

Emergency Preparedness Plan

Prepared For The

**Department Of Materials
Science And Engineering**

Professor Edwin L. Thomas, Ph.D. Director

Professor David Roylance, EPP Coordinator

2007

Modified March 5, 2007

DMSE EMERGENCY PREPAREDNESS PLAN

EVACUATION PLAN

I. Fire Alarm.....	1
II. Emergency Phone Number.....	1
III. Personnel With Delayed Evacuation Permission.....	1
IV. Responsibility For Communicating Emergencies	1
Fire.....	1
Other Emergencies	1
V. Personnel Who Will Fight Incipient Fires	2
VI. Evacuation Procedures	2
General Procedure In The Event Of Fire	2
Evacuation Of Persons With Disabilities	4
Evacuation In The Event Of A Bomb Threat	4
Evacuation In The Event Of An Explosion	4
VII. Rescue Assignments.....	5
Personnel Assigned Specific Rescue Assignments	5
VIII. First Aid	6

ORGANIZATION AND RESPONSIBILITY

I. Organization	7
II. People	7
III. Operations	7
IV. Responsibility	9
Fire Marshals	9
Duties Of The Fire Marshall	10
Fire Wardens	11
The Duties Of The Fire Wardens	12
V. Utilities Maintenance - Emergency & Routine.....	13
For All Emergencies.....	13
To Request Repairs.....	13

FIRE PREVENTION PLAN

I. Requirements	14
II. Identification of Fire Hazards	14
III. Housekeeping Procedures	
Hazardous Waste Pick-Up.....	15
Fire Protection Equipment.....	15
Inspection of Fire Extinguishers and Fire Hoses	15
Monthly Inspection of Fire Extinguishers Sheet.....	16
Monthly Inspection of Fire Hoses Sheet.....	16
SHELTER IN PLACE	17

GRAPHICS

Meeting Area	
Buildings 4, 8, 12, 16.....	21
Floor Plans	
4.0	25
4.1	26
4.2	27
4.4	28
8.0	29
8.1	30
8.2	31
8.3	32
8.4	33
12.0	34
16.5	35
16.6	36

Department of Materials Science And Engineering
Headquarters 35-419
(617) 253-3300
2007

- A. To activate a fire alarm box in building 4, 8, 12, 16 pull down the handle.
This is the preferred method because:
 - a. The alarm alerts others.
 - b. It alerts the Work Control Center (Operations) as to the location of the box so they may better direct the Cambridge Fire Department.
 - c. It brings the Cambridge Fire Department, MIT Police Department and the Emergency Response Team to the location.
 - d. There is less chance of confusion that could result from a telephone call.
- B. The fire alarm in building 4 is a Sloop Whoop with no pretone or evacuation message. Building 8 alarm is Temporal Three with pretone and non high rise voice evacuation message. Building 12 alarm is a Sloop Whoop with pretone and non high rise voice evacuation message. Building 16 alarm is a Sloop Whoop with pretone and non High rise voice evacuation message.

If there is no fire alarm box nearby, dial 100. Give your name, location and a description of the problem. Speak slowly and clearly. Wait to answer any questions or receive instructions the dispatcher may have. Stay on the line until the dispatcher hangs up.

The Institute policy is to evacuate immediately when an alarm is sounded. The Department of Materials Science And Engineering does not have personnel whom may delay evacuation.

A. FIRE

All staff has the responsibility of communicating the initial alarm.

MIT Police Department will be relied on to check all floors when deemed necessary by the Cambridge Fire Department.

B. OTHER EMERGENCIES

To report all other emergencies including medical police, explosions and other accidents dial 100. State your name, location and the nature of the emergency. Speak slowly and clearly. Wait for the dispatcher to hang up first. On occasion they may need additional information or will provide you with some instructions.

V. TRAINED PERSONNEL WHO WILL FIGHT INCIPIENT FIRES

The Institute policy is to evacuate immediately, *NOT* to fight fires. Fire fighting should only be done by trained personnel.

VI. EVACUATION PROCEDURES

A. GENERAL PROCEDURE IN THE EVENT OF FIRE

1. WHEN AN ALARM SOUNDS:

- a) Do not stop for valuables or to get a coat.
- b) If possible to complete safety as you leave:
 - Shut off electrical appliances.
 - Leave lights on
 - Close doors and windows
- e) If you lock your door, take your keys with you.
- f) Alert others around you.
- g) Assist any special needs people in evacuating.
- h) When evacuating *WALK*, never run, and keep to the right of the hallways.
- i) Leave the building, even if the alarm stops while you are on your way out.

DO NOT USE ELEVATORS.

- j) Once outside, move away from the building to allow room for the firefighters and their equipment.
Building 4 occupants should proceed to Killian Court. During inclement weather go to Lobby of Bldg.10. Building 8 occupants should proceed to Eastman Court. During inclement weather go to the Lobby of Bldg. 10. Building 12 occupants should gather by the North side of building 13. During inclement weather go to the Lobby of Bldg. 13. Building 16 occupants should proceed to Killian Court. During inclement weather go to Lobby of Bldg.26
Look for others who work with you to insure everyone has evacuated.
- k) Give any information about the fire or about persons who might still be in the building to your Fire Warden, the Fire Department, MIT Emergency Response Team or MIT Police Department.

- l) Do not re-enter the building for any reason until told to do so by the Fire Department or MIT Police Department.

2. IF YOU CANNOT LEAVE BECAUSE ALL EXITS ARE OBSTRUCTED

- a) Crawl or stay low to the floor where there is cleaner and cooler air.
- b) Get to a phone, dial 100 and let someone know where you are.

3. OF PARTICULAR IMPORTANCE

- a) Keep calm. A fire may be hot, noisy, and generally overwhelming, but your best weapon is a composed and logical approach.
- b) Assume there is a fire when the alarm sounds. Take it seriously.
- c) Do not call MIT Police Department or Dept. Of Facilities to ascertain if there is a real fire.
- d) Do not use the elevator. The shaft may act like a chimney, and the car may stop at the fire itself. Elevators may also act like giant pistons, pushing smoke and fire to other portions of the building. Use the nearest exit stairway or passageways to an adjacent building.
- e) Do not run if your clothes catch fire. Running will only fan the fire, causing it to intensify. Drop to the floor and roll back and forth to smother the flames. Call for help. Rescuers can smother the flames by quickly wrapping a blanket, coat, sheet or rug over the victim.
- f) Leave the building. This includes lobby areas. Not doing so is considered interference with fire fighting operations and violators of this Massachusetts State Law are subject to a fine, imprisonment, or both.

4. OTHER CONSIDERATIONS

- a) Exiting horizontally Horizontal evacuation generally means to move on the same floor to another section in the same building or an adjacent building instead of exiting vertically via the stairs or elevator. The advantage to horizontal evacuation is that one may remain inside, protected from the weather and avoid descending over stairs. Hence, this method is of primary importance for people with disabilities. For horizontal evacuation to be effective, one must pass through smoke barriers and/or fire barriers. Usually this means smoke or fire doors or perhaps a fire wall. The terms fire doors and smoke doors are really synonymous except a fire door can withstand a fire and prevent its passage more effectively because of heavier construction materials and a heavier frame. Smoke doors and their frames are comparatively more lightly constructed and cannot withstand a rigorous fire for as long a period as a fire door. Both, however, will keep deadly smoke and fire confined long enough to make an escape or rescue possible provided they are kept closed. Doors blocked open with wedges, broken or improperly working doors, a fire hose or other object holding the door even a little is enough to render the designed safety effect of preventing the spread of smoke and fire useless.

It is important to note when evacuating horizontally that it is not enough merely to exit into an adjoining building. It is necessary to go beyond an operating fire or smoke barrier.

B. EVACUATION OF PERSONS WITH DISABILITIES

We will use horizontal evacuation whenever possible. Refer to floor plans for possible routes.

If horizontal evacuation is not possible, staff will assist disabled individuals to the nearest enclosed stairway that is free from smoke and tell the person to remain there until help arrives (Fire Department, MIT Police Department, etc.). If possible, we will send someone to dial 100 to inform MIT Police Department of the stairway and floor location.

C. EVACUATION IN THE EVENT OF A BOMB THREAT

Evacuation procedures are the same as fire evacuation procedures except it is permissible to use elevators to evacuate. The elevators, however, should be reserved primarily for those who are disabled, elderly, pregnant, have heart or respiratory conditions, or other medical problems. Others should exit via the stairwells to expedite evacuation. Please follow the directions of supervisory personnel during this situation.

NOTE:

The handling of explosives is a job strictly for professionals. Should you notice something you suspect may be a bomb because it is an unusual item in an area you are very familiar with, do *NOT* touch it! Report it to the MIT Police Department, Emergency Response personnel, or Fire Department personnel. Be prepared to describe the item and its location.

D. EVACUATION IN THE EVENT OF AN EXPLOSION

In the event that an explosion occurs, use the Fire Evacuation Procedure.

VII. RESCUE ASSIGNMENTS

Some personnel may be assigned to limited preplanned rescue duties. No one is expected to be a rescue expert. Minimum rescue duties include aiding the disabled with evacuation and assuring everyone is alerted to the need for evacuation if they can be done without injury or significant danger to the rescuer. We will preplan with the MIT Disabilities Services Office and the MIT Safety Program for the evaluation of disabled students or employees. Otherwise, inform the Fire Department of the location of trapped persons and anyone who is unaccounted for.

PERSONNEL ASSIGNED SPECIFIC RESCUE ASSIGNMENTS

At this time there are no individuals requiring assistance to leave DMSE space.

When individuals requiring assistance to evacuate DMSE space arrive, the Lab in which this person is located **MUST** inform DMSE Headquarters and **ASSIGN A PERSON** whose assignment will be to assist the disabled person(s) entry into a secure area such as a stairwell till help arrives. The names of these individuals will be entered below as needed.

The escort should remain with this person. The Warden from the Lab the handicapped person works should tell the Floor Fire Marshall the location of the handicapped individual.

Lab	Escort	Room	Phone	Email
None required at this time.				

Visitors to DMSE space must be assigned a person who will assist with their evacuation from the building.

VIII. FIRST AID

There are no first aid kits in the Department of Materials Science And Engineering.

Medical personnel already assigned to the MIT Campus community such as the Medical Department, MIT Police Department and Emergency Medical Technicians satisfy the requirements of OSHA regulations 1910, Subpart K. These trained and skilled personnel can be requested via telephone (Dial 100) or through emergency personnel. Those who are trained to assist the injured may aid the wounded only within the scope of their training and on a voluntary basis.

<u>Name</u>	<u>Type & Extent of Training</u>
MIT Medical Dept.	Professional doctors, nurses, etc.
MIT Police Department	Certified EMT's
SEMS (Student Emergency Medical Service)	Certified EMT's

ORGANIZATION AND RESPONSIBILITY
Department of Materials Science And Engineering
Headquarters 35-419
(617) 253-3300
2007

Location: Building 8, Room 309

(Note: DMSE occupies some or all of the following floors:

Building 4 - Basement, First, Second, Fourth floors.

Building 8 -Basement, First, Second, Third floors.

Building 12 – Basement floor.

Building 16 – Fifth, Sixth floor.

Building NE47 – Third Floor

DMSE Director	Prof. Edwin L Thomas, PhD	35-412	(617)253-5931
EH&S Coordinator	Joseph A. Glogowski, Jr.	35-405	(617)253-5632
EPP Coordinator	Prof. David Roylance, PhD	6-202 26-441	(617)253-3309 (617)258-6275

Total Number of People:

Employees:169

Students: 110

Graduate Students :220

Affiliates: 21

Visiting Scientists: 8

Visitors: 10

OPERATIONS

1. Interests within the Department span the entire materials cycle from mining and refining of raw materials, to production and utilization of finished materials, and finally to disposal and recycling. There is a rich variety of problems of vital importance to the development of the science of metals, polymers, ceramics, glasses, electronic materials, biomedical materials, composites, and other materials awaiting solution. The Department has the theoretical and experimental resources available to attack these scientific and engineering problems successfully.
2. There are hazardous materials and equipment involved.
3. Hours and Days of Operation:
Normally Monday-Friday 9:00 a.m. - 5:00 p.m.
These hours may vary depending on research requirements.
People working outside of regular working hours must leave the building during an emergency and are instructed to follow the instructions of any responding emergency personnel.

4. There are no guards or night watchmen in buildings 8. Police protection is provided by MIT Police Department.

DMSE Fire Marshals

Floor	Lab	Fire Marshall	Room	Phone
Bld 4	Eagar	Galler, Donald	4-133	(617)253-4554
Bld 8	UGTL Nano	Bono, David C Schwartzman	8-1114	(617)452-3837
Bld 12	Cima	Centorino, John A Rigione, Leonard J	12-024 12-096	(617)253-5034 (617)253-4049
Bld 16	Lechtman	Lechtman, Heather N	8-437	(617)253-2172

DUTIES OF THE FIRE MARSHALL

1. To coordinate, instruct, and familiarize Fire Wardens in fire evacuation procedures and related tasks.
2. To convey applicable information to one or more of the following:
Fire Department personnel, MIT's Emergency Response Team and MIT Police Department
3. A Fire Marshal will usually be assigned an entire floor, wing or area directing and coordinating the Fire Wardens in his/her area. If a Fire Marshal is absent, an alternate should assume these duties.
4. On Floors with more than one Lab, each lab's EHS Representative will assume the responsibilities of Fire Marshall for one year. They will rotate in alphabetical order, by Lab.

DMSE Fire Wardens

Lab Loc	PI Name	EHS Rep	Room	Phone	Email
4(0)	Allen, Samuel M	Tarkanian, Michael	4-010	(617)253-	tarky@mit.edu
4(0)	O'Handley, Robert C	Techapiesancharoenkij, Ratcha	4-051	(617)452-	ratchat@mit.edu
4(0)	Powell IV, Adam C	Powell IV, Adam C	4-117	(617)452-	hazelsct@mit.edu
4(0)	Sadoway, Donald R	Avery, Kenneth Charles Gmitter, Andrew J	4-229	(617)253- 8468	chacha@mit.edu agmitter@mit.edu
4(0)	VanderSande, John	Richter, Henning	66-270	(617)253-	richter@mit.edu
4(0,1)	Eagar, Thomas W	Galler, Donald	4-133	(617)253-	dgaller@mit.edu
4(1)	Gibson, Lorna J	Galler, Donald	4-133	(617)253-	dgaller@mit.edu
8(0)	Allen, Samuel M	Tarkanian, Michael	4-010	(617)253-	tarky@mit.edu
8(0,1)	Suresh, Subra	La Bonte Jr, George J	8-139M	(617)253-	glabonte@mit.edu
8(0,4)	Schuh, Christopher	Detor, Andrew Joseph Trelewicz, Jason Ruan, Shiyun	8-006 " 8-402	(617)501- 2639 "	detora@mit.edu jtrelewi@mit.edu shiyun@mit.edu
8(1)	Gibson, Lorna J	Dawson, Matthew A	8-102	(617)253-	dawson@mit.edu
8(1)	Ross, Caroline A	Sivakumar, Vikram	13-4017	(617)253-	svikram@mit.edu
8(1)	Stellacci, Francesco	Bono, David C	8-111	(617)452-	dbono@mit.edu
8(1)	Van Vliet, Krystyn J	Schwartzman, Alan F	8-114	(617)452-	alan_s@mit.edu
8(2)	Ortiz, Christine	Bono, David C	8-111	(617)452-	dbono@mit.edu
8(2)	Van Vliet, Krystyn J	Thompson, Michael Todd	8-236	Unknown	mtt@mit.edu
8(2,4)	Irvine, Darrell J	Beane, Sheree Michelle	8-433	(617)452-	smbeane@mit.edu
8(3)	Allen, Samuel M	Hughes, Gerald	8-309	(617)452-	ghughes@mit.edu
8(4)	Lechtman, Heather N	Lechtman, Heather N	8-437	(617)253-	lechtman@mit.edu
12(0)	Cima, Michael J	Centorino, John A Rigione, Leonard J	12-024 12-096	(617)253- 5034	jcentor@mit.edu rigione@mit.edu
12(0)	Kimerling, Lionel C	Beals, Mark	12-064	(617)253-	mbeals@mit.edu
12(0)	Ortiz, Christine	Ye, Miao	12-065	(617)258-	miaoye@mit.edu
16(5)	Lechtman, Heather N	Lechtman, Heather N	8-437	(617)253-	lechtman@mit.edu
16(6)	Gibson, Lorna J	Corin, Karolina A	3-333	(617)2532139	bharley@mit.edu
16(6)	Lechtman, Heather N	Merrick, Harry V	8-436	(617)253-	hmerrick@mit.edu

THE DUTIES OF THE FIRE WARDENS

Before a fire occurs:

1. To familiarize new employees and students with fire evacuation procedures.
2. To assist persons with disabilities with evacuation pre-planning, drills and actual evacuations.
3. To note any malfunctioning alarms.
4. To discourage tampering with fire alarm and protection equipment.

During a fire:

1. To remind people in their area that if possible they should close windows and doors, shut off equipment (if necessary) and to evacuate. To note the location(s) of fire and/or smoke if seen, but not to search for it.
2. To note the location(s) of fire and/or smoke if seen, but not to search for it.

Additional suggested assignments:

1. Monthly visual checks of fire protection equipment.
2. Participate in fire alarm tests.
3. Set up an annual fire evacuation drill (contact the Safety Program).

A Fire Warden is usually assigned a floor or a section of the respective area in which they work. If the Fire Warden is absent, the duties would be performed by the alternate.

For Further Information Concerning Employee Duties and Responsibilities

The following names or regular job titles of persons or departments that can be contacted for further information or explanation of duties under the plan are:

- | | |
|--|---|
| a. Fire Wardens/Fire Marshal | * |
| b. EPP Coordinators | * |
| c. Supervisors/Department Management | * |
| d. Safety Program – N52 x2-3477 safety@mit.edu | |

*Refer to previous lists

Utilities Maintenance - Emergency & Routine

For all emergencies call extension 3-4948 or Operations Center at 3-1500

To request repairs via internet use the following:

https://web.mit.edu/facilities/forms_secure/repair-form.shtml

FIRE PREVENTION PLAN

Department of Materials Science And Engineering
Headquarters 8-309
(617) 253-3300
2007

1. Requirements

OSHA requires a written Fire Prevention Plan that is to be kept in the workplace and is available to employees. The DMSE must also review with each new employee, the parts of the fire prevention plan that the employee needs to know to protect him/herself. This can be included in the DMSE's safety briefing.

2. The Identification of Operations that are Fire Hazards and the Handling, Storage, and Disposal of Materials that Present Fire Hazards.

All employees and students should recognize hazards and report these to the supervisor so corrective action may be taken. The identification, proper handling, and storage of hazardous materials is the responsibility of the DMSE's management and the principal investigator or supervisor.

It would be impossible to list all the possible fire hazards you may encounter, however, the ones you are most likely to encounter while working in the DMSE are listed below.

<u>a. Common Fire Hazards</u>	<u>Controls are</u>	<u>Sources are</u>
electrical appliances and equipment	the proper use and maintenance of elec. equipment	overheating, sparks and electrical arcing

b. The procedure for hazardous operations or materials to minimize fire hazards are as follows:

<u>Ignition Sources</u>	<u>Control Procedures</u>
(1) electrical appliances that produce heat	do not operate unattended or near combustibles
(2) overloaded electrical extension cords	install more electrical outlets

FIRE RELATED HOUSEKEEPING PROCEDURES

Individual employees and students are responsible for the safety of their own areas regarding the following:

- safe use and maintenance of electrical equipment
- other fire-related housekeeping procedures

There will be an annual Spring clean-up to keep clutter, unwanted materials, excess equipment, and outdated hazardous materials to a minimum.

Contact the EH&S to arrange for a hazardous waste pick-up:

http://web.mit.edu/environment/ehs/chem_collection.html

Fire Protection Equipment Available to Control the Identified Fire Hazard is indicated on the Floor Plans

- a. The following areas are sprinkled Building 4, 8, 12, 16.
- b. Maintenance Responsibility: Dept. Of Facilities Mechanical and Electrical Operations are responsible for the maintenance of fire protection equipment and systems

Monthly Visual Inspection of Fire Extinguishers and Fire Hoses

Facilities Mechanical Operations is responsible for inspecting and testing extinguishers and hoses once a year. As required by OSHA, the Safety Program suggests that the Fire Wardens briefly inspect the extinguishers and hoses in their areas once a month. Refer to the attached sample charts that lists what to look for. These charts or tags can be used to document the inspections.

Call FIXIT to request service and to replace missing equipment.

Monthly Inspection of Fire Extinguishers

Year:	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mounted In Place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service Interval <1yr	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pressure OK	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pin OK	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No Rust/Tents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bracket OK	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hose & Nozzle OK	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Monthly Inspection of Fire Hoses

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Hose In Rack	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hose OK	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nozzle OK	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water leaks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Serviced <1 yr	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SHELTER IN PLACE
Department of Materials Science And Engineering
Headquarters 35-419
(617) 253-3300
2007

Introduction

Sheltering in place is a defensive action that building occupants can take to protect themselves against airborne hazards originating outdoors, and for which there is forewarning. A shelter is a pre-determined interior room or area of the building, which – with special provisions - can provide a barrier to protect the occupants from the external environment.

Buildings alone can provide protection to a varying degree, but are limited and effective only under certain conditions. This document offers procedures and methods to improve and enhance the protection provided.

Whether at home, in the workplace, or in a dormitory setting, sheltering in place is similar, and the basic steps remain the same:

- 1) Shut and lock all windows and doors.
- 2) Turn off all air handling equipment (heating, ventilation, and/or air conditioning, both supply and exhaust) within your ability to do so.
- 3) No sheltering rooms have been assigned at this time. Individuals are advised to remain where they are until further instructions become available.
- 4) Turn on a TV or radio and listen for further instructions.
- 5) When the “all clear” is announced, open windows and doors, turn on ventilation systems and go outside until the building’s air has been exchanged with the now clean outdoor air.
- 6) Due to the varying nature of MIT’s buildings and ventilating systems, MIT EHS does not recommend the use of encapsulation methods such as plastic sheeting. For more information on these methods, contact www.ready.gov

*Some housing units and other areas are designating shelter areas. If you wish to designate an area as a shelter area please contact MIT EHS Safety Program at 452.EHSS (3477) or e-mail David Barber at dbarber@mit.edu

Blank Page

Department of Materials Science And Engineering

Meeting Area Map Emergency Phone Locations

Blank Page

DMSE Meeting Areas

- DMSE Space

 - Building 4
 - Building 8 & 16
 - Building 12
- Meeting Area

 - Killian Court
 - Eastman Court
 - North Side Bld 13
- X Incident Reporting Station

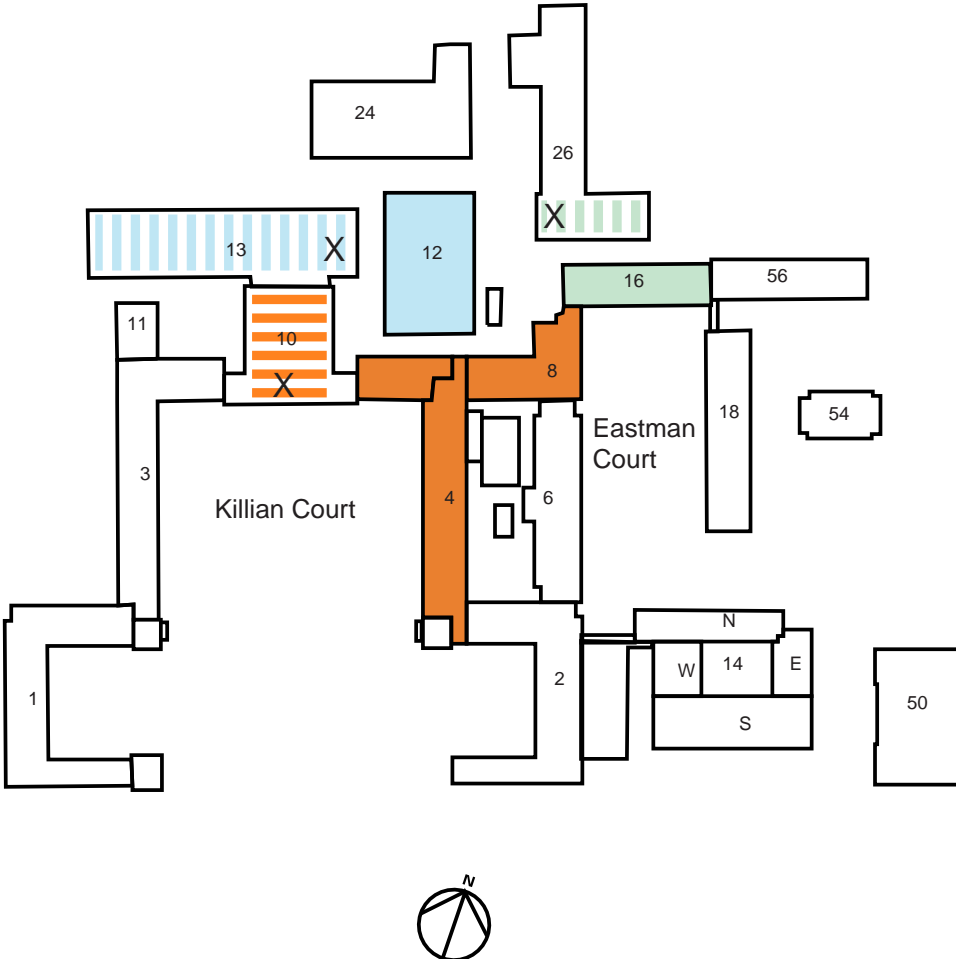


DMSE Alternate Meeting Areas

- DMSE Space

 - Building 4 & 8
 - Building 12
 - Building 16
- Meeting Area

 - Lobby Bld 10
 - Lobby Bld 13
 - Lobby Bld 26
- X Incident Reporting Station



Blank Page

Department of Materials Science And Engineering

Floor Plans

Blank Page

SC Spill Control Kit

Exit

a Horizontal Egress



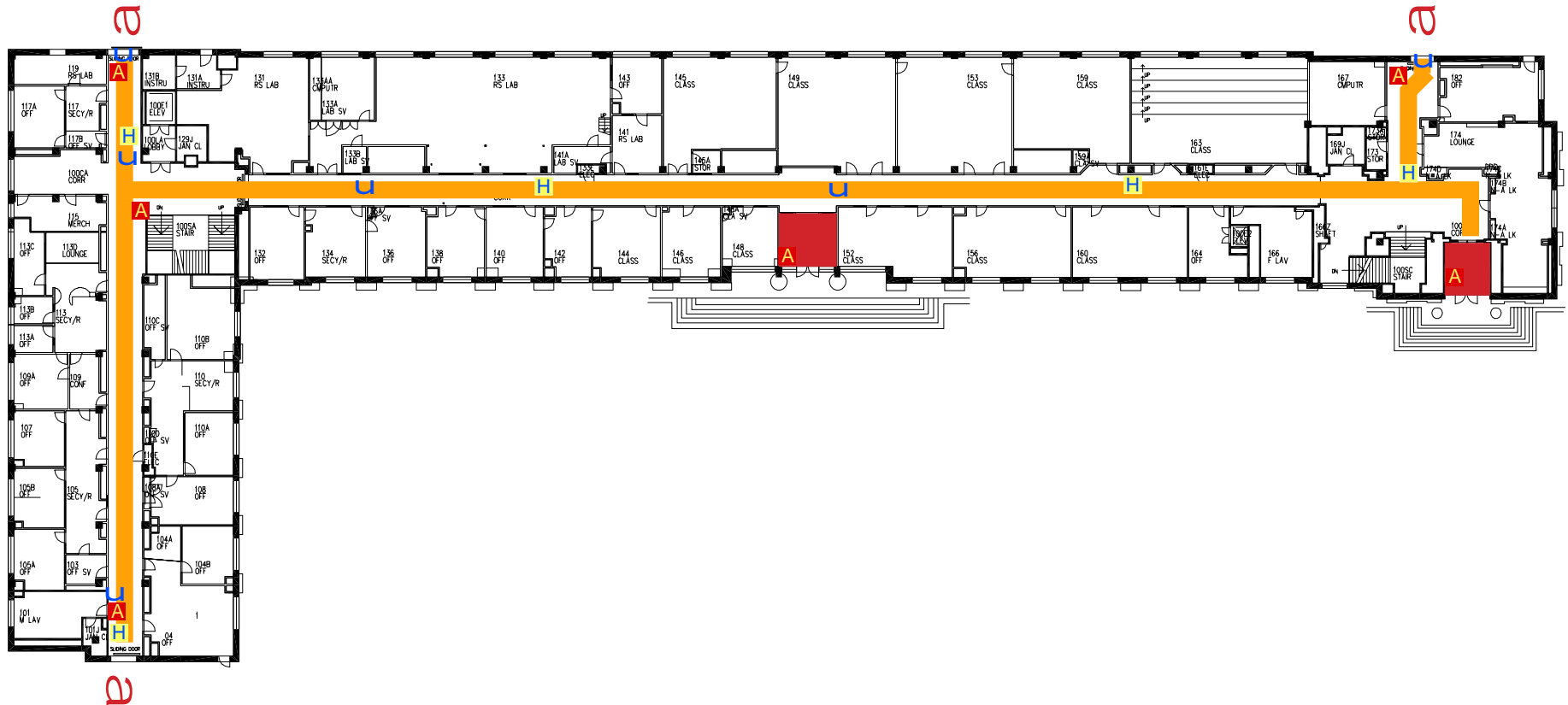
DMSE Building 4 Basement EAP

1. Use Alarm Pull Box and/or Dial 100 (MIT Campus Police) and Describe Problem.
2. Evacuate Building and Proceed to Meeting Place - Killian Court.
Handicapped People Unable To Evacuate Building Should Wait In The Nearest Stairwell For Assistance.
3. Tell Event Commander Any Information You may Have Pertaining to the Emergency.

EW Eye Wash Station
 SS Safety Shower / Doff-It Kit
 . Material Safety Data Sheets
 DC Dry Chemical Fire Extinguisher
 SC Spill Control Kit

A Alarm Box
 H Fire Hose
 Emergency Exit Route
 U Alarm Signal Box
 Exit

ERG Emergency Response Guide
 Hazardous Material Storage
 BioSafety Cabinet
 a Horizontal Egress



DMSE Building 4 1st Floor EAP

1. Use Alarm Pull Box and/or Dial 100 (MIT Campus Police) and Describe Problem.
2. Evacuate Building and Proceed to Meeting Place - Killian Court.
 Handicapped People Unable To Evacuate Building Should Wait In The Nearest Stairwell For Assistance.
3. Tell Event Commander Any Information You may Have Pertaining to the Emergency.

EW Eye Wash Station

SS Safety Shower / Doff-It Kit

• Material Safety Data Sheets

DC Dry Chemical Fire Extinguisher

SC Spill Control Kit

A Alarm Box

H Fire Hose

Emergency Exit Route

u Alarm Signal Box

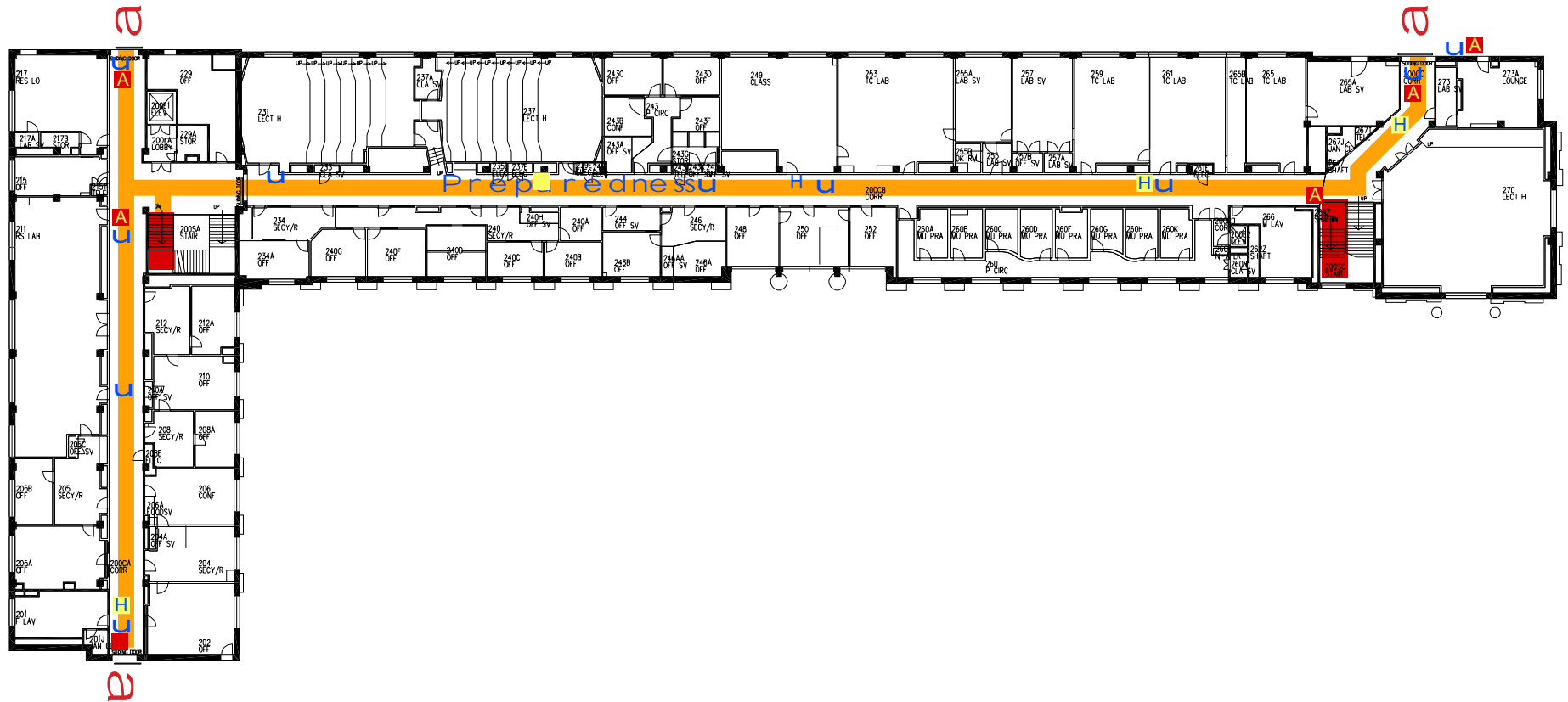
Exit

ERG Emergency Response Guide

Hazardous Material Storage

BioSafety Cabinet

a Horizontal Egress



DMSE Building 4 2nd Floor EAP

1. Use Alarm Pull Box and/or Dial 100 (MIT Campus Police) and Describe Problem.
2. Evacuate Building and Proceed to Meeting Place - Killian Court.
Handicapped People Unable To Evacuate Building Should Wait In The Nearest Stairwell For Assistance.
3. Tell Event Commander Any Information You may Have Pertaining to the Emergency.

EW Eye Wash Station

SS Safety Shower / Doff-It Kit

• Material Safety Data Sheets

CD Carbon Dioxide Fire Extinguisher

SC Spill Control Kit

A Alarm Box

H Fire Hose

Emergency Exit Route

U Alarm Signal Box

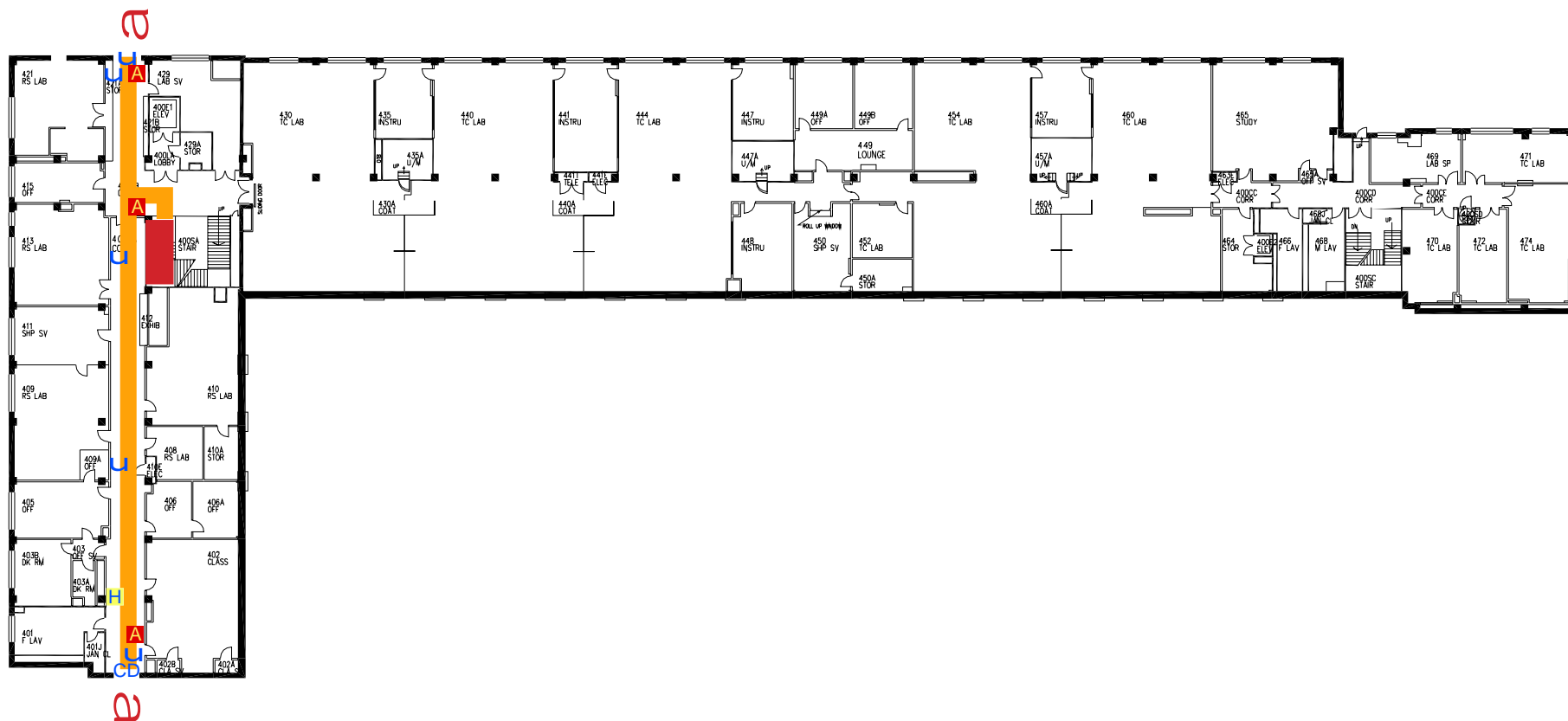
Exit

ERG Emergency Response Guide

Hazardous Material Storage

BioSafety Cabinet

a Horizontal Egress



DMSE Building 4 4th Floor EAP

1. Use Alarm Pull Box and/or Dial 100 (MIT Campus Police) and Describe Problem.
2. Evacuate Building and Proceed to Meeting Place - Killian Court.
Handicapped People Unable To Evacuate Building Should Wait In The Nearest Stairwell For Assistance.
3. Tell Event Commander Any Information You may Have Pertaining to the Emergency.

EW Eye Wash Station

SS Safety Shower / Doff-It Kit

. Material Safety Data Sheets

CD Carbon Dioxide Fire Extinguisher

SC Spill Control Kit

A Alarm Box

H Fire Hose

Emergency Exit Route

U Alarm Signal Box

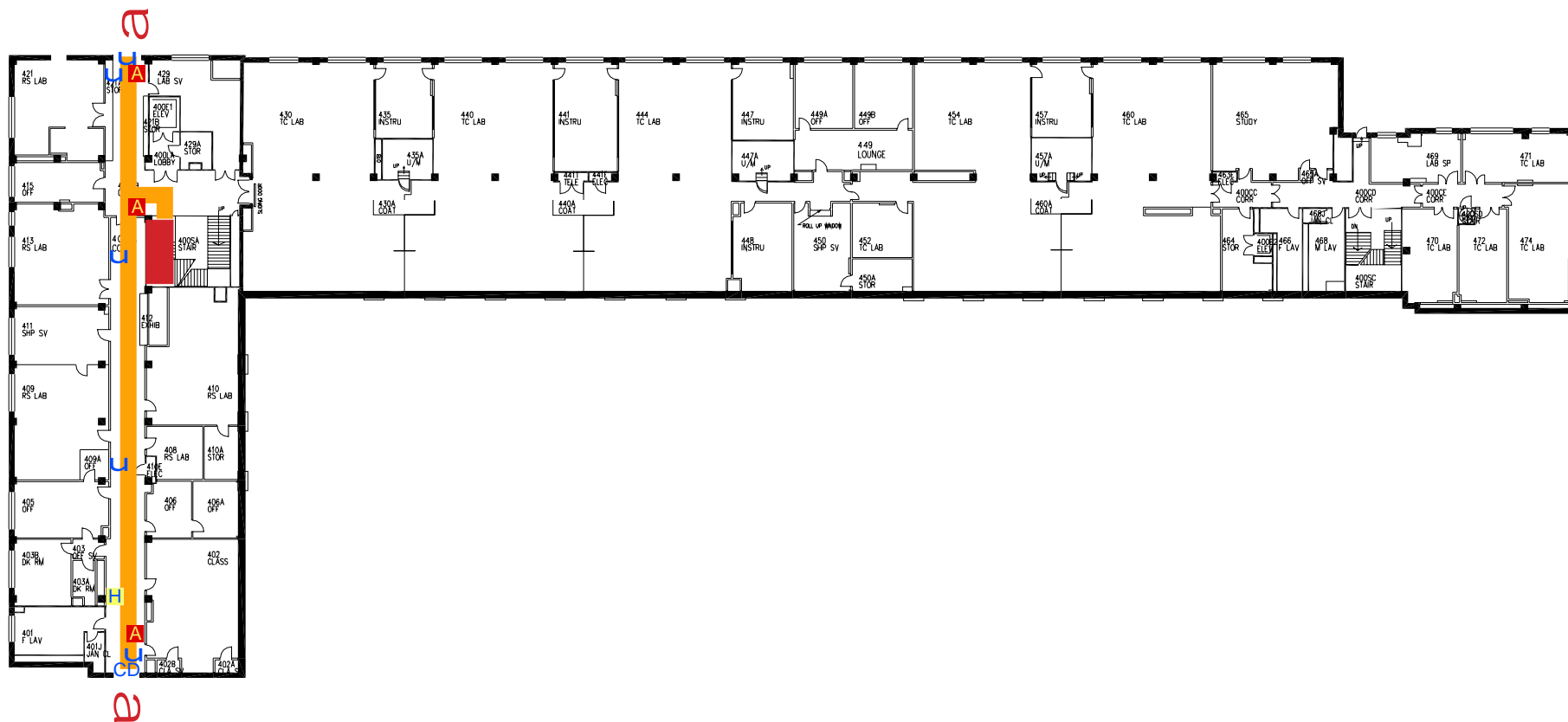
Exit

ERG Emergency Response Guide

Hazardous Material Storage

BioSafety Cabinet

a Horizontal Egress



DMSE Building 4 4th Floor EAP

1. Use Alarm Pull Box and/or Dial 100 (MIT Campus Police) and Describe Problem.
2. Evacuate Building and Proceed to Meeting Place - Killian Court.
Handicapped People Unable To Evacuate Building Should Wait In The Nearest Stairwell For Assistance.
3. Tell Event Commander Any Information You may Have Pertaining to the Emergency.

- EW Eye Wash Station
- SS Safety Shower
- FB Doff-It Kit
- . Material Safety Data Sheets
- DC Dry Chemical Fire Extinguisher
- SC Spill Control Kit
- ERG Emergency Response Guide
- A Alarm Box
- H Fire Hose
- U Alarm Signal Box
- Emergency Exit Route
- Hazardous Material Storage
- BioSafety Cabinet
- Exit
- a Horizontal Egress

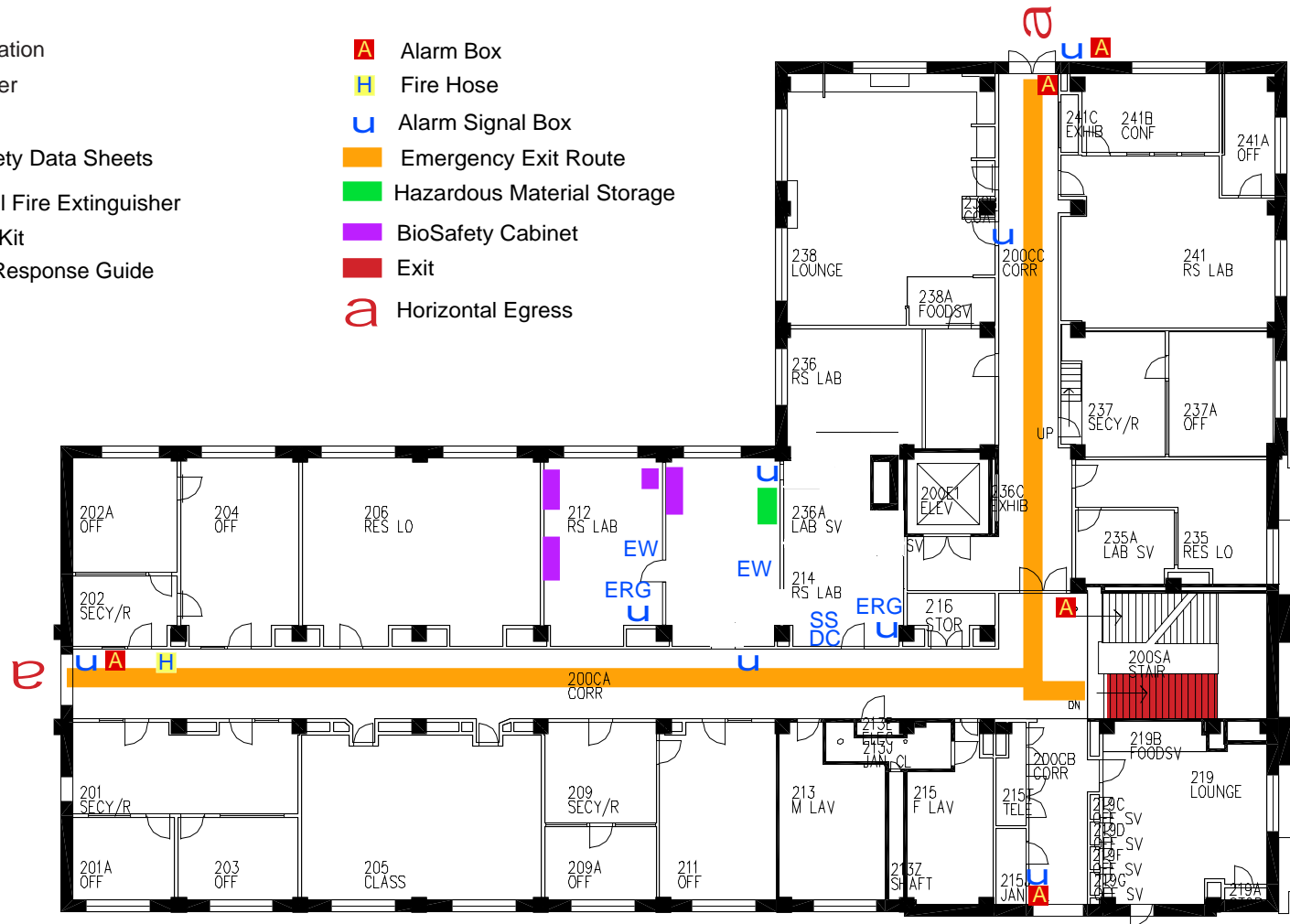


DMSE Building 8 1st Floor EAP

1. Use Alarm Pull Box and/or Dial 100 (MIT Campus Police) and Describe Problem.
2. Evacuate Building and Proceed to Meeting Place - Eastman Court.
Handicapped People Unable To Evacuate Building Should Wait In The Nearest Stairwell For Assistance.
3. Tell Event Commander Any Information You may Have Pertaining to the Emergency.

EW Eye Wash Station
 SS Safety Shower
 FB Doff-It Kit
 . Material Safety Data Sheets
 DC Dry Chemical Fire Extinguisher
 SC Spill Control Kit
 ERG Emergency Response Guide

A Alarm Box
 H Fire Hose
 U Alarm Signal Box
 Emergency Exit Route
 Hazardous Material Storage
 BioSafety Cabinet
 Exit
 a Horizontal Egress



DMSE Building 8 2nd Floor EAP

1. Use Alarm Pull Box and/or Dial 100 (MIT Campus Police) and Describe Problem.
2. Evacuate Building and Proceed to Meeting Place - Eastman Court.
 Handicapped People Unable To Evacuate Building Should Wait In The Nearest Stairwell For Assistance.
3. Tell Event Commander Any Information You may Have Pertaining to the Emergency.

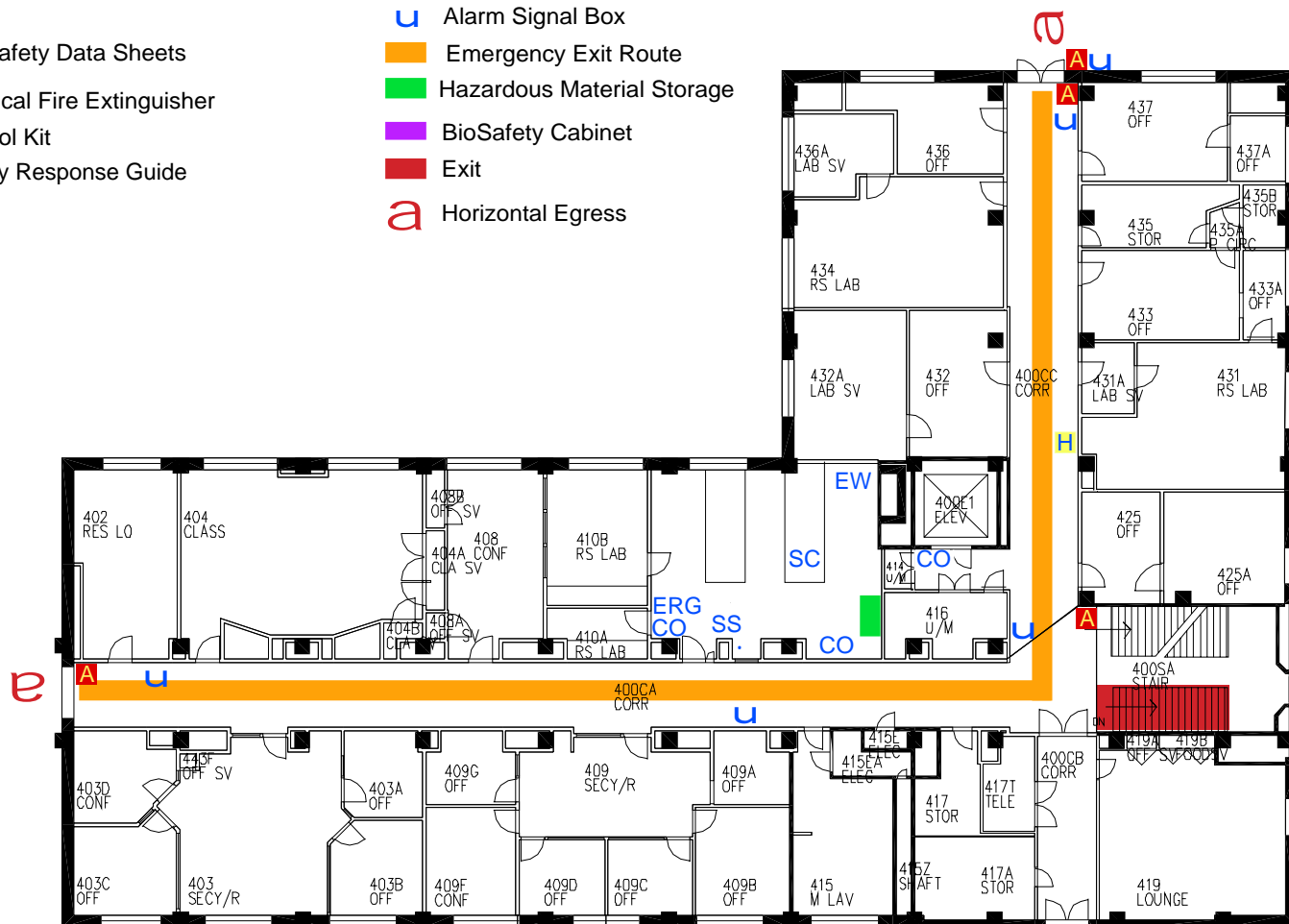
- EW Eye Wash Station
- SS Safety Shower
- FB Doff-It Kit
- Material Safety Data Sheets
- DC Dry Chemical Fire Extinguisher
- SC Spill Control Kit
- ERG Emergency Response Guide



DMSE Building 8 3rd Floor EAP

1. Use Alarm Pull Box and/or Dial 100 (MIT Campus Police) and Describe Problem.
2. Evacuate Building and Proceed to Meeting Place - Eastman Court.
Handicapped People Unable To Evacuate Building Should Wait In The Nearest Stairwell For Assistance.
3. Tell Event Commander Any Information You may Have Pertaining to the Emergency.

- EW Eye Wash Station
- SS Safety Shower
- FB Doff-It Kit
- . Material Safety Data Sheets
- DC Dry Chemical Fire Extinguisher
- SC Spill Control Kit
- ERG Emergency Response Guide
- A Alarm Box
- H Fire Hose
- U Alarm Signal Box
- Emergency Exit Route
- Hazardous Material Storage
- BioSafety Cabinet
- Exit
- a Horizontal Egress



DMSE Building 8 4th Floor EAP

1. Use Alarm Pull Box and/or Dial 100 (MIT Campus Police) and Describe Problem.
2. Evacuate Building and Proceed to Meeting Place - Eastman Court.
Handicapped People Unable To Evacuate Building Should Wait In The Nearest Stairwell For Assistance.
3. Tell Event Commander Any Information You may Have Pertaining to the Emergency.

EW Eye Wash Station

SS Safety Shower / Doff-It Kit

. Material Safety Data Sheets

DC Dry Chemical Fire Extinguisher

SC Spill Control Kit

A Alarm Box

H Fire Hose

Emergency Exit Route

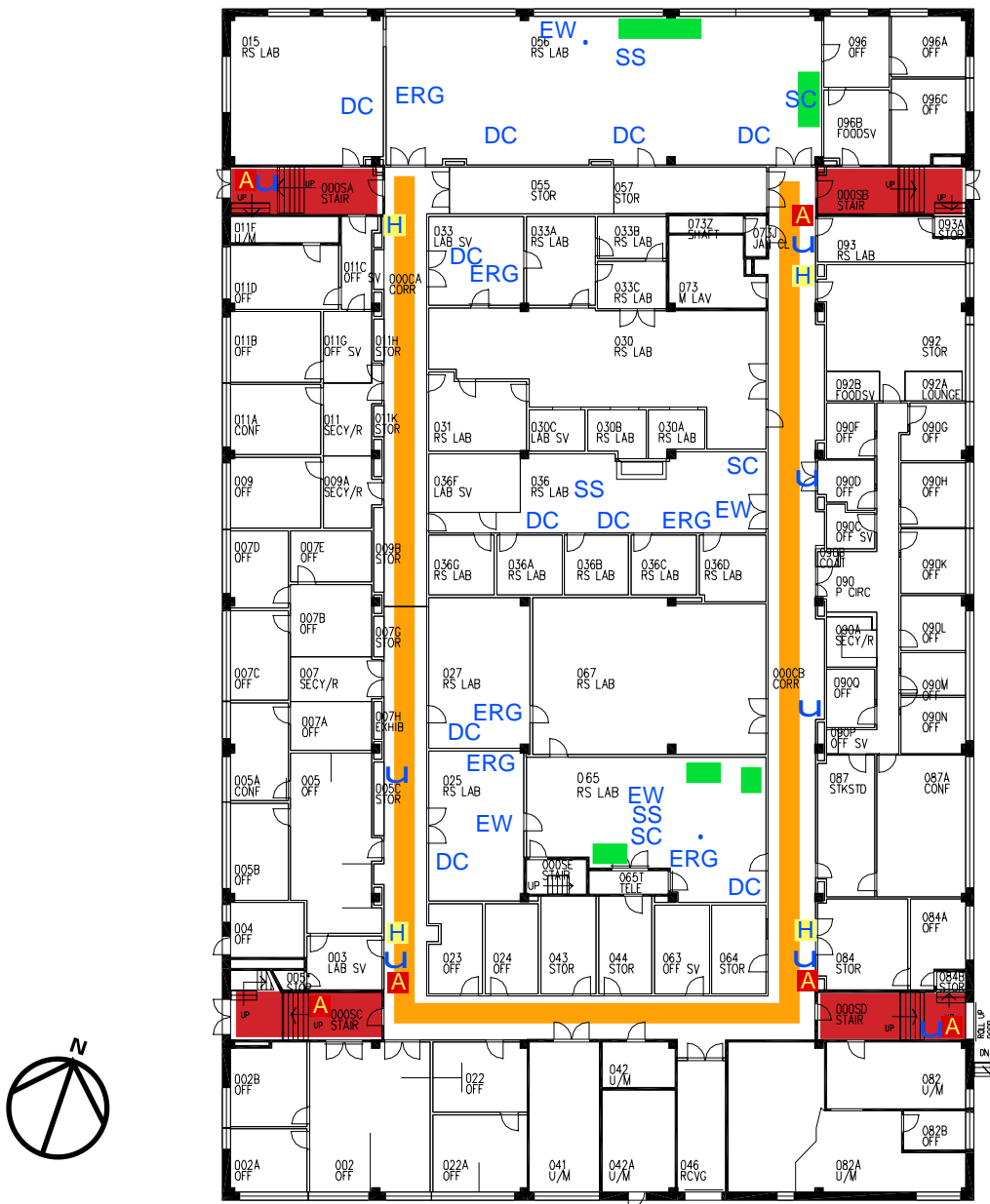
U Alarm Signal Box

Exit

ERG Emergency Response Guide

Hazardous Material Storage

BioSafety Cabinet



DMSE Building 12 Basement EAP

1. Use Alarm Pull Box and/or Dial 100 (MIT Campus Police) and Describe Problem.
2. Evacuate Building and Proceed to Meeting Place - In front of Bld 13 (West Corner of Bld 12).
Handicapped People Unable To Evacuate Building Should Wait In The Nearest Stairwell For Assistance.
3. Tell Event Commander Any Information You may Have Pertaining to the Emergency.

EW Eye Wash Station

SS Safety Shower

FB Fire blanket

G Natural Gas Shut Off

DC Dry Chemical Fire Extinguisher

A Alarm Box

H Fire Hose

Emergency Exit Route

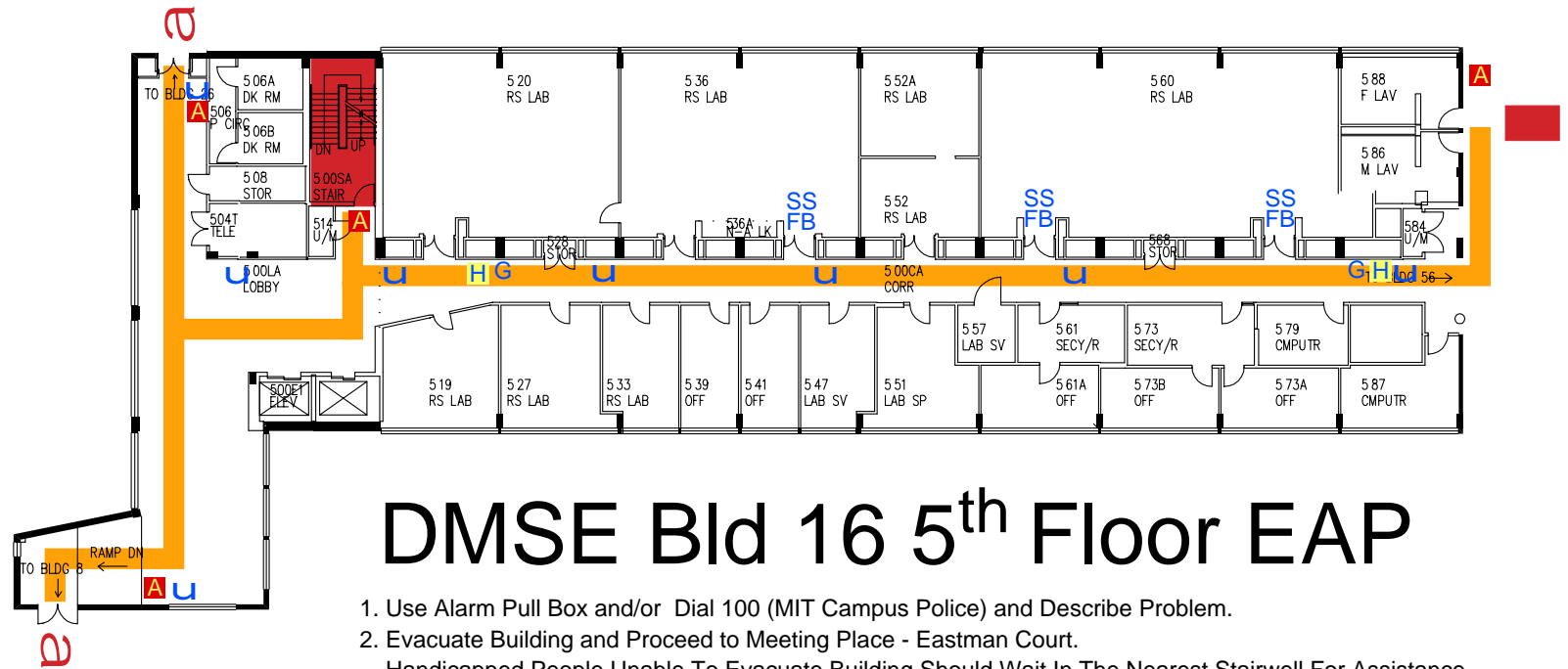
U Alarm Signal Box

Exit

ERG Emergency Response Guide

Hazardous Material Storage

a Horizontal Egress



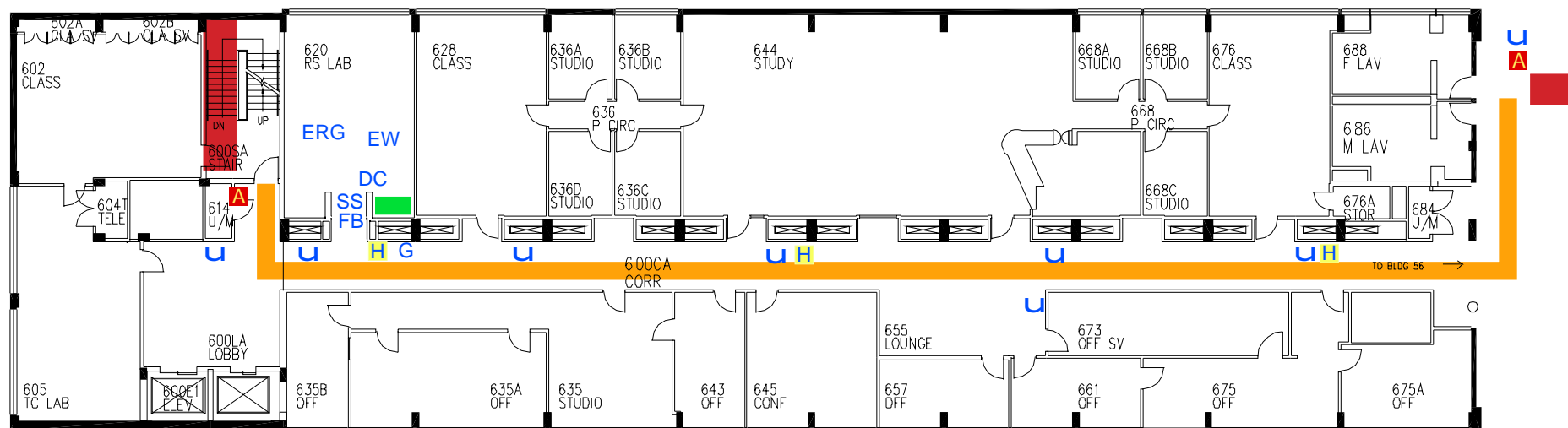
DMSE Bld 16 5th Floor EAP

1. Use Alarm Pull Box and/or Dial 100 (MIT Campus Police) and Describe Problem.
2. Evacuate Building and Proceed to Meeting Place - Eastman Court.
Handicapped People Unable To Evacuate Building Should Wait In The Nearest Stairwell For Assistance.
3. Tell Event Commander Any Information You may Have Pertaining to the Emergency.

EW Eye Wash Station
 SS Safety Shower
 FB Fire blanket
 G Natural Gas Shut Off
 DC Dry Chemical Fire Extinguisher

A Alarm Box
 H Fire Hose
 Emergency Exit Route
 U Alarm Signal Box
 Exit

ERG Emergency Response Guide
 Hazardous Material Storage



DMSE Bld 16 6th Floor EAP

1. Use Alarm Pull Box and/or Dial 100 (MIT Campus Police) and Describe Problem.
2. Evacuate Building and Proceed to Meeting Place - Eastman Court.
 Handicapped People Unable To Evacuate Building Should Wait In The Nearest Stairwell For Assistance.
3. Tell Event Commander Any Information You may Have Pertaining to the Emergency.

Blank Page

Notes

