

## USING A FIRE EXTINGUISHER (P.A.S.S.)

**PULL** the pin out of the handle completely.  
This will allow the lever to activate.

**AIM** at the base of the fire or the origin of the flames. Focus on what is burning.

**SQUEEZE** lever or handle firmly. Stand back 6-8 feet. Have an exit at your back.

**SWEEP** side to side in a smooth and steady motion, covering the objects on fire.



### CLASS A

This symbol is for common combustibles such as trash, cloth, paper and wood.



### CLASS B

This symbol is for flammable liquids like oil, alcohol, grease, solvents and chemicals.



### CLASS C

This symbol is for electrical fires and energized electrical equipment.

## FIRE AND SMOKE BARRIERS

The most common smoke and fire barriers are floor and ceiling deck assemblies, stairwell shafts, elevator shafts, machine and mechanical rooms, switchgear rooms, laundry and trash rooms, or other high hazard areas.

Any penetrations made through a smoke or fire barrier shall be temporarily packed with mineral wool at day's end, until permanent fire stop can be installed. Larger openings may require the installation of fire rated sheet rock or similar material.

Many of these smoke barriers have fire rated door assemblies in them to allow passage. It is important that you recognize these openings and help keep them in good working order.

**Rated smoke and fire doors with self closers can only be held open with listed equipment that is connected to the building fire alarm system, per the fire code.**

## Other Guidance

- Never block or park any equipment in front of egress doors.
- Do not store any materials in stair enclosures, or corridors leading from a stair enclosure to the exit, or within the exit itself.
- Do not wedge, block, or tie open doors. This applies to all stairwells, storage, utility, housekeeping, trash and linen rooms (including doors to chutes)
- Do not alter, disengage or bypass any door locks or latches. It reduces the fire protection features of the assembly and can make the barrier ineffective.
- Excessive waste and un-needed combustibles should be removed as soon as possible.
- Do not park or store equipment in front of any utilities or closets, mechanical rooms or other areas that may require Facilities Management access 24/7.
- No utility can pass through a rated stairwell unless it serves that stairwell.

## Sprinkler/ Suppression Systems

- Never block sprinkler heads or valves.
- Do not obstruct or impede access to valves.
- Storage must be maintained at least 18" below the sprinkler head height, throughout the space.
- Nothing can be attached to, or supported by sprinkler heads or any sprinkler piping.
- Sprinkler heads shall be free of any paint, plaster or other foreign materials.

### Phone Numbers (Area Code 401)

<b>PUBLIC SAFETY EMERGENCY</b>	<b>(86)3-4111</b>
<b>PUBLIC SAFETY ROUTINE</b>	<b>(86)3-3322</b>
<b>FIRE SAFETY OFFICE</b>	<b>(86)3-3462</b>
<b>ENVIRON. HEALTH &amp; SAFETY</b>	<b>(86)3-3353</b>
<b>FACILITIES MANAGEMENT</b>	<b>(86)3-7800</b>

# BROWN UNIVERSITY LIFE SAFETY SYSTEM IMPAIRMENTS & HOT WORK GUIDE

*This document is distributed to provide basic guidance to all individuals involved in the impairment process of Life Safety Systems during planned construction or emergencies. Some information is also provided related to Hot Work and Fire Watch activities. All users of this document are responsible for being familiar with the policies and procedures related to the information found herein, regarding the following:*

- **Fire Alarm**
- **Sprinkler Systems**
- **Fixed Suppression Systems**
- **Hot Work**
- **Fire Watch**
- **Evacuation Procedures**
- **Fire Extinguisher Use**
- **Smoke & Fire Barriers**
- **Contact Information**

### ? PRIOR TO ALL IMPAIRMENTS ?

- Is there a safer way that will avoid the impairment or shorten the duration?
- Can the impairment be completed off hours or during lower occupancy?
- Has all of the impaired equipment and affected area been identified?
- Are all the required parts, tools and equipment needed to complete the impairment in place and readily available?
- Have all notifications been made?
- Are alternative methods in place, if applicable?
- Is a fire watch required and if so, is it in place prior to starting work?

## Impairment Requirements

### When is notification required?

- Preferably, 48 hours prior to planned impairments. Any sprinkler, fire pump or standpipe shutdown or deactivation, (with the exception of testing and inspection) where the equipment is under constant supervision, until restored to normal service.
- Partial or full shutdown of cooking hoods, Ansul, Halon, data rooms, etc. (fixed suppression system.)
- Any fire alarm shutdown involving 6 or more activation or notification devices, exceeding 4 or more hours. 2 hours for residential dorms.
- Disconnect of any master box (other than testing and inspection.)
- Any portion of a smoke evacuation or pressurization system impairment lasting more than 4 hours.

### Who is authorized to perform the actual impairment task? (Authorized Person) AP

- This shall be a licensed tradesman performing the actual task.
- Tasks include disconnecting any active fire alarm, shutting a sprinkler valve, or other hands on work related to the impairment.
- The Authorized Person shall possess the applicable trade license and skill set to perform the task.

### Who is responsible for the notification? (Responsible Person) RP

- The Brown project manager, construction manager or in house supervisor overseeing the work being performed. This task can be assigned to a general contractor or service contractor however; the responsibility ultimately belongs to the Brown staff member overseeing the task or project. This person is identified as the Responsible Person in the impairment program.
- The **RP** shall be included in the initial notifications for all planned impairments.
- The Authorized Person shall make the notifications to the FSO directly, at the start and finish of the impairment.

**The FSO shall be notified of all emergency impairments through DPS during off hours**

## Impairment Notification

### Who shall be notified about planned impairments?

- The Fire Safety Office (FSO) preferably by email at [fire\\_safety@brown.edu](mailto:fire_safety@brown.edu) or (401) 863-3462.
- Facilities Management Service Response (FMSR) at (401) 863-7800.
- Department of Public Safety Comm. Center (DPSCC) at (401) 863-3322.

**Request forms can be found at ([Insert Link Here](#)) or requested by email**

### Impairment Closeout

- The departments noted above, shall be notified upon the completion of the impairment.
- The Red Tag (if applicable) shall be completed, signed and returned to the FSO.

## Fire Watch (FW) Requirements

### When is a Fire Watch Required?

- For all hot work operations including 60 minutes after completion of the hot work.
- For various system impairments as identified in the Impairment Program.
- For other circumstances that may be designated as high hazard, such as a utility failure or fire barrier failure/removal.

### General Fire Watch Responsibilities

- The FW shall have the authority to stop procedures that are deemed hazardous or pose a risk to the occupants or building.
- The FW shall have a working cell phone or radio.
- Know the location and operating procedures for the FEs and fire alarm pull stations in the area.
- Be familiar with the egress paths and exits. Be prepared to notify occupants and assist in evacuation.
- Do not allow egress paths or exits to be blocked. This includes crowding in corridors and exits.
- Do not allow the accumulation of combustibles.
- For Hot Work, constant oversight is required.
- For all FW activities, the entire, affected area, shall be monitored.

## Hot Work (HW) Permit Requirements

### Acronyms

**HWP**– Hot Work Permit

**PAI**– Permit Authorizing Individual

**FSO**– Fire Safety Office is the PAI for Brown

**HWO**– Hot Work Operator performs the hot work

**FE**- Fire Extinguisher

### When is a Hot Work Permit required?

A HWP is required for all HW. Common HW procedures include, but are not limited to the following: Welding, grinding, cutting, brazing, soldering, torch applied roofing, heat guns or other applications producing sparks, flame or heat. This includes outdoor operations.

### Assessment: Is there an alternative to performing Hot Work, or a designated, safer location?

- If not, a HWP is required prior to proceeding.
- **HW is not allowed during impairments, or when flammable liquids, vapors or unprotected combustibles are present.**

### Basic Guidance

- The HWO shall provide a compliant, minimum 10# ABC or 2.5 gallon water FE at the work site during HW.
- A charged garden hose may be required or used in addition to the FE.
- A dedicated fire watch shall be assigned during HW. This cannot be the HWO.
- 35 feet of clearance to all combustibles.
- Floors shall be swept clean.
- Relocate combustibles or cover them with welding blankets or equivalent.
- Hot work equipment shall be in satisfactory operating condition .
- Combustible floors shall be kept wet or covered with non-combustible materials.
- Protect openings or cracks in walls, floors or ducts.
- The HWP shall be visibly displayed at work area.