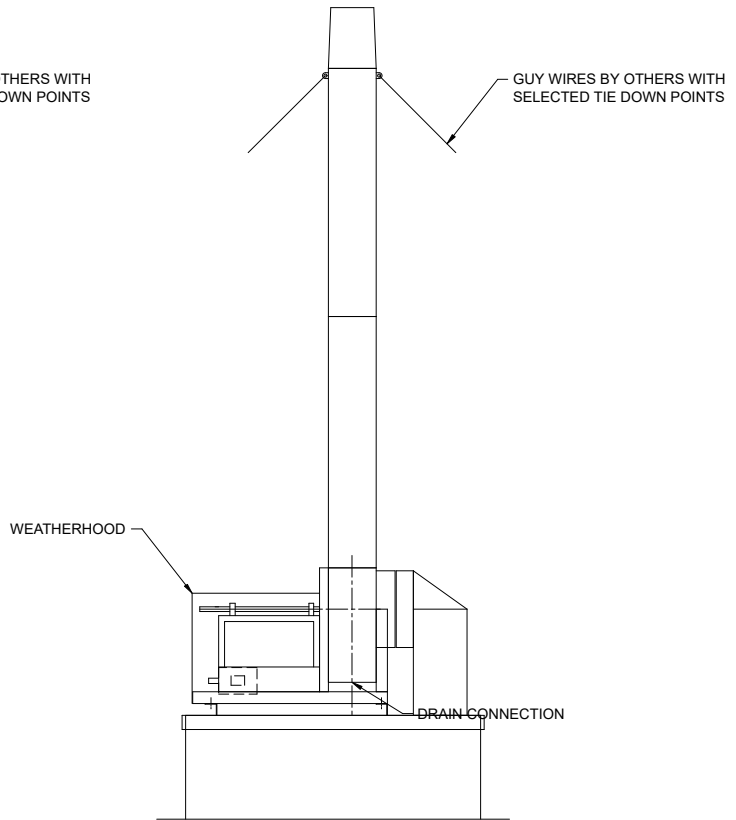


FAN FOOTPRINT



SIDE VIEW

*SIDE VIEW IS VIEWED FROM DRIVE SIDE
*FANS ARE SUBJECT TO ±.125 INCH TOLERANCE
*DUE TO CONTINUAL IMPROVEMENTS DIMENSIONS MAY CHANGE

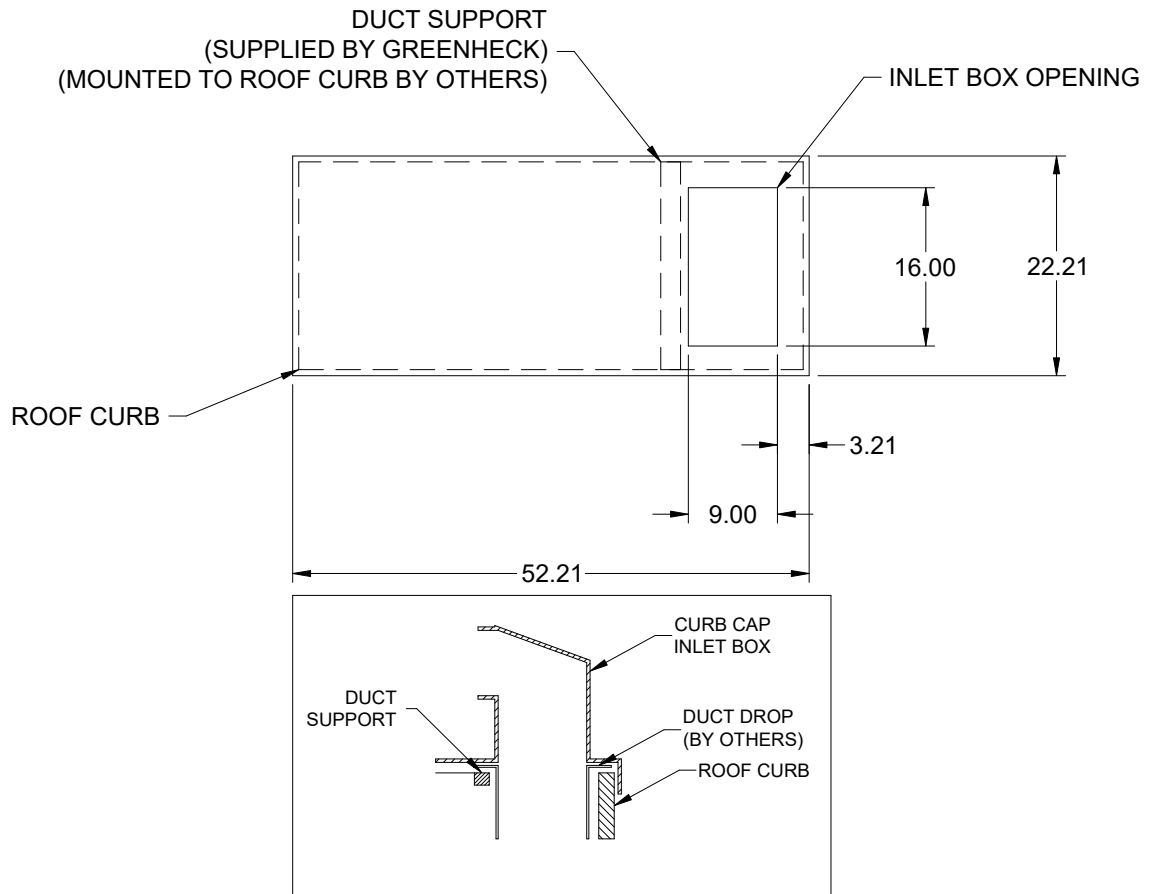


END VIEW

Notes: All dimensions shown are in units of in.

Inlet Connection

CURB CAP INLET BOX



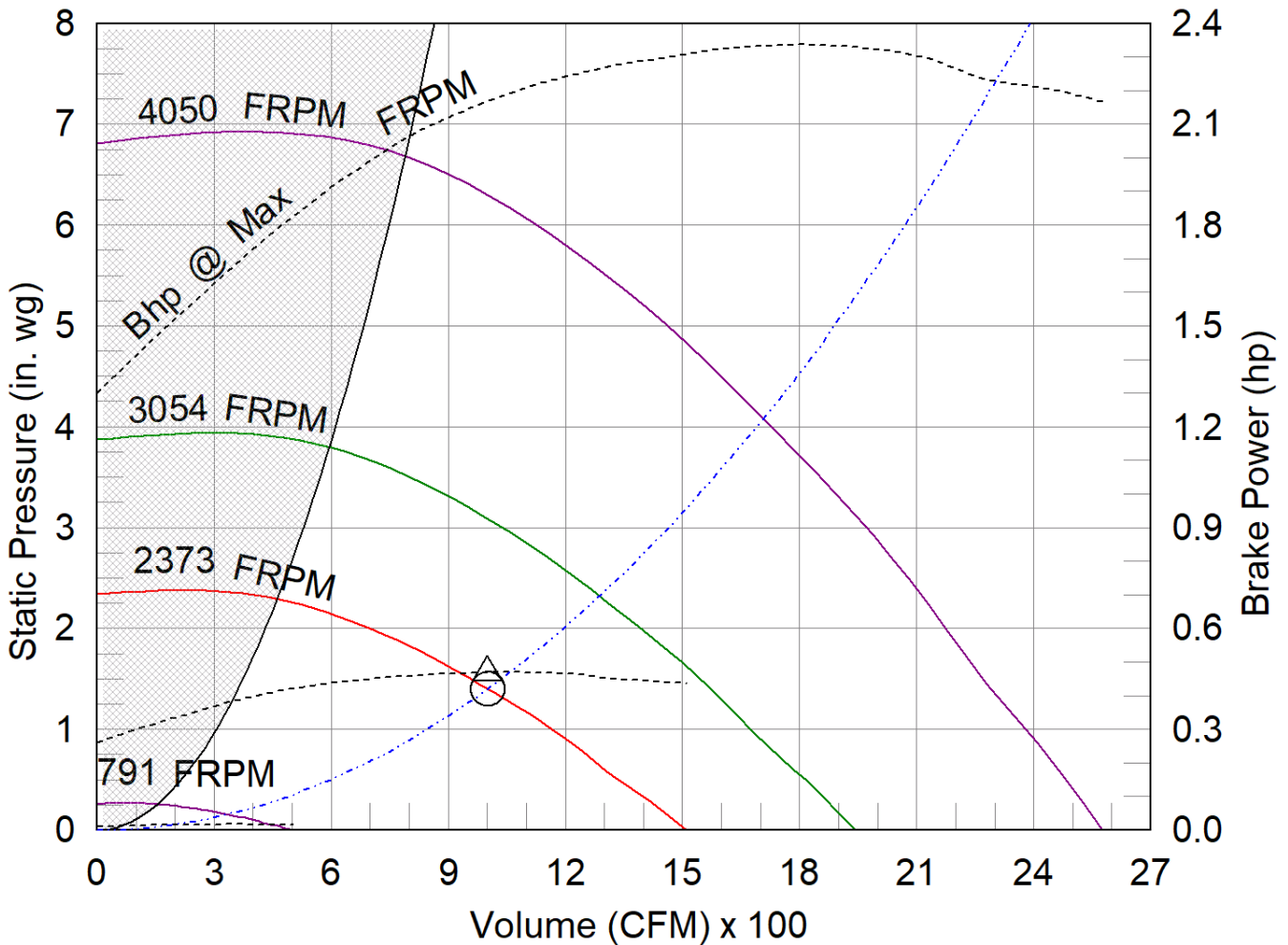
Notes: All dimensions shown are in units of in.

FJI-10-BI-X

Min/Max Fan Curve

Performance

Requested Volume (CFM)	Actual Volume (CFM)	External SP (in. wg)	Total SP (in. wg)	Fan RPM	Operating Power (hp)
1,000	1,000	1.4	1.4	2373	0.47



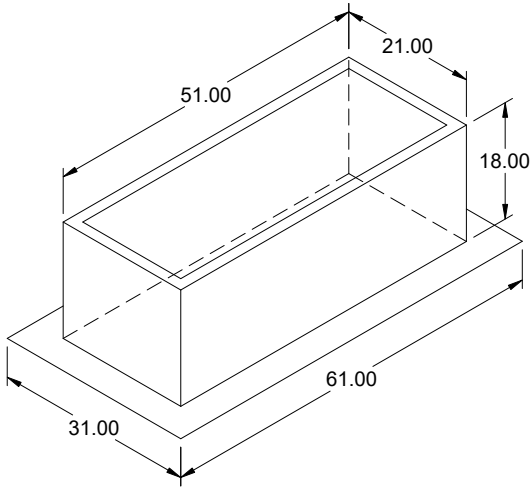
- △ Operating Bhp point
- Operating point at Total External SP
- Construction/System Limit
- Motor/System Limit
- Fan curve
- VFD 20 HZ Limit
- - - System curve
- - - Brake horsepower curve

AMCA



AMCA Licensed for Sound and Air Performance. Power rating (BHP/kW) includes transmission losses.

Greenheck Fan Corporation certifies that the model 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 AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA certified ratings seal applies to sound and air performance ratings only. Performance certified is for installation type B: Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (BHP/kW) does include transmission losses. The sound power level ratings shown are in decibels, referred to 10-12 watts calculated per AMCA Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for the inlet Lwi, LwiA, and outlet Lwo, LwoA sound power levels for installation type B: Free inlet, Ducted outlet. Outlet ratings include the effects of duct end correction. The AMCA Certified Ratings Seal for sound applies to inlet Lwi, LwiA, and outlet Lwo, LwoA ratings only.



Model: GPFHL

Heavy Load Roof Curb

Standard Construction Features:

- Roof Curb fits between the building roof and the fan mounted directly to the roof support structure - Constructed of galvanized steel (14 ga) - Straight Sided - Single roof flashing flange (5 in. width) - Insulated (1 in. thick, 3 lb density).
NOTES: - Curb actual dimension is 0.5 in. smaller than cap dimension. - The maximum allowable roof opening dimension is actual minus 4 in.. - The Roof Opening Dimension may or may not be the same as the Structural Opening Dimension.

General

Tag	Qty	Model	Sizing Method	Undersizing (in.)	Weight (lb)	Shipped Assembled	Union Label
	1	GPFHL-22.2	Nominal	1.2	123	Yes	No Preference

Dimensions

Curb Height (in.)	Nominal Outside Width (in.)	Nominal Outside Length (in.)	Actual Outside Width (in.)	Actual Outside Length (in.)	Flange Width (in.)	Flange Length (in.)
18	22.2	52.2	21	51	31	61

*May not be applicable

Accessories

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