TECHNICAL BULLETIN
Planning & Development Services
Building Inspections Division

Topic: Spray Booth Requirements

2021 International Fire Code, Chapter 24 – Application of Flammable Finishes

Welding and cutting shall be done only under the supervision of the person in charge.
No Welding.
The use of welding or cutting equipment in or near this area is dangerous because of fire and explosion hazards.

- An approved automatic fire extinguishing system shall be provided with fire sprinkler heads or nozzles installed to cover the duct, spray area, and behind the filters.
- "NO SMOKING" signs shall be posted in the spraying area.
- Conspicuous signs with the following warning shall be posted in the vicinity of spraying areas, dipping operations and paint storage rooms.
- Only manufactured booths of steel not less than 0.0478 inch (18 gage) in thickness are acceptable.
- Any paint booth having a floor area of 200 sq. ft. or more shall be served by at least two exits. The area of a paint spray booth shall not exceed 1,500 sq. ft and shall not exceed 10 percent of the basic area permitted for the major use of the building.
- The interior surfaces must be smooth, without edges, for cleaning purposes. (2021 IFC 2404.3.3.2 surfaces)
- No storage is allowed within three (3') feet and no welding within twenty (20') feet of the booth. (2021 IFC 2404.3.3.5 clear space)
- All lights must be behind heat treated or hammered wire glass. (NO PORTABLE LIGHTS)
- Wiring and electrical fixtures inside the booth must be designed and utilize devices UL Listed for Class 1, Division 1 locations.
- Air velocity through the booth during spraying operation shall be not less than one hundred (100) linear feet per minute. (2021 IFC 2404.7.3.1 Open-face or Open-front spray booth)
- Approved UL Listed filters shall be used.
- Space heaters or hot surfaces are prohibited inside spray booths.
- No electrical equipment is allowed in booth unless it is listed by UL for Class 1, Division 1 locations and located to avoid deposits of combustible residues.
- All metal parts of the spray booth, exhaust ducts, or flammable liquid piping system shall be properly electrically grounded.
- Electrical equipment shall be interlocked with the ventilation equipment so that the equipment cannot be operated unless the vent fans are on.
- Each spray booth shall have an exhaust duct discharging to the building exterior (through the roof is preferred, through the wall is acceptable, if not a fire hazard or a nuisance to neighbors).

- Exhaust fan motors shall not be placed inside booths or ducts. Fan blades shall be nonferrous or non-sparking or casing shall be lines with such material. Fan motor shall be UL Listed for Class 1, Division 1 locations.
- Fan belts and pulleys within the duct or booth shall be tightly enclosed.
- The discharge point for exhaust ducts shall be at least 30 feet from the property line; 10 feet from openings into the building; 6 feet from exterior walls and roofs; 30 feet from combustible walls or openings into the building which are in the direction of the exhaust discharge; and 10 feet above adjoining grade.
- Exhausted air shall not be re-circulated.
- The exhaust air intake ducts shall be extended to pick up flammable vapors within six inches (6") of the floor.

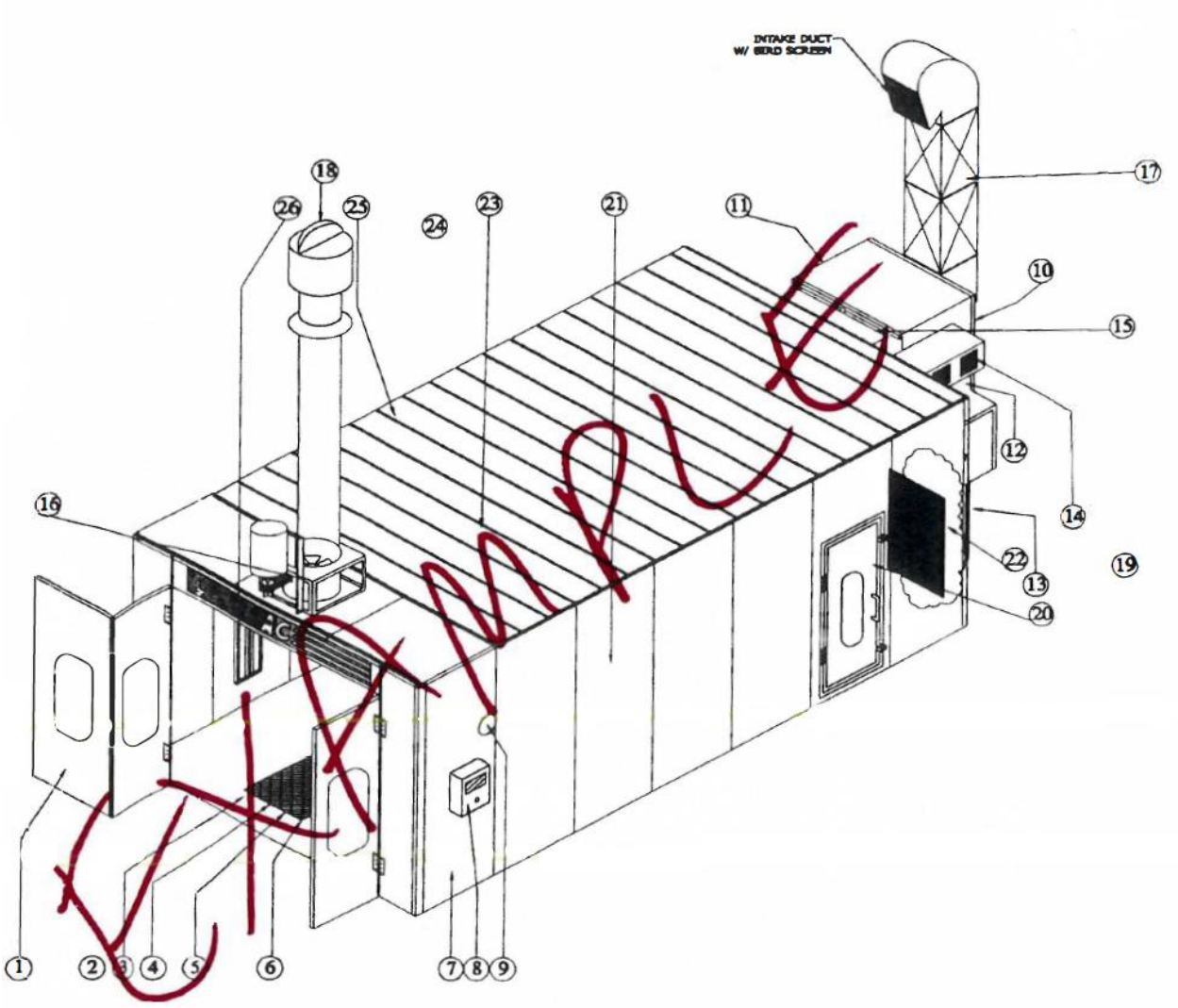
    - A separate permit and submittal for suppression system.

Required Plans for Commercial Remodel Building Permit –

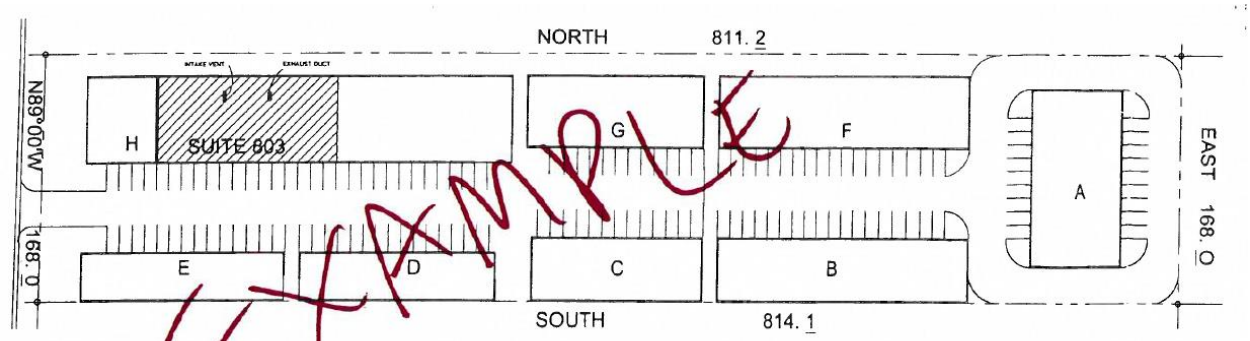
A full sets of Electronic plans drawn to a verifiable Engineer or Architect's scale. (clearly legible without the use of magnification)

- Site Plan
- Floorplan – Detailed drawings showing all rooms and specific uses labeled
    - Show proposed location of paint booth
- Elevations – Show how paint booth will look after installation with all attachment details
- Exhaust details
- Proof of Asbestos Survey

If you have specific questions, please contact at (817) 459-6502.

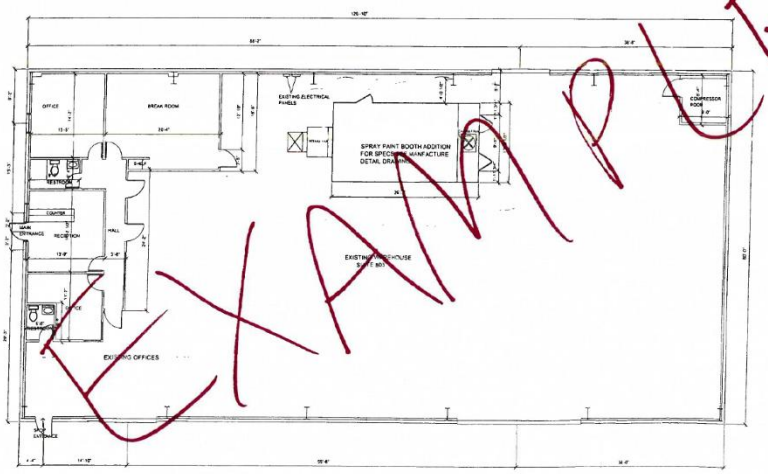


		14	ELECTRICAL ACCUATOR
		13	PRE FILTER
		12	MOTOR
26	SIDE LIGHTING	11	INTAKE FAN
25	ROOF PANEL S	10	STRAIGHT BOX
24	TOP LIGHTING (N/A ON THIS MODEL)	9	MANOMETER
23	HIGH TEMPERATURE LIMIT SWITCH	8	CONTROL PANEL
22	INTAKE FILTER	7	WALL PANEL
21	TEMPERATURE SENSOR	6	PIT BASEMENT (N/A THIS MODEL)
20	SIDE DOOR	5	GRIDS (N/A ON THIS MODEL)
19	STEP (N/A THIS MODEL)	4	FILTER SUPPORT (N/A ON THIS MODEL)
18	EXHAUST DUCT	3	98% EXHAUST FILTER (REAR OF CABIN)
17	INTAKE DUCT	2	RAMP (N/A THIS MODEL)
16	EXHAUST FAN	1	MAIN DOOR
15	DAMPER	NO	DESCRIPTION



KEY PLAN NOT TO SCALE

EXAMPLE



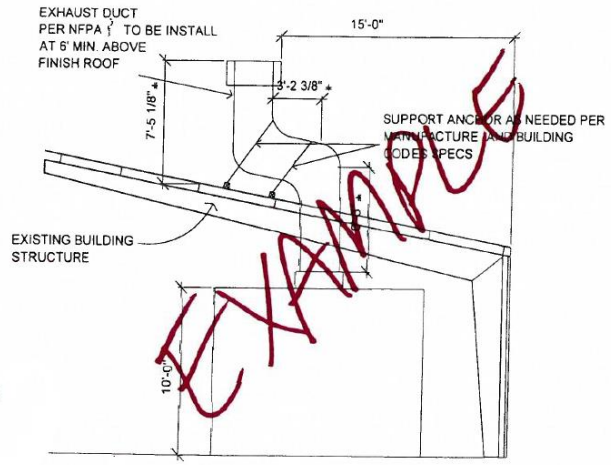
FLOOR PLAN

SCALE 1/8 = 1'-0"

GENERAL NOTES

1. SPRAY PAINT ROOM TO BE INSTALL PER MANUFACTURE SPECS.
2. SPRAY PAINT BOOTH'S EHXUAST TO BE LOCATED AT A MIN. 30' OF PROPERTY LINE AND 6' MIN. ABOVE FINISH ROOF OR PER CITY CODES, AND NFPA 33 CE QUIREMENTS.
3. SUPPORT ANCHORS AND DUCT PARTS NOT SEE MANUFACTURE RECOMMENDATIONS.
4. ALL ELECTRICAL WORK TO BE DONE BY LICENSE CONTRACTOR
5. ALL ECTECTRICAL SHALL COMPLY WITH NEC AND CITY CODES
6. ELECTRICAL CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED BY AHJ
7. PLUMBING WORK TO BE DONE BY A LICENSE CONTRACTOR
8. PLUMBING CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED BY AHJ
9. FIRE SUPPRESSION SYSTEM TO BE INSTALL BY A LICENSE CONTRACTOR AND TO OBTAIN ALL PERMITS REQUIRED BY AHJ

EXAMPLE

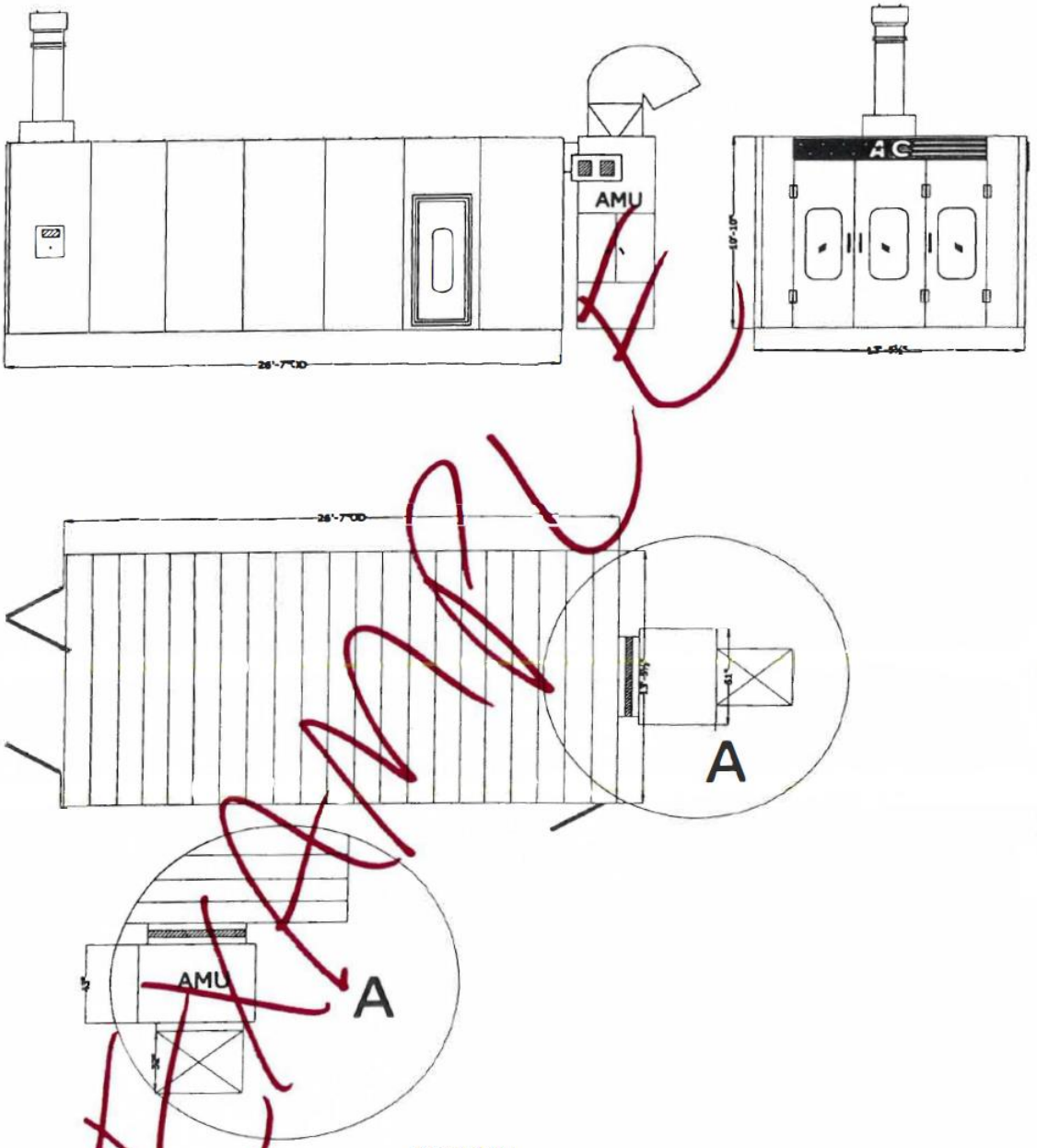


CROSS SECTION DETAIL

SCALE 1/4 = 1'-0"

EXAMPLE

2/1/2023



MODEL:
PrimeFlo Ultra STD25149 Model CROSS DRAFT
* MEETS N.F.P.A. 33 & O.S.H.A. 2208 CODES

SPECIFICATIONS:
LENGTH: 26'-7"OD 26'-3" ID
WIDTH: 13'-5½" OD 13'-1½" ID
HEIGTH: 10'-10" OD 10'-8"ID
FRONT DOOR HEIGTH: 8'-10½"
FRONT DOOR WIDTH: 9'-5"

CONSTRUCTION:
GALVANIZED PRE-COATED SOLID STEEL PANEL WITH INSULATED DOUBLE WALL

EXHAUST SYSTEM:
EXHAUST FAN TYPE: DIRECT
C.F.M. RATING: 13,000 TO 16,000 C.F.M.
MOTOR: 3-PHASE, 7.5HP QUANITY: 1 UNIT
VOLTAGE: 208\230\460

ELECTRICAL:
LIGHTING: TEN ETL LISTED FOR SPRAY BOOTHS, 4- TUBE, FLUORESCENT UPPER LIGHT FIXTURES WITH TEMPERED GLASS
TEN ETL LISTED FOR SPRAY BOOTHS 4-TUBE, FLUORESCENT SIDE LIGHT FIXTURES WITH TEMPERED GLASS
VOLTAGE: 120\60 HRTZ,

AIR MAKE-UP UNIT:
THE AMERI-CURE, INC. ETL LISTED DIRECT FIRED AIR MAKE-UP UNIT SYSTEM IS DESIGNED FOR SPRAY BOOTHS. THE TWO-STAGE SYSTEM MAINTAINS 77° F DURING SRAY CYCLE, AND UP TO 176° F DURING BAKE CYCLE. THE AIR MAKE-UP UNIT CAN BE MOUNTED ON REAR OR EITHER SIDE OF BOOTH.
DIMENSIONS:10'4"H X 5'1" L X 43" W
AIR INTAKE FANS TYPE: DIRECT DRIVE TURBINE
C.F.M. RATING: 13,000 TO 16,000 C.F.M.
MOTOR: 3- PHASE 7.5 HP, VOLTAGE 208\230
460 QUANITY:1 UNIT
BURNER: BY MIDCO, 1.375 TO 5 MILLION BTU DIRECT FIRED BURNER

EXAMPLE