

**LOUDOUN COUNTY FIRE AND RESCUE  
FIRE MARSHAL'S OFFICE**  
23675 Belmont Ridge Road, Suite 150  
Ashburn, VA 20148  
703-737-8600 703-737-8595 (fax)  
[www.loudoun.gov/firemarshal](http://www.loudoun.gov/firemarshal)



**PERMIT APPLICATION**  
**Application for the Display of Aerial Fireworks**

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**GENERAL INSTRUCTIONS FOR THE APPLICANT**

- PLEASE READ OVER THIS APPLICATION THOROUGHLY AND FILL OUT COMPLETELY, USING INK OR OTHER PERMANENT MARKER.
- APPLICATIONS ARE TO BE COMPLETED BY FIREWORKS VENDOR. PERMITS ARE ISSUED TO VENDORS ONLY.
- PLEASE PRINT ALL RESPONSES. FORM IS FILLABLE IN ACROBAT.
- SUBMIT THIS APPLICATION, WITH ALL LISTED ATTACHMENTS, TO THE FIRE MARSHAL'S OFFICE NOT LESS THAN 30 DAYS PRIOR TO THE EVENT. (Ord. Sec. 3308.2.3)
- Fee:      Private Display: \$600              Public Display: No Charge

1. Fireworks Company Name: \_\_\_\_\_

2. Company Business Phone # \_\_\_\_\_

3. Company Emergency Phone # \_\_\_\_\_

4. Company Address \_\_\_\_\_  
  Street Address or P.O. Box                      City                      State            Zip

5. F.I.D (Federal Identification Number) \_\_\_\_\_

6. Full Name of Applicant \_\_\_\_\_

7. Driver's License Number and State of Issuance \_\_\_\_\_

**8. Sponsor Information:**

- Organization: \_\_\_\_\_
- Name of the Sponsor's Representative: \_\_\_\_\_
- Business and Emergency # for Representative: \_\_\_\_\_

**9. Venue Information**

- Location: (List complex, facility or site, complete street address or nearest street intersection and community)

- Scheduled Date and Time for Display: \_\_\_\_\_

***NOTE: Duration of display time may not exceed 30 minutes and must be completed by 11 p.m.***

- Scheduled Rain Date and Time: \_\_\_\_\_
- Time and Date when the Operator and Product will arrive \_\_\_\_\_

**10. Operator, Assistants and Pyrotechnic Specifications**

- Name and Age of the Pyrotechnic Operator (person actually in charge of firing the display fireworks):  
\_\_\_\_\_

- Certifications, Qualifications or Credentials possessed:  
\_\_\_\_\_

- The pyrotechnic experience of the operator is evidenced by he/she having fired (check one in each column):

**Number of shows fired:**

- 1 – 5 shows
- 6 – 10 shows
- 11 – 20 shows
- Over 20 shows

**During a period covering:**

- 1 – 6 months
- 7 – 12 months
- 13 – 24 months
- Over 24 months

- With the latest firing having occurred at :

Name of facility:	Date of firing:
Physical address of facility:	Name of sponsor:
Telephone number of sponsor:	Additional:

- Name and birthdates for all shooters and assistants who will be present (attach additional pages as needed):

Name (print)	DOB

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- List the size (in inches) and number of shells to be fired. Provide additional indication for multi-break shells and/or salutes (reports). Attach additional pages as needed:

#	Size	Type of shell

- The display will be fired (check the appropriate box):

Manually ( ) Electrically ( ) Combined ( )

- Will mortars be re-loaded during the display? Yes ( ) No ( )

- Mortars to be used will be constructed of (check all that apply):

Steel ( ) Paper ( ) HDPE ( ) Fiberglass ( ) Other (specify) \_\_\_\_\_

**11. \*\*\*Emergency Procedures**

A written emergency plan must be submitted as part of the permit review process. This plan shall include the following information:

- Procedures to be followed for misfires. No misfires shall be re-fired without the approval of the Fire Marshal.
- Procedures to be followed in the event of a catastrophic failure of a firework device or component or other accident related to event activity. This must include emergency notification to fireworks personnel, event staff and emergency personnel.
- Procedures for retrieval, security, disposal and or transport of fireworks that are damaged or otherwise rendered unstable by the Fire Marshal for the purpose of re-firing. If this requires the services of a third party, this shall include the contact information and proof that said firm is a certified hazardous disposal firm, licensed to conduct business in Virginia. Said firm shall be immediately accessible for notification purposes by the applicant and shall be on site within a twenty four (24) hour period once notified by the applicant. Should the applicant not include the name and contact information of such a company, the applicant acknowledges that it will be responsible for paying all costs that may be incurred by the Fire Marshal’s Office in abating and cleaning up the hazard.

## 12. Additional Attachments.

The following items are to be provided as attachments to this application:

- A diagram of the grounds or area where the display will be held. The diagram is not required to be to scale however it must show:
  1. The display site radius (with an indicated distance in feet) for the largest shell to be used in the display, and
  2. The points at which the shells and/or cakes are to be positioned and fired, and
  3. The lines behind which the audience will be restrained (with an indicated distance in feet), and
  4. Location of significant buildings (with an indicated distance in feet), highways, overhead obstructions and utilities, and
  5. The indicated direction of North.
- Proof of a corporate surety bond or a public liability insurance policy in an amount acceptable to the sponsor noted on Item 8 (page 1), but not less than \$5,000,000.00, naming the County of Loudoun as an additional insured. Issuer must be licensed to do business in Virginia.
- Authorization letter from landowner(s) within the display site to allow aerial fireworks over their property.
- Copy of initial notification to FAA. Approval letter to be submitted prior to event.
- Zoning Approval
- A check payable to the 'County of Loudoun' where applicable

## 13. Conditions and Acknowledgements

The applicant is required to review and initial the following requirements of the Loudoun County Fire Prevention Code and its referenced standards. By initialing each item, the applicant acknowledges their review and agreement to comply with any listed requirements as expressed in the Code. (If the item does not apply to the circumstance, the applicant is to write N/A in place of their initials.)

- Each shell is marked to indicate its size (e.g., "3-in. shell"), type (e.g., "2-break with report") and provides the name of the manufacturer, importer, or distributor. \_\_\_\_\_
- Each shell has a conspicuous warning label stating the shell is a dangerous explosive and is of a contrasting color to its background. \_\_\_\_\_
- Each type of aerial salute is conspicuously marked with the word "Salute." \_\_\_\_\_
- If reloads are used during the display, the ready box will be capable of protecting the contents from burning debris with a self-closing cover or by an equivalent means or method. \_\_\_\_\_
- During the performance of the display, the ready box will be located at least 25 feet upwind from the mortar placement. \_\_\_\_\_
- The reloading of shells will be confined to shells with a 6-inch or less diameter. \_\_\_\_\_
- The display site has a radius of not less than 100 feet per inch of diameter of the largest shell to be fired. This distance is doubled for chain-fused items including cakes. An additional 50 'of buffer is requested, if practical, to compensate for wind. \_\_\_\_\_
- The display site radius from health care and detention/correctional facilities, or to the bulk storage area of materials that have a flammability, explosive, or toxic hazard, will not be less than 200 feet per inch of diameter of the largest shell to be fired. \_\_\_\_\_
- No spectators or spectator parking will be located within the display site. \_\_\_\_\_
- No one other than the pyrotechnic crew is permitted within 75 feet of unfired pyrotechnic items. \_\_\_\_\_
- Any ground display pieces used will be located a minimum distance of 75 feet from spectator viewing and parking areas. \_\_\_\_\_
- After consulting with the sponsor, provisions have been made for adequate fire protection for the display site and the local fire company has been made fully aware of the anticipated fireworks display. It is requested that a 20 B: C fire extinguisher be on hand at the display site. (On-site Fire/EMS standby required for hand-fired displays) \_\_\_\_\_

- The display site is free of fire hazards, to include boxes, wrapping, dry grass or mulch piles or other combustibles that could contribute to an accidental ignition of fireworks. \_\_\_\_\_
- The sponsor is providing a sufficient number of monitors, with distinctive identification (e.g., badges, colored vests, etc.), whose sole duty is enforcement of crowd control around the display area. The sponsor will determine the required number of monitors with the concurrence of the Fire Marshal (or his/her designee) and the operator. Where practical, fences and rope barriers can be incorporated by the monitors to aid in crowd control but will not to be used to supplant the number of monitors. \_\_\_\_\_
- When firing shells electrically, the firing system is designed to ensure against accidental firing by providing at least a two-step interlock process that requires the operator to intentionally enable or arm the firing system, and deliberately apply firing power. \_\_\_\_\_
- Not more than two boxes of shells are to be exposed at the display site during loading.
- Field application of electrical initiators shall be done AFTER the shell is loaded into the tube. No shells waiting to be loaded will be exposed during application. \_\_\_\_\_
- The power source used for firing pyrotechnic devices is restricted to batteries or isolated power supplies used for firing purposes only. \_\_\_\_\_
- Any shell larger than 6-inches in diameter will be pre-loaded into the mortar(s) and fired electrically. \_\_\_\_\_
- Except for securely fastened mortar racks, mortars will be buried to a depth of at least 66.6% of their length. Cake or box items are to be secured with sandbags on all sides. \_\_\_\_\_
- When mortars are to be reloaded during a display, mortars of various sizes will not be intermixed. Mortars of the same size will be placed in groups according to size and groups will be separated from one another. \_\_\_\_\_
- Mortars will be of sufficient length, strength and durability to fire the aerial shells safely and to safe heights. \_\_\_\_\_
- The tensile strength of steel pipe mortars will be at least 40,000 psi. Metal mortars with seams will be placed so that all seams face either left or right when viewing the line of mortars. The walls of steel mortars will be a minimum thickness of:

Mortar ID (in.)	Spherical	Cylindrical Single Break	Cylindrical Multi-Break
3	0.04	0.11	0.21
4	0.05	0.12	0.23
5	0.06	0.13	0.25
6	0.07	0.14	0.27
8	0.09	0.16	0.31
10	0.11	0.18	0.35
12	0.13	0.20	0.39

The cross-grain tensile strength of paper mortars will be at 2300 psi. of paper mortars will be a minimum thickness of:

Mortar ID (In.)	Spherical	Cylindrical Single Break	Cylindrical Multi-Break
3	0.25	0.25	0.37
4	0.25	0.33	0.50
5	0.31	0.42	0.62
6	0.37	0.50	0.75
8	0.50	0.62	.
10	0.62	-	.
12	0.75	'	'

- The tensile strength of High Density Polyethylene<sup>1</sup> plastic mortars will be at least 3500 psi. The wall of plastic mortars will be a minimum thickness of:

Mortar ID (in.)	Spherical	Cylindrical Single Break	Cylindrical Multi-Break
3	0.15	0.20	3
4	0.20	0.26	3
5	0.25	3	3
6	0.30	3	3
8	<sup>2</sup>	3	3
10	2	3	3
12	2	3	3

<sup>1</sup> If any other plastic pipe is used, such as PVC, please provide proof or evidence the material meets or exceeds the 3500 psi threshold.

<sup>2</sup> Data not currently available

<sup>3</sup> Provide documentation from plastic manufacturer that provides evidence or proof the material meets or exceeds the 3500 psi threshold.

- The inside mortar length will be a minimum of:

Mortar ID (in.)	Single Break	Double Break	Up to 4-Break
3	15	18	21
4	20	23	27
5	24	28	32
6	28	32	37
8	34	40	46
10	40	46	54
12	46	52	62

14. Final Review and Signatures

By my signature:

- I attest that the supplied information is accurate and correct.
- I acknowledge and agree to comply with all applicable requirements of the Loudoun County Fire Marshal's Office, to include the Loudoun County Fire Prevention Code and it's referenced standards governing the use, storage, display and disposal of fireworks.
- I agree to comply with the provisions of the submitted emergency plan. If this plan cannot be enacted, I acknowledge that I am responsible for compensating Loudoun County for any and all costs (salaries, overtime, materials, supplies, professional services) related to scene security, emergency destruction operations and hazardous materials clean up whenever the immediate removal, storage, transport and destruction of any and all damaged shells cannot be accomplished by a firm approved by the Fire Marshal.
- I also acknowledge that if a permit is issued based upon this application, it :
  1. Shall be valid only at the location listed on the application, and for the specific date(s) and time(s) for which it is issued and
  2. Does not convey approval to store explosives (display fireworks) beyond the temporary (less than 24-hour) on-site storage of the display fireworks on the date of the approved display.

If approved for permit issuance, I attest that **a copy of this application and all its attachments will be available on-site during the dates and times noted on Item 9 (page 1)** of the application. I further acknowledge and understand that any Loudoun County Fire Prevention Code violations identified after permit issuance may result in immediate permit suspension or revocation.

Applicant Signature \_\_\_\_\_

Date \_\_\_\_\_

Fire Marshal Signature \_\_\_\_\_

Date \_\_\_\_\_

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### Fire Marshal Use Only

- Application
- Applicable Fee
- Site Drawing
- Insurance Certificate
- Landlord permission
- Zoning Approval
- FAA Initial Notification
- FAA Response