
POLICY: GREEN OAKS FIRE PROTECTION ACT (SB 575) IMPLEMENTATION

Discipline: Fire and Life Safety

BACKGROUND: Senate Bill (SB) 50, also known as Leroy F. Greene School Facilities Act of 1998 (or “the Greene Act”), was chaptered into law on August 27, 1998 establishing the state funding program for public K-12 facilities. This Act replaced the previous Leroy F. Greene School Building Lend-Lease Act.

Senate Bill (SB) 575 (O’Connell), also known as the Green Oaks Family Academy Elementary School Fire Protection Act, became law on January 1, 2002, and included fire protection requirements for construction projects funded pursuant to the Greene Act. SB 575 directed that automatic fire sprinkler systems and automatic fire alarm systems be provided in various school construction projects.

SB 575 provides that all projects subject to this law and submitted to DSA for review on or after July 1, 2002, include automatic fire sprinkler systems and automatic fire detection and alarm systems, as required.

PURPOSE: The purpose of this DSA Policy is to answer questions about when automatic fire sprinkler or automatic fire alarm systems are required, what is required and how compliance can be achieved. The following definitions are provided to assist the reader. More complete definitions can be found in the California Fire Code (CFC) and the California Building Code (CBC).

1. DEFINITIONS

1.1 Equipment and Facilities Related Terms:

- **Educational Building** – Group “E” Occupancy, as described by the CBC Section 305. Group includes, among others, the use of a building or structure, or a portion thereof, by more than six persons at any one time for educational purposes through the 12th grade.
- **Automatic Fire Alarm** – As applied to fire protection devices, is a device or system providing an emergency function without the necessity for human intervention and activated as a result of a predetermined temperature rise, rate of temperature rise or detection of smoke. Automatic does not require anyone to activate an alarm.
- **Manual Fire Alarm** – A manually operated device used to initiate an alarm signal. The manual device requires human activation.
- **Modernization** – Any modification of a permanent structure or the construction of a new building on an existing campus. (EDC 17074.50))
- **Automatic Fire Sprinkler System** – An approved system of devices and equipment which automatically detects a fire and discharges water onto or in the area of the fire. For water based systems, an alarm signal is sent to the fire alarm control panel when water is flowing or when the system water supply is shut off. Other fire suppression systems are also required to send signals to the fire alarm panel.

GREEN OAKS FIRE PROTECTION ACT (SB 575) IMPLEMENTATION

1.2 Funding Related Terms: The following subset of terms applies to State funded projects only.

- **State Funded** – Projects funded, in whole or in part, under the Leroy F. Greene School Facilities Act of 1998.
- **Existing Public School Campus** – A school campus consisting of one or more buildings on a site for which application was made to DSA prior to July 1, 2002.
- **New Public School Campus** – A school campus consisting of one or more buildings on a new site for which application made to DSA on or after July 1, 2002. This includes future buildings constructed or added to these new campuses.
- **Modernization** – Any modification of a permanent structure that is 25 years old, or in the case of a portable classroom, that is at least 20 years old, that will enhance the ability of the structure to achieve educational purposes. (EDC 17070.15(f))
- **Portable Classroom** – A classroom building that is designed and constructed to be relocatable and transportable over public streets, and with respect to a single story portable classroom, is designed and constructed for relocation without separation of the roof or floor from the building and when measured at the most exterior walls, has a floor area not in excess of 2,000 square feet. (EDC 17070.15(k))
- **Temporary Relocatable Building** – As defined in the CEC, is a classroom building or structure of modular design and construction that meets all of the following criteria:
 - a) It is designed and constructed to be relocatable and transportable over public streets.
 - b) It is designed and constructed for relocation without detaching the roof or the floor from the building.
 - c) It has a floor area of 2,000 square feet or less when measured at the most exterior walls.
 - d) It is sited upon a temporary foundation in a manner that is designed to permit easy removal.
 - e) It shall be removed within three (3) years of installation, unless the school administration requests a 3-year extension.

2. WHEN FIRE PROTECTION SYSTEMS ARE REQUIRED

2.1 Automatic Fire Sprinkler Systems:

Installation of an automatic fire sprinkler system is required when all of the following conditions apply:

- a) The facility serves kindergarten through 12th grade students.
- b) The campus is a new public school campus as defined, and the plans were submitted to DSA regional offices on or after July 1, 2002.
- c) The project is State funded pursuant to the Greene Act. Any amount of such funding qualifies. Private and parochial school campuses and public school campuses with construction projects 100 percent funded by local funds, are not required to install automatic fire sprinkler systems under the law. The basic code provisions found in Chapter 9 of the CBC would prevail.

GREEN OAKS FIRE PROTECTION ACT (SB 575) IMPLEMENTATION

Note: The automatic sprinkler system requirements apply to all buildings on a new public school campus, regardless of occupancy classifications. This includes, among others, assembly buildings such as gymnasiums, multipurpose rooms and auditoriums.

Future buildings constructed on new public school campuses will also be required to be provided with an automatic fire sprinkler system if those buildings meet the above conditions.

The reduction in CBC and CFC requirements for automatic fire sprinkler systems, found in Chapter 5 of the CBC (i.e., area increases, story increases, height increases, reduction in rating of construction type), and reduction in fire flow (CFC Appendix B, BB, C, and CC) continue to be allowed even though the system is now required.

2.2 Manual and/or Automatic Fire Alarm Systems:

Installation of an automatic fire alarm and detection system consisting of smoke and/or heat detection with at least one manual fire alarm box located in the campus administrative offices is required when all of the following conditions apply:

- a) The facility serves kindergarten through 12th grade students.
- b) The project is State funded, whole or in part, under Chapter 12.5 of the Greene Act. Any amount of such funding qualifies. Private and parochial school projects and public school construction projects 100 percent funded by local funds are not required to install automatic fire alarm systems under this law. The minimum requirements found in the CBC are required to be met.

Note: These fire alarm requirements apply to all buildings on a public school campus that are used for educational purposes, regardless of occupancy classifications. This includes, among others, assembly buildings such as gymnasiums, multipurpose rooms and auditoriums.

Exceptions:

- a) Temporary portable buildings sited on a public school campus for less than three years on a temporary foundation require a minimum of a manual fire alarm system.
- b) Modernization project (as defined in Section 1.2), funded under the Greene Act, including one or more buildings where the estimated total cost is less than \$200,000.

3. SYSTEM REQUIREMENTS

3.1 Automatic Fire Sprinkler Systems

Automatic fire sprinkler systems are to be provided where required per the California Building Code. Systems shall be designed and installed per the adopted edition of NFPA 13, inclusive of State Fire Marshal (SFM) amendments.

Or

Alternative protection may be used where permitted in CBC Chapter 9, Sections 903.1.1. and 904.1.

GREEN OAKS FIRE PROTECTION ACT (SB 575) IMPLEMENTATION

- 3.2 Manual and/or Automatic Fire Alarm Systems:** Manual and/or automatic fire alarm and detection systems are to be provided where required per the California Building Code. Systems shall be designed and installed per NFPA 72, inclusive of SFM amendments, and California Electrical Code (CEC) Article 760.
- 3.3 Manual Initiation:** At least one manual fire alarm pull station shall be installed with manual and manual/automatic systems for the purpose of manually initiating the fire alarm system. The manual fire alarm pull station shall be located in the campus administration office area.
- 3.4 Occupant Notification:** Occupant notification shall be consistent with the requirements for audible and visible notification as required in CBC, and as described in NFPA Standard 72 inclusive of California amendments found in Chapter 35 of the CBC. The audible alarm signal shall be the standard fire alarm evacuation signal (ANSI S3.41), three-pulse temporal pattern. In addition, an audible alarm notification appliance shall be mounted on the exterior of buildings to alert occupants at the playground area(s).
- 3.5 Supervising Station:** All automatic fire alarm systems shall transmit alarm, supervisory and trouble signals to an approved supervising station. The supervising station shall be listed in categories UUFX or UUJS by Underwriters Laboratories, or shall meet the requirements of Factory Mutual Research Approval Standard 3011. A statement that supervision will be provided, and shall be verified by the project inspector prior to close out, is required on plans submitted to DSA.
- 4. ADDITIONAL INFORMATION:** Frequently asked questions and a chart providing an overview of fire alarm requirements are presented in the Appendices.

REFERENCES:

California Fire Code (CFC)
California Building Code (CBC)
California Education Code (EDC)

A DSA Policy is a formally established set of governing statements based on law and code objectives, addressing any aspect of DSA's plan and construction review program that is not clearly addressed by code. Policy also may specify administrative or technical requirements that are not yet addressed within Title 24, but are deemed important and necessary to fulfill code objectives in advance of adoption into the code.

GREEN OAKS FIRE PROTECTION ACT (SB 575) IMPLEMENTATION

Appendix

**GREEN OAKS FAMILY ACADEMY ELEMENTARY SCHOOL FIRE PROTECTION ACT
(SB 575)
FREQUENTLY ASKED QUESTIONS**

Question #1:

What is the definition of new or existing campus in the Green Oaks Family Academy Elementary School Fire Protection Act and the California Building Code (CBC)?

Answer:

Education Code Section 17074.50 and definitions within the CBC Chapter 2 identify new and existing schools as follows:

New Campus means a school project consisting of one or more buildings on a new site for which application made to DSA on or after July 1, 2002, per definition found in CBC Chapter 2, Section 202. This would include adding future new buildings to these new campuses.

Existing Campus means a school project consisting of one or more buildings on a site for which application was made to DSA prior to July 1, 2002, per definition found in CBC Chapter 2, Section 202.

Question #2:

Solely for the purposes of the Green Oaks Family Academy Elementary School Fire Protection Act, what does the term “modernization” mean?

Answer:

The Green Oaks Family Academy Elementary School Fire Protection Act defines modernization as any modification of a permanent structure or construction of a new building, on an existing campus.

Question #3:

Solely for the purposes of the Green Oaks Family Academy Elementary School Fire Protection Act, what is a temporary building and what are the fire alarm requirements?

Answer:

A temporary relocatable building that is sited with the intent that it be on site for less than three years and is placed on a temporary foundation is exempt from the requirements of Sections 17074.50 and 17074.52. Additionally, the public school administration may request a three-year extension of the exemption for said temporary building, which means that the temporary relocatable building may be sited on the public school campus for a maximum of six years. The minimum fire alarm requirement is a manual fire alarm system.

GREEN OAKS FIRE PROTECTION ACT (SB 575) IMPLEMENTATION

Question #4:

If a relocatable building is moved from an existing K-12 campus to a new campus what would be the requirements for fire alarms and fire sprinklers?

Answer:

A relocatable building moved from an existing campus to a new campus would require a manual and automatic fire alarm and a fire sprinkler system.

Question #5:

Are private and parochial schools subject to the requirements of the Green Oaks Family Academy Elementary School Fire Protection Act?

Answer: No

The Leroy F. Greene School Facilities Act of 1998 commencing with Section 17070.10 of the Education Code funds public school projects that house and/or serve students from kindergarten through twelfth grade (K-12), and does not apply to private and parochial schools.

Even though private schools are constructed without public funding and requirements for fire alarms and fire sprinklers do not fall within the Green Oaks Family Academy Elementary School Fire Protection Act, private schools are required to meet all of the applicable provisions found in the CBC for fire alarm and fire sprinkler requirements.

Question #6:

When the Green Oaks Family Academy Elementary School Fire Protection Act conflicts with the California Building Code, which provisions prevail?

Answer:

The provisions of the Green Oaks Family Academy Elementary School Fire Protection Act, were included in the California Building Code (CBC) in 2002. When the CBC, in subsequent editions, is more restrictive than the Green Oaks Family Academy Elementary School Fire Protection Act, the more restrictive provisions prevail.

Question #7:

Does a stand-alone (separated by required distance per CBC Table 602) new permanent K-12 building placed on a new or existing school campus, when not used for instruction, such as a toilet, storage, or ticket booth, require a manual and automatic fire alarm system as described under Green Oaks Family Academy Elementary School Fire Protection Act or as described under the Group "E" occupancy provisions in the CBC?

Answer: No

Only buildings used for educational purposes where instruction is given are required to have a manual and automatic fire alarm system for Group "E" occupancies. Other occupancies are required to meet their distinct provisions unless the non-educational activities are part of, grouped with per CBC Chapter 5, or an accessory to an educational building. If a non-educational occupancy is part of an educational occupancy, the most restrictive requirement will prevail.

GREEN OAKS FIRE PROTECTION ACT (SB 575) IMPLEMENTATION

Question #8:

What type of fire alarm system does the Green Oaks Family Academy Elementary School Fire Protection Act require for a modernization project?

Answer:

For projects funded under the Leroy F. Greene School Facilities Act of 1998, Education Code Section 17074.52(a) stipulates that a modernization project that involves an educational building that exceeds a total estimated cost of at least \$200,000 shall have a manual and an automatic fire alarm system installed in the area being modernized. The alarm, upon activation of an initiating device, shall alert all occupants and shall transmit the alarm signal to an approved monitored supervising station.

Additionally, Education Code Section 17074.50(b) allows a modernization project to be completed in more than one phase. The school district may defer the installation of the fire detection / alarm system until the final phase of the modernization project.

Question #9:

Do the requirements of the Green Oaks Family Academy Elementary School Fire Protection Act apply to all public schools that house and or serve students from kindergarten through twelfth grade (K-12)?

Answer: No

Only the public schools that are funded pursuant to the Leroy F. Greene School Facilities Act of 1998 commencing with Section 17074.10 of the Education Code are subject to these requirements.

Note: *Buildings not funded by the Leroy F. Greene School Facilities Act of 1998 are still required to meet applicable minimum provisions of the California Building Code and California Fire Code.*

Question #10:

Are community colleges, colleges, universities or vocational schools required to comply with the requirements of the Green Oaks Family Academy Elementary School Fire Protection Act?

Answer: No

Education Code Sections 17070.75 and 17071.75 clearly indicate that the requirements of the Leroy F. Greene School Facilities Act of 1998 commencing with Section 17074.10 of the Education Code are applicable to K-12 facilities.

Question #11:

Are the requirements of the Green Oaks Family Academy Elementary School Fire Protection Act retroactive?

Answer: No

Approved existing school fire alarms are allowed to remain in place as long as they are operable.

GREEN OAKS FIRE PROTECTION ACT (SB 575) IMPLEMENTATION

Question #12:

If a public school determines that it is more cost effective to install a sprinkler system in a modernization project in lieu of a manual and automatic fire alarm system, would that methodology comply with the intent of the Green Oaks Family Academy Elementary School Fire Protection Act?

Answer: No

If a school district installs an automatic fire sprinkler system in a modernization project with an estimated cost of \$200,000 or more on a “new” or “existing” campus, a manual and automatic fire alarm system is still required.

Question #13:

How many manual fire alarms are required for a school campus?

Answer:

A minimum of one manual pull fire alarm is required at a constantly attended location and others as required by code edition at the time of plan review and approval of plan.