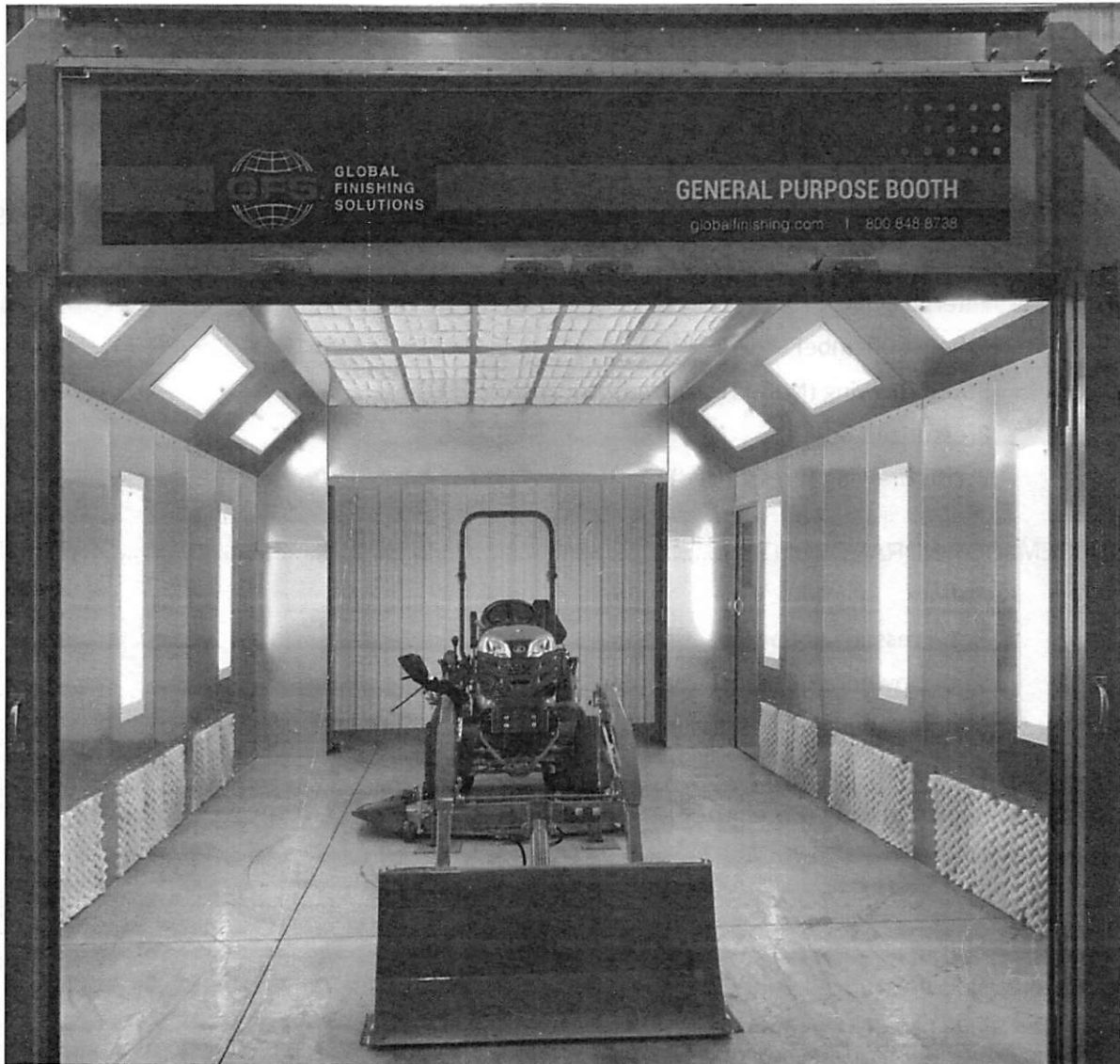




GLOBAL
FINISHING
SOLUTIONS

GENERAL PURPOSE

PAINT BOOTH BASICS 101



CONTENTS

GENERAL PURPOSE BASICS 101	4-13
Vision & Scope	
What Does This Mean for the Customer?	
Product Features	
Optional Upgrades	
Custom Options	
Standard GP Booth Sizes	
Features & Options	
Angled Ceiling Hip Light Fixtures	
Owner Manuals	
CROSSDRAFT BOOTHS	14-19
Airflow	
Filtered Swing Product Doors	
Exhaust Chamber	
Booth Drawing (Non-Pressurized)	
Pressurized Booth	
Booth Drawing (Pressurized)	
SEMI-DOWNDRAFT BOOTHS.....	20-25
Airflow	
Non-Pressurized Booth	
Semi-Downdraft Exhaust Chamber	
Booth Drawing (Non-Pressurized)	
Pressurized Booth	
Booth Drawing (Pressurized)	
SIDE DOWNDRAFT BOOTHS	26-31
Airflow	
Non-Pressurized Booth	
Side Exhaust Chamber	
Booth Drawing (Non-Pressurized)	
Pressurized Booth	
Booth Drawing (Pressurized)	

DOWNDRAFT BOOTHS.....	32-37
Airflow	
Non-Pressurized Booth	
Exhaust Pit	
Booth Drawing (Non-Pressurized)	
Pressurized Booth	
Booth Drawing (Pressurized)	
CONTROL PANELS.....	38-40
CP-1 Control Panel	
Velocity Control Panel	
Auto-Balance System	
AIR MAKE-UP UNITS	41-44
GP/RUPP Tempered AMUs	
Pressurized AMU Arrangements	
Non-Pressurized AMU Arrangements	
SAFETY EQUIPMENT	45-47
Manometer	
Air Solenoid Valve	
Limit Switches	

Vision & Scope

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



Notes

What Does This Mean for the Customer?



Notes

* Dual Skin

Product Features

AIRFLOW

- 75 FPM (Crossdraft)
- 35 FPM (Downdraft)

CONSTRUCTION

- 18-gauge galvanized steel
- Single-skin vertical panels *Dual?*
- Hip-roof construction
- Formed 12-gauge galvanized steel column and beam support

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
- Dual-skin panels
- Plain or spiral ductwork

FANS AND MOTORS

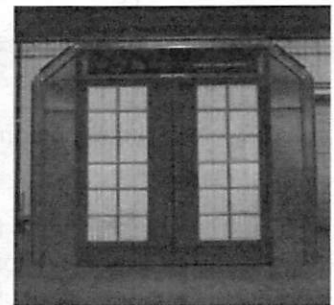
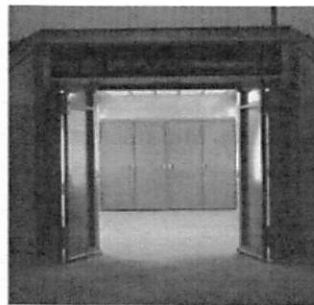
- Non-tempered intake fans
- AMU (with non-pressurized booth)
- Air proving switch

LIGHTING

- Six-tube fluorescent with T8 ballasts
- LED
- Light reflectors

DOORS AND WINDOWS

- Swing-type product doors
- Bifold doors
- Roll-up product doors
- Observation windows in 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

- Corner-style exhaust chamber
- External bridge
- Three-stage filtration
- White painted filter racks

LIGHTING

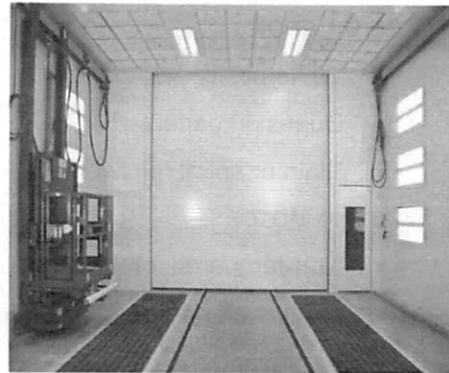
- T5
- Rear access

ACCESSORIES

- Lifts, platforms, stands and railings

OTHER

- Sliding and trifold doors
- Ductwork losses
- Recirculation cure mode
- Seismic construction

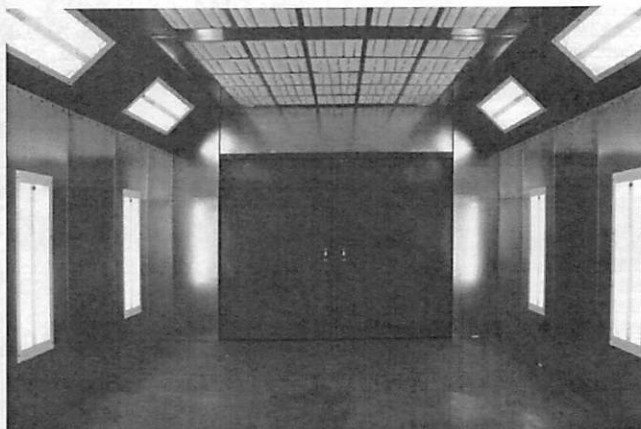


Notes

Standard GP Booth Sizes

- All models have been pre-engineered with general assembly drawings
- Other sizes available as custom options

PRE-ENGINEERED OPTIONS	
Width x Height	Depth
14 feet x 10 feet	24 feet
14 feet x 12 feet	27 feet
14 feet x 14 feet	30 feet
	33 34 feet



Notes

Features & Options

BOOTH FEATURES	Crossdraft Non-Pressurized GP Booth				Crossdraft Pressurized GP Booth				Downdraft Non-Pressurized GP Booth				Downdraft Pressurized GP Booth				Side-Downdraft Non-Pressurized GP Booth				Side-Downdraft Pressurized GP Booth				Semi-Downdraft Non-Pressurized GP Booth				Semi-Downdraft Pressurized GP Booth			
Booth Dimensions																																
Pre-Engineered Sizes:																																
Available Width:				14'				14'				14'				14'				14'				14'				14'			14'	
Available Height:		10'	12'	14'		10'	12'	14'		10'	12'	14'		10'	12'	14'		10'	12'	14'		10'	12'	14'		10'	12'	14'		10'	12'	14'
Available Depth:	24'	27'	30'	33'	24'	27'	30'	33'	24'	27'	30'	33'	24'	27'	30'	33'	24'	27'	30'	33'	24'	27'	30'	33'	24'	27'	30'	33'	24'	27'	30'	33'
Air Flow Design																																
Crossdraft (75 FPM)	✓				✓																											
Downdraft (35 FPM)									✓				✓																			
Side-Downdraft (35 FPM)																	✓				✓											
Semi-Downdraft (75 FPM)																									✓				✓			
Static Pressure (Exhaust)	1/2"				3/8"				1"				3/4"				1"				3/4"				1/2"				3/8"			
Construction																																
Booth Material Thickness/Type	18 gauge / Galvanized				18 gauge / Galvanized				18 gauge / Galvanized				18 gauge / Galvanized				18 gauge / Galvanized				18 gauge / Galvanized				19 gauge / Galvanized				20 gauge / Galvanized			
Single Skin Panels	✓				✓				✓				✓				✓				✓				✓				✓			
Precoat White Panels	Option				Option				Option				Option				Option				Option				Option				Option			
Panel Layout	Vertical w/ Hip				Vertical w/ Hip				Vertical w/ Hip				Vertical w/ Hip				Vertical w/ Hip				Vertical w/ Hip				Vertical w/ Hip				Vertical w/ Hip			
Structure Type	12 gauge formed steel				12 gauge formed steel				12 gauge formed steel				12 gauge formed steel				12 gauge formed steel				12 gauge formed steel				12 gauge formed steel				12 gauge formed steel			
Intake Air Source	Filtered Product Door				Internal Bridge Chamber				Full Filtered Ceiling				2' High Intake Filter Plenum				Full Filtered Ceiling				2' High Intake Filter Plenum				Front Filtered Ceiling				2' H Front Intake Filter Plenum			
Exhaust Flow Type	Internal Rear Bridge Chamber				Internal Rear Bridge Chamber				Single Row "Floor Pit" w/ 1 1/2" Grating				Single Row "Floor Pit" w/ 1 1/2" Grating				2 Sidewall Exhaust Chambers				2 Sidewall Exhaust Chambers				Internal Rear Bridge Chamber				Internal Rear Bridge Chamber			
Exhaust Filtration	20" x 20" x 2" Wave Filters				20" x 20" x 2" Wave Filters				Wave Roll-Media				Wave Roll-Media				20" x 20" x 2" Wave Filters				20" x 20" x 2" Wave Filters				20" x 20" x 2" Wave Filters				20" x 20" x 2" Wave Filters			
Lighting																																
4 Tube/T8 Lighting	✓				✓				✓				✓				✓				✓				✓				✓			
6 Tube/T8 Lighting	Option				Option				Option				Option				Option				Option				Option				Option			
Reflector Upgrade	Option				Option				Option				Option				Option				Option				Option				Option			
LED Upgrade	Option				Option				Option				Option				Option				Option				Option				Option			
Doors																																
Type (Standard)	Filtered Swing				Solid Swing				Solid Swing				Solid Swing				Solid Swing				Solid Swing				Solid Swing				Solid Swing			
Bi-Fold	Option (Filtered)				Option (Solid)				Option (Solid)				Option (Solid)				Option (Solid)				Option (Solid)				Option (Solid)				Option (Solid)			
Roll-up	Option Only on Exit Door if Drive-Thru Config. Selected				Option				Option				Option				Option				Option				Option				Option			
Observation Windows on Product Doors (1 per Door Slab)	Option				Option				Option				Option				Option				Option				Option				Option			
Add Product Exit Door (Drive-Thru Configuration)	Option (Solid Door on Exit)				Option				Option				Option				Option				Option				Option				Option			
Personnel Door w/ 18" x 24" Observation Window	1 Door				1 Door				1 Door				1 Door				1 Door				1 Door				1 Door				1 Door			
Additional Personnel Door Kit (Selectable Quantity)	Option				Option				Option				Option				Option				Option				Option				Option			
Limit Switches (Main Doors & Product Doors)	Option				✓				Option				✓				Option				✓				Option				✓			

Notes

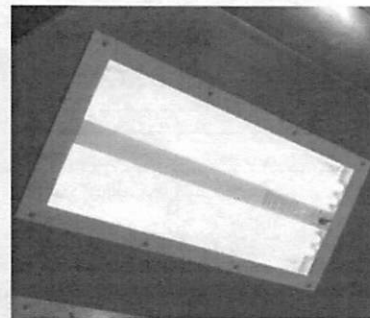
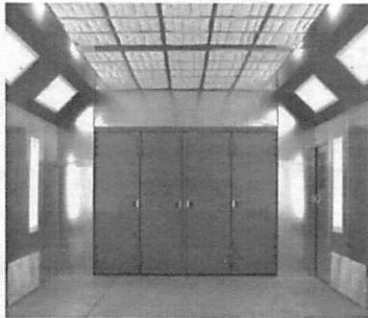
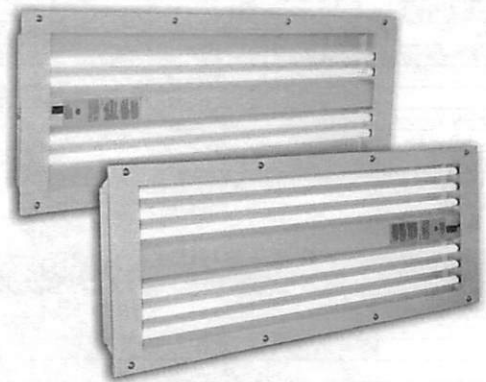
Features & Options

Pressurizing Selectables								
Air Make-Up Unit		✓		✓		✓		✓
Direct Fire Air Make-up Unit Selectables								
Discharge	✓	✓	✓	✓	✓	✓	✓	✓
Discharge		✓		✓		✓		✓
Vertical Outdoor Side Discharge	✓	✓	✓	✓	✓	✓	✓	✓
Vertical Indoor Side Discharge		✓		✓		✓		✓
Direct Fire Fuel Type	Propane or Natural Gas	Propane or Natural Gas	Propane or Natural Gas	Propane or Natural Gas	Propane or Natural Gas	Propane or Natural Gas	Propane or Natural Gas	Propane or Natural Gas
Selectable Gas Pressure	7-13" 4-28" 1-5#	7-13" 4-28" 1-5#	7-13" 4-28" 1-5#	7-13" 4-28" 1-5#	7-13" 4-28" 1-5#	7-13" 4-28" 1-5#	7-13" 4-28" 1-5#	7-13" 4-28" 1-5#
Canadian Requirements	Option	Option	Option	Option	Option	Option	Option	Option
AMU Intake/Discharge Duct Kit (Optional Roof/Wall Flange)	Option	Option	Option	Option	Option	Option	Option	Option
Control Panel								
Basic (CP-1)	✓		✓		✓		✓	
Velocity (degree)		✓		✓		✓		✓
Manual VFD	Option		Option		Option		Option	
Consta-Flow	Option		Option		Option		Option	
Auto-Balance		✓		✓		✓		✓
Economy Mode		Option		Option		Option		Option
Components								
Solenoid Air Valve (1/2" or 3/4")	✓	✓	✓	✓	✓	✓	✓	✓
Observation Window Kits (Field Install)	Option	Option	Option	Option	Option	Option	Option	Option
Explosion Proof Motor Upgrade	Option	Option	Option	Option	Option	Option	Option	Option
Air Proving Switches (# provided coincides with # of exhaust fans)	Option	Option	Option	Option	Option	Option	Option	Option
Exhaust Ductwork								
Exhaust Ductwork	Configurable Option	Configurable Option	Configurable Option	Configurable Option	Configurable Option	Configurable Option	Configurable Option	Configurable Option
Warranty								
1yr Parts Warranty	✓	✓	✓	✓	✓	✓	✓	✓

Notes

Angled Ceiling Hip Light Fixtures

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



Notes

Owner Manuals

- Manuals come only for standard jobs
- Every standard job comes with 3 manuals
 - Installation
 - Service and operations
 - Control panel
- Covers every type of airflow within the GP line

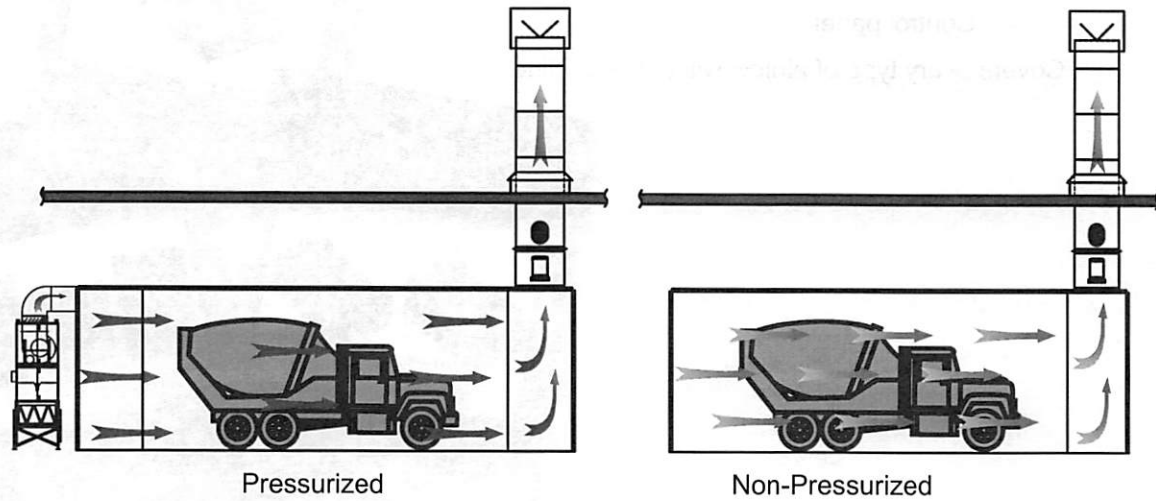


Notes

CROSSDRAFT BOOTHS

Crossdraft Airflow

Most cost-effective and most popular for industrial applications



Notes

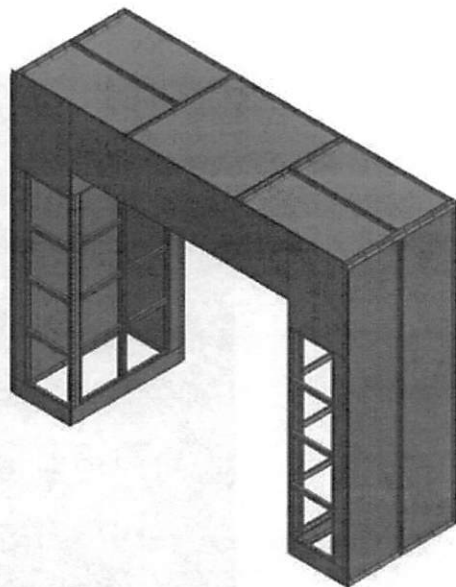
Filtered Swing Product Doors

Air is introduced through filtered swing product doors



Notes

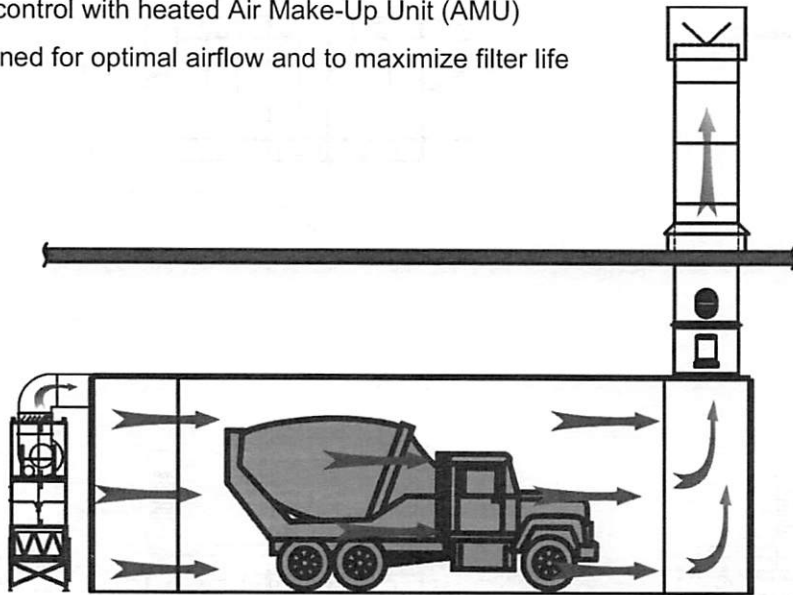
Exhaust Chamber



Notes

Pressurized Crossdraft Booth

- Cleaner environment
- More consistent paint jobs with booth balancing
- Better temperature control with heated Air Make-Up Unit (AMU)
- Chamber size designed for optimal airflow and to maximize filter life



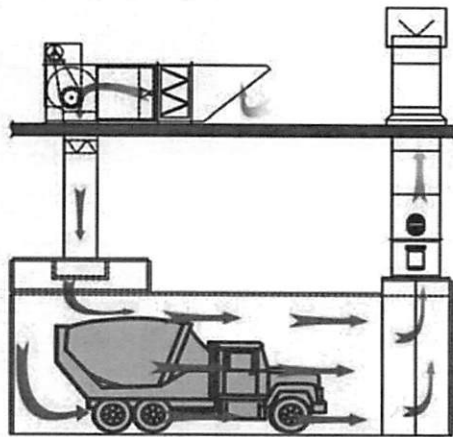
Notes

Notes

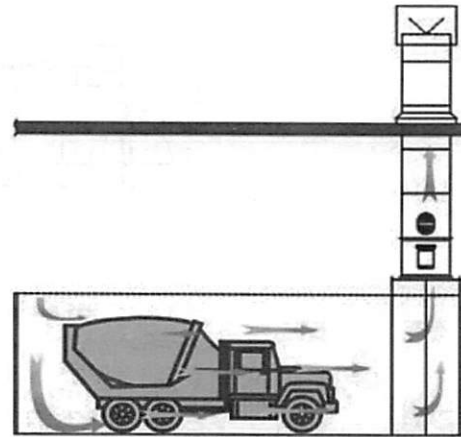


SEMI-DOWNDRAFT BOOTHS

Semi-Downdraft Airflow



Pressurized

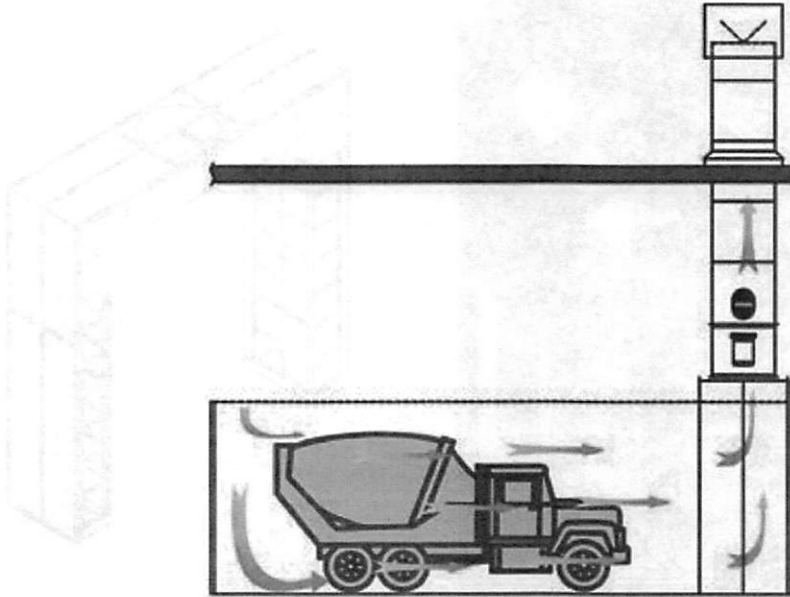


Non-Pressurized

Notes

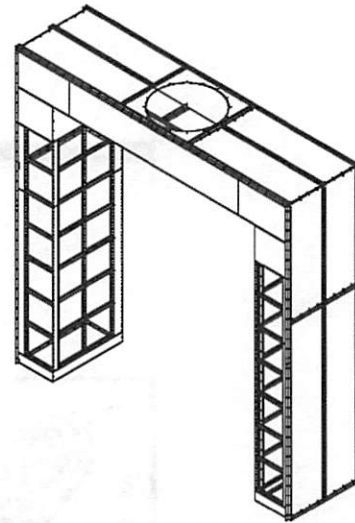
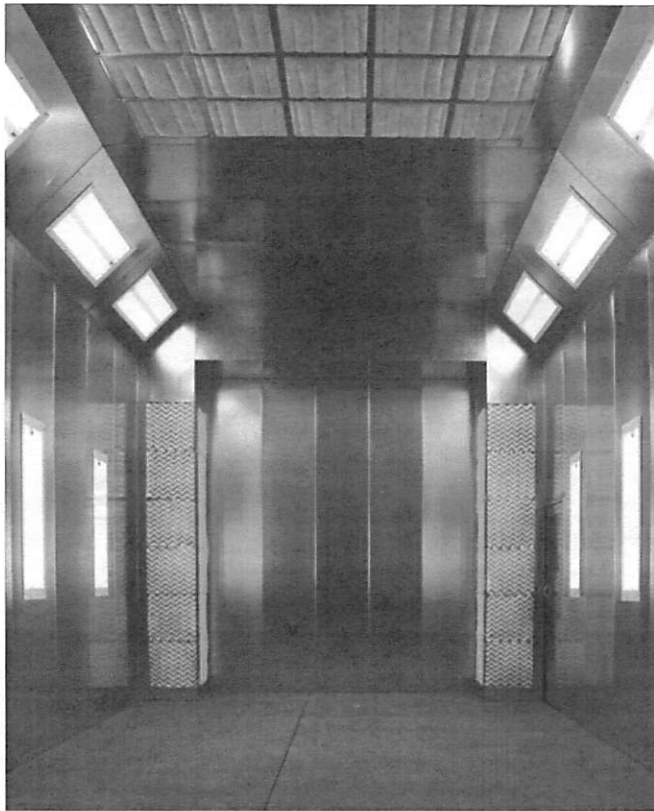
Non-Pressurized Semi-Downdraft Booth

- Cleaner environment for a quality paint job
- Less expensive than pressurized booths



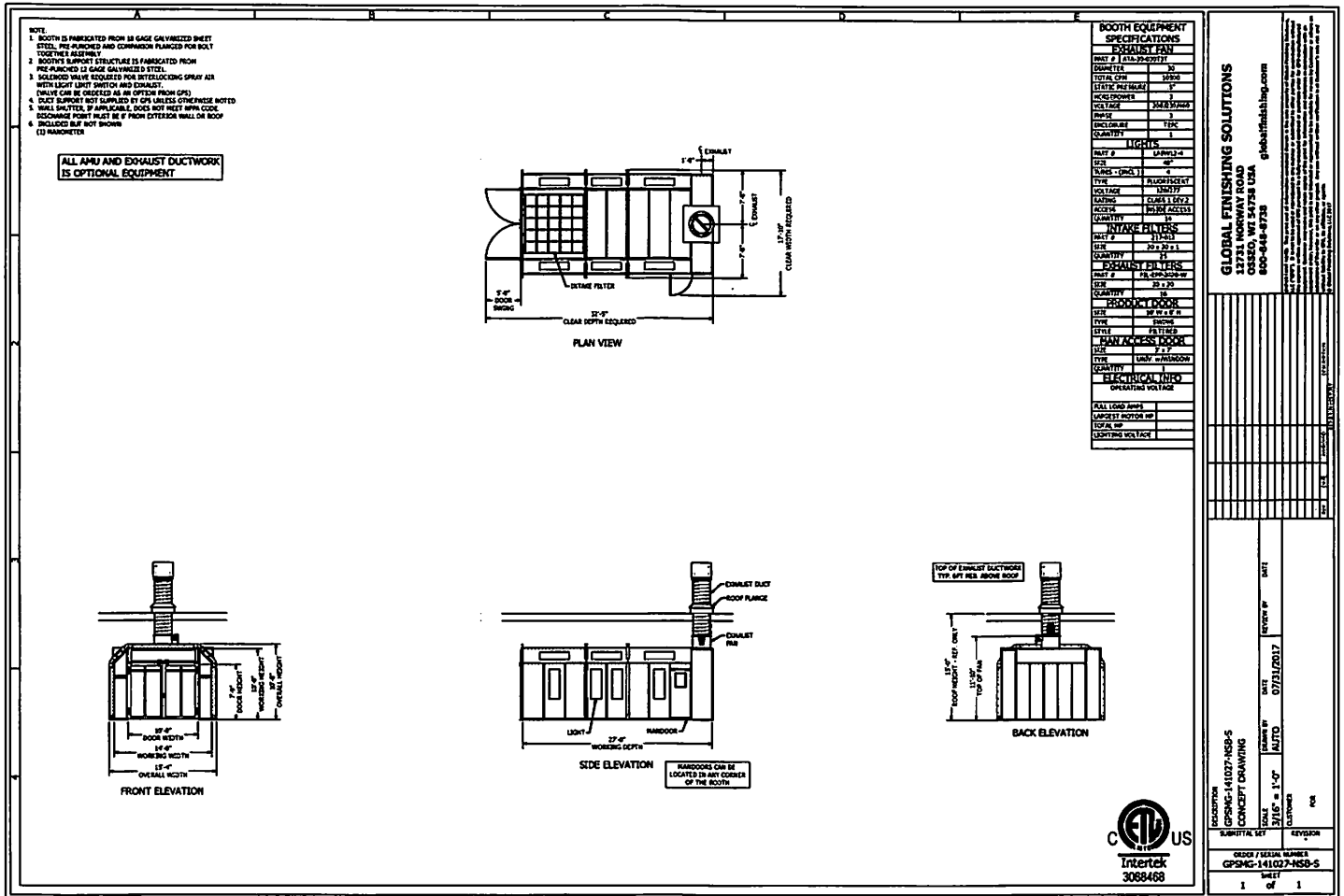
Notes

Semi-Downdraft Exhaust Chamber



Notes

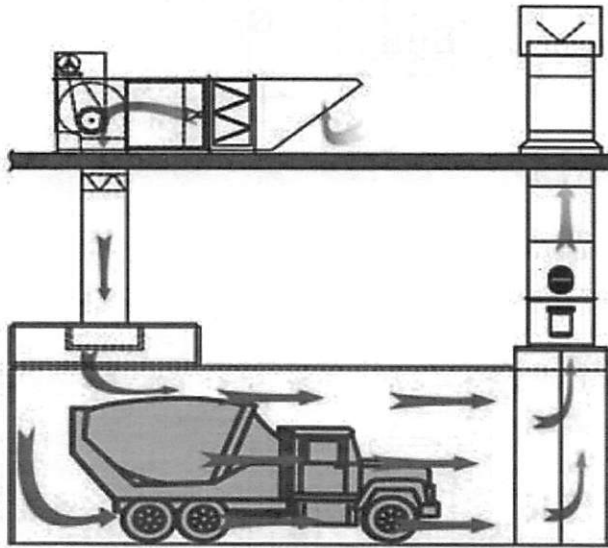
Non-Pressurized Semi-Downdraft Booth



Notes

Pressurized Semi-Downdraft Booth

- Cleaner environment
- More consistent paint jobs with booth balancing
- Better temperature control with heated Air Make-Up Unit (AMU)

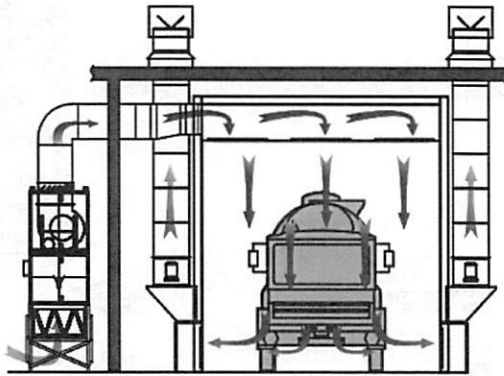


Notes

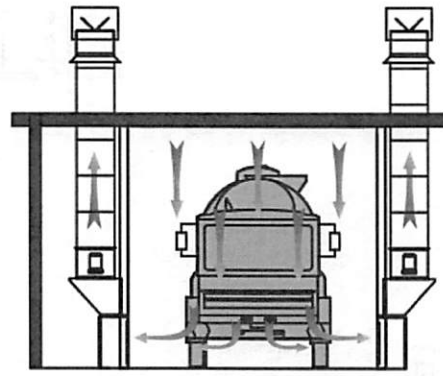
SIDE DOWNDRAFT BOOTHS

Side Downdraft Airflow

Economical solution for shops without a pit



Pressurized

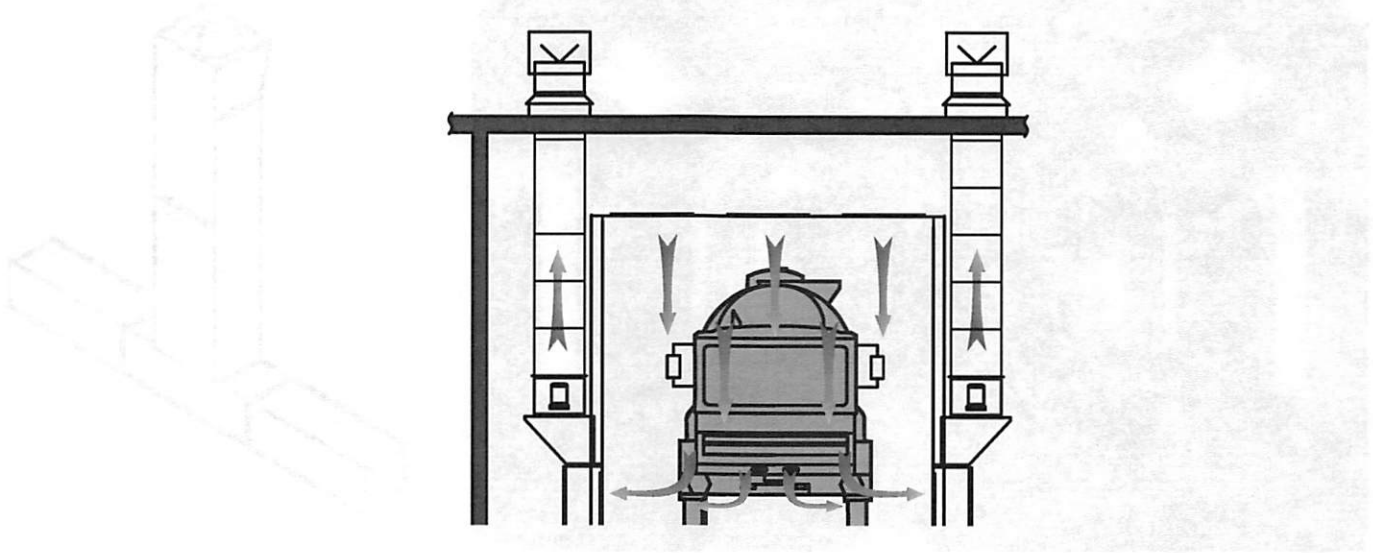


Non-Pressurized

Notes

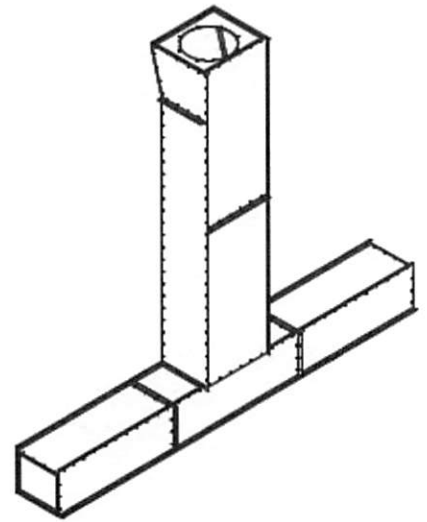
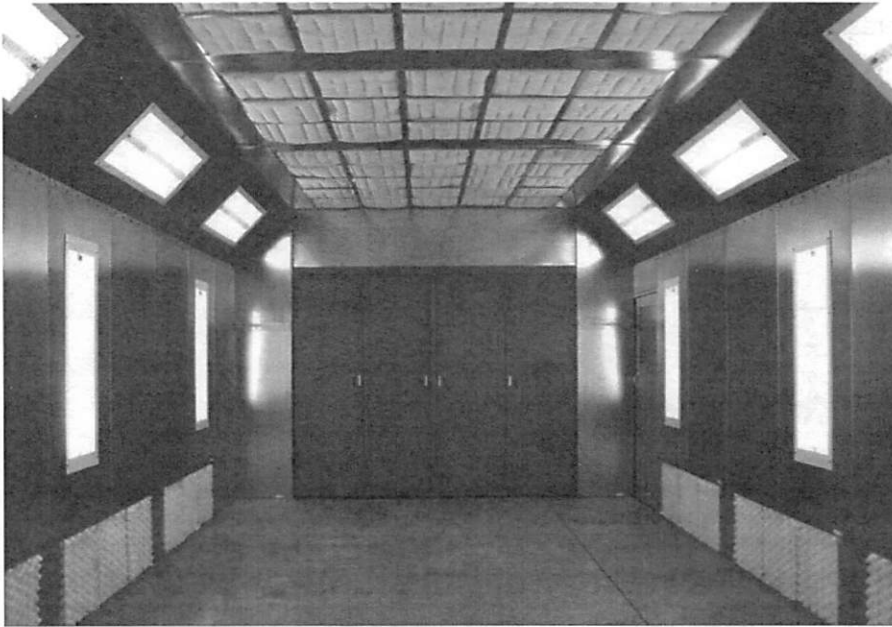
Non-Pressurized Side Downdraft Booth

- Cleaner environment for a quality paint job
- Less expensive than pressurized booths



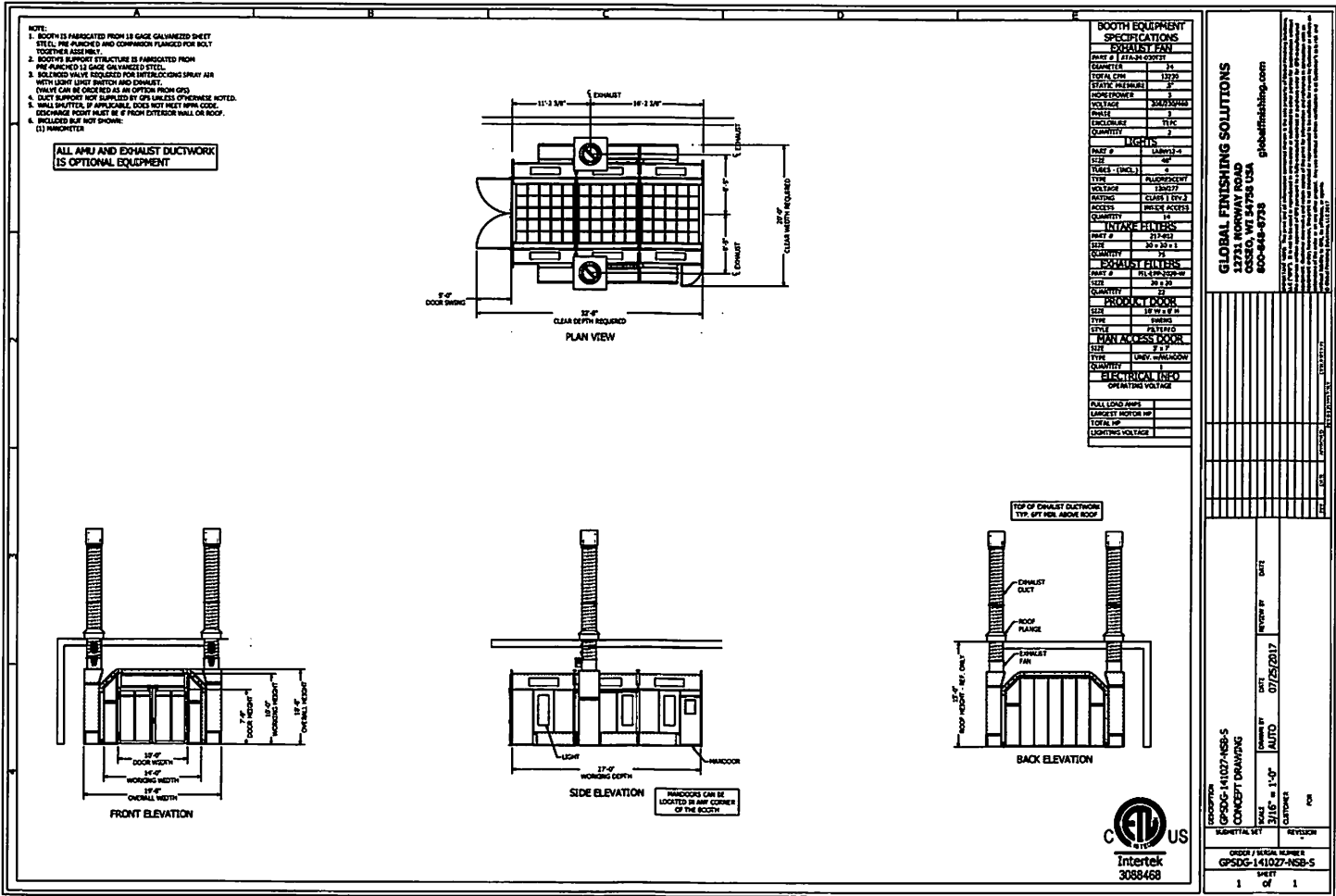
Notes

Side Exhaust Chamber



Notes

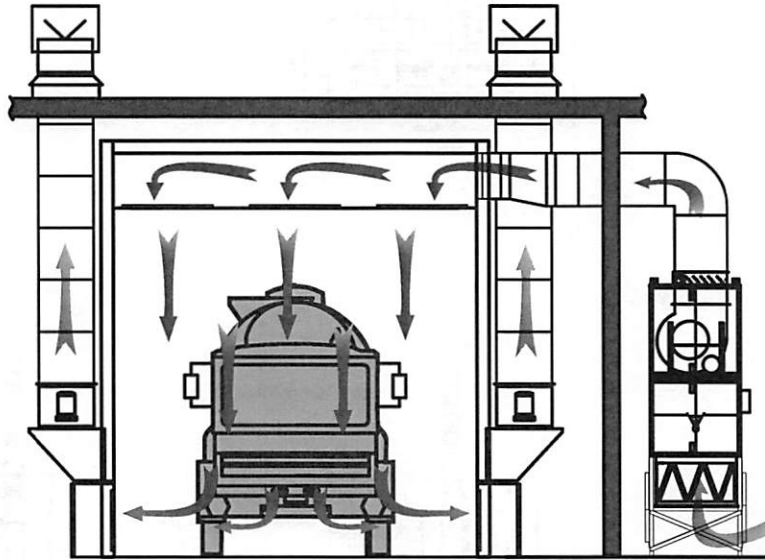
Non-Pressurized Side Downdraft Booth



Notes

Pressurized Side Downdraft Booth

- Cleaner environment
- More consistent paint jobs with booth balancing
- Better temperature control with heated Air Make-Up Unit (AMU)



Notes

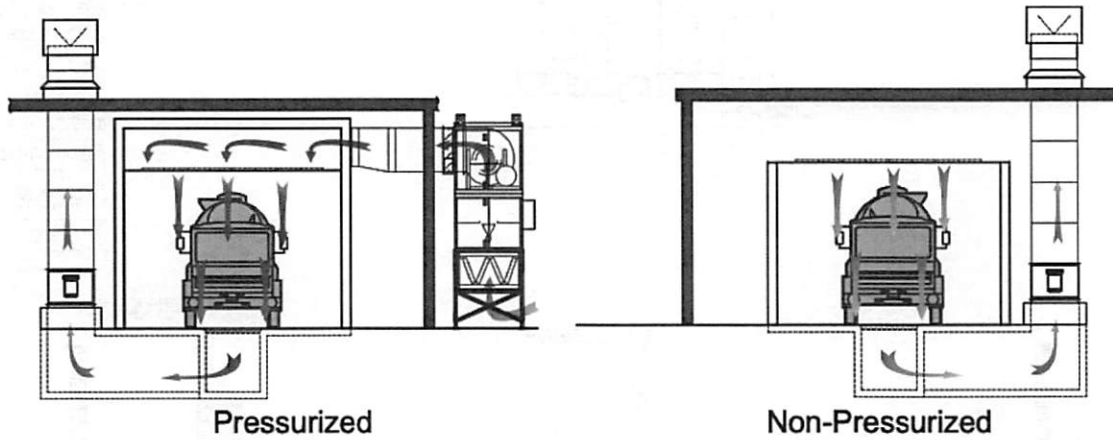
Notes



DOWNDRAFT BOOTHS

Downdraft Airflow

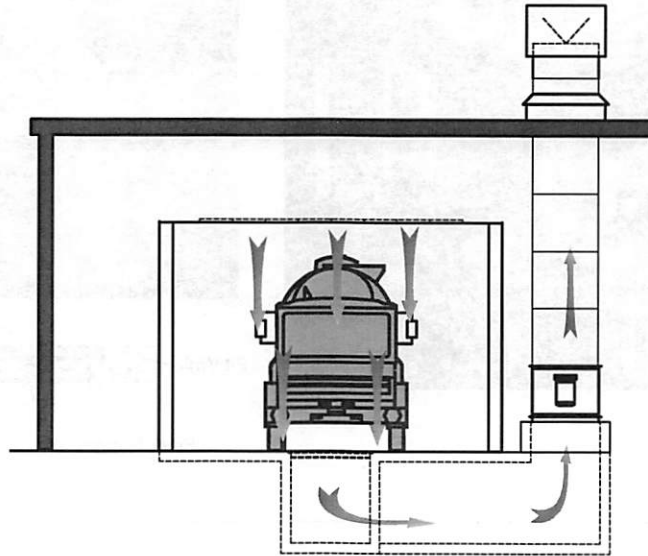
Best airflow style for controlling overspray and contamination



Notes

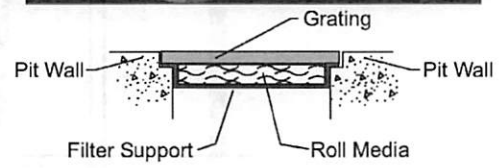
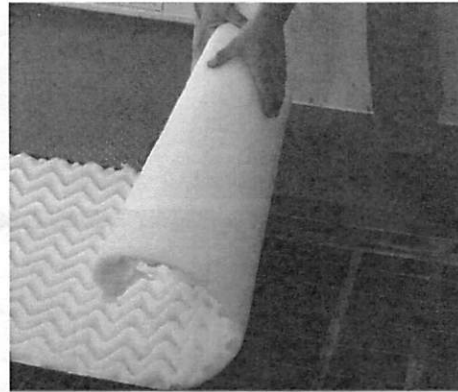
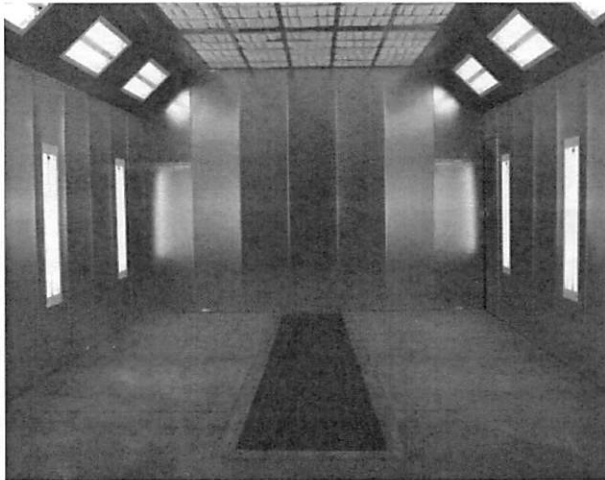
Non-Pressurized Downdraft Booth

- Cleaner environment for a quality paint job
- Less expensive than pressurized booths



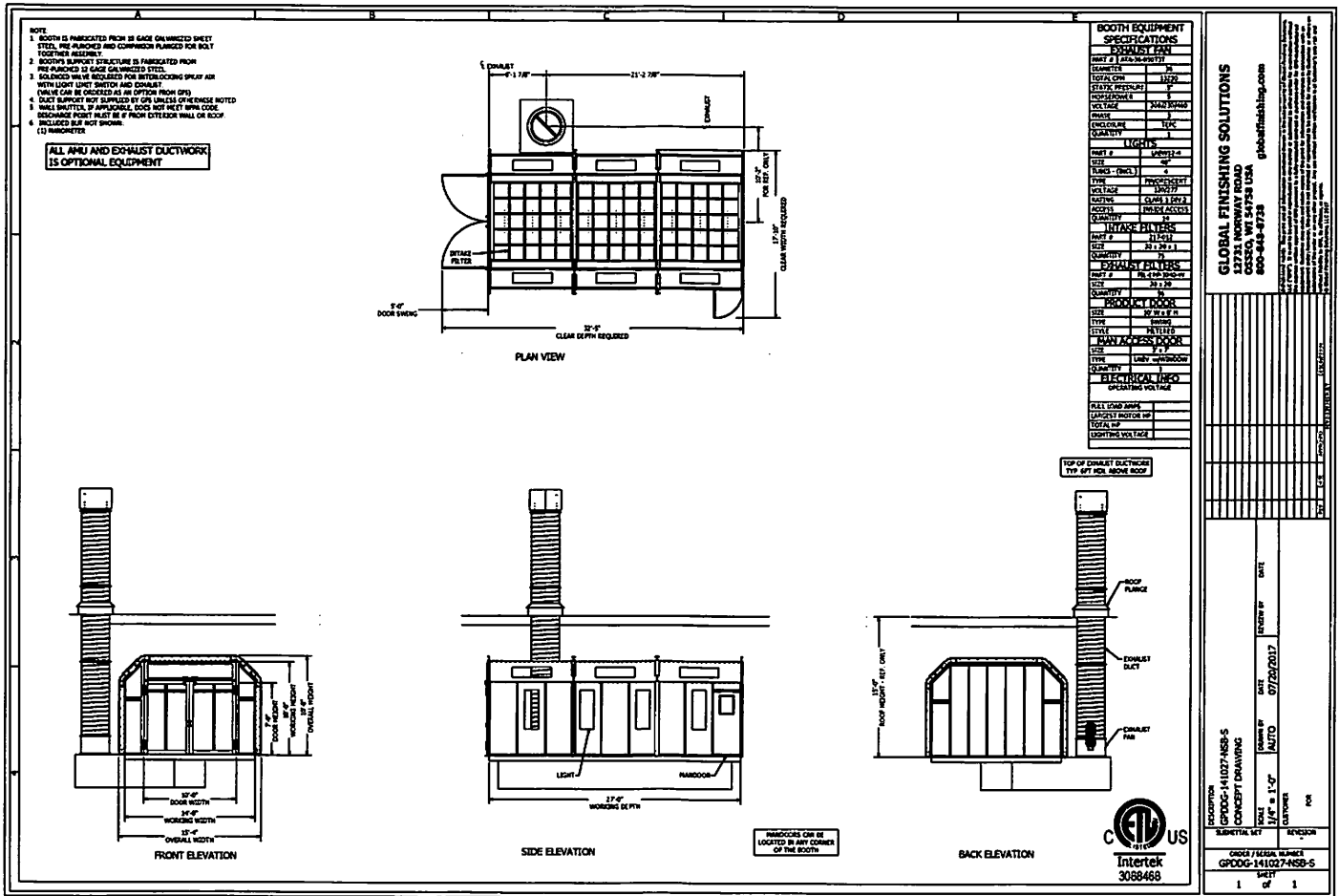
Notes

Exhaust Pit



Notes

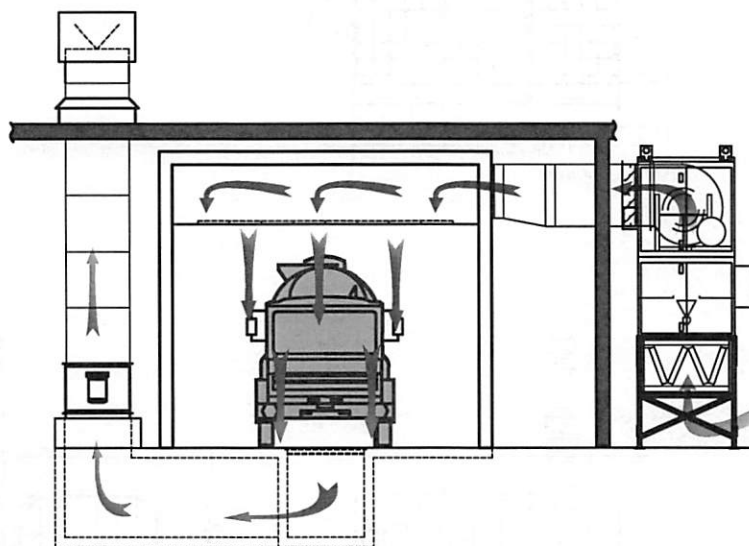
Non-Pressurized Downdraft Booth



Notes

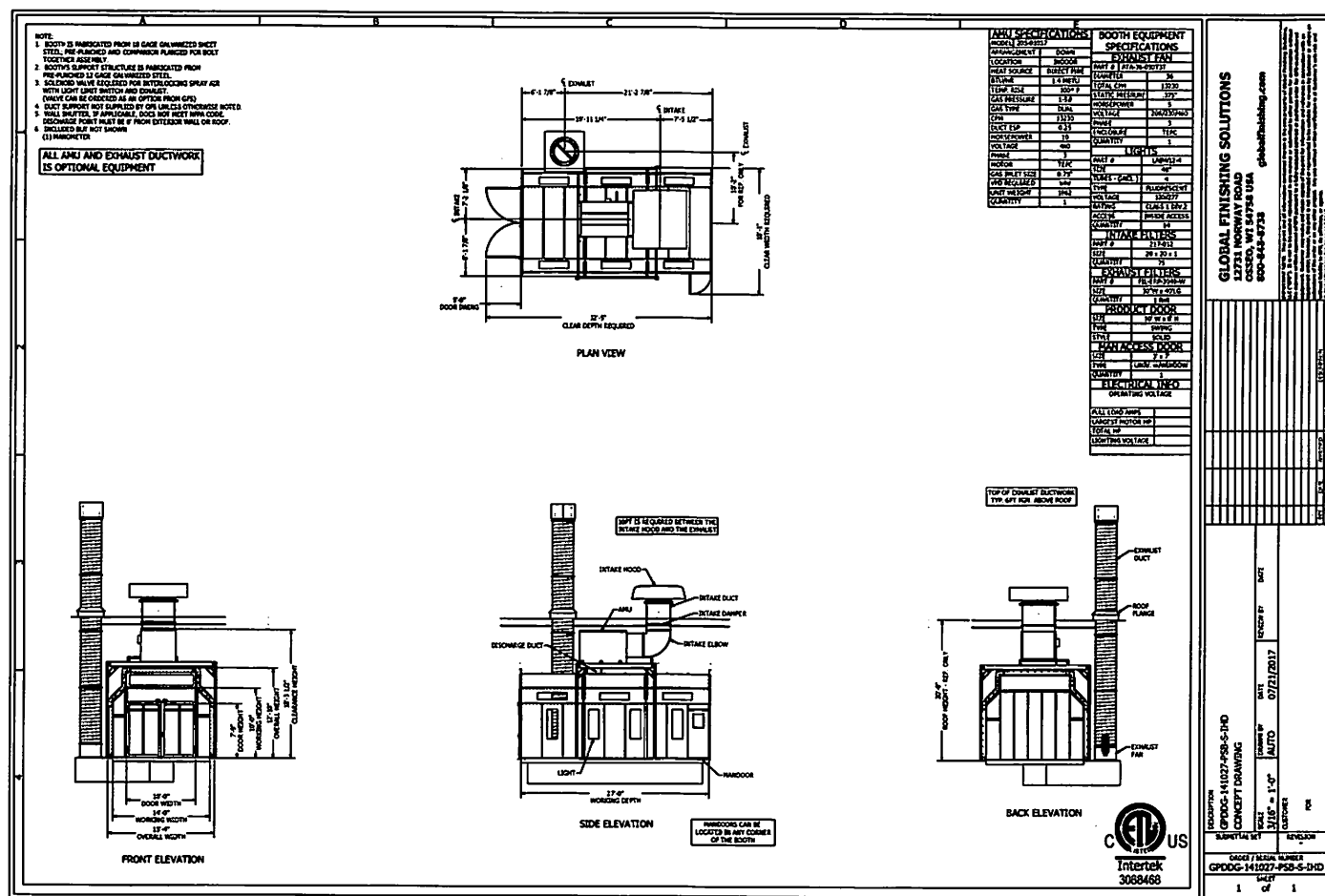
Pressurized Downdraft Booth

- Cleaner environment
- More consistent paint jobs with booth balancing
- Better temperature control with heated Air Make-Up Unit (AMU)



Notes

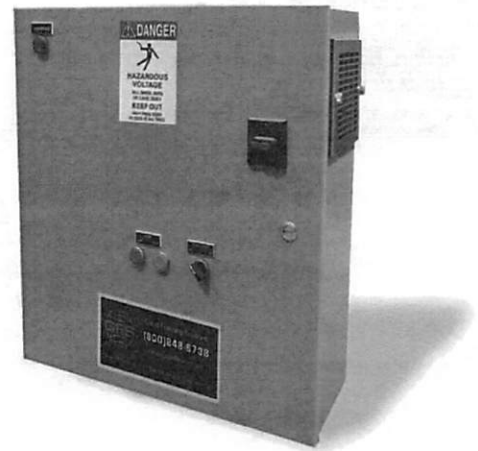
Notes



CONTROL PANELS

CP-1 Control Panel

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



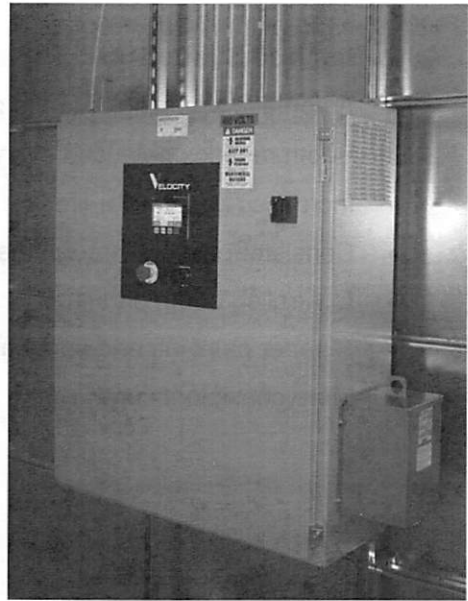
Notes

Pressurized

Velocity Control Panel

- Color touch screen
- Spray, flash and cure modes
- Programmable time and temperature
- Alarms and ethernet communication to AMU for enhanced troubleshooting
- Optional economy mode

*if you stop spraying
turns air flow down
automatically*

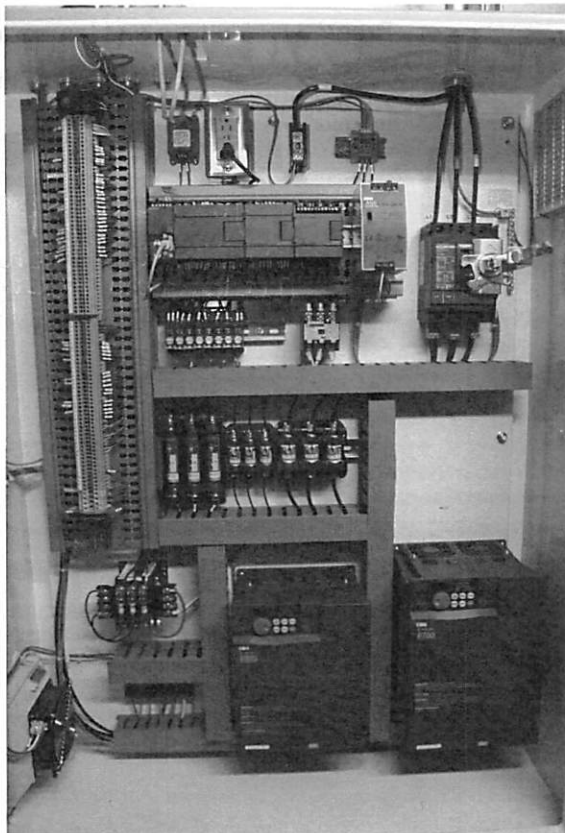


Notes

SPD

Auto-Balance System

- Automatic adjusting of fan to changing conditions via VFD, pressure gauge and probes
- Booth remains balanced even as filters load
- Increased useful filter life
- Consistent airflow through the booth
- Controlled booth pressure
- Cleaner paint job and spray area
- More consistent cure



Notes

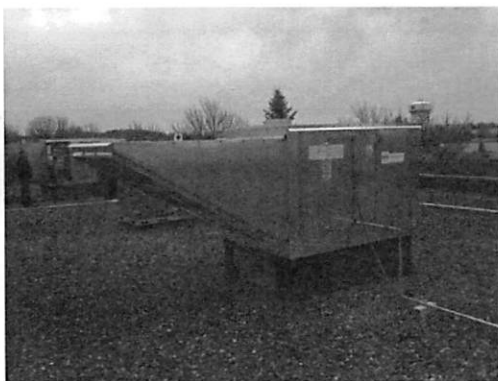
AIR MAKE-UP UNITS

GP/RUPP Tempered AMUs

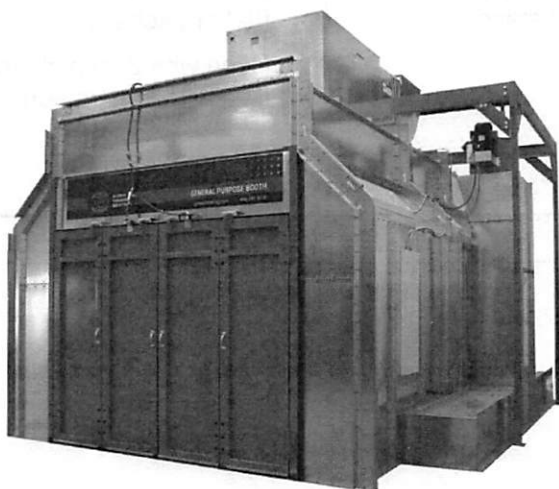
Standard Features (For pressurized booths)	Additional Features (Based on configuration)	
<ul style="list-style-type: none"> • 100-degree temperature rise • VAV/VFD cure control package • Direct-fired (Natural gas or propane) • Selectable gas pressure • Clogged filter switch • Meets NFPA 86 requirements • ETL listed 	INDOOR Vertical unit: <ul style="list-style-type: none"> • Enclosed vertical stand Horizontal Unit: <ul style="list-style-type: none"> • Above booth non-integrated stand 	OUTDOOR Vertical unit: <ul style="list-style-type: none"> • Vertical stand Horizontal unit: <ul style="list-style-type: none"> • 24-inch curb (flat or pitched) • Hood with 2-inch cleanable filter with bird screen

Notes

Pressurized Horizontal AMU Arrangements



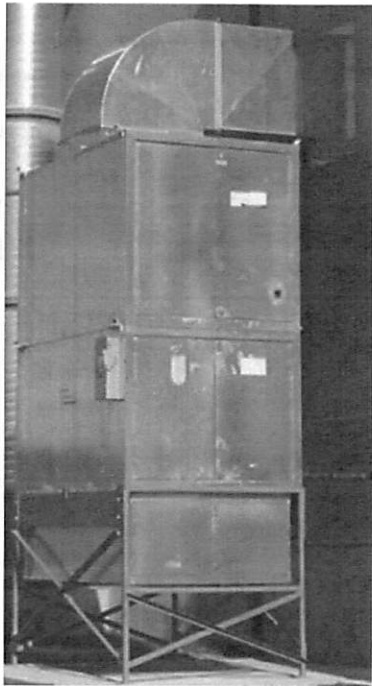
Horizontal outdoor down discharge (Roof-mounted)



Horizontal indoor down discharge (stand-mounted)

Notes

Pressurized Vertical AMU Arrangements



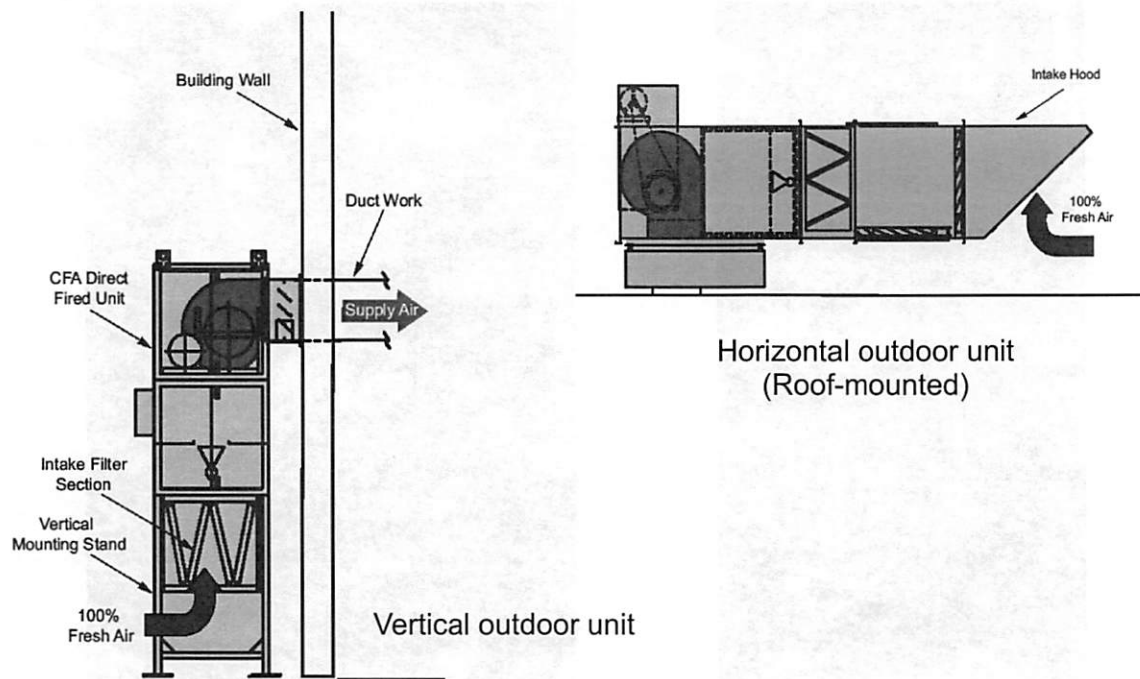
Vertical outdoor side discharge



Vertical indoor side discharge

Notes

Non-Pressurized AMU Arrangements

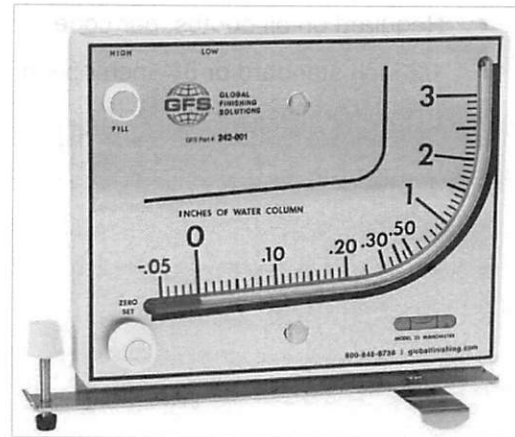


Notes

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