

Fire Prevention Plan – (Written per OSHA 1910.39 requirements)

First Aid

Purpose

This plan is to establish procedure for identifying fire hazards and prevention of fires. All Makerspace members and guest are expected to follow the procedures outlined in this plan to prepare and maintain this workspace to prevent fires and other safety hazards.

Responsibility

The PPM Executive Director, Drew Johnson (719) 210-8629, drew.johnson@pikespeakmakerspace.org,

is responsible for the maintenance of equipment to prevent fires. He is aided by Area Captains that maintain their areas and review for fire prevention work practices

Occupancy Fire Hazards

A list of all major fire hazards, proper handling and storage procedures for hazardous materials, potential ignition sources and their control, and the type of fire protection equipment necessary to control each major hazard;

Work Area	Fire Hazard	Proper Handling to Prevent Fires	Fire Extinguisher
Office workstations	Paper, plastics, electronics	Housekeeping, proper disposal, and periodic inspections for fire prevention	ABC
Laser Area	Wood, laser combustion	Training, fire extinguishers near equipment, venting of fumes, housekeeping, proper disposal, and periodic inspections for fire prevention	Halon
Kitchen	Microwave, refrigerator, toaster oven, coffee maker	Housekeeping, proper disposal, and periodic inspections for fire prevention	ABC
Woodshop	Wood products, dust, electrical	Dust housekeeping, proper disposal, and periodic inspections for fire prevention	ABC
CNC	Wood, plastic, friction	Training, housekeeping, proper disposal, and periodic inspections for fire prevention	ABC
Metal Shop	Metal, sparks, heat, molten metal	Training, housekeeping, proper disposal, and periodic inspections for fire prevention	ABC
Electronic	Electrical, soldering iron, heat	Training, housekeeping, proper disposal, and periodic inspections for fire prevention	ABC
Paint Storage	Wood paints, stain, finishes. See SDS list	Flammable cabinet for Class 3 & 4 flammables <30 gal, Inventory and SDSes available. Housekeeping,	ABC

		proper disposal and periodic inspections for fire prevention.	
3D Printer	Plastic, flammable (Isopropyl alcohol)	Housekeeping, proper disposal, and periodic inspections for fire prevention	ABC
Shed	Wood, metal, equipment	Housekeeping, proper disposal, and periodic inspections for fire prevention	ABC

Personnel Responsible for Control of Fuel Hazards

Area Captains ensure all fire and safety hazards are properly controlled through regular maintenance and inspections of their areas.

Safe Code of Work Practices

- Flammable, including rags, flammable liquids or trash shall not be placed or stored near heaters, vents, electrical appliances, or other potential sources of ignition.
- Sources of actual or potential heat, such as hot plates, soldering irons, electric coffee pots, etc., shall not be placed near flammable materials.
- Portable space heaters, candles, and smoking are prohibited in the building.
- Ensure that access to evacuation exits, and fire extinguishers are maintained clear.
- Ensure unimpeded access to electrical panels.
- Store flammable chemicals in the flammable cabinet when not in use. Ensure cabinet doors are closed. Keep flammable chemical storage to a minimum.
- Ensure that fire extinguishers are accessible

Fire Extinguishers

The following is a list of the Fire Extinguishers

Area	Type	Weight
Front Door	ABC	9 lbs
East Door	ABC	9 lbs
Zing Laser	Halon	5 lbs
Laser area	Halon	5 lbs
Laser Area	CO2	5 lbs
Woodshop	ABC	5 lbs
CNC	ABC	5 lbs
Backdoor	ABC	5 lbs
Powder Coat	ABC	5 lbs

Type ABC: Dry chemical effective on all classes of fires

Type BC, Halon and CO2: Use on electrical fires

Training for Fire Prevention and Evacuation Plan

Instructions for evacuation are included in the new member orientation, and on the Wiki.

Compliance with OSHA regulations

Citation		
1910.38(b)	Written and oral emergency action plans. An emergency action plan must be in writing, kept in the workplace, and available to employees for review.	Emergency Evacuation Plan – (CSFD requirements & OSHA 1910.38)

	However, an employer with 10 or fewer employees may communicate the plan orally to employees.	
1910.38(c)	Minimum elements of an emergency action plan. An emergency action plan must include at a minimum:	See below
1910.38(c)(1)	Procedures for reporting a fire or other emergency;	In case of emergency, call 911
1910.38(c)(2)	Procedures for emergency evacuation, including type of evacuation and exit route assignments;	Turn off power equipment if safe to do so. Go to the nearest marked exit to leave the building.
1910.38(c)(3)	Procedures to be followed by employees who remain to operate critical plant operations before they evacuate;	N/A – All person should evacuate
1910.38(c)(4)	Procedures to account for all employees after evacuation;	Go to the north side of the building, walk east to “The Wolf Den” for personnel accounting. Provide accounting of all persons that were known to be in the building. All employees and guest must evacuate during an emergency. Retrieve unaccounted person’s contact information and try to contact them directly. Notify emergency responders of any missing or unaccounted persons. Await further instructions from emergency responders.
1910.38(c)(5)	Procedures to be followed by employees performing rescue or medical duties; and	There are no assigned rescue or medical duties. Persons trained in first aid or CPR can render aid at their discretion.
1910.38(c)(6)	The name or job title of every employee who may be contacted by employees who need more information about the plan or an explanation of their duties under the plan	The PPM Executive Director, Drew Johnson (719) 210-8629
1910.38(d)	Employee alarm system. An employer must have and maintain an employee alarm system. The employee alarm system must use a distinctive signal for each purpose and comply with the requirements in § 1910.165.	Use voice commands and flickering of lights to notify other personnel of the danger. Smoke detectors, throughout the building, will make audible noise.
1910.38(e)	Training. An employer must designate and train employees to assist in a safe and orderly evacuation of other employees.	Instructions for evacuation are included in the New member orientation, and on the Wiki.
1910.38(f)	Review of emergency action plan. An employer must review the emergency action plan with each employee covered by the plan: When the plan is developed or the employee is assigned initially to a job; When the employee's responsibilities under the plan change; and When the plan is changed.	Instructions for evacuation are included in the new member orientation, and on the Wiki. .
1910.39(a)	Application. An employer must have a fire prevention plan when an OSHA standard in this part requires one	This plan

1910.39(b)	Written and oral fire prevention plans. A fire prevention plan must be in writing, be kept in the workplace, and be made available to employees for review. However, an employer with 10 or fewer employees may communicate the plan orally to employees.	This plan is linked to the Wiki.
1910.39(c)	Minimum elements of a fire prevention plan. A fire prevention plan must include:	See below
1910.39(c)(1)	A list of all major fire hazards, proper handling and storage procedures for hazardous materials, potential ignition sources and their control, and the type of fire protection equipment necessary to control each major hazard;	See the Table in Occupancy Fire Hazards
1910.39(c)(2)	Procedures to control accumulations of flammable and combustible materials;	Flammable and combustible materials are stored in a Flammable Storage Cabinet with self closing doors. The amount of material does not exceed 30 gallons which would require a permit.
1910.39(c)(3)	Procedures for regular maintenance of safeguards installed on heat-producing equipment to prevent the accidental ignition of combustible materials;	See information in the safe code of work practices.
1910.39(c)(4)	The name or job title of employees responsible for maintaining equipment to prevent or control sources of ignition or fires; and	The PPM Executive Director, Drew Johnson (719) 210-8629 or delegated Area Captains.
1910.39(c)(5)	The name or job title of employees responsible for the control of fuel source hazards.	The PPM Executive Director, Drew Johnson (719) 210-8629 or delegated Area Captains.
1910.39(d)	Employee information. An employer must inform employees upon initial assignment to a job of the fire hazards to which they are exposed. An employer must also review with each employee those parts of the fire prevention plan necessary for self-protection.	Information is provided in the New Member Orientation, and on the Wiki

<https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.39>