

FIRE MARSHAL
COUNTY OF NASSAU

FLAMMABLE FINISH REQUIREMENTS



FIRE MARSHAL
INDUSTRIAL DIVISION
(516) 573-9940

Revision January 1, 2018

NASSAU COUNTY FIRE PREVENTION ORDINANCE ARTICLE V **FLAMMABLE FINISH LOCATION REQUIREMENTS**

In order to apply Flammable Finishes in Nassau County, the location must have the following; a plan package must be submitted to the Nassau County Fire Marshal for review. This package shall include three (3) things. (1) Flammable Finish location SITE plan, (2) Automatic Extinguishing Plan (either sprinkler or AES plans), and (3) a completed Flammable Finish license application.

All plans and cut sheets will be submitted in triplicate (3).

The term “finishing shop” shall mean a building or part thereof used for the application of flammable finishes by means of spraying or dipping.

Application of flammable finishes can only be done in a spray booth and/or spray room constructed to meet all applicable fire and building codes.

Mixing operations are to be carried out in a room specifically constructed to meet all applicable fire and building codes.

The New York State Fire Code also includes combustible powder coatings and electrostatic operations as a flammable finish location

(1) Flammable Finish location (site) Plan shall include drawings of the building, spray booth and Mixing Room. Over Head, Cross section and Construction drawings, showing required fire wall ratings, roof construction, if the building is attached or stand alone. Drawings and Spec sheets of the spray booth, mixing room, cross section, and construction, all duct work, fans, location in the building, and Ductwork termination points are required.

If cut sheets for the booth and mixing room are unavailable than a detailed drawing of the booth and mixing room is required. Show construction material, lighting, electrical equipment, fans, plenums, exhaust ducts, filters, make up air ducts, heating equipment. No aluminum is to be used.

***Be advised that if the shop is attached to multiple occupancies either, a three-hour fire wall OR a two-hour fire wall AND a fire sprinkler system installed in the shop occupancy, is required to separate the shop from the other occupancies.**

Open faced spray booths are required to be installed in a separate room having a 1-hour fire rating.

Spray Rooms, with no booth are required to have a two-hour fire rating.

The open-faced booth and spray room must have an automatic fire suppression system installed in the booth and room.

Plans for a spray booth, spray room and/or mixing room indicating their location in the building, paperwork indicating their compliance with all fire and building codes must be submitted to the Nassau County Fire Marshal’s Office, by a licensed professional engineer or registered architect, for approval. Plans shall include a statement from a licensed professional engineer or registered architect, certifying that the proposed construction will conform to the regulations of the building department of the municipality wherein the plant is to be located. *No work shall commence until such plans are approved by the Fire Marshal.*

ALL PLANS ARE GOOD FOR ONE (1) YEAR FROM THE DATE THE APPROVAL WAS GIVEN!

For information Reference the Fire Code of New York State, New York State Mechanical Code, NFPA-33, NFPA-13 NFPA-17, NFPA-10 and The Nassau County Fire Prevention Ordinance.

AES Control heads determine the Number of plan submissions. Each control head requires a separate plan submission.

- **Show cross section of system. If the building has a fire alarm system, show the interconnection of the AES system. Include Spec sheets for the system installed. Plans submitted by a licensed installer for a Pre-Engineered AES do not have to be stamped by a licensed professional. A copy of the installer's license must be included, and a statement that the system is pre-engineered and approved for the application.**

Open faced spray booths or Spray rooms are required to be installed in a separate room having a 1-hour fire rating. The open-faced booth and spray room must have an automatic fire suppression system installed.

Fusible links shall be of the type and temperature required by the manufactures specification for the operation and shown on the plan. No High Temp Links in Mixing Rooms, or Non-Heated Spray Booths.

Enclosed spray booths installed closer than 3 feet from any wall or ceiling, then that wall or ceiling next to the spray booth must have a 1-hour fire rating.

Control Heads for the AES system shall be mounted in an accessible location reachable from the floor level, If the control head has a manual activation handle then requirements for manual pull stations must be followed.

An Automatic Fire Extinguishing System (AES) is required in the spray booth, spray room and mixing room. The system must be installed by a Nassau County Fire Marshal licensed installer. If the building is protected by a fire sprinkler system it may be extended to protect the spray booth, spray room, and mixing room. *Any alteration to the fire sprinkler system must be done by a Nassau County Fire Marshal licensed contractor and Stamped Plans submitted.*

Plans for an Automatic Extinguishing System (AES) in the spray booth, spray room and/or mixing room must be submitted to the Nassau County Fire Marshal's Office, by a Nassau County Fire Marshal licensed extinguishing system installer, for approval. *No work shall commence until such plans are approved by the Fire Marshal.*

There shall be a fee imposed for the review and process of any plans submitted to the Fire Marshal's Office. The fee shall be submitted at the time of plan submission. The fee shall be in addition to any other fee required by this Ordinance. The plan review fee shall be a onetime non-refundable fee as prescribed in Article XXII of this Ordinance, per submission. Revised plans for installation, construction or renovation of facilities or equipment that have not exceeded the requirements of Section 5.15.3, shall be considered part of the original submission, but will not alter or extend the time period given to commence the approved proposed scope of work.

A Flammable Finish license will be issued to the location upon completion of all required system tests. Such license shall expire one (1) year from the date of such issuance unless prior thereto the license is revoked or suspended by the Fire Marshal.

All firms, business entities, or corporations engaging in the business of applying flammable finishes are required to have a license issued by the Fire Marshal.

Licensed firms must submit a certificate of insurance to the Fire Marshal indicating: comprehensive general liability and bodily injury and property damages, product liability, completed operations, and contractual liability coverage.

A licensed firm that has such coverage shall notify the Fire Marshal of any change, lapse, or cancellation of coverage.

PLAN SUBMISSIONS

GENERAL REQUIREMENTS

- A minimum of three (3) copies of the plans shall be submitted for review.
- "Originals" will not be accepted or stamped.
- If the plans have been revised, the revision number, date and revision description shall be noted on the plans.
- All plans shall be drawn to an established scale.
- Plans shall not be drawn on lined paper.
- All Flammable Finish Location Site plans shall be:
 - a) Stamped by a Licensed Professional Engineer, Registered Architect or Licensed Land Surveyor as required by the New York State Department of Education Law.
 - b) If, due to the scope of work proposed, the plans are not required to be stamped, the plans shall be drawn utilizing accepted engineering and drafting practices and procedures. All line work and lettering shall be clear and legible.
- AES plans submitted by a licensed installer for a Pre-Engineered Automatic Extinguishing Systems, **Do Not** have to be stamped by a licensed professional. **A copy of the installers license must be included, and a statement that the system is pre-engineered and approved for the application.**
- All plans shall have an area of at least sixty-four (64) square inches available for approval stamps. The area shall be a quadrangle with no side less than four (4) inches in length.
- Plans submitted for review shall deal directly to the type of installation governed by this office.
- Where details are required to be shown, they shall be shown as a drawing detail and not as a note indicating compliance.
- **Indicate the following information on all plans:**
 - a) Business Name
 - b) Operator (corporate officer, principal partner or sole proprietor)
 - c) Street address and nearest intersection
 - d) Telephone number.
 - e) Owner (if different than operator).
Indicate the individual or business name. If owned by other than an individual indicate corporate officer or principle partner.
 - f) Owners address
 - g) Owners telephone number
 - h) Property owner
 - i) Address
 - j) If the scope of work involves a Dip Tank
Installation, indicate the owner(s) of the tank(s) address and telephone number
 - k) County Section number (s)
 - l) County Block Number (s)
 - m) County Lot Number (s)
 - n) School District Number

GENERAL REQUIREMENTS (CONT'D)

- If the location is not licensed by this Office, as required by Section 5.16 of Article 5 of the Nassau County Fire Prevention Ordinance, the license application and the appropriate fee shall be submitted with the plans. After plans are approved, and required tests completed, then a flammable finish license will be issued.
- Provide a Key Map [in addition to a site plan] of the area indicating the site location in relationship to the neighborhood / streets location.
- Provide a site plan of the location, indicating the dimensions from the building to the property lines. Indicate the location, size and use of all existing buildings attached or immediately adjacent to the location for which the plans are being submitted, with cross section drawings.
- Indicate the building construction and the occupancy classification as per the New York State Uniform Fire Prevention and Building Code.
- Indicate placement of Flammable Finish Spray Booth and/or Mixing Room within the building. Show distances to walls, and that it meets applicable requirements, and cross section drawing. **Minimum of three (3) foot clear space around booth, including ceiling.** If less than three feet than show wall construction having not less than 1 hr. fire resistance rating. (ALL PLANS)
- Provide name or brand, specs and/or cut sheets for the spray booth and/or mixing room. No Aluminum construction. If cut sheets are unavailable than a detailed drawing of the booth and mixing room is required, showing construction material, lighting, electrical equipment, fans, plenums, exhaust ducts, filters, make up air ducts, heating equipment.
- Does the booth have a Bake operation? Show fuel type used. **Sign shall be placed stating “FUEL SHUT OFF” at shut off valve location. (ALL PLANS)**
- Show spill containment in mixing room. Provide a sill at the door.
- Indicate all Electrical devices subject to Flammable Vapors shall be explosion proof type and considered Class I Division I or Class II Division I hazardous locations. **Provide a note stating proper grounding as per NEC requirements.**
- Electrical wiring and equipment in areas adjacent to spray areas, 5 feet horizontally and 3 feet vertically of the openings are considered Class I Division 2 or Class II Division 2 hazardous locations and be classified for use in those areas.
- State if the building has a preexisting Fire/Smoking Detection System? If so state yes and show location of the F/A panel. The Automatic Extinguishing system must be connected to the F/A panel, if it has one.
- Automatic Extinguishing System (AES) plan to show all parts of the system with appropriate cut sheets. All parts are to be clearly labeled. **Operation Sign shall be placed eye level at all pull stations. Also shows interconnect to building Fire Alarm System if applicable. Show F/A panel (AES PLAN ONLY)**
- Indicate if the building has a fire sprinkler system installed.
- If spray booth and/or mixing room are going to be protected by Fire Sprinkler System either existing or new, a proper Sprinkler System plan is to be submitted. (SPRINKLER SYSTEM ONLY) the system is to be designed and installed as per **NFPA -13, and NFPA-33, for extra high hazard.**

GENERAL REQUIREMENTS (CONT'D)

- **NO building heating equipment (open flame or any that produces a hot surface that can ignite flammable vapors, inferred heaters)) shall be installed within the Flammable Vapor Zone (20 feet of the opening of the spray booth or mixing room).** Only approved heaters are to be installed in those areas.
- Indicate if there are any other occupancy classifications within the same building. Show fire rated separations between any floor/ceilings and between other occupancies in building.
- Indicate if the classification, change in classification or the presences of other classifications within the building that will require either a modification to an existing sprinkler system or the installation of a sprinkler system. If the installation of a sprinkler system or a modification to an existing system is required, the requirements of Article XVIII of the Nassau County Fire Prevention Ordinance shall be satisfied
- Indicate the details of the venting system, either existing or to be installed. The details shall include the location and size of the vents, exhaust fans, or blowers, make-up air vents, etc.
- Indicate the location, number, class, travel distance to all required fire extinguishers. Size and number of required extinguishers shall be derived from NFPA 10. Min 40 B rating and travel 30 feet, 80 B rating, travel 50 feet. (ALL PLANS)
- Termination points of ventilation systems. Section 1504.7.6 NY State Fire Code. Ducts carrying flammable vapors shall terminate 30 feet from property lines, 10 feet from openings in buildings, 6 feet from exterior walls or roofs.
- All ducts shall follow Section 510.8 of NY State Mechanical Code for construction requirements and clearances to combustibles. Show detail of ceiling roof exhaust duct pass through. Reduced clearances maybe allowed if approved Fire Wrap is used.
- Access panels in ductwork shall be shown to provide service to nozzles and links.
- Where required, provide details of the blowout, or weak seam explosion venting to be provided.
- Indicate on plans the location of exits to comply with the requirements of the NYS Uniform Fire Prevention and Building Code and/or NFPA 101, Life Safety Code.
- By note, indicate that all necessary air discharge permits will be secured, or include a copy of the approved permit with the plan submission.
- Show placement of “**NO Smoking**”, and “**NO Welding**” signs in vicinity of flammable vapor areas and paint storage areas.
- Plans show location and type of heating equipment used in building. NYS Fire Code 1503 requires equipment to be located a minimum of 20 feet away from the flammable vapor area, ie. Front of booth and mixing room.
- Provide Information, (name address and phone) as to who is installing the booth (on the Flammable Finish Location Plan) and AES system, (on the AES plan).
- Inspector’s copy of plan shall be on site at all times.
- Carbon Monoxide Detectors are required in office area, waiting rooms, locker and lunch rooms.
- All spray booth and mixing room entry doors shall have self-closer’s installed.

PLAN REVIEW, SYSTEM TEST AND PERMIT FEES

- A non-refundable plan review fee as per Article XXII of the Nassau County Prevention Ordinance shall be submitted with the plans. All checks shall be made payable to “**NASSAU COUNTY TREASURER.**”
- Plans for Flammable Finish Location (Site Plans) require \$550.00 fee submission.
- Automatic Fire Extinguishing System plan review fee requires \$550.00 (for each system).
- Automatic Fire Extinguishing System test inspection fee requires \$550.00 (for each system).
- Automatic Fire Extinguishing System Permit requires \$215.00 (for each system).
- Initial Application for Flammable Finish Location License is a fee of \$320.00.

- **Total Initial fees are \$2185.00. Three separate checks are to be submitted:** #1: \$550.00 for FF location (site plan) review, #2: \$320.00 for initial FF License, #3: \$1315.00 for AES plan review, test inspection and permit.
- Renewal Application for Flammable Finish Location License is a fee of \$165.00.
- If the proposed work is not COMPLETED within twelve (12) months of the plan approval, new plans shall be submitted, and an additional fee will be required.
- After **TWO** rejections of a plan, a fee of \$270.00 will be imposed to review the plan a third time.