



General Order Application: Automobile Body Repair and Refinishing Shops

I. Instructions

This application applies state-wide for facilities under the Department of Ecology's jurisdiction. Fill out the form completely to obtain coverage.

- Read the Automobile Body Repair and Refinishing Shop General Order. You can find it online at <https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Air-Quality-permits/Air-quality-general-orders> or call the appropriate regional office (see below) for a copy.
- Answer all the questions and sign and date the application.
- Enclose manufacturer specification sheets for the paint booth that show design drawings. For a custom booth, submit exhaust blower specification sheets and design drawings.
- Enclose manufacturer specification sheets that show your exhaust filters meet 98 percent capture efficiency.
- Enclose a check to the Department of Ecology for the application fee.
- State Environmental Policy Act (SEPA) Compliance:
 - \$625 application fee** if SEPA review is complete – Include a copy of the final SEPA checklist and SEPA determination (e.g. DNS, MDNS, EIS) with your application.
 - \$981 application fee** if SEPA review is required – If SEPA review has not been conducted, please fill out a SEPA checklist and submit it with your application. You can find a SEPA checklist online at <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance>.

Department of Ecology
Cashiering Unit
PO Box 47611
Olympia, WA 98504-7611

For Fiscal Office Use Only: 0299-3030404-B00-216--001--000404

Check the box for the location of your proposal. For assistance, call the appropriate office listed below:

Check box	County	Regional Office
<input type="checkbox"/>	Chelan, Douglas, Kittitas, Klickitat, or Okanogan County Ecology Central Regional Office (509) 575-2490	CRO
<input checked="" type="checkbox"/>	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Stevens, Walla Walla, or Whitman County Ecology Eastern Regional Office (509) 329-3400	ERO
<input type="checkbox"/>	San Juan County Ecology Northwest Regional Office (206) 594-0000	NWRO
<input type="checkbox"/>	For actions taken at Kraft and Sulfite Paper Mills and Aluminum Smelters Only Ecology Industrial Section (360) 407-6900	IND
<input type="checkbox"/>	For actions taken on the US Department of Energy Hanford Reservation Only Ecology Nuclear Waste Program (509) 372-7950	NWP

\$981.00 461X1505

II. Company Information

1. Company Name: Michael's Auto Body.
2. Company Mailing Address (street, city, state, zip):
817 S Maitland Ave, Pasco, WA, 99301
3. Facility Location (if different from company mailing address): Portable Plant
4. County: Franklin
5. Company Phone #: 509 539 7486
6. Company Fax #: _____
7. Company Contact Person, Title: Nicolas J Serrano Owner
8. Contact Person Phone #: 509 539 7486
9. Contact Person Email Address: michaelsautobody2011@gmail.com
10. On-site Plant Contact Person, Title: Nicolas J Serrano
11. On-site Plant Contact Person Phone #: 509 539 7486

III. Process Information

1. Approximate quantity of all solvents and paints purchased annually: 506 Gallons (To qualify for coverage, you must use less than 940 gallons of solvents and paints annually.)
2. Do all of the spray guns you use have transfer efficiencies at least equal to high volume low pressure (HVLP) designs? (To qualify for coverage, all spray guns must have transfer efficiencies equal to HVLP designs) Yes No
3. Do you conduct all spray gun cleaning in an enclosed apparatus? Yes No
Specify gun cleaner manufacturer and model number:
Uni-ran UG110

IV. Paint Booth Information


Parameter	Paint Booth #1	Paint Booth #2	Paint Booth #3
1. Installation date (If an existing source, give the date the paint booth was constructed)	June 2013		
2. Exhaust fan rating and manufacturer information	Standard Cubic Feet per Minute (SCFM) Rating <u>15,260 CFM @ 0.5" sp</u> Manufacturer and Model # <u>SD-1000</u>	Standard Cubic Feet per Minute (SCFM) Rating _____ Manufacturer and Model # _____	Standard Cubic Feet per Minute (SCFM) Rating _____ Manufacturer and Model # _____

Parameter	Paint Booth #1	Paint Booth #2	Paint Booth #3
3. Paint booth exhaust stack release height above roof line <i>(Must be at least 3.5 feet above roof line)</i>	4.5' feet	_____ feet	_____ feet
4. Inside exhaust stack dimensions	9'6.5" or 114.5" length (in) x 34" width (in) Or 34" diameter (in)	_____ length (in) x _____ width (in) Or _____ diameter (in)	_____ length (in) x _____ width (in) Or _____ diameter (in)
5. Does the exhaust stack vent vertically? If no, explain	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No _____	<input type="checkbox"/> Yes <input type="checkbox"/> No _____	<input type="checkbox"/> Yes <input type="checkbox"/> No _____
6. Is the exhaust fan non-restricting? (i.e. there is no rain guard that covers the top of the exhaust stack that impairs air dispersion) If no, explain.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No _____	<input type="checkbox"/> Yes <input type="checkbox"/> No _____	<input type="checkbox"/> Yes <input type="checkbox"/> No _____
7. Exhaust filter area dimensions (If entering dimensions of entire filter area, please input "1" for number of filters)	8' length (in.) 10' width (in.) 24 number of filters	_____ length (in.) _____ width (in.) _____ number of filters	_____ length (in.) _____ width (in.) _____ number of filters
8. Exhaust filter capture efficiency (See page 1 checklist)	98.81% capture efficient	____ % capture efficient	____ % capture efficient
9. Does this paint booth have a heating cycle? Specify Btu/hr rating and fuel type (if applicable) or indicate if electric.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No _____	<input type="checkbox"/> Yes <input type="checkbox"/> No _____	<input type="checkbox"/> Yes <input type="checkbox"/> No _____

V. Signature Block

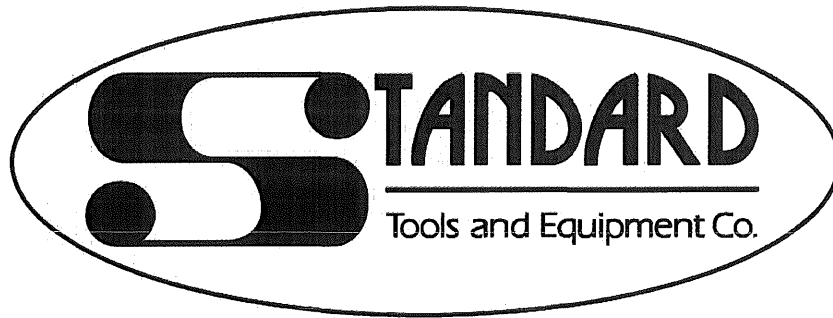
I certify, based on information and belief formed after reasonable inquiry, the statements and information in this application are true, accurate, and complete.

Printed Name Nicolas J Serrano Title Owner

Signature  Date 1-31-24

To request ADA accommodation, call Ecology at (360) 407-6800, 711 (relay service), or (877) 833-6341 (TTY).





INSTALLATION & MAINTENANCE INSTRUCTIONS

GENERAL INSTRUCTIONS FOR PAINT SPRAY BOOTHS POWDER COAT BOOTHS MIXING ROOMS

This manual should be read prior to initiating any installation, operations or maintenance tasks. Refer to the specific drawings and bill of materials for exact parts and instructions.

This manual contains information about materials, permitting, installation instructions, maintenance requirements and the warranty on the booth or mixing room.

IMPORTANT NOTES:

The installation of this booth and all associated materials should comply with local codes and local interpretations of national codes.

Contacting your local building inspector or building engineer before installing the booth to verify requirements can save significant time and expenses.

Please read this entire manual before beginning to install your booth.

Keep this manual as a reference for proper operation and maintenance of your booth. The final page of this manual is Standard Tool and Equipment's warranty on these items.

For questions or problems related to your new spray booth, call our Customer Service Department at 1-800-451-2425. Please have your order number available when you call.

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2	Written installation and maintenance procedures plus a checklist to verify completion prior to using the spray booth	7-13
3	General drawings for the most common booth styles that show major phases of assembly plus detail drawings about doors, filters and light fixtures Standard Tools and Equipment's Spray Booth Warranty	Final Page

This manual is not intended to replace or supersede any OSHA, NEC, NFPA or other laws, codes or regulations.

For ease of reading this manual the term booth is used when instructions apply to paint spray booths, powder coat booths and mixing rooms. Specific booth types are referred to when the instructions are specific to the booth type.

SECTION 1

CODE COMPLIANCE

The booths manufactured by Standard Tools / Tools USA are designed for code compliance. The booth is supplied in kit form and is assembled on site by the booth owner or a contractor hired by the booth owner.

The booths are designed to comply with the 2012 edition of the *National Fire Protection Association* NFPA-33 requirements. The booth is also compliant to OSHA 29CFR.1910 code and IFC International Fire Code. The materials, design, ventilation and documents supplied by Standard Tools and Equipment Co. are compliant to these codes, but other materials may be required by the codes such as fire suppression systems and makeup air systems.

Optional ETL kits are available with Standard's most popular paint spray booths and mixing rooms. These kits include an electrical control panel, an air solenoid and the ETL label that shows satisfactory acceptance by Intertek that the booth meets NFPA-33 requirements. This kit must be purchased and installed prior to the booth leaving our facility. Standard Tools and Equipment Co. is not certified by any firm to label a booth as compliant once it leaves the manufacturing facility.

Standard Tools and Equipment Co. is not responsible for third-party inspections or an engineer's stamp should local authorities require these approvals. Standard Tools is not responsible for requirements beyond what is supplied with the booth such as control panels, fire suppression or signage on the booth unless these items are purchased from Standard Tools.

INFORMATION ABOUT THE BOOTH KIT CONTENTS

GALVANIZED STEEL - Each booth is fabricated from 18 gage-galvanized steel. The steel meets ASTM A-653 requirements. Galvanizing is G90 @ 1.25 ounces per square foot, and meets ASTM A527LFQ requirements.

EXHAUST FAN - The tubeaxial fan is equipped with a non-sparking blade that is driven by belts enclosed in a motor duct and is designed for paint booth service. The fan meets the AMCA testing requirements and bears the AMCA seal.

ELECTRIC MOTOR - The motor (supplied with the fan) conforms to National Electric Manufacturers Association ratings A and B and is UL Rated (reference E47479). The motor is also CSA rated (reference LR6153). Safe ventilation is designed at 100% of operational rpms. The standard motor is rated for Class 2/Div II zones; a Class 1/Div II hazardous-location motor is used if the motor is within 36" of a booth opening. Standard Tools does not recommend the use of a variable frequency drive (VFD) for the fan motors unless the booth air is supplied via a connected air makeup system.

LIGHTS - The standard lights are 120/277V 2'x4' T8 fluorescent lay-in and are cULus and CSA approved. The lights are lay-in style and serviced from the outside of the booth. The lights are separated from the interior of the booth by 0.25" tempered glass and sealed with caulk to provide a vapor proof seal. Inside-access lights (explosion-proof, Class 1/ Div II, UL and CSA listed) are available as an upgrade (ref. LDPI 390-series, 4-bulb, T8 with interlock switch).

WINDOWS - Windows are fully-tempered safety glass and meet the requirements of the following:

- ANSI Z97.1
- Federal Standard 16 CFR 1201
- ASTM C-1036-91
- ASTM C-1098-92

The windows are ¼" thick tempered glass, designed to be sealed with caulking to insure a vapor proof seal, and meet NFPA-33 requirements.

MANOMETER DRAFT GAUGE – Mark II Model 25, manufactured by Dwyer Instruments to meet NFPA 33.

INTAKE FILTERS - Manufactured by CHEMCO Mfg. Co. Inc., 92.4% efficiency. UL Class II [reference R13314 (N)], equal alternates may be used

EXHAUST FILTERS - Manufactured by CHEMCO Mfg. Co. Inc., Average Arrestance Efficiency 98.66%, Holding Capacity 0.41 Lbs/ft², UL Class 2 [reference R13314 (N)], equal alternates may be used

POWDER BAG FILTERS - Manufactured by Air Technologies Inc., 97% efficiency. UL Class 2 [reference R13314 (N)], equal alternates may be used, powder coat booths

POWDER PREFILTERS - Manufactured by Air Technologies Inc., 99.76% efficiency. UL Class 2 [reference R13314 (N)], equal alternates may be used, powder coat booths

FINAL FILTERS - MERV 14, 95% efficiency. UL Class II [ref R9118], powder coat booths

CAULK - Manufactured by DAP, Inc. Meets ASTM specification C-834. MSDS is available at www.dap.com or www.toolsusa.com.

CONTROL PANEL - an ETL-listed assembly for controlling lights and fans using all UL and CSA listed items, comes with instructions for installation. ETL-listed booths require this control panel, but it may also be purchased as an option.

AIR SOLENOIDS – ASCO Redhat # 8210G002, sold separately or included in ETL kit.

FIRE PROTECTION

NFPA-33 Section 9 requires an automatic fire suppression system for most spray booths and mixing rooms. Local authorities may elect to defer this requirement in select cases. **It is the responsibility of the booth owner to determine this need.**

Standard Tools and Equipment Co. offers an optional automatic dry-chem fire suppression system for many of the booths from one of the industry leaders in certified fire suppression systems. These systems have been designed to meet NFPA-17 federal code and will be installed by qualified technicians.

The local fire marshal or building inspector can provide local code requirements. If the booth is not purchased with a fire suppression system from Standard Tools and Equipment Co., a licensed fire protection system provider local to the booth site can be contracted by the booth owner.

NOTE REGARDING CERTIFIED LISTINGS – UL, CSA, ETL

All electrical components supplied with the booth are UL, CSA and/or ETL approved.

Everything supplied with the booth meets OSHA and NFPA 33 requirements. Third-party certification, fire suppression and other items described in the OSHA and NFPA-33 codes are not included as standard components in the spray booths and mixing rooms but are available from Standard Tools for the most popular booths and mixing rooms.

NFPA-33, OSHA and IFC codes state that spray booths and mixing rooms must comply with the codes, but they do not state that the spray booth and mixing room MUST be certified. A requirement that a spray booth be certified to these standards comes from the local authorities.

Standard Tools and Equipment Co. offers an ETL kit that includes the ETL label, electrical control panel and interlocking hardware. The booth type and size must be listed by ETL/Intertek. This kit must be purchased prior to the spray booth leaving Standard Tools.

UL certification is NOT available for pre-designed kitted spray booths. UL may be contracted by the booth owner to visit a facility once the spray booth or mixing room is complete and operational for on-site certification.

Please contact our engineering department if you have further questions about the technical aspects of this topic.

PERMITTING GUIDE

The permitting process is the responsibility of the booth owner but is typically not difficult. There are various sequences possible, but the one detailed below is the process recommended to save time and money. The goal of the permit is to show compliance to all applicable codes and laws to ensure the safety of the booth owner and operators. The notes below are taken from the codes. The local authority has the final interpretation of the codes.

Step 1 - Verify that the building and desired booth location are suitable

- Flat, nonflammable floors
- At least 36" clearance from one-hour rated walls on all sides of the booth
- Adequate air supply to supply at least twenty minutes of exhausted air
- Zoned for installation and use of a booth
- At least 30-ft from the exhaust outlet of the ductwork to the nearest property line

Step 2 – Obtain subcontractor information

- Contact licensed electrical contractor
- Contact a local HVAC and fire suppression contractors [if needed]
- Obtain information about the contractors for completing the permit application: name, address, phone number, license number and type.

Step 3 – Complete and submit permit application

- Obtain local building permit application on local government websites
- Complete the forms as necessary. Refer to this manual and the specific drawings for the booth.
- Determine if third-party certification is required (like ETL or UL or an engineer). If yes, please read page five of this manual.
- Submit the permit application and required documents to your local permitting authority.
- Display the building permit in a visible location near the booth.
- Follow the instructions of your local authorities to obtain the permit

Other Information

- Some permitting authorities will require stamped engineering drawings. Standard Tools and Equipment Co. can provide a set of drawings stamped by an NC-licensed PE (professional engineer) that shows the documentation and design complies with NFPA-33 for a marginal fee. Contact our sales office if you need stamped drawings.
- Be prepared to answer questions about mixing/storage of paint and other flammable liquids, fire suppression and training of employees.
- If leasing the building, most local authorities require approval of the landowner for the booth prior to approving a permit. This approval includes wall and roof penetrations.
- The booth may require an EPA permit to show compliance with NESHAP 6X or 6H rules. Visit the NESHAP website or your regional EPA office for more information.
- If the booth is installed without a permit, inspectors tend to be less lenient and non-compliance with the codes may require costly corrective actions.

SECTION 2

I. INTRODUCTION

- Paint spray booths manage overspray and fumes from the painting.
- Powder coating booths move dust-laden air to exhaust filters.
- Mixing rooms manage fumes and contain liquid spills.
- The performance of these greatly depends on the installers following the proceeding notes and drawings.

The booth may be one of the following:

- Wet spray booth with dry-arrestor exhaust
 - It operates by drawing air through the booth and to replaceable filters (arrestor pads) that capture overspray droplets and exhausts the fume-laden air to the atmosphere. All booths with arrestor exhausts are supplied with a draft gage (manometer). A wet spray booth may be used for application of solvent or water-borne paint. This type of booth is also often used for spray application of wet materials such as gelcoat, glue, wood stain and polymers.
- Powder coat booth with two-stage filters (spray-to-waste)
 - It operates by drawing air through the booth to pre-filters and bag-filters. Powder coat booths are supplied with a draft gage (manometer) to measure the static pressure change across the filters due to overspray buildup. A final filter unit is available to provide a third-stage filtration that allows the air to be recirculated into the building. Powder coat booths are also often used for dust collection in sanding or prepping processes.
- Mixing Room
 - It houses mixing operations, contains a limited amount of liquid paint and spray equipment cleaning processes, and vents fumes to the outside of the building.

There is no overlapping of these three types of units. A paint spray booth cannot be used for powder coating; a powder coating booth cannot be used for spraying of wet materials, and a mixing room cannot be used for any type of coating. These units have different air flow requirements and filtration systems. Using one of these units for another process may result in a fire and will not provide an acceptable working condition.

Conversion of a booth from wet paint to powder coat (or visa versa) may be possible but will require review by our engineering staff and changes in the exhaust filter panels and possibly in the fan or motors.

II. PREPARATION

1. Consult your local fire marshal and building inspector before installing the booth. Obtaining pre-approval can eliminate costly rework to the installation.
2. Study this manual and the specific drawings to understand the process. Contact our internal experts if you have questions.
3. Standard Tools recommends that the installation site be:
 - Indoors – The booth is recommended for erection inside an enclosed building. However, it may be erected outside if it is under a covered structure that will protect all electrical components and air filters from rain and snow. The paint booth does not have a snow load or wind rating.
 - Flooring - Non-combustible (concrete preferred), flat and level within ¼" per 36"
 - Spacing - 36" clearance on all sides of the booth (This is a recommendation to aid installation and servicing. Talk to your local authorities if this is a concern.)
 - Sparks - A minimum of 20' (based on OSHA) between the booth and any source of sparks (e.g. welding, grinding and laser-cutting)
 - Air-makeup - OSHA and NFPA requirements dictate ventilation requirements of the booth. Placing the booth in an enclosed building that is too small to provide enough air may cause 'air starvation'. An air makeup system or venting from the outside may be required if the building does not contain 20 minutes of ventilation.
4. Standard Tools recommends a minimum of two people to build the booth since the panels can weigh up to 100 pounds. A larger team is recommended for larger booths.
5. Recommended personal protective gear includes leather gloves, steel-toed shoes, hard hats, ANSI-approved safety glasses with side shields, long pants (not shorts) and long-sleeved shirts. The metal panels can be sharp; the installers should dress and work to prevent cuts. Jewelry and other similar items should not be worn.
6. Mark the outer booth location with chalk lines. Keeping the lines square will enhance the installation, fit and performance of the booth.
7. Take the following into consideration when identifying the booth location: exhaust ducting, access to power and compressed air, emergency egress, access to lights and fans, path to load/unload the booth.
8. Inspect all of the received items to identify missing, damaged or defective items. The items should be compared to the parts list detailed in this manual. Performing the inspection of all parts prior to starting the installation is recommended.
9. Recommended tools: drill with 5/16" hex socket, extension cord, a dozen c-clamp vise grips, level, rubber hammer, ¼" masonry bit, 3/8" drill, two ladders, caulk gun, chalk line. A powered lift or scaffolding are practical for booths over 10-ft tall.

III. INSTALLATION

1. Most panels install with the smooth side to the inside of the booth. Filter panels will be oriented so that filters can be serviced from within the booth. Some panels, especially around the exhaust plenum, may be smooth to the outside.
2. Begin at the rear of the booth, following the instructions detailed after the parts list. Lay out panels in groups (example: exhaust plenum, ceiling, walls).
3. Booths with drive-through doors can be built from either end. It is typically best to build it from the end closest to the wall.
4. Use the specific drawings to identify the correct panels and the proper overlaps.
5. Do not vary the panel locations from the drawings. This may affect the performance and the safety features designed into the booth. Locating most electrical devices within 36" of the booth opening is not permitted.
6. Personnel doors may be rotated so that the hinge side is changed. A personnel door can be moved but no electrical devices (lights, fan motors, controls) should be within 36" of the door opening unless it is rated for hazardous location.
7. Tri-fold doors can be hung so that the single door is on either side.
8. Use C-clamps or vise grips to secure the panels in place until the Teks screws are installed. Gaps and misalignments will decrease the stability of the booth.
9. Install the Teks screws 2" from the end of any panel and on 10"-12" spacing. Locate the Teks screws at 6"-8" on the panel for mounting the fan. Insert the Teks screws until the head is flush to the metal.
10. The booth will be self-supporting when complete. During installation brace the ceiling and wall panels with 2x4 pine boards and/or straps. Bracing the ceiling ½" over level will allow the booth to settle to a desired height once the booth is complete: use 108-1/2" long boards for a 108" high ceiling.
11. Compare the location of panels to the chalk lines during the entire assembly process to make sure that the structure is square. If correct, attach the booth panels to the floor with the drive rivets provided. The included drive rivets should provide sufficient anchoring but powder-actuated nails or anchor bolts are also approved. Anchoring hardware should be spaced no more than 30".
12. Add the ceiling panels as the length of the walls are built to ensure squareness.
13. Install the door jambs with the supplied Teks screws. Verify the squareness of the booth before installing the front doors. Door details are in the following pages.
14. Prior to installing main doors, the frontal skins should be secured to the frontal panels, if provided. CF, SD and SDD booths have frontal skins. Booths with square fronts or front panels with tubular frame do not have frontal skins.
15. Main doors should be spaced as high as possible off the floor. The hinges should be rotated out from the booth. Install one door (the single door on the tri-fold design is first). Fold the hinge over the outer face of the door and use the Teks screws to secure. Repeat for the second door. Bi-fold doors should be installed with the hinges joining the two halves on the inside face of the doors (inside the booth). See the general drawing for door installation.
16. Install the door sweep and seals shown in the general drawings.
17. Install door latches per the general instruction drawings.

18. Mount the exhaust fan unit and motor, (see Section 4- General Assembly Details- Detail II). Ensure that there are no obstructions in the exhaust unit that would damage it. **All wiring should be done by a licensed electrician according to the local building code.** Make certain that electrical connections have been made properly and that direction of rotation is as indicated. Orient fan such that maintenance access is allowed. The belt guard is required by OSHA regulations.
19. Seal all panel joints with latex caulk from the inside of the booth after the booth has been completely erected. Inspect all bolts and joints as the booth is sealed. Use of silicone caulk may result in quality issues in the coating process.
20. Install the exhaust ducting system. A separate manual is provided if the ducting kit is provided by Standard Tools. Adding elbows and/or running lengths greater than 25' of ducting will increase the resistance within the ducting and will lower the air flow volume significantly. Local industrial or commercial HVAC contractors are recommended for providing complex ducting solutions.
21. Install lighting fixtures. The caulk to seal the tempered glass must be continuous to provide a complete seal and keep volatile fumes inside the booth. **All wiring should be installed by a licensed electrician according to the local building code.** Most codes allow use of flexible conduit to wire light fixtures so that changing of fluorescent bulbs is possible but all wiring within 36" of the booth openings should be hard conduit that is rated for hazardous location. Lights on the ceiling should have sufficient slack in the conduit to allow bulb changing from the side of the booth. Standing on top of the booth is not recommended.
22. Filters
 - A. Filter retention – Filter clips are riveted to the exhaust filter grid and used to secure the filters. The clips should be rotated so that they push the filter against the metal panel. Rotating the clip so that the clip filter is not backed by metal will not secure the filter properly. Refer to the general drawing for proper filter installation.
 - B. Types of filters
 - 1) Intake – ½" thick, wireframe, tacky on one side, tacky side seals flush against the metal panel
 - 2) Exhaust – 2" thick (no wireframe) but compressible, smooth side against filter grid.
 - 3) Exhaust (for powder coat) – pre-filter and bag filter, The bag filter is inserted into the hole first. The pre-filter is installed over the bag filter so that the purple side is visible.
 - 4) Final filter – third stage of filters used on some powder coat booths, installed with the arrows in line with the air flow.
23. The booth was provided with two 4"x12" no smoking decals. These OSHA-required decals should be applied near the entry points of the booth. The QR code on the decal can be used to access booth maintenance notes with any smart phone and access to the Internet.

IV. OPERATING PRECAUTIONS

The following precautions should always be observed during operation of paint spray booths:

1. On wet type paint spray booths with dry arrestor exhaust:
 - A. Do not use this type of booth when applying spray materials known to be highly susceptible to spontaneous heating and ignition. Refer to your spray material suppliers and MSDS sheets for this information. Enamels mixed with linseed oil or alkyds are examples of materials that cannot be mixed together.
 - B. Do not use arrestor pads alternately for different types of coating materials where the combination of materials may be result in spontaneous combustion.
 - C. Do not allow overspray to collect and block sensing tubes in draft guage (manometer). Inspect fluid levels periodically and add fluid as necessary. If the draft gauge is subjected to an overpressure, check to ensure that fluid has not passed into the loop.

2. On all booths:
 - A. Do not spray any materials near processes emitting sparks or other hazardous operations (such as welding and grinding).
 - B. To protect the booth from rust or oxidation and to facilitate cleaning of overspray, one of the several commercial coatings available should be applied to areas where overspray will be deposited. Standard Tools offers a variety of these peel-off coatings. Paper should only be used in a booth that is equipped with a fire suppression system, and the paper should be discarded at the end of each shift..
 - C. Keep the air velocity through the booth constant. Obstructing the filters or airflow within the booth can dramatically decrease the ventilation of the booth leading to a hazardous condition.
 - D. The exhaust fans should be in operation during all drying or curing processes.
 - E. To keep specks of direct dust and lint off the surface being painted:
 1. Wear starched overalls during spraying operations
 2. Strain all spray material using a metal mesh filter, not a cheese-cloth or similar strainer
 3. Keep the area surrounding booth and the booth interior clean
 4. Keep all spray equipment clean

3. Mixing rooms
 - A. NFPA-33 8.3.2 (4) requires the ventilation fan to operate continuously.
 - B. Do not exceed the maximum amount of flammable materials stored in the room as set by the NFPA-33 code (see the silver identification on the booth panel).
 - C. Clean up spills and remove excessive or old materials to reduce hazards of fire or falls.
 - D. The bottom jamb of the door provides secondary spill containment; do not remove this barrier.

V. MAINTENANCE

The frequency of the following maintenance checks depends on the amount and kind of materials being sprayed. Under all circumstances, however, these checks should be made at regular intervals to reduce fire hazards, to maintain the efficiency of the booth, to prevent freshly painted objects from becoming blemished and to hinder oxidation of the booth.

Note: The paint booth is not designed to support personnel on the ceiling. Light and fan maintenance should be performed from other means of support.

1. Daily
 - a. Issues due to wear or damage
 - b. Exhaust filters for over-accumulation including checking the manometer readings while the booth is in operation
 - c. Excessive stored materials and combustible materials
 - d. All operators are trained in the safe use of the spray booth
 - e. Powder coat booths: grounding devices for the parts or parts racks
2. Weekly
 - a. Excessive overspray accumulation on the walls, floor and in the exhaust plenum
 - b. Replace light bulbs that are not operating
 - c. Listen for fan belts squeaking or rubbing
 - d. Check doors for proper operation of hinges, latches and handles
 - e. Identify cracked or broken glass in doors, vision panels or at the lights
 - f. Visually inspect all gasketing and sweeps
3. Monthly
 - a. Visually inspect the exterior of the booth for excessive dust that is a fire hazard or may be drawn into the booth and contaminate coated surfaces.
 - b. Make sure that the fire suppression system is not out of expiration
 - c. Visually check all caulking around lights and panels.
 - d. Check air flow of sensing tubes and fluid level of draft gauge (manometer).
4. Semi-annually
 - a. Check fan belt tension. The fan should easily turn by hand with no sense of rubbing.
 - b. Fire suppression systems require semi-annual inspection by licensed contractors.
 - c. Check for paint accumulation on exhaust fan and duct.
5. Replace filters as needed. The exhaust filters will need to be replaced frequently. Change when the manometer draft gage differential is 0.5" above the starting point. Replace the intake filters when the draft gauge (manometer) reads below green arrow. Filters are available from Standard Tools as kits or as individual items.

CHECKLIST

Verify that all of these items are correct and that these tasks have been completed.

YES	NO	
		1. Panels are located per the specific drawings.
		2. Panels are mounted flush to each other.
		3. Teks screws are located 2-4" from the end of each panel and are spaced no more than 12" apart.
		4. All seams are caulked, including fan/panel, floor/panels and all glass.
		5. Fan is oriented correctly per the instructions on the fan body and pulling air out of the booth.
		6. Fan motor screws and fan belts are adjusted correctly.
		7. Fan belts are covered with the hardware supplied.
		8. Fan blades, belt and shaft are unobstructed.
		9. Filters are turned to the correct side.
		10. All wiring completed by a licensed electrical contractor.
		11. Spray interlocks and timers work correctly (required for ETL-listed booth).
		12. Identification label is visible from the front of the booth and in plain view.
		13. 'No Smoking' decals are located near booth entry points.

Signature: _____ Date: _____

SECTION 3

NOTE: The following drawings are not specific to this booth.

The following drawings are intended to supplement the drawings and parts list specific to the booth to be installed. Use the drawings to plan the sequence of installation. Refer to the specific drawings to identify the items in the assembly.

General instructions (such as how to assemble a ceiling beam or install the door jambs) are included in this manual after the general drawings of the booths.

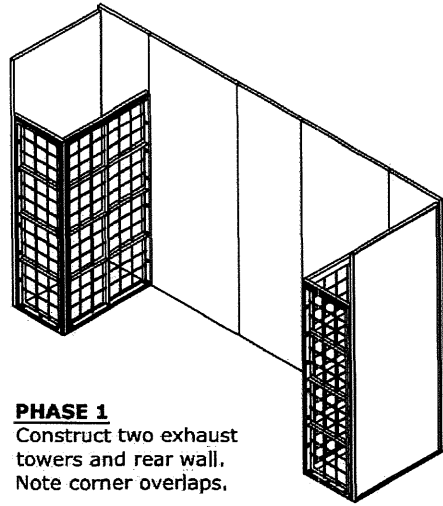
The last page in this section is the warranty. Please complete the blanks on that page and keep this manual as a record and instructions about your booth.

Our booths are designed so that our customers can install them with a minimum of resources and time. Please do not hesitate to call us at **1-800-451-2425** if you have questions or concerns. We are ready to supply answers to your questions about permitting, installation, operation and maintenance to promote the safe and long operation of your new booth.

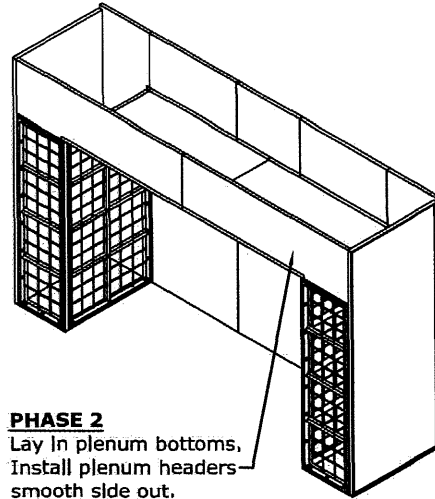
CONTENTS OF THE FOLLOWING DRAWINGS

DRAWING TITLE	DETAILS SHOWN	NOTES
CF-1000 and SD-1000	Four phases of assembly	1 page
SDD-1000	Three phases of assembly	1 page
MSCF-1000 and MSSD-10000	Three phases of assembly	1 page
EFB-1000	Three phases of assembly	1 page
Intake Plenum Detail	Intake Plenum Installation	1 page
Joining Panels		1 page
Hip and Ceiling		1 page
Fan and Lights		1 page
Top and Side Jamb Door Detail	Top and Side Door Jamb assembly and installation	1 page
Door Detail	Frontal skin and latch placement and installation	1 page
Door Sweep Detail		1 page
Personnel Door	Personnel door jamb installation	1 page
Latch Bracket	Latch bracket placement and installation	1 page
Filter Detail	Powder coat exhaust, paint exhaust and intake filters	1 page
Manometer	Manometer draft gage	1 page, see manufacturer's instructions
Beam	Beam assembly and installation	3 pages

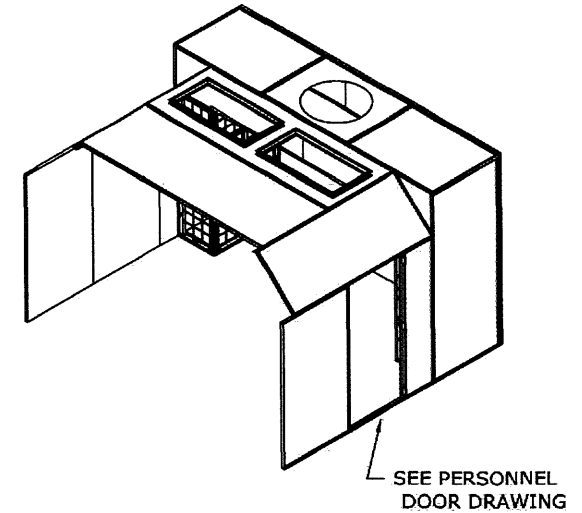
ASSEMBLY PHASES FOR CF-1000 AND SD-1000



PHASE 1
Construct two exhaust towers and rear wall. Note corner overlaps.

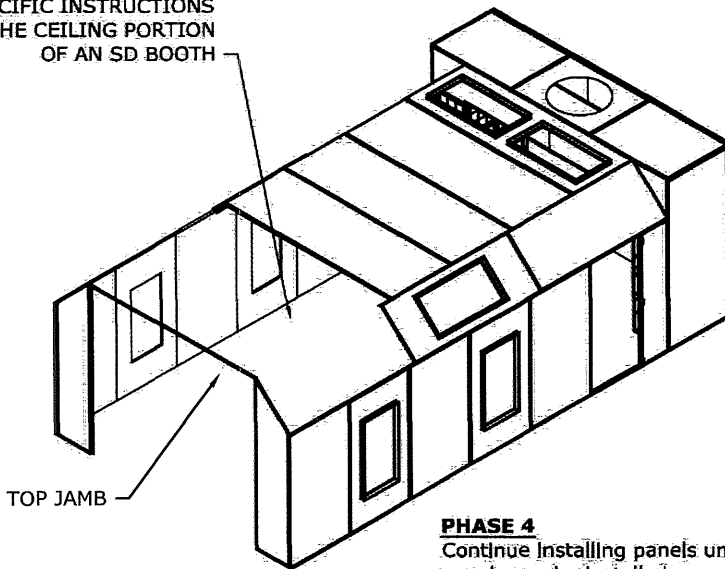


PHASE 2
Lay in plenum bottoms. Install plenum headers—smooth slide out.



PHASE 3
Install first wall panels, hip panels and ceiling panels, working forward in the booth. Support with wooden boards until complete.

SEE SPECIFIC INSTRUCTIONS FOR THE CEILING PORTION OF AN SD BOOTH



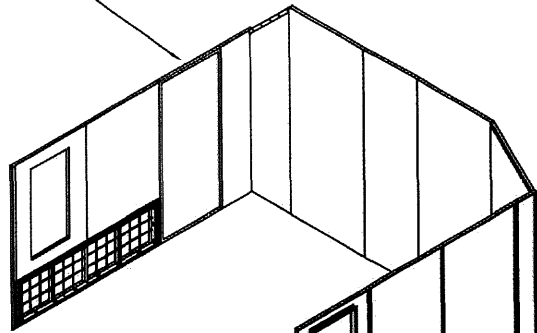
PHASE 4
Continue installing panels until the frontal panels can be installed. Install the jambs prior to the final hip and ceiling panels. See general door instructions.

NOTES:

- 1 • THESE ASSEMBLY PHASES REFER TO A STANDARD CF-1000 OR SD-1000 PAINT BOOTH; IT IS INTENDED ONLY AS A GUIDE.
- 2 • SEE FURTHER GENERAL INSTRUCTIONS FOR DETAILS ON DOORS, FILTERS, FAN(S).
- 3 • SEE THE SPECIFIC BOOTH DRAWING FOR PANEL SIZES.

ASSEMBLY PHASES FOR SDD-1000 AND ESDD-1000

SEE PERSONNEL
DOOR DRAWING

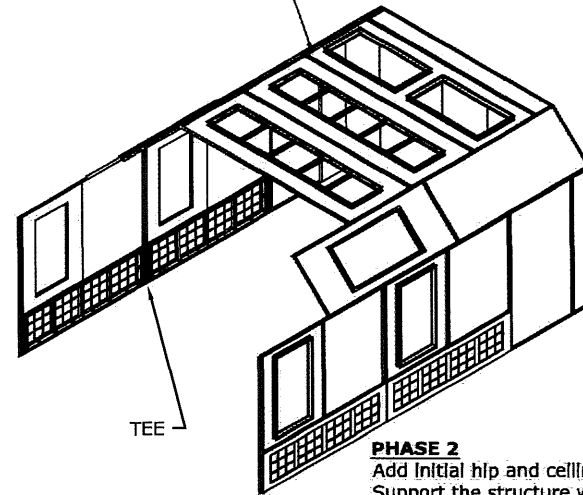


PHASE 1
Assemble from rear wall.
Support side walls as necessary.

Install Tee's per
the booth design

CLIP TO INTERIOR

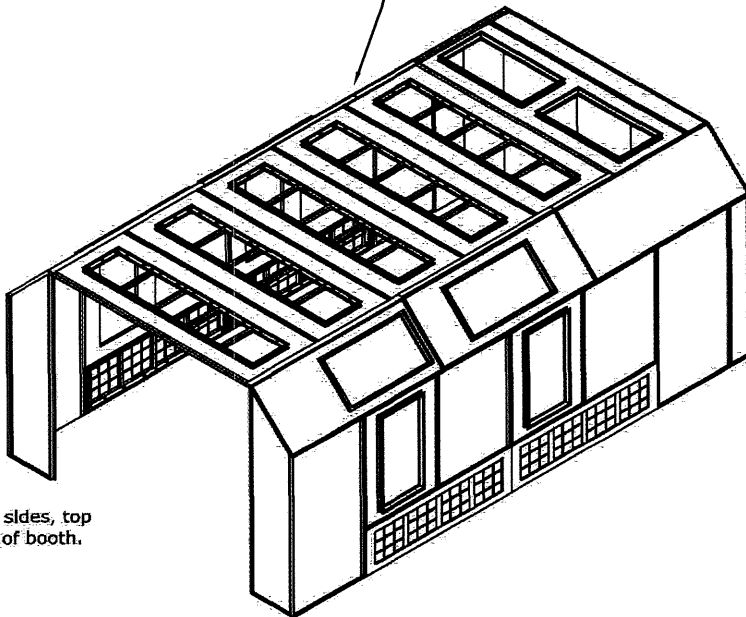
INSERT 1.5x1.5 ANGLE BETWEEN PANELS
TO SUPPORT INTAKE PLENUM



PHASE 2
Add Initial hip and ceiling panels.
Support the structure with
wooden boards until complete.

TEE

SEE INTAKE PLENUM DRAWING



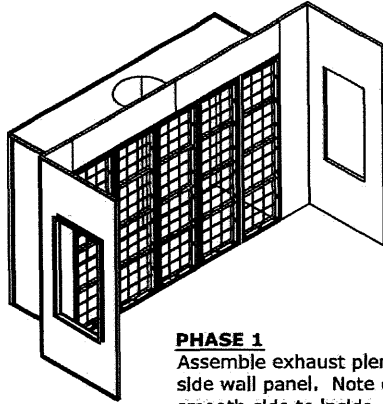
PHASE 3
Complete sides, top
and front of booth.

NOTES:

1. THESE ASSEMBLY INSTRUCTIONS REFER TO A STANDARD SDD-1000 OR ESDD-1000 PAINT BOOTH. IT IS INTENDED ONLY AS A GUIDE FOR CUSTOM BOOTH ASSEMBLY.
2. SEE FURTHER GENERAL INSTRUCTIONS FOR DETAILS ON DOORS, FILTERS, FAN(S).
3. SEE THE SPECIFIC BOOTH DRAWING FOR PANEL SIZES.

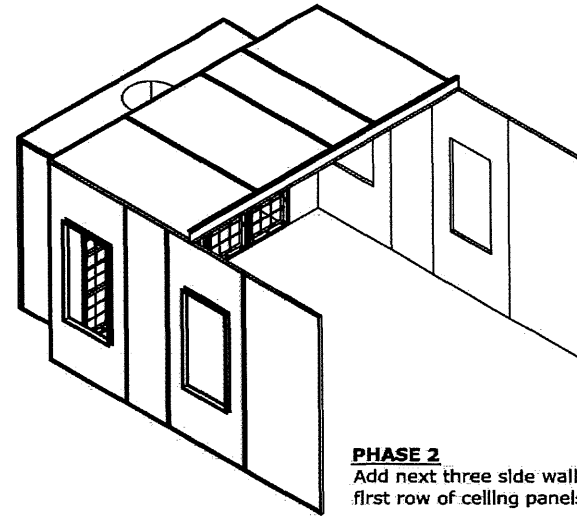
ASSEMBLY PHASES FOR MSCF-1000 AND MSSD-1000

NOTE: SIDE PANELS OVERLAP
REAR WALL PANELS



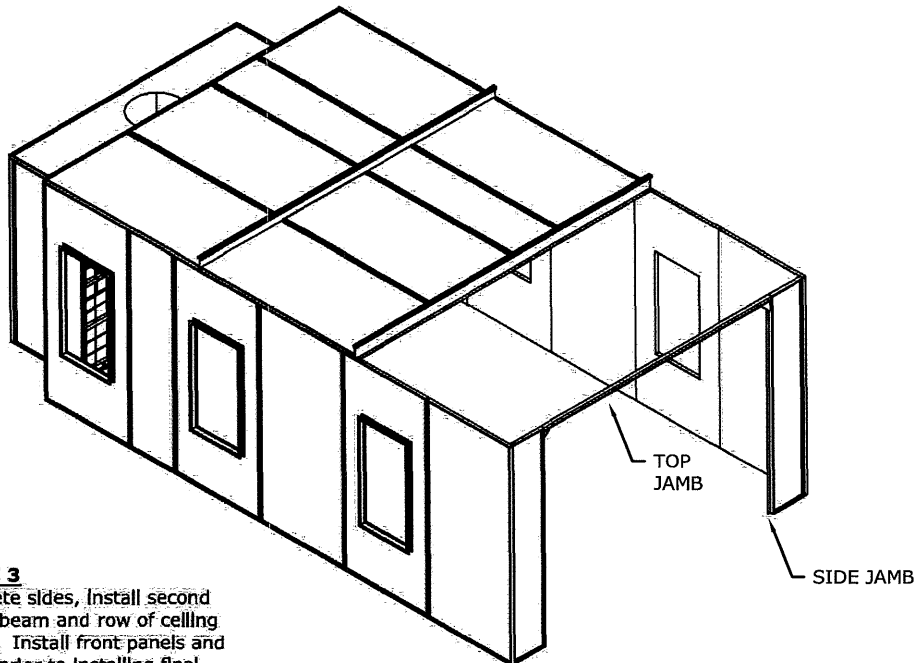
PHASE 1

Assemble exhaust plenum, back wall and one side wall panel. Note overlap. All panels are smooth side to inside. Use the 1,5x1,5 angles to secure the exhaust plenum to the back wall.



PHASE 2

Add next three side wall panels, first ceiling beam and first row of ceiling panels.



PHASE 3

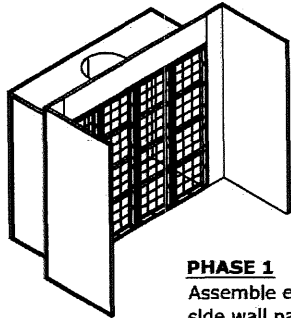
Complete sides, install second ceiling beam and row of ceiling panels. Install front panels and jamb's prior to installing final ceiling row. See door detail sheet.

NOTES:

- 1 • THESE ASSEMBLY INSTRUCTIONS REFER TO A STANDARD MSCF-1000, MSFB-1000 OR MSSD-1000 PAINT BOOTH. IT IS INTENDED ONLY AS A GUIDE.
- 2 • SEE FURTHER GENERAL INSTRUCTIONS FOR DETAILS ON DOORS, FILTERS, FAN(S).
- 3 • SEE THE SPECIFIC BOOTH DRAWING FOR PANEL SIZES.

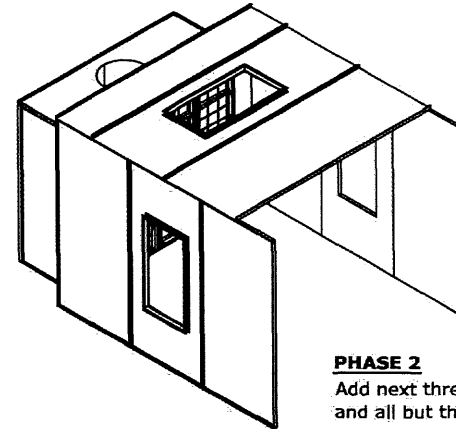
ASSEMBLY PHASES FOR EFB-1000

NOTE: SIDE PANELS OVERLAP
REAR WALL PANELS



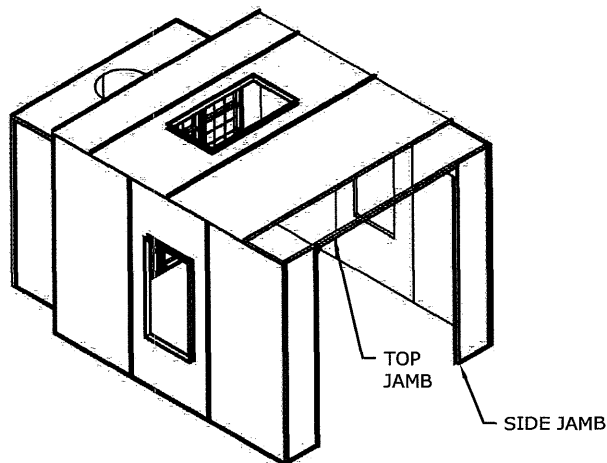
PHASE 1

Assemble exhaust plenum, back wall and one side wall panel. Note overlap. All panels are smooth side to inside.
Use 1.5x1.5 angles to secure the exhaust plenum to the back wall.



PHASE 2

Add next three side wall panels and all but the last ceiling panel.



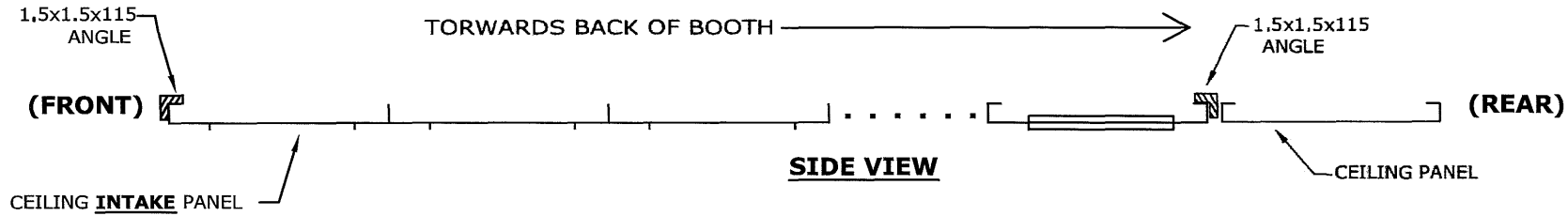
PHASE 3

Complete sides and install front panels and jambs prior to installing final ceiling panel.
See door detail sheet.

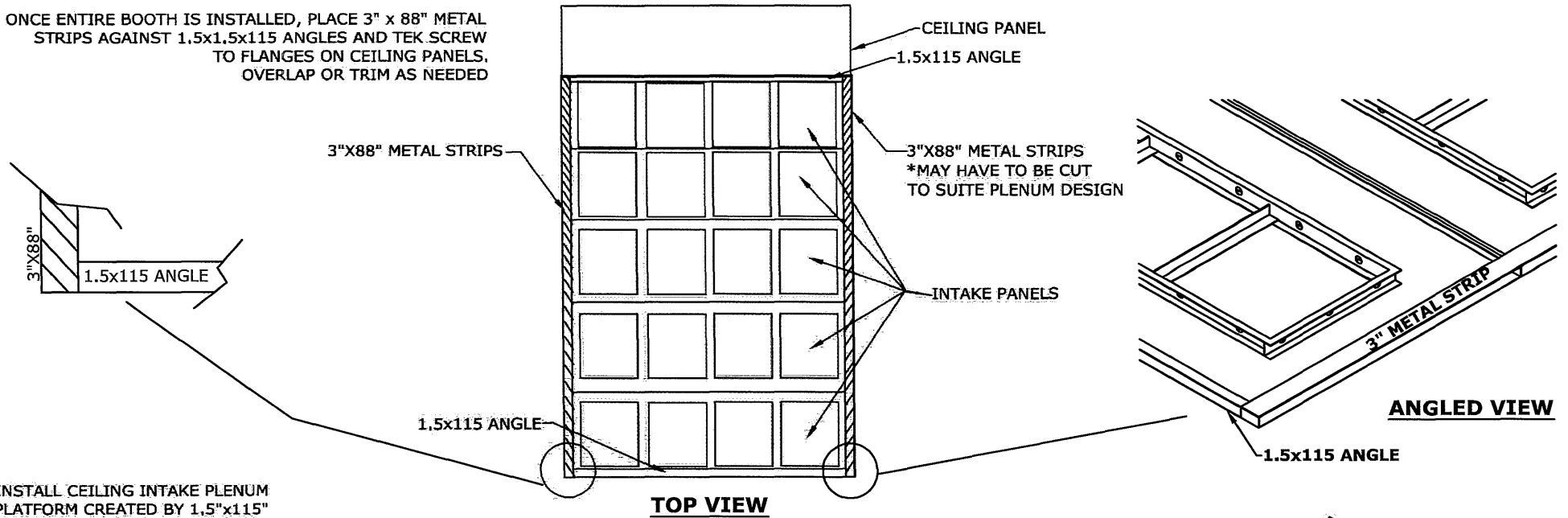
NOTES:

1. THESE ASSEMBLY INSTRUCTIONS REFER TO A STANDARD EFB-1000 PAINT BOOTH.
IT IS INTENDED ONLY AS A GUIDE FOR CUSTOM BOOTH ASSEMBLY.
2. SEE FURTHER GENERAL INSTRUCTIONS FOR DETAILS ON DOORS, FILTERS, FAN(S).
3. SEE THE SPECIFIC BOOTH DRAWING FOR PANEL SIZES.

- 1) INSTALL AND TEKS SCREW 1.5x1.5x115 ANGLE CENTERED OF 120" FRONT AND BACK INTAKE PANELS



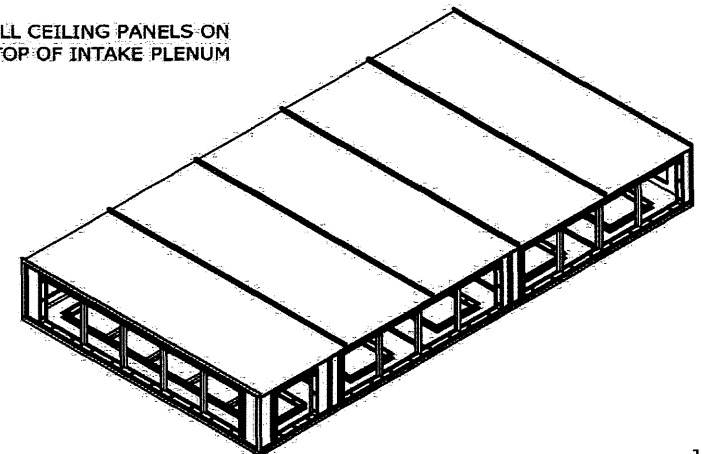
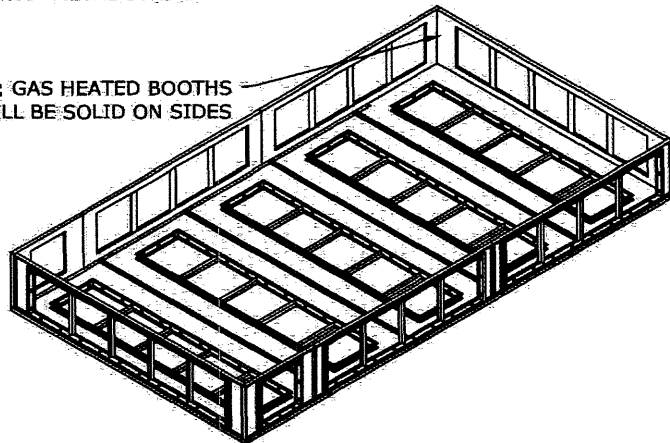
- 2) ONCE ENTIRE BOOTH IS INSTALLED, PLACE 3" x 88" METAL STRIPS AGAINST 1.5x1.5x115 ANGLES AND TEK SCREW TO FLANGES ON CEILING PANELS. OVERLAP OR TRIM AS NEEDED



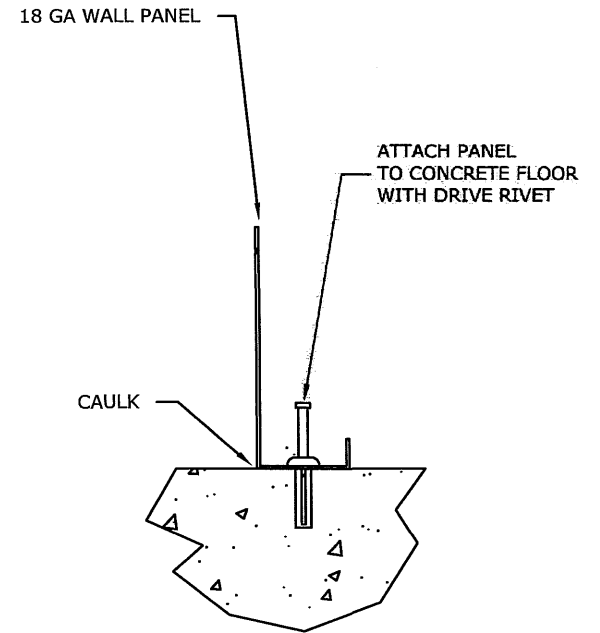
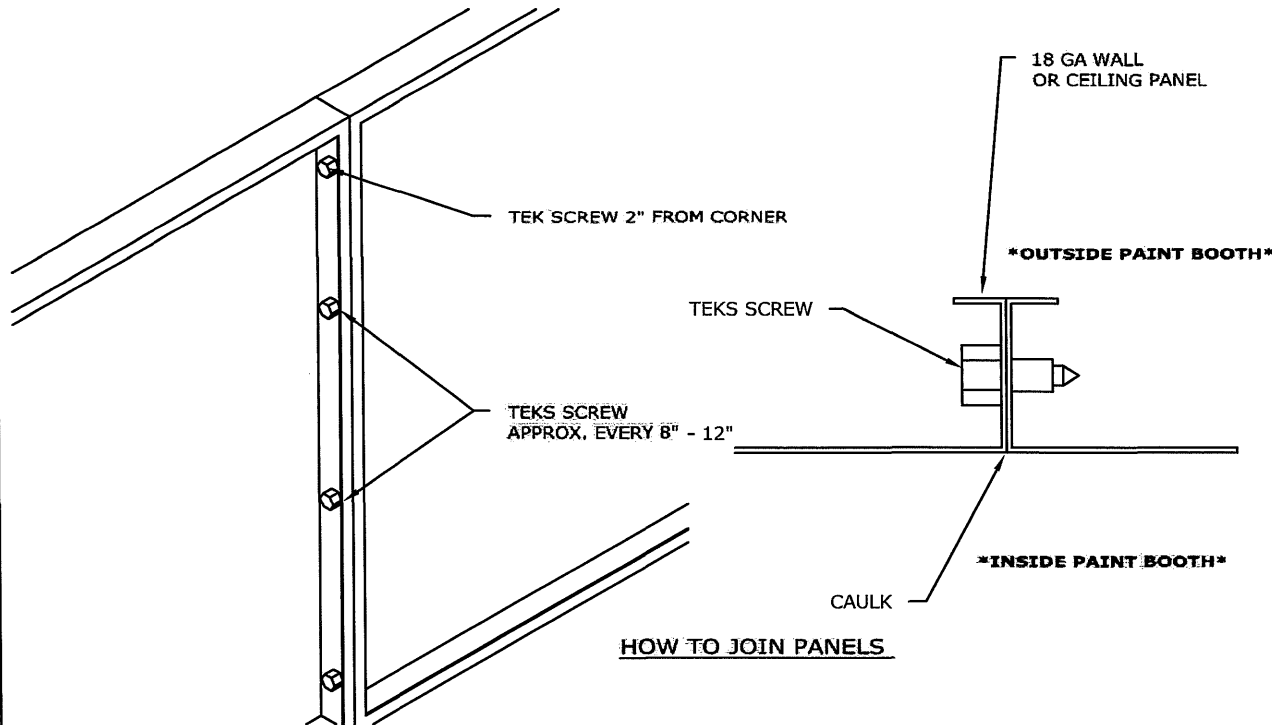
- 3) INSTALL CEILING INTAKE PLENUM ON PLATFORM CREATED BY 1.5"x115" AND 3"x88" METAL STRIPS

- 4) INSTALL CEILING PANELS ON TOP OF INTAKE PLENUM

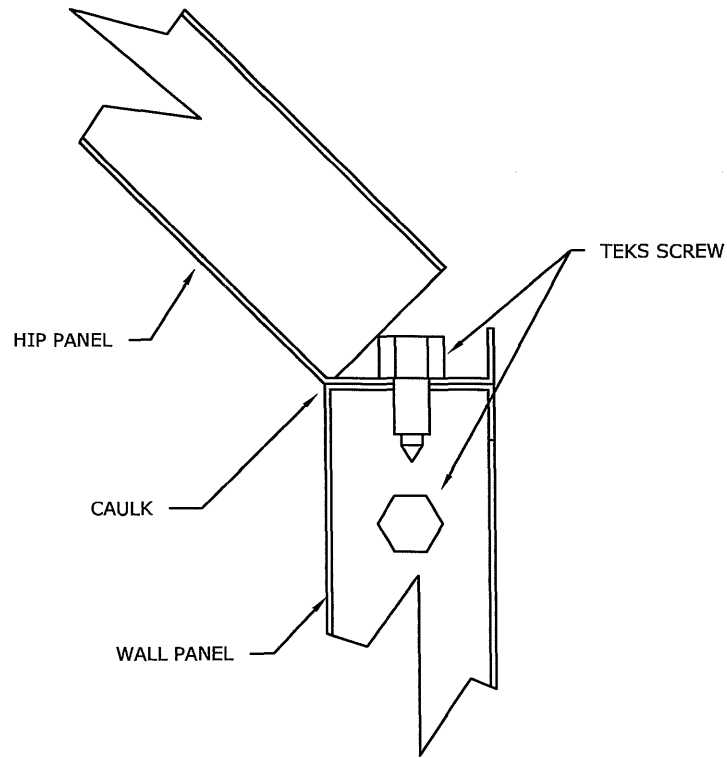
***NOTE:** GAS HEATED BOOTHS WILL BE SOLID ON SIDES



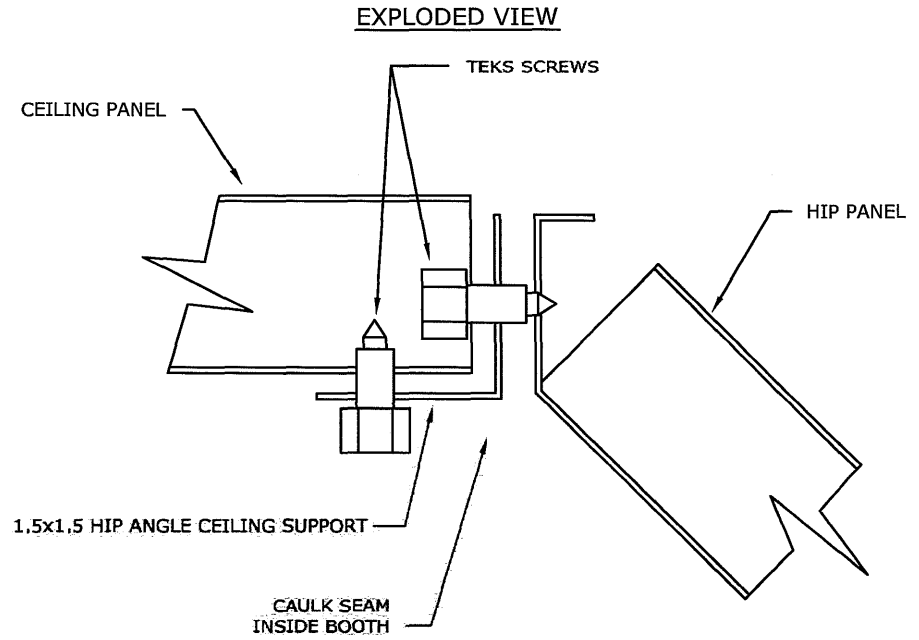
DETAIL TEKS SCREW AND ANCHOR INSTRUCTIONS



DETAIL HIP AND CEILING

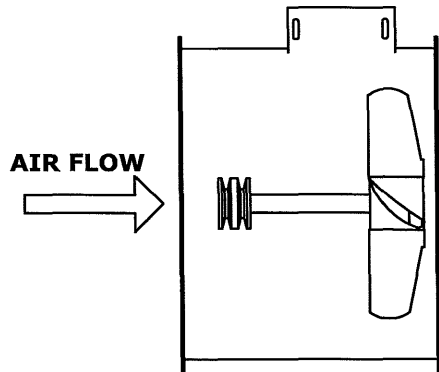


WALL PANEL TO HIP PANEL JOINT



HIP PANEL TO CEILING PANEL JOINT

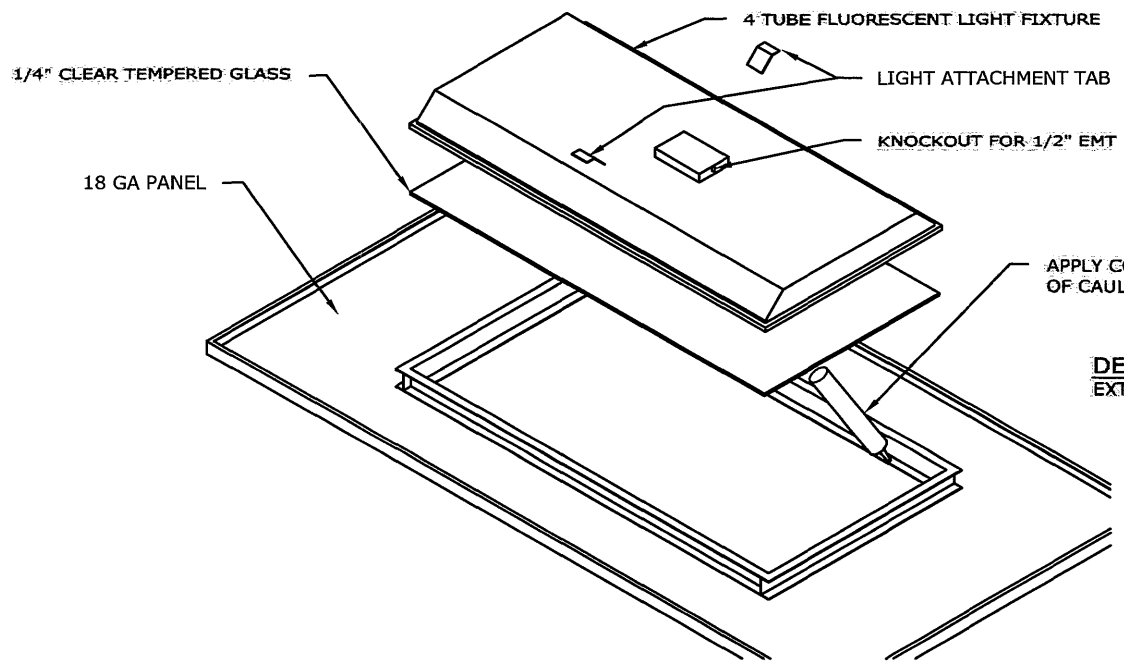
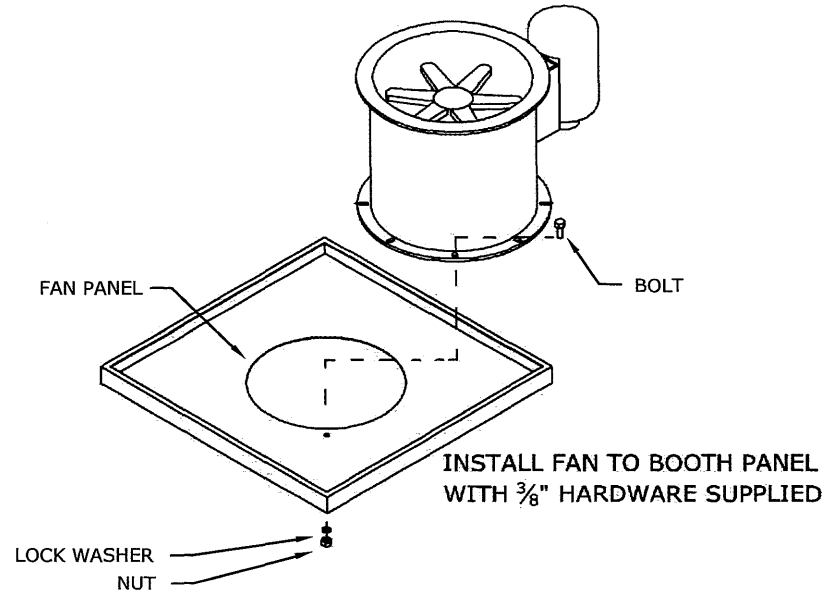
DETAIL FAN AND LIGHTS



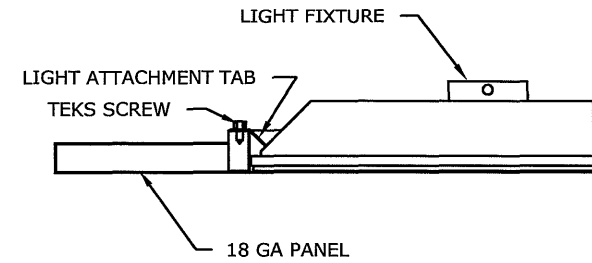
FAN DIRECTION

DETAIL II • FAN DETAILS

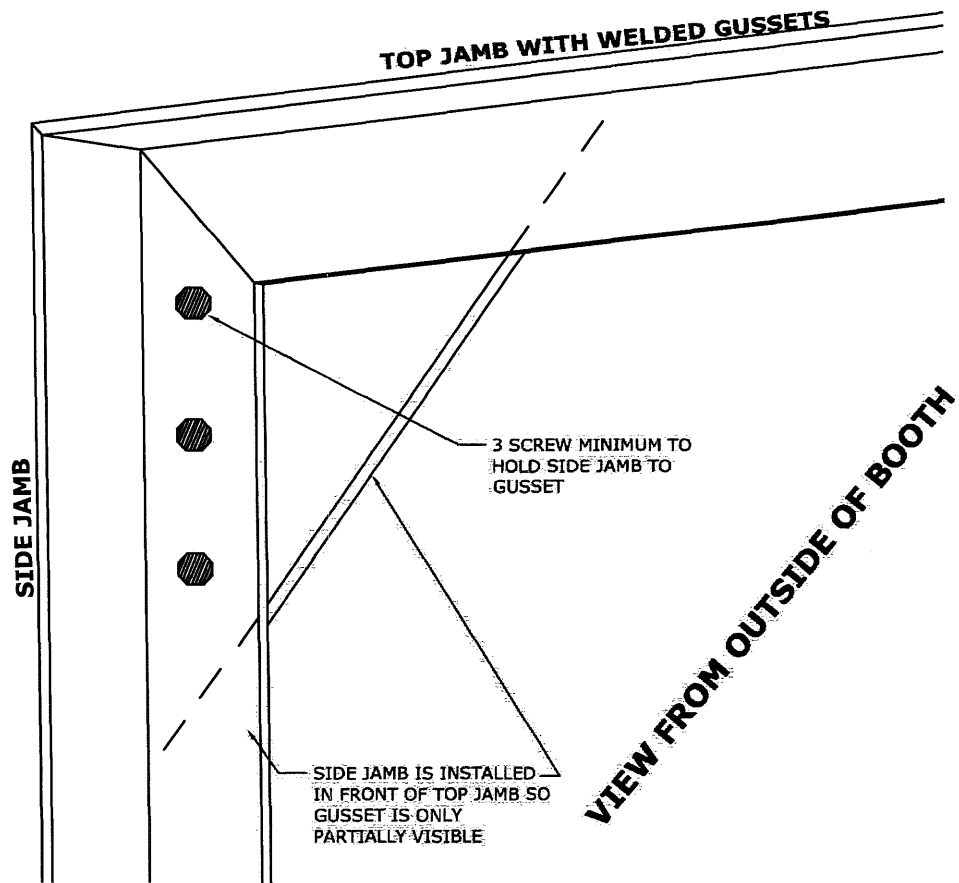
- REFER TO www.Gralnger.com FOR MORE INFORMATION
- MOUNT AND WIRE MOTOR PER INSTRUCTIONS PROVIDED WITH FAN AND MOTOR
- ORIENT FAN SO THAT THE BELTS CAN BE SERVICED; THEN DRILL THE FAN PANEL FOR THE BOLTS



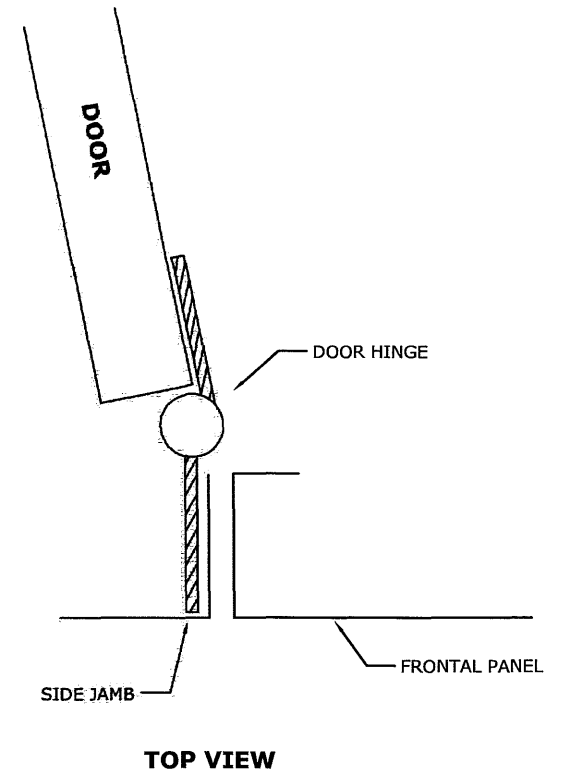
**DETAIL VI
EXTERIOR ACCESS LIGHT**



TOP JAMB WITH GUSSET/ SIDE JAMB PLACEMENT

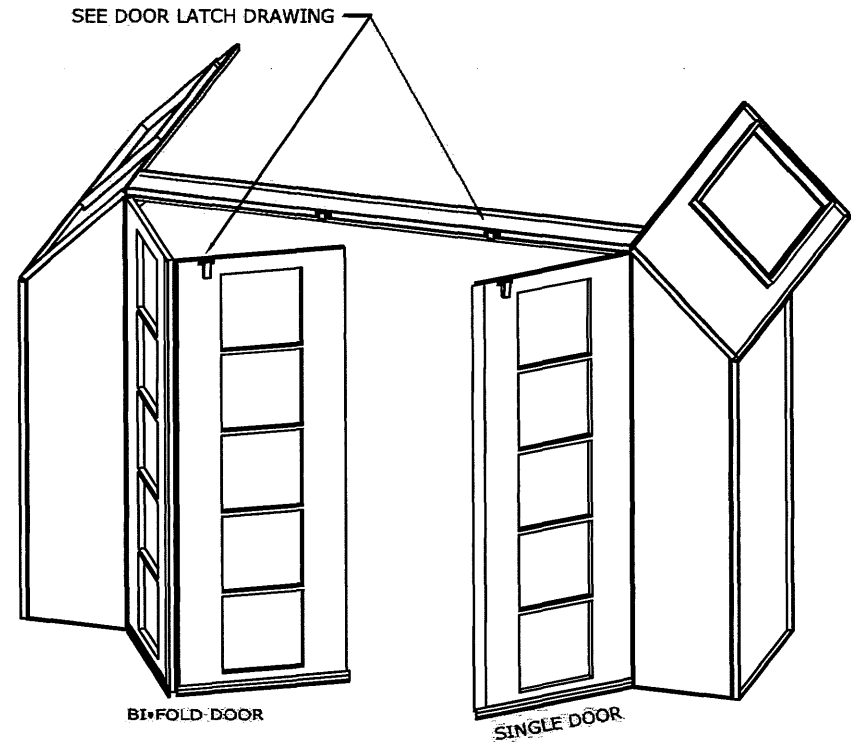
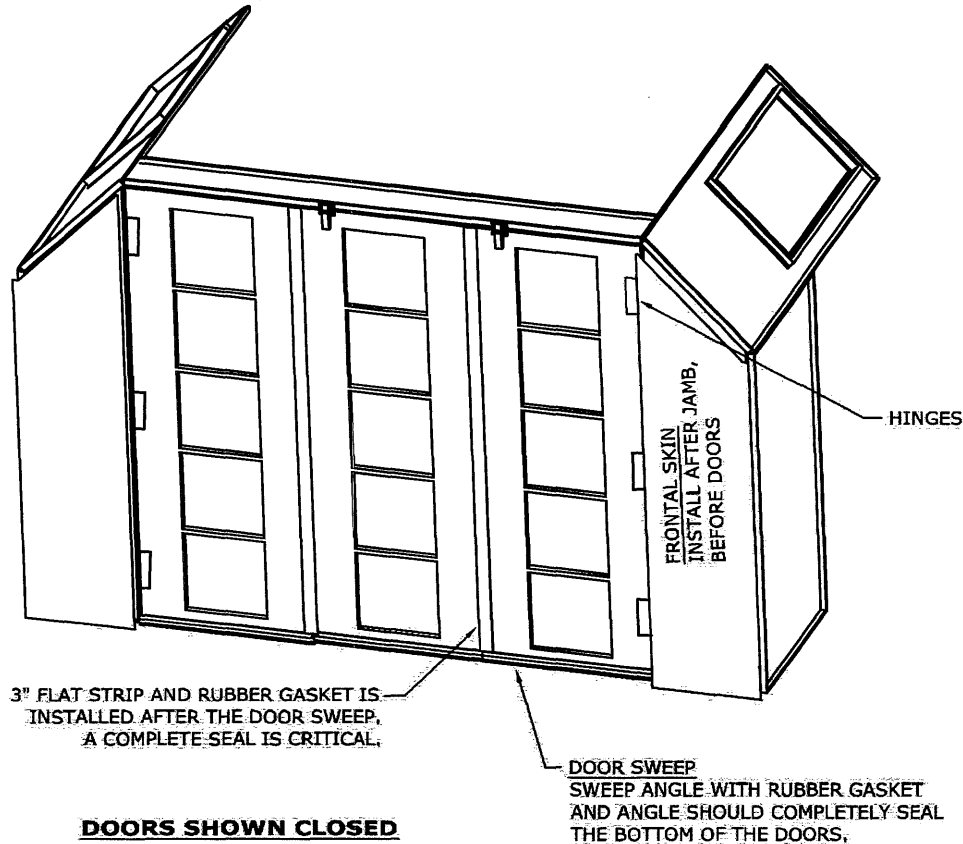


DOOR/HINGE PLACEMENT



DOOR DETAILS

NOTE THAT LIGHTS ARE AT LEAST 36" AWAY FROM DOOR OPENINGS IF INSTALLED PER THE DRAWINGS, UNLESS LIGHTS ARE EXPLOSION-PROOF.



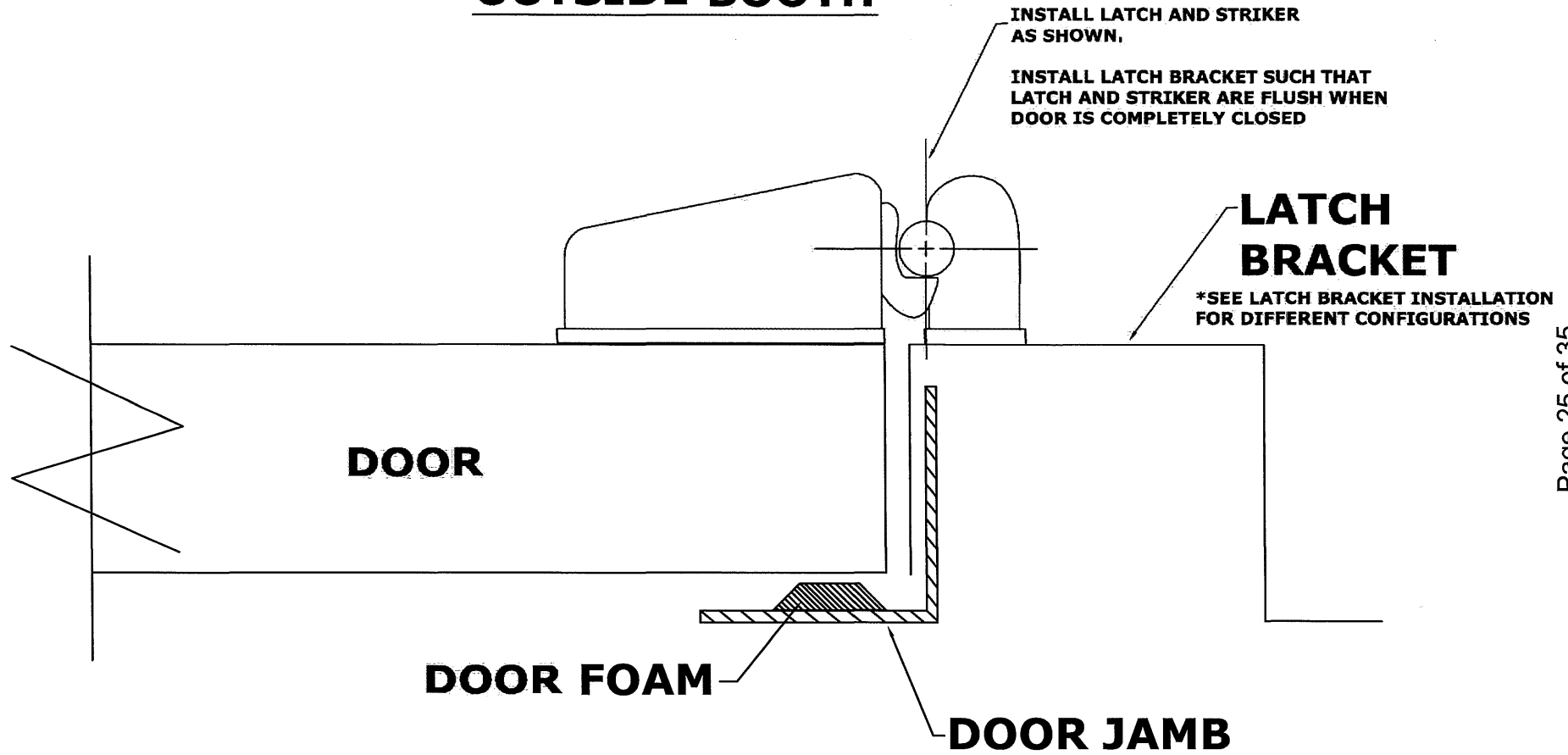
FILTER DOORS ARE SHOWN, WINDOW DOORS ARE THE SAME.

THE SMOOTH SIDE OF THE DOOR IS TO THE INTERIOR OF THE BOOTH.

NOTES:

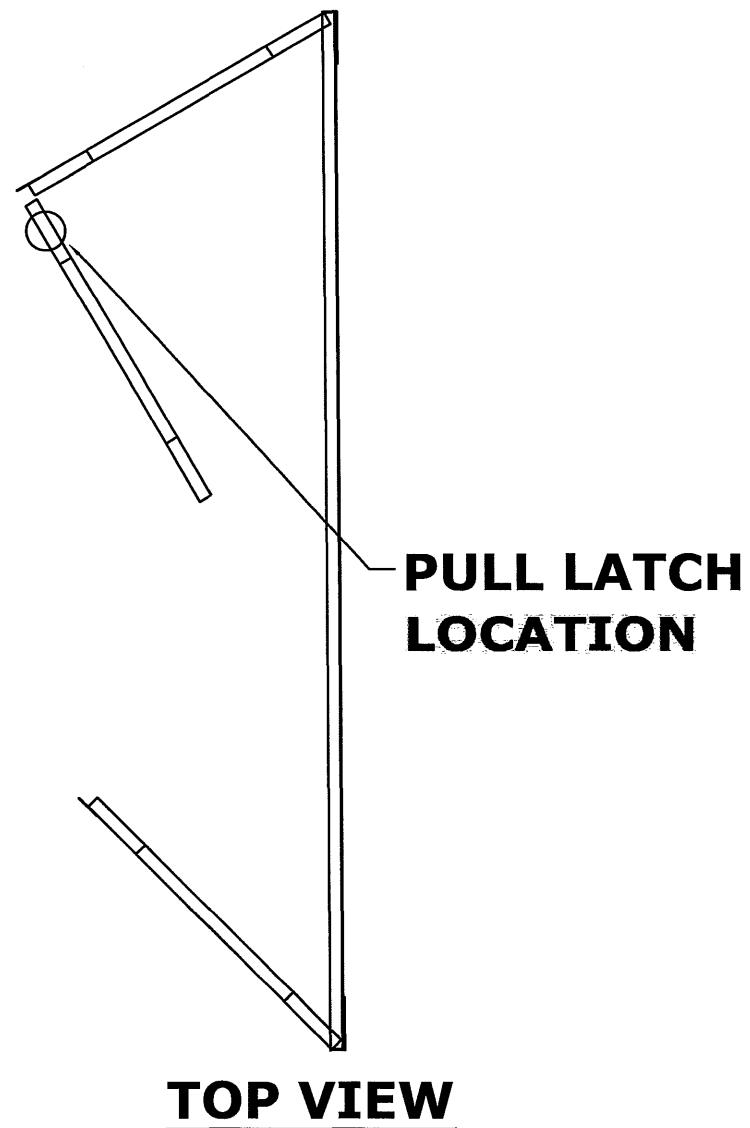
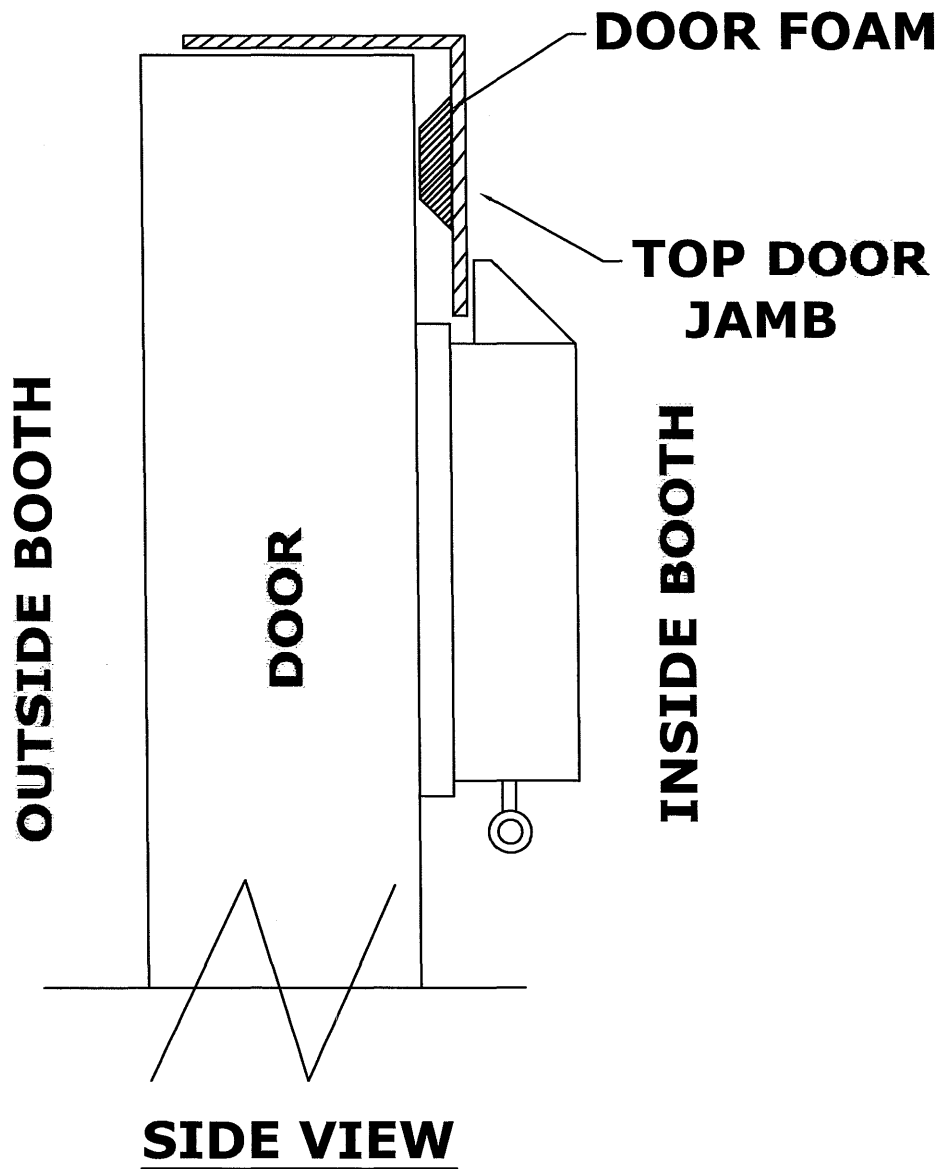
1. INSTALL TOP AND SIDE JAMBS.
2. ANCHOR THE BOOTH AND INSTALL THE FRONTAL SKINS (IF PROVIDED).
2. HANG SINGLE DOOR ON DESIRED SIDE. SPACE THE DOOR AS HIGH AS POSSIBLE BEFORE SECURING WITH TEKS SCREWS.
3. REPEAT FOR BI-FOLD DOOR. THE HINGE JOINING THE TWO SIDES OF THE BI-FOLD DOOR FACES THE INSIDE OF THE BOOTH.
4. SEE ASSEMBLY SEQUENCE DRAWINGS AND BOOTH SPECIFIC DRAWINGS FOR MORE DETAILS.

OUTSIDE BOOTH



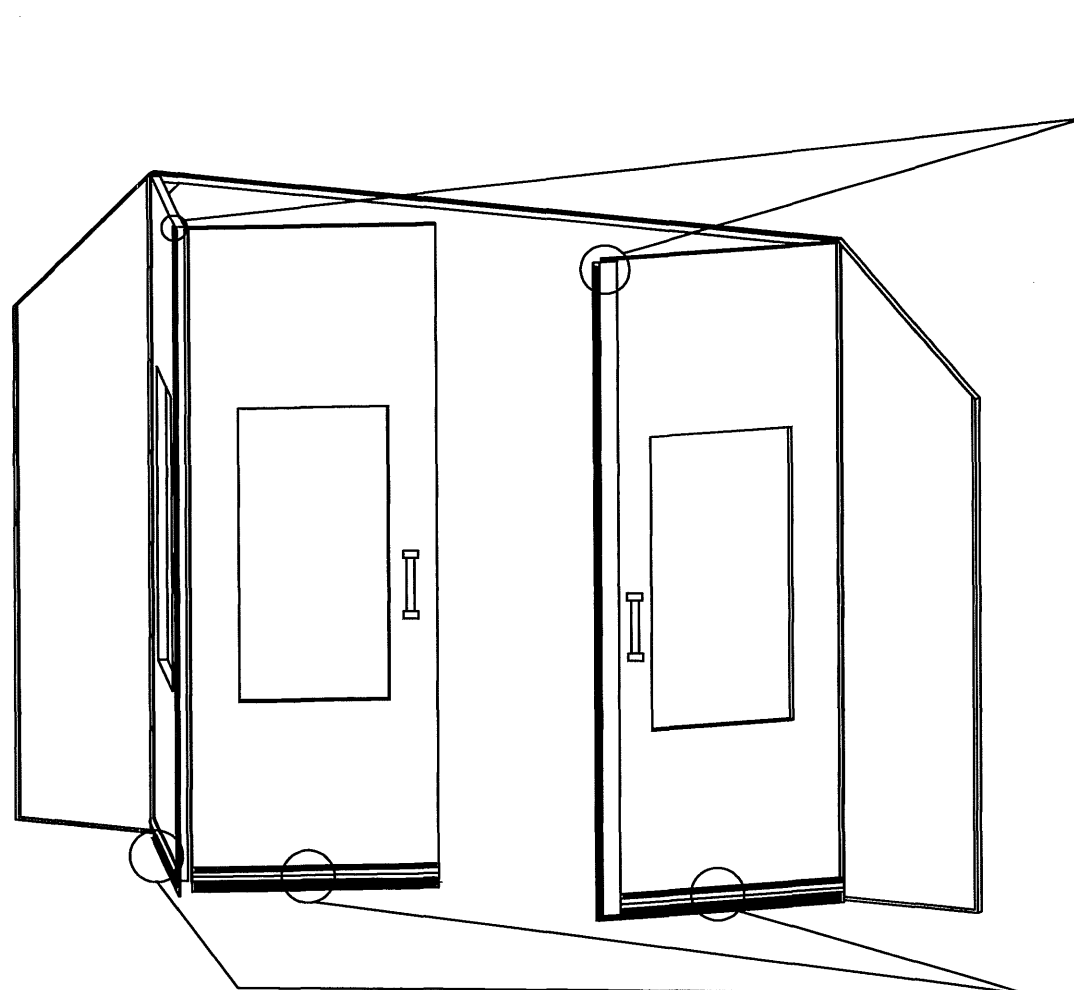
INSIDE BOOTH

PULL LATCH INSTALLATION

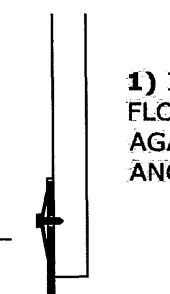


****PULL LATCHES ARE FOR THE BIFOLD SECTION OF A GAS HEATED BOOTH****

NOTE: 4" RUBBER MATERIAL AND 3"x39" ANGLE WILL NEED TO BE CUT TO DESIRED LENGTH

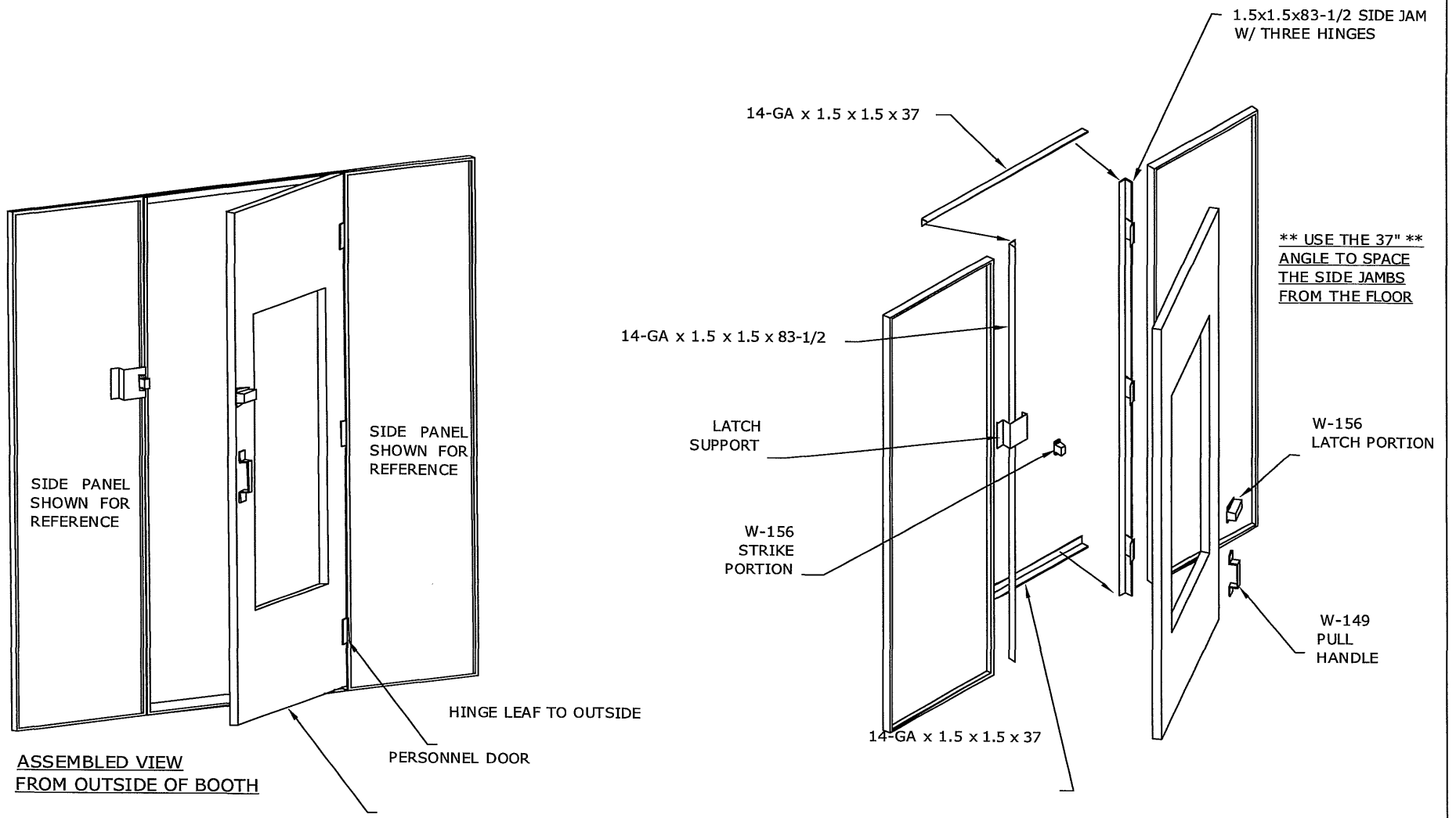


2) INSTALL 4" RUBBER AND 3" WIDE METAL STRIP ALONG DOOR EDGE, RUBBER SHOULD PROTRUDE 2" PAST DOOR. TEKS SCREW METAL STRIP TO HOLD RUBBER IN PLACE



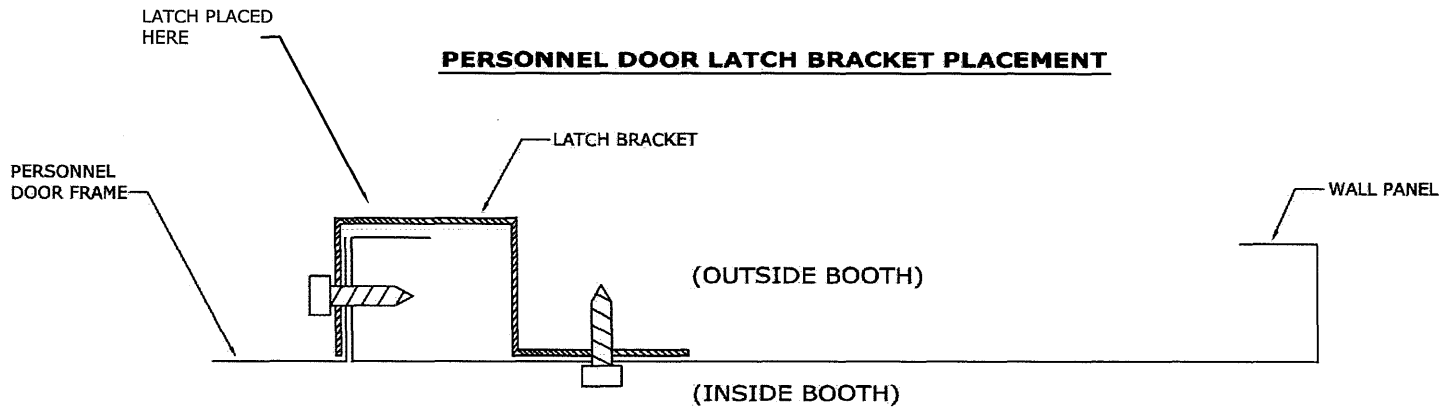
1) INSTALL 4" RUBBER MATERIAL AS FLOOR SWEEP SO IT LIGHTLY RUBS AGAINST FLOOR, TEKS SCREW 39" ANGLE TO RUBBER TO HOLD IN PLACE

PERSONNEL DOOR FRAME DETAILS



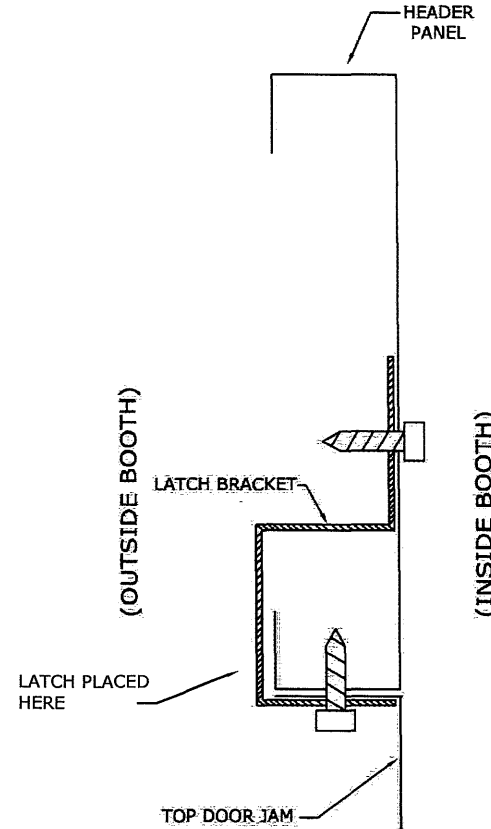
DOOR LATCH BRACKET INSTALLATION

PERSONNEL DOOR LATCH BRACKET PLACEMENT



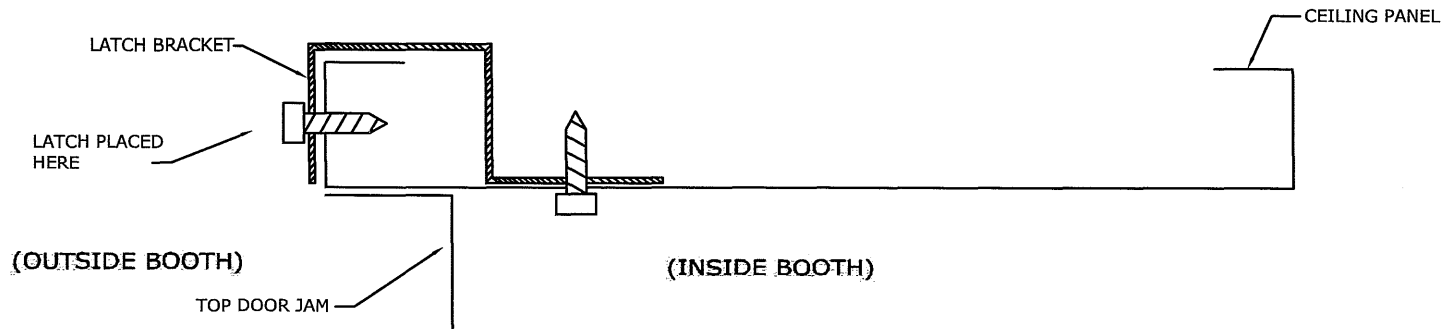
TOP VIEW

TRI-FOLD DOOR WITH HEADER PANEL LATCH BRACKET PLACEMENT



SIDE VIEW

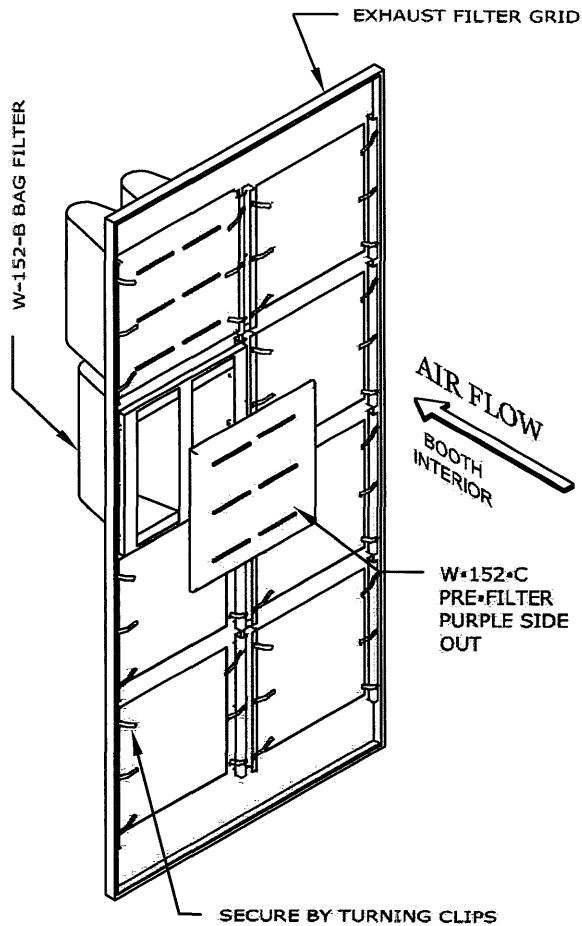
TRI-FOLD DOOR LATCH BRACKET PLACEMENT



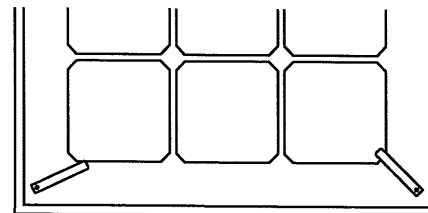
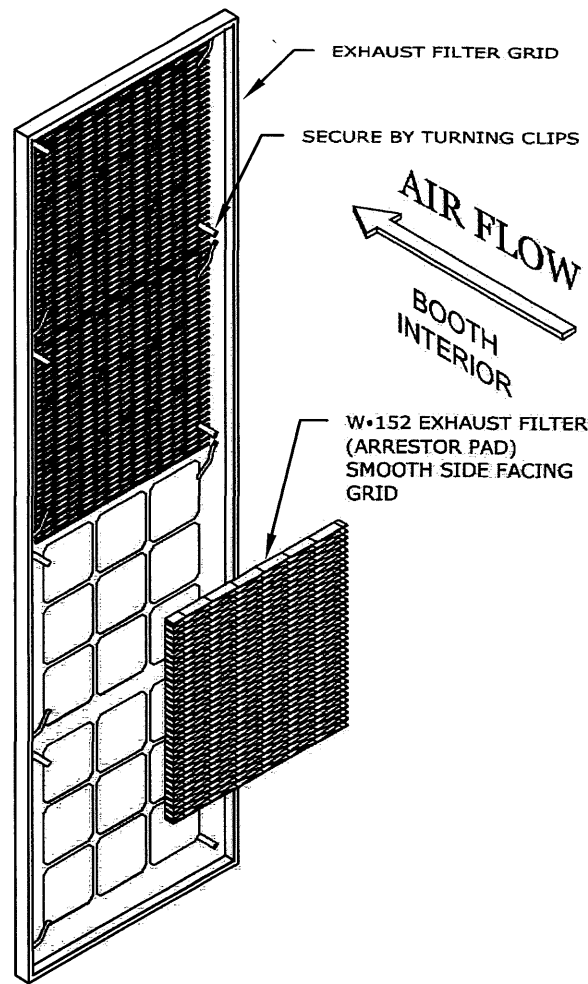
SIDE VIEW

NOTE: NO LATCH BRACKET IS REQUIRED FOR BOOTHS WITH DOORS UNDERNEATH INTAKE PLENUM OR DOORS WITH 3x1,5 TOP DOOR JAM

DETAIL 1 • EXHAUST FILTER FOR POWDERCOAT BOOTHS



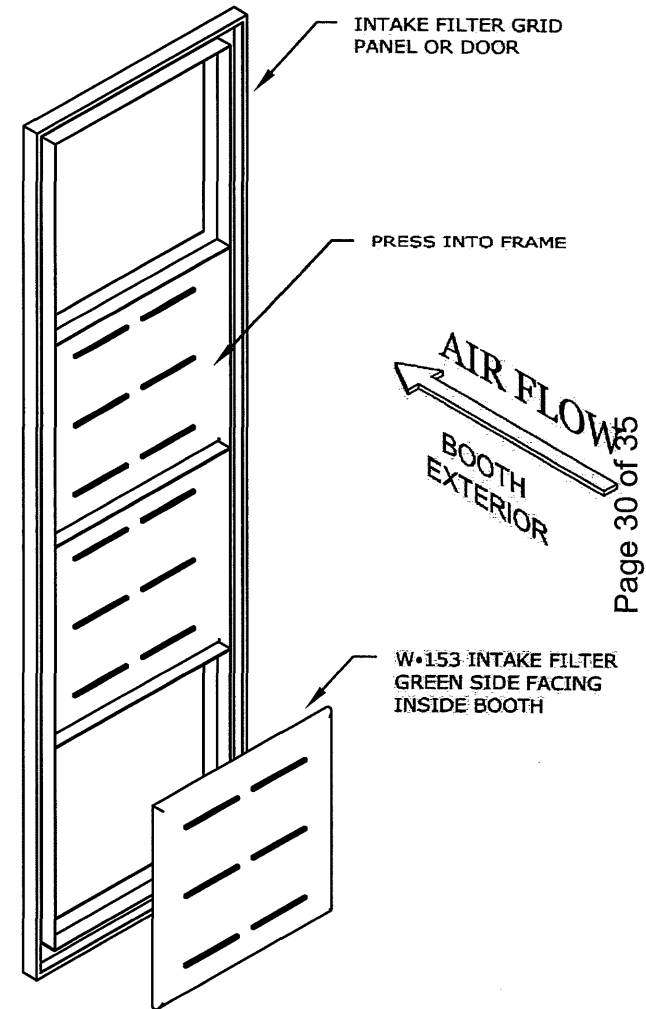
DETAIL 2 - EXHAUST FILTER W•152



CORRECT •
TAB PUSHING
AGAINST METAL

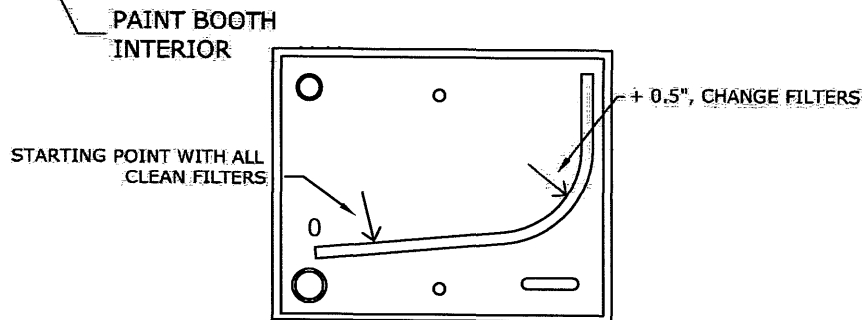
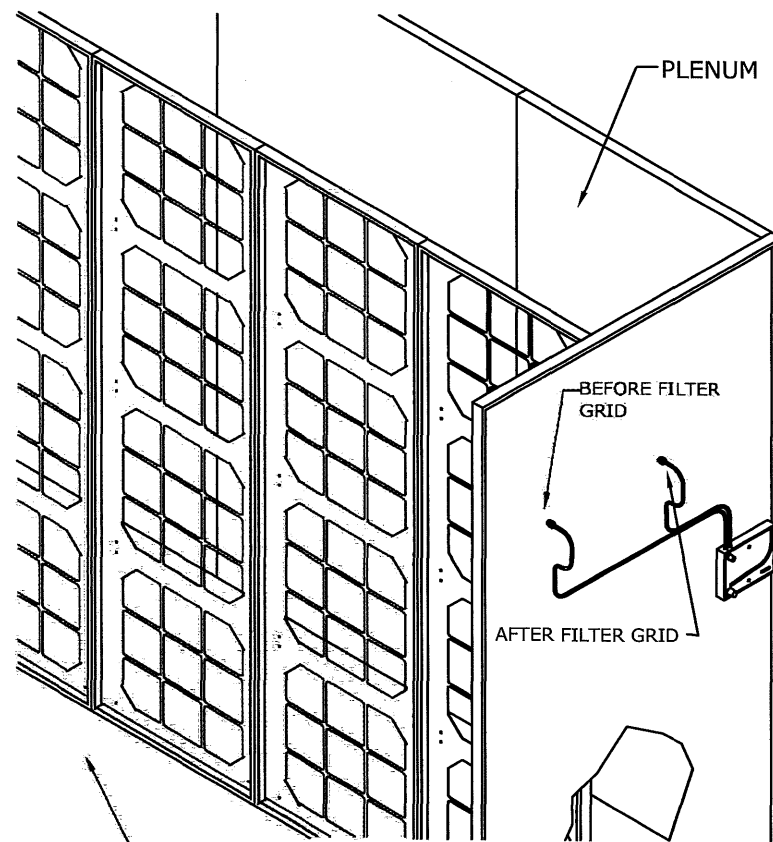
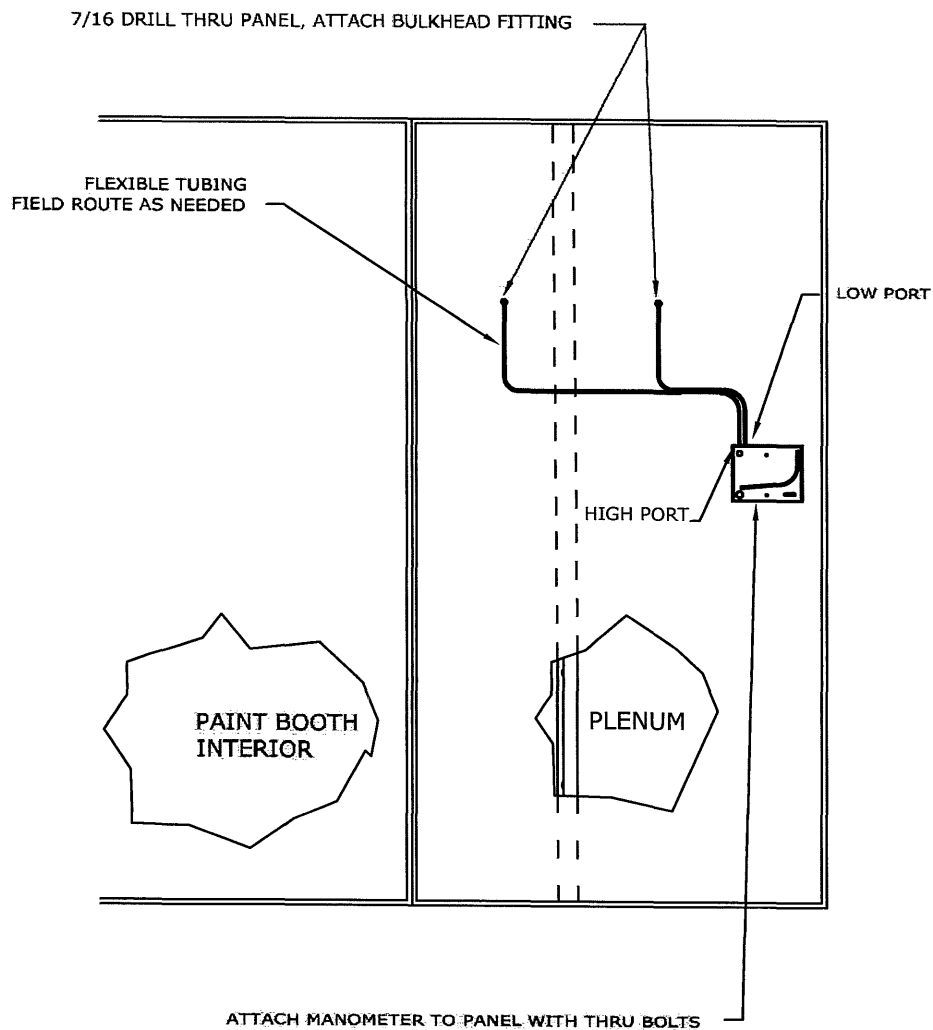
INCORRECT •
TAB NOT PUSHING
AGAINST METAL

DETAIL 3 - INTAKE FILTER W-153



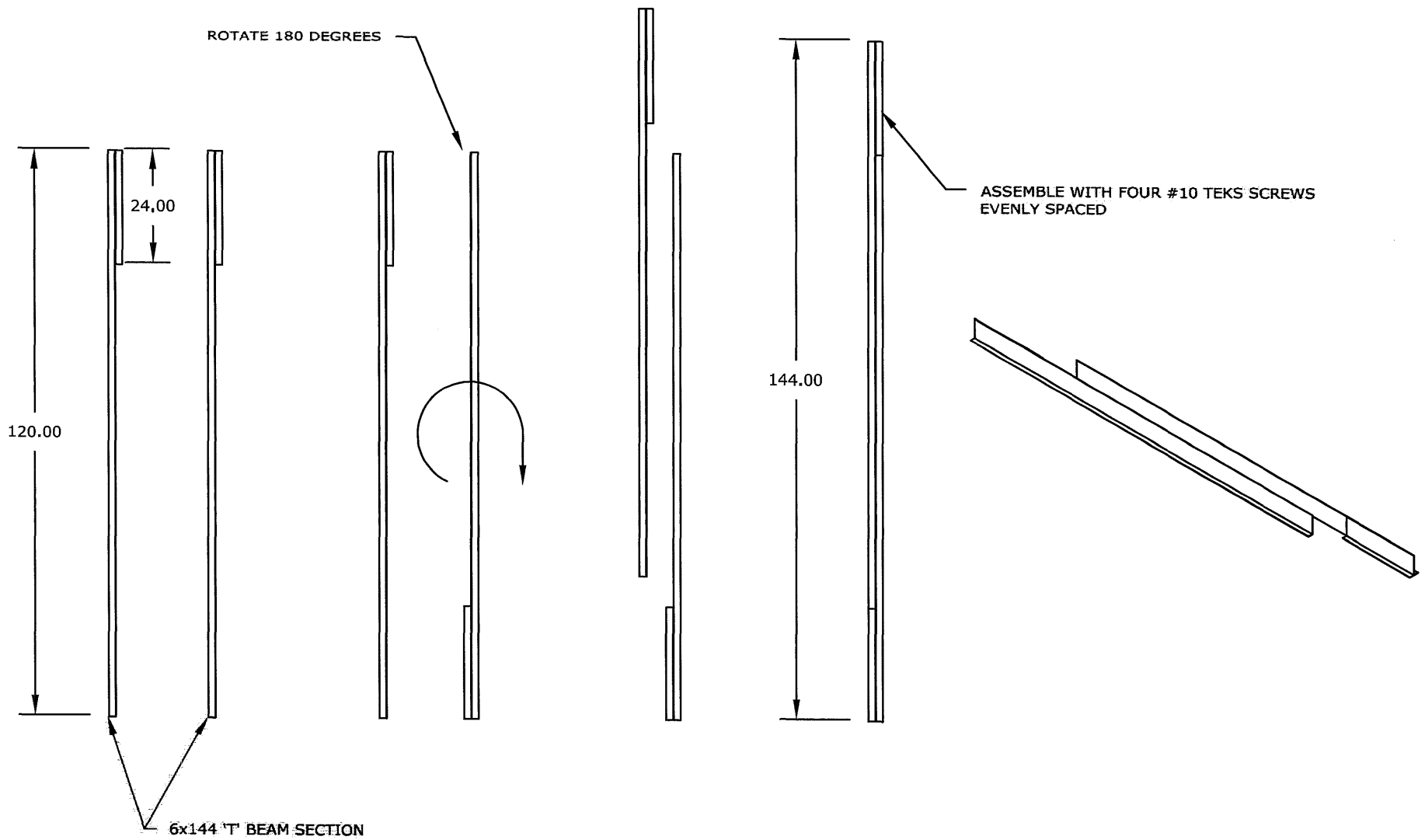
NOTE:
• EXHAUST FILTER GRID STYLE MAY VARY
• FOLLOW DETAIL XV TO SECURE EXHAUST FILTERS

DETAIL MANOMETER (DRAFT GAGE)



NOTES;

- INSTALL MANOMETER PER MANUFACTURER'S INSTRUCTIONS.
- INSTALL MANOMETER LEVEL (UNIT HAS BUILT IN LEVEL).

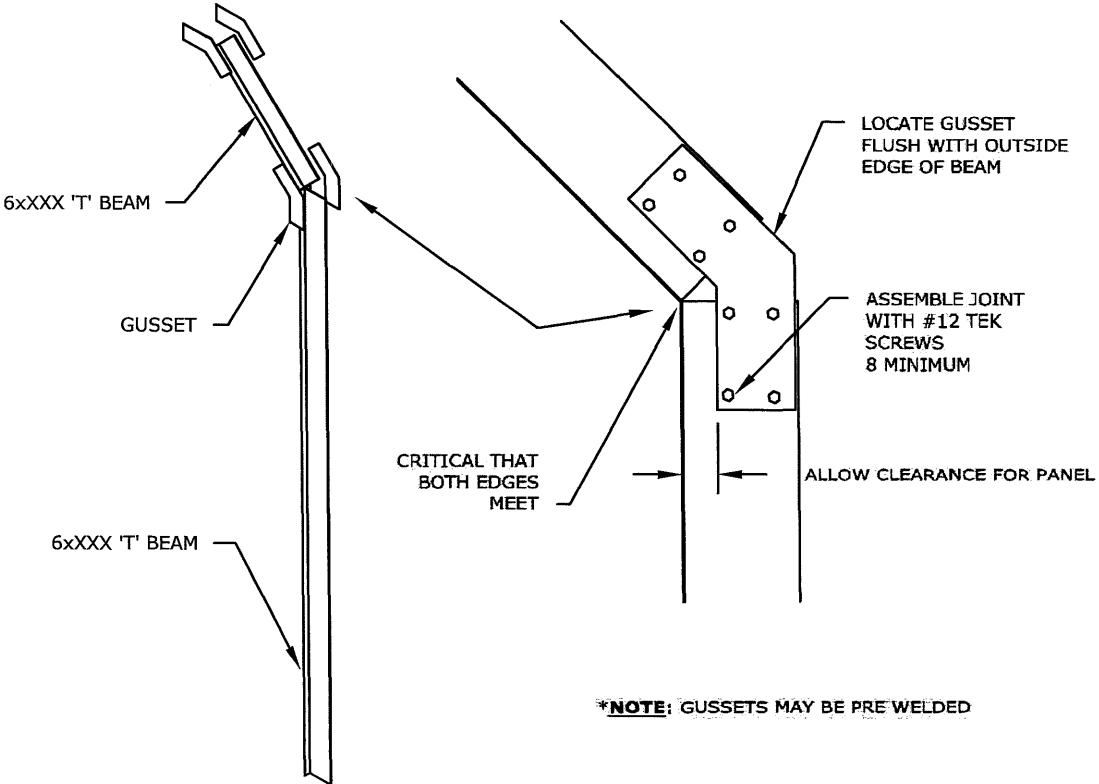


DETAIL 1 - ASSEMBLY OF 'T' BEAM SECTIONS

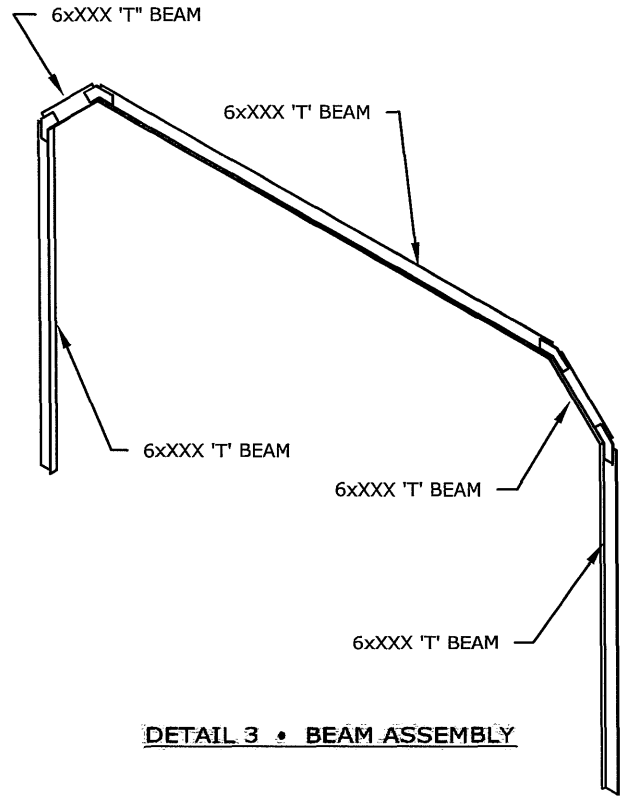
NOTES:

- 1 - DETAILS SHOWN FOR 144" 'T' BEAM, OTHER LENGTHS ARE SIMILAR. SOME LONGER BEAMS MAY BE IN 3 OR 4 SECTIONS
- 2- ASSEMBLE WITH #10 TEKS SCREWS, 2 NEAR TOP AND 2 NEAR BOTTOM OF BEAM WITH NO MORE THAN 12" SEPARATION BETWEEN SCREWS,
- 3- 'T' BEAMS ARE USED FOR SOME BOOTHS AND ARE ASSEMBLED IN THE SAME MANNER.

DETAIL - T-BEAMS (SHT 2 OF 3)

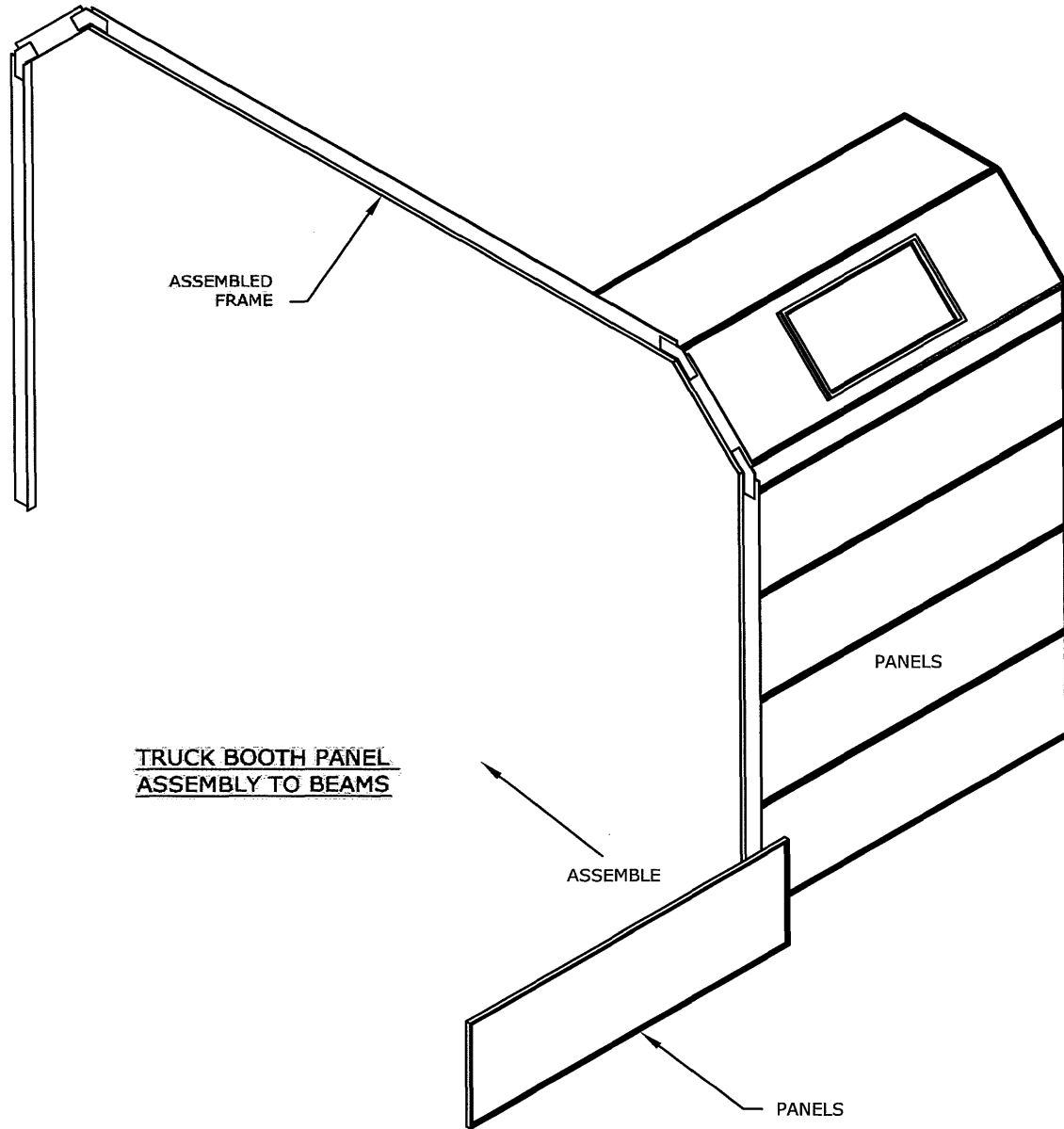


***NOTE:** GUSSETS MAY BE PRE WELDED

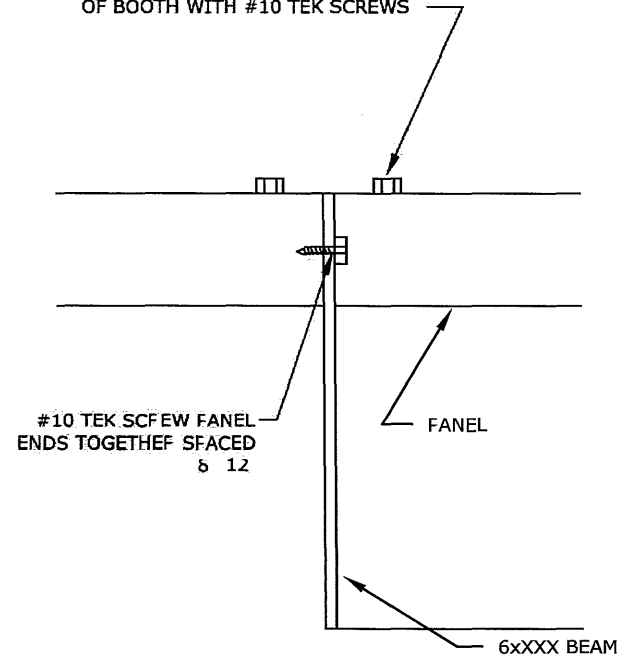


DETAIL 3 • BEAM ASSEMBLY

DETAIL - T-BEAMS (SHT 3 OF 3)



ASSEMBLE PANEL TO BEAM FROM INTERIOR OF BOOTH WITH #10 TEK SCREWS



DETAIL OF BEAM TO PANELS



STANDARD TOOLS AND EQUIPMENT CO.

LIMITED WARRANTY ON SPRAY BOOTHS

STANDARD TOOLS AND EQUIPMENT CO. will, within five (5) years of the purchase date, replace F.O.B. the factory, any materials which are defective in materials and/or workmanship. This warranty is subject to the inspection of the seller, and the seller's judgment will be the deciding factor if booths and/or components have been altered, changed or modified in any manner or have been subjected to abnormal use and abuse, inadequate maintenance and lubrication, or subjected to use beyond the seller recommended capacities and specifications during time of use. This warranty does not apply to, and in no event shall the seller be liable for, labor costs expended on such goods or consequential damages. At the seller's option, the buyer must return defective goods to seller, freight and delivery prepaid, which shall be the buyer's sole and exclusive remedy for defective goods. Fans, motors, light fixtures and air makeup systems are subject to their respective manufacturers' warranties (typically one year from shipping). Seller will not be liable to buyer for any personal injury or property damage arising from the use of the equipment or the installation of the equipment. This warranty is limited to the original buyer and is not assignable or transferrable to any other person. No officer, employee or agent of the seller is authorized to make any oral representations or warranty of fitness or to waive any of the foregoing terms of sale, and none shall be binding on the seller.

Fill out the following information and keep this warranty and the attached manual for buyer's records.

BUYER: _____

ADDRESS: _____

CITY, STATE, ZIP: _____

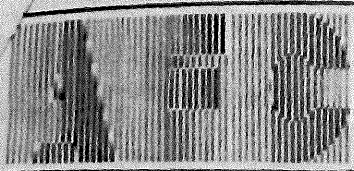
BUYER'S SIGNATURE: _____

DATE OF PURCHASE: _____

SERIAL #: _____ (see order number on silver label)

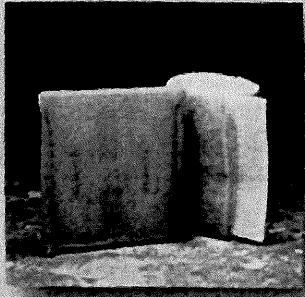
MODEL OF SPRAY BOOTH: _____

1/2014



AIR FILTRATION CO., INC.

**CUSTOM TACKY & 300 SERIES
TACKY INTAKE FILTERS**



Custom Tacky Series

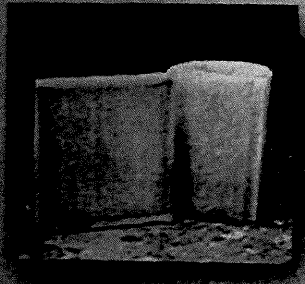
Product Application

Use in crossdraft applications. The industry favorite, the Custom Tacky is a long-life filter that is a proven performer at a great price.

Product Specifications

- 2" blue, 2-ply, self-sealing, tackified polyester media, panels heat sealed around steel frame
- Available in panels, pads, and blankets
- 94% efficient @ 5-10 micron range @ 100 fpm

Item #	Description	Set Qty
CT10	4'x9' Custom Tacky Blanket Filter	2
CT11	2'x9' Custom Tacky Blanket Filter	1
CT12	4.5'x9' Custom Tacky Blanket Filter	2
CT14	4'x13.5' Custom Tacky Blanket Filter	2
CT16	20"x25" Custom Tacky Panel Filter w/ frame	20
CT17	20"x25" Custom Tacky Panel Filter w/o frame	20
CT18	20"x50" Custom Tacky Panel Filter w/ frame	10
CT19	20"x50" Custom Tacky Panel Filter w/o frame	10
CT20	20"x20" Custom Tacky Panel Filter w/ frame	20
CT21	20"x20" Custom Tacky Panel Filter w/o frame	20
CT24	20"x48" Custom Tacky Panel Filter w/ frame	10
CT25	20"x48" Custom Tacky Panel Filter w/o frame	10
CT26	16"x20" Custom Tacky Panel Filter w/ frame	20
CT27	16"x20" Custom Tacky Panel Filter w/o frame	20
CT28	16"x25" Custom Tacky Panel Filter w/ frame	20
CT29	16"x25" Custom Tacky Panel Filter w/o frame	20
CT30	20"x46" Custom Tacky Panel Filter w/ frame	8
CT31	20"x46" Custom Tacky Panel Filter w/o frame	8
CT32	24"x24" Custom Tacky Panel Filter w/ frame	20
CT33	24"x24" Custom Tacky Panel Filter w/o frame	20



300 Series

Product Application

Use in crossdraft applications where the user requires a good basic filter and cost is a major consideration.

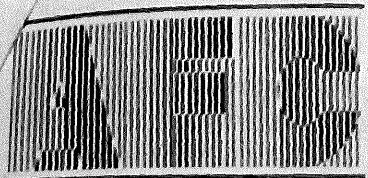
Product Specifications

- 1.5" green, 2-ply, self-sealing, tackified polyester media, panels heat sealed around steel frame
- Available in panels, pads, and blankets
- 83% efficient @ 5-10 micron range @ 100 fpm

Item #	Description	Set Qty
310	4'x9' 300 Series Blanket Filter	2
312	4.5'x9' 300 Series Blanket Filter	2
314	4'x13.5' 300 Series Blanket Filter	2
316	20"x25" 300 Series Panel Filter w/ frame	20
318	20"x50" 300 Series Panel Filter w/ frame	10
320	20"x20" 300 Series Panel Filter w/ frame	20
324	20"x48" 300 Series Panel Filter w/ frame	10
326	16"x20" 300 Series Panel Filter w/ frame	20
328	16"x25" 300 Series Panel Filter w/ frame	20
330	20"x46" 300 Series Panel Filter w/ frame	8
330-14	20"x46" 300 Series Panel Filter w/ frame	14
332	24"x24" 300 Series Panel Filter w/ frame	20

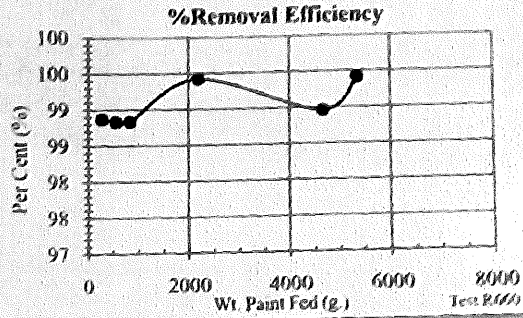
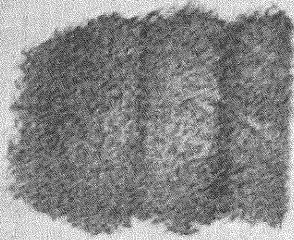
800 848 5859

1858 Hwy 14 Corydon, IA 50060



AIR FILTRATION CO., INC.

FIBERGLASS EXHAUST FILTERS



GA/PA Series 15 Gram Fiberglass

Product Application

Our most popular arrestor, ideal for use in most spray booth applications and our most economical option. For use where the user requires a good basic filter and cost is a major consideration. Available in pads (GA) and roll media (PA). **Compliant with EPA 6H law.**

Product Specifications

- 2" green, water resistant, 15 gram fiberglass
- 98.81% efficient with an average paint holding capacity of 2.22 pounds in a 20"x20" pad

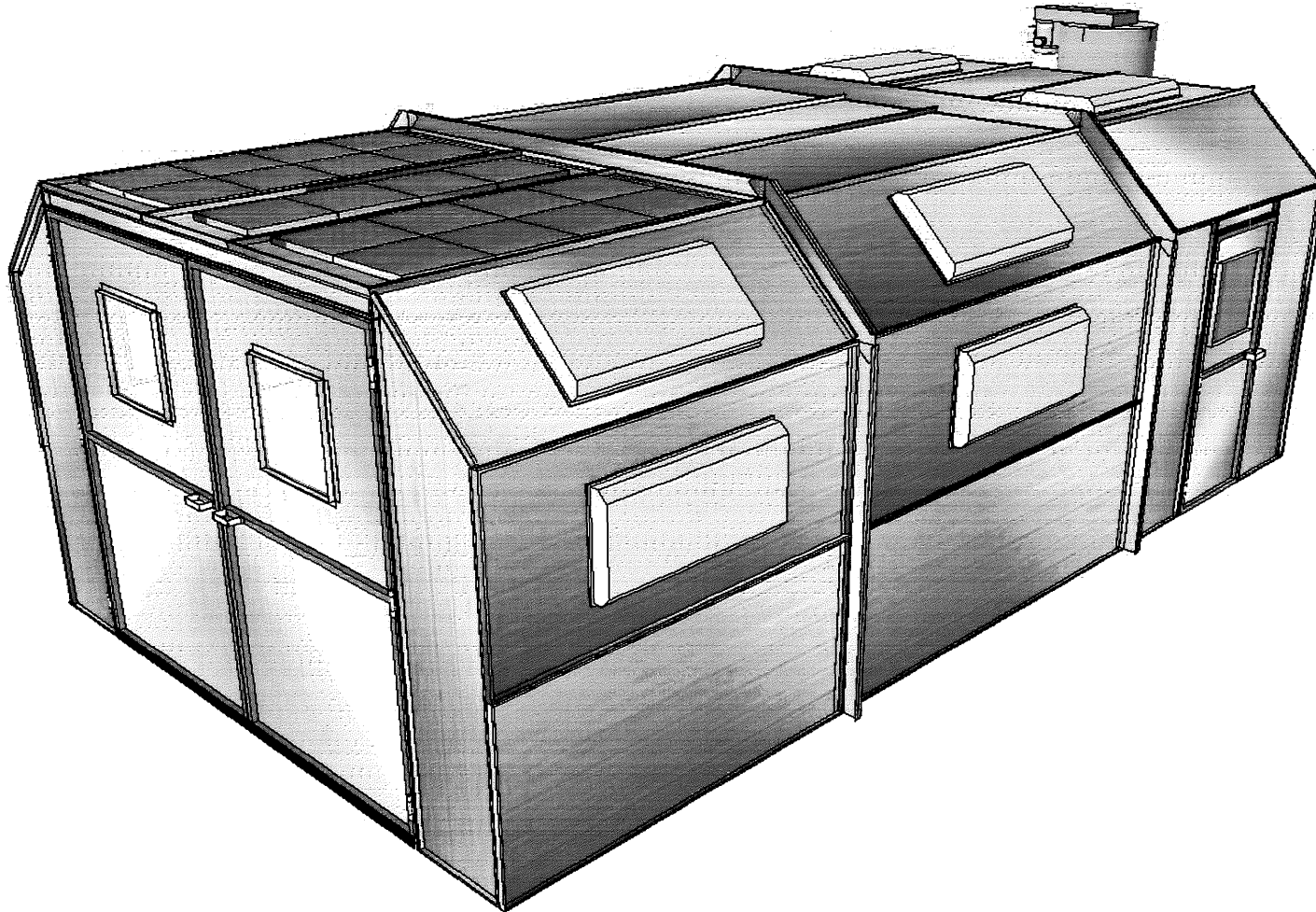
Item #	Description	Set Qty	Item #	Description	Set Qty
GA10	20"x20' 15 Gram FG Arrestor Pads	50	PA303	30"x300' 15 Gram FG Arrestor Roll	1
GA10-100	20"x20' 15 Gram FG Arrestor Pads	100	PA321	32"x100' 15 Gram FG Arrestor Roll	1
GA20	20"x25' 15 Gram FG Arrestor Pads	50	PA323	32"x300' 15 Gram FG Arrestor Roll	1
GA20-100	20"x25' 15 Gram FG Arrestor Pads	100	PA361	36"x100' 15 Gram FG Arrestor Roll	1
GA24	20"x24' 15 Gram FG Arrestor Pads	50	PA363	36"x300' 15 Gram FG Arrestor Roll	1
GA24-100	20"x24' 15 Gram FG Arrestor Pads	100	PA401	40.5"x100' 15 Gram FG Arrestor Roll	1
GA26	20"x48' 15 Gram FG Arrestor Pads	8	PA403	40.5"x300' 15 Gram FG Arrestor Roll	1
PA201	20"x100' 15 Gram FG Arrestor Roll	1	PA421	42"x100' 15 Gram FG Arrestor Roll	1
PA203	20"x300' 15 Gram FG Arrestor Roll	1	PA423	42"x300' 15 Gram FG Arrestor Roll	1
PA221	22"x100' 15 Gram FG Arrestor Roll	1	PA451	45"x100' 15 Gram FG Arrestor Roll	1
PA223	22"x300' 15 Gram FG Arrestor Roll	1	PA453	45"x300' 15 Gram FG Arrestor Roll	1
PA241	24"x100' 15 Gram FG Arrestor Roll	1	PA481	48"x100' 15 Gram FG Arrestor Roll	1
PA243	24"x300' 15 Gram FG Arrestor Roll	1	PA483	48"x300' 15 Gram FG Arrestor Roll	1
PA251	25"x100' 15 Gram FG Arrestor Roll	1	PA601	60"x100' 15 Gram FG Arrestor Roll	1
PA253	25"x300' 15 Gram FG Arrestor Roll	1	PA603	60"x300' 15 Gram FG Arrestor Roll	1
PA281	28"x100' 15 Gram FG Arrestor Roll	1	PA801	80"x100' 15 Gram FG Arrestor Roll	1
PA283	28"x300' 15 Gram FG Arrestor Roll	1	PA803	80"x300' 15 Gram FG Arrestor Roll	1
PA301	30"x100' 15 Gram FG Arrestor Roll	1			

800.842.5859

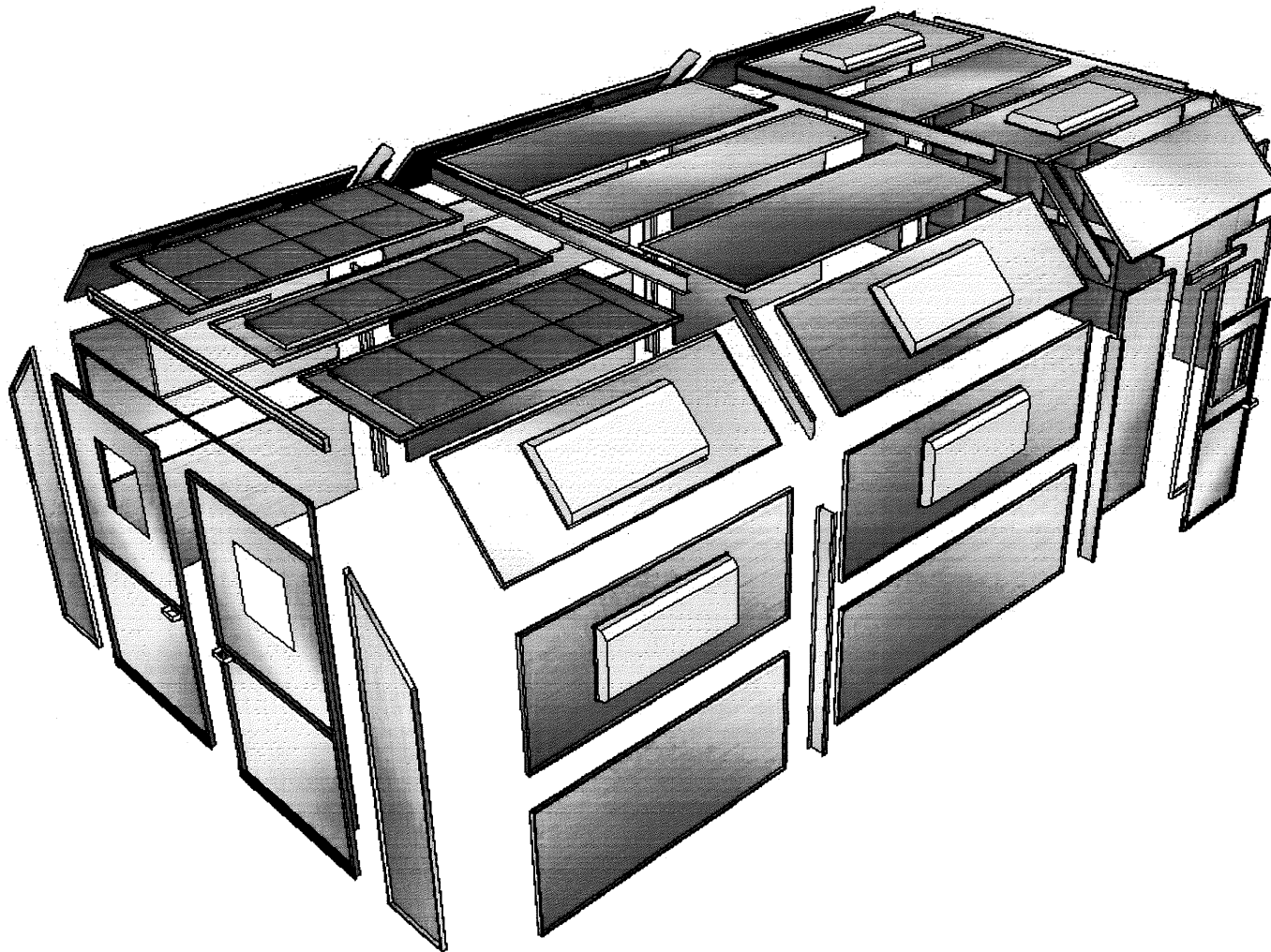
1858 Hwy 14 Corydon, IA 50060

914-231-1111

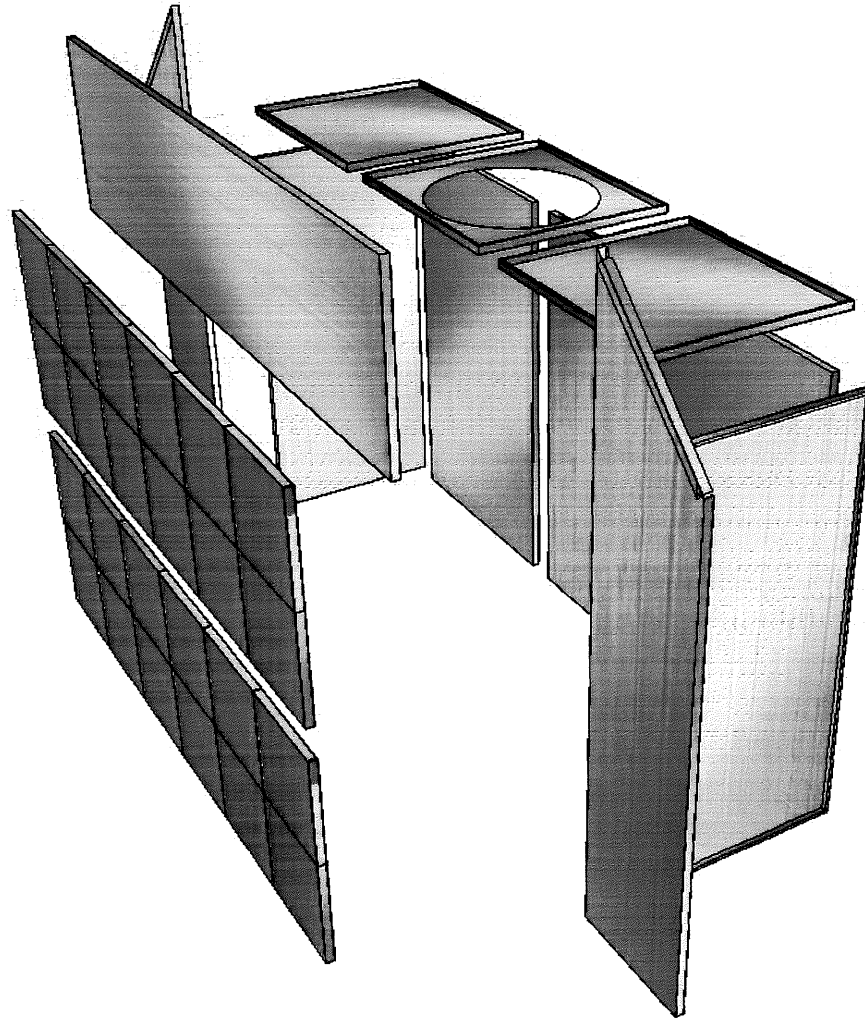
SEMI DOWN DRAFT LOW BACK ASSEMBLY & BILL OF MATERIALS

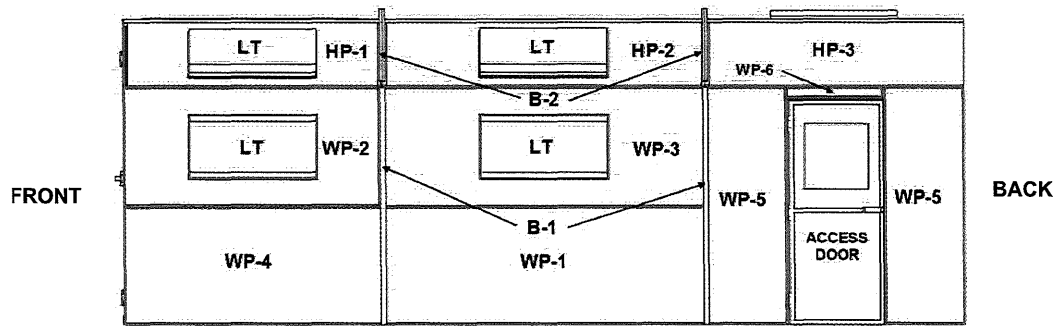


SEMI DOWN DRAFT LOW BACK - MAIN BOOTH



SEMI DOWN DRAFT LOW BACK - EXHAUST BOX





FRONT

BACK

RIGHT SIDE

SEMI DOWN DRAFT LOW BACK - BILL OF MATERIALS - ASSEMBLY

Part Number	Quantity	Description	Checked
WP-1	2	44" x 120" side wall panel	
WP-2	2	44" x 96" side wall panel with light opening	
WP-3	2	44" x 120" hip wall panel with light opening	
WP-4	4	44" x 96" side wall panel	
WP-5	2	30" x 88" side wall panel	
WP-6	1	4" x 36" side wall panel	
HP-1	2	34" x 96" hip panel with light opening	
HP-2	2	34" x 120" hip panel with light opening	
HP-3	2	34" x 96" hip panel	
AC-D	1	35" x 85" access door with window	
B-1	4	5 1/2" x 88" beam	
B-2	4	5 1/2" x 45 7/8" beam	
LT	8	24" x 48" flourescent light fixture	

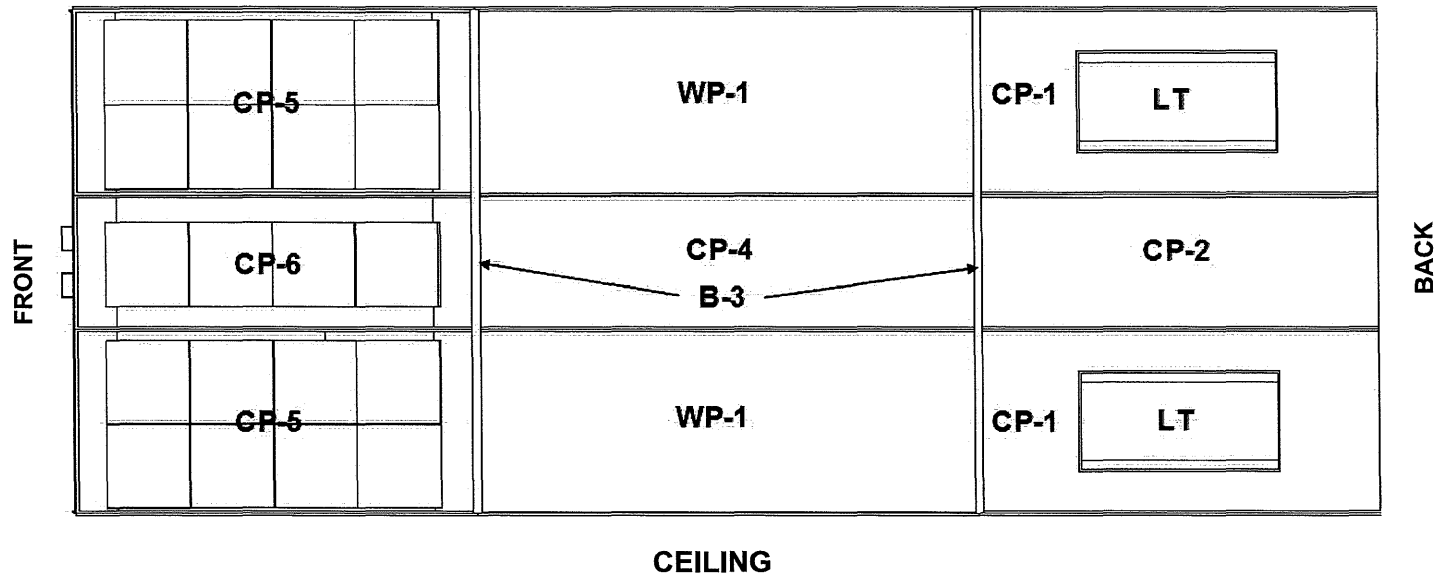
BACK

FRONT

LEFT SIDE

SEMI DOWN DRAFT LOW BACK - MAIN BOOTH

NO SCALE

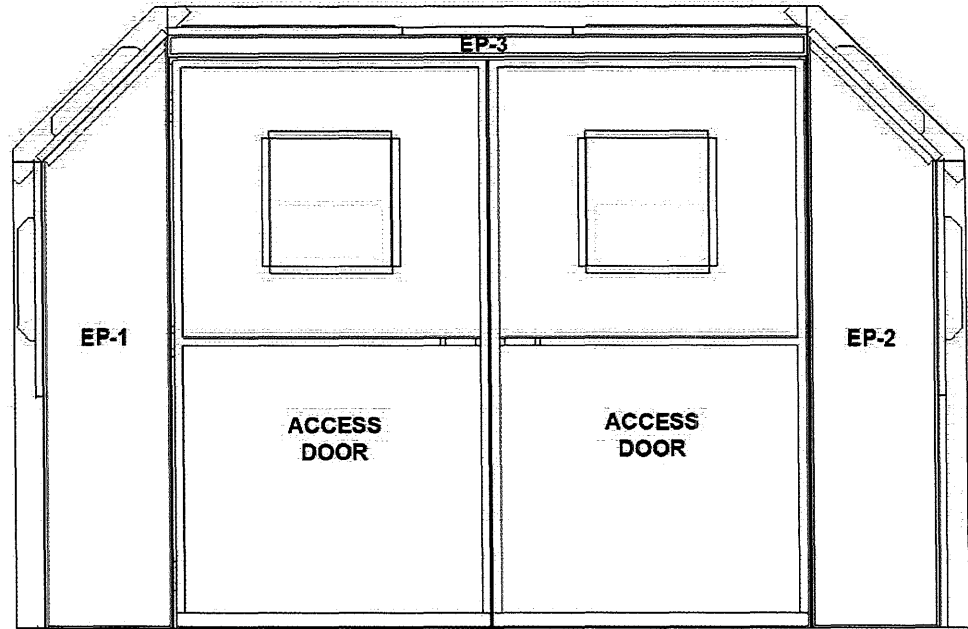


SEMI DOWN DRAFT LOW BACK - BILL OF MATERIALS - ASSEMBLY

Part Number	Quantity	Description	Checked
WP-1	2	44" x 120" ceiling panel	
CP-1	2	44" x 96" ceiling panel with light opening	
CP-2	1	32" x 96" ceiling panel	
CP-4	1	32" x 120" ceiling panel	
CP-5	2	44" x 96" ceiling panel w/ 40" x 80" filter grid	
CP-6	1	32" x 120" ceiling panel w/40" x 80" filter grid	
B-3	2	5 1/2" x 120" beam	
LT	2	24" x 48" flourescent light fixture	

SEMI DOWN DRAFT LOW BACK - MAIN BOOTH

NO SCALE



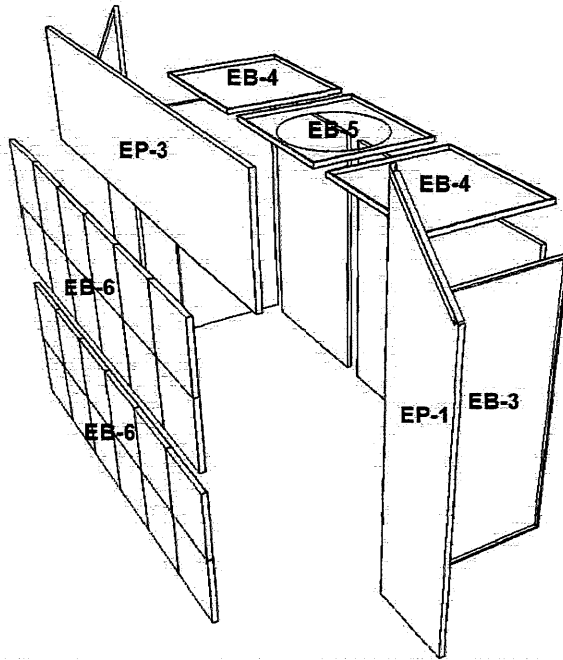
FRONT - ENTRY

SEMI DOWN DRAFT LOW BACK - BILL OF MATERIALS - ASSEMBLY

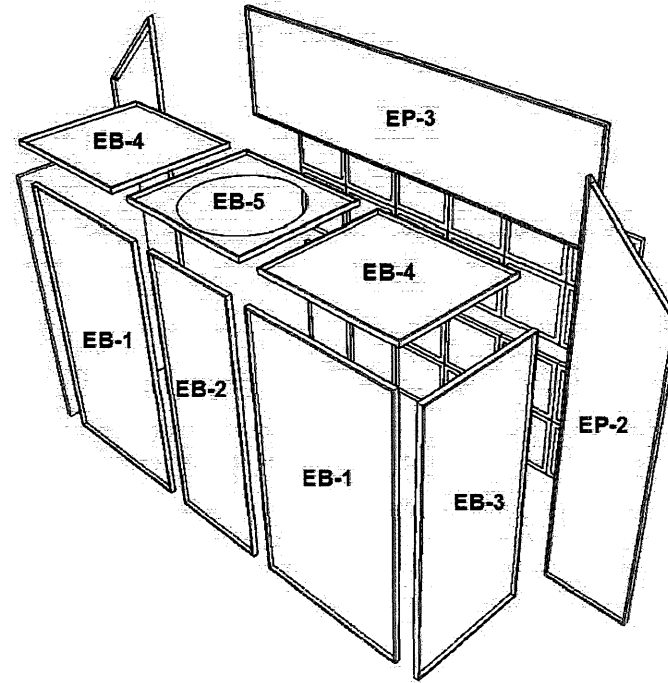
Part Number	Quantity	Description	Checked
EP-1	1	24" x 88" end panel w/ 1 1/2" angle welded on 45	
EP-2	1	24" x 88" end panel w/ 1 1/2" angle welded on 45	
EP-3	1	5 1/2" x 120" stiffening panel	
ACD	2	59" x 106 1/2" access door	

SEMI DOWN DRAFT LOW BACK - MAIN BOOTH

NO SCALE



FRONT OF EXHAUST BOX



REAR OF EXHAUST BOX

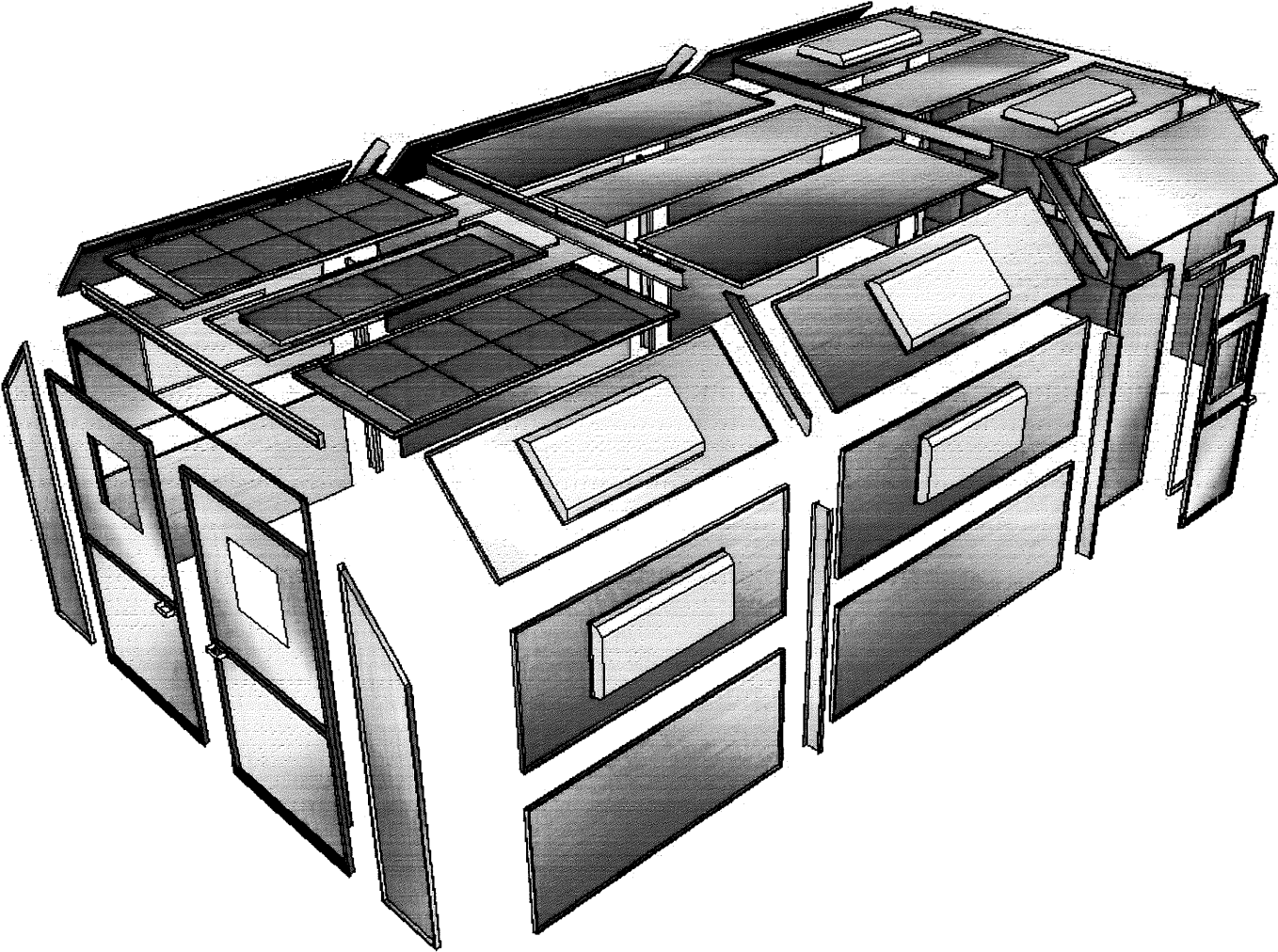
SEMI DOWN DRAFT LOW BACK - BILL OF MATERIALS - ASSEMBLY

Part Number	Quantity	Description	Checked
EP-1	1	24" x 88" end panel	
EP-2	1	24" x 88" end panel	
EP-3	1	32" x 120" end panel	
EB-1	2	44" x 80" exhaust box panel	
EB-2	1	29" x 80" exhaust box panel	
EB-3	2	36" x 80" exhaust box panel	
EB-4	2	36" x 40" exhaust box panel	
EB-5	1	36" x 40" exhaust box panel w/fan opening	
EB-6	2	40" x 120" filter grid panel	

SEMI DOWN DRAFT LOW BACK - MAIN BOOTH

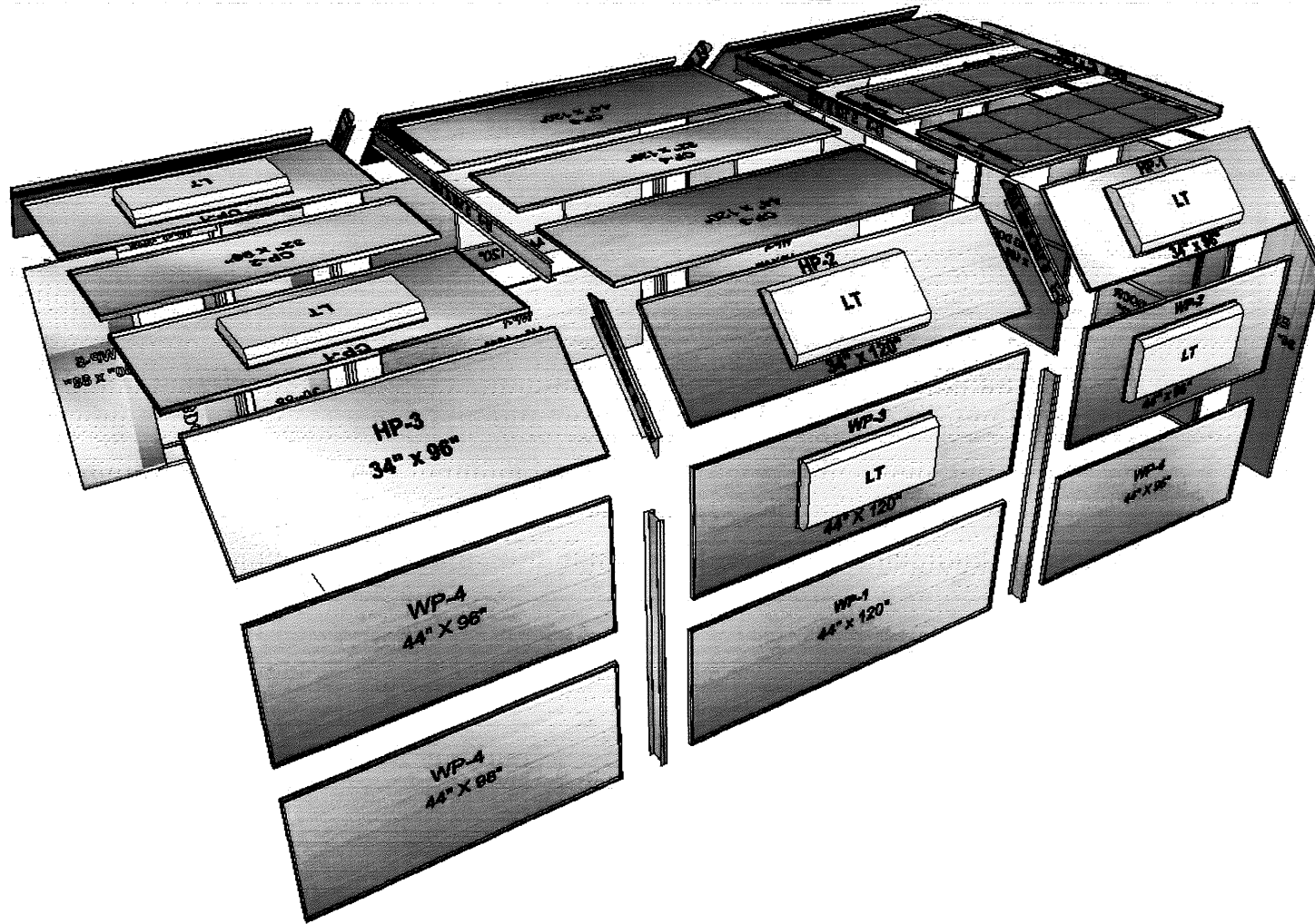
NO SCALE

SEMI DOWN DRAFT LOW BACK - MAIN BOOTH



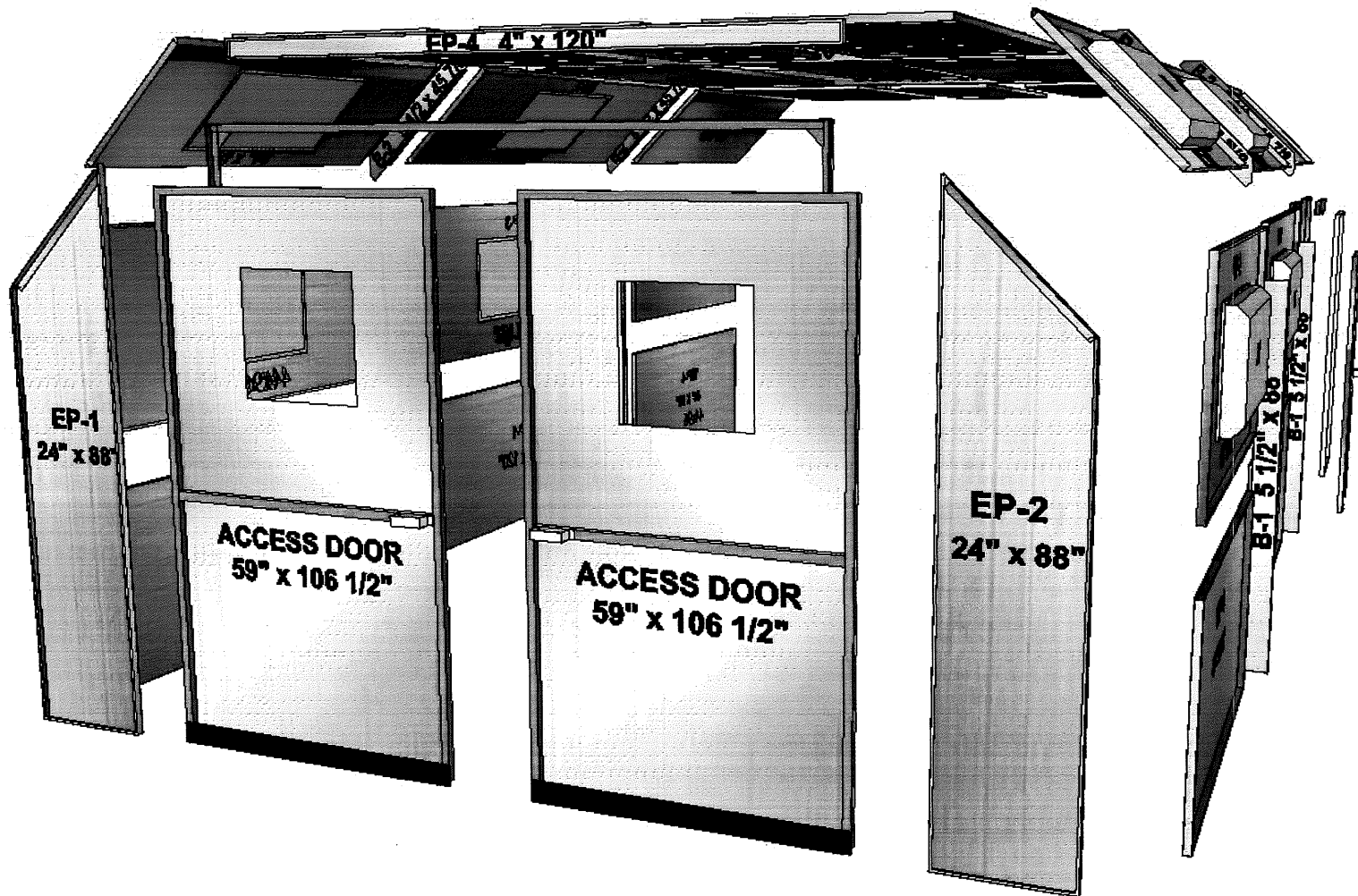
MAIN BOOTH - RIGHT SIDE

SEMI DOWN DRAFT LOW BACK - MAIN BOOTH



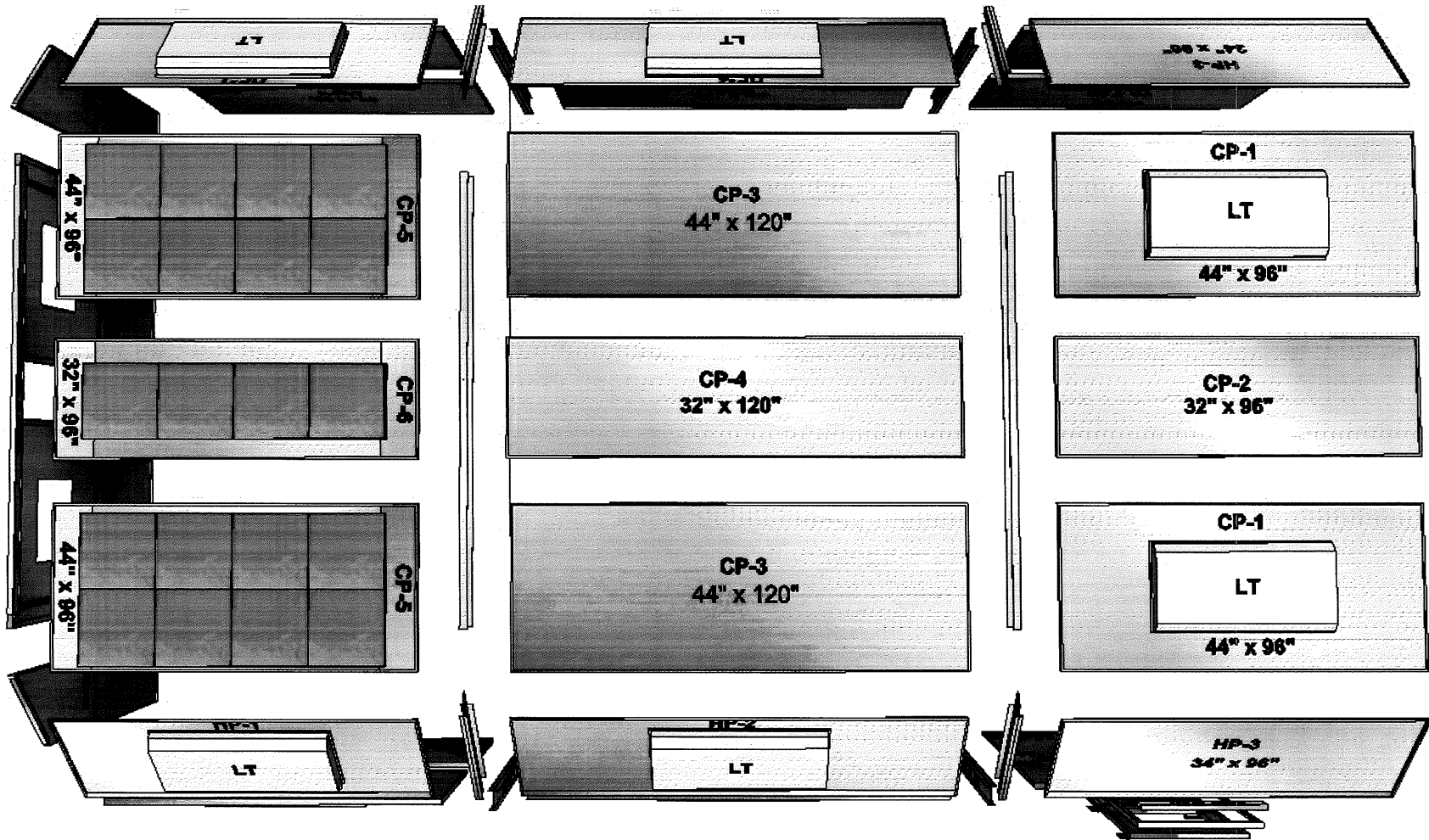
MAIN BOOTH - LEFT SIDE

SEMI DOWN DRAFT LOW BACK- MAIN BOOTH



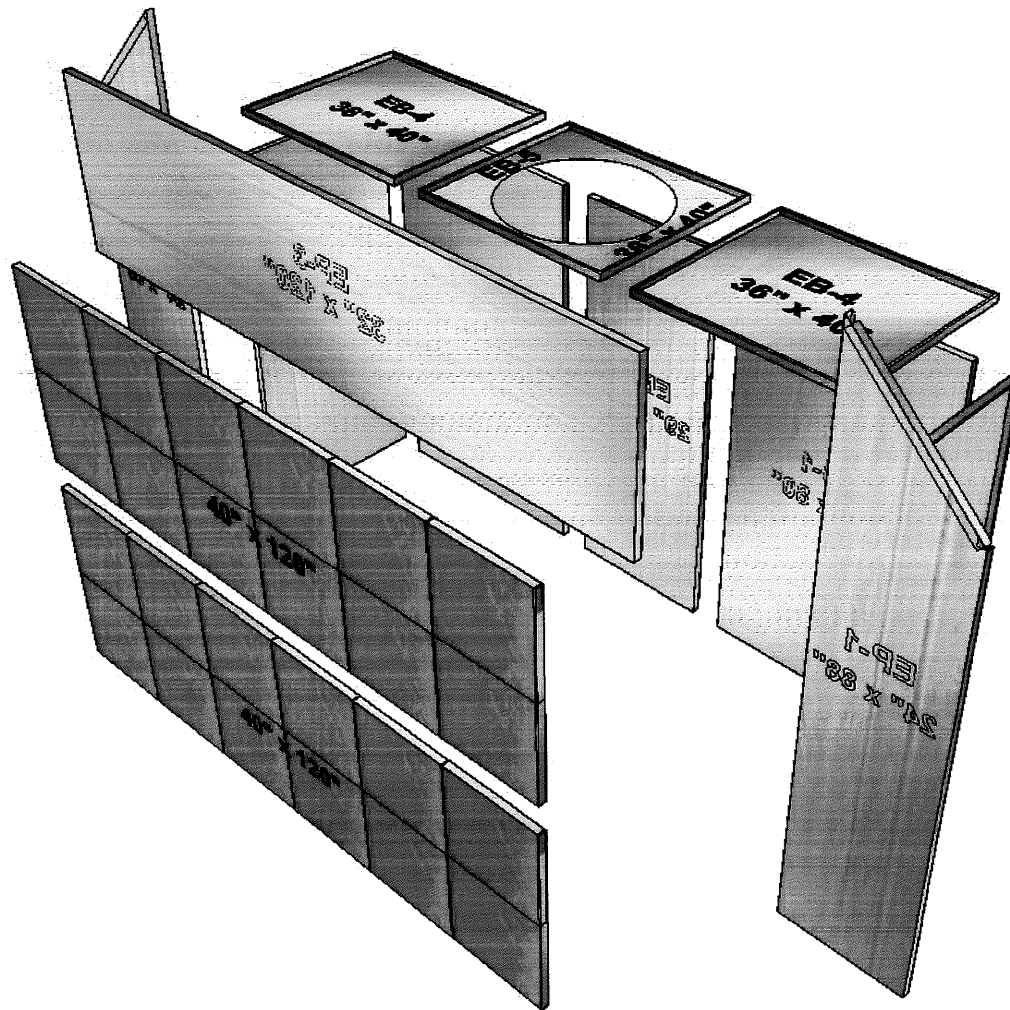
MAIN BOOTH - FRONT SIDE

SEMI DOWN DRAFT LOW BACK- MAIN BOOTH



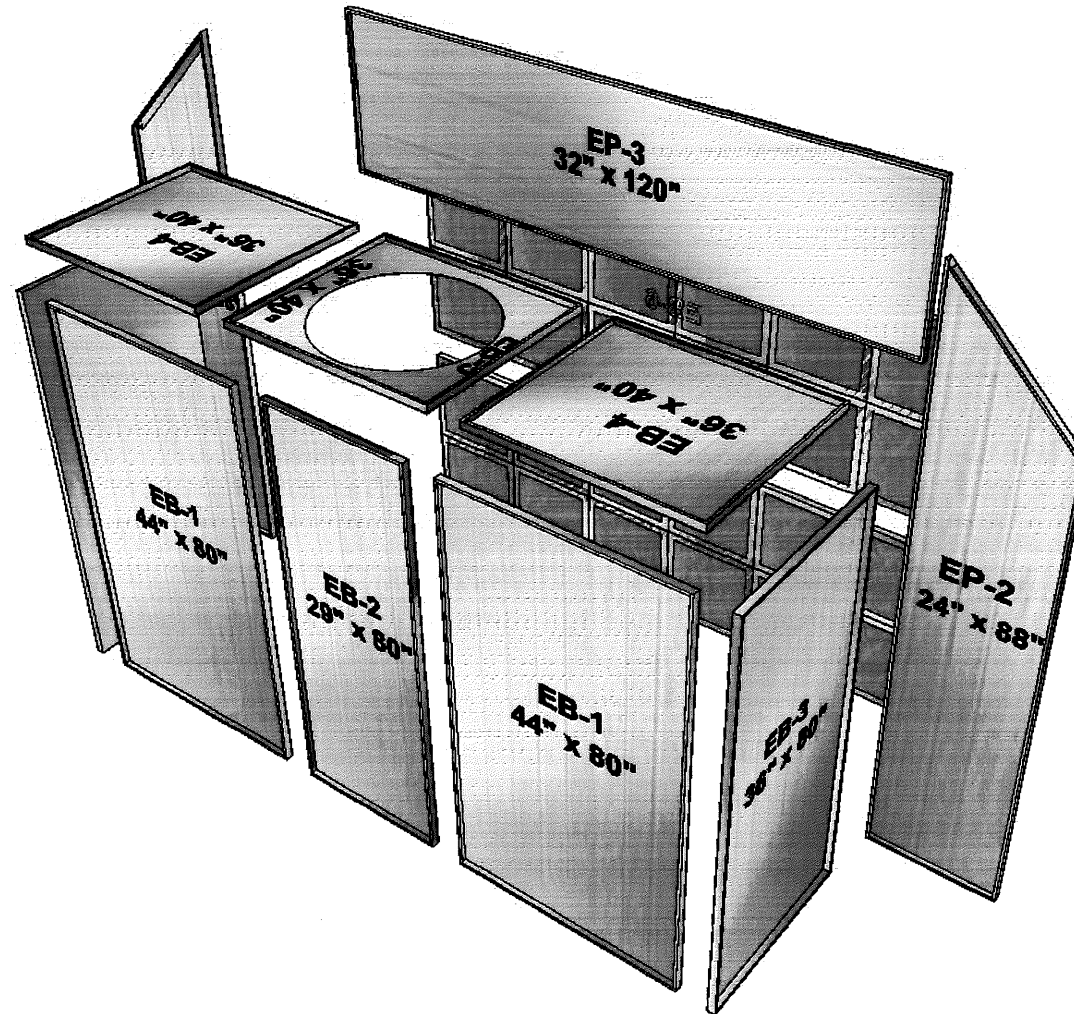
MAIN BOOTH - TOP SIDE

SEMI DOWN DRAFT LOW BACK- EXHAUST BOX



EXHAUST BOX - FRONT SIDE

SEMI DOWN DRAFT LOW BACK- EXHAUST BOX



EXHAUST BOX - REAR SIDE



BILL OF MATERIALS

SD-1000

ITEM NO.	MODEL/QTY.	-	PART NUMBER	DESCRIPTION	NOTES
1	2		1.5x1.5x37-14FA	14ga FOLDED ANGLE	PERSONNEL DOOR TOP/BOTTOM JAMB
2	1		1.5x1.5x83.5-14FA	14ga FOLDED ANGLE	PERSONNEL DOOR SIDE JAMB
3	1		36x36-FS	18ga FLAT SHEET	SERVICE PORT COVER
4	2		1.5x1.5x115-18FA	18ga FOLDED ANGLE	INTAKE PLENUM SUPPORT ANGLE
5	7		1.5x1.5x92-18FA	18ga FOLDED ANGLE	SUPPORT ANGLE
6	1		DSR-1000	DOOR STRESS RELIEF	
7	3		1x1x39.5-DSA	DOOR SWEEP ANGLE	
8	2		3x107-FS	FLAT STRIP	DOOR SEAL
9	2		3x88-FS	FLAT STRIP	PLENUM SUPPORT
10	1	D	79.5x107-BFWDA	BI-FOLD WINDOW DOOR	
11	1	D	36x83-PDA	PERSONNEL DOOR w/ GLASS	
12	1	D	39.5x107-WDA	WINDOW DOOR ASSEMBLY	
13	1	J	1.5x1.5x83.5-PDSJH	PERSONNEL DOOR SIDE JAMB w/ HINGES	
14	1	J	1.5x1.5x108-SJH	SIDE JAMB w/ HINGES	
15	1	J	1.5x1.5x108-SJH	SIDE JAMB w/ HINGES	
16	1	J	1.5x1.5x120-TJG	TOP JAMB w/ GUSSETS	
17	1	P	12x120-CP	CEILING PANEL	
18	5	P	44x120-CP	CEILING PANEL	
19	1	P	44x120-CP2LF	CEILING PANEL w/ 2 LIGHT FRAMES	
20	2	P	25.5x25.5-EPC	EXHAUST PLENUM CORNER	
21	6	P	1.5x24x24-FCA	FRONTAL CORNER ASSEMBLY	
22	2	P	25.5x84x108-FSK	FRONTAL SKIN	
23	2	P	34x42.5-HP	HIP PANEL	
24	2	P	34x44-HP	HIP PANEL	
25	2	P	34x92-HP	HIP PANEL	
26	2	P	34x92-HPLF	HIP PANEL w/ LIGHT FRAME	
27	2	P	34x92-HPLFO	HIP PANEL w/ LIGHT FRAME OFFSET W0L7	
28	1	P	12x84-WP	WALL PANEL	
29	1	P	19x84-WP	WALL PANEL	
30	2	P	20.5x25.5-WP	WALL PANEL	
31	1	P	20.5x69-WP	WALL PANEL	
32	2	P	24x60-WP	WALL PANEL	
33	4	P	24x84-WP	WALL PANEL	
34	1	P	32x84-WP	WALL PANEL	
35	2	P	38x44-WP	WALL PANEL	
36	11	P	44x84-WP	WALL PANEL	
37	1	P	44x44-WPFH-34	WALL PANEL w/ 34" FAN HOLE	
38	1	P	42.5x69-WP34SP	WALL PANEL w/ 34" SERVICE PORT	
39	4	P	44x84-WPLF	WALL PANEL w/ LIGHT FRAME	
40	2	T	24x117-WIFG	WALL INTAKE FILTER GRID	
41	2	T	44x120-CIFG	CEILING INTAKE FILTER GRID	
42	2	T	24x84-EFG	EXHAUST FILTER GRID	
43	2	T	42.5x62-EFG	EXHAUST FILTER GRID	
44	2	T	24x88-WIFG	WALL INTAKE FILTER GRID	
45	1000	VC	W-155A	10-16x3/4 HX WSHR HD TEK SCREW #3 ZINK BULK 7000/CS Unit weight .005 lbs	
46	3	VC	W-160	1/8X4X120 DURO 60 RUBBER DOOR	
47	30	VC	W-161-A	1/4 X 1 MUSHROOM HD NAIL DRIVE ANCHOR	
48	4	VC	W-158	1/2 X 3/4 X 17" DOOR SEAL WEATHER STRIPPING	
49	20	VC	W-152A	20X20 EXHAUST FILTER PAD PROG DENISTY 22g SKU W-152A	
50	38	VC	W-153	20X20 55 SERIES INTAKE FILTER SKU W-153	
51	8	VC	S-117	3/8 USS FLAT WASHER ZINC PKG	
52	8	VC	S-111	3/8 LOCK WASHER PLAIN	
53	8	VC	T-101	3/8 GR8 HEX NUT PLATED	
54	8	VC	R-101	3/8-16 X 1 UNC GR8 HHCS PLATED 3/8-16 X 1	
55	3	VC	W-156	BRIXON LATCH	
56	10	VC	W-145	48X24X.25 CLEAR TEMP GLASS	
57	10	VC	W-147	PRTL-24-4-NF-32T8-MVOLT LIGHT (28/pallet)	
58	6	VC	W-149	6-1/2" PULL HANDLE	
59	1	VC	W-159	INCLINED MANOMETER	
60	1	VC	LS	LATCH SUPPORT	
61	20	VC	W-157	PAINTERS CAULK	
62	20	VC	light-tab	LIGHT TAB	
63	2	VC	W-212	NO SMOKING DECAL FOR PAINT BOOTHS	
64	1	VC	W-200	SPRAYBOOTH SILVER DECAL - 8.5 X 11	



UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ± 1/8
THREE PLACE DECIMAL ± 0.025
ANGULAR ± 1.0°

DRAWN: []
DATE: 2/24/2017
REV: []
SHEET: 4 of 4
DRAWING NOT TO SCALE

MODEL: SD-1000
PARENT MODEL: []

INSIDE DIMENSIONS:
14' - 0" WIDE; 9' - 0" HIGH; 26' - 5" LONG
OUTSIDE DIMENSIONS:
14' - 3" WIDE; 11' - 3" HIGH; 26' - 8" LONG

NOTE:
CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD AND REPORT ANY DISCREPANCIES PRIOR TO STARTING WORK.