STAFF REPORT FOR PLANNING COMMISSION MEETING OF MARCH 31, 2021

FILE NO: LU-2020-0044 **AGENDA ITEM:** E.2

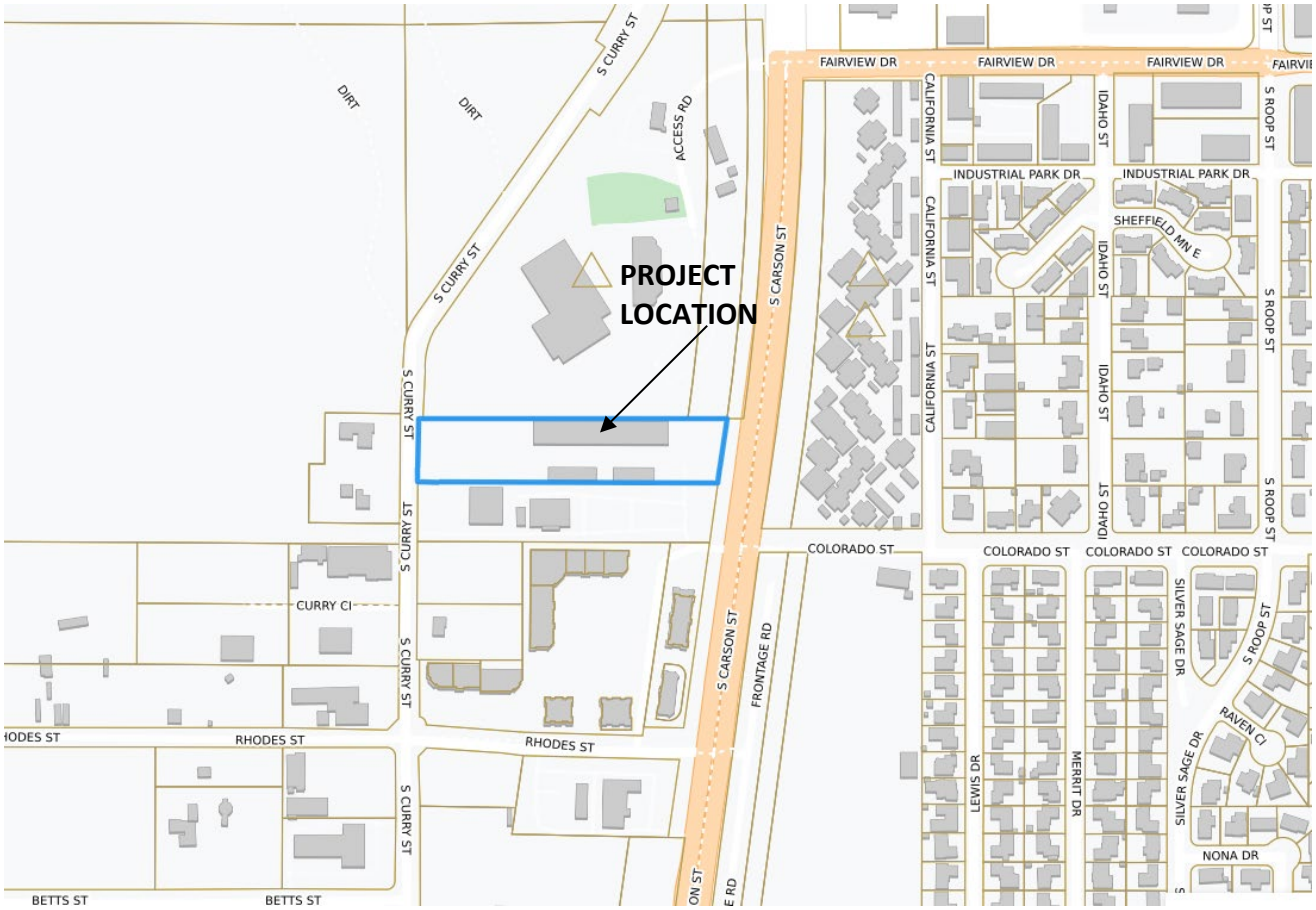
STAFF CONTACT: Heather Ferris, Associate Planner

AGENDA TITLE: For Possible Action: Discussion and possible action regarding a request for Special Use Permit to allow for an automobile paint and body repair shop on property zoned General Commercial (GC) located at 2234 S. Carson Street, APN 009-052-09. (Heather Ferris, hferris@carson.org)

Summary: The applicant is seeking to utilize a 3,000 square foot space in an existing building for an automobile paint and body repair shop and approximately 9,000 square feet of space for outdoor storage associated with the repair shop. The applicant currently operates an auto repair shop at this location which is an allowed use in the GC zoning; however, painting and body work require approval of a Special Use Permit prior to commencing the use. The Planning Commission is authorized to approve a Special Use Permit.

PROPOSED MOTION: "I move to approve Special Use Permit LU-2020-0044 based on the findings and subject to the conditions of approval contained in the staff report."

VICINITY MAP:



RECOMMENDED CONDITIONS OF APPROVAL:

1. The applicant must sign and return the Notice of Decision for conditions of approval within 10 days of receipt of notification. If the Notice of Decision is not signed and returned within 10 days, then the item may be rescheduled for the next Planning Commission meeting for further consideration.

2. All development shall be substantially in accordance with the development plans approved with this application, except as otherwise modified by these conditions of approval.

3. All on- and off-site improvements shall conform to City standards and requirements.

4. The use for which this permit is approved shall commence within 12 months of the date of final approval. A single, one-year extension of time may be requested in writing to the Planning Division thirty days prior to the one-year expiration date. Should this permit not be initiated within one year and no extension granted, the permit shall become null and void.

5. The applicant shall submit details of any new exterior lighting with the building permit. Any new exterior lighting shall be directed downward, not outward, or upward, and shall be installed to prevent spillover lighting onto adjoining properties and glare to the sky. The height of new light standards, light poles, and wall pack lighting when adjacent to residential zones is limited. All new exterior lighting shall comply with the requirements listed in Development Standards Division 1.3 Lighting Standards.

6. All vehicles must be stored within an enclosed sight obscured area consistent with Division 1.12 of the Development Standards.

7. All work, including painting, shall take place inside the building.

8. The outdoor storage area must be paved.

9. A reduce pressure principle assembly backflow preventer must be installed on the domestic water line above ground at the property line.

LEGAL REQUIREMENTS: CCMC 18.02.080 (Special Use Permits); 18.04.135 (General Commercial); 18.04.195 (Non-residential Districts Intensity and Dimensional Standards).

MASTER PLAN DESIGNATION: Mixed-Use Commercial

PRESENT ZONING: General Commercial

KEY ISSUES: Will the proposed auto body repair facility have an adverse impact on the adjacent neighborhood, and will it be in keeping with the standards of the Carson City Municipal Code?

SURROUNDING ZONING AND LAND USE INFORMATION:
NORTH: Public / Nevada Railroad Museum
EAST: Public / S. Carson Street & apartments
SOUTH: General Commercial / commercial
WEST: General Commercial / S. Curry Street & single-family residence

ENVIRONMENTAL INFORMATION:
1. FLOOD ZONE: X-shaded (area of moderate flood hazard)

2. EARTHQUAKE FAULT: Within 200 feet, Zone IV (least severity)
3. SLOPE/DRAINAGE: Generally Flat

SITE DEVELOPMENT INFORMATION:
1. LOT SIZE: 2.93 acres
2. EXISTING STRUCTURE SIZE: 3,000 square feet of an existing multi-tenant property and an additional 9,000 square feet of outside storage.
3. VARIANCES REQUESTED: None

DISCUSSION:
The subject parcel is 2.93 acres in size and is zoned General Commercial (GC). The property is a multi-tenant property including a tile and stone retail store and various automotive related uses. The applicant currently operates an auto repair facility in a 3,000 square foot suite on-site, addressed as 2234 S. Carson Street. The current operations consist of automotive repair and maintenance, not including auto body repair and painting. Automotive repair/maintenance is allowed in the General Commercial zoning district; however, auto body repair/painting, is only allowed subject to first obtaining a Special Use Permit. Therefore, the applicant is seeking a Special Use Permit to expand his operations to include auto body repair and painting, including approximately 9,000 square feet of outdoor storage area.

Per the provisions of CCMC 18.02.080, the Planning Commission has the authority to approve a Special Use Permit upon making each of the seven required findings in the affirmative.

PUBLIC COMMENTS: Public notices were mailed to 35 property owners within 600 feet of the subject site on March 12, 2021. As of the date of this report no public comments have been received regarding this application. Any comments that are received after this report is completed will be submitted to the Planning Commission prior to or at the meeting on March 31, 2021 depending on the date of submission of the comments to the Planning Department.

OTHER CITY DEPARTMENTS OR OUTSIDE AGENCY COMMENTS:
Plans were routed to commenting agencies and the following comments were received. Comments have been incorporated into the conditions of approval as appropriate.

Engineering Division:
The Engineering Division has no preference or objection to the special use request provided that the following conditions are met:

- The project must meet all Carson City Development Standards and Standard Details including but not limited to the following:
  - The outdoor storage area must be paved.
  - An RPPA backflow preventer must be installed on the domestic water line above ground at the property line.

The Engineering Division has reviewed the application within our areas of purview relative to adopted standards and practices and to the provisions of CCMC 18.02.080, Conditional Uses. The Engineering Division offers the following discussion:

C.C.M.C. 18.02.080 (5a) - Master Plan
The request is not in conflict with any Engineering Master Plans.

C.C.M.C. 18.02.080 (5b) – Use, Peaceful Enjoyment, Economic Value, Compatibility
Development Engineering has no comment on this finding.

C.C.M.C. 18.02.080 (5c) - Traffic/Pedestrians
Local intersections: South Carson Street provides access to this property. S Carson Street is classified as a minor arterial street.
Parking and internal circulation: There is on-site parking but there is no on street parking available.

C.C.M.C. 18.02.080 (5d) - Public Services
Sanitary Sewer:

- The existing sewer main is 10-inch concrete on the east side of the property. This main is approximately 30% full (d/D). There is sufficient capacity to serve the project without any mitigation.

Water:

- The existing water main is 12-inch steel on the east side of the property with a 6-inch steel lateral serving the complex. There is sufficient capacity in this main to serve the project without any mitigation.
- An RPPA must be installed per Carson City Development Standards and State Code.

Storm Drain:

- The site currently drains to the street. No new improvements are proposed for the exterior site.

Public Lands:

- The project does not significantly impact City owned lands.

C.C.M.C. 18.02.080 (5e) – Title 18 Standards
Development Engineering has no comment on this finding.

C.C.M.C. 18.02.080 (5f) – Public health, Safety, Convenience, and Welfare
The project will meet engineering standards for health and safety if conditions are met.

- Earthquake faults: The closest fault is less than 200 feet away from the property however the slip rate of the fault is less than 0.2 mm/yr.
- FEMA flood zones: The flood zone is Zone X (unshaded) so no special flood damage mitigation will be required.
- Site slope: The site is currently developed so the slope is minimal.
- Soils and Groundwater: The site is currently developed.

C.C.M.C. 18.02.080 (5g) – Material Damage or Prejudice to Other Property
Development Engineering has no comment on this finding.

C.C.M.C. 18.02.080 (5h) – Adequate Information
The plans and reports provided were adequate for this analysis.

Fire Department:
Project must comply with the International Fire Code and Northern Nevada Fire Code amendments as adopted by Carson City.

FINDINGS: Staff's recommendation is based upon the findings as required by CCMC Section 18.02.080 (Special Use Permits) enumerated below and substantiated in the public record for the project.

1. Will be consistent with the master plan elements.

The subject property is designated as Mixed-Use Commercial. The primary uses associated with this designation are commercial retail and offices. The zoning for the site is General Commercial. The property is a multi-tenant property including a tile and stone retail store and various automotive related uses. The applicant currently operates an auto repair facility in a 3,000 square foot suite on-site. The

current operations consist of automotive repair and maintenance, not including auto body repair and painting. Automotive repair and maintenance are allowed in the General Commercial zoning district; however, auto body repair and painting, is only allowed subject to first obtaining a Special Use Permit. The expanded use, including auto body repair and painting will continue to be consistent with the master plan designation.

2. Will not be detrimental to the use, peaceful enjoyment, economic value, or development of surrounding properties or the general neighborhood; and will cause no objectionable noise, vibrations, fumes, odors, dust, glare or physical activity.

The subject parcel is zoned General Commercial with commercial property to the south, S. Carson Street to the east, S. Curry Street to the west, and the Railroad Museum to the north. The property is a multi-tenant property which includes a tile and stone retail store and various other automotive related uses. The 3,000 square foot suite is currently used by the applicant as an auto repair facility. The proposed use would be an expansion of the business to include auto body repair and painting as well as a 9,000 square foot outdoor storage yard. All work, including painting, will take place inside the building. This will help to mitigate noise, vibrations, fumes, odors, dust, glare, and physical activity. The outdoor storage yard associated with this use will be required to be fenced and screened to provide mitigation of the appearance of the site from neighboring properties and the roadway. As designed and conditioned, the auto body repair facility will not be detrimental to the use, peaceful enjoyment, economic value, or development of surrounding properties or the general neighborhood.

3. Will have little or no detrimental effect on vehicular or pedestrian traffic.

The existing use is automotive repair and maintenance. The applicant is proposing to expand the services offered at his facility to include auto body repair and painting. The proposed expansion will not result in a substantial increase in traffic beyond the current use and will therefore have little or no detrimental effect on vehicular or pedestrian traffic.

4. Will not overburden existing public services and facilities, including schools, police and fire protection, water, sanitary sewer, public roads, storm drainage, and other public improvements.

The site is currently served by public services. The existing infrastructure, including roads, sewer, storm water, and water are able to serve this project with no required mitigations; however, per Carson City Municipal Code and State Code a reduced pressure principle assembly backflow preventer must be installed on the domestic water line. The Fire Department notes that the use will be required to meet the requirements of the 2018 International Fire Code and the northern Nevada Fire Code amendments as adopted by Carson City, including fire sprinklers and fire alarms. The project will not overburden existing public services and facilities.

5. Meets the definition and specific standards set forth elsewhere in this title for such particular use and meets the purpose statement of that district.

An auto body repair facility with painting is a conditional use in the General Commercial zoning district. The proposed paint booth will require a building permit and must comply with all applicable City standards. As conditioned, the project will meet the definition and specific standards set forth in Title 18.

6. Will not be detrimental to the public health, safety, convenience and welfare.

The existing use is automotive repair and maintenance. The applicant is proposing to expand the

services offered at his facility to include auto body repair and painting. As conditioned the autobody repair and painting facility will not be detrimental to the public health, safety, convenience and welfare.

7. Will not result in material damage or prejudice to other property in the vicinity.

The existing use is automotive repair and maintenance. The applicant is proposing to expand the services offered at his facility to include auto body repair and painting. The outdoor storage yard associated with this use will be required to be fenced and screened to provide mitigation of the appearance of the site from neighboring properties and the roadway. Additionally, any new outdoor lighting associated with this use will be required to meet the requirements of Division 1.3 of the Carson City Development Standards to ensure that lighting is not directed upward or outward into the night sky or neighboring properties. Moreover, all work will be conducted within the building to serve to mitigate noise, vibrations, fumes, odors, dust, glare, and physical activity. As conditioned, the expansion of the existing auto body repair facility will not result in material damage or prejudice to the other property in the vicinity.

Attachments:
Application (LU-2020-0044)

Detailed Written Project Description

Estrada's Auto Body

2234 S. Carson St.

My business will consist of providing services of auto body. I will repair the body and also paint vehicles providing a finished product that looks like it has always been on the car. Some of the repairs include disassembling vehicles in order to repair, sanding, some light metal welding, and panel replacements.

Panels on the vehicles will be painted in a paint booth that is a U.L. listed product manufacturer. In accordance with NFPA-33, providing a safe practice to any future staff hired, property, and environment. Hazardous waste will be in metal containers of 30 gallons or bigger and then will picked up by a recycling company.

Carson City Planning Division
108 E. Proctor Street · Carson City NV 89701
Phone: (775) 887-2180 • E-mail: planning@carson.org

FILE

APPLICANT **PHONE #**
Ivan Lopez (775) 315 5413

MAILING ADDRESS, CITY, STATE, ZIP
4089 Furnace Creek Dr C.C. NV 89706

EMAIL ADDRESS
abctech86@gmail.com

PROPERTY OWNER **PHONE #**
Doug Englekirk (805) 720 7259

MAILING ADDRESS, CITY, STATE, ZIP
Box 1274 Zephyr Cove NV 89448

EMAIL ADDRESS

APPLICANT AGENT/REPRESENTATIVE **PHONE #**

MAILING ADRESS, CITY STATE, ZIP

EMAIL ADDRESS

FOR OFFICE USE ONLY:

CCMC 18.02.080

SPECIAL USE PERMIT

FEE*: $2,450.00 MAJOR
$2,200.00 MINOR (Residential zoning districts)
+ noticing fee
***Due after application is deemed complete by staff**

☐ **SUBMITTAL PACKET – 4 Complete Packets (1 Unbound Original and 3 Copies) including:**
- ☐ Application Form
- ☐ Detailed Written Project Description
- ☐ Site Plan
- ☐ Building Elevation Drawings and Floor Plans
- ☐ Special Use Permit Findings
- ☐ Master Plan Policy Checklist
- ☐ Applicant's Acknowledgment Statement
- ☐ Documentation of Taxes Paid-to-Date
- ☐ Project Impact Reports (Engineering)

☐ **CD or USB DRIVE with complete application in PDF**

Application Received and Reviewed By:

Submittal Deadline: Planning Commission application submittal schedule.

Note: Submittals must be of sufficient clarity and detail for all departments to adequately review the request. Additional information may be required.

Project's Assessor Parcel Number(s):	Street Address	
00905209	2234 S. Carson St. C.C. NV 89701	
Project's Master Plan Designation	**Project's Current Zoning**	**Nearest Major Cross Street(s)**
Paint Booth	Commercial	E. Colorado st./S. Curry st./Rhode st.

Please provide a brief description of your proposed project and/or proposed use below. Provide additional pages to describe your request in more detail.
Auto Body repair and Paint.

PROPERTY OWNER'S AFFIDAVIT

I, Dwight D. Englekirk, being duly deposed, do hereby affirm that I am the record owner of the subject property, and that I have knowledge of, and I agree to, the filing of this application.

Signature: _____ Address: Box 1274 Zephyr Cove Date: 2/8/2021

Use additional page(s) if necessary for additional owners.

STATE OF NEVADA)
COUNTY Carson City)

On Feb. 8, 2021, Dwight D. Englekirk, personally appeared before me, a notary public, personally known (or proved) to me to be the person whose name is subscribed to the foregoing document and who acknowledged to me that he/she executed the foregoing document.

Notary Public: Stephanie L.

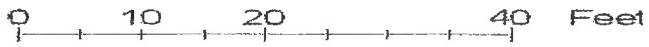
STEPHANIE MARISCAL LOZANO
Notary Public - State of Nevada
Appointment Recorded in Lyon County
No: 19-1616-12 - Expires Feb. 25, 2023

NOTE: If your project is located within the Historic District or airport area, it may need to be scheduled before the Historic Resources Commission or the Airport Authority in addition to being scheduled for review by the Planning Commission. Planning staff can help you make this determination.

SPECIAL USE PERMIT CHECKLIST

Each application must include the following:

1. Detailed Written Project Description
2. Special Use Permit Findings
3. Master Plan Policy Checklist
4. Documentation of Taxes Paid to Date
5. Project Impact Reports: Provide documentation regarding project impacts related to traffic, drainage, water, and sewer, including supportive calculations and/or reports required per the Carson City Development Standards, Divisions 12, 14 and 15. Contact Development Engineering to determine if these are necessary for your project at (775) 887-2300.
6. Building Elevation Drawings and floor plans
7. Site plan including the following information:
    a. The site plan shall be drawn on quality paper (minimum size of 8.5 inches by 11 inches) at an appropriate scale or dimension to depict the parcel. Any site plan larger than 8.5 inches by 11 inches must be folded.
    b. Show a north point arrow and site plan scale. A bar scale is preferred because when the drawings are reduced, it will still show an accurate scale. A bar scale could appear like this for a project that has a scale of one inch equals 20 feet on the original site plan:



    c. Vicinity map must be shown on the site plan. This is a map, not to scale, that you would provide a visitor unfamiliar with the area as directions to get to your property. It will show adjacent streets.
    d. Title block in lower right-hand corner including:
        i. Applicant's name, mailing address, and daytime phone number (including area code).
        ii. The name, mailing address, and daytime phone number of the person preparing the site plan, if different from applicant.
        iii. The name, mailing address, and daytime phone number of the record owner of the subject property, if different from applicant.
        iv. Assessor Parcel Number(s) (APN) and address (location, if no address) of the subject property.
        v. Project title and permit request. (Example: Variance, Special Use Permit).
8. Property lines of the subject property with dimensions indicated.
9. All existing and proposed structures shall be shown, including:
    a. Distances from property lines indicated by dimensions.
    b. Distances between buildings shall be indicated on the site plan.
    c. Clearly label existing and proposed structures and uses, and show dimensions.
    d. Square footage of all existing and proposed structures.
    e. If a commercial or multi-family project, show all elevations and submit roof plans showing all proposed roof equipment and means of screening from view along with plans for trash receptacle screening and loading/unloading area location and design.
    f. Elevations of any proposed structures/additions.
    g. All easements.
10. Show curb, gutter, sidewalks, ADA facilities, PFD, circulation.
11. Project access:
    a. Show the location of proposed street access and all existing accesses of neighboring properties including across the street.
    b. Show adjoining street names.
    c. Show all curb cuts with dimension.
12. Show the Assessor Parcel Number(s) of adjoining parcels.

13. Show all existing and proposed parking, landscape islands and traffic aisles, with dimensions. If you are requesting approval for off-site parking within 300 feet, provide site plans showing (1) parking on your site, (2) parking on the off-site parking lot, and (3) how much of the off-site parking area is required for any business other than your own.

14. Show location of existing and proposed utilities and drainage facilities, and indicate whether overhead or underground. Show the location of any septic lines/fields.

15. If specific landscape areas are required or provided, show with dimensions.

16. Show location of all proposed amenities, such as gazebos, retaining walls, retention areas, etc.

SPECIAL USE PERMIT APPLICATION FINDINGS

State law requires that the Planning Commission consider and support the statements below with facts in the record. These are called "FINDINGS". Since staff's recommendation is based on the adequacy of your findings, you need to complete and attach the required findings with as much detail as possible to ensure that there is adequate information supporting your proposal.

THE FINDINGS BELOW ARE PROVIDED IN THE EXACT LANGUAGE FOUND IN THE CARSON CITY MUNICIPAL CODE (CCMC), FOLLOWED BY EXPLANATIONS TO GUIDE YOU IN YOUR RESPONSE. ON A SEPARATE SHEET TO BE INCLUDED WITH YOUR COMPLETE APPLICATION, LIST EACH FINDING AND PROVIDE A RESPONSE IN YOUR OWN WORDS. ANSWER THE QUESTIONS AS COMPLETELY AS POSSIBLE TO PROVIDE THE PLANNING COMMISSION WITH THE DETAILS NECESSARY TO CONSIDER YOUR PROJECT. IF A FINDING DOES NOT APPLY TO YOUR SITUATION, EXPLAIN WHY.

CCMC 18.02.080(5) FINDINGS. Findings from a preponderance of evidence must indicate that the proposed use:

. **Will be consistent with the objectives of the Master Plan elements.**

Explanation: Explain how your project will further and be in keeping with, and not contrary to, the goals of the Master Plan elements. Turn to the Master Plan Policy Checklist included with this application. The Master Plan Policy Checklist for Special Use Permits and Major Project Reviews addresses five items that appear in the Carson City Master Plan. Each theme looks at how a proposed development can help achieve the goals of the Carson City Master Plan. Address each theme; a check indicates that the proposed development meets the applicable Master Plan Policy. Provide written support of the policy statement in your own words as a part of these findings. For additional guidance, please refer to the Carson City Master Plan document on our website at www.carson.org/planning or you may contact the Planning Division to review the document in our office or request a copy.

. **Will not be detrimental to the use, peaceful enjoyment, economic value, or development of surrounding properties or the general neighborhood; and is compatible with and preserves the character and integrity of adjacent development and neighborhoods or includes improvements or modifications either on-site or within the public right-of-way to mitigate development related to adverse impacts such as noise, vibrations, fumes, odors, dust, glare or physical activity.**

Explanation:

A. Describe the general types of land uses and zoning designations adjoining your property (for example: North: grocery store, Retail Commercial zoning)

B. Explain why your project is similar to existing development in the neighborhood, and why it will not hurt property values or cause problems, such as noise, dust, odors, vibration, fumes, glare, or physical activity, etc. with neighboring property owners. Have other properties in your area obtained approval of a similar request? How will your project differ in appearance from your neighbors? Your response should consider the proposed physical appearance of your proposal, as well as comparing your use to others in the area.

C. Provide a statement explaining how your project will not be detrimental to the use, peaceful enjoyment or development of surrounding properties and the general neighborhood.

D. If outdoor lighting is to be a part of the project, please indicate how it will be shielded from adjoining property and the type of lighting (wattage/height/placement) provided.

E. Describe the proposed landscaping, including screening and arterial landscape areas (if required by the zoning code). Include a site place with existing and proposed landscape shown on the plan which complies with City ordinance requirements.

F. Explain any short-range and long-range benefit to the people of Carson City that will occur if your project is approved.

3. Will have little or no detrimental effect on vehicular or pedestrian traffic.

Explanation: Consider the pedestrian and vehicular traffic that currently exists on the road serving your project. What impact will your development have to pedestrian and vehicular traffic when it is successfully operating? Will additional walkways and traffic lights be needed? Will you be causing traffic to substantially increase in the area? State how you have arrived at your conclusions.

I. Will not overburden existing public services and facilities, including schools, police and fire protection, water, sanitary sewer, public roads, storm drainage and other public improvements.

Explanation: A. How will your project affect the school district? Will your project add to the student population or will it provide a service to the student population?

B. How will your project affect police and fire protection?

C. Is the water supply serving your project adequate to meet your needs without degrading supply and quality to others in the area? Is there adequate water pressure? Are the lines in need of replacement? Is your project served by a well? Contact the Development Engineering Division at (775) 887-2300 for assistance with this item, if applicable.

D. If your project will result in the covering of land area with paving or a compacted surface, how will drainage be accommodated? Contact the Development Engineering Division at (775) 887-2300 for assistance with this item, if applicable.

E. Is there adequate capacity in the sewage disposal trunk line that you will connect to in order to serve your project, or is your site on a septic system? Contact the Development Engineering Division at (775) 887-2300 for assistance with this item, if applicable.

F. What kind of road improvements are proposed or needed to accommodate your project? Contact the Development Engineering Division at (775) 887-2300 for assistance with this item, if applicable.

G. Indicate the source of the information that you are providing to support your conclusions and statements made in this application (private engineer, Development Engineering, Public Works, Transportation, title report or other sources).

. Meets the definition and specific standards set forth elsewhere in Carson City Municipal Code, Title 18 for such particular use and meets the purpose statement of that district.

xplanation: Explain how your project meets the purpose statement of the zoning district in which it is located and how it meets the specific standards that are set forth in that zoning district. In CCMC Section 18.04, Use Districts, find the zoning district where your property is located. Refer to the purpose statement at the beginning of the zoning district section and explain how your project meets the purpose statement of that district. In addition, find the specific Intensity and Dimensional Standards for your zoning district in either CCMC Section 18.04.190 (Residential) or CCMC Section 18.04.195 (Non-Residential) and explain how your project meets these specific standards. To access the Carson City Municipal Code, visit our website at www.carson.org/planning.

. Will not be detrimental to the public health, safety, convenience and welfare.

xplanation: Provide a statement explaining how your project will not be detrimental to the public health, safety, convenience and welfare. If applicable, provide information on any benefits that your project will provide to the general public.

'. Will not result in material damage or prejudice to other property in the vicinity, as a result of proposed mitigation measures.

Explanation: Provide a statement explaining how your project will not result in material damage or prejudice to other property in the vicinity.

f there is any additional information that would provide a clearer picture of your proposal that you would like to add for presentation to the Planning Commission, please be sure to include it in your detailed description.

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'lease type and sign the statement on the following page at the end of your findings response.

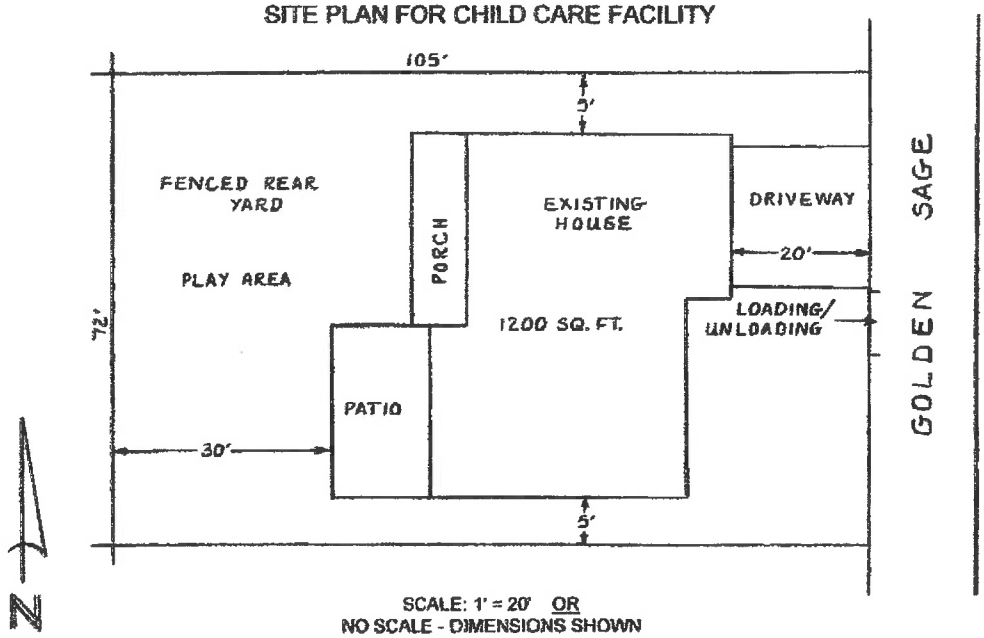
ACKNOWLEDGMENT OF APPLICANT

certify that the forgoing statements are true and correct to the best of my knowledge and belief. I agree to ully comply with all conditions as established by the Planning Commission. I am aware that this permit ıecomes null and void if the use is not initiated within one-year of the date of the Planning Commission's ıpproval; and I understand that this permit may be revoked for violation of any of the conditions of approval. I urther understand that approval of this application does not exempt me from all City code requirements.

Applicant's Signature	Print Name	Date
	IVAN LOPEZ	02/09/21

EXAMPLE
SITE PLAN

SITE PLAN FOR CHILD CARE FACILITY



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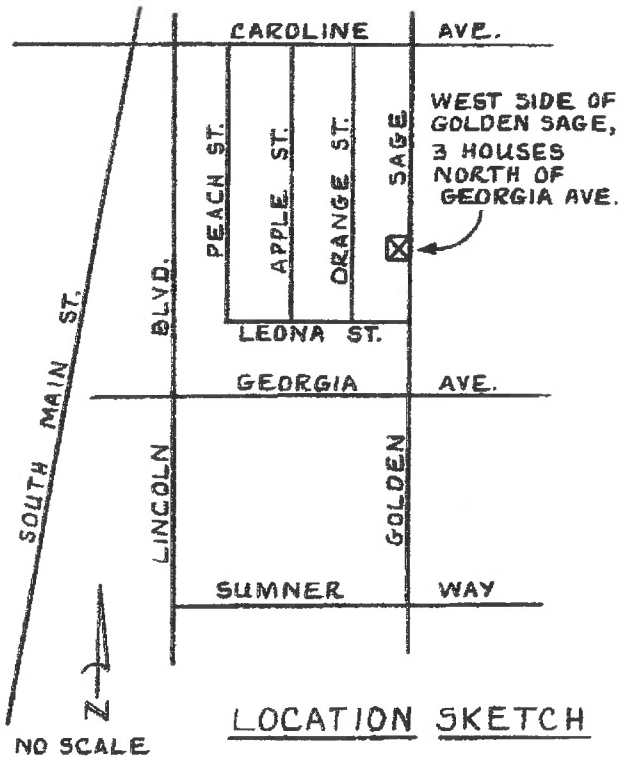


LOCATION SKETCH

OWNER: John Doe
123 Anyplace
Carson City NV 89701
(775) 333-3333

APPLICANT: SAME

REQUEST: To allow a childcare facility

LOCATION: 123 Golden Sage Drive

ZONING: Single Family 6,000 (SF6)

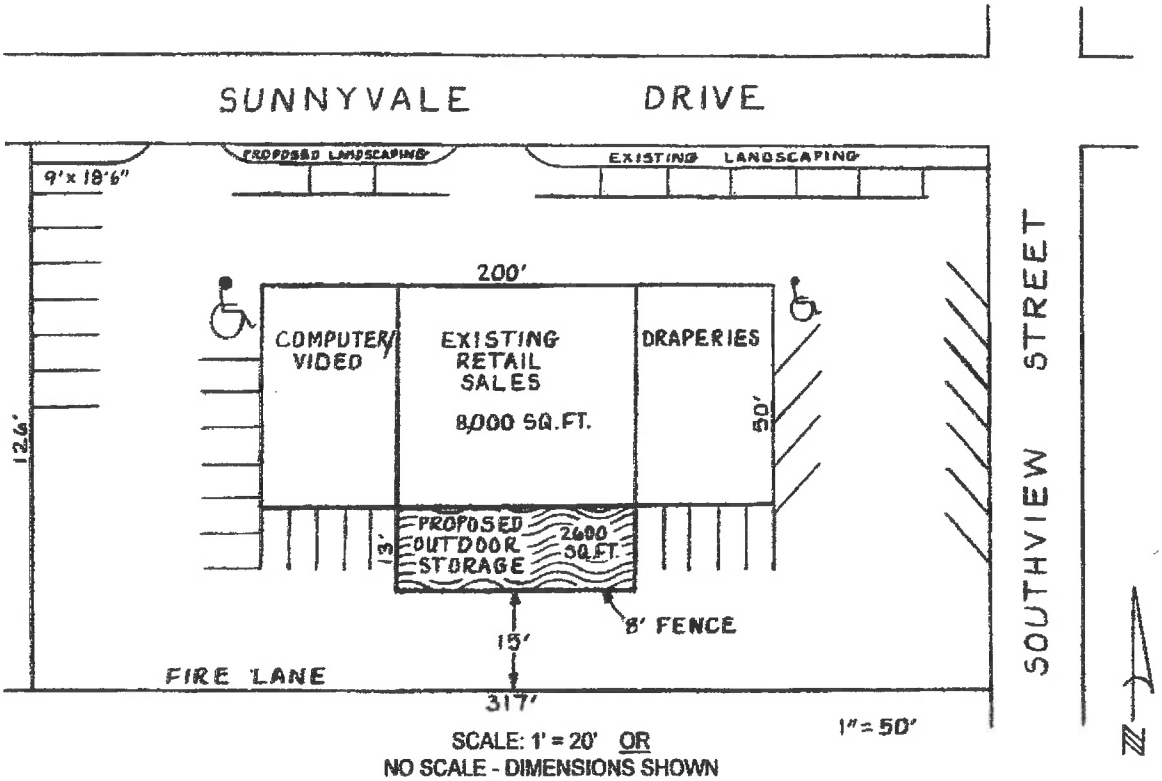
MASTER PLAN LAND USE DESIGNATION: Low Density Residential

APN: 005-215-25

Site Plan Prepared By John Doe

EXAMPLE
SITE PLAN

SITE PLAN FOR COMMERCIAL OUTDOOR STORAGE



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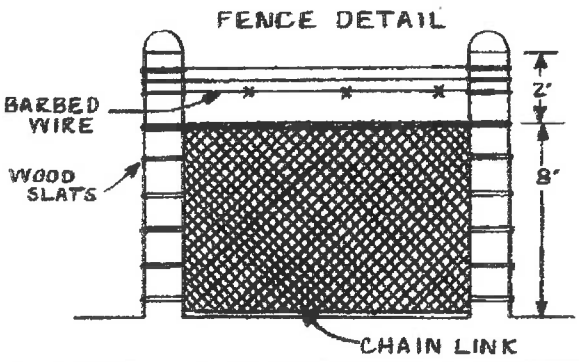
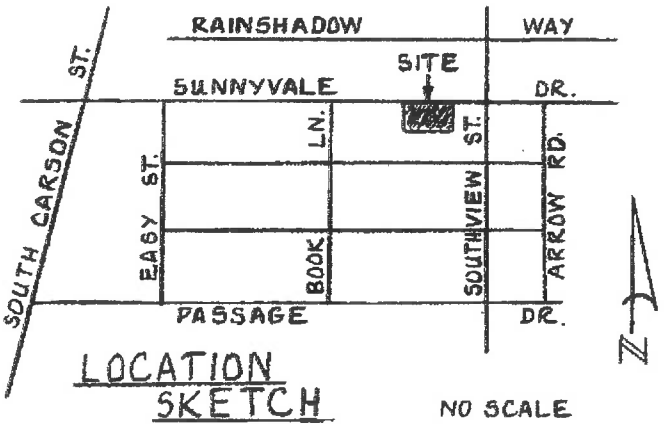




OWNER: John Doe
123 Anyplace
Carson City NV 89701
(775) 111-1111

APPLICANT: Jane Smith
345 Someplace
Carson City NV 89701
(775) 222-2222

REQUEST: To allow outdoor storage in Retail Commercial (RC) zone

LOCATION: 123 Anyplace

ZONING: Retail Commercial (RC)

MASTER PLAN LAND USE DESIGNATION: Commercial

APN: 005-215-25

Site Plan Prepared By Jane Smith

Master Plan Policy Checklist

Special Use Permits & Major Project Reviews & Administrative Permits

PURPOSE

The purpose of a development checklist is to provide a list of questions that address whether a development proposal is in conformance with the goals and objectives of the 2006 Carson City Master Plan that are related to non-residential and multi-family residential development. This checklist is designed for developers, staff, and decision-makers and is intended to be used as a guide only.

Development Name: Estradas AutoBody

Reviewed By: IVAN LOPEZ

Date of Review: 02/08/2021

DEVELOPMENT CHECKLIST

The following five themes are those themes that appear in the Carson City Master Plan and which reflect the community's vision at a broad policy level. Each theme looks at how a proposed development can help achieve the goals of the Carson City Master Plan. A check mark indicates that the proposed development meets the applicable Master Plan policy. The Policy Number is indicated at the end of each policy statement summary. Refer to the Comprehensive Master Plan for complete policy language.

CHAPTER 3: A BALANCED LAND USE PATTERN

The Carson City Master Plan seeks to establish a balance of land uses within the community by providing employment opportunities, a diverse choice of housing, recreational opportunities, and retail services.

Is or does the proposed development:

- ☑ Meet the provisions of the Growth Management Ordinance (1.1d, Municipal Code 18.12)?
- ☑ Use sustainable building materials and construction techniques to promote water and energy conservation (1.1e, f)?
- ☑ Located in a priority infill development area (1.2a)?
- ☐ Provide pathway connections and easements consistent with the adopted Unified Pathways Master Plan and maintain access to adjacent public lands (1.4a)?

- ☑ Protect existing site features, as appropriate, including mature trees or other character-defining features (1.4c)?
- ☐ At adjacent county boundaries or adjacent to public lands, coordinated with the applicable agency with regards to compatibility, access and amenities (1.5a, b)?
- ☐ In identified Mixed-Use areas, promote mixed-use development patterns as appropriate for the surrounding context consistent with the land use descriptions of the applicable Mixed-Use designation, and meet the intent of the Mixed-Use Evaluation Criteria (2.1b, 2.2b, 2.3b, Land Use Districts, Appendix C)?
- ☐ Meet adopted standards (e.g. setbacks) for transitions between non-residential and residential zoning districts (2.1d)?
- ☐ Protect environmentally sensitive areas through proper setbacks, dedication, or other mechanisms (3.1b)?
- ☐ Sited outside the primary floodplain and away from geologic hazard areas or follows the required setbacks or other mitigation measures (3.3d, e)?
- ☐ Provide for levels of services (i.e. water, sewer, road improvements, sidewalks, etc.) consistent with the Land Use designation and adequate for the proposed development (Land Use table descriptions)?
- ☐ If located within an identified Specific Plan Area (SPA), meet the applicable policies of that SPA (Land Use Map, Chapter 8)?

CHAPTER 4: EQUITABLE DISTRIBUTION OF RECREATIONAL OPPORTUNITIES

The Carson City Master Plan seeks to continue providing a diverse range of park and recreational opportunities to include facilities and programming for all ages and varying interests to serve both existing and future neighborhoods.

Is or does the proposed development:

- ☑ Provide park facilities commensurate with the demand created and consistent with the City's adopted standards (4.1b)?
- ☐ Consistent with the Open Space Master Plan and Carson River Master Plan (4.3a)?

CHAPTER 5: ECONOMIC VITALITY

The Carson City Master Plan seeks to maintain its strong diversified economic base by promoting principles which focus on retaining and enhancing the strong employment base, include a broader range of retail services in targeted areas, and include the roles of technology, tourism, recreational amenities, and other economic strengths vital to a successful community.

Is or does the proposed development:

- ☐ Encourage a citywide housing mix consistent with the labor force and non-labor force populations (5.1j)
- ☑ Encourage the development of regional retail centers (5.2a)
- ☑ Encourage reuse or redevelopment of underused retail spaces (5.2b)?
- ☐ Support heritage tourism activities, particularly those associated with historic resources, cultural institutions and the State Capitol (5.4a)?
- ☑ Promote revitalization of the Downtown core (5.6a)?
- ☐ Incorporate additional housing in and around Downtown, including lofts, condominiums, duplexes, live-work units (5.6c)?

CHAPTER 6: LIVABLE NEIGHBORHOODS AND ACTIVITY CENTERS

The Carson City Master Plan seeks to promote safe, attractive and diverse neighborhoods, compact mixed-use activity centers, and a vibrant, pedestrian-friendly Downtown.

Is or does the proposed development:

- ☑ Use durable, long-lasting building materials (6.1a)?
- ☐ Promote variety and visual interest through the incorporation of varied building styles and colors, garage orientation and other features (6.1b)?
- ☐ Provide variety and visual interest through the incorporation of well-articulated building facades, clearly identified entrances and pedestrian connections, landscaping and other features consistent with the Development Standards (6.1c)?
- ☐ Provide appropriate height, density and setback transitions and connectivity to surrounding development to ensure compatibility with surrounding development for infill projects or adjacent to existing rural neighborhoods (6.2a, 9.3b 9.4a)?
- ☐ If located in an identified Mixed-Use Activity Center area, contain the appropriate mix, size and density of land uses consistent with the Mixed-Use district policies (7.1a, b)?
- ☐ If located Downtown:
  - ☐ Integrate an appropriate mix and density of uses (8.1a, e)?
  - ☐ Include buildings at the appropriate scale for the applicable Downtown Character Area (8.1b)?
  - ☐ Incorporate appropriate public spaces, plazas and other amenities (8.1d)?
- ☐ Incorporate a mix of housing models and densities appropriate for the project location and size (9.1a)?

CHAPTER 7: A CONNECTED CITY

The Carson City Master Plan seeks promote a sense of community by linking its many neighborhoods, employment areas, activity centers, parks, recreational

amenities and schools with an extensive system of interconnected roadways, multi-use pathways, bicycle facilities, and sidewalks.

Is or does the proposed development:

- ☑ Promote transit-supportive development patterns (e.g. mixed-use, pedestrian-oriented, higher density) along major travel corridors to facilitate future transit (11.2b)?
- ☐ Maintain and enhance roadway connections and networks consistent with the Transportation Master Plan (11.2c)?
- ☐ Provide appropriate pathways through the development and to surrounding lands, including parks and public lands, consistent with the Unified Pathways Master Plan (12.1a, c)?

Special Use Permit Estrada's Auto Body

1. Will be consistent with the objectives of the Master Plan elements.

I will meet the provisions of the Growth Management Ordinance and municipal code. I will conserve water and energy by only using tools when there needed. For example, the air compressor and paint booth will only be turned on when needed. Water will not be needed to do auto body repairs and paint. When it comes to washing cars, will be washed in a nearby car wash business located on 3130 S Carson St, Carson City, NV 89701 or at 1306 S Carson St, Carson City, NV 89701. I will protect existing features including mature trees since my project will be completed inside of the existing building. I will use all retail space I am renting out at the moment and plan on using it when my project is approved. I will use durable, long lasting building materials by disposing materials adequately after use.

2. **Will not be detrimental to the use, peaceful enjoyment, economic value, or development of surrounding properties or the general neighborhood; and is compatible with and preserves the character and integrity of adjacent development and neighborhoods or includes improvements or modifications either on-site or within the public right-of-way to mitigate development related to adverse impacts such as noise, vibrations, fumes, odors, dust, glare or physical activity.**

A. Commercial Shops are located on the East and West side of my auto body business. On the North side of the building there is the rail road museum. South side is heavy equipment rentals.

B.Auto body shop is allowed in commercial zoning. Estrada's Auto body is very similar to my neighbor's auto repair shops. My project includes working indoors and with minimal noise when repairing dents on cars. Also, the process of auto body includes painting cars in a paint booth. This process is very quiet, and the paint booth is all enclosed with closed doors. The paint body is properly installed with air filters throughout the inside and with proper ventilation.

The same location where I am presenting my project for auto body licensing used to be an auto body shop called Battle Born. The owners had the same project as the one I am introducing now and also had the same paint booth I will be using and have already installed. However, my project differs from my neighbors is that I will be painting vehicles once repairs are made.

C. Surrounding neighbors are primarily repair shops next to Estrada's Auto Shop. The project I am presenting of body work is peaceful work of repairing small dents and include applying auto body filler and sanding down. All similar processes that do not require big noisy equipment also spray painting is a peaceful job.

D. Outdoor lighting is not part of the project as the project being presented is indoor work.

E. Our project does not consist of landscaping work.

F. Short range- Business location is central and accessible to our community in Carson City. Provide great quality work and low prices to one-time customers.

Long range- Provide great quality work and great prices to regular customers. Also, provide more job opportunities to younger generations or any other age group as the business is growing and expanding.

3. Will have little or no detrimental effect on vehicular or pedestrian traffic

There are no immediate cross walks and there is also no immediate vehicular traffic unless on South Carson street. Our project is being presented on an existing building and it is accessible and will not cause any traffic. No additional walkways and traffic lights will ever be needed. I have arrived to this conclusion because my auto shop is located in a big property.

4. **Will not overburden existing public services and facilities, including schools, police and fire protection, water, sanitary sewer, public roads, storm drainage and other public improvements.**

A. The school district will be affected in a positive way as services are provided to students who have a desire to repair their vehicle and as mentioned before more job opportunities for our youth. However, all populations will benefit from my services.

B. My project will not affect police or fire protection in any shape or form because I will be working indoors.

C. Water is an element that will not be used at all for my project and it will not take away from surrounding neighbors use.

D. No paving needed

E. My site is on an adequate capacity and sewage disposal is not needed for my project.

F. No road improvements are proposed or needed to accommodate my project.

G. The building plans, the paint booth manufacturer specs, and fire suppression system.

5. **Meets the definition and specific standards set forth elsewhere in Carson City Municipal Code, Title 18 for such particular use and meets the purpose statement of that district**.
Auto Body repair is a conditional use with the approval of a Special Use Permit In addition, previous business in this same location was an auto body shop and zoning were met by this previous project. A large area on the west of the premises is fenced to keep vehicles gated.

6. **Will not be detrimental to the public health, safety, convenience and welfare.**

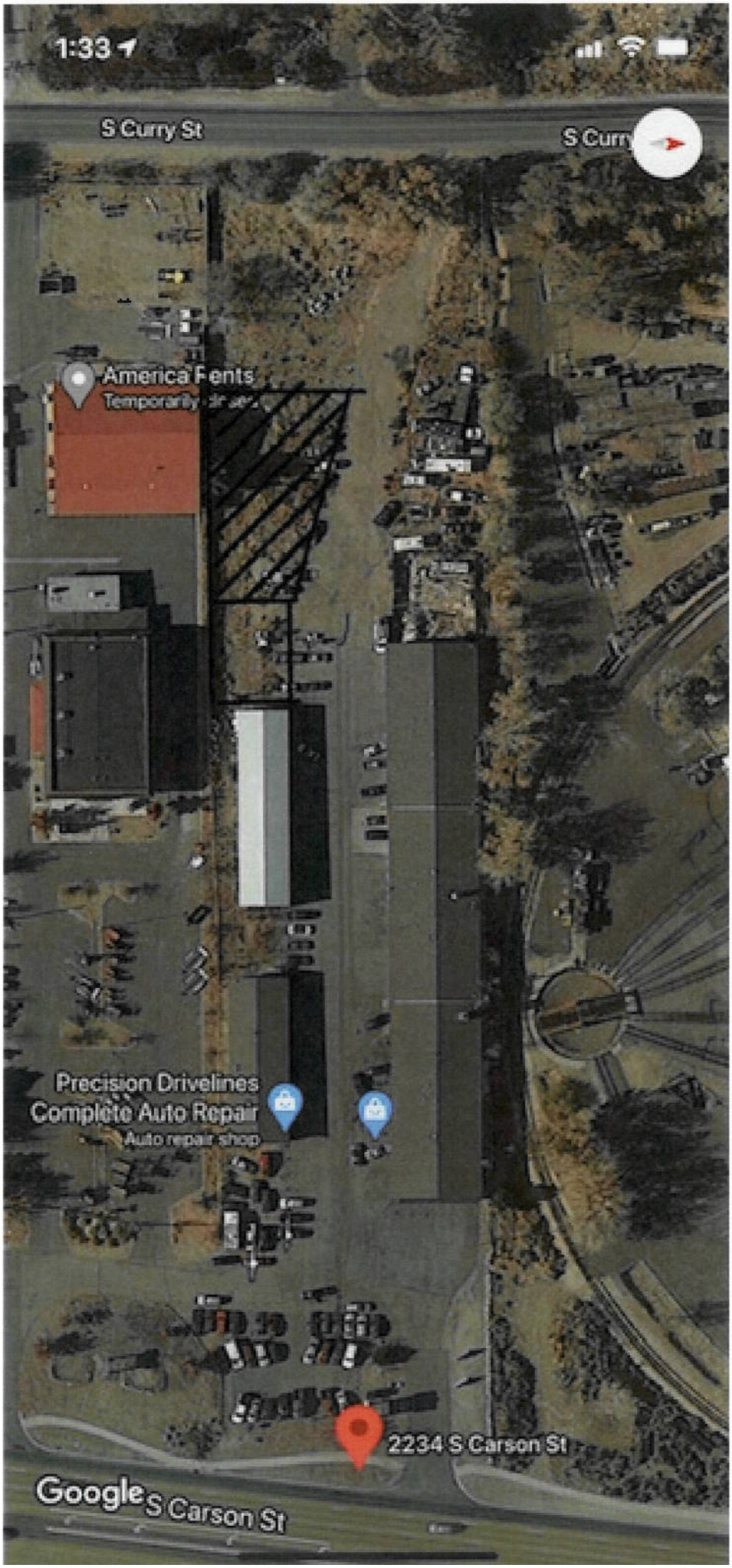
My project will not affect the public health, safety, convenience, and welfare of our community. On the other side benefits include more job opportunities in the future for our community as well as low prices and great quality work.

7. **Will not result in material damage or prejudice to other property in the vicinity, as a result of proposed mitigation measures.**

My project will not result in material damage to other projects in my vicinity. This Commercial facility has been an Auto Body Shop for many years like Battle Born Auto Body, Carson Auto Body. All material will be disposed properly and according to safety standards. Also, cleanliness and storage of materials in there assigned areas will be kept.

Additional Information

We are looking forward to establish here, for our Auto Body Services to service the community of Carson City since this location has always been an Auto Body Shop since we moved here back in 1997.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CHEVROLET


Estrada's
Auto Shop LLC

13-055

COL-MET spray booths

Letter of General Compliance

All Col-Met Spray Booths meet or exceed the requirements of the National Fire Protection Association (NFPA) Chapter 33 Standard for Spray Application Using Flammable or Combustible Materials, NFPA Standard Number 70 National Electric Code (NEC), Occupational Health and Safety Administration (OSHA) CFR 29.1910.107, and the Uniform Fire Code (UFC) Article 45, Special Processes, Application of Flammable or Combustible Materials. Please note that most Col-Met Spray Booths will ship unassembled and therefore the installation, wiring, and the fire suppression system required for the booth but not provided by Col-Met must also comply with these codes.

Listings, Certification, and Approvals on Col-Met Spray Booth Components:

√ Motor: Manufactured by Leeson. General Duty A.C., ODP type enclosure. Motor is mounted outside of the airflow. UL file numbers: E57948, GUIDE# PRGY2, additionally the insulation systems incorporated are covered by Listing: E55555, GUIDE# OBJY2.

√ Fan: Manufactured by Aerovent Fans, Manufactured in accordance to AMCA specifications. Fan is tube-axial type and equipped with non-sparking, non-ferrous aluminum blade. No UL file number is available: fans are AMCA certified.

√ Light Fixture (open): Manufactured by LDPI, Inc. is a fluorescent fixture 120/277 volt. Light is mounted on the exterior of the Spray Booth and sealed with tempered safety glass. UL file number: E107621

√ Light Fixture (Class I Div. II): Manufactured by LDPI, Inc. is a fluorescent fixture 120/277 volt. Light is mounted on the exterior of the Spray Booth and sealed with tempered safety glass. UL file number: E165734

√ Tempered Safety Glass: Various Manufacturers, Glass is fully tempered clear glass manufactured and tempered to meet the requirements of ANSI Z97.1 Standard and Federal Standard CPSC 16 CFR 1201. Meets NFPA 33 requirements.

√ Exhaust Filters: Manufactured by Columbus Industries is a paint arrestor filter rated at 99% efficiency for removal of paint over-spray. UL file number: R5277.

√ Caulking: Manufactured by Red Devil. Materials are non-hazardous and non-flammable. Meets ASTMC-838 specifications.

√ Air Solenoid Valve: Manufactured by Goyen. Valve operates on 120 volt A.C. power. Valve is normally closed one way. UL File number: MH9011

√ Explosion Proof Limit switch: Manufactured by Square D. Limit switch is rated for 15 amps 120 volt. UL file number: NKCR.E78403.

√ Manometer Draft Gage: Manufactured by Dwyer Instruments to meet NFPA 33 requirements.

√ Galvanized Steel: Various Manufacturers, 18-gauge Prime G-90 lock forming quality-mill flat. Meets ASTM-A653 specifications. Steel is galvanized in the hot-dipped process with a zinc coating. Meets NFPA 33 requirements.

Bill Van Buren
Col-Met Spray Booths

1635 Innovation Drive • Rockwall, Texas 75032 • Phone: 888.452.6684 • Fax: 972.772.1833 • www.colmetsb.com

Auto Body TOOLMART
760 Industrial Drive, Unit D, Cary, Illinois 60013
Phone: (800) 382-1200 Fax: (847) 462-9247

Model #8550
Semi Downdraft Spray Booth

Dimensions:

	Interior	Exterior
Width:	14'-0"	14'-4"
Height:	9'-0"	11'-2" *(plus exhaust fan)*
Depth:	24'-6"	26'-4"

Scope:
Air flows in through the dual filtered air intake plenum (located in the ceiling toward the front of the booth) downward through the work area and exits through the exhaust plenum located in the rear of the booth. Filtered exhaust air is drawn through the exhaust plenum and discharged upward into the atmosphere through the exhaust stack. This booth is provided complete, with all necessary hardware to meet the applicable national requirements established by OSHA and the NFPA for paint booth construction.

Construction Features:

Panels:
- Panels are fabricated from 18-gauge prime quality galvanized steel precision punched on 6" centers for maximum rigidity. Panels are fastened together with 5/16" grade #5 bolts and are to be sealed with the provided caulk following assembly.

Illumination:
- Lighting is provided by LDPI brand 48" long, 4-tube, 32-watt, fluorescent type fixtures. Each is mounted behind tempered safety glass that is sealed from the interior of the spray booth with a continuous neoprene rubber-sealing gasket placed around the perimeter of the light window's opening. All fixtures are UL listed and approved for their intended use and placement. This unit will be supplied with ten (10) light fixtures. Standard voltage is 120V/ single phase.

Filtration:
- Intake air filters: Rated by UL as Class 2 and are EPA registered as environmentally safe. Filters are self-supporting in an internal frame sized 20" x 20" x 1". One set of filters will be supplied with this unit.
- Exhaust air filters: Fiberglass paint arrestor pad made specifically for the collection of paint overspray. These filters are UL rated as Class 2. A filter holding grid is provided for each filter cell. This unit is provided with one set of filters.
- A manometer is provided with the unit to monitor the filter resistance and thereby the filters life and efficiency.

Exhaust Fan Unit:

- A tube axial type duct fan specifically designed and constructed for use in paint spray booths and similar applications is provided for exhaust. A precision balanced, fabricated, six-wing, aluminum non-sparking fan blade moves the air through the fan. Bearings are permanently lubricated and mounted in rubber isolators for smooth operation. The motor, drive and bearings are isolated from the exhaust air stream. This unit will be provided with one 30" diameter fan driven by a 3 HP motor (208/230/460V/3 ph/60HZ), operating at 12,600 SCFM at ½" static pressure.

Product Doors:

- The product entry doors are fabricated with tube steel frames hung on structural channel jambs. These doors are constructed with the filter holding grids as an integral part of the door. These doors are provided with a foam rubber weather stripping seal about the perimeter and a neoprene rubber sweep seal at the threshold. The mounting hardware provided includes a FM approved panic type safety latch and four door pulls. These shall be double doors having a clear opening of approximately 9'-4" wide by 8'-10 ½" tall.

Personnel access doors:

- One (1) personnel access door is provided as an 18-gauge galvanized steel unit sized at 30" x 84" and is provided pre-hung in a heavy gauge steel frame ready for mounting to the spray booth. The mounting hardware includes a FM approved panic type safety latch, striker plate and two 6" door pulls.

Code Compliance:

- All Auto Body ToolMart booths are designed to meet or exceed the requirements and recommendations of the National Fire Protection Association (NFPA), Standard Number 33 dated 1969 & 2000, as well as the Occupational Health and Safety Administration (OSHA) CFR 29.1910.107 covering the operation and construction of spray booths.

Warranty:

- Auto Body ToolMart warrants to buyer that the equipment to be free from defects of materials or workmanship under normal use and maintenance for a period of one year.
- All components supplied but not produced by Auto Body ToolMart shall carry the warranty of the manufacturer.

Auto Body ToolMart
Spray Booth
Installation Directions
Model #8548
Model #8550

GENERAL:

This instruction manual is a guide for installing a variety of automotive paint spray booths. The assembly drawings and instructions enclosed are specifically for the paint spray booth you have purchased. This drawing is an exploded isometric showing the relationship of each panel or part to the next one. A packing list of all components is provided and should be used in addition to the drawing when uncrating your booth to correctly identify all components. ***All damages MUST be reported within 24 hours of receipt and a freight claim filed with the carrier.***

PRELIMINARY:

Auto Body ToolMart booths are manufactured in accordance with NFPA 33, UFC 45 and OSHA CFR 29.1910.107. However, local codes and regulations may apply to the installation and use of this product. It is recommended that all permits and approvals be obtained prior to installation and use of the spray booth.

1. Tools needed:
    - Pry bar
    - Claw hammer
    - Drift pin (rolling pry bar – catalog item # 2131)
    - Assorted wrenches (pneumatic tools are fastest)
    - Electric drill with 3/8" bit
    - Screw driver
    - 2 x 4 studs (or other suitable support method) for supporting all walls and gables during installation.
    - 2 ladders (8' - 10')
    - *Hint: A drywall lift can be rented inexpensively and will save time.*

2. Uncrate and inventory all spray booth components to ensure all of the parts are accounted for. Each component is numbered on the exploded view. Stack all common panels together.

3. The floor surface of the booth must be non-combustible material of such character as to facilitate the safe cleaning and removal of residues. The floor surface of the booth must be flat and level to avoid problems with erection and alignment of panels.

4. Using a chalk line, mark the dimensional outline of the booth on the floor.

5. Follow the step-by-step instructions provided.

Auto Body ToolMart
Model # 8548
Model# 8550

Under no circumstances shall this booth be considered a load bearing structure... do not walk on, stand on or use the spray booth as a support structure before, during, or after installation.

*Hint: when assembling the booth you should leave the bolts **Finger Tight Only. All flanges should face outward.** The nut end of the bolt should protrude outward (bolt heads inside the booth). Each panel has a series of pre-punched holes, which begins 3" from the end. This end of the panel will be placed on the floor side of the booth. All panel bolt holes should begin 3" from the bottom. **There is no need to drill any holes.** All panel bolt holes should line up, if not please call for instructions.*

Determine the area at your location to assemble the booth. Using the dimensions shown on the first page of the assembly drawing, make a chalk line lay out of the booth.

Starting with the back wall identify parts #6, #10, #20, and #24. Lay panels face down. Smooth side down with all flanges facing upward. The #20 and #24 Tie Channel will bolt to the bottom of these panels. Again, keep the bolt head on the smooth side and the nut on the flange side. Continue to bolt this entire section. Finger Tight Only.

Locate items #1, #5 and #21. These panels can be bolted in the same manner.

Locate items #13 and the Access Door #19 then bolt together.

Hint: These two sections are universal they can be placed on the left or right side of booth, which ever you prefer. The door may be hinge on the left or right. However, it must open to the exterior.

Once these steps are complete the back wall can be stood up vertically while bolting the #5 to the #10 and on the opposite side bolting the #13 to the #10.

The #11 hip panels are the next to be installed. It will be necessary to support these sections with 2 x 4 studs (or other suitable support).

The #4 Fan Panel and #7 can be installed at this time. When bolting the #4 to the #7 panel only bolt the last three holes on each end. In the next step the #16 panel will be sandwich between these two panels then they will be bolted together.

The next step is to assemble the exhaust plenum. Locate the following parts #15, #16, #17A, and #17B. These items can be assembled as one unit and slid into place. Be sure to attach these parts with the smooth side facing the interior of the booth. When complete, slide into place against the back wall. The #16 panel will sandwiched between the #4 and #7 panels. You may continue to bolt these panels together.

Make sure the Plenum is centered to the back wall. Use the Speed Screws item #F23 to attach the Plenum to the back wall and fan panel. The #16 and #17A panels will also be screwed together.

Now that the back section of the booth is complete you may notice a gap between the access door and the hip panel. This gap can be filled with foam gasket and speed screws after the booth is completely assembled.

Locate items #SA3-72, #SA1, and SA4-96. These items are 14 gauge supports that will be positioned around the sides and top of the booth. The 2" flange of these parts should point towards the back of the booth. It is only necessary to insert two or three bolts into each section. They will need to be removed when installing the next section.

Depending on your location and the space available, your may choose to place the exhaust fan and motor into position on the #4 Fan Panel. If so, it must have suitable support (i.e.: 2 x 4 studs).

To begin the wall installation, identify panels #1, #2, and #22. Follow the panel lay out on the isometric drawing, these panels can be bolted together in the same manner as perform on the back wall. When this step is complete, stand up vertically and position next to the #SA3-72. When bolting together the #SA3-72 it will be sandwich between the two #1 panels and on the opposite side it will sandwich between the #1 and #13 panels.

Installing the Hip Light Panels it is important to note that the #8 Light Panel is for a seal & gasket light fixture and must be located closest to the access door. This is a code requirement.

The #3 Roof Panels can be installed at this time. It will be easier to assemble these panels one at a time. You will need to provide support for the roof panels as you process.

Again, following the panel layout continue these steps on the next two sections.

To continue the installation of the 8550, the last section of the booth (closest to the Door) you will install the #27 Filter Panels. The #29 Panel will be sandwich between the #3 Roof Panel and the #27 Filter Panel. The #28 panels are installed on each side of the plenum, follow by the remaining #3 roof panels.

When these steps are complete locate the #12 left and right panels and attach the #24 Tie Channel to the bottom of each. Position this panel against the #1 and #9 panels then bolt together.

The #14 Header Panel will be placed between the left and right #12 panels. When bolting together you will use the bottom hole on the #14 panel to the top hole of the #12 Panel (Only one bolt is needed). The #14A Door Stop is bolted along the bottom edge of the #14 Header Panel. Do not use the last two holes on each. They will be used later with the door channel.

At this point your booth has been assembled. Remembering that all nuts and bolts are only finger tight.

You are now ready to assemble your Product Door. Please refer to the door drawing assembly.

Locate the #1 and #2 Door Channel and bolt to the inside edge of the #12 panels.

Item #2 is the left side of the Product Door, it can be identified by the door stop (angle brace) that is attached to the inside edge of the door.

At this time you may refer to the Hinge Installation Detail.

Hint: Position the base of the Product Door approximately 1" above the floor, to allow the door to swing open freely. Repeat the process on the right side door.

At this time your booth is completely assembled. Making sure that all panels are square and not sagging, you can begin to tighten all nuts and bolts. It is recommend that you begin at the back and work your way to the front.

Caulk all panel joints inside the booth with the caulk provided. *Note: do not use a siliconized caulk as this can cause finish problems later.*

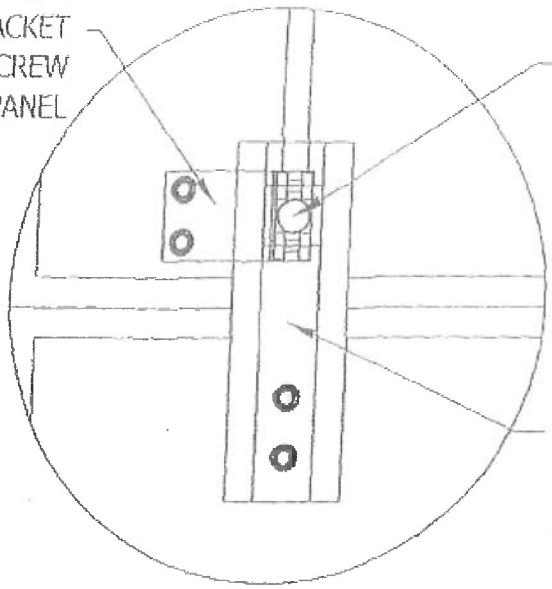
Apply foam gasket material to the perimeter of all door openings.

Apply foam gasket material around all window frame openings. Place glass against the gasket, then place the light fixture over the glass and use the provided spring clips to secure the fixture (it is best to have someone help you with this).

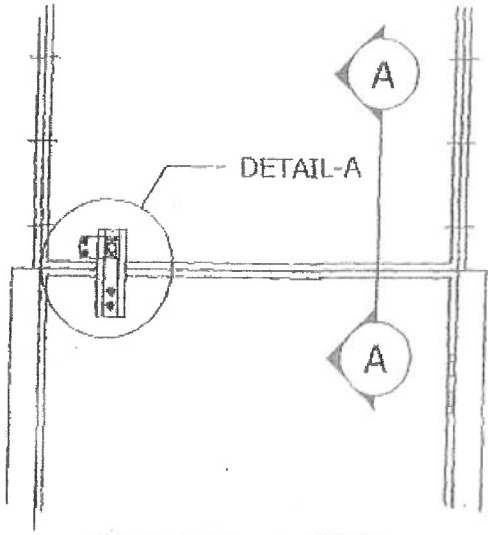
Attach all door hardware and adjust latches. Install intake filters in the front doors. The side that says "air leaving side" faces *into* the booth. Install one wire grid in each filter cell with the prongs facing into the booth, the exhaust filters will be attached to the prongs.

If you purchased the optional Electrical Kit, have your electrician install these components for you.

If you purchased the optional Chimney Kit: we suggest you have the flashing professionally installed as this entails cutting a hole in the roof of your building.
To assemble the duct work, first bolt the pipe with the connecting ring to the exhaust fan, the rest of the duct work is crimped on one end to interlock with the next section. Your directional weather cap will be mounted on top. The storm collar will attach to the duct above the flashing to make it weather proof.



DETAIL-A

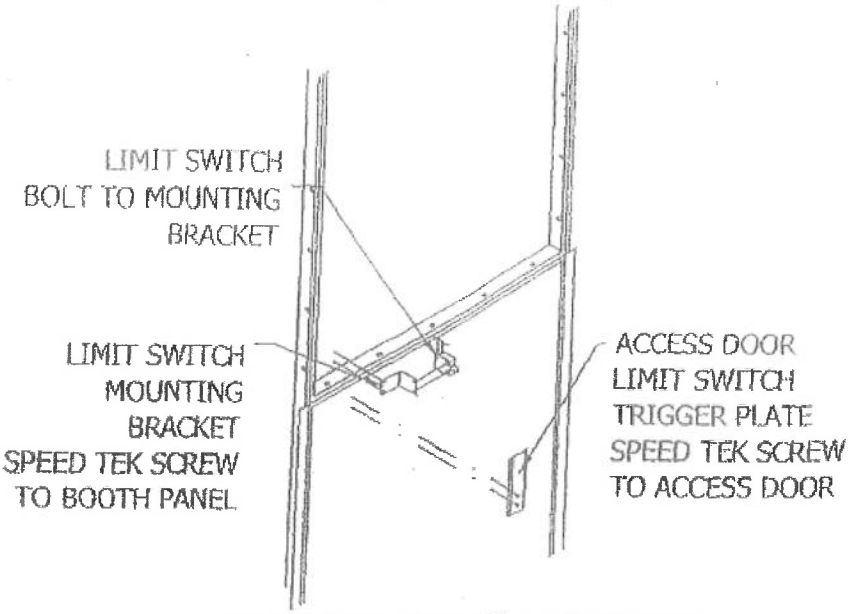


FRONT VIEW

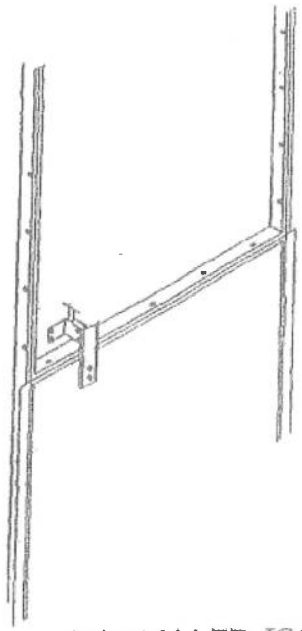
SECTION A-A

ACCESS DOOR NON-EXPLOSION PROOF LIMIT SWITCH PAGE 1 OF 2

	ACCESS DOOR LIMIT SWITCH
	MOUNTING INSTRUCTIONS
	PAGE 1 OF 2
	INSTALLATION DRAWINGS.DWG



EXPLODED INSTALLATION ISO



INSTALLED ISO

ACCESS DOOR NON-EXPLOSION PROOF LIMIT
SWITCH PAGE 2 OF 2

ACCESS DOOR LIMIT SWITCH
MOUNTING INSTRUCTION
PAGE 2 OF 2
INSTALLATION DRAWINGS.DWG

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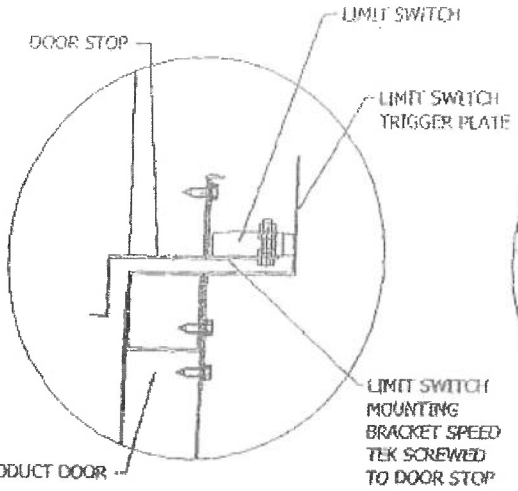
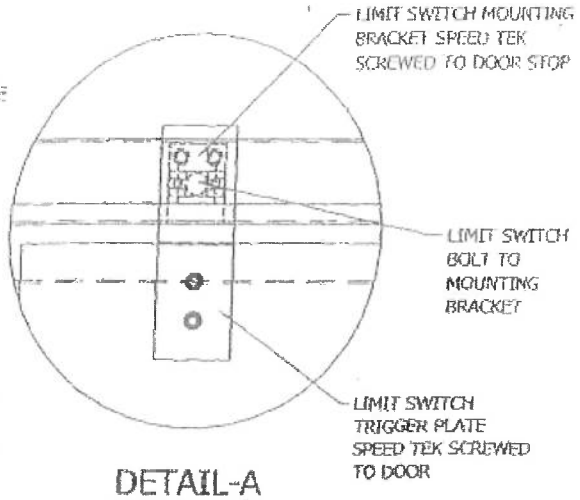


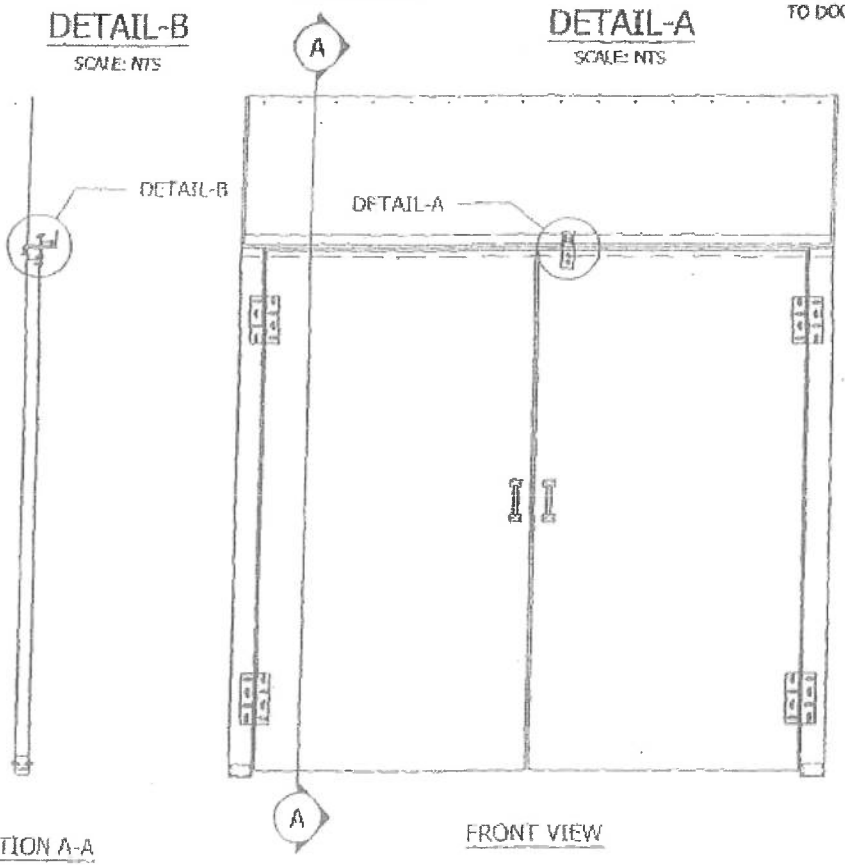
DETAIL-B

SCALE: NTS



DETAIL-A

SCALE: NTS



SECTION A-A

FRONT VIEW

PRODUCT DOOR LIMIT SWITCH MOUNTING INSTRUCTIONS

PAGE 1 OF 2

INSTALLATION DRAWINGS.dwg

PRODUCT DOOR NON-EXPLOSION PROOF LIMIT SWITCH PAGE 1 OF 2

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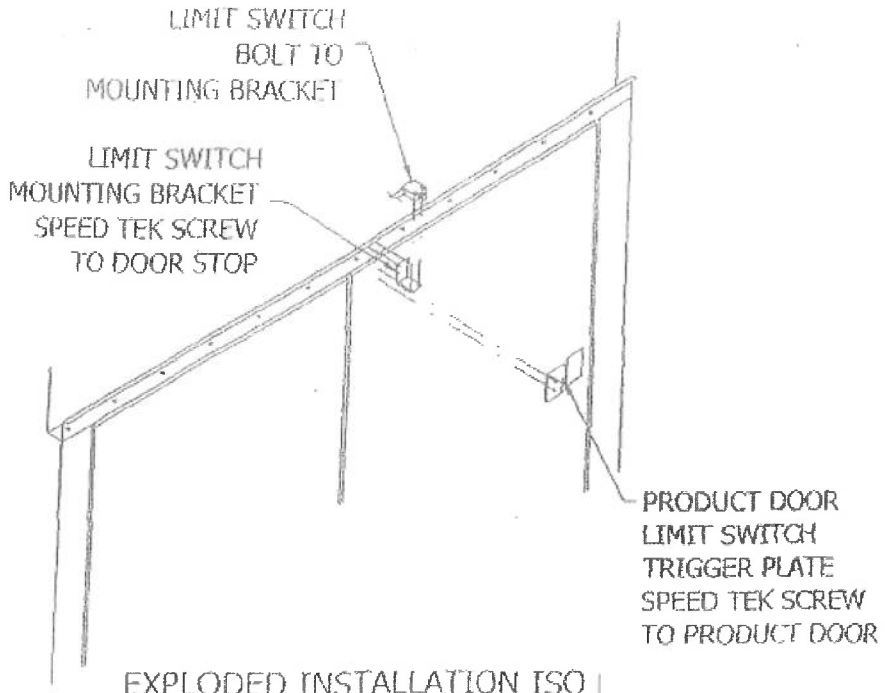

EXPLODED INSTALLATION ISO

INSTALLED ISO

PRODUCT DOOR NON-EXPLOSION PROOF LIMIT SWITCH PAGE 2 OF 2

PRODUCT DOOR LIMIT SWITCH
MOUNTING INSTRUCTIONS
PAGE 2 OF 2
INSTALLATION DRAWINGS.DWG

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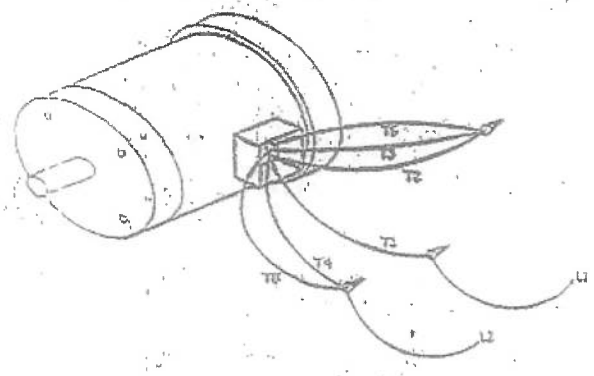
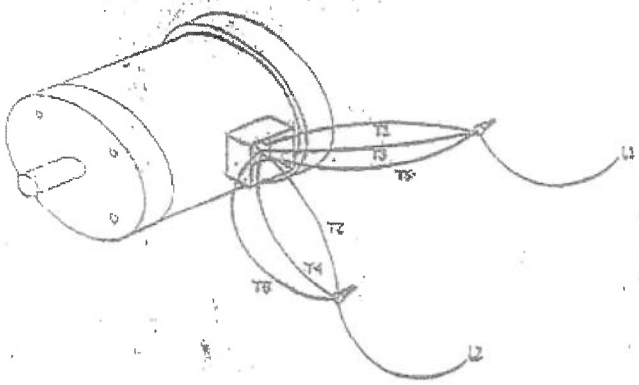
1/3 - 3 Hp
230V Single Phase

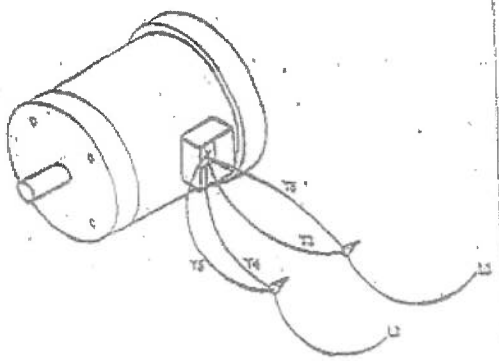


115V Single Phase



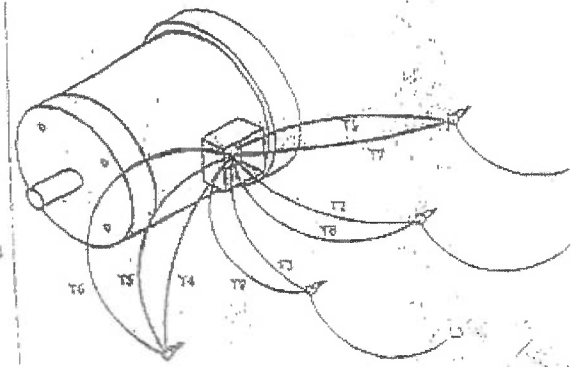
To reverse the ...

5 Hp
230V Single Phase

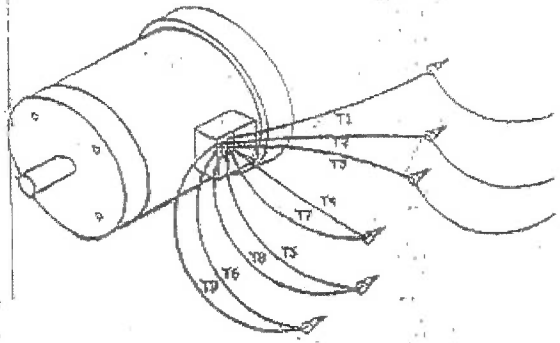


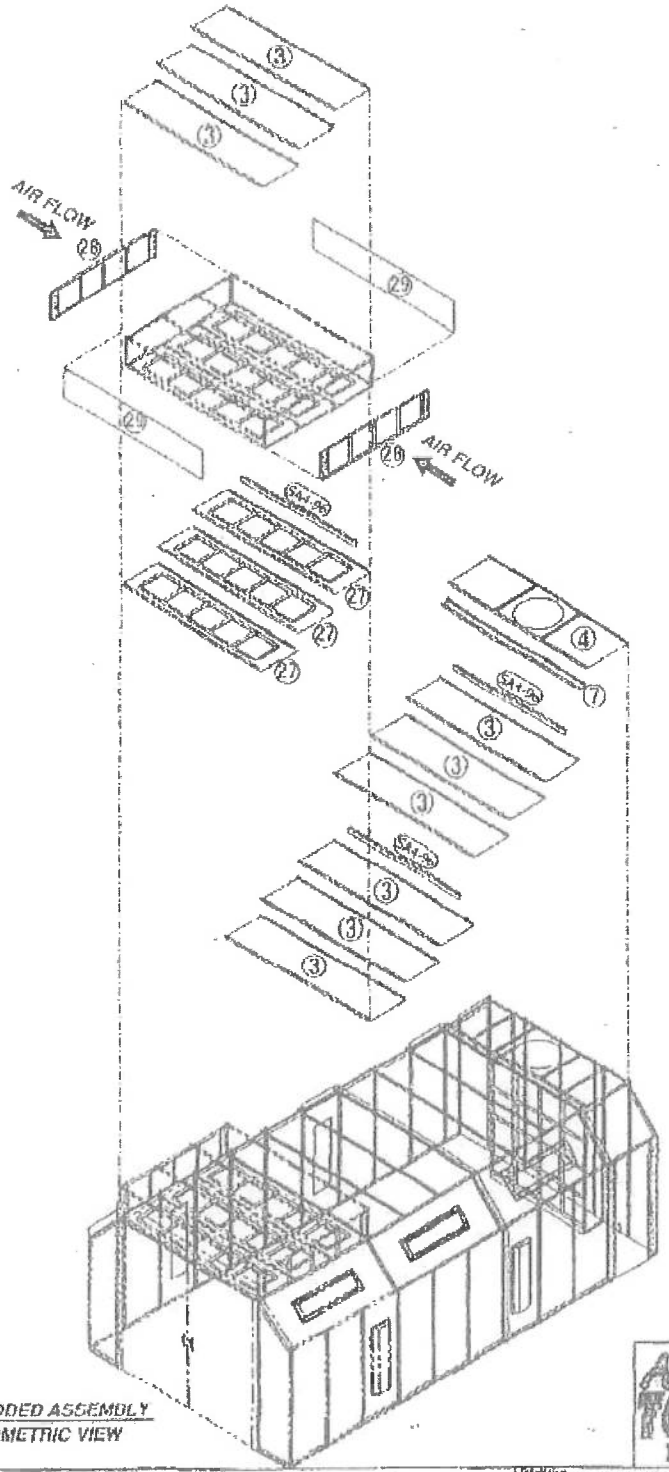
To reverse the motor
Swap T5 and T8

1/2 - 5 Hp
208 - 230V Three Phase



460V Three Phase

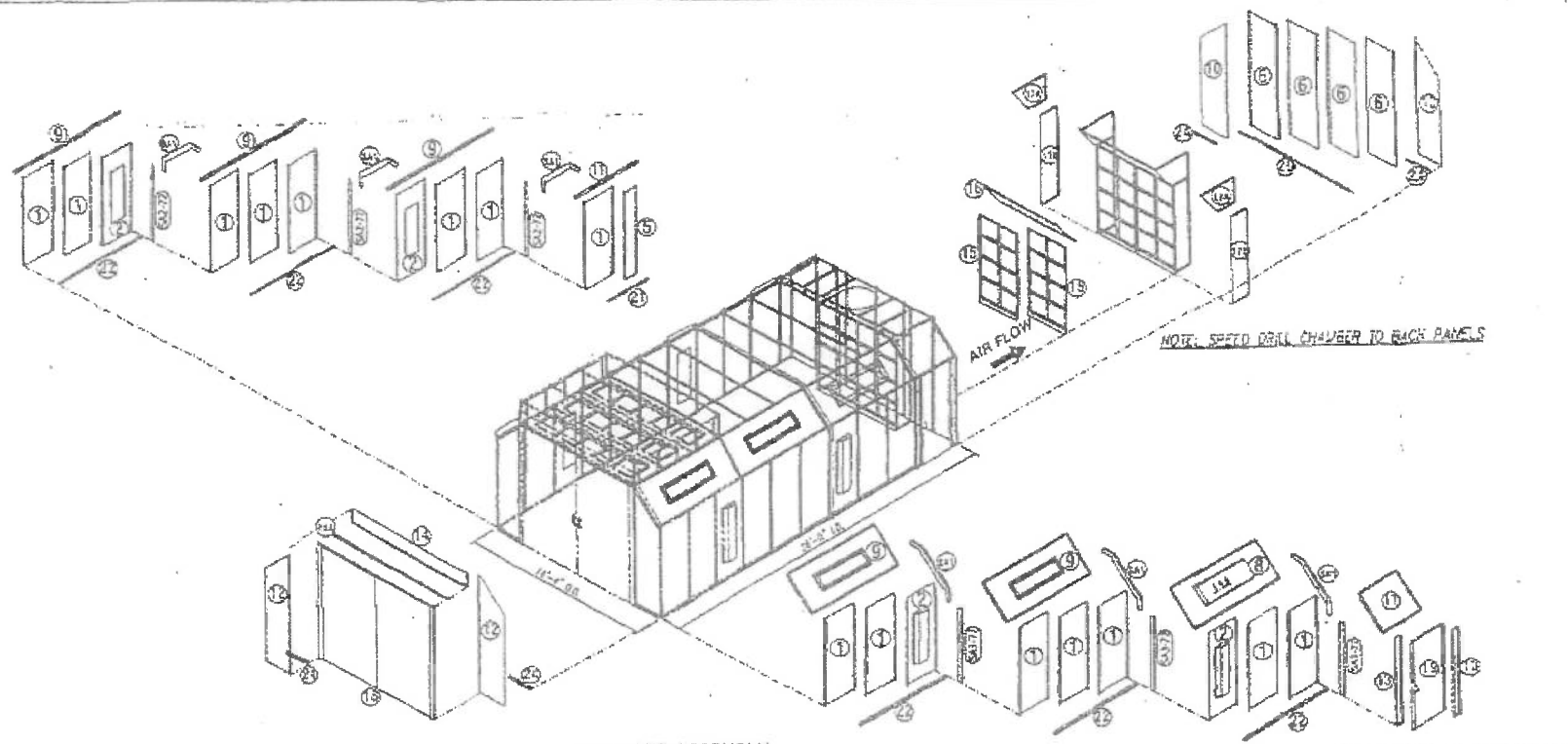




Auto Body TOOLMART
1-800-382-1200

EXPLODED ASSEMBLY

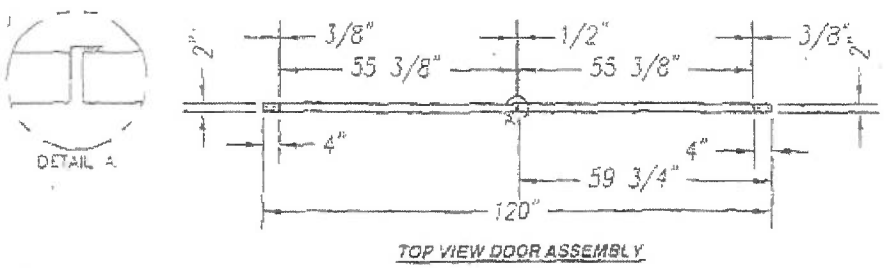
AUTO BODY TOOLMART



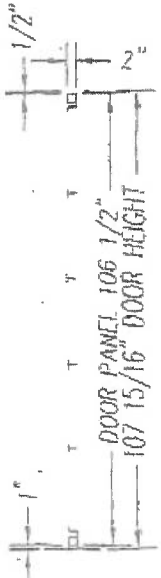
EXPLODED ASSEMBLY
ISOMETRIC VIEW

Auto Body TOOLMART
1-800-382-1200

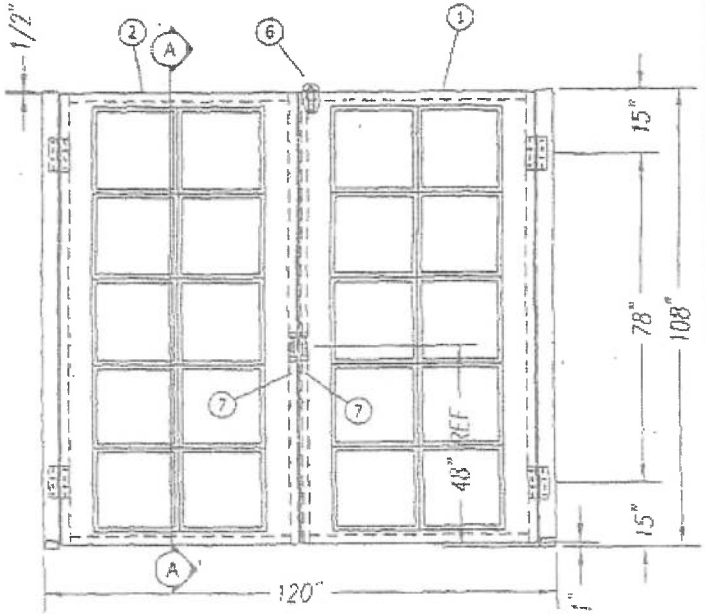
EXPLODED ASSEMBLY
AUTO BODY TOOLMART



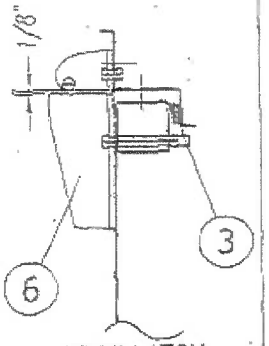
TOP VIEW DOOR ASSEMBLY



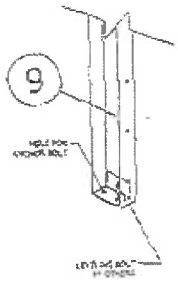
VERTICAL SECTION THRU DOOR ASSY



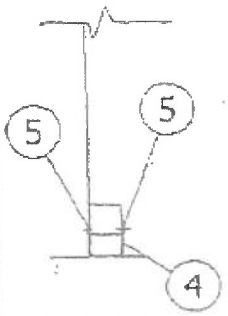
ELEVATION OF DOOR ASSEMBLY (FROM EXTERIOR)



DOOR LATCH AND SEAL DETAIL



DOOR FRAME BASE DETAIL

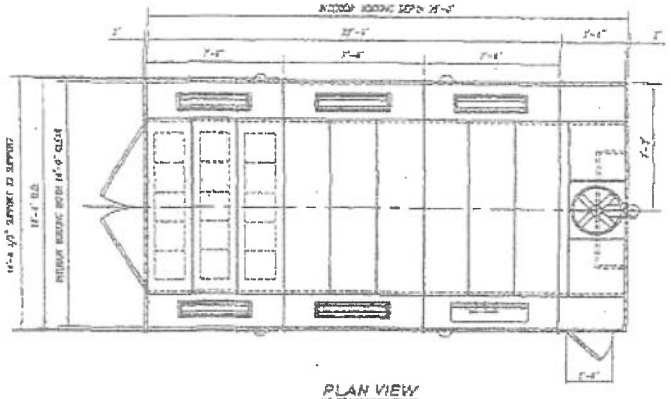


THRESHOLD SEAL DETAIL

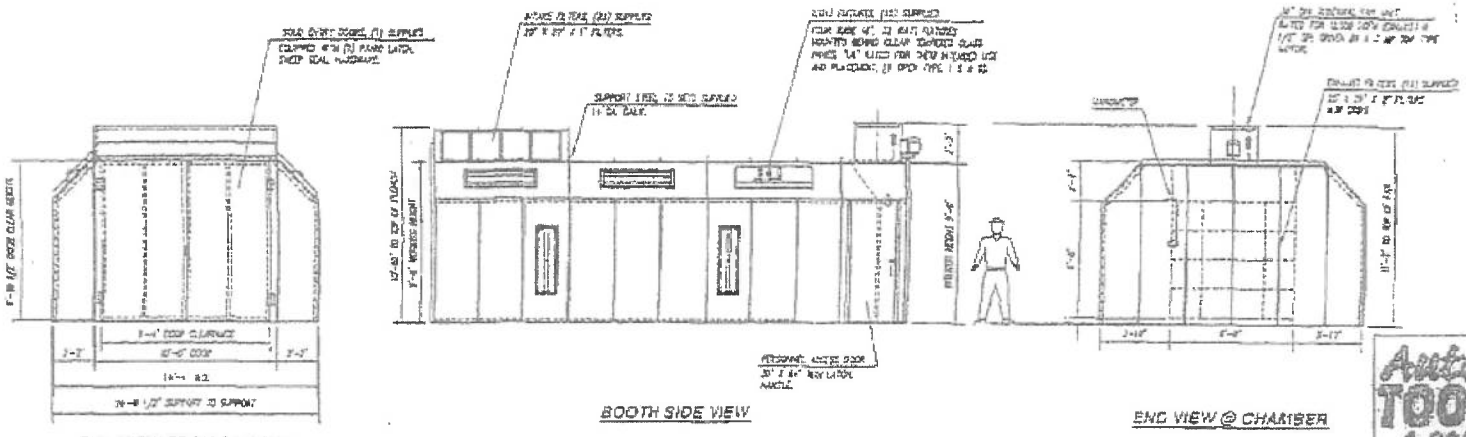
ITEM	QTY.	DESCRIPTION	WIDTH		LENGT
11	32	$\frac{5}{16}$" X 1½" HEX WASHER UNSLOT SELF DRILLING SCREW			
10	4	LARGE HINGES		X	
9	2	DOOR CHANNEL	4"	X	108"
8	20	INTAKE FILTERS	20" X 20"	X	1"
7	4	6" DOOR PULLS WITH HARDWARE		X	
6	ONE	P2 DOOR LATCH W/ HARDWARE		X	
5	4	DOOR SWEEP HOLD DOWN	1"	X	55"
4	ONE	1/16" THICK DOOR SWEEP	8"	X	120" RC
3	50 LF	FOAM TAPE GASKET		X	
2	ONE	DOOR (LEFT SIDE)	55 3/8"	X	106 1/
1	ONE	DOOR (RIGHT SIDE)	55 3/8"	X	106 1/

SINGLE SKIN DOUBLE FILTER DOOR 10(

DRN BY	DATE	JOB NO.	SHT	OF	DWG NO.
PW	6/23/06		1	4	DF-SS-1009



PLAN VIEW



END VIEW FROM BAY END

BOOTH SIDE VIEW

END VIEW @ CHAMBER

ANCHOR BOLTS BY OTHERS

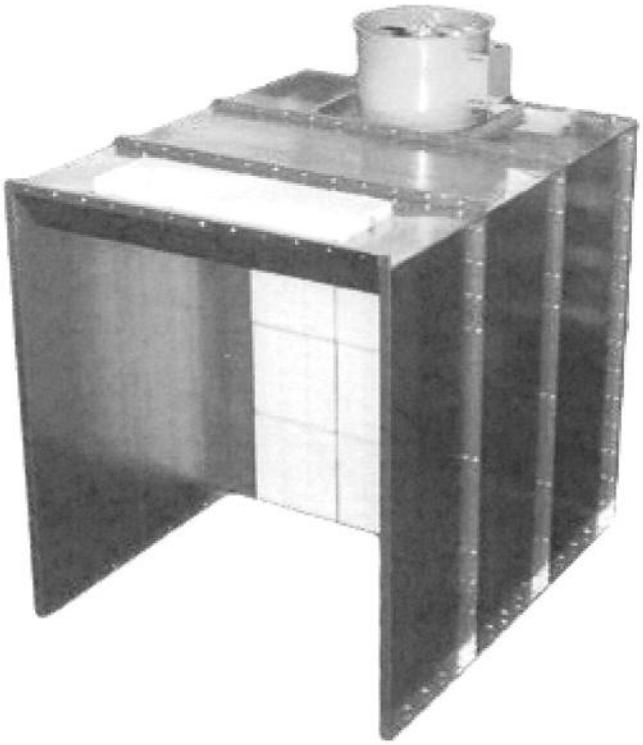
Auto Body TOOLMART
1-800-382-1200

BOOTH LAYOUT
AUTO BODY TOOLMART

COL-MET
Engineered Finishing Solutions

Installation Manual
Industrial Booths

Class I



>> Open Front Booths - IB

>> Open Front Bench Booths - IBB

>> Enclosed Industrial Booths - EIB

>> Industrial Exhaust Chamber - IBC

>> Exhaust Bench - EB

This Installation Manual reviews an introduction, safety, component description, installation, maintenance and warranties of Col-Met's industrial spray booths.

888-452-6684
www.colmetsb.com

Revised November 2016

Contents

Introduction

1.1 Introduction

Thank you for purchasing a Col-Met spray booth. Please read and understand this manual before using your booth and follow all of the safety instructions. Please be sure to keep this manual with your booth at all times.

This manual explains the assembly and routine maintenance of the Col-Met spray booth and covers the following:

- >> Open Front Booths - IB
- >> Open Front Bench Booths - IBB
- >> Enclosed Industrial Booths - EIB
- >> Industrial Exhaust Chambers - IBC
- >> Exhaust Bench - EB

The spray booth itself consists of four major components: paint area, exhaust fan and chamber, product doors and, in some cases, an air makeup unit. A brief description is provided for these and other related items.

The text contained in this manual is for current production models. Some instructions and maintenance procedures may not apply to your specific unit.

Equipment modifications from original design and specifications are strictly prohibited. Modifications may compromise safe operation of the booth, subjecting users to serious injury or death and may void any remaining warranty.

This Operator's Manual does not replace, nor does its use release the operator from observing all safety or operating limitations as well as any applicable federal, state, provincial or local regulations.

1.2 Receiving, Unpacking, And Reporting Missing Items

Check for damage when receiving and unloading equipment. Note on Bill of Lading "FREIGHT DAMAGE." Notify the Col-Met customer service department immediately of any damage.

Unpack all items and verify on packing list within ten (10) days of receipt. Notify Col-Met customer service department of missing items and discrepancies immediately. Col-Met will not pay for overnight freight on shorted items. If overnight freight is necessary, the buyer shall be accountable for freight costs.

For quality control, Col-Met's Shipping Department photographs all items as they are packed.

Per company policy, two independent checks are performed to verify each item against the packing list. If Col-Met determines that the reported shortage was checked off in our records, replacement parts will be shipped AND invoiced accordingly.

Items that can be shipped UPS usually take one to three days to receive, depending on distance. Items too large for UPS will ship via common freight. This shipping method typically takes from one to five days to reach the destination.

During the warranty period, Col-Met will repair or replace, free of charge, any parts that Col-Met has verified to be defective in materials or workmanship. If inspection of the equipment does not disclose any defect in workmanship of material, repairs will be made at a reasonable charge, which will include the costs of labor, materials and transportation.

2. Safety

2.1 Safety Alert Symbol And Signal Words

Before assembling, operating or servicing the spray booth, you must read, understand and follow the instructions and safety warnings in this manual. Your spray booth may not be equipped with some of the optional equipment described in this manual.

NEVER ALLOW ANYONE TO OPERATE THIS EQUIPMENT WITHOUT PROPER TRAINING!

The safety information in this manual is denoted by the safety alert symbol: ⚠

The level of risk is indicated by the following signal words:

⚠ DANGER
DANGER - Indicates a hazardous situation, which, if not avoided, WILL result in death or serious injury.

⚠ WARNING
WARNING - Indicates a hazardous situation, which, if not avoided, could result in death or serious injury.

⚠ CAUTION
CAUTION - Indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury.

NOTICE
NOTICE - Indicates a situation that could result in damage to the equipment or other property.

2.1.1 Assembly Hazards

⚠ WARNING

Prevent serious injury or death.

Overriding a safety system may result in unsafe equipment, which may result in serious injury or death.

Do not override safety devices.

⚠ WARNING

Blade hazard. Keep hands clear of rotating parts.

Follow lockout procedure before servicing.

⚠ WARNING

Prevent serious injury or death.

Use adequate lifting devices to raise, move and install booth components.

⚠ WARNING

Prevent serious injury or death.

Electrical installations must be performed by qualified electricians.

Installation must conform to all national, local, and provincial codes and standards.

2.1.2 Operational Hazards

⚠ WARNING

Prevent serious injury or death.

Do not operate machine with guards and/or covers open or removed.

⚠ WARNING

Prevent serious injury or death.

Only trained and qualified personnel may operate booth.

⚠ WARNING

Prevent serious injury or death.

Never operate spray booth while under the influence of drugs, alcohol or while feeling ill.

⚠ WARNING

Prevent serious injury or death.

Always wear personal protective equipment (PPE) appropriate for job.

Read Material Safety Data Sheet for products used in spray booth.

⚠ WARNING

Shock hazard.

Only a qualified electrician may open electrical control cabinet.

Disconnect and lockout / tagout all power sources before adjusting, repairing, or cleaning booth.

2.1.3 Maintenance Hazards

⚠ WARNING

Prevent serious injury or death.

Disconnect and lockout / tagout all power sources before adjusting, repairing, or cleaning booth.

⚠ WARNING

Prevent serious injury or death.

Service, maintenance and adjustments must be performed by trained and qualified personnel.

⚠ WARNING

Burn hazard. Do not touch hot parts.

Allow to cool before servicing.

⚠ WARNING

Prevent serious injury or death.

Always wear personal protective equipment (PPE) appropriate for job.

Read Material Safety Data Sheet for products used in spray booth.

2.1.4 Fire Hazard

No smoking or open flame in or near spray booth. Local fire codes prohibit smoking in the vicinity of spray painting operations.

⚠ WARNING

Explosion and fire hazard.

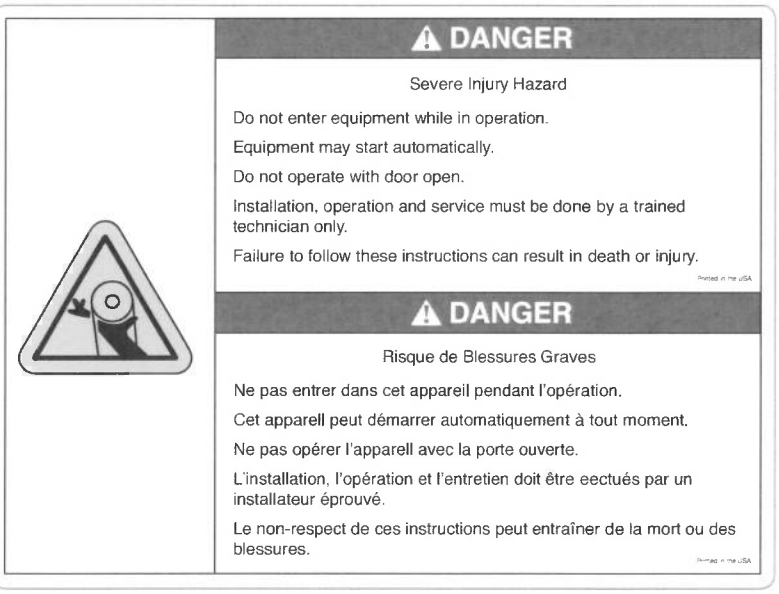
No smoking or open flame within 50 feet of spray booth.

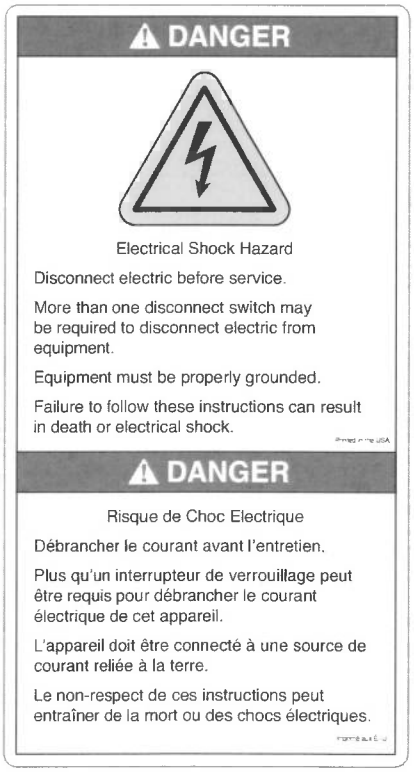
Do not store flammable liquids adjacent to or inside spray booth. Read all product labels and instructions.

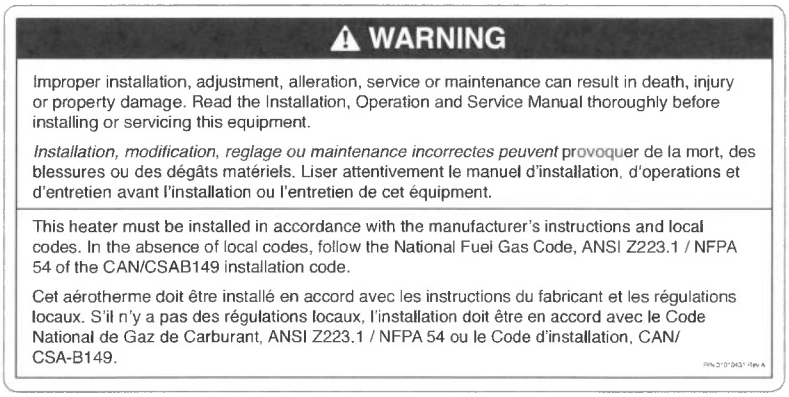
Do not use any electric powered airless spray rigs, pressure washers or similar equipment when applying a low flash point solvent or peel coating. Run spray booth exhaust fan to purge dangerous vapors that could ignite or explode while cleaning or performing maintenance inside spray booth.

AN APPROVED FIRE PROTECTION SYSTEM MUST BE INSTALLED ON YOUR SPRAY BOOTH TO COMPLY WITH NFPA 33, SECTION 9. PORTABLE FILE EXTINGUISHERS MUST BE LOCATED IN OR AROUND YOUR PAINT MIX ROOM PER NFPA 10.

2.2 Safety Decals







⚠ WARNING

To protect you and others against death or serious injury, all applicable labels shown must be on the booth and must be legible.

If any of these labels are missing or cannot be read, contact your Col-Met for replacement labels.

2.3 NFPA 33 Standards for Spray Application

Reprinted with permission from NFPA 33-2016, Standard for Spray Application Using Flammable or Combustible Materials, Copyright © 2010, National Fire Protection Association, Quincy, MA. This reprinted material is not the complete and official position of the NFPA on the referenced subject, which is represented only by the standard in its entirety. The following is section 10 from NFPA 33:

10.1 General. Maintenance procedures shall be established to ensure that all spray application apparatus and processes are operated and maintained in accordance with the manufacturers specifications and the requirements of this standard. Maintenance shall be the responsibility of the users of the apparatus and processes.

10.1.1 Spray application operations shall not be conducted outside predetermined spray areas.

10.1.2 Inspection of extinguishing systems shall be conducted to ensure that the performance of the extinguishing system components will not be affected by overspray and residues.

10.2 Combustible Deposits.

10.2.1 All spray areas shall be kept free of excessive accumulation of deposits of combustible residues.

10.2.2 Combustible coverings (thin paper, plastic) and strippable coatings shall be permitted to be used to facilitate cleaning operations in spray areas.

10.2.2.1 Where plastic covering is used, it shall be of a static dissipative nature or shall have a maximum breakdown voltage of 4 kV to prevent accumulation of a hazardous static electric charge.

10.2.3 If residue accumulates to excess in booths, duct or duct discharge points, or other spray areas, all spraying operations shall be discontinued until conditions have been corrected.

10.3 High-Pressure Hose Lines. High-pressure hose lines that convey flammable or combustible coating material in "airless" spray application operations shall be inspected daily and shall be repaired or replaced as necessary. Hose lines and equipment shall be located so that, in the event of a leak or rupture, coating material will not be discharged into any space having a source of ignition.

10.4 Maintenance Procedures

10.4.1 Overspray collectors shall be inspected daily and clogged filters shall be discarded and replaced. Maintenance procedures shall be established to ensure that overspray collector filters are replaced before restriction to airflow is reduced below the minimum established by Section 7.2.

10.4.2 At the close of the day's operation, all discarded overspray collector filters, residue scrapings, and debris contaminated with residue shall be removed immediately to a designated storage location, placed in a noncombustible container with a tight-fitting lid, or placed in a water-filled metal container.

10.5 Waste Containers.

10.5.1 Approved waste containers shall be provided wherever rags or waste are impregnated with sprayed material, and all such rags or waste shall be deposited therein immediately after use. The contents of waste containers shall be placed in a designated storage location.

10.5.2 Waste containers containing flammable liquids shall be located in ventilated areas that meet the requirements of Chapter 7. Such areas shall also meet the electrical area classification requirements of 6.5.5.

10.5.3 Waste containers for flammable liquids shall be constructed of conductive materials and shall be bonded and grounded.

10.5.4 Waste containers for flammable liquids shall be handled and stored in accordance with Chapter 8.

10.6 Clothing. Employees' clothing contaminated with sprayed material shall not be left on the premises overnight unless kept in metal lockers.

10.7 Cleaning Operations.

10.7.1 Scope. This section shall apply to the use of flammable or combustible liquids for the flushing and cleaning of equipment.

10.7.2 Liquids. Class I and Class II liquids used in cleaning operations shall be in original shipping containers or in listed safety containers.

10.7.3 Location. Cleaning operations using flammable or combustible liquids shall be conducted inside a spray area with ventilating equipment operating or in ventilated areas that meet the requirements of Chapter 7. Such areas shall also meet the electrical area classification requirements of 6.5.5.

10.7.4 Equipment. Equipment using flammable or combustible liquids shall meet the requirements of 6.5.5 and shall be bonded and grounded.

10.7.5 Manual Cleaning. Individual manual cleaning operations shall be limited to not more than 4 L (1 gal) of flammable or combustible liquid for each cleaning operator.

10.7.6 Liquid Storage. Flammable and combustible liquids shall be handled and stored in accordance with Chapter 8. Containers used for handling, storage, or recovery of Class I liquids shall be constructed of conductive materials and shall be bonded and grounded.

10.8 Solvent Distillation Units (Solvent Recyclers).

10.8.1 Scope.

10.8.1.1 Section 10.8 shall apply to solvent distillation units having distillation chambers or still pots that do not exceed 227 L (60 gal) capacity and are used to recycle Class I, Class II, and Class IIIA liquids. [30:19.6.1.1]

10.8.1.2 This section shall not apply to research, testing, or experimental processes; to distillation processes carried out in petroleum refineries, chemical plants, or distilleries; or to distillation equipment used in dry cleaning operations. [30:19.6.1.2]

10.8.2 Equipment. Solvent distillation units shall be approved or shall be listed in accordance with ANSI/UL 2208, Standard for Solvent Distillation Units. [30:19.6.3]

10.8.3 Solvents. Solvent distillation units shall only be used to distill liquids for which they have been investigated and that are listed on the unit's marking or contained within the manufacturer's literature. [30:19.6.3]

10.8.3.1 Unstable or reactive liquids or material shall not be processed unless they have been specifically listed on the systems markings or contained within the manufacturer's literature. [30:19.6.3.1]

10.8.4 Location [30:19.6.4]

10.8.4.1 Solvent distillation units shall only be used in locations in accordinance with their approval or listing.

10.8.4.2 Solvent distillation units shall not be used in basements.

10.8.4.3 Solvent distillation units shall be located away from potential sources of ignition, as indicated on the unit's marking.

10.8.5 Liquid Storage. Distilled liquids and liquids awaiting distillation shall be stored in accordance with Chapter 6 of NFPA 30.

10.9 Spontaneous Ignition Hazards. The same spray booth shall not be alternately used for different types of coating materials if the combination of the materials is conducive to spontaneous ignition, unless all deposits of the first-used coating material are removed from the booth and exhaust ducts prior to spraying with the second coating material.

10.10 Chlorinated Solvents. Coating materials containing chlorinated solvents shall not be used with spray application apparatus or fluid-handling equipment if the chlorinated solvent will come into contact with aluminum within a piping system, pump, enclosed container, or any enclosure that is capable of being pressurized by the potential reaction. This shall apply even if the container or system has been constructed with pressure relief devices.

10.11 Smoking. Signs stating NO SMOKING OR OPEN FLAMES in large letters on contrasting color background shall be conspicuously posted at all spray areas and paint storage rooms.

10.12 Hot Work. Welding, cutting, and other spark producing operations shall not be permitted in or adjacent to spray areas until a written permit authorizing such work has been issued. The permit shall be issued by a person in authority following his or her inspection of the area to ensure that precautions have been taken and will be followed until the job is completed.

3. Component Description

3.1 Compliance To Applicable Codes

This spray booth is designed to be in strict accordance with the National Fire Protection Association Standard Number 33, "Spray Application Using Flammable Combustible Materials. The NFPA Standard Safety Code for the Design, Construction and Ventilation of Spray Finishing Operations." This spray booth meets or exceeds the requirements of the Occupational Safety and Health Administration (OSHA).

3.2 Material Specifications

The spray booth panels, filter racks and product doors are constructed of 18-gauge steel, conforming to ASTM A653 "Lock Forming Quality". All structural steel channel and angle conform to ASTM A36.

3.3 General Description

The spray booth consists of four major components: paint area, exhaust fan and chamber, product doors and, in some cases, an air makeup unit. A brief description is provided for these and other related items.

3.3.1 Paint Area

The paint area is the actual "booth" part of the spray booth. Parts are placed in this area, through product doors, if so equipped, to be painted. Air flows from the intake filters of the booth to the exhaust filters. The booth is constructed of 18-gauge galvanized sheet metal panels which are bolted together. The booth exhaust is routed through the exhaust plenum at the exit of the booth. The exhaust fan then routes the exhaust out through the exhaust duct and discharges it at a point above the roof height of the building.

3.3.2 Exhaust Fan And Chambers

The booth exhaust chamber(s) is/are located as shown in the mechanical drawing package included with this manual. Gases are exhausted through the exhaust duct by an electrically powered fan. The fan is made of spark resistant material and the motor is located out of the air stream. The exhaust chamber(s) operate(s) under a negative pressure to induce the required airflow through the exhaust filters.

3.3.3 Product Doors

The product doors can be filtered or solid and may be either overhead doors, bi-fold doors, or tri-fold doors. Some industrial spray booths have an open front in lieu of product doors. Overhead doors are equipped with an intrinsically safe pneumatic safety edge. There are two 3-button controls to operate each door. Doors may also be manually operated.

3.3.4 Door Latch

Door latches secure doors in closed position and hold contact against rubber seal. Latches are pressure relief latches that allow doors to open in case of explosion. This feature also allows for ease of booth operator egress from the spray booth by applying moderate pressure to the door from inside the booth.

3.3.5 Door Limit Switch

Optional limit switch to indicate when a door is open on the booth. If a door is in the open position, micro switch contact is opened which breaks the circuit for the paint air solenoid.

3.3.6 Air Makeup Unit (Optional)

The air makeup unit (AMU) supplies filtered, heated atmospheric air. This unit may be heated by natural gas, LP gas, steam coils or hot water coils. The temperature of the AMU discharge air is controlled by a temperature controller. The airflow capacity of the fan and motor are matched to the airflow capacity of the spray booth exhaust fans. Some air makeup units also have the capability to provide a paint cure cycle. This cycle, employed after the paint spraying operations are complete, typically involves supplying air that is heated to the paint area of the booth to decrease paint cure times.

3.4 Exhaust Filter Manometer

Manometer is used to measure pressure drop across exhaust filters to indicate the condition of the filters.

3.5 Air Solenoid Valve

The function of this valve is to interrupt supply of compressed air to painting equipment under certain conditions. This is done to prevent painting from occurring when the booth is not operating as designed or if any booth doors are open. The air solenoid valve is electrically interlocked with booth intake and exhaust fans. If optional switches are purchased, it is also interlocked with product doors and personnel doors. If a fan is not operating properly, or if a door is open, the air solenoid valve will shut off flow of pressurized air to spray gun.

Unit should be installed downstream of any regulators and filters and upstream of painting equipment. It should be located near fitting to which painting equipment connects in order to ensure rapid loss of supply pressure.

3.6 Control Panel

The spray booth may be equipped with an optional electrical control panel. Electrical schematics are located inside the control panel. Also shown on this drawing is the wiring required for installation. No spare parts are provided with control panel. Panel and its associated wiring must be installed by a licensed electrician. The cabinet that houses controls is either NEMA 1 or NEMA 12 rated. It is not suitable for installation in a Class I, Division II area. Refer to Chapter 6 in the NFPA 33 Standard and consult with the local authority having jurisdiction for definition of this area for paint spray booth.

4. Installation

4.1 General

This manual is a guide for installing a variety of spray booths. The assembly drawings enclosed are specific for the booth you have purchased. This drawing is an exploded isometric drawing showing the relationship of each panel or part to the next one. A packing list of all components is provided and must be used in addition to the drawing to identify all components.

All DAMAGES MUST be reported within 24 hours of receipt and a freight claim filed with the carrier.

4.2 Preliminary

Col-Met booths are manufactured in accordance with NFPA 33 standard for spray application using flammable or combustable materials. However, local codes and regulations may apply to the installation and use of this product. All permits and approvals should be obtained prior to installation and use of the spray booth.

1. Uncrate and inventory all spray booth components to ensure all of the parts are accounted for. Each component is numbered on the exploded view.
2. The floor surface of the booth must be non-combustible material of such character as to facilitate the safe cleaning and removal of residues. The floor surface must be flat and level.
3. Mark the dimensional outline of booth on floor.
4. Follow the step-by-step instructions provided.

4.2.1 Recommended Booth Layout Tools

>> Chalk line or self-leveling 5-way laser

>> Tape measure

>> Marker

>> Framing square

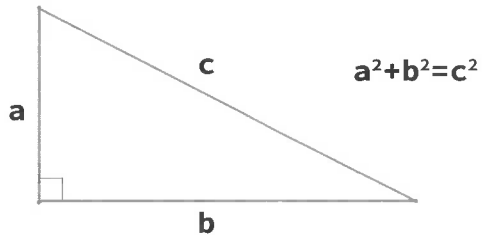
Use the 3-4-5 method (Pythagorean Theorem) $A^2 + B^2 = C^2$ for a right triangle to layout and square the booth. C is the longest side (hypotenuse) and A and B are the two shorter legs. If a triangle has sides measuring 3, 4 and 5 feet (or any other unit), it must be a right triangle with a 90° angle between the short sides. You can multiply each number by the same amount and still use this method. For example let's say that the booth width being installed is 9' I.D., use a multiplier of 3 to achieve the 9' I.D. working width of the booth for your first line (A^2) and the right triangle will consist of the following dimensions:

>> $3 \times 3 = 9$ (first line A^2)

>> $4 \times 3 = 12$ (second line B^2)

>> $5 \times 3 = 15$ (third line C^2) Step one:

Locate a building drawing showing the booth in the building.



4.2.2 Booth Layout Steps

Step 1:

Locate a building drawing showing the booth in the building.

Step 2:

Locate a dimension shown from a reference point such as outside wall, pit, conveyor, building structure, other equipment, etc. to the inside dimension of spray booth.

Step 3:

Using a chalk line, mark that dimension at two points along a wall (reference point example) and snap a line on the floor.

Step 4:

Locate the back of the booth and make a mark on the first line that was snapped for the first corner of the booth (I.D.), using 9' as the first line dimension (A^2 example) make another mark at 9' for the back wall of the booth

Step 5:

Using 12' as our second line dimension (B^2 example) make another mark at 12' from one of the corner markings of the back wall off of the first line snapped. When doing so, be sure to stay as square as possible. This is when a framing square comes in handy. Once marked, snap the second line.

Step 6:

Using 15' as our third line dimension (C^2 example) mark and scribe an arc crossing the end of the second line snapped from the opposing corner marking of the back wall off of the first line snapped. This mark is now perfectly square to the back wall of the booth. Snap the third line between these two marks.

Step 7:

Pull two points off of the third line and snap a fourth line marking the interior work area of the booth. Now that the square interior of the booth is complete, proceed with the rest of the booth (exhaust chambers, fans, air make-up unit etc.) to verify that all components are placed as planned without obstruction.

Step 8:

Using a laser, verify building clearance, fan ductwork and air makeup unit (if applicable) orientation.

Step 9:

Using a laser, verify that the floor is level. Any area that will have more than a ¼" gap will need to be shimmed.

Step 10:

Double check the entire layout for accuracy and to prevent losing your layout, spray clear coat over it before beginning the booth installation.

4.2.3 Recommended Booth Installation Tools

>> Step ladders (4', 6' and 8') and multi-use ladder
>> Wrench and socket sets (1/2", 9/16" and 3/4" most common)
>> Screw driver set
>> Allen wrenches
>> Hammer and dead blow
>> Alignment pins and pry bar
>> Level (magnetic)
>> Caulk gun and utility knife
>> 1/4" and 3/8" drive cordless impacts
>> 1/2" drive drill
>> Drill bits and uni-bit/ step-bit
>> Hammer drill (SDS)
>> Metal nibblers/ cutters
>> Cut-off saw
>> Welding and plasma machines

4.3 Planning Ahead

1. Clearances between other work areas and combustible storage areas must be held as follows:
   >> 3 ft. minimum clearance at all sides and sealed entry ways (i.e., door ways).
   >> 3 ft. minimum clearance at all non-sealed entry ways (i.e., the open face of spray booth or a silhouette openings).
   >> 10 ft. minimum clearance must be held between the exhaust stack of the booth and the intake of another apparatus. NFPA 33 dictates a minimum discharge clearance of 3 ft. from the nearest combustible material; however, stack height requirements vary with individual states and can be up to 1½ times the building's roof height from grade.
2. Permits are not included. It is the responsibility of the end user to acquire all permits to install a booth.
3. A FIRE SUPRESSION SYSTEM IS NOT INCLUDED WITH THE BOOTH BUT IT IS REQUIRED. Generally this is supplied and installed by a licensed local installer.
4. Electrical installation must be performed by a licensed electrician familiar with national, local electrical codes and regulations in your location.

4.4 Booth Assembly

When assembling the booth, leave bolts finger tight until the entire booth is assembled. All flanges should face outward. Install bolts from inside so nut is outside of the booth. Use a drift pin to align panel holes when two or more panels are difficult to align by hand.

Lay out all floor channel for exhaust chamber and walls. As you attach wall panels together, they will also bolt to the floor channel.

⚠ WARNING

Prevent serious injury or death.

Most booth components weigh 50-500 lbs.

Use adequate lifting devices to raise, move and install booth components.

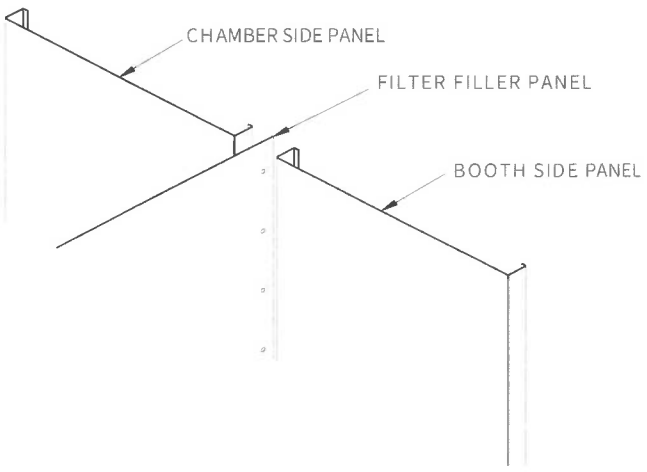
NOTICE

Prevent equipment damage.

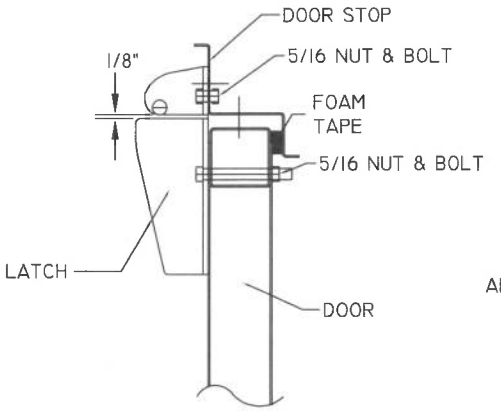
Spray booth roof will not support a person. Do not attempt to stand or walk on spray booth roof.

Refer to exploded view drawings included with your spray booth.

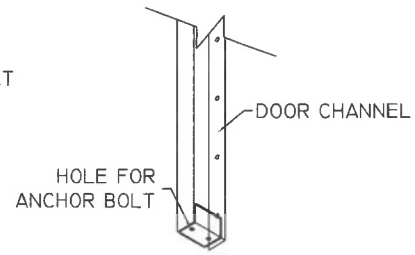
1. Starting with exhaust chamber at either rear corner, bolt one corner panel and one rear wall corner panel together (use tie channel where applicable).
2. Bolt opposite rear sidewall panel to rear wall panel.
3. Bolt all rear wall panels in place.
4. Bolt tie channel along top edge of rear wall panels.
5. Place exhaust fan panel above side and rear wall panels and bolt in place.
6. Insert filter filler panels between sidewall, roof panels and exhaust chamber. Bolt in place.
7. Following exploded view drawings, continue alternately assembling wall panels and roof panels to each other until you reach front end of booth. Finish off roof section by attaching fire curtain if needed. If booth has front doors, no fire curtain is needed.



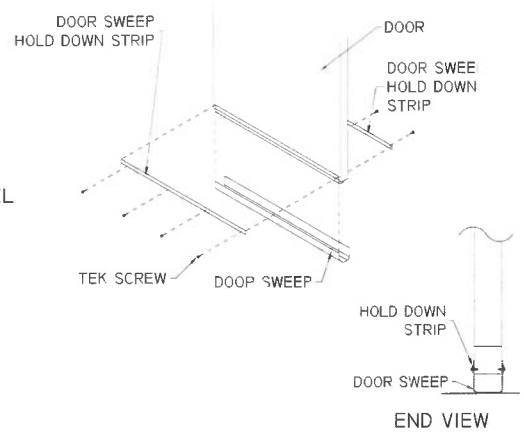
8. Verify walls are plumb and booth is square and on floor layout marks. Tighten all mounting hardware.
9. Anchor floor channel to floor at a minimum of every 12 inches.
10. Caulk all panel joints inside the booth with the caulk provided. Do not use a silicone caulk.
11. If booth is supplied with a personnel door or product doors, apply gasket to perimeter of all door openings. Attach door hardware and adjust latches. Level door with doors off, then attach doors to hinges.



DOOR LATCH AND SEAL DETAIL

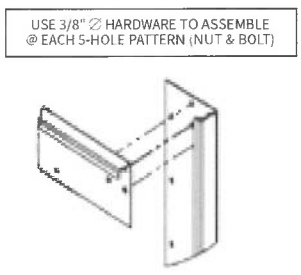


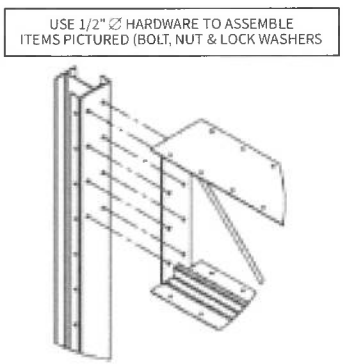
DOOR FRAME BASE DETAIL

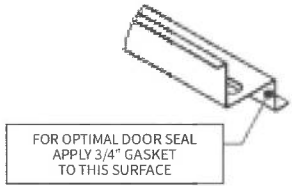


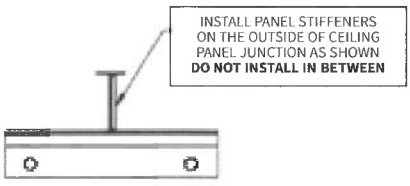
PRODUCT DOOR DOOR SWEEP DETAIL

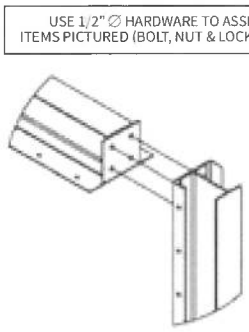
12. Other installation that may apply to your type of booth











4.5 Lights

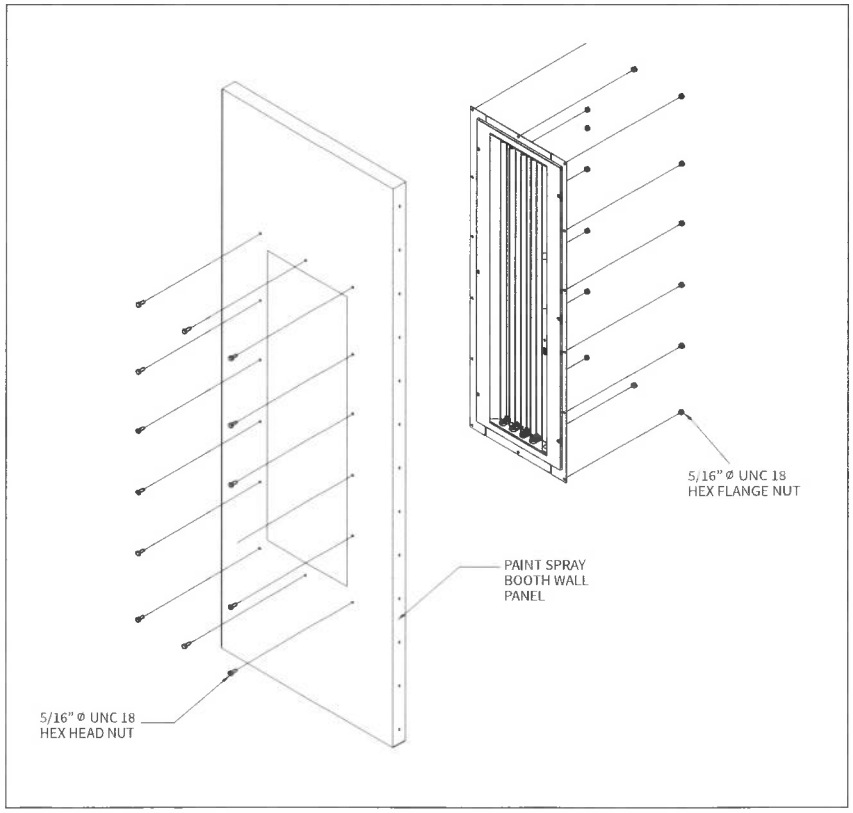
⚠ WARNING

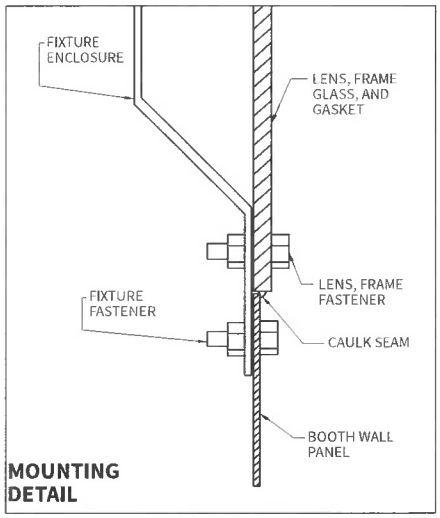
Prevent serious injury or death.

Electrical installations must be performed by qualified electricians.

Installation must conform to all national, local, and provincial codes and standards.

1. Place light fixture into booth panel, center in opening, and bolt in place.
2. Install light fixture in panel from outside of booth as shown in drawing.
3. Caulk perimeter of light fixture lens frame with appropriate caulking.
4. The fixture is provided with an interlock switch that has a normally open contact, which opens when the fixture lens is removed from fixture. The switch is to be wired to disable spray equipment used in spray booth.





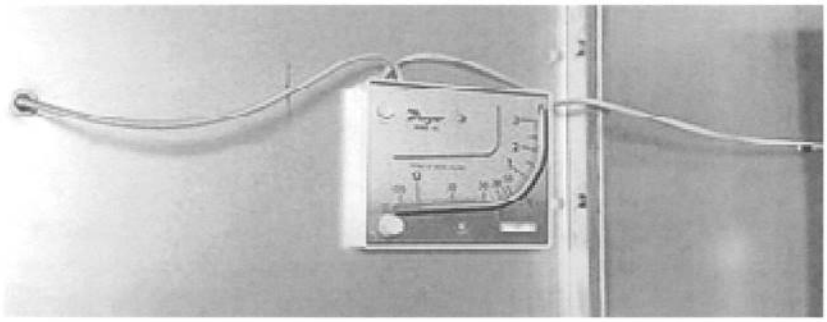
MOUNTING DETAIL

CAUTION:
WHEN TIGHTENING LENS FRAME FASTENERS, TIGHTEN USING HAND TOOLS ONLY. TIGHTEN UNTIL SIDES OF METAL LENS FRAME MAKES CONTACT WITH FIXTURE ENCLOSURE. OVER TIGHTENING WILL CAUSE LENS FRAME TO WARP AND WILL BREAK DOWN VAPOR SEAL OF LENS

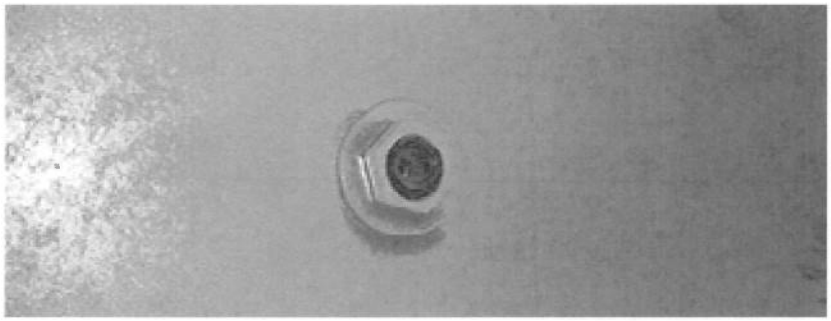
4.6 Manometer

Locate manometer on the exhaust chamber so that hardware is not visible inside the booth and where it can easily be viewed daily.

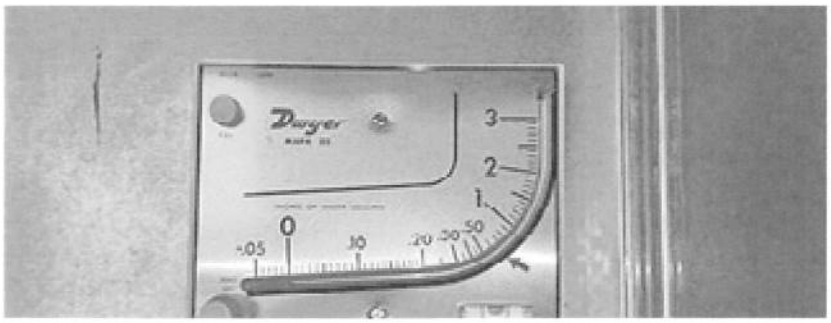
Install close to exhaust filter wall to keep tubing length to a minimum. Excess tubing length will reduce accuracy of the manometer. The high port will connect to work chamber, and the low port will connect to chamber on the suction side of the filter grid.



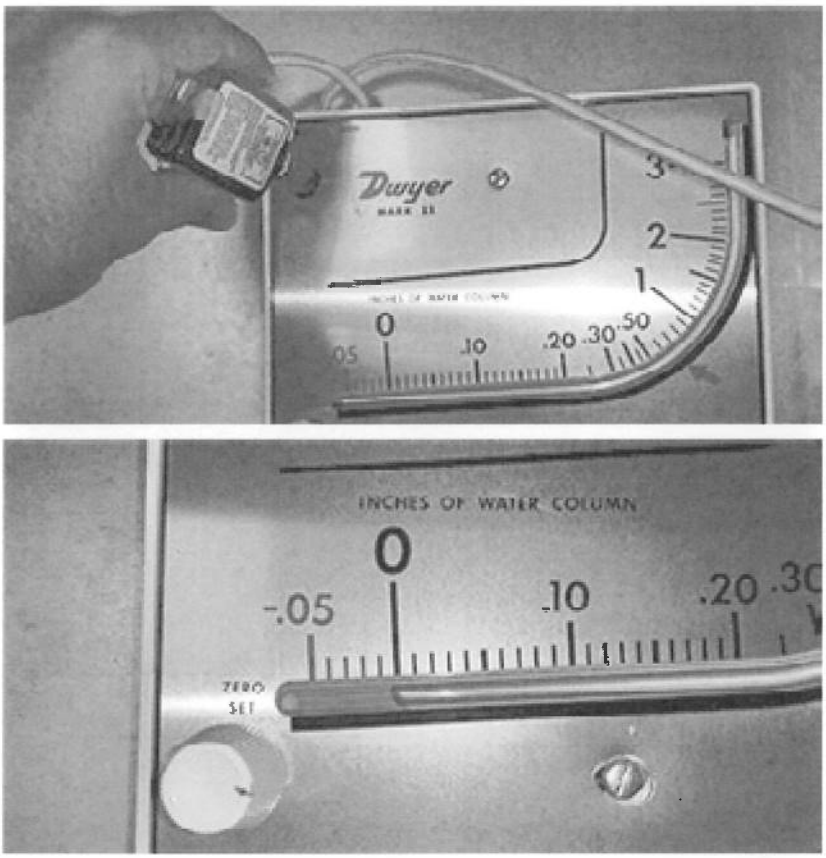
1. Drill a hole in booth wall just large enough for the plastic hose barb to fit through (approx. 13/32). Install washer and nut on back side. Do not over tighten.



2. Mount manometer on booth wall and ensure it is level using bubble level on manometer. Manometer must be level or it will not be accurate.



3. Turn "Zero Set" knob counter clockwise until it stops, then turn knob counter clockwise three full turns. This will place the adjustment knob in the middle of its travel range. Remove fill plug at top of manometer and slowly fill with red fluid. You will not need the entire bottle. Stop filling as soon as you can see the red fluid enter clear tube at bottom of the manometer. Turn "Zero Set" adjustment knob to set red fluid on 0 mark. If you overfill gauge, remove excess fluid by inserting a pipe cleaner through fill port to blot up excess oil. Once the red fluid is set on zero, replace the fill cap.



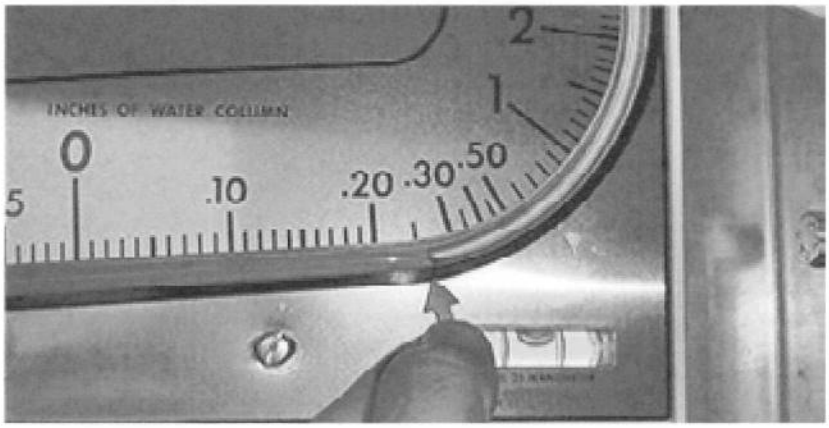
Complete booth assembly and then perform steps 4-6 to set manometer.

IMPORTANT: All filters in the booth must be installed and new in order to get an accurate baseline.

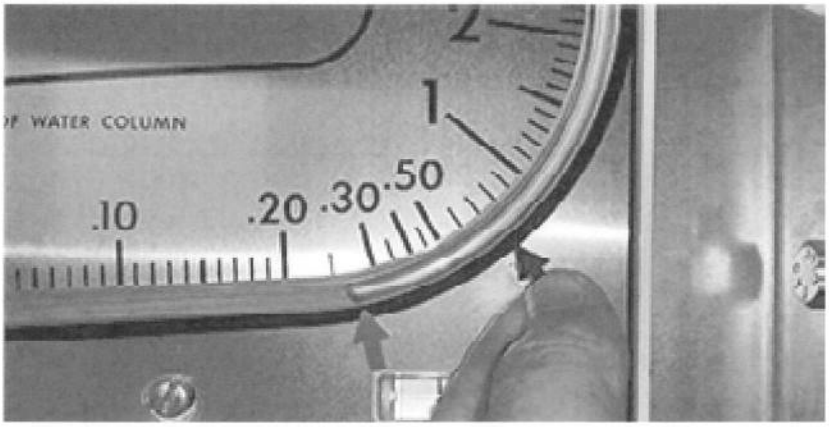
4. Turn on exhaust fan. If exhaust fan is connected to a VFD to control the speed of the fan, make sure it is set to run at full speed. You will notice the red fluid should move up the scale and then settle at a number. The number will be different from booth to booth, but that does not matter, this is just a baseline setting.

5. Wherever the red fluid stops is where you will place the green arrow. In this example, the red fluid stopped at .25 inches of water column. So because we know our filters are rated for .5 inches of water column, and we know that with clean filters the fan is drawing .25 inches of water column, we simply add the two numbers together to tell us where the filters will pack out.

   .25 inches of water + .5 inches of water = .75 inches of water total



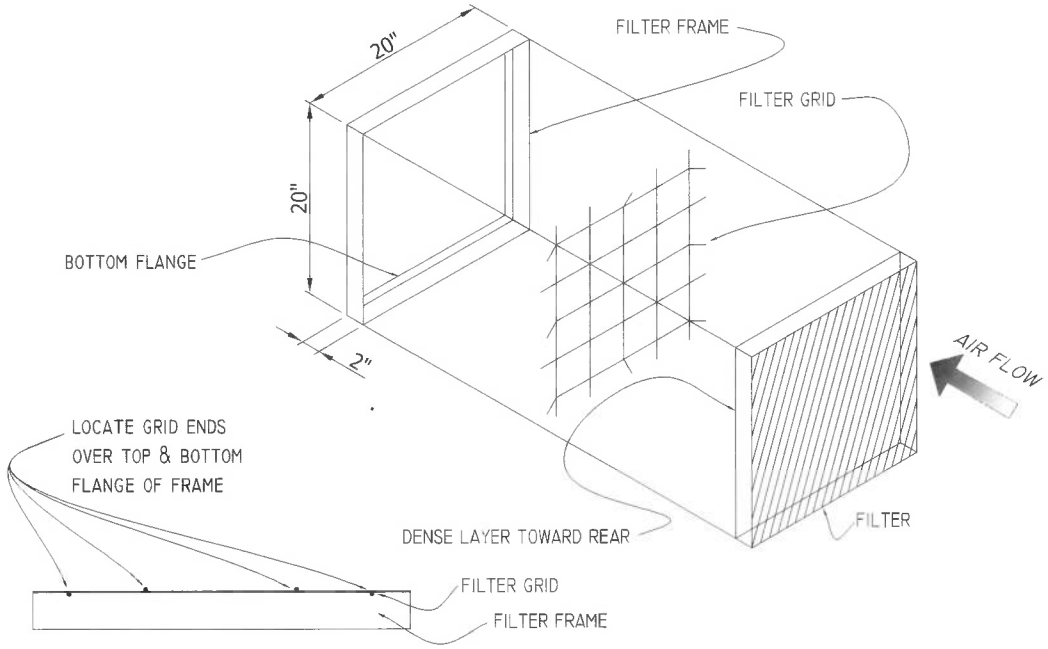
6. Now that baseline is set, measure up the scale .5 inches of water. That is where you will place the red arrow.



At this point, your manometer is set up and ready to use. You should never need to move the arrows once they are placed. Always check the manometer before turning the fan on to ensure the red fluid is sitting on the 0 mark. If the fluid is not on 0, turn "Zero Set" knob to adjust fluid to zero before starting fan.

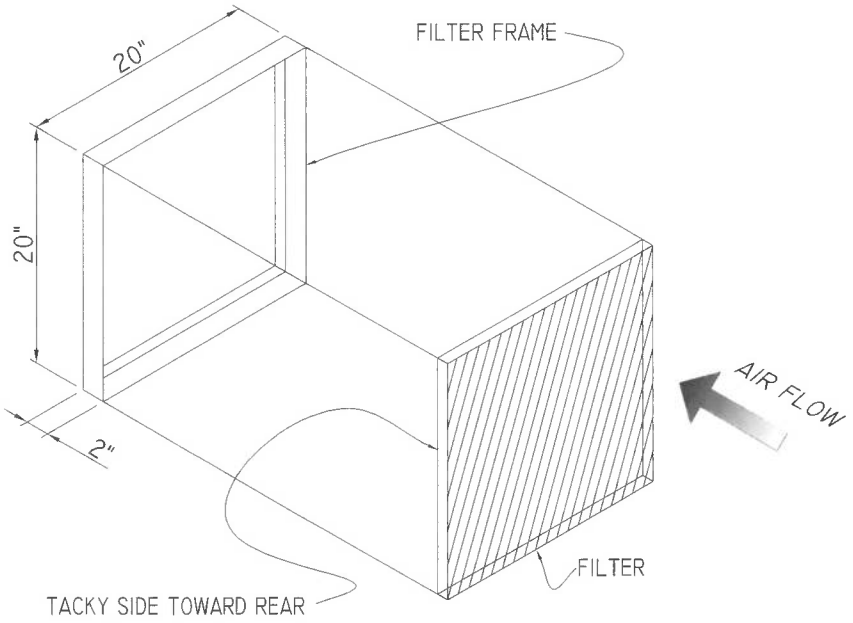
4.7 Exhaust Filter Installation

Install one wire grid in each filter cell with prongs facing into booth. Exhaust filters will be attached to prongs.



4.8 Intake Filter Installation

If booth has an intake plenum, insert intake filter into filter grid. The side marked "Air Leaving Side" on filter goes toward inside of booth.



4.9 Motor Installation

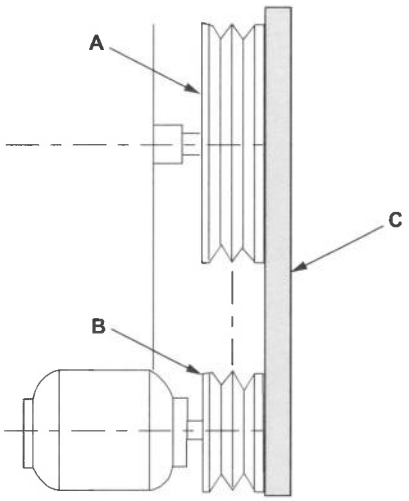
Couplings, drive belts, chains or other mounted devices must be in proper alignment, balanced and secure for safe motor operation.

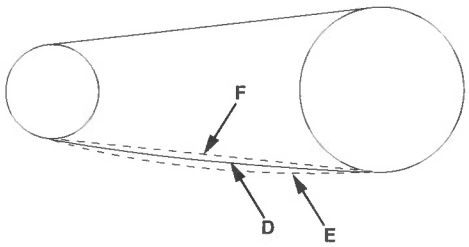
4.9.1 Mounting

This motor must be securely mounted. Sufficient ventilation must be provided to insure proper operation.

4.9.2 Install Sheaves And Fan Belts

1. The fan sheave (A) and motor sheave (B) must be in axial alignment. Shafts must be parallel in both vertical and horizontal planes.
2. The sheaves must be in radial alignment. When sheaves are of equal width, align with a straightedge (C). When sheaves are of unequal width, align center of sheaves.
3. Check fan belts for proper tension and for signs of wear. Belt should have a slight sag at bottom of sheaves. Belt (D) is properly adjusted. Belt (E) is too loose. Belt (F) is too tight.





4.9.3 Electrical

⚠ WARNING

Prevent serious injury or death.

Electrical installations must be performed by qualified electricians.

Installation must conform to all national, local, and provincial codes and standards.

Complete booth assembly and then perform steps 1-5 below to connect electrical service to motor.

1. Determine voltage at your facility. Col-Met does not recommend using 120V single phase on motors above 1HP.
2. If a control panel or motor starter was ordered with this booth, confirm that the voltage and phase on the control panel matches the voltage and phase you intend to use.
3. Locate the wiring diagram inside the control panel that matches your voltage, phase, and HP.
4. Some motors may have 2 additional red wires. These wires are for an internal thermal overload. We do not use these wires and they should be capped off with wire nuts or electrical tape.
5. Locate the rotation arrow on the fan and verify belts are rotating in the direction of the arrow. If the belts are not rotating in the direction of the arrow, reverse the motor.
6. To insure proper wiring refer to motor nameplate for wiring diagram.

4.10 Tubeaxial Fan

⚠ WARNING

Fan assembly is heavy.

Fan assembly weight is approximately 50 - 200 lbs., depending on model. Use an adequate lifting device to install fan assembly.

⚠ WARNING

Prevent serious injury or death.

Electrical installations must be performed by qualified electricians.

Installation must conform to all national, local, and provincial codes and standards.

The fan and motor assembly will bolt to fan panel.

4.11 Exhaust Duct Installation

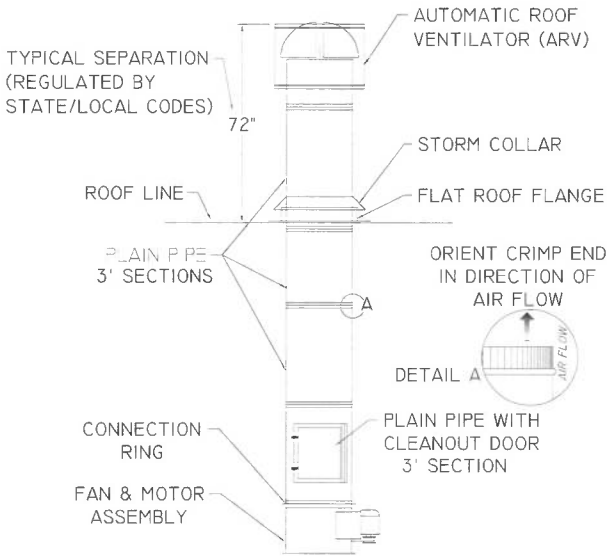
If equipped with optional exhaust ductwork, it is recommended to have this professionally installed.

To assemble ductwork:

1. Bolt pipe with connecting ring to the exhaust fan.
2. Remaining ductwork is crimped on one end to interlock with the next section. Crimped ends of duct shall be installed with the crimped edge pointed inward in the direction of airflow.
3. Your ARV (automatic roof ventilator) will be mounted on top.
4. Storm collar will attach to duct above flashing to make it weather proof.

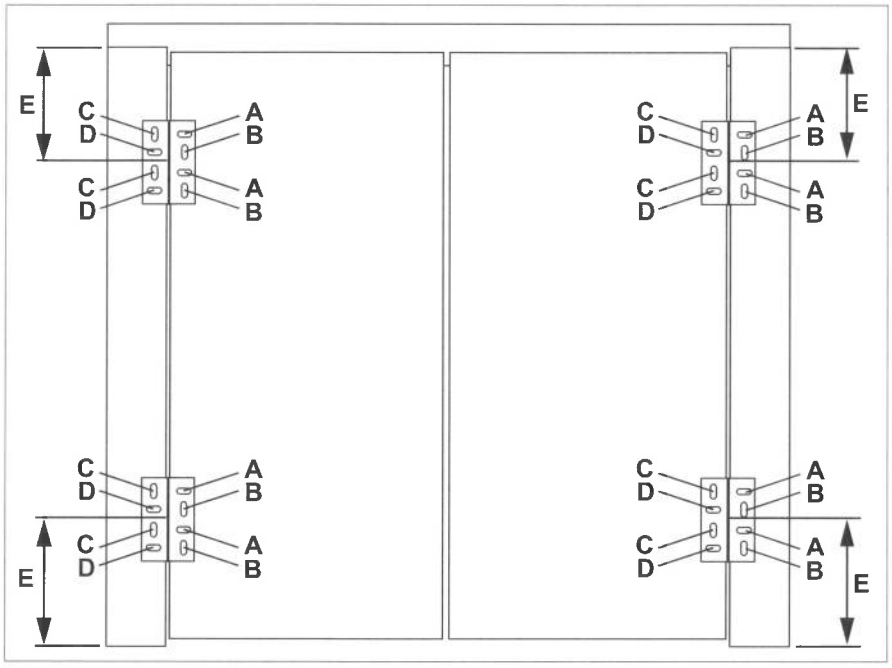
Where more than 25 ft. of piping is required, static pressure (resistance) is increased and the airflow may be hindered when using the standard exhaust unit recommended for use with the booth.

Where a piping arrangement of an unusual nature is necessary or where two or more elbows are used, a similar condition may exist. Therefore, if either of these situations arises, contact Col-Met for recommendations.



Exhaust piping, including the ARV (if used), should extend a minimum of 6 ft. above the highest point of building. There should be an access door just above exhaust unit.

4.12 Product Door



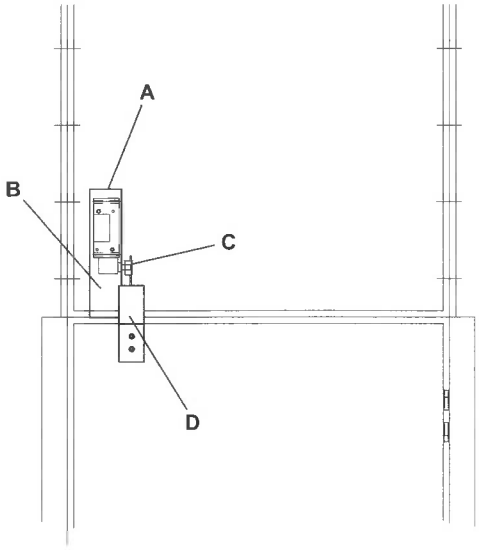
Side of door with 2 x 4 in. tube is the hinge side.

Before installing door, verify both door channels and top door stop installed properly and squared. Verify dimension between channels and floor to door stop with door drawing.

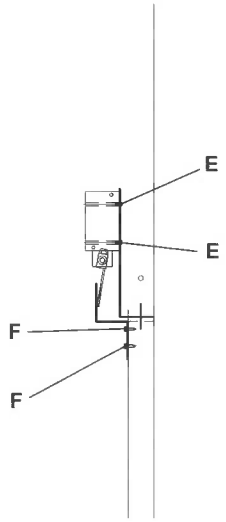
Install Left Door

1. Place spacers between door and floor. Door is manufactured to have a 1 in. clearance at bottom, 1/2 in. clearance on top and 1/2 in. clearance on sides.
2. Put hinges in place per dimension (E) on door drawing. Install screw in center of slots A and C on all hinges. Do not tighten screws at this time.
3. Adjust the door in all directions. Assure the door closes completely, then tighten screws.
4. Install screws in center of slots B and D.
5. Remove spacers.
6. Repeat steps 1-5 to install right door.

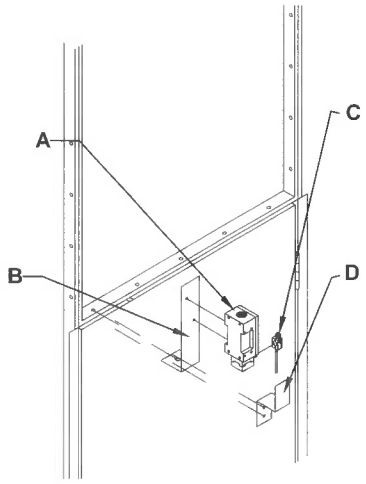
4.13 Access Door Limit Switch Installation

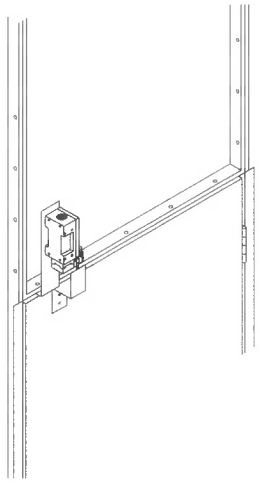


Front View



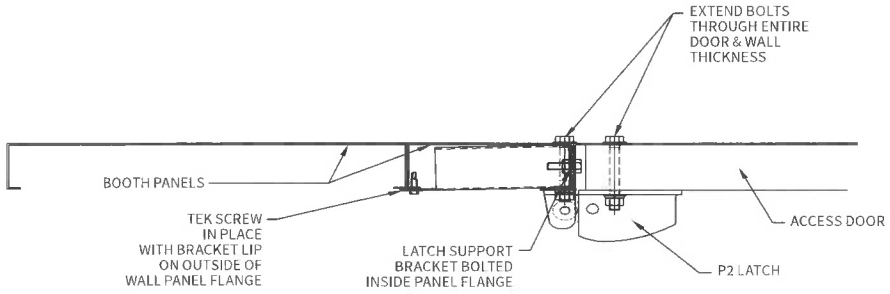
Side View

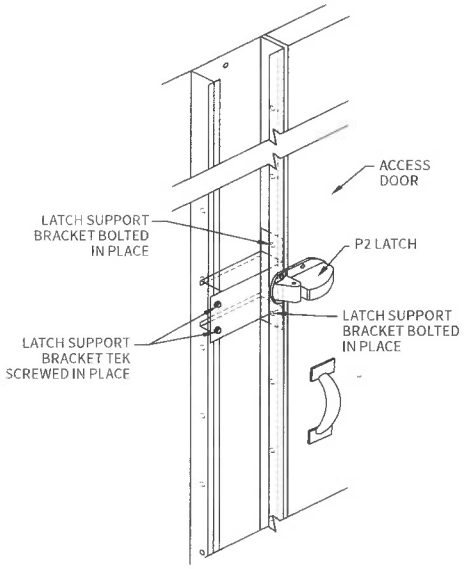


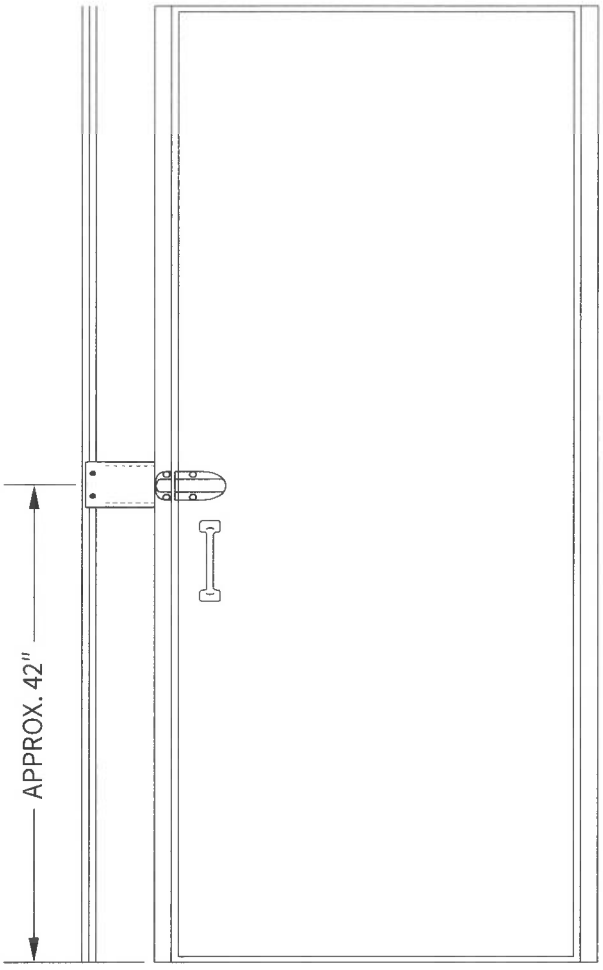


1. Bolt limit switch (A) to limit switch mounting bracket (B) with No.20 x 3/8 in. bolts (E).
2. Unbolt bolt in panel above access door on latch side and bolt the limit switch mounting bracket in place.
3. Measure and cut limit switch lever arm (C) to desired length.
4. Attach limit switch lever arm (C) to limit switch (A) (do not tighten set screw at this time).
5. Attach limit switch trigger plate (D) to door with self tapping screws (F) in front of limit switch lever arm.
6. Make final adjustments to lever arm to assure proper operation.
7. Tighten set screw on limit switch lever arm (C).

4.14 Access Door Latch Installation

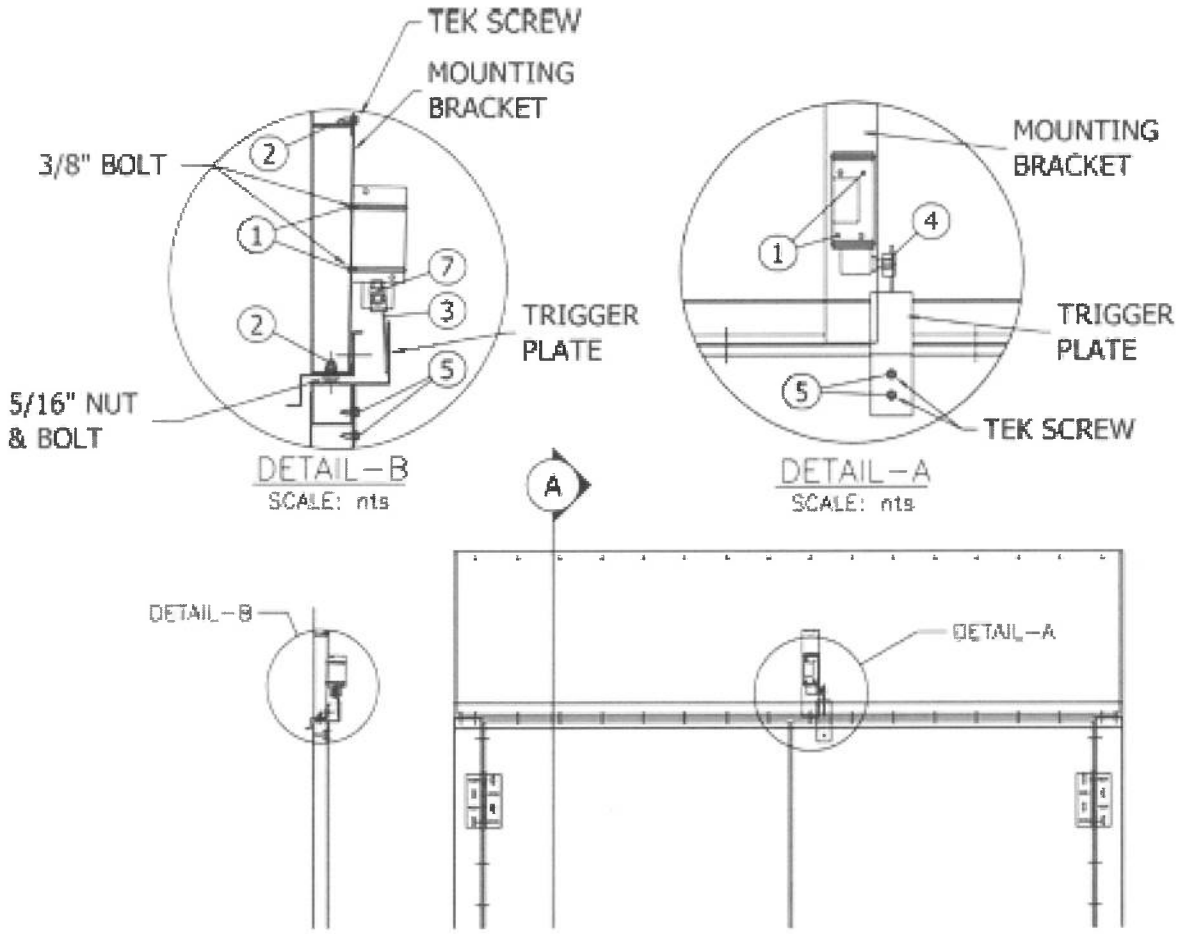






1. Unbolt two bolts that connect panel and door frame approx. 42" from the floor.
2. Insert door latch bracket into panel flange with the tail laying over the opposite panel flange.
3. Reinsert bolts and tighten.
4. Drill and bolt the P-2 latch striker plate through the door latch bracket and the wall panel.
5. Drill through the door and bolt the P-2 latch to it.
6. Tek screw the tail end of the door latch bracket to the other panel flange.

4.15 Product Door Limit Switch Installation



1. Bolt limit switch to limit switch mounting bracket with 3/8 in. bolts.
2. Unbolt bolt in panel and door stop above center of product door and bolt the limit switch mounting bracket in place. Tek screw the top of the bracket to the upper panel return, if present.
3. Measure and cut limit switch lever arm to desired length.
4. Attach limit switch lever arm to limit switch (do not tighten set screw at this time).
5. Attach the access door limit switch trigger plate to access door with self tapping v screws in front of limit switch lever arm.
6. Make final adjustments to lever arm to assure proper operation.
7. Tighten set screw on limit switch lever arm.

4.16 Checklist

Check the following items prior to start up:

1. Motors wired for proper voltage.
2. All fans and motors turn freely.
3. Lubricate all bearings.
4. Check installation of exhaust fan for proper airflow direction. Generally, exhaust fan airflow is out of booth.
5. Listen for excessive or unusual noise when booth is operating.
6. When door limit switches are applicable, operate the booth and open any door to see if spray gun will shut down. This will verify proper safety operation of the booth.

5. Maintenance

⚠ WARNING

Prevent serious injury or death.

Disconnect and lockout / tagout all power sources before adjusting, repairing, or cleaning booth.

⚠ WARNING

Prevent serious injury or death.

Service, maintenance and adjustments must be performed by trained and qualified personnel.

⚠ WARNING

Burn hazard. Do not touch hot parts.

Allow to cool before servicing.

⚠ WARNING

Prevent serious injury or death.

Always wear personal protective equipment (PPE) specific to the job.

Read Material Safety Data Sheet for products used in spray booth.

Review and follow all safety precautions before performing any maintenance.

5.1 Maintenance Interval Chart

Item	Maintenance Interval			
	Daily	Every Two Months	Every Six Months	Every Year
Visually Inspect Filters	•			
Lubricate Door Latches		•		
Check And Adjust Belt Tension*			•	
Inspect And Clean Motor				•
Inspect And Clean Air Solenoid Safety Valve				•

* Adjust belt tension after first week of operation, then every six months thereafter.

5.2. Daily

5.2.1 Inspect Filters

Visually inspect all filters for damage and debris buildup. Replace damaged or clogged filters.

5.2.2 Filter Maintenance

> **⚠ WARNING**
>
> **Prevent serious injury or death.**
>
> **Always wear personal protective equipment (PPE) specific to the job.**

Wear personal protective equipment to protect against dry paint and dust particles while handling filters.

Check manometer gauge daily for condition of filters. Do not change filter based on its appearance.

Filters are not necessarily changed at equal time intervals. The usable life of a filter is related to:

- Filter material weave
- Paint sprayed
- Distance from gun to filter
- Paint gun type
- Amount of thinner used
- Spray pressure

5.2.3 Determine Filter Condition

1. The filter condition is acceptable when the manometer tube scale is between the two arrows.
2. When manometer scale exceeds red pointer flag, filters must be changed.
3. If a different filter media is to be used, manometer setup procedure may need to be changed based on the capacity rating of the media.

5.3 Every Two Months

5.3.1 Lubricate Door Latches

Lubricate bearing pin and laminated cam with SAE 30-50 high temperature oil. Tighten set screws in handle as needed.

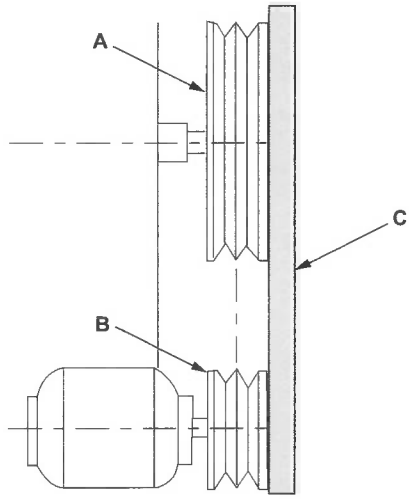
For use in cold areas, use SAE 10-20 high temperature oil.

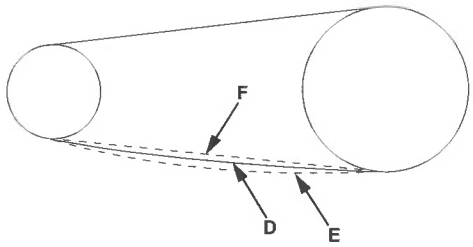
Test explosion-venting feature to verify proper operation. Corrosion and/or build-up of foreign materials may affect proper operation of latches.

5.4 Every Six Months

5.4.1 Check Fan Belts

1. The fan sheave (A) and motor sheave (B) must be in axial alignment. Shafts must be parallel in both vertical and horizontal planes.
2. The sheaves must be in radial alignment. When sheaves are of equal width, align with a straightedge (C). When sheaves are of unequal width, align center of sheaves.
3. Check fan belts for proper tension and for signs of wear. Belt should have a slight sag at bottom of sheaves. Belt (D) is properly adjusted. Belt (E) is too loose. Belt (F) is too tight.





5.5 Every Year

5.5.1 Inspect Motor

Verify that cooling air to motor has not been diverted or blocked by dirty guards or other obstacles.

5.5.2 Inspect Fan Wheel

Inspect fan wheel for buildup of material, which may cause an unbalanced fan wheel. An unbalanced fan wheel may lead to premature failure of the fan wheel, bearings and belt. Clean material buildup as necessary.

5.5.3 Inspect And Clean Air Solenoid Valve

The function of this valve is to interrupt the supply of compressed air to the painting equipment when the booth is not operating as designed or if any booth doors are open.

⚠ WARNING

Prevent serious injury.

Turn off electrical power, depressurize valve, and vent fluid to a safe area before servicing valve.

The time between cleanings varies depending on the medium and service conditions. If voltage to coil is correct, sluggish valve operation, excessive noise or leakage indicates that cleaning is required. Clean strainer or filter when cleaning valve. Thoroughly clean all parts. If parts are worn or damaged, install a complete rebuild kit.

Follow instructions included with air solenoid valve.

6. Warranty

Col-Met Engineered Finishing Solutions has a full one year warranty that begins from the day of shipment on all parts and materials. This warranty does not extend to include labor costs for the replacement of parts or materials covered under warranty.

If a part is believed defective, please notify our Customer Service Department. A replacement item shall be shipped and regular freight shall be paid by Col-Met.

If Col-Met requires the defective part to be returned, appropriate return freight costs shall be paid by Col-Met.

IMPORTANT: Before returning the defective part(s), you must first get an RGA (Return of Goods Authorization) from our Customer Service Department. A copy of the RGA document MUST be included with the returned item(s).

The Seller warrants to Buyer that the equipment mentioned herein shall be free from defects of materials or workmanship under normal use and maintenance for a period of one (1) year from date of shipment. The liability of Seller under this warranty shall be limited to the repair or replacement, at Seller's option, of any part or component which may prove to be defective under normal use, service and maintenance after Seller, in its sole discretion, determines same to be defective. Said warranty is conditioned upon Buyer giving Seller immediate written notice of an alleged defect and refraining from the attempted repair of alleged defects without prior written consent of Seller. The Seller makes no warranty whatsoever with respect to accessories or components not supplied by Seller. For any components purchased by Seller for use on or in conjunction with the equipment which is the subject of this contract, the Seller extends to the Buyer only the same warranty granted to Seller by the component vendor or manufacturer.

THIS LIMITED WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY OTHER WARRANTIES (EXPRESS OR IMPLIED) INCLUDING WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND OF ANY NON-CONTRACTUAL LIABILITIES INCLUDING PRODUCT LIABILITIES BASED ON NEGLIGENCE OR STRICT LIABILITY. EVERY FORM OF LIABILITY FOR DIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS IS EXPRESSLY EXCLUDED AND DENIED. IN NO CASE SHALL COL-MET ENGINEERED FINISHING SOLUTIONS LIABILITY ON THIS WARRANTY EXCEED THE AMOUNT OF THE PURCHASE PRICE.

The performance and safety of the equipment mentioned herein is contingent upon proper installation, the use of suitable process materials and operation and maintenance by properly trained personnel.

During the warranty period, Col-Met will repair or replace, free of charge, any parts that Col-Met Engineered Finishing Solutions has verified to be defective in materials or workmanship. If inspection of the equipment does not disclose any defect in workmanship of material, repairs will be made at a reasonable charge, which will include the costs of labor, materials and transportation.

6.1 Returning Items For Credit

Col-Met Engineered Finishing Solutions will take back any standard stocked items returned and issue a credit, less a 20% handling and restocking fee. Customer is responsible for all freight charges and the item MUST be returned in its original condition. If the item is damaged in transit you will not receive credit. Col-Met will mark the Bill of Lading "Damaged" and send you pictures of the damaged item. For custom or non-stock special order items you must contact our Customer Service Department to determine is the item may be returned. Any restocking charges shall be determined on a case by case basis.

If an item needs to be returned, Col-Met will issue you an RGA (Return Goods Authorization) form. Please ensure that a copy is sent back with returned item(s). Without an RGA the product may be lost or returned to stock with no credit issued. Please note that in some cases the freight may be more than the item is worth when credit is received.

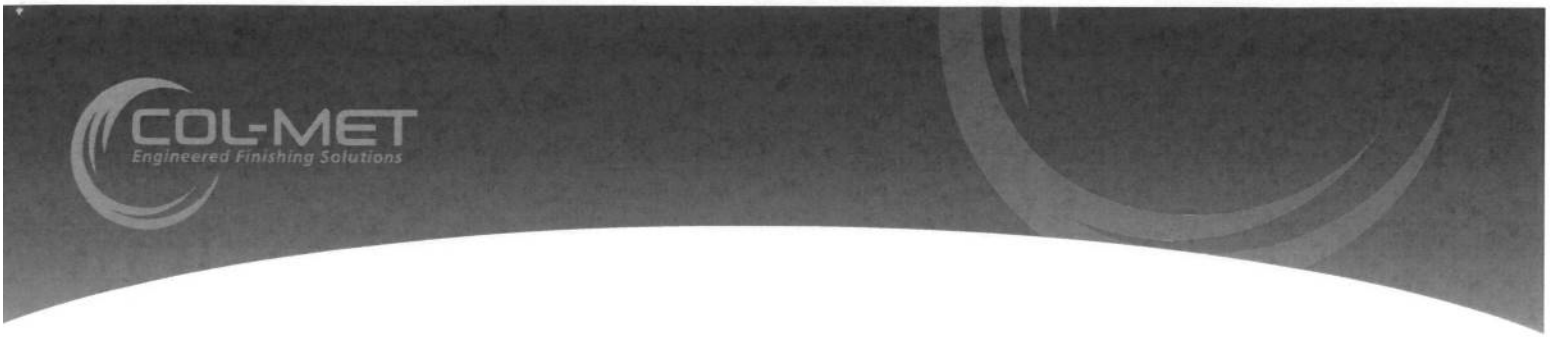
6.2 Back Charges For Material And Labor

Col-Met Engineered Finishing Solutions shall not be held responsible for any back charges incurred for materials or labor without prior written consent.

Should a problem arise, please notify Col-Met immediately. Once the issue is investigated, should costs be incurred, an amount shall be agreed on by both parties beforehand. Do NOT attempt modifications or repairs without prior consent as this may void further warranty repairs or credit. Col-Met will not accept back charges associated with late delivery.

Please address repairs to:

Col-Met Engineered Finishing Solutions
2975 Discovery Blvd.
Rockwall, TX 75032
Attention: Customer Service
Phone: 888-452-6684
Email: sales@colmetsb.com



888-452-6684
www.colmetsb.com

Col-Met Engineered Finishing Solutions
2975 Discovery Blvd. Rockwall, TX 75032 **Toll-Free** 888-452-6684 **Email** sales@colmetsb.com **www.colmetsb.com**

Follow us:

EXISTING SITE CONDITIONS

EXISTING PARKING PLAN

AND PROPOSED OUTDOOR STORAGE

2250 S. CARSON STREET

LOCATED IN A PORTION OF THE W 1/2 SW 1/4 OF SEC. 20 T.15N., R.20E., M.D.B&M, CARSON CITY, NEVADA

PARCEL INFORMATION

A.P.N. - 009-052-09

ZONING - G.C.

TENANT SPACE IS A PART OF 2250 S. CARSON ST.

TOTAL OUTDOOR STORAGE IS 13,800 SQFT WHICH IS LESS THAN 20% OF THE LOT AREA. INCLUDING OUR PROPOSED 9,000 SQFT OUTDOOR STORAGE. 20% OF THE LOT AREA IS MORE THAN 25,000 SQFT.

20 10 0 20 40 60

GRAPHIC SCALE: 1" = 20'

Estrada's Auto Body

2234 S. Carson St. Carson City, Nevada

EXISTING OUTDOOR STORAGE

2,800 SQFT

EXISTING

Proposed Tenant Space For Estradas Auto Body

COMMERCIAL

BUILDING

3000sqft

TENANT SPACE 2234 S. CARSON ST.

EXISTING PARKING

EXISTING PARKING

EXISTING PARKING

SHARED EXISTING PARKING

PROPOSED TENANT OUTDOOR STORAGE

9,000 SQFT

EXISTING OUTDOOR STORAGE

2,000 SQFT

EXIST. COMMERCIAL BUILDING

9' SYP.

EXIST. COMMERCIAL BUILDING

EXISTING AC PARKING

EX. WM

EX. VALVE

Fd. 5/8" REBAR NO TAG

EX. FH

TENANT SPACE 2234 S. CARSON ST.

798.94'

CURRY STREET

163'

EXISTING OUTDOOR STORAGE

PROPOSED TENANT OUTDOOR STORAGE

EXISTING OUTDOOR STORAGE

776.49'

(E.) BUILDINGS

HWY 395 SOUTH 400'

162.52'

SOUTH CARSON STREET

N

E

S

SITE PLAN

SCALE 1" = 40'-0"

Carson City

Building Division
108 E. Proctor Street
Carson City, NV 89701

PERMIT NUMBER
FIREC-2020-0028
Issue Date: 03/20/2020

Permit Type: Fixed Fire Protection System

Assessor's Parcel Number	Street Address
00905209	2234 S. Carson St

Owner Information	Applicant Information
Name: StateFire Sales And Service Phone: () - Email: vbecerra@statefire.com	Name: StateFire Sales And Service Email: vbecerra@statefire.com Phone: () -

Contractor Information

Company Name: StateFire Sales And Service
Address:
Phone:
Email: vbecerra@statefire.com

Contact Name: StateFire Sales And Service
Lic No:

Building Information

Proposed Use:
Construction Type:
Estimated Cost of Construction:

Livable Square Footage:
Unlivable Square Footage:
Porch/Deck Square Footage:
Fire Sprinkler Required:

Project Description

Fixed Fire Protection System

Scope of Work

Install Fire Suppression System for Auto Paint Booth

Permit Center Notes:

ANY PERMIT ISSUED EXPIRES SIX (6) MONTHS AFTER ISSUANCE IF NO INSPECTIONS HAVE BEEN MADE.
ANY PERMIT ISSUED SHALL EXPIRE TWELVE (12) MONTHS AFTER ISSUANCE IF THE WORK IS DISCONTINUED.

TOTAL FEES:	$82.00

Carson City Community Development
108 E. Proctor Street
Carson City, NV 89701
(775) 887-2180

INSPECTION RECORD

Permit NO. ***FIREC-2020-0028*** *Permit IVR Number:* ***156349***
Type: **Fire Construction**
Workclass: **Fixed Fire Protection System**
Permit Status: **Issued**

Issue Date: 3/20/2020 **Expires: 09/16/2020**

Request inspection via CSS portal or by E-mailing to inspections@carson.org by 2PM the prior business days

POST ON SITE

Owner's Name:
Owner's Phone:

Job Address: 2234 S. Carson St
Carson, NV 89701

Total Square Feet: 6,000
Total Job Valuation: $8,200.00

Contractor(s)	Phone	Address
Victor Becerra		1380 Greg St #203, Sparks, NV 89431

Description: Install Fire Suppression System for Auto Paint Booth

Inspection Scheduling Code

Inspection	IVR	Comments	Pass	Date
Rough Fire				10-14-20
Final Fire	**515**			10-14-20

Floor Plan

CARSON CITY FIRE DEPARTMENT
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ROUGH AND FINAL FIRE INSPECTIONS REQUIRED. PAPER SET OF APPROVED PLANS AND PERMIT TO BE ON JOB SITE.
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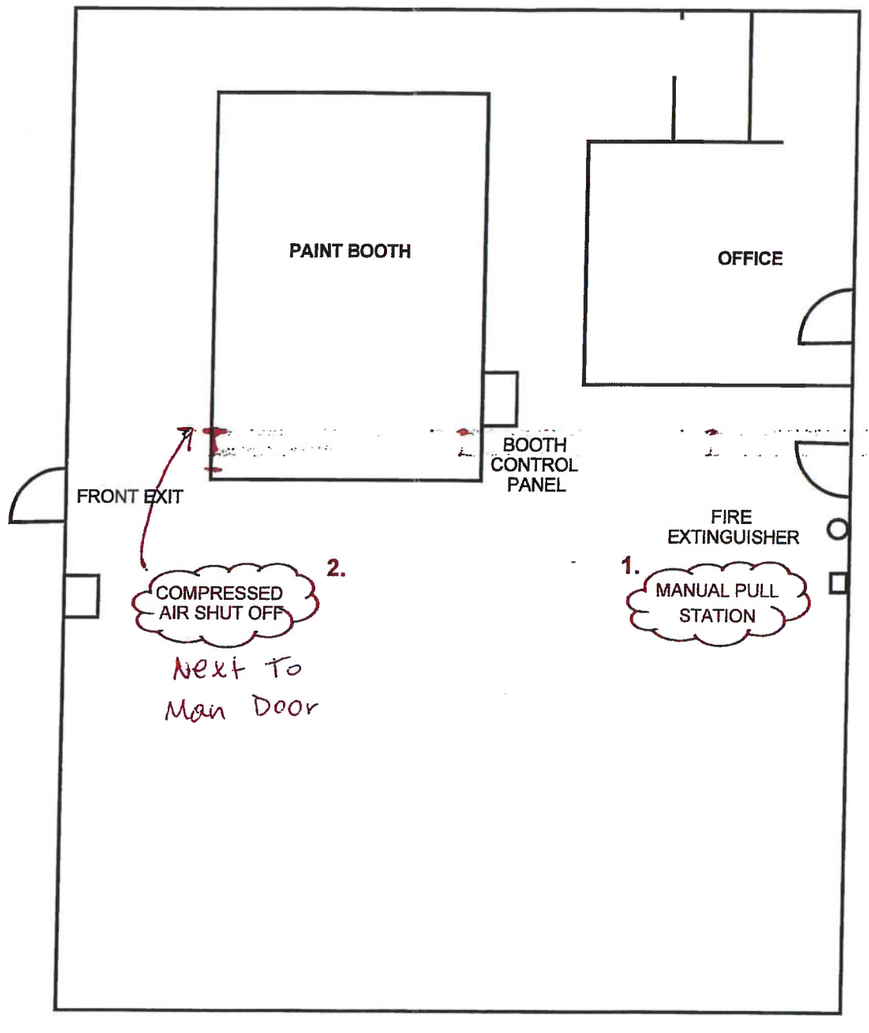

StateFire Sales & Service
1380 Greg Street, #203
Sparks, NV 89431
(775) 502-8688
(775) 753-8831 Fax
CL# 55324A, 0060954A, 007343
FL# E/2 073, E316, G701, HE147

AMEREX INDUSTRIAL PAINT BOOTH FIRE SUPPRESSION SYSTEM

ESTRADA'S AUTOBODY
2234 S CARSON STREET, CARSON CITY, NV 89701

REVISIONS	
3/11/20	

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A 003

AMEREX INDUSTRIAL VEHICLE PAINT BOOTH DESIGN

ROUGH AND FINAL FIRE INSPECTIONS REQUIRED.
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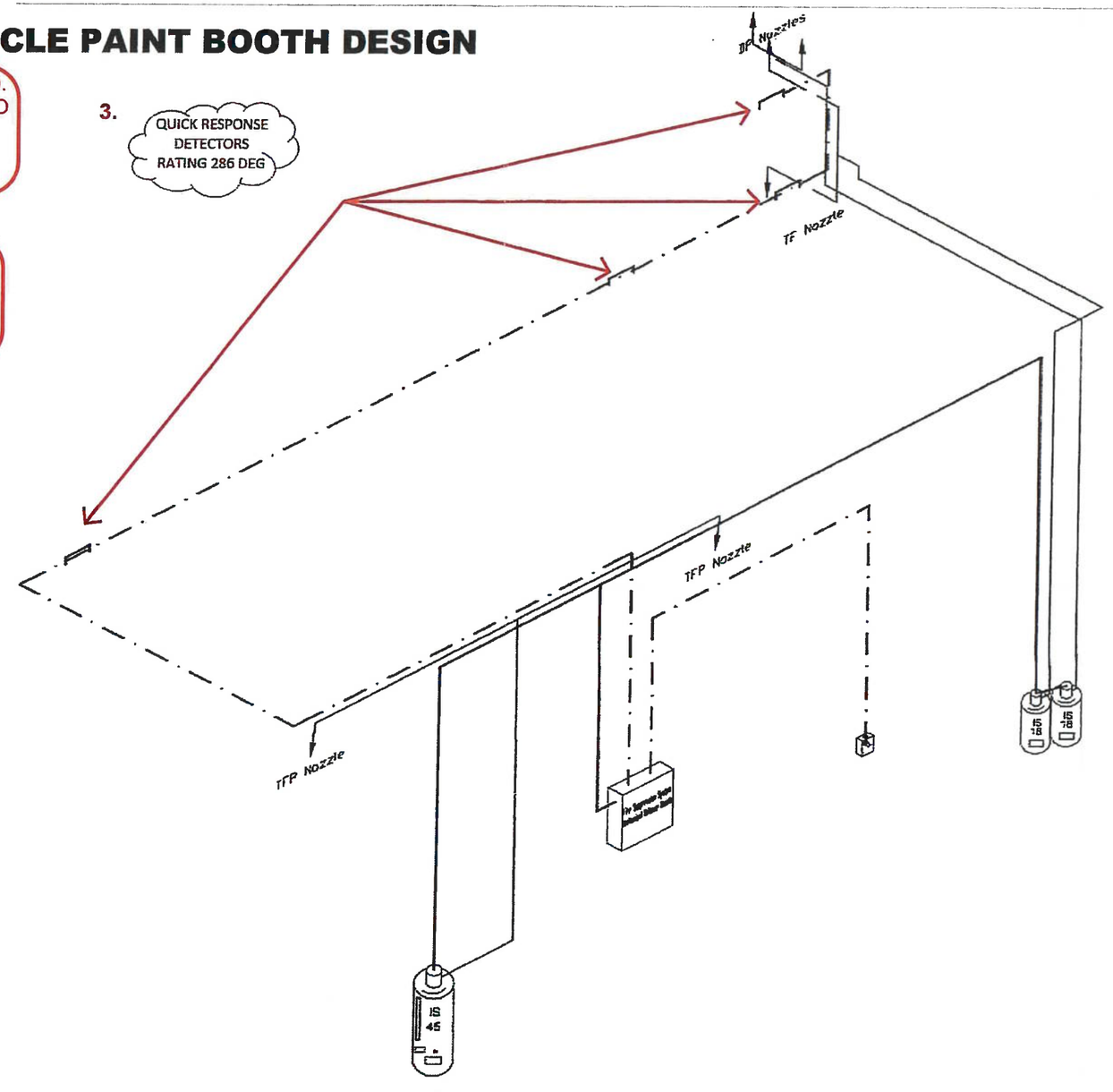
3. QUICK RESPONSE DETECTORS RATING 286 DEG



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AMEREX INDUSTRIAL PAINT BOOTH FIRE SUPPRESSION SYSTEM

ESTRADA'S AUTOBODY
2234 S CARSON STREET, CARSON CITY, NV 89701

REVISIONS	MM/DD/YY	
1	3/11/20	--
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4	__/__/__	
5	__/__/__	

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ROUGH AND FINAL FIRE INSPECTIONS REQUIRED. PAPER SET OF APPROVED PLANS AND PERMIT TO BE ON JOB SITE.

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System Information

3A.4 Vehicle Paint Spray Booths (VPSB):

The Amerex Vehicle Paint Spray Booth Fire Suppression System is of the pre-engineered type as defined by the NFPA Standard for Dry Chemical Extinguishing Systems, NFPA 17 and the Standard for Spray Application Using Flammable or Combustible Materials, NFPA 33. The extinguishing systems described in this manual are intended to be installed, maintained, and serviced in accordance with NFPA 17 and NFPA 33. The Amerex Vehicle Paint Spray Booth System has been evaluated by Underwriters Laboratories (UL) in accordance with the specific test protocol found in the UL1254 Standard (Pre-engineered Dry Chemical System Units).

Used for painting or coating cars, trucks, buses and large mobile equipment, Vehicle Paint Spray Booths come in a variety of configurations and sizes. The basic volumes of a Vehicle Paint Spray Booth to be protected by the Amerex System consists of three main components. They are:

Work Area - Where the vehicle is painted.
Plenum(s) – Exhaust chambers adjacent to the Work Area. Plenums utilize filters to trap overspray particles that escape from the Work Area. The primary purpose of the plenum is to expose a sufficiently large area of filter media to the overspray that is carried along in a smooth current of air.
Duct(s) - Fan-powered air channels that draw air through the Work Area, the Plenum(s), and finally out through the Duct.

Most of the time, the air is drawn downward over the vehicle during the painting process (as in either an Under Floor, Pit, or Down Draft (Side-Exhaust) configuration). Other booths, such as a Back Draft or Pant-Leg (Horseshoe) design, draw air down and across, toward the rear of the booth. Fresh air is usually drawn in through intake filters either in the Work Area ceiling or on the upper walls of the Work Area. Many installations utilize a Heated Make-Up / Recirculation option, which re-circulates filtered, heated air through the booth, thereby being more energy efficient.

The Amerex Vehicle Paint Spray Booth System requires that the booth exhaust fan(s) be shut down prior to the discharge of the ABC dry chemical. This is accomplished with the use of the Mechanical Time Delay **(P/N 15765)** with mechanically-released systems, or by the use of the Amerex Electric Control Panel **(P/N 15780)** with the use of the timed discharge circuit. It is the responsibility of the installer to properly identify the configuration of the booth and to follow the requirements of this manual in order to achieve proper fire suppression. Sometimes, additional turns, baffles, or obstructions in the booth's plenum and duct may dictate the use of additional nozzles in order to ensure good distribution of dry chemical.

Nozzles:	P/N:	Application:
TF	16172	Standard Work Area; Backdraft / Pantleg / Underfloor Plenum
3-Way	16174	Pit w/ Tunnel (center-mount); Downdraft Plenum with or without Vertical Transition (center-mount)
D/P	16190	Exhaust Duct; Pit Plenum (end-position)
TFP	17809	Module Perimeter Work Area Coverage, ONLY

Cylinders: The Model IS18ABC, IS35ABC, and IS45ABC can be used for Vehicle Paint Spray Booth applications. The IS18 and IS 35 models are used for Duct and Plenum coverage, using either the DP, TF, or 3-Way nozzles. The IS45 model must use two or four TF nozzles (P/N 16172) under Standard Work Area Coverage. The IS45 model uses one or two TFP nozzles (P/N 17809) under Module Perimeter Work Area Coverage.

Temperature Range: The operating temperature range for Vehicle Paint Spray Booth applications is -20°F to 120°F (-29°C to 49°C).

Piping Requirements: Piping diagrams include limitations on pipe length and fittings. System piping must be balanced. Balanced piping is that in which the difference between the shortest actual pipe length from ***any*** ¾" tee to nozzle and the longest actual pipe length from any ¾" tee to nozzle does not exceed 10% of the longest actual pipe length from any ¾" tee to nozzle. Piping runs from the 1" tee to each of the ¾" tees must be equal in length. The number and type of fittings for all tee to nozzle sections must be equal.

All piping must be Schedule 40, hot-dipped galvanized steel pipe, and all fittings must be 150 lb. class, minimum. Examples of acceptable fitting materials include hot-dipped galvanized malleable iron, ductile iron, or steel. Couplings and unions may be used where necessary, and reducing bushings or reducing tees can be used for changes in pipe diameter. **Note:** Black steel pipe and fittings can be used in relatively noncorrosive atmospheres.

3A.4.1 Work Area Coverage, VPSB

There are two distinctly different nozzle and piping arrangements for protecting the Work Area using the IS45ABC cylinder. The first arrangement is "**Standard Work Area Coverage**", and the second is "**Module Perimeter Work Area Coverage**" outlined as follows:

3A.4.1.1 Standard Work Area Coverage, VPSB

The Amerex Vehicle Paint Spray Booth System is flexible enough to protect a wide variety of Vehicle Booths of various dimensions. The maximum booth height is 23'4". As noted, the IS45 cylinder is used with two or four nozzles, and each of the nozzles has been tested to protect a Work Area Module. A Work Area can be thought of as a series of 'boxes', or Modules, stacked together, each protected with a nozzle. The maximum parameters for each Module are given as follows:

Module Volume: 1,050 ft.^{3} per nozzle, two or four TF nozzles per IS45ABC
Maximum Module Area: 105 ft.^{2} per nozzle for booths up to 10 ft. in height;*
45 ft.^{2} for booths at 23 ft., 4 in. height.*
Maximum Module Height: 23 ft., 4 in.
Maximum Module Side Length:
- Module Center: 14 ft. for booths up to 10 ft. tall*
  9 ft for booths at 23'4" tall*
- Booth Edge: 14 ft for booths up to 10 ft tall
- Centerline: 15 ft. (widthwise); booth height limited to 10' tall with this option

Maximum Nozzle Offset – Module Center Entry: Within a 2.5 ft. radius semicircle from center of module, no less than 12" from any side of the module (booth); the curved portion of the semicircle must curve away from the centerline of the booth; the tip of the nozzle within 6" of ceiling.

Maximum Nozzle Offset – Booth Edge Entry: Entry into the module at the closest point to the intersection of the booth wall and ceiling. The nozzle location, horizontally, is at the midpoint of the longest side of the module, +/- 2 feet. The tip of the nozzle must be within 6" of its entry point. This option is allowable only for booths 10 feet or less in height.

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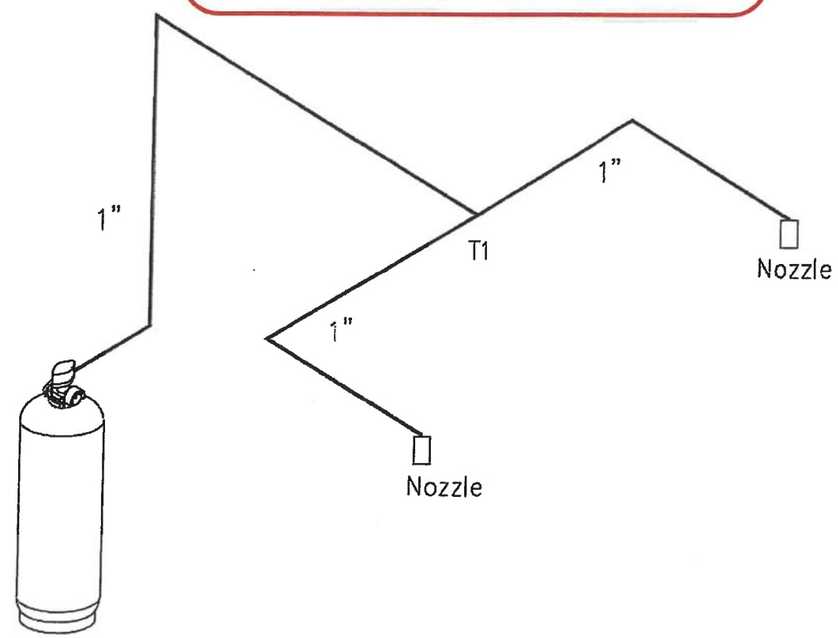
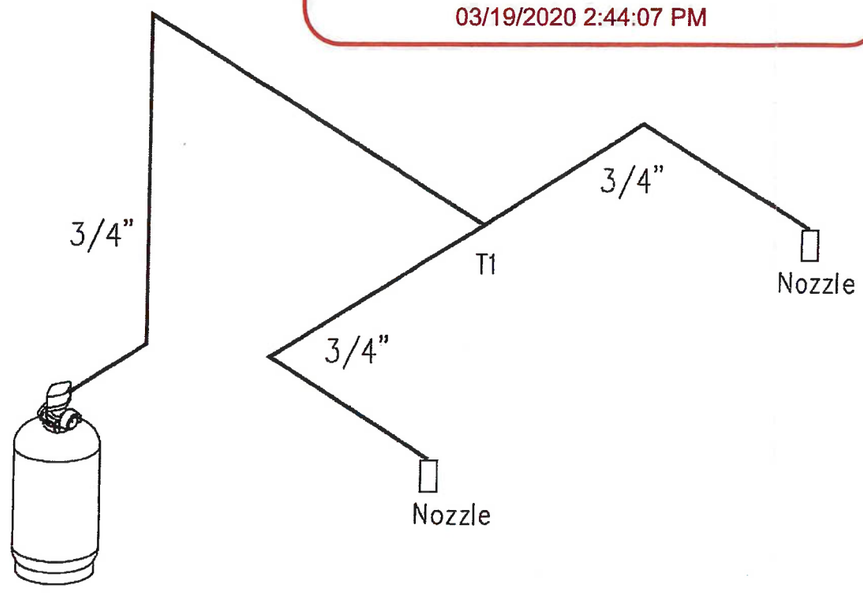
System Design





Module Perimeter Work Area, VPSB, IS45ABC, Two TFP Nozzles				
	Pipe Size, in	Maximum Length, ft	Maximum # of Elbows	# of Tees Allowed
Cylinder to T1	1	36	4	1
T1 to Nozzle	1	10	2	0
Total 1" Pipe	–	56	–	–
The maximum nozzle height above the agent cylinder is 20 feet.				

Vehicle Paint Spray Booths, DUCT and STANDARD Plenum Coverages, IS18ABC, Two Nozzles						
Cylinder Size	Nozzle Quantity	Nozzle Type	Piping Section	Pipe Size, in.	Maximum Length, ft.	Maximum # of Elbows
IS18ABC	2	Any of the following combinations: - one 3-Way and one D/P; - two D/P's; - two TF's; - one TF and one D/P	Cylinder to T1	¾	36	4
			T1 to Nozzle	¾	16	3
The maximum elevation of the D/P, TF and 3-way nozzles above cylinder is 23'4".						

StateFire Sales & Service

1380 Greg Street, #203
Sparks, NV 89431
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AMEREX INDUSTRIAL PAINT BOOTH FIRE SUPPRESSION SYSTEM

ESTRADA'S AUTOBODY
2234 S CARSON STREET, CARSON CITY, NV 89701

REVISIONS		Scale
3/11/20		NO SCALE

A 003

ESTRADA'S AUTO BODY
PAINT BOOTH

REVISIONS	BY
-	-
-	-
-	-
-	-
-	-
-	-

CODE ANALYSIS

PROJECT SCOPE: EXISTING (E.) PAINT BOOTH
INCLUDING ASSOCIATED MECHANICAL AND ELECTRICAL SYSTEMS.
CODE ANALYSIS:
I.B.C. 2018, U.P.C. 2018, U.M.C. 2018, I.E.E.C. 2018, I.F.C. 2018, N.E.C. 2017,
CARSON CITY AMENDMENTS

1. OCCUPANCY CLASSIFICATION: CHAPTER 3 SECTION 304
   STORAGE - GROUP "S1" OCCUPANCY (REPAIR SHOP) W/ AN ACCESSORY OFFICE SPACE
2. TYPE OF CONSTRUCTION EXISTING STRUCTURE: TABLE 503 TYPE III-B
3. FIRE PROTECTION: one (1) fire extinguisher with a minimum rating of 4A. IFC 2404.4.1 and 916
   FIRE Suppression SYSTEM CHANGES TO BE SUBMIITED UNDER SEPARATE PERMIT.
4. OCCUPANCY LOADS: TABLE 1004.1.2 MAXIMUM FLOOR AREA PER OCCUPANT
   TENANT OFFICES = 298 SF/ 100 SF/ OCCUPANT = 3 PERSONS
   SHOP SPACE = 2702 SF/ 100 SF/ OCCUPANT = 28 PERSONS
   TOTAL OCCUPANT LOAD = 31
5. EXITING REQUIREMENTS: TABLE 1014.1
   REQUIRES A MINIMUM OF 2 EXITS BASED ON OCCUPANCY GREATER THAN 29 PERSONS.
6. ALLOWABLE TRAVEL DISTANCE: TABLE 1016.1
   250 FEET
7. Mechanical: N/A Non Heated booth.
8. Engineering: Meter and backflow device per NAC 445A.

GENERAL NOTES:

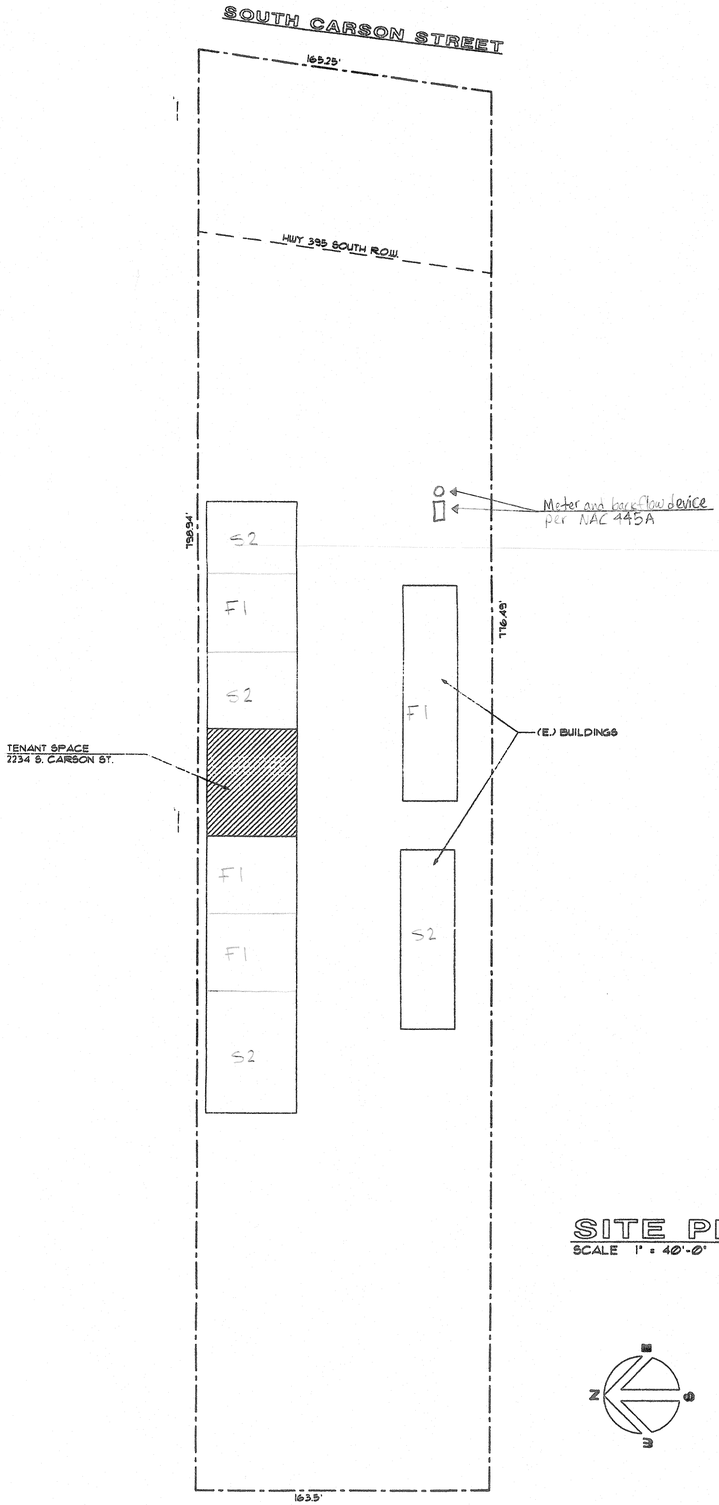
1. ALL WORK TO BE PERFORMED IS WITHIN THE EXISTING BUILDING ENVELOPE. NO GRADING IS REQUIRED.
2. FIRE Suppression SYSTEM CHANGES TO BE SUBMIITED UNDER SEPARATE PERMIT.

PARCEL INFORMATION

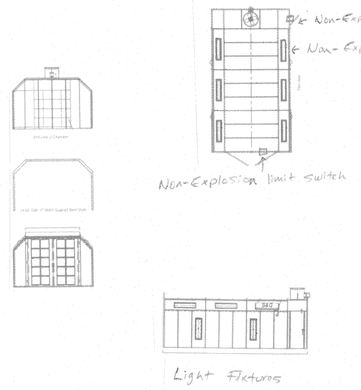
A.P.N. = 003-032-09

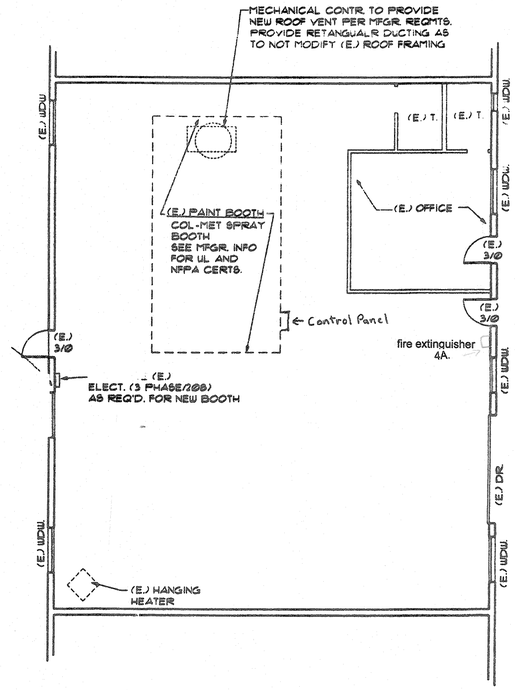
ZONING - G.C.

TENANT SPACE IS A PART OF 2250 S. CARSON ST.



SITE PLAN
SCALE 1" = 40'-0"





FLOOR PLAN
SCALE 1/8" = 1'-0"

SPRAY BOOTH
COL-MET BOOTH IS A U.L. LISTED PRODUCT MFGR. IN ACCORDANCE WITH NFPA-33. AND I.B.C. CHAPTER 416

NOTE: PAINT TO BE APPLIED IS WATER BASED AND NON-FLAMMABLE

CONTRACTOR INFORMATION:
BEAM CONSTRUCTION NV LLC.
Zephyr Cove NV 89448
NV Lic # 81549
305-720-7591

ESTRADA'S AUTO BODY
PAINT BOOTH
2234 S. CARSON ST. CARSON CITY NV 89701

ISSUE DATE:	
SCALE:	AS NOTED
DRAWN BY:	JW
CHECKED BY:	JW
PROJECT NUMBER:	110507JW

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