

Indoor Pyrotechnics Safety Permit

This Act establishes a permit process to authorize using pyrotechnics at indoor sporting, cultural and theatrical events. It also increases penalties for those who ignite indoor fireworks without a permit.

Submitted as:

New York

[Assembly 6893 B](#)

Status: Enacted as Chapter 584 in 2003.

Suggested State Legislation

(Title, enacting clause, etc.)

1 Section 1. [*Short Title.*] This Act may be cited as an "Act to Require Permits for Indoor
2 Pyrotechnics."
3

4 Section 2. [*Definitions.*] For the purposes of this Act:

5 a. "Airburst" means a pyrotechnic device that is suspended in the air to simulate outdoor
6 aerial fireworks shells without producing hazardous debris.

7 b. "Areas of public assembly" means all buildings or portions of buildings used for
8 gathering together fifty or more persons for amusement, athletic, civic, dining, educational,
9 entertainment, patriotic, political, recreational, religious, social, or similar purposes, the entire
10 fire area of which they are a part, and the means of egress therefrom.

11 c. "Assistant" means a person who works under the supervision of the pyrotechnic
12 operator.

13 d. "Audience" means spectators whose primary purpose is to view a performance.

14 e. "Building" means a combination of any materials, whether portable or fixed, having a
15 roof, to form a structure affording shelter for people, animals, or property. The word "building"
16 shall be construed for the purposes of this section as though followed by the words "or part" or
17 "parts thereof," unless the context clearly requires a different meaning.

18 f. "Concussion mortar" means a device specifically designed and constructed to produce a
19 loud noise and a violent jarring shock for dramatic effect without producing any damage.

20 g. "Fallout area" is the area in which any hazardous debris falls after a pyrotechnic device
21 is fired. The fallout area is defined as a circle that, in turn, is defined by the fallout radius.

22 h. "Fallout radius" is the line that defines the fallout area of a pyrotechnic device. The
23 line is defined by two points. The first point is at the center of a pyrotechnic device. The second
24 point is the point most distant from the center of the pyrotechnic device at which any hazardous
25 debris from the device can fall.

26 i. "Fire area" is the floor area of a story of a building within exterior walls, party walls,
27 firewalls, or any combination thereof.

28 j. "Hazardous debris" is any debris, produced or expelled by the functioning of a
29 pyrotechnic device, that is capable of causing personal injury or unpredicted property damage.
30 This includes, but is not limited to, hot sparks, heavy casing fragments, and unignited
31 components. Materials such as confetti, lightweight foam pieces, feathers, or novelties are not to
32 be construed as hazardous debris.

33 k. "Owner" means any person, agent, firm, association, limited liability company,
34 partnership, or corporation having a legal or equitable interest in the property.

35 l. "Performance" means the enactment of a musical, dramatic, operatic, or other
36 entertainment production. The enactment may begin and progress to its end according to a script,
37 plan, or other preconceived list of events, or deviate therefrom. A performance includes any
38 encores.

39 m. "Performer" is any person active in a performance during which pyrotechnics are used
40 and who is not part of the audience or support personnel. Among others, performers include, but
41 are not limited to, actors, singers, musicians, and acrobats.

42 n. "Permit authority" means the agency authorized to grant and issue the permits provided
43 for in this section, which agency in the territory within a state park shall be the state agency
44 having custody and control thereof, in the territory within a county park shall be the county park
45 commission, or such other agency having jurisdiction, control, and/or operation of the parks or
46 parkways within which any pyrotechnics are to be used, in a city shall be the duly constituted
47 licensing agency thereof and, in the absence of such agency, shall be an officer designated for the
48 purpose by the legislative body thereof, in a village shall be an officer designated for the purpose
49 by the board of trustees thereof, and, in the territory of a town outside of villages, shall be an
50 officer designated for the purpose by the town board thereof.

51 o. "Permittee" means

52 (1) The person or people who are responsible, as provided in subparagraph two of
53 this paragraph, for obtaining the necessary permit or permits for the use of indoor pyrotechnics in
54 areas of public assembly or for a production, or who are responsible for obtaining such permit or
55 permits under an applicable local law or ordinance authorized pursuant to subdivision five of this
56 section.

57 (2) The owner of a place of public assembly or building in which pyrotechnics are
58 to be used shall be responsible for obtaining such permit or permits; provided, however, that
59 such owner, in writing, by agreement or lease, may require or otherwise authorize a lessee,
60 licensee, pyrotechnic operator, or other party to be responsible for obtaining such permit or
61 permits, in which case such other party or parties shall be deemed responsible for obtaining such
62 permit or permits and shall be the permittee for purposes of this Act; provided further that the
63 structure is otherwise appropriate for such use under the [state fire prevention and building code]
64 or other such applicable code.

65 p. "Producer" means an individual who has overall responsibility for the operation and
66 management of the performance where the pyrotechnics are to be used. Generally, the producer
67 is an employee of the promotion company, entertainment company, festival, theme park, or other
68 entertainment group

69 q. "Production" means all the performances of a musical, dramatic, operatic, or other
70 show or series of shows

71 r. "Pyrotechnic device" means any device containing pyrotechnic materials and capable
72 of producing a special effect as defined in this subdivision.

73 s. "Pyrotechnic material (pyrotechnic special effects material)" is a chemical mixture
74 used in the entertainment industry to produce visible or audible effects by combustion,
75 deflagration, or detonation. Such a chemical mixture consists predominantly of solids capable of
76 producing a controlled, self-sustaining, and self-contained exothermic chemical reaction that
77 results in heat, gas, sound, light, or a combination of these effects. The chemical reaction
78 functions without external oxygen.

79 t. "Pyrotechnic operator (special effects operator)" means an individual who has
80 responsibility for pyrotechnic safety and who controls, initiates, or otherwise creates special
81 effects.

82 u. "Pyrotechnic special effect" means a special effect created through the use of
83 pyrotechnic materials and devices.

84 v. "Pyrotechnics" means controlled exothermic chemical reactions that are timed to create
85 the effects of heat, gas, sound, dispersion of aerosols, emission of visible electromagnetic
86 radiation, or a combination of these effects to provide the maximum effect from the least
87 volume.

88 w. "Rocket" means a pyrotechnic device that moves by the ejection of matter produced
89 by the internal combustion of propellants.

90 x. "Special effect" means a visual or audible effect used for entertainment purposes, often
91 produced to create an illusion. For example, smoke might be produced to create the impression
92 of fog being present, or a puff of smoke, a flash of light, and a loud sound might be produced to
93 create the impression that a cannon has been fired.

94 y. "Support personnel" means any individual who is not a performer or member of the
95 audience. Among others, support personnel include the road crew of any production, stagehands,
96 property masters, security guards, fire watch officers, janitors, or any other employee.

97 z. "Venue manager" is an individual who has overall responsibility for the operation and
98 management of the facility where pyrotechnics are to be used in a performance.

99
100 Section 3. [*Permit Requirements.*]

101 a. All uses of all pyrotechnics in areas of public assembly shall be approved by the permit
102 authority. The permit authority shall determine that appropriate measures are established to
103 provided acceptable crowd management, security, fire protection, (including sprinklers), and
104 other emergency services. All planning and use of pyrotechnics shall be coordinated with the
105 venue manager and producer.

106 b. Before the performance of any production, the permittee shall submit a plan for the use
107 of pyrotechnics to the permit authority. After a permit has been granted, the permittee shall keep
108 the plan available at the site for safety inspectors or other designated agents of the permit
109 authority. Any addition of pyrotechnics to a performance or any significant change in the
110 presentation of pyrotechnics shall require approval by the permit authority, except that reducing
111 the number or size of pyrotechnics to be used in a performance shall not be considered to be a
112 significant change in the presentation.

113 c. (1) The plan for the use of pyrotechnics shall be made in writing or such other
114 form as is required or approved by the permit authority.

115 (2) The plan shall provide the following:

116 (i) Name of the person, group, organization, or other entity sponsoring the
117 production.

118 (ii) Date and time of day of the production.

119 (iii) Exact location of the production.

120 (iv) Name of the person actually in charge of firing the pyrotechnics (i.e.,
121 the pyrotechnic operator).

122 (v) Number, names, and ages of all assistants who are to be present.

123 (vi) Qualifications of the pyrotechnic operator.

124 (vii) Pyrotechnic experience of the operator.

125 (viii) Confirmation of any applicable local, state, and federal licenses held
126 by the operator or assistant.

127 (ix) Evidence of the permittee's insurance carrier or financial
128 responsibility.

129 (x) Number and types of pyrotechnic devices and materials to be used, the
 130 operator's experience with those devices and effects, and a definition of the general
 131 responsibilities of assistants.

132 (xi) Diagram of the grounds or facilities where the production is to be
 133 held. This diagram shall show the point at which the pyrotechnic devices are to be fired, the
 134 fallout radius for each pyrotechnic device used in the performance, the lines behind which the
 135 audience shall be restrained, and the placement of sprinkler systems.

136 (xii) Point of on-site assembly of pyrotechnic devices.

137 (xiii) Manner and place of storage of the pyrotechnic materials and
 138 devices.

139 (xiv) Material safety data sheet (MSDS) for the pyrotechnic materials to
 140 be used.

141 (xv) Certification that the set, scenery, and rigging materials are inherently
 142 flame-retardant or have been treated to achieve flame retardancy.

143 (xvi) Certification that all materials worn by performers in the fallout area
 144 during use of pyrotechnic effects shall be inherently flame-retardant or have been treated to
 145 achieve flame retardancy.

146 (3) All plans shall be submitted as soon as is possible so that the permit authority
 147 has time to be present and to notify other interested parties. In no event shall such advance notice
 148 be less than [five business days].

149 d. A walk-through and a representative demonstration of the pyrotechnics shall be
 150 approved by the permit authority before a permit is approved. The permit authority may waive
 151 this requirement based on past history, prior knowledge, and other factors; provided that the
 152 authority is confident that the discharge of pyrotechnics can be conducted safely. The
 153 demonstration shall be scheduled with sufficient time allowed to reset/reload the pyrotechnics
 154 before the arrival of the audience.

155 e. All pyrotechnic operators shall be at least twenty-one years old and licensed or
 156 approved by the permit authority in accordance with all applicable laws, if any. All assistants
 157 shall be at least eighteen years old.

158

159 Section 4. [*Conduct of Pyrotechnic Performances.*]

160 a. Two or more fire extinguishers of the proper classification and size as approved by the
 161 permit authority shall be readily accessible while the pyrotechnics are being loaded, prepared for
 162 firing, or fired. In all cases, at least two pressurized water or pump extinguishers shall be
 163 available. Additional fire extinguishing equipment shall be provided as required by the permit
 164 authority. Personnel who have a working knowledge of the use of the applicable fire
 165 extinguishers shall be present while the pyrotechnics are being handled, used, or removed. No
 166 personnel shall use or handle pyrotechnic materials or devices while under the influence of
 167 intoxicating beverages, narcotics, controlled substances, and prescription or nonprescription
 168 drugs that can impair judgment. Fire detection and life safety systems shall not be interrupted
 169 during the operation of pyrotechnic effects.

170 b. (1) All pyrotechnic devices shall be mounted in a secure manner to maintain their
 171 proper positions and orientations so that, when they are fired, the pyrotechnic effects described in
 172 the plan submitted by the permittee are produced. Pyrotechnic devices shall be mounted so that
 173 no fallout from the device endangers human lives, results in personal injury, or damages
 174 property. Pyrotechnic materials shall be fired only from equipment specifically constructed for
 175 the purpose of firing pyrotechnic materials. The pyrotechnic operator shall be responsible for
 176 selecting equipment and materials that are compatible.

177 (2) Where rockets are launched before an audience, performers, or support
178 personnel, the rockets shall be attached securely to a guide wire or cable with both ends securely
179 attached and placed on an impact-resistant surface located at the terminal end of the guide. This
180 guide wire or cable shall be of sufficient strength and flame resistance to withstand the exhaust
181 from the rocket. An effective arrangement to stop the rocket shall be provided.

182 (3) Pyrotechnics shall be:

183 (i) Placed so that any hazardous debris falls into a safe, flame-resistant
184 area;

185 (ii) Fired so that the trajectory of their pyrotechnic material is not carried
186 over the audience; and

187 (iii) Placed for firing so that no flammable materials are within their
188 fallout area.

189 (4) Pyrotechnic devices and materials used indoors shall be specifically
190 manufactured and marked for indoor use by the manufacturer.

191 (5) Airbursts shall be permitted to be fired above the assembled audience, subject
192 to the following conditions:

193 (i) The airburst shall be suspended by a minimum 30-gauge metal wire
194 that is attached securely to a secure support acceptable to the authority having jurisdiction.

195 (ii) The airburst shall occur at a minimum height of three times the
196 diameter of the effect.

197 (iii) Where the effect is demonstrated, there shall be no burning or
198 glowing particles below the fifteen-foot level above the floor.

199 c. Each pyrotechnic device fired during a performance shall be separated from the
200 audience by at least fifteen feet but not by less than twice the fallout radius of the device.
201 Concussion mortars shall be separated from the audience by a minimum of twenty-five feet.
202 There shall be no glowing or flaming particles within ten feet of the audience.

203 d. (1) The facility where pyrotechnic materials and devices are handled and used
204 shall be maintained in a neat and orderly condition and shall be kept free of any conditions that
205 can create a fire hazard.

206 (2) Smoking shall not be permitted within twenty-five feet of the area where
207 pyrotechnics are being handled or fired; provided that smoking by performers as part of the
208 performance shall be permitted as blocked in rehearsals and if expressly approved by the
209 pyrotechnic operator and the permit authority.

210 e. (1) The pyrotechnic effect operator shall advise all performers and support
211 personnel that they are exposed to a potentially hazardous situation when performing or
212 otherwise carrying out their responsibilities in the vicinity of a pyrotechnic effect. Performers
213 and support personnel familiar and experienced with the pyrotechnic effects being used shall be
214 permitted to be in the area of a pyrotechnic effect, but only voluntarily and in the performance of
215 their duties.

216 (2) No part, projectile, or debris from the pyrotechnic material or device shall be
217 propelled so that it damages overhead properties, over-head equipment, or the ceiling and walls
218 of the facility.

219 (3) Immediately before any performance, the pyrotechnic operator shall make a
220 final check of wiring, positions, hook-ups, and pyrotechnic devices to ensure that they are in
221 proper working order. The pyrotechnic operator also shall verify safety distances.

222 (4) The placement and wiring of all pyrotechnic devices shall be designed to
223 minimize the possibility of performers and support personnel disturbing the devices during a
224 performance.

225 (5) The pyrotechnic operator shall exercise extreme care throughout the
 226 performance to ensure that the pyrotechnic devices function correctly and that the performers,
 227 support personnel, and audience are clear of the devices.

228 (6) When pyrotechnics are fired, the quantity of smoke developed shall be
 229 controlled so as not to obscure the visibility of exit signs or paths of egress.

230
 231 Section 5. [*Bonds.*] Before granting and issuing a permit for a use of pyrotechnics as
 232 provided in this Act, the permit authority shall require an adequate bond from the applicant
 233 therefore, unless such applicant is a state park, county park, city, village, or town, or from the
 234 person to whom a contract for such use shall be awarded, in a sum to be fixed by the permit
 235 authority, which, however, shall not be less than five hundred thousand dollars, conditioned for
 236 the payment of all damages which may be caused to a person or people or to property by reason
 237 of the use so permitted and arising from any acts of the permittee, his or her agents, employees,
 238 contractors, or subcontractors. Such bond shall run to the owner of the facility for which the
 239 permit is granted and issued and shall be for the use and benefit of any person or persons or any
 240 owner or owners of any property so injured or damaged, and such person or persons or such
 241 owner or owners are hereby authorized to maintain an action thereon, which right of action also
 242 shall accrue to the heirs, executors, administrators, successors, or assigns of such person or
 243 persons or such owner or owners. The permit authority may accept, in lieu of such bond, an
 244 indemnity insurance policy with liability coverage and indemnity protection equivalent to the
 245 terms and conditions upon which such bond is predicated and for the purposes herein provided.

246
 247 Section 6. [*Local Laws or Ordinances Superseded.*] All local laws or ordinances
 248 regulating the use of pyrotechnics within the contemplation of this Act are hereby superseded by
 249 the provisions of this Act, with the exception of:

- 250 (1) All laws or ordinances enacted by a city of one million or more people; and
 251 (2) Other local laws or ordinances that prohibit the use of indoor pyrotechnics.

252
 253 Section 7. [*Unpermitted Use of Indoor Pyrotechnics.*]
 254 a. A person is guilty of unpermitted use of indoor pyrotechnics in the second degree when
 255 he or she is responsible for obtaining a necessary permit to use indoor pyrotechnics, as required
 256 by this Act, and, without obtaining such permit or knowing that he or she is not in compliance
 257 with the terms of a permit, he or she intentionally ignites or detonates pyrotechnics for which
 258 such permit is required, or knowingly permits another to ignite or detonate such pyrotechnics, in
 259 a building, as defined in this Act. Unpermitted use of indoor pyrotechnics in the second degree is
 260 a [Class A misdemeanor].

261 b. A person is guilty of unpermitted use of indoor pyrotechnics in the first degree when
 262 he or she commits the crime of unpermitted use of indoor pyrotechnics in the second degree, as
 263 defined in this section, and, within the previous five year period, he or she has been convicted
 264 one or more times of the crime of unpermitted use of indoor pyrotechnics in the second degree,
 265 as defined in this section, or unpermitted use of indoor pyrotechnics in the first degree, as
 266 defined in this section. Unpermitted use of indoor pyrotechnics in the first degree is a [Class E
 267 felony].

268 c. A person is guilty of aggravated unpermitted use of indoor pyrotechnics in the second
 269 degree when he or she commits the crime of unpermitted use of indoor pyrotechnics in the
 270 second degree, as defined in this section, and, by means of igniting or detonating such indoor
 271 pyrotechnics, he or she recklessly:

- 272 (1) Causes physical injury to another person; or

273 (2) Damages the property of another person in an amount that exceeds two
274 hundred fifty dollars. Aggravated unpermitted use of indoor pyrotechnics in the second degree is
275 a [Class E felony].

276 d. A person is guilty of aggravated unpermitted use of indoor pyrotechnics in the first
277 degree when he or she commits the crime of unpermitted use of indoor pyrotechnics in the
278 second degree, as defined in this section, and, by means of igniting or detonating such indoor
279 pyrotechnics, he or she recklessly causes serious physical injury or death to another person.
280 Aggravated unpermitted use of indoor pyrotechnics in the first degree is a [Class D felony].

281

282 Section 8. [*Severability.*] [Insert severability clause.]

283

284 Section 9. [*Repealer.*] [Insert repealer clause.]

285

286 Section 10. [*Effective Date.*] [Insert effective date.]