



# UC Merced Lab Fire Marshal Violations

The following slides show the most common Fire Marshal violations in our lab spaces and what can be done to prevent them.

# Compressed Gas and Cryogenic Storage

- All compressed gases and cryogenic cylinders must always be secured to either tank racks or Unistrut bracing by two points of contact.
- All cylinders not in use must have caps/covers on and secure.

# Compressed Gas and Cryogenic Storage

Violation: Unapproved Storage no cap on the cylinder.



Approved Storage.



Approved Storage.



Violation: Unapproved Storage cylinder not chained.



# Flammable & Corrosive Storage

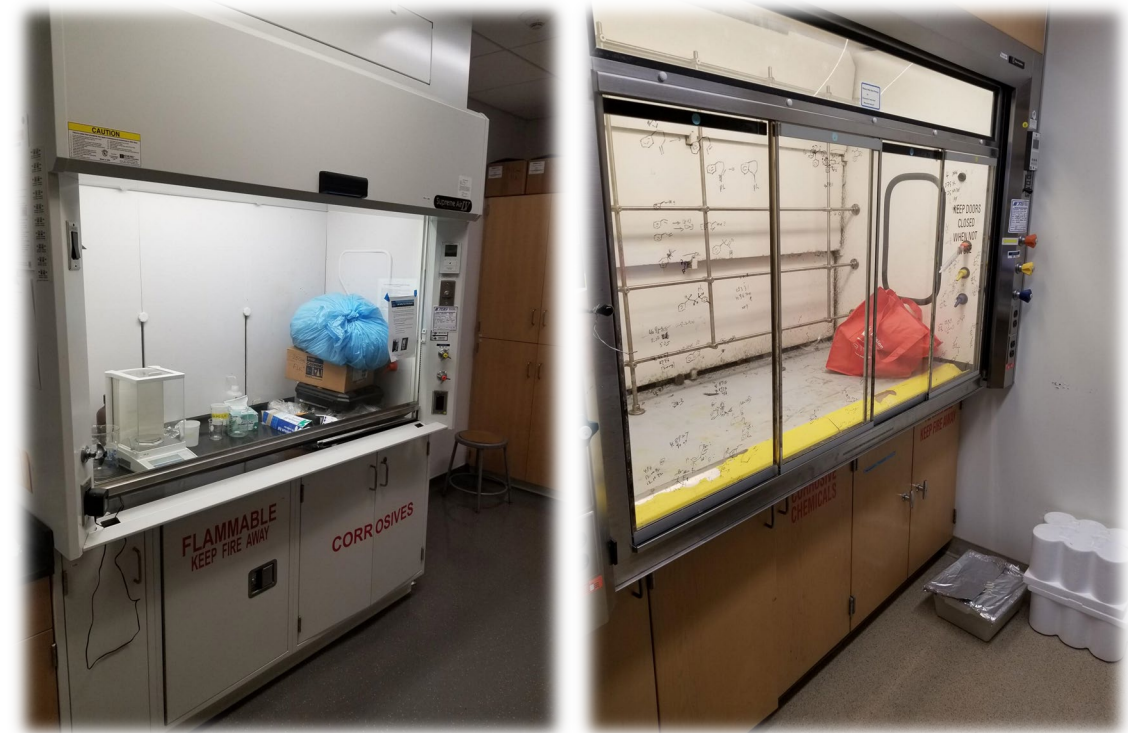
- All flammable & corrosive materials, when not in use, must be stored in either an approved corrosive cabinet or a self-closing and self-latching flammable storage cabinet
- Stand-alone flammable storage cabinets not attached to the building's fume hoods are the labs' responsibility to have adjusted to ensure compliance. Facilities can complete this work if a work order is submitted with a COA.
- Facilities will adjust all fume hood flammable storage cabinets at no charge.

# Hazardous Material Storage

Labs are responsible for cabinets. Facilities can adjust doors and closures for labs with work order and COA



Facilities is responsible for hazardous materials cabinets attached to fume hoods.



# Fume Hoods

- Utilize all designated ports and pass-throughs for tubing and other instruments so the fume hood sash can fully close when not in use. The fume hood sash must be fully closed when not in use
- If fume hood airflow is out of tolerance or in alarm, please submit a work order to facilities management

# Fume Hoods

Violation: Sash left open when not in use, items blocking sash from closing, ports for hoses and equipment not utilized.



Approved: Sash is completely closed when not in use, ports and cutouts are used for hoses and equipment power cables.



# Emergency Equipment

- There must be a minimum of 36 inches in front of and 30 inches from side to side of free and clear space at every electrical panel and disconnect in the labs.
- Fire extinguishers, fire alarm strobes, and alarms must be free of any obstruction or items blocking them from access or view.
- Fire rated doors must remain closed at all times and cannot be propped open.



# Emergency Equipment

Violation. Electrical panels are blocked with items stored within the required 36"x30" in front of panels



Approved: Electrical panels, fire alarm pull station, fire extinguisher, and safety shower all have proper clearance.



# General Notes

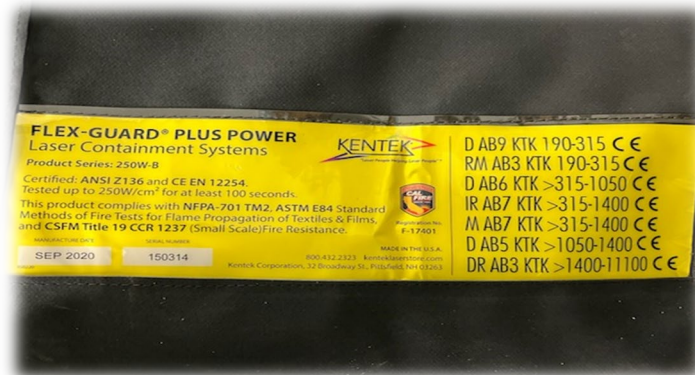
- Please ensure your MAQ's (maximum allowable quantities) are up to date and not over.
- All laser curtains, and other fabrics must be approved by the State Fire Marshal and have the flame-resistant seal on the curtain prior to installation
- No items can be stacked within 18 inches of the ceiling or sprinkler heads in any space
- All storage cabinets or permanent furniture and equipment over 60 inches tall must be seismically braced to prevent tipping.
- Window film cannot be added to any door or window with out prior Facilities and Fire Marshal Approval.

# General Notes

Items must be a minimum of 18 inches from the ceiling.



All Laser curtains, drapes, and blackout shades must be NFPA-701 and ASTM E84 standards.



Violation: Window coverings must be approved by Fire Marshal and made of fire-resistant material

Approved



# Helpful Resources

- UC Merced EH&S research labs <https://ehs.ucmerced.edu/researchers-labs>
- EH&S New Lab Workers <https://ehs.ucmerced.edu/students/laboratory-research>
- UC Merced EH&S Laboratory Safety Plan  
[https://ehs.ucmerced.edu/sites/ehs.ucmerced.edu/files/page/documents/ucmlabsafetyplan\\_update\\_for\\_2021\\_1.pdf](https://ehs.ucmerced.edu/sites/ehs.ucmerced.edu/files/page/documents/ucmlabsafetyplan_update_for_2021_1.pdf)
- Facilities Managers Building Assignments  
[https://facilities.ucmerced.edu/sites/facilities.ucmerced.edu/files/documents/facilities\\_mgr\\_building\\_assignments.pdf](https://facilities.ucmerced.edu/sites/facilities.ucmerced.edu/files/documents/facilities_mgr_building_assignments.pdf)
- Facilities Management work orders. <https://facilities.ucmerced.edu/>

