



Complete Program Title: Fire Safety Plan	Risk Management Manual (RMM) Number: 1201
Approved by:  Vice-President, Administration  President and Vice-Chancellor	Date of Most Recent Approval: September 2018
Date of Original Approval: May 2002	Supersedes/Amends Program dated: August 2009
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1 PURPOSE

- 1.1 To provide all persons working, studying, living or visiting campus buildings with adequate instruction and direction during a fire emergency.
- 1.2 To comply with the Ontario Fire Code regarding assignment of personnel to supervise activities during a fire emergency and regarding a Fire Safety Plan.

2 SCOPE

- 2.1 This plan applies to all campus buildings with the exception of the McMaster University Medical Centre.
- 2.2 This plan applies to every person in any campus building that discovers a fire or is aware of an alarm.
- 2.3 Exceptions to this plan are noted in Appendix 6 and Appendix 7 – MDCL Exam Procedures & IWC Exam Procedures.

3 RELATED DOCUMENTS

- 3.1 Ontario Fire Code, Part 2, Section 2.8.2 "Fire Safety Plan"
- 3.2 Fire Warden Description and Duties (Appendix 1).
- 3.3 McMaster University Fire Safety Procedures (Appendix 2).
- 3.4 Residence Fire Safety Plan (appendix 3)
- 3.5 Fire Watch Standard Operating Procedure (Appendix 4)
- 3.6 Fire System Communication Failure Standard Operating Procedure (Appendix 6)
- 3.7 MDCL – Building Specific Procedures for Exams only (Appendix 7).
- 3.8 IWC – Building Specific Procedures for Exams Only (Appendix 8).

4 ACCRONYMS

- 4.1 FMO - Fire Marshall's Office
- 4.2 HFD - Hamilton Fire Department
- 4.3 HPS - Hamilton Police Services
- 4.4 JHSC - Joint Health and Safety Committee
- 4.5 EOHSS – Department of Environmental & Occupational Health Support Services
- 4.6 MDCL – Michael DeGroote Centre for Learning & Discovery
- 4.7 IWC – Ivor Wynn Centre

5 RESPONSIBILITIES

- 5.1 Every person who discovers fire or smoke in a campus building shall sound an alarm by actuating an alarm pull station. If it is within the person's knowledge and training, available firefighting equipment may be used to control or extinguish the fire. Fire hoses are provided for firefighting professionals and should not be used by building personnel. Self-contained breathing apparatus (SCBA) should be used by trained personnel only.
- 5.2 In the event of an alarm McMaster University Security Services dispatch is responsible to communicate the emergency to the HFD and other first responders as necessary.

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- 5.3 Security Services will assist the HFD to gain access to areas of the building as necessary.
 - 5.4 Every person who is alerted to a building fire alarm device will evacuate the building by the closest exit in a peaceful and orderly manner. All persons will follow the directions of a person visibly identified by a brightly coloured vest as a "Fire Warden", or by a firefighter and/or Security Officer.
 - 5.5 Every Department Head will appoint at least one Fire Warden for each floor of occupied space. Where the individual floor occupancy is large, more than one Fire Warden will be assigned.
 - 5.6 If required EOHSS will work with Fire Wardens and the local JHSC to develop building-specific fire safety procedures.
 - 5.7 Fire Wardens will carry out the duties specified in Appendix 1.
 - 5.8 EOHSS will provide initial and ongoing training and information to Fire Wardens concerning fire safety equipment and assigned duties.
 - 5.9 EOHSS will schedule, and with assistance of Facility Services, carry out fire drills in every building at least once per year.
 - 5.10 JHSC will inspect University work areas for fire safety hazards as part of their inspection of the workplace. The inspectors will advise the area supervisors so that appropriate corrective action can be undertaken.
 - 5.11 Facility Services shall be responsible for the care and maintenance of all building fire safety systems and equipment. For that purpose, Facility Services will maintain records of all building and system schematics and instructions required by the Ontario Fire Code.
 - 5.12 Facility Services will ensure that appropriate measures are taken for the safety of occupants whenever there is a shutdown of any part of the fire protection system. If a fire safety system in a building is not functioning, a fire watch shall be instituted immediately (Appendix 4). The fire watch will include hourly checks of the area and a log of the checks will be kept. All occupants shall be notified when shutdowns of fire safety systems have occurred, and when they are restored.
 - 5.13 When fire panel communication to Security Services malfunctions, Appendix 6 shall be followed.
 - 5.14 Facility Services will ensure that the fire alarm and prevention systems are returned to full operation as soon as possible after a fire alarm.
 - 5.15 The University Health Physics Office will identify labs designated as "high-level" radiation labs and will review special procedures with the HFD to protect firefighters and laboratory personnel.

- 5.16 EOHSS will work with Fire Wardens, local JHSC's and the HFD to ensure that the Fire Safety Plan serves the needs of the McMaster community and are approved as required. A copy of the approved Fire Safety Plan will be held on file in the EOHSS office.

6 PROCEDURES

- 6.1 McMaster University Fire Safety Procedures (Appendix 2) will be posted in a conspicuous location on every floor of every building. For residence buildings, Appendix 3 shall be posted.
- 6.2 A copy of the Fire Safety Plan will be retained in the office of every department head. This copy will be available for review by any person on request.
- 6.3 Occupants of buildings will be provided a copy of the emergency procedures and occupant procedures.
- 6.4 Occupants of buildings shall read and be familiar with the responsibilities contained in the Fire Safety Plan.
- 6.5 When a fire alarm sounds, every person shall evacuate the building unless such alarm is a scheduled test that has been previously announced.
- 6.6 When a person is unable to evacuate a building because of a disability, the person will be placed in a safe location at a fire exit stairwell or moved laterally to an adjoining building where possible and firefighting professionals will be advised of the location immediately by the Fire Warden.
- 6.7 **Elevators must not be used during fire or fire alarm conditions.** Control of elevator functions may be relinquished to professional firefighters. If possible, building occupants should move laterally to an adjoining building.
- 6.8 Once evacuated, a building will not be re-entered until the "all clear" has been given by the HFD and communicated through Security Services and the Fire Wardens.
- 6.9 The University Health Physics Office will provide training and education to the HFD concerning the "high level" radiation labs on request. HPS will work with the HFD directly to determine procedures to be used in the event of a fire emergency. The labs will be visibly marked for ease of identification and, in a fire emergency, should not be entered except under the direction of the Health Physics staff.

7 RECORDS

- 7.1 Facility Services will keep records of tests of fire equipment on file for a period of at least two years.
- 7.2 EOHSS will maintain current approved copies of University policies, generic procedures and the Fire Safety Plan in the EOHSS office.

7.3 EOHSS will maintain records of fire drills for a period of at least two years.

Appendix A:

Specific Fire Procedures

Each Department must have one or more Fire Wardens per floor of occupied space. The Fire Wardens may be safety committee members, volunteers or appointed by the Department Chair or Manager.

Duties of a Fire Warden

1. **Ensure safe evacuation.**
2. **Shut doors.**
3. **Check disabled and other people with medical conditions who may require evacuation. Ensure that such people are in a safe location.**
4. **Check attendance in the evacuation area if applicable.**
5. **Advise Security and the Fire Department if anyone is missing, non-ambulatory, trapped or still in the building.**
6. **Participate in fire drills by carrying out duties, as though there is a real fire.**

In Case of a Fire Alarm

The safety of **people** is the most important consideration.

1. **Leave the building immediately, using the nearest and safest exit, closing doors behind you to contain the spread of smoke and fire.**
2. **Sound the alarm by activating a manual pull station. They are located at each door leading to the stairwells.**
3. **Once outside, move away from the exits to allow clear access for emergency personnel and vehicles.**
4. **Advise McMaster Security Services of any trapped or endangered occupants requiring assistance in evacuating.**

If it is Unsafe to Evacuate

1. **If unsafe to leave the building, call McMaster Security by calling '88' or 905-522-4135 and advise the dispatcher of your location. If possible, hang a sheet out the window to alert emergency personnel of your location.**
2. **Keep smoke from entering the room/apartment by closing the door and using wet towels, cardboard, paper and/or duct tape to seal around the doors, vents and air ducts.**
3. **Move to the most protected area of the room, opening the window for fresh air.**
4. **Keep low to the floor, where the air is cleanest.**
5. **Listen for instructions from authorities as given over a bullhorn or voice communication system.**

When the alarm stops ringing, check with Security Services to confirm that it is safe to re-enter the building. Security Services, in consultation with the Fire Department has sole authority to authorize a return to normal occupancy. Fire Wardens will assist in communicating the "all-clear".

**Appendix 2:
Posted Fire Safety Procedures – Non Residence Main Campus Buildings**

McMaster University

EMERGENCY PROCEDURES

- **FIRE**
- **SMOKE**
- **EXPLOSION**
- **GAS**

*Pull Fire Alarm,
and then from a safe location*

Call 88

(University Line)

or

Call 905-522-4135

When Alarm Rings SHUT OFF GAS AND POWER

Evacuate ... Close doors behind you Use stairs or ramps Do NOT use elevators

If Unsafe to Evacuate ... Shut door Block cracks Stay low near window |

If Room Door is HOT ... Do NOT open door Stay put Stay low near window

- **AMBULANCE**
- **MEDICAL**
- **SECURITY**

and then from a safe location

Call 88

(University Line)

or

Call 905-522-4135

This is Building _____ Building# _____ Room# _____

Environmental and Occupational Health Support Services | eohss@mcmaster.ca | ext. 24352

This document can be provided in an accessible format upon request

Appendix 3: McMaster University Residence Fire Safety Plan

IN CASE OF FIRE:

- 1. If safe to do so, leave the building immediately, using the nearest and safest exit, taking your keys and closing doors behind you to contain the spread of smoke and fire.**
- 2. Sound the alarm by activating a manual pull station. They are located at each door leading to the stairwells.**
- 3. Once outside, move to the closest parking lot to allow clear access for emergency personnel and vehicles.**
- 4. Advise the McMaster Security Officer of any trapped or endangered occupants requiring assistance in evacuating.**

IF YOU HEAR AN ALARM OR ARE NOTIFIED OF A FIRE:

- 1. If safe to do so, leave the building immediately, using the nearest and safest exit, taking your keys and closing doors behind you to contain the spread of smoke and fire. Activate the alarm if not already activated.**
- 2. Once outside, move to the closest parking lot to allow clear access for emergency personnel and vehicles.**
- 3. Advise the McMaster Security Officer of any trapped or endangered occupants requiring assistance in evacuating.**

IF YOU HAVE TO REMAIN IN THE BUILDING:

If, due to excessive smoke, heat or fire the exit corridors or stairwells cannot be used you should remain in your room/apartment or take refuge with others in another room/apartment.

- 1. If unsafe to leave the building, call McMaster Security using the “emergencies” speed dial button on the phone in your room and advise the dispatcher of your location. Hang a sheet out the window to alert emergency personnel of your location.**
- 2. Keep smoke from entering the room/apartment by closing the door and using wet towels, cardboard, paper and/or duct tape to seal around the doors, vents and air ducts.**
- 3. Move to the most protected area of the room/apartment, opening the window for fresh air. As a last resort, a balcony where they exist can be used as a waiting area where the air is fresh.**
- 4. Keep low to the floor, where the air is cleanest.**
- 5. Listen for instructions from authorities as given over a bullhorn or voice communication system.**

DO NOT USE THE ELEVATORS --- DO NOT PROCEED TO THE ROOF

Upon hearing an alarm or being notified of a fire all occupants must, if safe to do so, immediately evacuate the building. Occupants must understand that failure to do so is a major offence under the Residence Code of Conduct.

McMaster Security is responsible for notifying the Hamilton Fire Department of all fire alarm situations. Once the Fire Department has been called, fire alarm systems will not be silenced until the responding Captain gives approval.

If safe to do so, Residence Managers shall try to contain, control and extinguish the fire using an available portable fire extinguisher or fire hose. If smoke or fire threatens their safety, they are to leave the building, ensuring that all doors are closed to contain the spread of smoke and fire. Residence Managers are to advise McMaster Security of the extent of the situation and the location of any persons who are trapped, endangered or require assistance evacuating. Residence Managers should remain available outside the front door of the building to assist emergency personnel as directed.

McMaster Security Services will meet the Fire Department when they arrive and direct them to the scene of the fire. McMaster Security will have all necessary keys available and advise the Fire Department of any trapped or endangered occupants who still require assistance evacuating. If required, two additional sets of master keys will be available at the Housing & Conference Service Centre in the Commons Building and Keyes Residence for McMaster Security and the Fire Department to conduct room-by-room checks.

Community Advisors will keep the Service Centre Staff advised of any individual with a temporary disability due to surgery or an accident. The Service Centre staff will provide McMaster Security with a current list of the names and locations of all disabled students in residence. The Security Dispatcher will check the list and relay pertinent information to the officer on the scene.

In the event that occupants are required to remain out of a building for an extended period during inclement weather, McMaster Security will provide access to the Commons Market Place or Refectory.

In the event that a fire protection system or part thereof is not operational, an electrician will be called to correct the situation. If the system will be down longer than an hour, McMaster Security will contact the building Residence Manager to conduct hourly rounds of the affected areas watching for fire. In his/her absence the Residence Manager on call is to be contacted. A record of the conditions found during the hourly rounds will be maintained and submitted to the Residence Facilities Team.

Each dwelling unit is equipped with both smoke and fire detection devices. Where required, doors are equipped with self-closing devices. These devices are not to be disconnected. Individuals identified, as being responsible for tampering with fire safety equipment or falsely activating a fire alarm, will face major offence disciplinary measures as per the Residence Code of Conduct. Additionally, individuals may also be prosecuted under the Criminal Code for falsely activating the alarms and/or tampering with life safety equipment.

All occupants are responsible for ensuring the following:

- That exit corridors and stairwells are kept clear.
- That flammable or combustible liquids and gases, explosives, fireworks, firearms, ammunition or propellant explosive are not brought into or stored in residence buildings.
- That the volume of posted paper on common area walls and doors is kept to a maximum of 20% of the surface (2' X 3' piece with 4' of clearance on all sides).
- That combustible material such as newspaper, cardboard and furniture does not accumulate anywhere in the buildings, creating a fire hazard.

The Community Advisors will conduct fire safety inspections in each residence on a daily basis. The results will be documented and work orders submitted to the appropriate Service Centre the day following the inspection.

Building fire systems and equipment will be maintained and tested in accordance with the applicable sections of the Ontario Fire Code.

The fire alarm bells will be tested each week in all residences - North campus on Tuesdays & West campus on Fridays between 1:00 p.m. and 2:00 p.m.

A fire evacuation drill will be held in each residence a minimum of once per academic year and the results communicated to the occupants, along with suggestions for improvement. The building occupants are expected to evacuate the building and move to the closest parking lot.

A copy of this Fire Safety Plan will remain posted on each floor. All building occupants and McMaster Staff working in the residences will read this Fire Safety Plan and be aware of their responsibilities for fire safety. The plan will be reviewed with staff annually.

A training session will be held annually for Residence Managers and Community Advisors to outline the Fire Safety Plan. Residence Managers and Community Advisors will outline the Fire Safety Plan to the occupants of their building during Welcome Week.

Appendix 4: Fire Watch Standard Operating Procedure

Purpose: To ensure compliance with the Ontario Fire Code, the McMaster University Fire Safety Plan as well as protect the life safety of any member of the McMaster Community. This procedure is required when any detection capabilities are taken out of service in any building on campus. This could be due to any reason, and could range from a single detector to the entire system.

Note: *This procedure is NOT required for communication issues to each building. For communication issues, please refer to 'Fire System Communication Failure Procedure'.*

Responsibilities:

Security and Parking Services

- Must always be notified when any fire alarm system or part thereof is out of service.
- Notify the responsible parties of the need to activate the fire watch procedure when a fire alarm system is deactivated in part, or in its entirety.
- Aid in the fire watch process if necessary.

Facility Services

- Any work required on fire alarm panels in any building must be conducted by a worker who is qualified to do so through the Canadian Fire Alarm Association.
- Supply individuals to conduct fire watches in all **non residence buildings** when they are required as per the procedure.
- Ensure appropriate documentation is generated for fire watches.
- Retain fire watch logs for a period of one year.

Housing and Conference Services

- Any work required on fire alarm panels in any building must be conducted by a worker who is qualified to do so through the Canadian Fire Alarm Association.
- Supply individuals to conduct fire watches in all **residence buildings** when they are required as per the procedure.
- Ensure appropriate documentation is generated for fire watches.
- Retain fire watch logs for a period of one year.

Environmental & Occupational Health Support Services

- Be consulted on, and approve changes to this procedure
- Review the procedure if changes in the system or regulations come in effect.
- Review and approve the shutdown of any fire alarm systems for the purposes of an event (i.e. religious ceremony involving the creation of smoke).

Procedure

The purpose of the fire watch is to have an individual surveying an area where fire detection systems are not working. This allows for identification of an emergency that may otherwise remain undetected due to the malfunctioning fire system.

- An individual familiar with the facilities will be placed in charge of completing the fire watch by the assigned responsible party (Facility Services or Housing and Conference Services).
- The fire watch must be conducted in the areas where the system shut down has occurred. This may be one small area, or in some cases, the entire building.
- The assigned individual must travel through the affected areas at least once per hour.
- If the individual discovers a fire, or any other emergency, the individual should activate the closest pull station. Security Services is to be contacted immediately by Dialing 88 from an internal phone, or 905-522-4135 from an outside line. The individual should report the following information from a safe location:

***This is NAME, I am in BUILDING NAME conducting a fire watch
and there is a EMERGENCY DESCRIPTION in room/area
SPECIFIC EMERGENCY LOCATION.***

- The Fire Watch Log Sheet (attached) shall be completed by the assigned individual and initialed every hour. Upon completion of the fire watch, the Fire Watch Log Sheet will be filed with the supervisor responsible in each area.
- The assigned individual shall post signage to notify occupants when shutdowns of fire safety systems have occurred, and when fire safety systems have been restored.

**Appendix 5
Fire Watch Log**

Date _____ Event _____

Supervisor _____ Affiliation _____

Facility Services _____
 (System Deactivated) (System Reactivated)

A fire watch shall be conducted whenever part of a fire alarm system is taken out of service. This fire watch shall be conducted by someone familiar with the facilities and be logged on an hourly basis.

Time (Hourly)	Checked by: (Print)	Signature



Appendix 6: Fire System Communication Failure Standard Operating Procedure

Purpose: To ensure compliance with the Ontario Fire Code, the McMaster University Fire Safety Plan as well as protect the life safety of any member of the McMaster Community. This procedure is required when fire panel communication to Security Services dispatch is compromised.

Note: *This procedure is NOT required for detection failure to each building. For detection failure, please refer to 'Fire Watch Standard Operating Procedure'.*

Responsibilities:

Security and Parking Services

- Notify the responsible parties (Facility Services, Housing and Conference Services, Environmental and Occupational Health Support Services) when communication issues are identified.
- Notify the responsible parties (Facility Services, Housing and Conference Services, Environmental and Occupational Health Support Services) when communication issues are resolved.
- Aid in the Fire System Communication Failure process if necessary.

Facility Services

- Supply Communicators when necessary in all **non residence buildings** during off hours.
- Notify Communicators when the communication failure has been resolved during off hours.

Housing and Conference Services

- Assign Communicators when necessary in all residence buildings.
- Notify Communicators when the communication failure has been resolved.

Environmental & Occupational Health Support Services

- Be consulted on changes to this procedure.
- Assign Fire Warden as Communicators.
- Notify Communicators when the communication failure has been resolved during regular business hours.

Communicator

- Follow the Procedure.
- Notify Security Services (ext. 24281) if you have to leave the building for any reason so an alternate can be assigned.

Procedure:

The purpose of this procedure is to ensure appropriate communication goes to Security Services in the event of an emergency.

- A Communicator shall remain in the assigned building during the communication failure.
- The Communicator shall check the fire alarm panel/annunciator at the front entrance of the building every hour. If any indicators, either visual or audible are identified, contact Security Services via ext. 24281. If an individual is unsure of the location of the panel, or what the panel lights mean, contact Security Services.
- In the event the fire alarm sounds, Security Services is to be contacted immediately by Dialing 88 from an internal phone, or 905-522-4135 from an outside line. The individual should report the following information from a safe location:

This is NAME, I am in BUILDING NAME. There is a EMERGENCY DESCRIPTION in room/area SPECIFIC EMERGENCY LOCATION. My understanding is that communication lines are down. Please notify the appropriate emergency responders.

- If Communicators are not available in any building, Security Services will post the following signs at every pull station for the duration of the communication failure:

ATTENTION!

COMMUNICATION BETWEEN THIS ALARM AND SECURITY SERVICES IS OUT OF SERVICE

IN THE EVENT OF AN EMERGENCY, ACTIVATE PULL STATION AND CONTACT SECURITY SERVICES FROM A SAFE LOCATION WITH ANY DETAILS OF THE ALARM.

**DIAL 88 INTERNAL
905-522-4135 EXTERNAL (from cell)**

**Appendix 7:
McMaster University Fire Safety Plan – MDCL Exam Procedures
Effective April 10th, 2007**

The Michael DeGroote Centre of Learning (Building #52) has a two-stage response system. The two-stage procedures are as follows:

Exam Procedures

This procedure only applies in the listed rooms during Exam periods ONLY.

For rooms MDCL 1102, 1105, 1110, 1305, 1307, 1309, the procedure is as follows:

During the first stage of alarm, all occupants are to remain seated, be prepared to evacuate and follow the strict direction of the Chief Exam Presider. Security will assess the alarm and will determine the cause of the alarm. If the source is not a real emergency, Security will contact the Chief Exam Presider and identify that there is no issue and all exam participants will remain in the rooms.

If during the alarm, Security, or the Chief Exam Presider determines that a real fire emergency exists, the entire building will be evacuated immediately at the sound of the second stage alarm.

If Security, or the Chief Exam Presider is unable to confirm the status of a fire emergency (i.e. real or false), all exam participants will be directed to exit the building immediately at the sound of the second stage alarm.

When the alarm stops ringing, check with Security to confirm that it is safe to re-enter the building. The Security Department, in consultation with the Fire Department has sole authority to authorize a return to normal occupancy.

**Appendix 8:
McMaster University Fire Safety Plan – IWC and DBAC Exam Procedures
Effective December 1st, 2007**

The Ivor Wynn Centre (Building #24) and David Braley Athletic Centre (Building #54) has a two-stage response system. The two-stage procedures are as follows:

Exam Procedures

This procedure only applies in the listed rooms during Exam periods ONLY.

For Burrige Gym (Room B116), Smith Gym (AB106), IWC Mezzanine, Pulse Gym (AB113), and Fitzhenry Studios, the procedure is as follows:

During the first stage of alarm, all occupants are to remain seated, be prepared to evacuate and follow the strict direction of the Chief Exam Presider. Security will assess the alarm and will determine the cause of the alarm. If the source is not a real emergency, Security will contact the Chief Exam Presider and identify that there is no issue and all exam participants will remain in the rooms.

If during the alarm, Security, or the Chief Exam Presider determines that a real fire emergency exists, the entire building will be evacuated immediately at the sound of the second stage alarm.

If Security, or the Chief Exam Presider is unable to confirm the status of a fire emergency (i.e. real or false), all exam participants will be directed to exit the building immediately at the sound of the second stage alarm.

When the alarm stops ringing, check with Security to confirm that it is safe to re-enter the building. The Security Department, in consultation with the Fire Department has sole authority to authorize a return to normal occupancy.

