

## FIRE SUPPRESSION TECHNICIAN

REPAIRING AND REPLACING FIRE SUPPRESSION SYSTEMS		
Activity	Hazard Identification	Required Precautions
1. Driving to and from work site.	1. Motor vehicle accident; striking pedestrians, bicyclists, or individuals using rollerblades.	1. Wear prescription lenses, if required, and seatbelt. Verify that all equipment on vehicle is secured properly. Stay alert for pedestrians, bicyclists, and individuals using rollerblades.
2. Using stepladder.	2. Ladder collapsing; slipping/falling from ladder.	2. Inspect ladder before use. Use ladder of proper height. Make sure ladder is properly assembled and locked and standing on level ground. Do not exceed weight limit for ladder. Do not stand on top of ladder or on top rung. Have coworker hold ladder.
3. Using extension ladder.	3. Ladder falling; slipping/falling from ladder.	3. Use bucket truck if possible. Inspect ladder before use. Verify that ladder is properly assembled and that it is securely positioned on level ground. Tie safety rope to hold ladder to roof. Use 1'-4' rule. Use OSHA decal to verify that ladder is in the proper position.
4. Using interior scaffolding.	4. Scaffolding collapsing; falling from scaffolding.	4. Verify that scaffolding is properly assembled and wheels locked. Use safety rails properly. Verify a safe means of climbing on/off scaffolding.
5. Using power tools.	5a. Electric shock; electrocution.  5b. Tripping over or cutting power cord.	5a. Inspect cord before use. Keep power cord away from work area. Plug tools into GFCI-protected outlets. Do not use electric tools if work area is wet.  5b. Keep power cord away from work area.

## FIRE SUPPRESSION TECHNICIAN

	5c. Injury from flying bits of material.	5c. Wear safety glasses, and optionally a dust mask, gloves, long-sleeve shirt and/or coveralls.
	5d. Drill or saw catching; drill bit breaking; severe lacerations and abrasions; dismemberment.	5d. Keep tools in good condition. Inspect tools before use. Verify that guards work properly. Do not put hands near blades. When using tools, make sure you have a good center of gravity and are properly balanced. Hold tools securely with two hands to maintain control.
6. Using hand tools.	6a. Electric shock; electrocution.	6a. Make sure that insulation on tools is in good condition. Turn off power whenever possible.
	6b. Cuts, pinches, smashes, punctures, severing of fingers.	6b. Keep tools in good condition. Inspect tools before use. Ear safety glasses. Work away from yourself. Use normal caution required for all hand tools.
7. Using contact cleaner.	7a. Freeze burn to skin.	7a. Avoid contact with skin. Always aim spray away from self.
	7b. Getting cleaner in eyes will severely dry out eyes.	7b. Aim spray away from self. Wear safety glasses.
	7c. Can exploding.	7c. Do not allow can to reach temperatures above 120 degrees. Avoid storing in truck. When can must be in truck, keep it in the back, away from passengers.
8. Using canned smoke.	8a. Inhalation of smoke will irritate lungs.	8a. Stand upwind of smoke. Use in small quantities.
	8b. Can exploding.	8b. Do not allow can to reach temperatures above 120 degrees. Avoid storing in truck. When can must be in truck, keep it in the back, away from passengers.
9. Using canned air.	9a. Freeze burn to skin.	9a. Keep can vertical so propellant does not leak.

## FIRE SUPPRESSION TECHNICIAN

	9b. Can exploding.	9b. Do not allow can to reach temperatures above 120 degrees. Avoid storing in truck. When can must be in truck, keep it in the back, away from passengers.
10. Replacing damaged smoke detector.	10. Radiation leaking.	10. Bring old smoke detector to safety department for disposal. If detector is in bad condition, have safety department remove detector from building and dispose of it.
11. Replacing batteries.	11a. Thermal burn caused by improper hookup.  11b. Battery leaking acid, causing burns to skin.	11a. Work carefully to avoid improper hookup.  11b. Handle battery carefully. Wear rubber gloves. Put battery in plastic bag for disposal.
	11c. Battery can explode.	11c. Wear safety glasses.
12. Lifting heavy and awkward equipment (such as batteries and fire alarm panels).	12. Back strain; overexertion.	12. Know your weight-lifting capacity and get help if needed. Lift using leg muscles. Keep back straight. Use mechanical lifting equipment. For very heavy or awkward objects, always have at least two people lifting.
13. Working in manholes, crawl spaces, or other confined spaces.	13a. Serious illness due to lack of oxygen or exposure to methane gas.	13a. Before working in confined area, verify that it is safe by monitoring air (get confined space permit as required). While working, always ventilate area using fan. In vertical tunnels, always use tripod and harness in case worker becomes ill and must be pulled up. Always have at least one person outside confined area to monitor safety of those working inside.
	13b. Slipping from ladder.	13b. Repair ladder rungs when necessary. Wear rubber boots. Climb/walk carefully as area is wet and slippery.
	13c. Dark work area.	13c. Use flashlights and bright floodlights to light up work area.
	13d. Smashing fingers with manhole cover.	13d. Use prybars and crowbars to move cover. Always have two people lift cover.

## FIRE SUPPRESSION TECHNICIAN

	13e. Working for long periods of time in cramped position can lead to back ache or neck ache.	13e. Leave confined area frequently to stretch out.
	13f. Heat exhaustion from working in very hot crawl spaces.	13f. Always work in pairs to monitor each other's safety. Take breaks as needed.
14. Working in mechanical room.	14a. Getting burned by steam, hot water, or hot oil.	14a. Wear proper protective clothing: gloves, safety glasses, long-sleeve shirt and/or coveralls. Be aware of your surroundings and of possible leaks.
	14b. Electric shock; electrocution.	14b. Always use GFCI protectors.
	14c. Slipping on water or oil on floor.	14c. Clean up any standing water or oil.
	14d. Excessively hot temperatures; heat exhaustion.	14d. Use a fan, plugged into GFCI-protected outlet, to ventilate work area. Take frequent breaks. Drink plenty of fluids to avoid dehydration. Maintain radio contact with others.
	14e. Loss of hearing.	14e. Wear ear plugs or ear muffs.
	14f. Tripping.	14f. Survey work area for hazards. Walk carefully.
	14g. Inhalation of dust.	14g. Wear dust mask.
15. Working in area of pedestrian traffic.	15. Pedestrians knocking over ladders or lights or bumping into worker; pedestrians getting hit with equipment or falling tools, etc.	15. Secure area using cones and caution tape before beginning work. Use warning lights.
16. Repairing hazardous gas alarms.	16. Exposure to hazardous gas.	16. Do not assume alarm is faulty. Have safety department check for gas before entering room.
17. Testing fire alarm systems.	17. Loss of hearing.	17. Wear ear plugs or ear muffs.
18. Soldering.	18a. Burning self with torch.	18a. Wear safety goggles, gloves, coveralls, and leather chaps. Always burn away from yourself.

## FIRE SUPPRESSION TECHNICIAN

	18b. Starting fire.	18b. Do not solder near flammable materials. Always keep fire extinguisher nearby and have a person stand by as firewatch.
	18c. Burns from hot solder dripping on self; flux burn.	18c. Do not reach to solder; stay level with area being soldered. Wear gloves, safety glasses, and coveralls.
	18d. Inhalation of fumes.	18d. Work in well-ventilated area. Use exhaust fans and tubes for ventilation.
	18e. Using wrong solder can cause popping and splattering.	18e. Use correct solder for job.