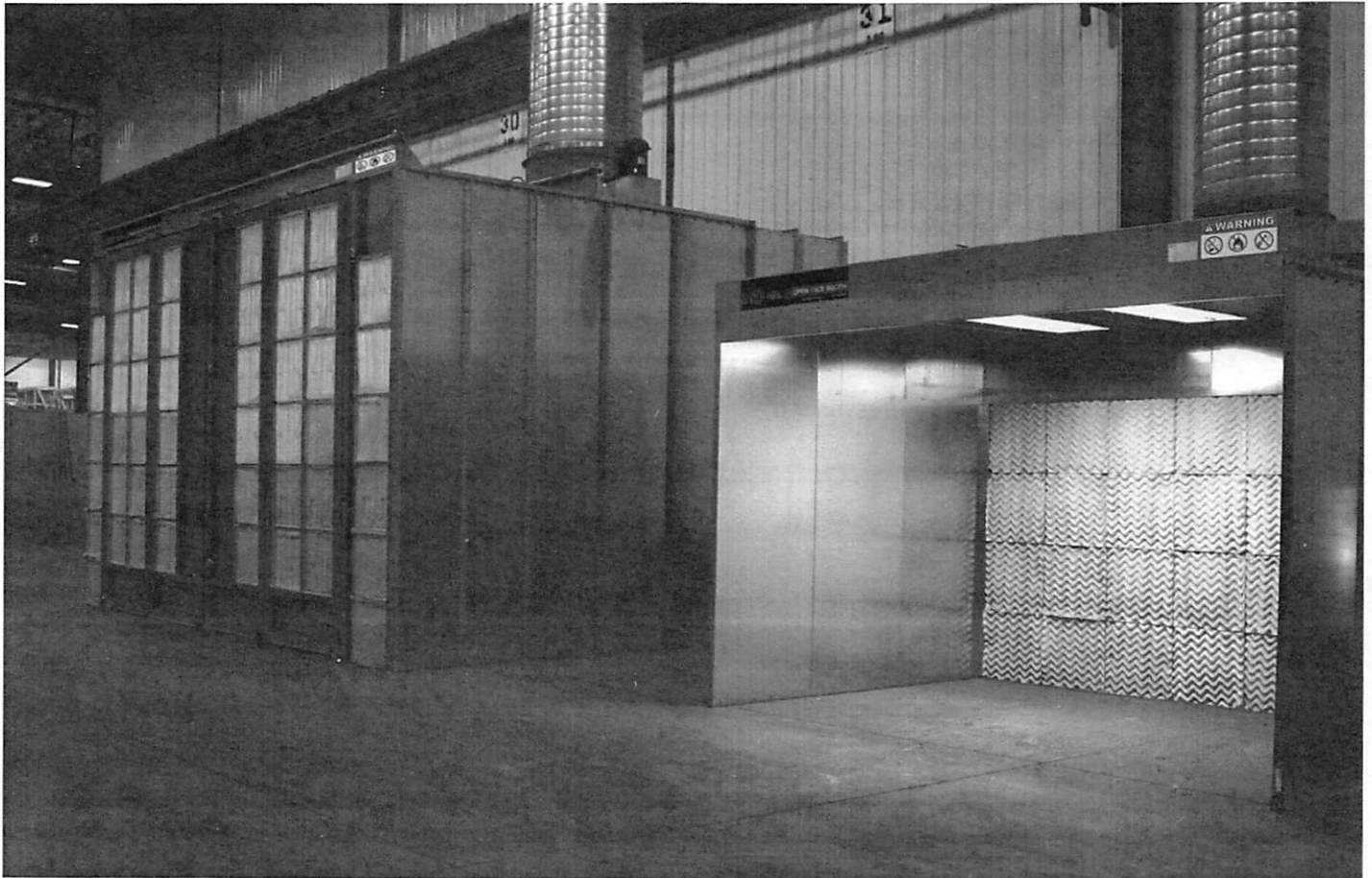




GLOBAL  
FINISHING  
SOLUTIONS

# DRY FILTER

## PAINT BOOTH BASICS 101



Copyright © 2019 Global Finishing Solutions, LLC. All rights reserved.

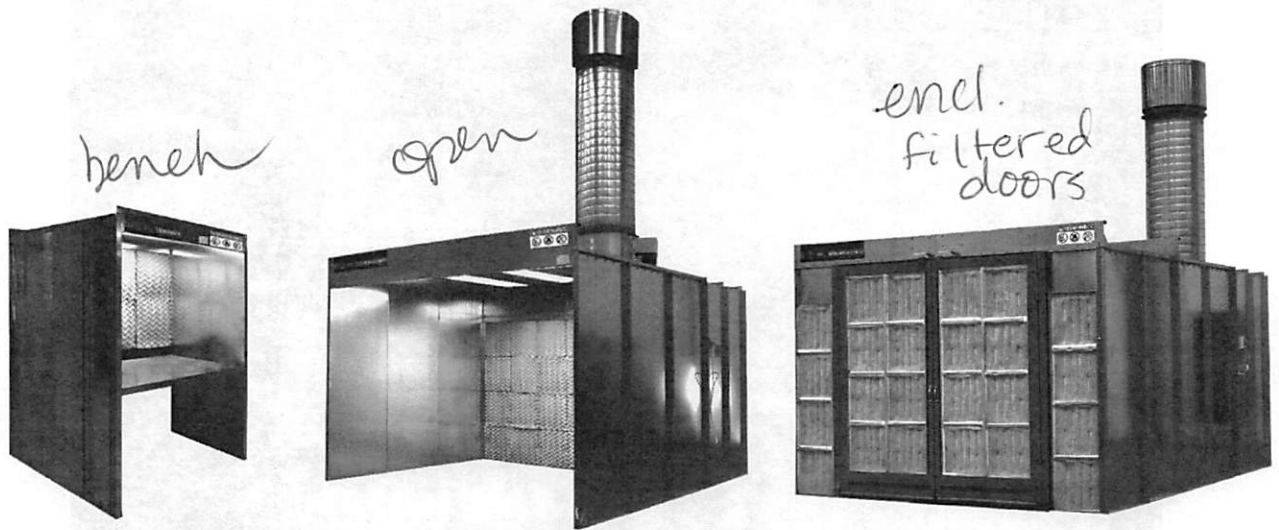
Rev. March 2019

# CONTENTS

<b>PAINT BOOTH BASICS 101</b> .....	<b>3-16</b>
Vison & Scope	
What Does This Mean for the Customer?	
Open Face/Conveyor Opening Air Velocity	
Product Features	
Optional Upgrades	
Custom Options	
Model Sizes	
Features & Options Matrix	
Lighting	
Determining Booth Size	
Crossdraft Airflow	
Exhaust Chamber	
Owner Manuals	
<b>TABLETOP BENCH BOOTH</b> .....	<b>17-18</b>
Tabletop Bench Booth	
Booth Drawing	
<b>BENCH BOOTH</b> .....	<b>19-20</b>
Bench Booth	
Booth Drawing - Non-Pressurized	
<b>OPEN FACE BOOTHS</b> .....	<b>21-22</b>
Open Face Booth	
Booth Drawing	
<b>ENCLOSED FINISHING BOOTHS</b> .....	<b>23-24</b>
Enclosed Finishing Booth	
Booth Drawing	
<b>CONTROL PANELS</b> .....	<b>25</b>
CP-1 Panel	
<b>AIR MAKE-UP UNITS (AMU)</b> .....	<b>26-27</b>
AMU Types	
Pressurized AMU Arrangements	
Non-Pressurized Arrangements	
<b>SAFETY EQUIPMENT</b> .....	<b>28-30</b>
Manometer	
Air Solenoid Valve	
Limit Switches	

## Vision & Scope

- Pre-engineered options
- Diverse customer base
- Code compliant



---

Notes

## What Does This Mean for the Customer?



Notes

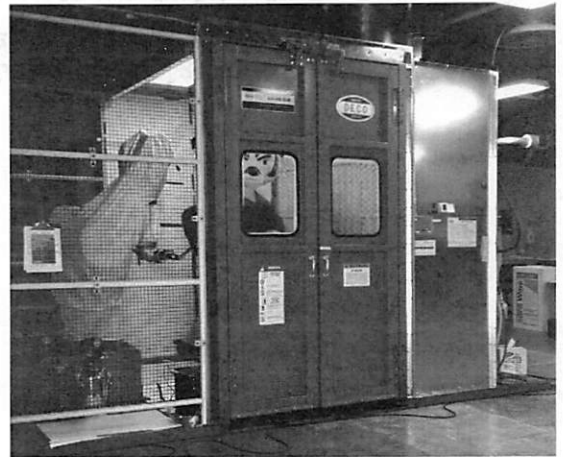
## Open Face/Conveyor Opening Air Velocity

Into the paint booth through all openings:

- No less than 100 FPM

For fixed or automated electrostatic spray application:

- No less than 50 FPM



---

Notes

## Product Features

### AIRFLOW

- 100 FPM (Crossdraft)

### CONSTRUCTION

- 18-gauge galvanized steel
- Single-skin horizontal panels
- Formed 12-gauge galvanized steel beam support (12 feet and wider)

### LIGHTING

- 4-tube fluorescent with T8 ballasts
- Color-corrected tubes

### DOORS

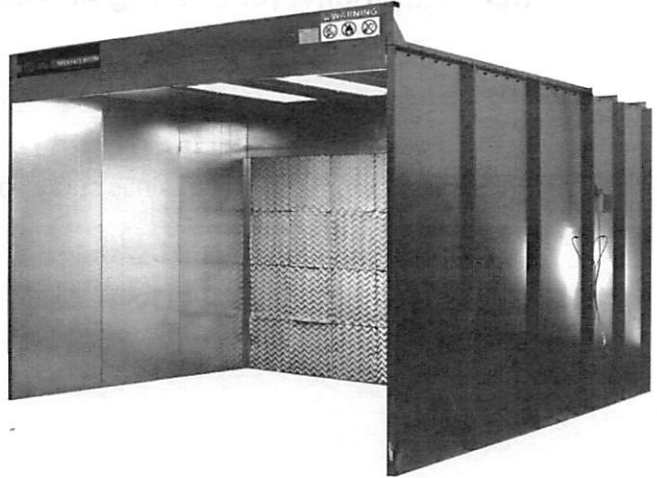
- Swing doors
- Personnel doors
- Friction-style door latches

### SAFETY EQUIPMENT

- Manometers
- Air solenoid valves
- Limit switches

### FANS AND MOTORS

- Tube axial exhaust fans
- TEFC 3-phase motors



Notes

## Optional Upgrades

### CONSTRUCTION

- White pre-coated panels
- Plain or spiral ductwork

### FANS AND MOTORS

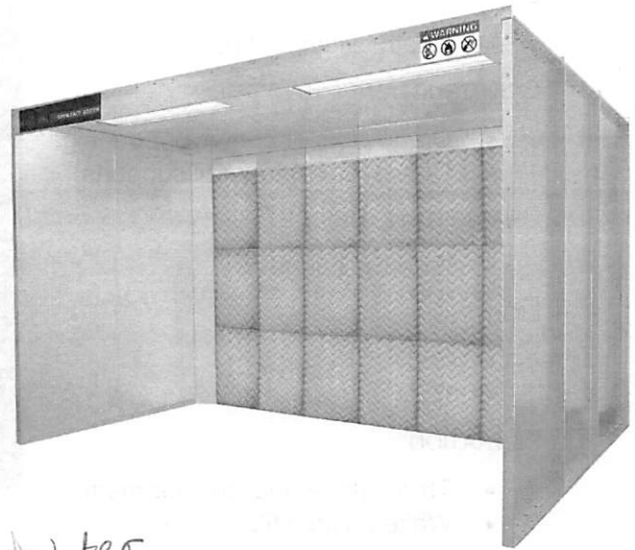
- Rear wall-mounted exhaust fan
- Air proving switch

### LIGHTING

- Six-tube fluorescent with T8 ballasts
- LED
- Light reflectors - *makes them brighter*

### DOORS AND WINDOWS

- Swing-type product and access doors
- Bifold doors
- Booth observation wall window kit



---

Notes

## Custom Options

### SIZE

- Depth, width and height

### CONSTRUCTION

- Crane slots or conveyor openings
- Conveyor or monorail supports

### CHAMBER AND BRIDGE

- External bridge

### LIGHTING

- T5

*www* Rear access

### FILTRATION

- Three-stage and roll filter media
- White painted filter racks

### ACCESSORIES

- Platforms, stands and railings

### OTHER

- Sliding and trifold doors
- Ductwork losses
- Seismic construction



90° elbow = 1" SP  
45° elbow = 1/2" SP

---

Notes



## Models & Sizes

<b>Booth Type</b>	<b>Bench</b>	<b>Open Face</b>	<b>Enclosed Finishing</b>
<b>Design Feature</b>	Tabletop	No Product Door	Product Door
<b>Number of Models</b>	6	260	260
<b>Width</b>	3', 4', 5', 7'	6', 8', 10', 12', 14', 16', 18', 20'	6', 8', 10', 12', 14', 16', 18', 20'
<b>Length</b>	2', 3'	6', 8', 9', 10', 12'	6', 8', 9', 10', 12'
<b>Height</b>	4'	7', 8', 10', 12'	7', 8', 10', 12'
<b>Max Lead Time (business days)</b>	5-7	10-15	15-20

Notes

# Features & Options

Standard Equipment = ✓ Not Available = Blank Cell

	OPEN FACE BOOTH	ENCLOSED FINISHING BOOTH	BENCH BOOTH
	Non-Pressurized	Non-Pressurized	Non-Pressurized
<b>Booth Dimensions</b>			
<b>Pre-Engineered Sizes:</b>			
Available Widths (ft)	6', 8', 10', 12', 14', 16', 18', 20'	6', 8', 10', 12', 14', 16', 18', 20'	3', 4', 5', 7'
Available Heights (ft)	7', 8', 10', 12'	7', 8', 10', 12'	4'
Available Depths (ft)	6', 8', 9', 10', 12'	6', 8', 9', 10', 12'	2ft on 3ft width, 3ft depth on 4ft-5ft-7ft widths
<b>Air Flow Design</b>			
Crossdraft (100 FPM)	✓	✓	✓
<b>Product Certifications</b>			
NFPA-33	✓	✓	✓
IFC Chapter 24	✓	✓	✓
<b>Product locations Through Seismic Category C</b>	✓	✓	✓
Static Pressure (Exhaust)	1/2"	3/4"	3/4"
<b>Construction: Single skin 18 gauge (Booths widths 12ft - 20ft have formed steel Cross supports)</b>			
Galvanized	✓	✓	✓
Pre-Cost White Panels	Option	Option	Option
<b>Input Power (Select One)</b>			
120V/1PH/2W (up to 3hp max)	Option	Option	Option
240V/1PH/3W (up to 6hp max)	Option	Option	Option
208V/3PH/4W	Option	Option	Option
240V/3PH/3W, 240V/3PH/4W	Option	Option	Option
480V/3PH/3W, 480V/3PH/4W	Option	Option	Option
600V/3PH/3W	Option	Option	Option
<b>Exhaust Chamber</b>			
Industrial (Top Exhaust)	✓	✓	Option
Industrial (Rear Exhaust - Increased Fan Static Pressure (Includes Exhaust baffle)	Option	Option	Option
Bridge-External Top - Increased Fan Static Pressure (solid back or drive thru)	N/A	Option (Limited Sizes: 10x08, 10x10, 10x12, 12x08, 12x10, 12x12)	N/A
<b>Lighting</b>			
4 Tube/T8 Lighting (Min 20 foot candles average @ 3ft A.F.F.)	✓	✓	✓
6 Tube/T8 Lighting (25% increased foot candles average)	Option	Option	Option
Reflector Upgrade (25% increased foot candles for 4-Tube and 6-Tube lights)	Option	Option	Option
LED Upgrade (Energy Savings - 50% watt reduction) (Can Not be used with Light Reflectors)	Option	Option	Option
<b>Additional Ceiling Light Kits</b>	Option (Only available on booth widths 12ft-20ft)	Option (Only available on booth widths 12ft-20ft)	

Notes

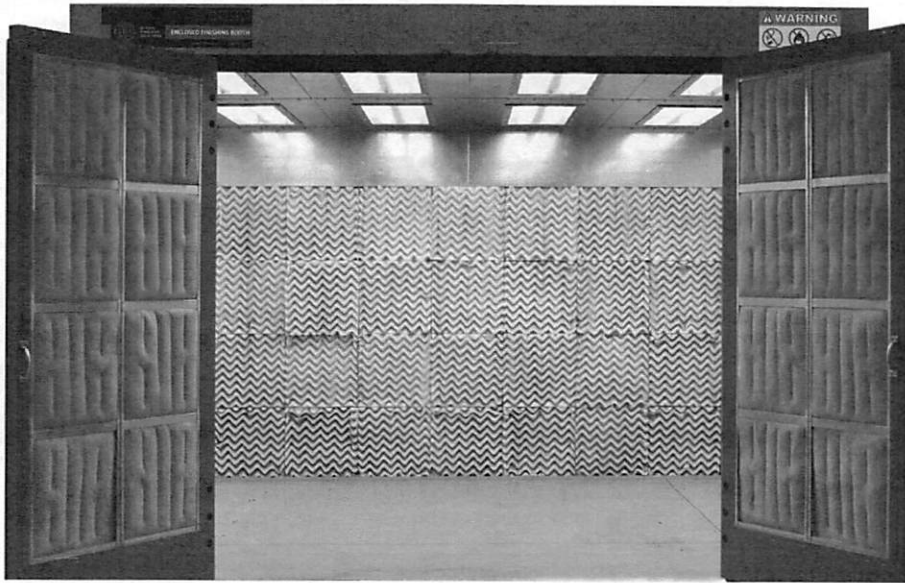
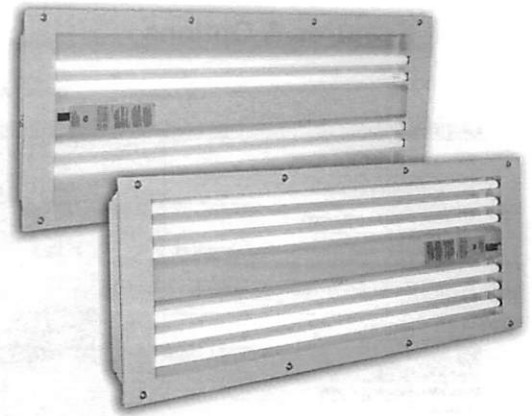
# Features & Options

	OPEN FACE BOOTH	ENCLOSED FINISHING BOOTH	BENCH BOOTH
<b>Doors (Enclosed Booths Only)</b>			
Swing Type (Filtered) (Full height)	N/A	Option: Full Width (6ft-8ft & 10ft booth widths) Option: Width -4ft (12ft & 14ft booth widths)	N/A
Tri-Fold (Filtered) (Full height)	N/A	Option: Width -4ft (10ft width only)	N/A
BI-Folding (Filtered) (Full height)	N/A	Option: (18ft and 20ft width booths)	N/A
Drive Thru Door - Solid Swing Type (Only available with bridge exhaust option - Limited sizes available)	N/A	Option: (Width -4ft) (Limited Sizes: 10x08, 10x10, 10x12, 12x08, 12x10, 12x12)	N/A
Personnel Door w/ 18" x 24" Observation Window & Panel Kit	Option	Option	N/A
Limit Switches (Man Doors & Product Doors)	Option (Mandoor Only)	Option	N/A
<b>Control Panel</b>			
Electro-Mechanical (CP-BNP)	Option	Option	Option
Manual VFD	Option	Option	Option
Consta-Flow	*Option	*Option	*Option
*Economy Mode (only available with Consta-Flow) (Select Airflow switch or Gun hanger Switch)	Option	Option	N/A
AMU Interlock	Option	Option	Option
<b>Components</b>			
Solenoid Air Valve (1/2" Standard or Optional Upgrade to 3/4")	✓	✓	✓
Door Limit Switches	Option	Option	
Roll Media Filter (includes hangers and filter media)	Option	Option	Option
Observation Window Kits 18"x24" (Field Install)	Option	Option	N/A
Fan Stand (roof mounted)	Option	Option	Option
Motor Cover (roof mounted)	Option	Option	Option
Explosion Proof Motor Upgrade	Option	Option	Option
Dirty Filter Shutdown	Option	Option	Option
Air Proving Switches (1 per exhaust fan)	Option	Option	Option
<b>Exhaust Ductwork *(Kit is created per Building Roof Height - Kit includes: Straight duct, Clean out door, and Roof ventilator)</b>			
Plain Pipe or Spiral Pipe	Select Type	Select Type	Select Type
*8ft Above Roof Height	Configurable Option	Configurable Option	Configurable Option
*10ft Above Roof Height	Configurable Option	Configurable Option	Configurable Option
*1 1/2 time Roof Height	Configurable Option	Configurable Option	Configurable Option
Duct Guy Wire Kit	Option	Option	Option
Roof Flange	Option	Option	Option

Notes

## Lighting

- Class I, Division 2 inside-access light fixtures
- Strategically placed
- Precise, complete lighting for minimal shadows



---

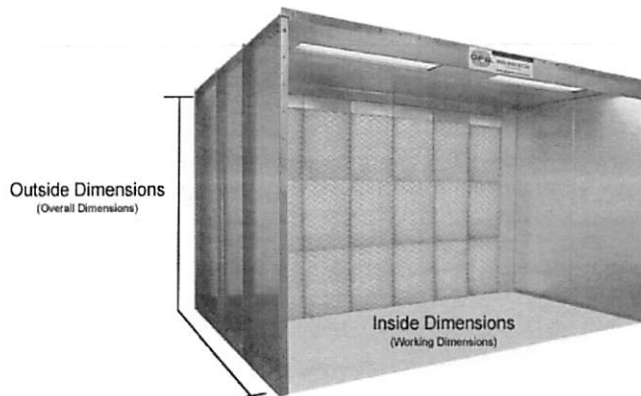
Notes

## Determining Booth Size

- Outside dimensions are always larger than the inner work area
- Allow:
  - 3 feet on both sides of part
  - 3 feet above part
  - 3 feet between front of part and front of booth

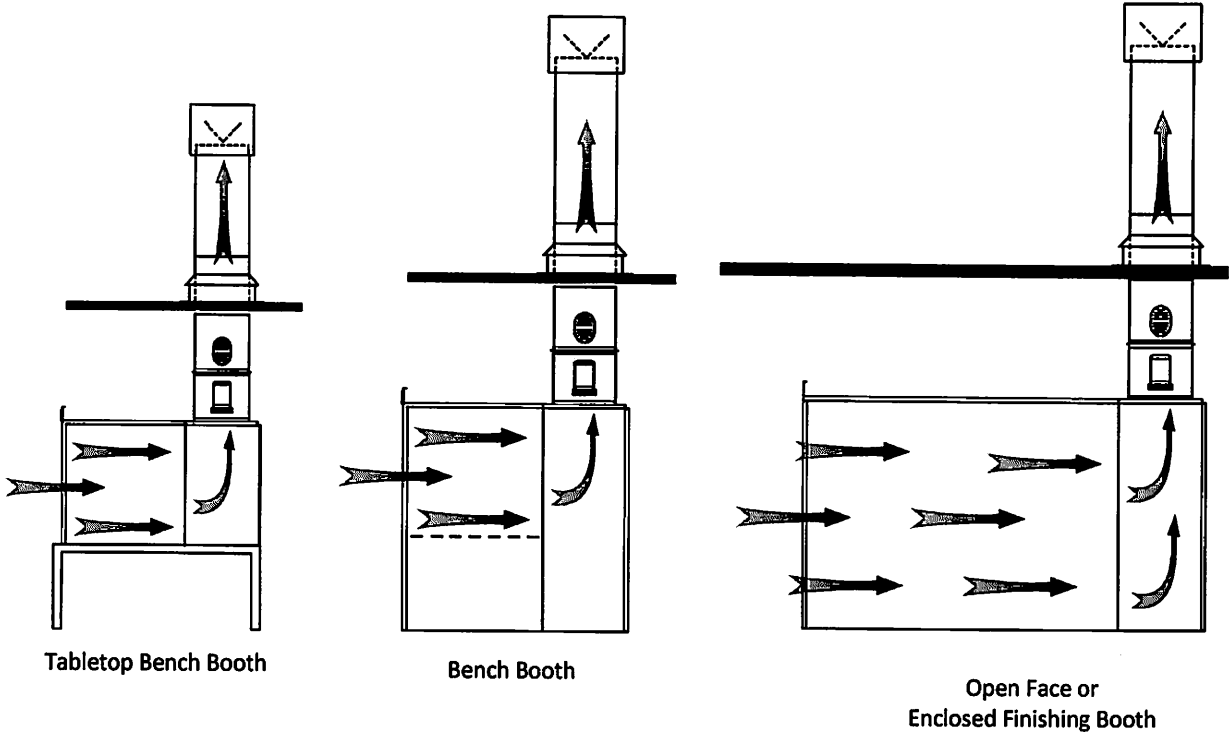
### OPEN FACE BOOTH MODELS

Model No.	Inside Dimensions			Outside Dimensions			Exhaust Fan			No. of Lights
	Width	Height	Depth	Width	Height	Depth	Dia.	HP	SCFM	
<b>6 Ft. Wide Booths</b>										
DFOCG-060706-NSB-1L	6'	7'	6'	6' 4"	7' 10"	9' 2"	24	1	4200	1
DFOCG-060708-NSB-1L	6'	7'	8'	6' 4"	7' 10"	11' 2"	24	1	4200	1
DFOCG-060709-NSB-1L	6'	7'	9'	6' 4"	7' 10"	12' 2"	24	1	4200	1
DFOCG-060710-NSB-1L	6'	7'	10'	6' 4"	7' 10"	13' 2"	24	1	4200	1
DFOCG-060712-NSB-2L	6'	7'	12'	6' 4"	7' 10"	15' 2"	24	1	4200	2
DFOCG-060806-NSB-1L	6'	8'	6'	6' 4"	8' 10"	9' 2"	24	2	4800	1
DFOCG-060808-NSB-1L	6'	8'	8'	6' 4"	8' 10"	11' 2"	24	2	4800	1
DFOCG-060809-NSB-1L	6'	8'	9'	6' 4"	8' 10"	12' 2"	24	2	4800	1
DFOCG-060810-NSB-1L	6'	8'	10'	6' 4"	8' 10"	13' 2"	24	2	4800	1
DFOCG-060812-NSB-2L	6'	8'	12'	6' 4"	8' 10"	15' 2"	24	2	4800	2
DFOCG-061006-NSB-1L	6'	10'	6'	6' 4"	10' 10"	9' 2"	24	2	6000	1
DFOCG-061008-NSB-1L	6'	10'	8'	6' 4"	10' 10"	11' 2"	24	2	6000	1
DFOCG-061009-NSB-1L	6'	10'	9'	6' 4"	10' 10"	12' 2"	24	2	6000	1
DFOCG-061010-NSB-1L	6'	10'	10'	6' 4"	10' 10"	13' 2"	24	2	6000	1
DFOCG-061012-NSB-2L	6'	10'	12'	6' 4"	10' 10"	15' 2"	24	2	6000	2
DFOCG-061206-NSB-1L	6'	12'	6'	6' 4"	12' 10"	9' 2"	30	3	7200	1
DFOCG-061208-NSB-1L	6'	12'	8'	6' 4"	12' 10"	11' 2"	30	3	7200	1
DFOCG-061209-NSB-1L	6'	12'	9'	6' 4"	12' 10"	12' 2"	30	3	7200	1
DFOCG-061210-NSB-1L	6'	12'	10'	6' 4"	12' 10"	13' 2"	30	3	7200	1
DFOCG-061210-NSB-2L	6'	12'	12'	6' 4"	12' 10"	15' 2"	30	3	7200	2



Notes

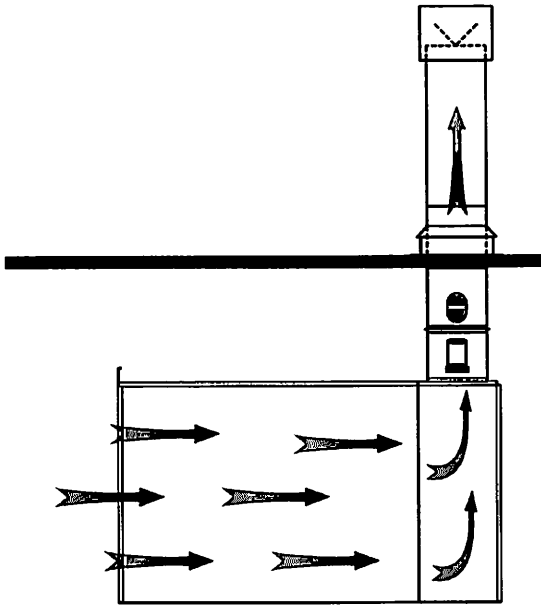
## Crossdraft Airflow



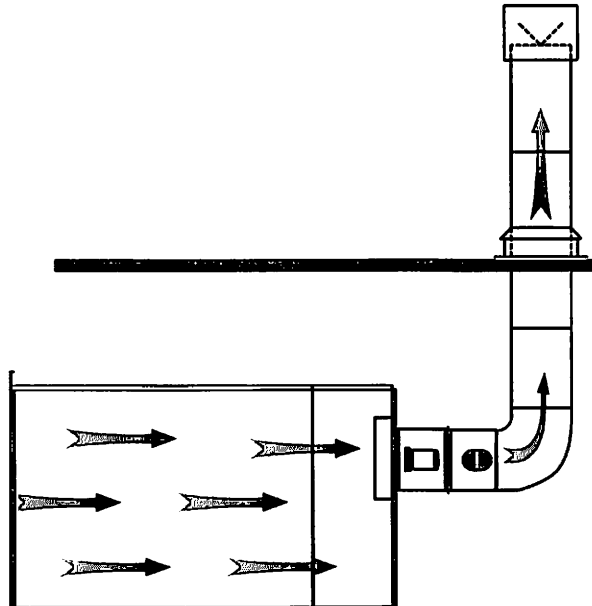
Notes

## Exhaust Chamber

Top exhaust is standard on all Dry Filter Booths



Rear exhaust is optional on Open Face and Enclosed Finishing Booths

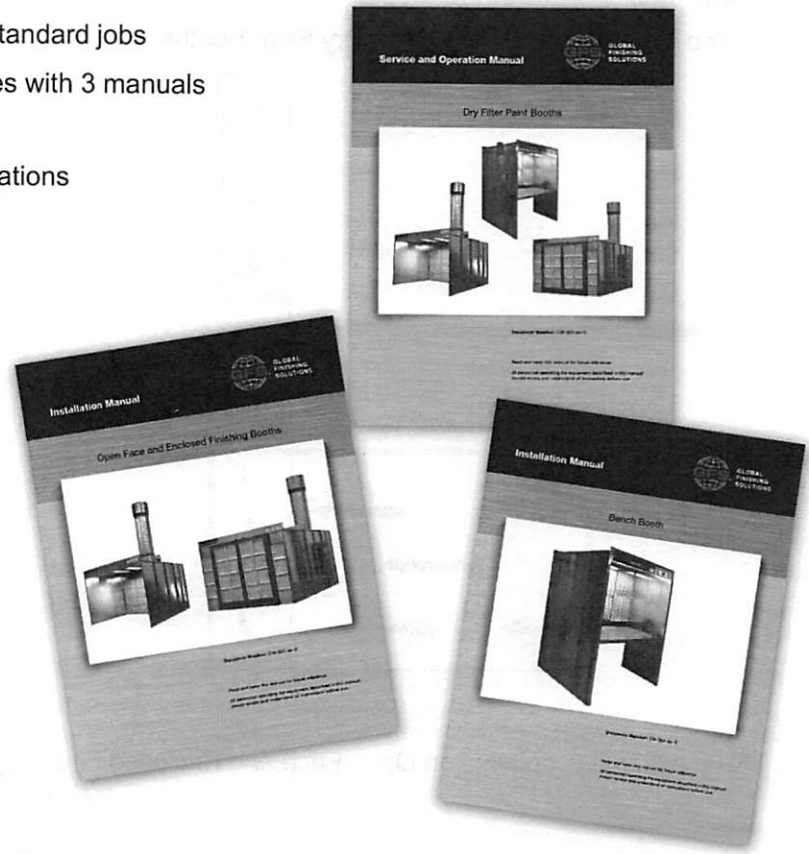


---

Notes

## Owner Manuals

- Manuals come only for standard jobs
- Every standard job comes with 3 manuals
  - Installation
  - Service and operations
  - Control panel

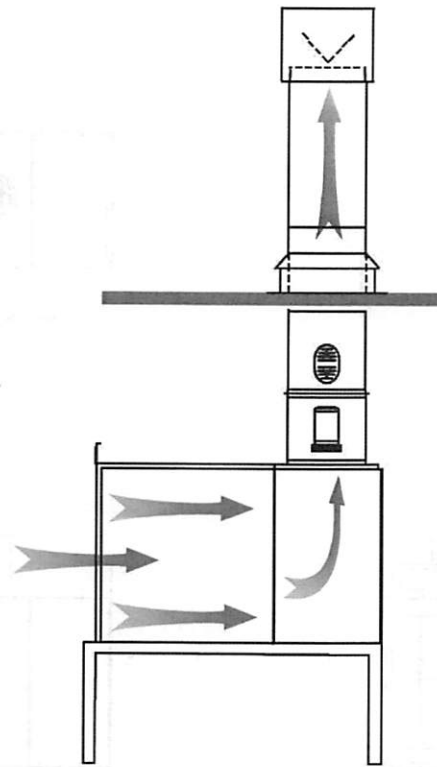
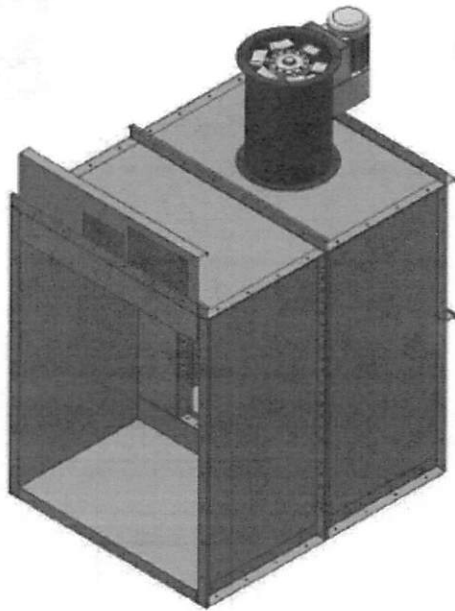


---

Notes



## Tabletop Bench Booth

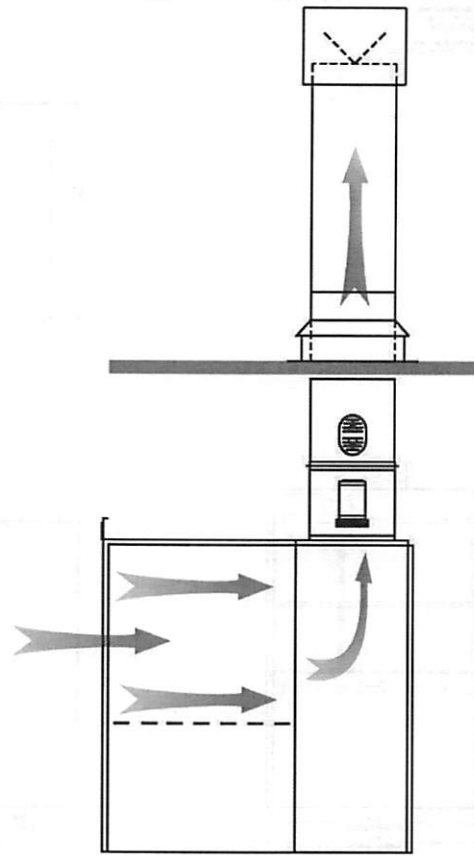
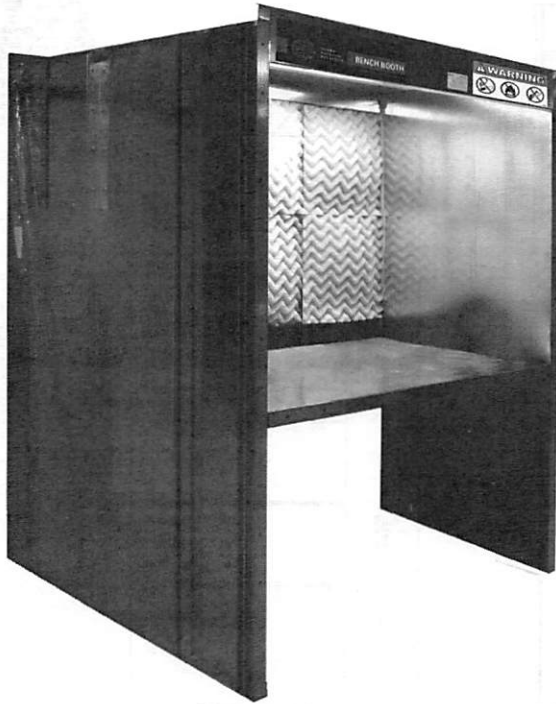


---

Notes

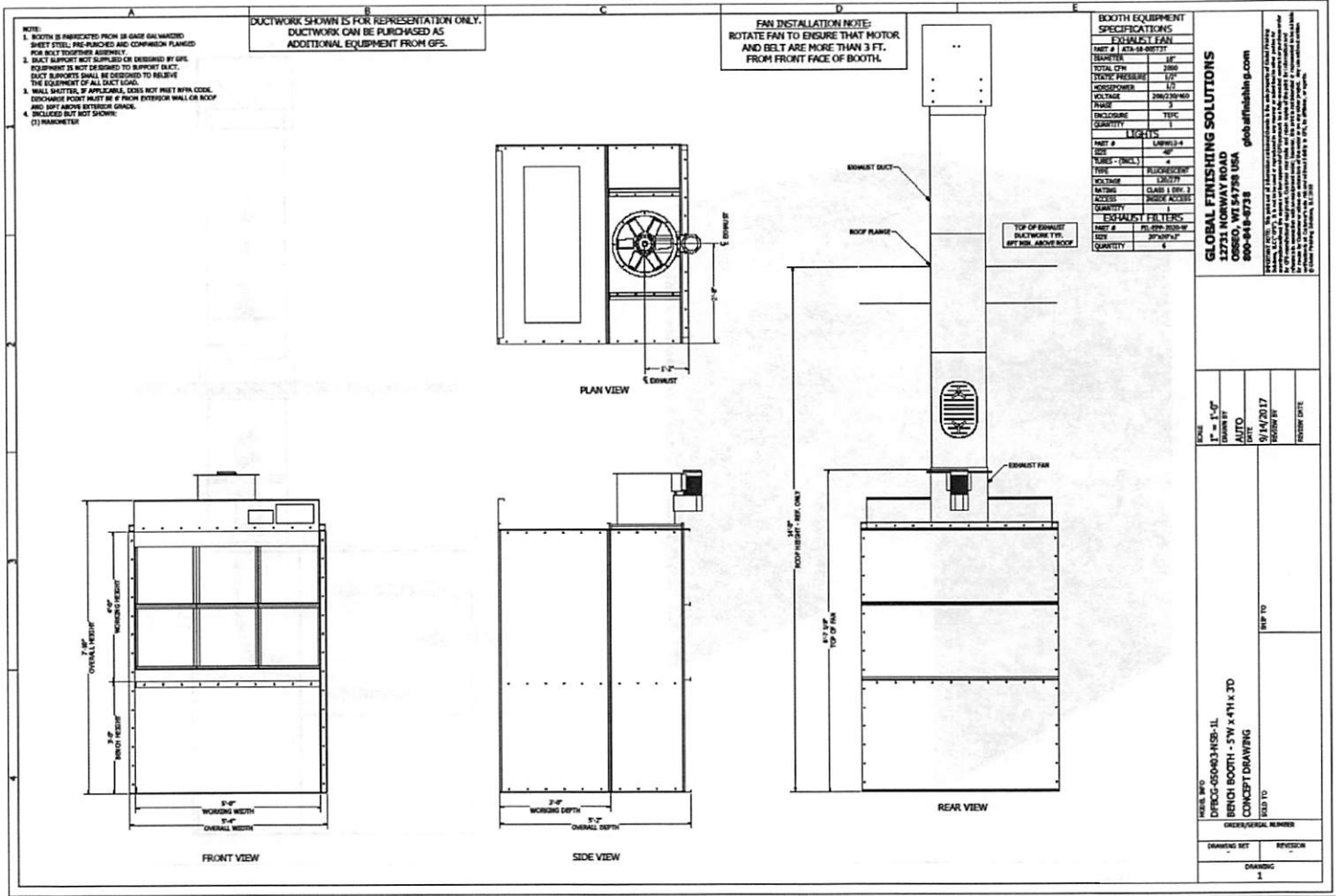


# Bench Booth



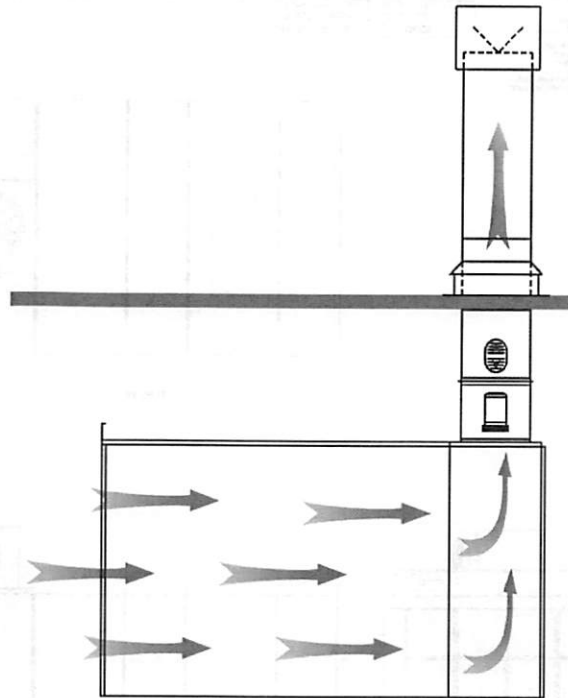
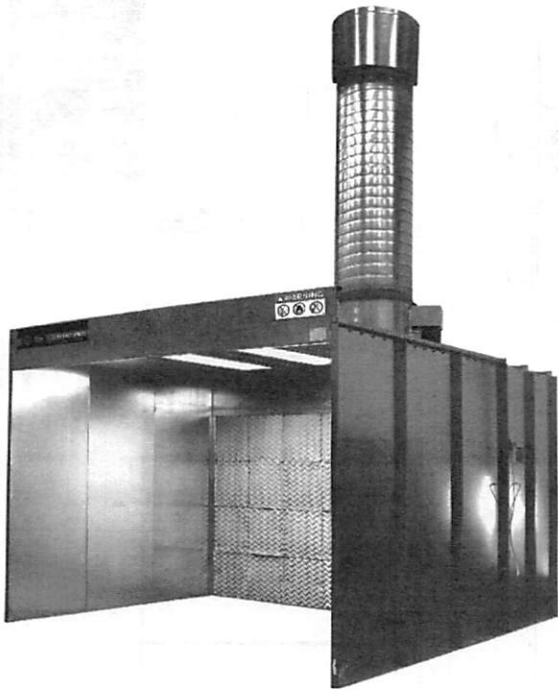
Notes

# Bench Booth



Notes

## Open Face Booth

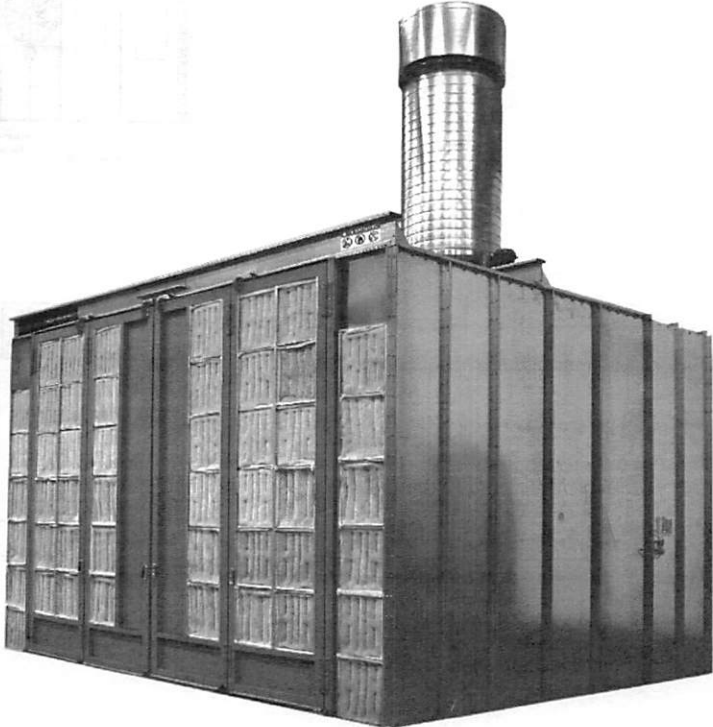
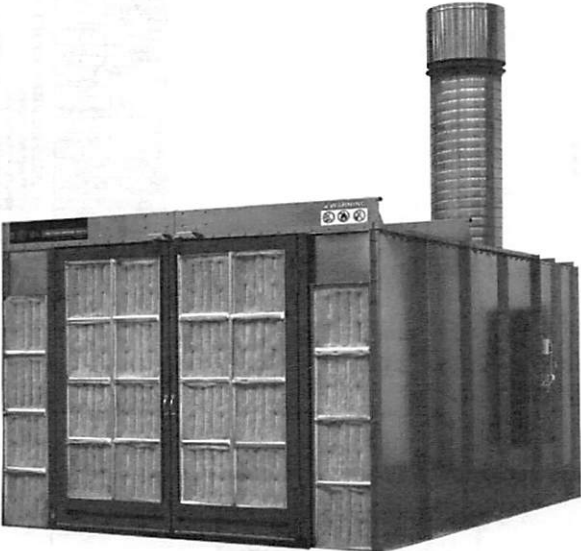


### Notes

can add depth only (w x h no)  
after install



# Enclosed Finishing Booth



---

Notes





OPTION

NOT INCL

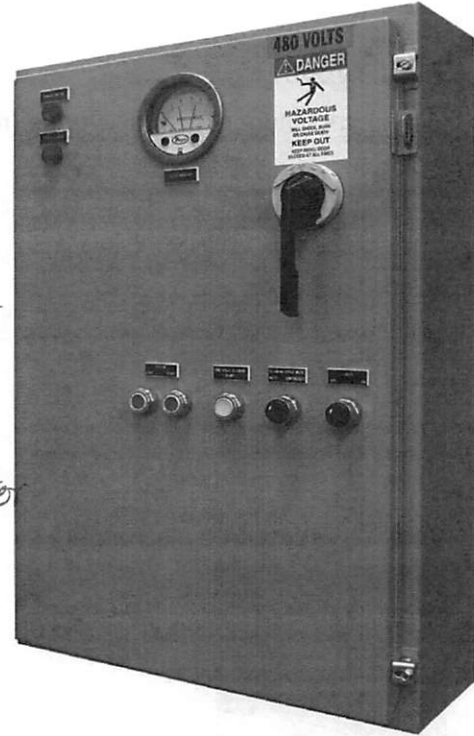
## CONTROL PANEL

# of fans

### CP-1 Control Panel

- Single-point power connection for easy wiring
- UL listed
- Options include manual VFD and Consta-Flow

↓  
conveyor  
or  
crane  
slot  
regulator

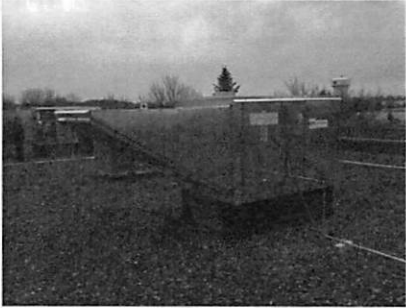


Notes

# AIR MAKE-UP UNITS (AMU)

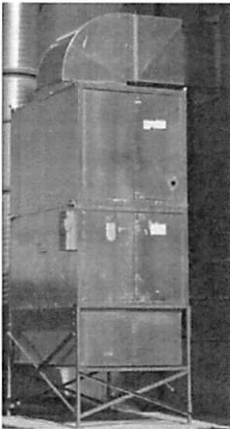
## AMU Types

Horizontal outdoor down discharge (roof-mounted)



*pitched or flat roof*

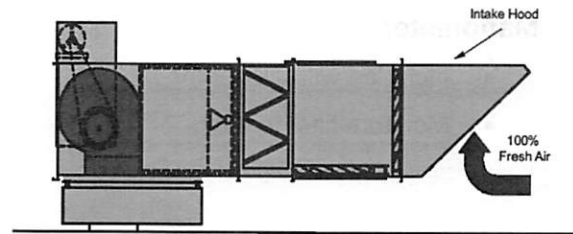
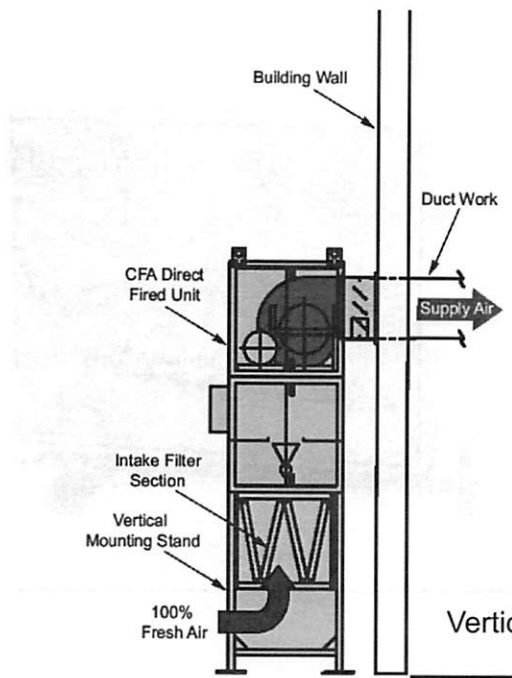
Vertical outdoor side discharge



Notes

---

# Non-Pressurized AMU Arrangements



Horizontal Outdoor Unit  
Roof Mounted

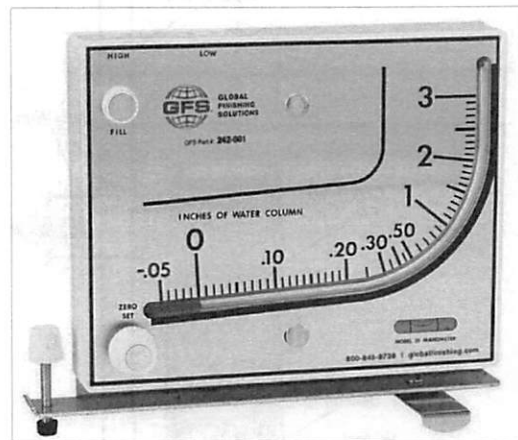
Vertical Outdoor Unit

Notes

# SAFETY EQUIPMENT

## Manometer

- Included with all booths
- Monitors filter loading

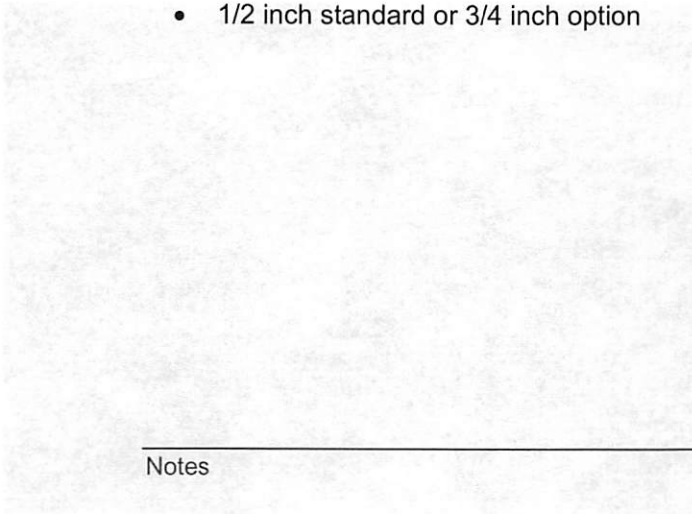


---

Notes

## Air Solenoid Valve

- Prevents spraying in the booth when fans are off or access door is open
- Required on all booths, per code
- 1/2 inch standard or 3/4 inch option

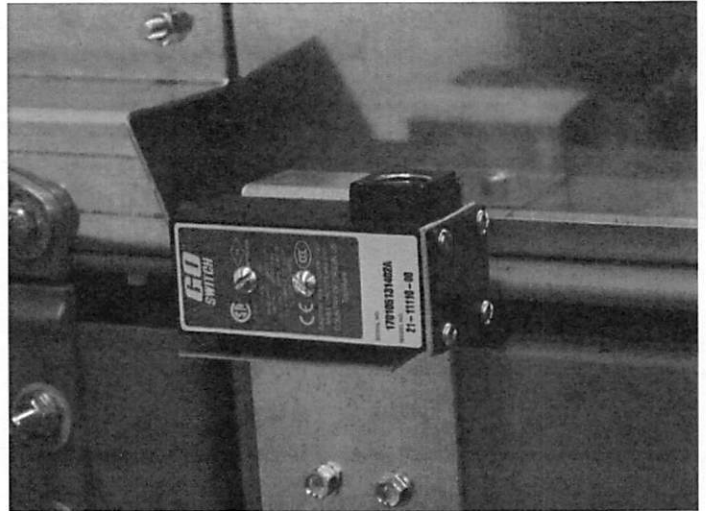


---

Notes

## Limit Switches

- Shuts down painting when booth doors are open for user safety
- Standard on all pressurized booths
- Optional on non-pressurized booths



---

Notes