Fire Safety Procedures

Department of Safety and Risk Management

June 2000
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According to the United States Fire Administration, fire kills thousands of Americans each year, injures hundreds of thousands, destroys billions of dollars in property, and costs tens of billions of dollars overall. Unfortunately, colleges and universities are not immune to the ravages of fire. In 1997, universities nationwide reported over 1,500 fires, injuring 33 individuals and costing over $7,000,000 in losses.

As a means of assuring a proactive stance toward fire safety at Georgia State University, the Department of Safety and Risk Management and the University’s Fire Safety Committee have developed this Fire Safety Procedure Manual. The purpose of the manual is to provide the members of our campus community with the basic requirements of the University’s fire safety program. All faculty and staff members are subject to the requirements in this manual.

It is hoped that these procedures will provide our students a safer college experience and also protect our faculty, staff and visitors to the campus.

Carl V. Patton
President
73-00-00 FIRE SAFETY POLICY/PROCEDURE STATEMENT

PURPOSE
Georgia State University is committed to creating an environment that is safe for its employees, students, visitors and the environment. The purpose of this document is to establish an organizational structure to ensure the effective implementation of this policy at all University locations.

IMPACT ON CAMPUS COMMUNITY
This policy applies to all faculty and staff members, along with students, contractors and vendors of Georgia State University.

REQUIREMENTS
All employees, students, visitors, vendors and contractors are expected to comply with the statements that follow. Each department or unit may supplement this policy document with specific procedures about hazards in their workplace and the precautions necessary to control and prevent these hazards. These supplements, prepared in cooperation with the Department of Safety and Risk Management, may be in the form of, as examples, written procedures or training programs.

The responsibility for the administration of the University's fire safety program is assigned to the Department of Safety and Risk Management. Implementation of this policy is the responsibility of the entire University community - staff, faculty, students, vendors and contractors.

Applicable federal and state laws and regulations, together with policies and procedures issued by or through the Department of Safety and Risk Management (DSRM) will provide the guidance under which the University will conduct its fire safety program.

RESPONSIBILITIES
Administrative Officials
Administrative Officials have the primary responsibility for maintaining a safe work environment within their jurisdiction, by monitoring and exercising control over their assigned areas.

Administrative Officials (President, Vice Presidents, and Deans) will:

1. Communicate to all faculty members, employees and students that the safety of persons in the workplace and environment are of the highest priority at Georgia State University.

2. Ensure that fire safety policies are carried out in the academic departments or administrative units for which they are responsible.
3. Ensure that fire safety policies established are applicable to their program are carried out. This includes assuring compliance with applicable state and national fire safety rules, regulations, standards and procedures. Included, for example, are regulations of the State Fire Marshal, the National Fire Protection Association, and policies and procedures established by the Department of Safety and Risk Management.

4. Monitor implementation of programs designed to ensure fire safety:
   a. Consult with the Department of Safety and Risk Management with respect to new, existing or planned facilities or equipment that may present a fire safety hazard to determine specific measures that may need to be implemented to control these hazards before exposure to these hazards may occur.
   b. Support measures such as training, use of protective devices and resources to control and prevent hazards.

5. Provide appropriate financial support for fire safety improvements, or request assistance from the next higher level of supervision regarding these requests.

Supervisors
All supervisors (department chairs, faculty and other employees with direct oversight of University activities and employees or students) have a specific responsibility to provide for the fire safety of those supervised. They are in important positions in the organization to carry out the University's safety policies and to prevent injuries to their employees.

Supervisors will:

1. Be knowledgeable of appropriate University and Departmental fire safety policies, rules and procedures and how they specifically apply to their responsibilities and authority.

2. Inform all new and current employees and students that fire safety is a priority at Georgia State and inform them about fire safety policies, rules, regulations and procedures, as well as their specific responsibilities (see section on Employees and Students).

3. Ensure that required fire safety equipment, devices and personal protective equipment and apparel are provided and maintained, and are properly used by individuals working in their operations.

4. Provide employees and students with instruction and assistance in the proper operation of equipment or materials involved in any operation that may be potentially hazardous.
5. Take prompt corrective action when unsafe conditions, practices or equipment are reported or observed.

6. Encourage prompt reporting of fire safety concerns.

7. Coordinate or conduct fire inspections to maintain safe conditions, and address any deficiencies that are identified.

8. Provide for fire safety training.

9. Provide appropriate financial support for fire safety improvements, or request assistance from the next higher level of supervision regarding these requests.

10. Follow-up on all identified problems until resolved.

**Employees and Students**
Employees, students, vendors and contractors have specific responsibilities to comply with established fire safety policies, standards, rules, procedures and regulations. Compliance with these is essential to create and maintain a safe environment at all University locations.

Employees, students, vendors and contractors will:

1. Comply with applicable fire safety policies, standards, rules, regulations and procedures. These include safety-related signs, posters, warnings and written/oral directions when performing tasks.

2. Not perform any function or operation that is considered hazardous, or is known to be hazardous without proper instructions and authorization.

3. Only use equipment and materials approved or provided by the supervisor or instructor and for which instruction has been provided.

4. Become thoroughly knowledgeable about potential hazards associated with the work area; knowing where information on these hazards is maintained and how to use this information when needed.

5. Wear or use prescribed protective equipment.

6. Report all unsafe conditions, practices or equipment to the supervisor, instructor or safety officer when deficiencies are observed.
73-00-51 QUANTITY OF FLAMMABLE AND COMBUSTIBLE LIQUIDS PROCEDURE

PURPOSE
Limitations on quantities and the proper use and storage of flammable and combustible liquids are required to control fire hazards.

GOVERNING REGULATIONS
• O.C.G.A. Title 25, Chapter 2
• National Fire Protection Association (NFPA) 45, Standard on Fire Protection for Laboratories Using Chemicals

IMPACT ON CAMPUS COMMUNITY
All users of flammable and combustible liquids must establish safeguards regarding use and storage.

PROGRAM
This policy applies to all department, vendors and contractors to regulate the quantity of flammable and combustible liquids. It addresses quantities in use as well as those in storage in approved storage cabinets. It does not address storage in specifically constructed flammable liquid storage rooms. See Appendix A for definitions of flammable and combustible liquids.

REQUIREMENTS
1. All personnel should be familiar with the flammability rating and the characteristics of all chemicals used. The classification or flammability may be found on the product label, material safety data sheet, product literature and other sources.

2. Maximum quantities of flammable and combustible liquids in research laboratory units and general-purpose laboratory units shall be in accordance with the following tables.

3. Allowable maximum quantities of flammable and combustible liquids in undergraduate instructional laboratory units shall not exceed 50% of that indicated in the following tables.
### Maximum Quantities of Flammable and Combustible Liquids in Laboratory Units

**Excluding** Quantities in Storage Cabinets and Safety Cans

<table>
<thead>
<tr>
<th>Liquid Class</th>
<th>Maximum Quantity per 100 sq. ft. of Lab Unit</th>
<th>Maximum Quantity*** per Lab Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>I*</td>
<td>20 L (5 gal)</td>
<td>1136 L (300 gal)</td>
</tr>
<tr>
<td>I, II and IIIA**</td>
<td>38 L (10 gal)</td>
<td>1515 L (400 gal)</td>
</tr>
</tbody>
</table>

### Maximum Quantities of Flammable and Combustible Liquids in Laboratory Units

**Including** Quantities in Storage Cabinets and Safety Cans

<table>
<thead>
<tr>
<th>Liquid Class</th>
<th>Maximum Quantity per 100 sq. ft. of Lab Unit</th>
<th>Maximum Quantity*** per Lab Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>I*</td>
<td>38 L (10 gal)</td>
<td>2270 L (600 gal)</td>
</tr>
<tr>
<td>I, II and IIIA**</td>
<td>76 L (20 gal)</td>
<td>3028 L (800 gal)</td>
</tr>
</tbody>
</table>

**Notes:**

* Class I liquid maximum shall be inclusive of Class IA, IB and IC collectively.
** The maximum quantities of Class I liquids shall not exceed the quantities specified for Class I alone.
*** The more restrictive quantity, based on either the Maximum Quantity per 100 sq. or Maximum Quantity Per Lab Unit, shall apply in all cases.

4. Maximum allowable container size for use in all laboratories shall be in accordance with the following table.

### Maximum Allowable Container Capacity

<table>
<thead>
<tr>
<th>Container Type</th>
<th>Flammable Liquids***</th>
<th>Combustible Liquids***</th>
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<tbody>
<tr>
<td>Glass</td>
<td>IA 500 ml (1 pt)*</td>
<td>IB 1 L (1 pt)*</td>
</tr>
<tr>
<td></td>
<td>IC 4 L (1.1 gal)</td>
<td>II 4 L (1.1 gal)</td>
</tr>
<tr>
<td></td>
<td>IIA 20 L (5 gal)</td>
<td></td>
</tr>
<tr>
<td>Metal or approved plastic</td>
<td>4 L (1.1 gal)</td>
<td>20 L (5 gal)</td>
</tr>
<tr>
<td></td>
<td>20 L (5 gal)</td>
<td>20 L (5 gal)</td>
</tr>
<tr>
<td></td>
<td>20 L (5 gal)</td>
<td>20 L (5 gal)</td>
</tr>
<tr>
<td></td>
<td>227 L (60 gal)</td>
<td>227 L (60 gal)</td>
</tr>
<tr>
<td>Safety cans</td>
<td>10 L (2.6 gal)</td>
<td>20 L (5 gal)</td>
</tr>
<tr>
<td></td>
<td>20 L (5 gal)</td>
<td>20 L (5 gal)</td>
</tr>
<tr>
<td></td>
<td>20 L (5 gal)</td>
<td>20 L (5 gal)</td>
</tr>
<tr>
<td>Metal drum (DOT spec.)</td>
<td>0</td>
<td>20 L (5 gal)</td>
</tr>
<tr>
<td></td>
<td>20 L (5 gal)</td>
<td>20 L (5 gal)</td>
</tr>
<tr>
<td></td>
<td>20 L (5 gal)</td>
<td>227 L (60 gal)</td>
</tr>
<tr>
<td></td>
<td>227 L (60 gal)</td>
<td></td>
</tr>
<tr>
<td>Polyethylene**</td>
<td>4 L (1.1 gal)</td>
<td>20 L (5 gal)</td>
</tr>
<tr>
<td></td>
<td>20 L (5 gal)</td>
<td>227 L (60 gal)</td>
</tr>
<tr>
<td></td>
<td>227 L (60 gal)</td>
<td></td>
</tr>
</tbody>
</table>
Notes:

* Glass containers, as large as 4 L shall be permitted to be used if needed and if the required purity would be adversely affected by storage in a metal or an approved plastic container, or if the liquid would cause excessive corrosion or degradation of a metal or an approved plastic container.

** DOT Spec. 34, UN 1H1, or as authorized by DOT exemption.

*** In instructional laboratory work areas, no container for Class I or Class II liquids shall exceed a capacity of 4 L, except that safety cans shall be permitted to have an 8 L capacity.

5. Flammable or combustible liquids shall not be stored in ordinary refrigerators. Storage of flammable or combustible liquids in well-sealed containers is permissible in approved flammable materials storage refrigerators, in refrigerators approved for Class I, Division I, Group C and D or refrigerators that have been site-modified to include:

   a. Relocation of manual temperature controls to the exterior of the storage compartment, sealing all points where capillary tubing or wiring formerly entered the storage compartment;
   b. Removal of light switches and light assemblies and sealing of all resulting openings; and
   c. Replacement of positive mechanical door latches with magnetic door gaskets.

6. Every laboratory refrigerator should be clearly marked to indicate whether it is safe for storage of flammable materials. Internal laboratory procedures should ensure that laboratory refrigerators are being properly used. Labels that can be used on laboratory refrigerators include:

   ![Label used for unmodified domestic refrigerators.](image)

   Do not store flammable solvents in this refrigerator.

   ![Label for laboratory-safe or modified domestic refrigerators.](image)

   Notice: This is not an explosion proof refrigerator, but is has been designed to permit safe storage of materials producing flammable vapors. Containers should be well stoppered or tightly closed.

7. Incompatible materials shall be segregated to prevent accidental contact with one another.
8. Flammable and combustible liquids stored in the open in the laboratory work area shall be kept to the minimum necessary for the work being conducted.

9. All containers used for storage of flammable and combustible liquids shall be labeled as to content in accordance with good laboratory practice and the State of Georgia’s “Right to Know” laws.
**Appendix A**

**Definitions**

**Flammable Liquid:** A liquid having a flashpoint below 100°F and having a vapor pressure not exceeding 40 pounds per square inch at 100°F shall be known as a Class I liquid. Class I liquids shall be sub-divided as follows:

- Class IA (Flammability Rating 4) shall include those having flashpoints below 73°F and having a boiling point below 100°F.
- Class IB (Flammability Rating 3) shall include those having flashpoints below 73°F and having a boiling point at or above 100°F.
- Class IC (Flammability Rating 3) shall include those having flashpoints at or above 73°F and below 100°F.

**Combustible Liquid:** A liquid having a flashpoint at or above 100°F. Combustible liquids shall be sub-divided as follows:

- Class II (Flammability Rating 2) shall include those having flashpoints at or above 100°F and below 140°F.
- Class IIIA (Flammability Rating 2) liquids shall include those having flashpoints at or above 140°F and below 200°F.
- Class IIIB (Flammability Rating 1) liquids shall include those having flashpoints at or above 200°F.

**Laboratory Unit:** An enclosed space used for experiments or tests. Laboratory units may or may not include offices, other laboratories and other contiguous rooms maintained for or used by laboratory personnel, and corridors within the unit. It may contain one or more separate laboratory work areas. It may be an entire building. It must, however, be separated from other building areas by appropriate fire resistive construction having at least a one hour fire resistive rating.
73-00-52 COMPRESSED GAS CYLINDER
STORAGE AND USAGE PROCEDURE

PURPOSE
Limitations on quantities and the proper use and storage of compressed and liquefied gases in pressurized cylinders are required to control fire hazards.

GOVERNING REGULATIONS
- O.C.G.A. Title 25, Chapter 2
- National Fire Protection Association (NFPA) 55, Standard for the Storage, Use, and Handling of Compressed and Liquefied Gases in Portable Cylinders
- National Fire Protection Association (NFPA) 45, Standard on Fire Protection for Laboratories Using Chemicals

IMPACT ON CAMPUS COMMUNITY
All departments using compressed and liquefied gases in pressurized cylinders must establish safeguards regarding use and storage.

PROGRAM
This policy applies to all departments, vendors and contractors that use compressed gas cylinders. It addresses quantities in use and the storage of cylinders in approved storage areas.

REQUIREMENTS
1. All personnel using compressed gas cylinders should be familiar with the flammability and health ratings and the characteristics of all compressed gases used. The classification and ratings may be found on the product label, material safety data sheet, product literature and other sources.

2. Maximum quantities of compressed or liquefied gas cylinders in research laboratory units and general-purpose laboratory units shall be in accordance with the following table.

<table>
<thead>
<tr>
<th>Flammable or Oxidizing Gases</th>
<th>Liquefied Flammable Gases</th>
<th>Gases with Health Hazard Rating of 3 or 4*</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>3</td>
<td>3**</td>
</tr>
</tbody>
</table>

Note:
- Maximum number of cylinders per 46.5 m² (500 ft²) or less.
- *Gases with a Health Hazard Rating of 4 are not permitted.
- **Use or storage of gases with a Health Hazard Rating of 3 are limited to a total of 400 scf (compressed) or 100 pounds (liquefied).
3. Maximum quantities of compressed or liquefied gas cylinders in undergraduate instructional laboratory units shall not exceed three full size cylinders in any combination.

4. A compressed gas cylinder shall be considered to be “in use” if it is:
   a. Connected through a regulator to deliver gas to a laboratory operation; or
   b. Connected to a manifold being used to deliver gas to a laboratory operation; or
   c. A single cylinder secured alongside the cylinder in (a) above as the reserve cylinder for (a).

5. Excess cylinders shall be stored in centralized outside storage areas. Cylinders will be stored in separate rooms by category as follows.
   a. Toxic
   b. Pyrophoric
   c. Flammable
   d. Oxidizing
   e. Nonflammable

6. Empty cylinders will be marked as “Empty” or “MT” and stored separated by category.

7. All cylinders used shall be labeled as to content in accordance with good laboratory practice.

8. All cylinders shall be securely fastened at all times by an approved restraining system.
73-00-53 CONSTRUCTION AND RENOVATION APPROVAL POLICY

PURPOSE
Newly constructed or renovated buildings must meet applicable life safety code requirements.

GOVERNING REGULATIONS
- O.C.G.A. Title 25, Chapter 2

IMPACT ON CAMPUS COMMUNITY
This policy is intended for use by Physical Plant and Design & Construction personnel. Construction or renovation projects identified by this policy as requiring to be reviewed by the State Fire Marshal or the Fire Safety Officer shall not be occupied until a Certificate of Occupancy has been issued by the State Fire Marshal or by the Fire Safety Officer.

PROGRAM
The State Fire Marshal, which has review and inspection authority for compliance with the Georgia Building Code, has granted Georgia State University plan review and inspection authority for construction and renovation projects in existing University facilities.

The State Fire Marshal will retain jurisdiction for all new construction projects.

All building plans for new construction or for major renovations as defined by this policy shall be submitted to the Fire Safety Officer for approval before starting construction.

Departments shall not contract with private contractors, architects, engineers, or for construction materials without first coordinating construction plans with Design and Construction Services and with the Physical Plant Department.

The Fire Safety Officer shall be the designated representative to the State Fire Marshal Office for the University for all design and construction matters.

Although a project may have received approval from the State Fire Marshal or the Fire Safety Officer, violations or discrepancies noted during a construction inspection takes precedence over previously approved drawings.
REQUIREMENTS
New Construction and Renovation Projects Designed By Consultant Architects

See Attachment 1 for a flow diagram of this section.

1. All new construction and renovation projects designed by consultant architects shall be subject to the plan review and inspection jurisdiction of the State Fire Marshal.

2. Two copies of final building plans shall be submitted to the State Fire Marshal at least four weeks before the scheduled start of new construction.

3. One copy of plans shall also be submitted for review to the Fire Safety Officer. The Architect/Engineering firm shall provide written response to all review comments. In addition, copies of all correspondence to and from the State Fire Marshal shall be provided to the University’s Fire Safety Officer.

4. Professional stamps shall be provided with the plan submittal.

5. One set of approved plans shall be kept on file at the construction site.

6. The State Fire Marshal shall be notified when the construction project is estimated to be 80 percent completed, so that an inspection may be conducted. Additional inspections may be necessary. It shall be the responsibility of the Architect/Engineering firm or General Contractor to notify the State Fire Marshal for this inspection.

7. The Architect/Engineering firm or General Contractor may request additional inspections by the State Fire Marshal at any time during the construction.

8. Prior to occupation of the new structure, the Architect/Engineering firm or General Contractor shall request and obtain a final acceptance inspection by the State Fire Marshal.

9. All deficiencies noted during inspections will be given to the Architect/Engineering firm or General Contractor in writing and must be corrected. Once these items are corrected, a follow-up inspection will be made by the State Fire Marshal.

10. Certification/confirmation of acceptance tests, when applicable, shall be provided to the State Fire Marshal for the following systems prior to the issuance of a Certificate of Occupancy:

   a. fire alarm certificate
b. sprinkler certificate

11. A Certificate of Occupancy should be issued when:

a. plans have been submitted and approved and;
b. required inspections have been made and deficiencies corrected and;
c. applicable certificates have been provided to the State Fire Marshal, and a final acceptance inspection has been made.

12. Upon request, a Temporary Certificate of Occupancy may be issued before completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely without endangering life or public welfare and:

a. applicable certificates are provided to the State Fire Marshal,
b. all exits are clear and operable, and
c. all life safety features are in place and operable.

13. If the construction area is occupied prior to the issuance of a Certificate of Occupancy or Temporary Certificate of Occupancy, a notice of Illegally Occupied Area stating the deficiencies shall be sent by the Fire Safety Officer to the appropriate unit head and the Assistant Vice President for Planning and Facilities for further action.

All Other University Projects

See Attachment 2 for a flow diagram of this section.

For the purposes of this section, a “major” project or renovation is any project that involves, changes, adds to, or otherwise affects entrances, paths of egress, fire/smoke barrier walls, fire sprinkler systems, or fire detection/alarm systems. The Fire Safety Officer will work cooperatively with Design and Construction Services and the Physical Plant Department to identify other projects that may not meet the definition of a “major project”, but has other life safety concerns that should be considered under this section.

1. All major renovations, alterations or modernization projects designed by or constructed by University personnel or their contractors require approval of the Fire Safety Officer. Projects involving ordinary repairs and maintenance are not subject to this policy. Depending on the size or scope of the project, the Fire Safety Officer may require that plans be submitted to the State Fire Marshal for approval. In such instances, the section on New Construction Projects shall be followed. For the purposes of this section, the terms Architect/Engineering firm, Project Manager and the Work Management Center may be used interchangeably.
2. The Project Manager shall submit one copy of the final drawings and specifications of the project to the Fire Safety Officer at least three weeks before the scheduled start of any renovation project performed by an outside contractor. If drawings and specifications are not created for the project, a copy of the Facility Modification Request (FMR) form may be submitted. Once approved, the set of plans or FMR shall be kept on file at the construction site.

3. The Department of Safety and Risk Management shall review the plans/specifications or FMR submitted and then issue a Project Review Form for projects which will either approve the submittal or identify deficiencies (see Attachment #3). Any deficiency noted shall be addressed before construction begins.

4. Any changes to the approved submittal shall be resubmitted to the Fire Safety Officer for written approval before beginning the construction.

5. The Fire Safety Officer may require that professional stamps be provided with the plan submittal for a project where a general contractor, not the Physical Plant, is used as the primary builder.

6. The Fire Safety Officer shall be notified when the approved construction project is estimated to be 80 percent completed, so that an inspection may be conducted. Additional inspections may be necessary. It shall be the responsibility of the Project Manager or General Contractor to schedule the inspection with the Fire Safety Officer.

7. The Project Manager or General Contractor may request additional inspections by the Department of Safety and Risk Management at any time during the construction.

8. Before occupying the affected area, the Project Manager or General Contractor shall request and obtain a final acceptance inspection by the Fire Safety Officer.

9. All deficiencies noted during inspections will be given to the Project Manager or General Contractor in writing and must be corrected. Once these items are corrected, the Fire Safety Officer will make a follow-up inspection.

10. Certification/confirmation of acceptance tests, when applicable, shall be provided to the Fire Safety Officer for the following systems prior to the issuance of a Certificate of Occupancy:
   a. fire alarm certificate
   b. sprinkler certificate
11. A University Certificate of Occupancy shall be issued when:

   a. plans have been submitted and approved,
   b. required inspections have been made and deficiencies corrected and;
   c. applicable certificates have been provided to the Fire Safety Officer, and a final acceptance inspection has been made.

12. Upon request, a University Temporary Certificate of Occupancy may be issued before completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely without endangering life or public welfare and:

   a. applicable certificates are provided to the Fire Safety Officer,
   b. all exits are clear and operable, and
   c. all life safety features are in place and operable.

A Temporary Certificate of Occupancy permit shall be valid for 30 days. After 30 days, the area must be vacated immediately unless a permanent University Certificate of Occupancy is issued. Failure to vacate will result in a notice of Illegally Occupied Area being sent by the Fire Safety Officer to the appropriate unit head and the Assistant Vice President for Planning and Facilities for further action.

13. If the construction area is occupied prior to the issuance of a University Certificate of Occupancy or Temporary Certificate of Occupancy, a notice of Illegally Occupied Area stating the deficiencies shall be sent by the Fire Safety Officer to the appropriate unit head and the Assistant Vice President for Planning and Facilities for further action.

**Activities Not Requiring Approval**

Ordinary repairs and maintenance are not subject to this policy.
Plan Review Project Flow
New Construction and Renovation Projects
Designed By Consultant Architects

Submit 2 Copies of Plans to State Fire Marshal (SFM)

Plans Accepted

Yes

Additional Modifications Required to Plans?

No

Make Corrections and Resubmit

Yes

Implement Changes

Begin Construction

Request Inspection from FM at 80%

Request Reinspection from FM at 100%

Deficiencies Identified?

Yes

Correct Deficiencies

No

C.O. Issued
Attachment #2

Plan/FMR Review Project Flow
Existing Building Renovations

Submit 1 Copy of Plans/FMR to Fire Safety Officer (FSO)

- Plans/FMR Accepted
  - Yes
  - No: Make Corrections and Resubmit

- Additional Modifications Required to Plans/FMR?
  - Yes
  - No: Implement Changes

- Begin Construction

- Request Inspection from FSO at 80%

- Request Reinspection from FSO at 100%

- Deficiencies Identified?
  - Yes: Correct Deficiencies
  - No: C.O. Issued
### GEORGIA STATE UNIVERSITY

**FIRE SAFETY PROJECT REVIEW FORM**

**TO:**  
**FROM:**  
**DATE:**  
**PROJECT:**

- The above referenced plans/specifications are approved.  
- The above referenced plans/specifications are approved. Deficiencies noted below must be corrected. **Resubmittal not required.**
- The above referenced plans/specifications are not approved. Deficiencies noted below must be corrected. **Resubmittal required for approval.**
- The above referenced plans/specifications are required to be submitted to the State Fire Marshal for approval. Deficiencies, if any, are noted below.
- Project does not require submission or approval.

**A COPY OF THIS FORM SHALL REMAIN WITH APPROVED PLANS AT ALL TIMES**

The following certificates will be required upon completion of the project:

- Fire Alarm Certificate
- Sprinkler System Certificate
- Other: ________

The following inspections will be required during this project:

- 80% completion inspection
- 100% completion inspection
- Other: ________
- No inspections will be required

**DEFICIENCIES/COMMENTS**

<table>
<thead>
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<th>1.</th>
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<td>2.</td>
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<td>3.</td>
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<td>4.</td>
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<td>5.</td>
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<td>6.</td>
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Version 1.0  June 2000
73-00-54 FIRE SEALING OF PENETRATIONS POLICY

PURPOSE
Maintaining the integrity of firewalls is essential to fire and smoke containment.

GOVERNING REGULATIONS
- National Fire Protection Association (NFPA) 70, *National Electrical Code*

IMPACT ON CAMPUS COMMUNITY
This policy applies to all Georgia State University departments as well as vendors and contractors working on University projects. It covers all University owned, operated, occupied or leased buildings.

PROGRAM
Fire sealing or firestopping is the application of materials to restrict the spread of smoke and fire gases in concealed spaces or through established rated enclosures. The proper application of fire stopping material will limit the spread of fire and will lessen the damage from smoke and other fire related contaminants.

Areas that are required to be sealed include: walls that are labeled or act as a “fire wall” or “smoke barrier wall”, walls in corridors, walls in stairwells, all penetrations between floors, and all walls surrounding ‘high hazard’ areas. High hazard areas include: mechanical/electrical/data rooms, laboratory units, hazardous storage areas, and areas of public assembly.

REQUIREMENTS
1. When holes are made in walls for telecommunication cables, electrical wiring, plumbing of any type, duct work, data cables or for any other reason, all holes in walls that are identified above are to be sealed immediately upon completion of the job. All departments and contractors are responsible for sealing all penetrations upon completion of any job and are responsible for obtaining an inspection prior to covering areas that have been penetrated. If it is unclear whether a wall is required to be sealed, the Fire Safety Officer shall be contacted.

2. All fire sealing material must be applied according to manufacturer’s specifications. All fire sealing material manufacturers publish specification sheets for the proper application of their material. The University’s standard fire sealing material is Hilti brand sealant.

3. Examples of fire rated material used for resealing penetrations include; concrete, fire barrier mortar and Hilti brand sealant.
4. When running anything through a firewall or rated enclosure, consideration should be given to using sleeves. This will make for a neater job and will make the task of fire sealing much easier. It will also eliminate the need for more penetrations in the future.

5. Special attention must be given to vertical concealed spaces or shafts, running between floors. All vertical concealed shafts must be enclosed at the lowest level of the shaft, at the top of the shaft and at the walls of the shaft at each floor. A concealed shaft is like a chimney and any smoke or fire will be spread throughout a building through the shafts. These shafts, if open, will create a draft drawing fire and products of combustion through them.

6. Special attention must also be given to spaces between floors at the outside walls of any building. This area must be sealed to prevent the spread of smoke and fire from floor to floor at the outside wall.

7. Electrical conductors, telecommunications cables and data cables shall not be run through air transfer grills or grills where ductwork has terminated. These areas may contain fire dampers. Wires or cables will prevent fire dampers from properly closing. In addition, electrical conductors shall not be run on open cable trays intended for telecommunications or data cables.

8. When there is a question, consult with the Fire Safety Officer for the proper fire stopping material and the proper application of material.
73-00-55 WELDING, CUTTING AND HOT WORK POLICY

PURPOSE
Welding, cutting and hot work operations, without taking proper precautions, can lead to serious fires.

IMPACT ON CAMPUS COMMUNITY
This policy applies to all Georgia State University departments as well as vendors and contractors working on University projects. It covers all University owned, operated, occupied or leased buildings.

REQUIREMENTS
Welding, Cutting or Hot Work Approval:
1. All contractors must obtain approval from the Physical Plant Department Zone Manager responsible for the building where welding, cutting or hot work operations will occur before starting such an operation. Physical Plant Department zone employees shall be approved to perform welding, cutting or hot work operations by their zone chief. Such approval may be for all operations or on a case-by-case basis, at the zone chief’s discretion.

2. Any individual conducting welding, cutting or hot work operations must examine the location where the work is to be done and insure that all safety precautions have been taken. Contractor approval may be issued for the duration of a contract or specific job. Periodic inspections may be made. This requirement applies to all contract work, no matter what department the work is performed in.

General Safety Rules for Welding, Cutting and Hot Work
1. No device or attachment facilitating or permitting mixture of air or oxygen without combustible gases prior to consumption, except at the burner or in a standard torch or blowpipe, shall be allowed unless approved for the purpose.

2. The user shall not transfer gases from one cylinder to another to mix gases in a cylinder.

3. Under no conditions shall acetylene gas be generated, piped (except in approved cylinder manifolds), or utilized at pressure, except when dissolved in a suitable solvent in cylinders manufactured according to Interstate Commerce Commission requirements.

4. The use of liquid acetylene is prohibited.

5. Acetylene gas shall not be brought in contact with unalloyed copper except in blowpipe or torch.
6. Oxygen shall not be used from cylinders through torches or other devices equipped with shutoff valves, without reducing the pressure through a suitable regulator attached to the cylinder valve or manifold.

7. Fuel gas shall never be used from cylinders through torches or other devices equipped with shutoff valves, without reducing the pressure through a suitable regulator attached to the cylinder valve or manifold.

8. Cylinders, valve regulators, hose and other apparatus and fittings containing or using oxygen shall be kept free from oil and grease. Oxygen cylinders, apparatus, and fittings shall not be handled with oily hands, gloves or greasy materials.

9. Oxygen and fuel gas cylinders and acetylene generators shall be placed far enough away from the welding position that they will not be unduly heated by radiation from heated materials, by sparks or slag, or by misdirection of the torch flame.

10. No gas welding or cutting shall be done in or near rooms or locations where flammable liquids or vapors, lint, dust or loose combustible stocks are so located or arranged that sparks or hot metal from the welding or cutting operations may cause ignition or explosion of such materials.

11. When such welding or cutting must be done above or within ten feet of combustible construction or material, or above a place where workers are employed, or where persons are likely to pass, noncombustible shields shall be interposed to protect such materials and persons from sparks and hot metal or oxide.

12. One or more first aid fire-extinguishing appliances of a suitable type shall be kept at the location where welding or cutting is being done.

13. When welding or cutting is done above or within ten feet of combustible construction or material, a fire watch shall be kept to make use of fire-extinguishing equipment, if needed.

14. A fire watch or guard shall be maintained for at least one half hour after completion of cutting or welding operations to detect and extinguish possible smoldering fires. This time may be increased in extremely flammable areas.
PURPOSE
To provide a means of ensuring that buildings are maintained in compliance with fire code requirements.

GOVERNING REGULATIONS
• O.C.G.A. Title 25, Chapter 2
• National Fire Protection Association (NFPA) 101, Code for Safety to Life from Fire in Buildings and Structures

IMPACT ON CAMPUS COMMUNITY
This policy applies to all faculty and staff members of Georgia State University. It covers all University owned, operated, occupied or leased buildings.

REQUIREMENTS
Storage of Materials
1. Storage or placing of materials in any corridor or obstructing building fire safety devices is prohibited at all times. This includes surplus furniture or equipment. If a department or division is found to be improperly storing materials, the Fire Safety Officer shall document such storage and will make every effort to contact the proper department chair or business manager. This person will be given a written notice of the problem identified. The offending department will then have 24 hours to move the item back to its original location or have removed the item. At the end of the 24-hour period, the Fire Safety Officer shall confirm that the item was removed. If the item was removed, no further action shall be taken.

2. If the responsible department has not removed the item, the Fire Safety Officer shall have the Physical Plant Department issue an emergency work order and have the item removed. The Fire Safety Officer shall notify the next highest administrative unit (dean, vice-president, or Provost) of the department involved. Upon request, the Physical Plant Department will return any item removed under this policy to an approved location, with the approval of the Fire Safety Officer.

3. If an improperly stored item is deemed an imminent danger to life or health, the Fire Safety Officer shall immediately have the Physical Plant Department issue an emergency work order to have the item removed.

4. If the responsible department owning a improperly stored item can not be determined, the Fire Safety Officer will contact the dean’s office or the vice president’s office of the area in question.
**Fire and Smoke Control Doors**
1. Doors identified as fire or smoke control doors shall not be held open by any means that would prevent the door from closing automatically in the event of a fire alarm activation.

2. Any fire or smoke control door found improperly held open will have the item or device holding the door open removed. The Fire Safety Officer shall notify the responsible department and shall dispose of the item or device holding the door open.

**Use of Extension Cords**
1. Extension cords, including multiple outlet power strips, shall not be used in lieu of permanent wiring. If a department or division is found improperly using extension cords, the Fire Safety Officer shall document such usage and will contact the proper department chair or business manager. This person will be given a written notice of the problem identified. The offending department will then have three calendar weeks to discontinue the use of the extension cord and have an approved electrical outlet added by the Physical Plant Department. At the end of the three-week period, the Fire Safety Officer shall confirm that the extension cord was removed. If the item was removed, no further action shall be taken.

2. If the department did not remove the extension cord and has not submitted a funded request to the Physical Plant Department, the extension cord shall be immediately removed and discarded.

3. The use of multiple outlet power strips with surge protection used on computers or other similarly sensitive equipment is approved.

**Appeals of State Fire Marshal Interpretations**
1. College Deans or Vice Presidents of departments objecting to a fire code interpretation of the State Fire Marshal must send a letter requesting a variance to the Director of Safety and Risk Management. The Fire Safety Officer will be available to assist the individual requesting a variance on the appropriate fire code requirements and any recommended alternatives.

The State Fire Marshal requires that “all petitions for variances and waivers must specify the rule from which a variance or waiver is requested; the specific facts of substantial hardship which would justify a variance or waiver for the petitioner, including the alternative standards which the person seeking the variance or waiver agrees to meet and a showing that such alternative standards will afford adequate protection for the public health, safety and welfare; and the reason why the variance or waiver requested would serve the purpose of the underlying statute.” Departments requesting the appeal or variance shall prepare the documentation for review.
2. If approved, the Director of Safety and Risk Management will request a variance or specific relief from the State Fire Marshal. If the request is not approved, the department cited shall immediately take appropriate steps to correct the disputed violation.

Payment of Fines and Penalties
1. Fines or other financial penalties imposed on the University by the State Fire Marshal will be assessed as determined by the Provost.
73-00-99 MODIFICATION OF FIRE SAFETY POLICIES/PROCEDURES

PURPOSE
To provide a means of changing and updating fire safety policies.

IMPACT ON CAMPUS COMMUNITY
This policy applies to all faculty and staff members of Georgia State University. It covers all University owned, operated, occupied or leased buildings.

REQUIREMENTS

Annual Review
1. The Fire Safety Taskforce shall meet annually to review existing policies and to recommend necessary changes. One month prior to the annual meeting, all College Deans and Vice President offices will be contacted and requested to submit recommendations for changes and additions to the fire safety policies.

2. At the annual meeting, the Taskforce will review each suggestion and incorporate the changes as appropriate.

3. The Chair of the Taskforce shall forward a copy of the revisions to the Provost and the Vice President of Finance and Administration.

4. Once approved, the revisions shall be communicated to the University community through established means.

Interim Changes
1. The Fire Safety Committee or Officer may recommend changes or additions to existing policies to be implemented before the annual review.

2. With the approval of the Assistant Vice President of Planning and Facilities, the changes or additions shall forward a copy of the revisions to the Provost and the Vice President of Finance and Administration.

3. Once approved, the revisions shall be communicated to the University community through established means.

4. During the annual review process, the Fire Safety Committee shall review and approve each change or addition.

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