

Fire Safety Right-to-Know Report

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California Institute of Technology

Annual Fire Safety Report October 2016

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Introduction

Under the Campus Fire Safety Right-to-Know Act, colleges and universities are required to maintain a written Fire Log that records, by date reported, any fire that occurs in an on-campus student housing facility. The Act also requires colleges and universities to provide to all current students and employees and any applicant for enrollment or employment, upon request, an Annual Fire Safety Report containing information about the campus fire safety practices and standards.

Fire Safety

The mission of the Environment, Health, and Safety (EHS) Office is to facilitate innovative research at Caltech through a comprehensive safety program, which promotes the health and safety of students, faculty, staff, and visitors. Through education, training and information, safety awareness and practices are integrated into all activities at Caltech.

The EHS department provides supporting services to the campus, including monitoring evacuation and emergency drills, safety training for new students, staff, and faculty, and helps develop building-specific emergency action plans. EHS also partners with the City of Pasadena Fire Department activities such as training, response activities, and building inspection visits.

Fire Log

The EHS Office maintains a Fire Log that contains information on all fires occurring in on-campus housing. The Fire Log includes the date that the fire was reported, the nature of the fire, the date and time of the fire, and the general location of the fire. The Fire Log for the most recent 60-day period is available on the EHS Website under [Manuals and Forms](#), Fire Log. The Fire Log with older entries is available within 2 business days of a request to view. Please contact the EHS Office at (626) 395-6727 if you would like to request a past log

Annual Report

Under the provisions of “The Campus Fire Safety Right-to Know Act”, incidents involving fire in student residential facilities are compiled and reported annually by EHS in this Annual Fire Safety Right-to-Know Report. This Report contains:

- Fire safety practices and standards at Caltech
- Evacuation procedures

- Description of fire safety systems for each student residential facility
- Fire statistics (number of fires, injuries, property damage)

Copies of this Report are available during normal working hours at the Environment, Health, and Safety Office located in Room B125 on the lower level of the Keith Spalding Building or online at <http://www.safety.caltech.edu/>.

Fire Safety Policies and Procedures

Caltech Fire Safety Policies and Procedures <http://www.studaff.caltech.edu/policies/fire> for students is posted on the [Office of Student Affairs](#) website, including those for portable electrical appliances and open flames in student housing facilities.

Barbecues: Prior to their initial use, barbecues must be approved by Housing. Gas burning barbecues are permitted. Charcoal barbeques are only permitted for use in conjunction with Dining Services events. Propane tanks must be stored separately from the barbeques when not in use. Barbecues may only be used outdoors. The Housing Office does not provide storage for propane tanks.

Bonfires: Bonfires may only be held in approved locations upon receipt of permits required from the City of Pasadena with prior written permission of the offices of EHS, Security, Campus Life, and the appropriate Dean's Office. The organizers of any bonfire are responsible for cleanup of the site. The EHS Office reserves the right to determine when conditions exist which would make the bonfire unsafe, and to cancel or shut down the bonfire if it poses a safety hazard. Bonfires in Caltech Housing properties are strictly prohibited.

Decorations: In general, decorations must not cover, block, or hide exit signs, lights, or fire safety equipment. To the extent possible, students should minimize the amount of combustible materials that are used and/or stored in living areas. Decorations such as fishnets, parachutes, and fabrics are a source of fuel and can spread a fire. Old newspapers, cardboard boxes and magazines can also accelerate a fire. Particular attention should be given to decorations for special occasions. Fresh cut Christmas trees must be treated with fire retardant and artificial trees must be labeled as made of non-combustible material. Christmas trees must not be burned in fireplaces. Candles, pine and fir trees, pine boughs, costumes, and straw represent special fire hazards and their use as fuel for fires must always be supervised and are strictly limited.

Electrical Appliances: All equipment utilized (lights, halogen lights, wires, plugs, connections, etc.) must be Underwriters Laboratories (UL) or Factory Mutual (FM) approved and in good condition. The only pole or torchiere halogen lamps allowed are those which are UL- or FM-approved and which are equipped with 300-watt (or less) bulbs and which are protected by appropriate bulb guards. The use of improvised wiring and multi-outlet adapters (i.e., adapters that allow two or more appliances to be plugged into one outlet) are prohibited. Electrical cooking appliances such as coffee pots and hot plates in addition to other cooking appliances

must be used only in kitchen areas, and should be attended at all times while in use. Housing-approved space heaters may be used in student rooms and must be attended while in use.

Combustible Hazardous Materials: Flammable liquids, gases, solids, and explosives, including fireworks, may not be possessed or used on Institute property except in approved campus locations under the authority of the faculty for reasons of academic research, laboratory, or teaching activities. Of particular note are the following two hazards:

Explosives: Explosives are extremely hazardous and it is illegal and against Institute policy to possess manufactured explosives in a residence or living quarters. Use and storage of explosives is strictly controlled by local, state, and federal laws and with the exception of a few specific research labs, are not allowed on campus. Explosive materials used for the Fleming Canon are contained in an appropriate storage magazine. The Bureau of Alcohol, Tobacco, and Firearms (BATF) regulates types of explosives from fireworks to dynamite. See <http://www.gpo.gov/fdsys/pkg/FR-2011-10-19/pdf/2011-26963.pdf> for the latest list of such materials. Misuse of chemicals and stockroom privileges is a serious matter.

Flammable Liquids and Gases: Flammable liquids and gases pose a particular hazard when stored or used in living areas. The hazard is typically created by the evaporation of fuels or solvents in confined spaces, mixing with air to form a flammable region, and ignition by an open flame such as pilot lamps, stove, cigarette lighter, or faulty wiring. Gasoline, acetone, camping stove fuel (white gas or butane), lighter fuel, and propane torch canisters are common items that can supply the fuel. The propellant in aerosol spray cans (paint) is also a flammable gas in some cases. No such materials may be used or stored in student living areas. Certain household combustibles such as hair spray and nail polish are exempt from this requirement and may be possessed by students in their living areas. Mopeds and motorcycles must not be stored inside residences since the gas shut-off valves can leak or not be properly used, creating a flammable vapor hazard. Caltech does not provide campus residences with approved storage locations for flammable materials.

Fire Alarms: It is a violation of Institute policy to intentionally set off a false fire alarm. Actions such as setting off a false fire alarm, tampering with or disabling a fire alarm, or suppressing a warning device are illegal and may result in criminal penalties as well as campus disciplinary actions.

Fire Doors: Fire doors must be kept closed at all times.

Fire Drills and Evacuation Procedures: Students must understand and conform to all Institute procedures for fire drills and evacuation procedures. Housing provides evacuation procedures. These procedures can be found on the back of each student residence room door. When a fire alarm is sounded, all individuals in the building must exit promptly to their designated evacuation site, and must cooperate with any responding emergency personnel.

Fire Extinguishers: Fire extinguishers are located, labeled, and maintained so that they may be easily identified and in good operating condition. All fire extinguishers are checked monthly by EHS to provide reasonable assurance that they operate properly.

Hallways and Walkways: Hallways, walkways, exit corridors, staircases, doors, and passageways leading to exits must be kept clear of all items that may obstruct the hallway or impede evacuation. The EHS Office, Housing, Security, and Facilities Management reserve the right to remove any combustible materials or items that may impede normal passage or evacuation routes.

Indoor Fireplaces: Indoor fires are permitted only in fireplaces inside the student houses and apartments. These fireplaces must be used safely and in accordance with accepted practices. Only natural gas may be used in the indoor fireplaces.

Open Burnings: No open burnings shall be allowed on Institute property other than pre-approved bonfires.

Outdoor Fireplaces: Prior to their initial use, outdoor fireplaces must be approved by Housing. Only untreated wood, cardboard, and paper may be used in such outdoor fireplaces. Untreated wood must not be oversized, and must fit completely within the fireplace. Leaves and pine needles may not be burned in the fireplaces. All procedures must be followed for appropriate use of the outdoor fireplaces. Modifying the fireplaces will not be approved.

No Smoking Policy: Resident will not smoke in or around the Premises and agrees to keep the Premises (including use of e-cigarettes) smoke free at all times. (Ord. 8.78.085- Reduction of drifting tobacco smoke in multi-unit housing-
<http://library.municode.com/index.aspx?clientId=16551>.)

Fire Evacuation Drills: The Office of Student Affairs and EHS conducted four fire drills for on-campus housing during the 2015 calendar year. Participation in evacuation drills is mandatory.

Procedures for Student Housing Evacuations

Evacuation procedures are posted on the back of each on-campus student's room door. When an alarm is sounded, all individuals in the building must exit promptly to their designated emergency assembly areas, and must cooperate with any responding emergency personnel.

Policies Regarding Fire Safety Training and Education

The objective of the Institute's fire safety training is to increase awareness of the importance of fire safety, to provide hands-on fire safety training through demonstration, and to protect the health and safety of its students. It is a means to teach new skills, provide information to enable students to respond to a fire emergency, and instill safe habits.

Caltech offers various fire safety training opportunities to students, faculty, and employees. Training opportunities are listed on the Environment, Health, and Safety website under the Training tab at <http://www.safety.caltech.edu/training>.

New incoming students, faculty, and staff are provided initial fire safety training during orientation such as Frosh Welcoming, New Researcher Training, and at the Institute New Employees Orientation.

Resident Life Coordinators (RLC's) and Resident Associates (RA's) receive fire safety training on an annual basis. Training includes use of a fire extinguisher, evacuation assembly areas for their buildings, contents and use of their portable emergency equipment bag, and specific fire policies for student housing.

Several publications are also available that include pertinent information on fire safety. These include the [New Student Orientation Guide](#), the [Resident Guide and Housing Policies](#), and the [Caltech Emergency Response Guide](#).

Students are expected to conform to all Institute procedures for fire drills and evacuations. Housing provides evacuation procedures. When an alarm is sounded, all individuals in the building must exit promptly to their designated emergency assembly areas, and must cooperate with any responding emergency personnel

Reporting Procedures

In case of a fire, immediately call Security Dispatch at extension **5000**. Provide information regarding: the nature of the emergency (smoke, fire), caller name, location, and phone number. Wait for the arrival of emergency personnel at the assembly area or in a safe location.

The following person's must be notified that a fire has occurred for reporting purposes:

- Assistant Vice President for Student Affairs Operations
- Chief of Campus Security
- Director of Environment, Health, and Safety

Institute Fire Systems for Student Housing

Fire Safety Features	On-Campus Housing			Other Housing	
<ul style="list-style-type: none"> • Fully sprinklered • Supervised fire alarm system • A supervised smoke detector in each sleeping room 	Avery House		Catalina 1		
	Blacker House		Catalina 2		
	Dabney House		Catalina 3		
	Fleming House		Ricketts House		
	Lloyd House *		Ruddock House *		
	Page House *				
<ul style="list-style-type: none"> • Supervised fire alarm system • A smoke detector in each sleeping room 	Braun	Marks	Ruddock		
	Lloyd	Page	150 S. Chester		
<ul style="list-style-type: none"> • A smoke detector in each sleeping room 				131 S. Chester	145 S. Chester
				135 S. Chester	147 S. Chester
				145 ½ S. Chester	153 S. Chester
				147 ½ S. Chester	216 S. Chester
				155 S. Chester	230 S. Chester
				222 S. Chester	236 S. Chester
				234 S. Chester	250 S. Chester
				240 S. Chester	188 S. Catalina
				260 S. Chester	242 S. Catalina
				180 S. Catalina	250 S. Catalina
				244 S. Catalina	555 S. Catalina
				252 S. Catalina	240 S. Michigan
				1364 Cordova	272 S. Michigan
				260 S. Michigan	229 S. Wilson
				255 S. Hill	294 S. Wilson
				267 S. Wilson	297 S. Wilson
				295 S. Wilson	373 S. Wilson
				307 S. Wilson	1043 E. Del Mar
				1052 E. Del Mar	1066 E. Del Mar
				1094 E. Del Mar	1100 E. Del Mar
				1104 E. Del Mar	1053 E. Del Mar
				1205 E. Del Mar	1170 E. Del mar
				1043 E. Del Mar	1124 E. Del Mar
				217 S. Holliston	1053 E. Del Mar
				150 S. Chester	260 S. Michigan
				1001 E. Villa	

* Sprinklers in the basement only

Fire Statistics

Year	Location	Cause of Fire	Number of Injuries that Resulted in Treatment at a Medical Facility	Number of Deaths Related to a Fire	Value of Property Damage Caused by Fire
2013	Cat 1 (362 S. Catalina)	Paper	0	0	\$ 10.00
2014	Fleming	Paper	0	0	\$ 0.00
2014	Fleming	Charcoal Briquettes	0	0	\$ 40.00
2015	Ricketts	Computer Monitor in Fireplace	0	0	\$ 500.00
2015	150 S. Chester	Lit Cigarette Thrown on Roof	0	0	\$1,735.00

Student Residences with No Fires Reported in 2015

Avery	Blacker	Braun	Dabney	Fleming	Lloyd
Marks	Page	Ruddock	Catalina 1	Catalina 2	Catalina 3
131 S. Chester	135 S. Chester	145 S. Chester	145 ½ S. Chester	147 S. Chester	147 ½ S. Chester
153 S. Chester	155 S. Chester	216 S. Chester	222 S. Chester	230 S. Chester	234 S. Chester
236 S. Chester	240 S. Chester	250 S. Chester	260 S. Chester	180 S. Catalina	188 S. Catalina
242 S. Catalina	244 S. Catalina	250 S. Catalina	252 S. Catalina	555 S. Catalina	1364 Cordova
240 S. Michigan	260 S. Michigan	272 S. Michigan	255 S. Hill	229 S. Wilson	267 S. Wilson
294 S. Wilson	295 S. Wilson	297 S. Wilson	307 S. Wilson	373 S. Wilson	1043 E. Del Mar
1052 E. Del Mar	1053 E. Del Mar	1066 E. Del Mar	1094 E. Del Mar	1100 E. Del Mar	1104 E. Del Mar
1124 E. Del Mar	1170 E. Del Mar	1205 E. Del Mar	217 S. Holliston	1001 E. Villa	

Plans for Future Improvements in Fire Safety

The Institute seeks annual input from students and staff to improve training material and methods used to educate incoming and returning students about fire safety. The Institute initiated an outreach effort by meeting with students at their residences to discuss and answer questions about fire safety.

This year our outreach efforts will include:

1. Continue to explore on-line fire safety education options for students.
2. Adding fire extinguisher training to New Student Orientation.
3. Continue to support our various student-led outreach efforts with the Pasadena Fire Department on promoting fire safety to students.

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