

UW Superior - Special Event Safety Guide

UW Superior Environmental Health and Safety Office (2013)

The goal of this document is to provide event planners the necessary information so they can incorporate safety into events during the planning phase to ensure a safe event for their participants. *The following safety requirements are appropriate for all indoor and outdoor events, and are particularly important where large crowds will be gathering (50 people or more).*

Planning for Emergencies

Event planners should understand the University Emergency Procedures and have plans in place to manage emergencies. The emergency procedures are readily available on line at:

<http://www.uwsuper.edu/wb/emergency/> .

- Fire codes require one trained crowd manager for the first 50-250 people in attendance and one additional crowd manager for every 250 people attending thereafter. The crowd managers must have training in managing crowds as well as the UW Superior emergency procedures. A video training for crowd managers at the Environmental Health and Safety office that will meet part of the training requirements. The crowd managers must also be trained in:
 - Location of the exits from the event area
 - Emergency evacuation procedures
 - Location of the building assembly point
 - How to summon emergency assistance
 - Emergency storm shelter locations and how to shelter in place
 - What to do if someone requires first aid or CPR. Know the location of the nearest AED. Event staff are not required to provide first aid or CPR, but they do need to know how to summon help in an emergency.

Event Space Occupancy Limits


Spaces used for the gathering of crowds of 50 or more or events are considered assembly locations and have been assigned maximum occupancy ratings which can never be exceeded. The maximum number of occupants permitted in the space includes event and support staff, talent, and patrons of the event. The maximum occupancy ratings assigned to event spaces is established during the building design using a bare floor area and exit widths, and must be confirmed for each event. The actual event occupancy can be reduced by variables including the type of event, expected attendance, width of emergency exits, and available floor space.

- Assembly locations, which include classrooms, auditoriums, dining and dance halls, meeting rooms, arenas, gymnasiums, field houses, etc, must have two or more exits. The number of exits is determined by the maximum occupancy of the space.
- Exits from event spaces must always be visible. Do not place curtains, displays etc in positions that will block the view of the exit lighting or doors.
- To control the occupancy, it may be necessary to limit ticket sales or adjust advertising plans.

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- The maximum occupancy of the space is determined by architects using a bare floor space and exit width. The occupancy limits will be adjusted (lowered) on a case-by-case basis by calculating the amount of floor area to be consumed with immovable objects (like stages, tables, furnishings). Contact Environmental Health and Safety early in your planning stages. If there is sufficient exit width, the criteria specified in Chapter SPS 377 of the Wisconsin Administrative Code for re-calculating occupancy are (based on bare floor areas):
 - 10 sq ft/person in dining and dance areas
 - 15 sq ft/person in gymnasiums, skating rinks and lodge halls
 - 7 sq ft/person for seated assembly functions
 - 18 inches/person for bleacher seating

Fire Safety

- Everyone must evacuate when the fire alarm sounds. Immediately leave the building and report to the Assembly Point shown on the Evacuation Plans. Evacuation plans are posted throughout the building and show two or more ways out of the building, the building name and address as well as the location of first aid, spill materials and emergency phone numbers. Call 911 from a safe location outside the building to report the fire alarm.
 
- Keep all aisles clear. This is important for emergency exiting as well as preventing slips, trips and falls.
- Dead-end aisles are discouraged. If used, the dead-end aisle cannot be greater than 20 feet in length.
- Do not disable, block access to or obscure the view of any exit door, electrical panel, fire extinguisher, fire alarm strobe, horn or speaker, emergency eyewash or other safety devices.
- No exits or exit signs may be blocked, hidden from view, or removed from service without first consultation with EH & S and the Superior Fire Department.
 - Blocking or removing an exit from service will result in a decrease in the occupancy (ticket sales) by 50 persons for every 100 inches of exit width removed from service.
- Open flames (including tobacco use, candles, incense, etc.) or pyrotechnics are not permitted to be used indoors at any event without the approval of the Fire Department. Contact the EH & S department well in advance if your event needs to include open flames. The exception is for food warming heaters that are continually monitored by kitchen staff.
- Theatrical Productions require:
 - Any use of open flames, such as smoking or candles, in theatrical productions requires prior approval of the Environmental Health and Safety office and Superior Fire Department. This request must be made for each production where open flames are expected.
 - One fire extinguisher must be present back stage on each side of the stage with a person staged to use it in an emergency.
 - A fire watch must be posted during and after the performance when smoking, candles or other open flames were present. The individual on fire watch duty will have no other responsibilities other than continuously observing the candle, smoking material or other open flame to ensure that no ash or embers are trapped in stage furnishings during the performance.

- If your event involves cooking indoors or outdoors (excluding microwave ovens), including bbq's, there must be a K-type fire extinguisher available. A K-extinguisher can be reserved from Facilities. Cooking in tents (enclosed on two or more sides) will require an Ansul system & K extinguisher.
- If a bonfire or campfire is planned, contact Facilities Management and the Environmental Health and Safety office well in advance. Bonfires are more than 36 inches in diameter or height, and require a burning permit from the Superior Fire Department. Campfires are 36 inches or less in diameter and height and do not require a burning permit, but requires permission from Facilities Management and Environmental Health and Safety in advance. Complete the bonfire/campfire request form on the Facilities Management web site prior to scheduling a bonfire or campfire on campus.

Electrical Safety

- Inspect all electrical cords prior to each use. Replace if there are any nicks, frays, taped or spliced areas on the cord or if the plug is damaged in any way or missing its ground prong.
- NEVER run any type of electrical cord through a doorway, wall, floor, above a ceiling, or under rugs.
- Cords that cross an aisle or walkway must be protected with a safety cord cover and/or taped down to prevent tripping. The tape or cord cover must protect the cord for the entire width of aisle or walkway.
- Outlet adapters or outlet multipliers ("triple taps") are not permitted unless they have a re-set switch or circuit breaker. Three-prong plugs may not be altered or fitted with adapters.
- All electrical equipment and extension cords used outdoors must be UL listed and UL approved for outdoor use.
- Electrical equipment used in damp/wet/humid locations or outdoors should be plugged into a Ground Fault Circuit Interrupter (GFCI) protected outlet or a portable GFCI. Contact Facilities or EH & S to borrow a portable GFIC or exterior grade extension cord.
- Any equipment that is taken out of service for repair must be locked-out at the energy source using lock-out devices and procedures approved by UW Superior.
- Extension cords:
 - Are permitted only for temporary use, such as displays or special events.
 - Must have a UL mark on the label of the cord and be rated for the usage. "Shop made" (home made) extension cords are not allowed (they are not UL listed).
 - No more than one extension cord may be used with a device. Only one device may be connected to an extension cord, even if there are multiple outlets.
 - Must be plugged directly into a wall outlet, and cannot be plugged into another extension cord or power strip.
- Power Strips:
 - Power strips cannot be plugged into extension cords.
 - Power strips may be used for portable electronic equipment such as audio-visual equipment, radios, computers, and peripheral equipment. Power strips may also be used for appliances and equipment with high current demand, such as refrigerators, freezers, microwaves, coffee pots, photocopiers, portable heaters, power tools, or lab or studio equipment IF the power strip is rated for the required amperage of the equipment.

- *Note:* Electrical codes require refrigerators/freezers to be on a dedicated circuit or power strip. Do not combine other appliances on the same circuit.

Propane / Fuels/ All Gas Cylinders

- Gas cylinders (all types) must always be secured with chains, and/or strap in an upright position unless the cylinder is designed for horizontal installation. This includes any gas cylinder used for filling helium balloons, CO2 cylinders for soda machines, and fuel sources.
- Gas cylinders must be capped during moving or when not in use.
- Highly flammable materials like LP gas or gasoline are not permitted to be stored within a building at any time.
- Barbeque grills may not be used within buildings.
- Liquid propane heaters, including patio heaters, are not permitted to be used within buildings.
- All use of barbeque grills must be more than 15 feet away from buildings and combustible materials.
- Propane cylinders/tanks must be at least 15 feet from a structure or tent.

Ladders, Risers, Lifts and Scaffolds

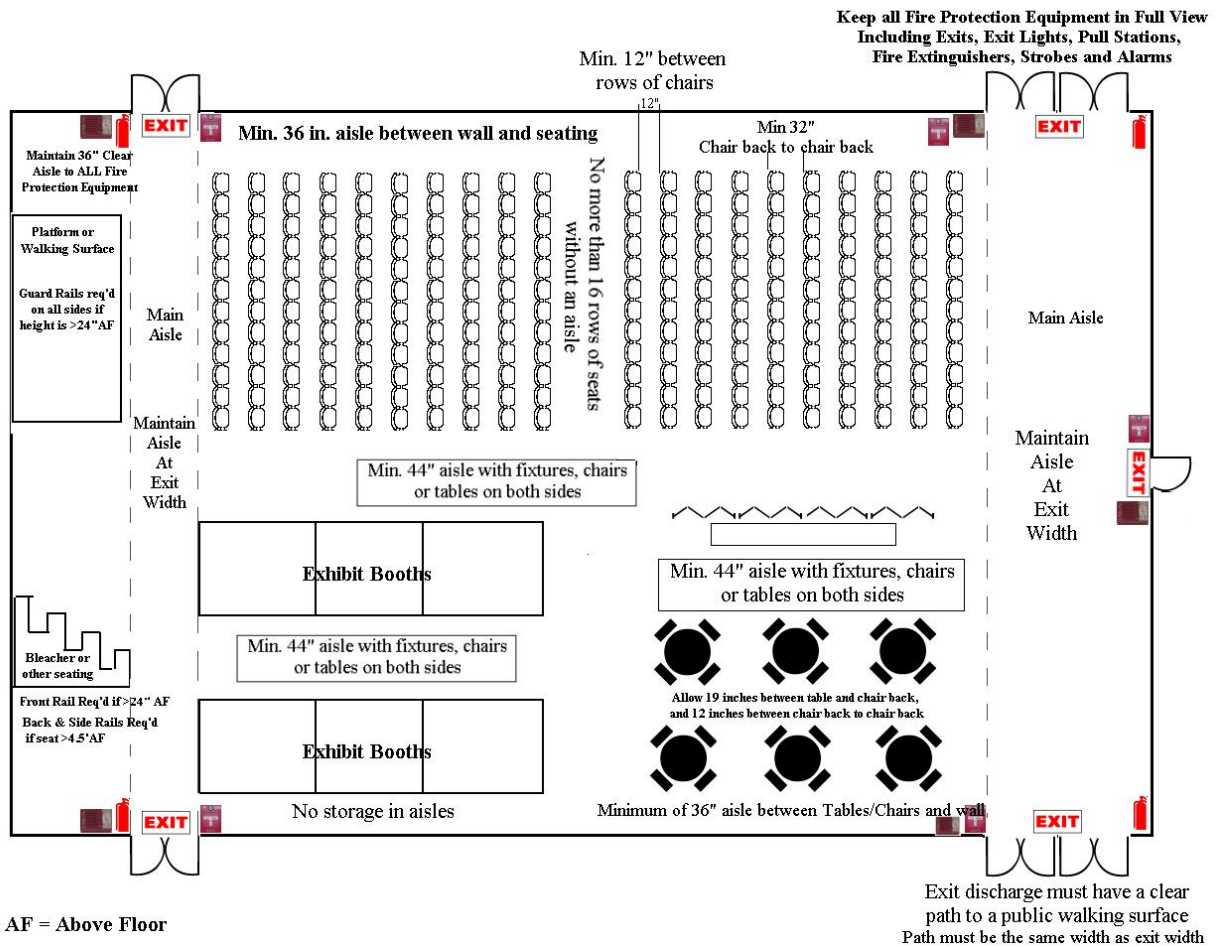
- Individuals must have current documented training for using scissor lifts, boom lifts and scaffolding. Non-campus employees must have a signed authorization form from Facilities Management.
- Scaffold use and set up must be supervised by an individual who has met the OSHA criteria as a competent person
- Ladder Use:
 - ✓ Don't use metal ladders near electrical sources or overhead power lines.
 - ✓ Never exceed the weight limit of the ladder
 - ✓ A straight ladder should extend 3 feet above its support point.
 - ✓ Only one person should be on the ladder at a time.
 - ✓ Inspect the ladder before each use for loose or damaged rungs, steps, rails or braces.
 - ✓ Step ladders should never be leaned against a wall for use as a straight ladder.
 - ✓ Step ladders should be used fully opened with the spreaders locked.
 - ✓ Always maintain 3 points of contact with a ladder while climbing. Use a tool belt or hand line to transport tools up and down the ladder.
 - ✓ Never allow the trunk of your body to extend past the side of the ladder. Move the ladder if you need to reach.
 - ✓ Always use the four-to-one rule for positioning a straight ladder: The base of the ladder should be one foot out from the wall for every four feet of ladder height.
 - ✓ Never climb past or stand on the straight ladder's top three rungs or the top two steps of a step ladder.
- Risers/platforms
 - ✓ Risers and platforms should be inspected before use. All parts must be in good working condition or the riser should be taken out of service.
 - ✓ When chairs are placed on risers, there must be a minimum of a 1.5" kickboard on all exposed edges to prevent chairs from slipping off.

- ✓ Risers that stand more than 24 inches above the floor must have a guard rail and midrail. The railing must be capable of withstanding a force of at least 200 lbs at any point in any direction, and extend 42" above the riser. Exception: performance stages do not require front or side railings.
- ✓ Risers greater than 8" above the floor must have stairs at the aisles. The stair must be a uniform height ranging from 4 - 8" tall, and carry a minimum tread depth of 11".
- ✓ Stairs with more than 2 risers must have a handrail 42" above the tread surface.

Seating and Display Arrangements

Including tables, chairs, rows of seating, exhibit booths and vendor displays

- Make sure there are 48 inch wide minimum clear main aisles that lead directly to exits.
- Aisles other than main aisles must be a minimum of 36 - 44 inches in width. Please refer to the diagram below for more detail.
- Dead-end aisles are discouraged. If present, dead end aisles cannot exceed 20 feet in length.
- Keep all aisles clear. Displays or other items may not protrude into the aisle or otherwise affect the safety of exhibitors and guests.
- All lobbies, aisles, doorways must be kept free of furniture, drapes, displays, merchandise, or other obstructions.
- No one (except an employee associated with the event, such as security) is allowed to stand in or occupy any aisles during an assembly function or performance.
- Do not block access to or obscure the view of any exit door, exit light, fire extinguisher, fire alarm strobe, horn or speaker, emergency eyewash or other safety devices.
- All curtains, drapes, foam, cloth and decorations must be constructed of flame-retardant material, or treated with flame-retardant solution. Certification for the flame-retardant must be available to the Superior Fire Department upon request.
- Any electrical cord that crosses or is adjacent to a traffic area must be taped to the floor surface. Do not overload outlets or plugs.
- Requirements for rows of chairs – seating (ref: Wis Admin Code SPS 377):
 - There must be a minimum of 12 inches between the front of the chair seat and the back of the chair in front of it.
 - Seats with backrests require a minimum back to back spacing of 32 inches.
 - Rows should contain no more than 12 chairs without an aisle
 - No more than 16 rows without an aisle
 - Main aisles should be the same width as the exit doors they lead to.



- Requirements for Wheelchair Spaces (per ADA guidelines). In addition to the seating arrangement and aisle width information included above, the requirements for wheelchair spaces and companion chairs in general seating are:
 - The minimum number of wheelchair spaces required at an event is based on the number of total seats (non-fixed seating) for the event:
 - 2 - 25 seats: 1 wheel chair space 26-50 seats: 2 wheel chair spaces
 - 51 – 150 seats: 4 wheel chair spaces 151–300 seats: 5 wheel chair spaces
 - 301 – 500 seats: 6 wheel chair spaces
 - More than 500 seats: 6 wheel chair spaces plus 1 for every 150 seat thereafter
 - Provide at least one companion seat for every wheelchair space provided.
 - Wheel chair spaces should be placed at different locations within the seating area from front to back and horizontally to provide choices in seating and viewing locations.
 - Wheel chair spaces should adjoin an assessable route or aisle (36 inches or more.)
 - If the wheel chair space can be entered from the front or rear, the wheelchair space must be a minimum of 36 inches wide and 48 inches deep, not including the standard distance between the chair in front and seat of the companion chair.
 - If the wheel chair space can be entered only from the side, the wheelchair space must be a minimum of 36 inches wide and 60 inches deep, not including the standard distance between the chair in front and seat of the companion chair.
 - Two wheel chair spaces are permitted to be side-by-side in row seating. Each wheel chair space should be allowed a 33 inch width when two chair spaces are side by side.

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Tents and Canopies

Definitions:

- Tent: A temporary membrane enclosure, shelter or structure with sidewalls or drops on 2 or more of its sides.
- Canopy: A temporary membrane enclosure, shelter or structure with 1 or less sidewall.

- Tents will require an advance notification to the Superior Fire Department Inspection office.
- **Contact Facilities Management in advance to arrange for Diggers Hotline to mark all underground utilities** prior to contracting for a tent or canopy.
- No open flames are permitted in a tent, with the exception of food warming candles or burners.
- Tents and canopies must be treated with or constructed of flame-resistant materials.
- Tents larger than 1500 square feet must be located 20 feet or more away from another structure or property line. Smaller tents may be located adjacent to a structure providing the egress from the structure is not impacted.
- Tents used for assembly purposes require a minimum of 2 exits. The amount of exit width required is 44 inches per 100 people. If the tent has a capacity of 600 or more persons, exits are required on 3 sides of the tent. If the tent has a capacity of 1000 persons or more, exits are required on 4 sides of the tent.
- Stake lines for tents and canopies must be positioned so they do not interfere with egress from either the tent or from nearby structures. Mark the stake lines to prevent tripping.
- Exit signs are required above the exits if the tent will hold 50 or more persons. If the tent has a capacity of more than 100 persons the exit signs must be UL-approved and illuminated or photoluminescent.
- Smoking is not permitted in a tent.
- Determine the occupancy of the tent by dividing the net available area by 10 sq ft/person. The net available floor area is determined by subtracting all fixed/large areas such as tables, bars, food prep areas and serving lines from the total floor area.
- If the event involves cooking indoors or outdoors, including bbq's, there must be a K-type fire extinguisher available. A K-extinguisher can be reserved from Facilities. Cooking in tents (enclosed on two or more sides) will require an Ansul system & K extinguisher.
- Fire extinguishers must have a minimum of a 5 lb 2A 10BC rating and be within a 75 foot walking distance of all occupied areas of the tent.
- Tents may be heated using electrical heaters. Fuel-fired heaters (such as patio heaters) must be used outdoors to control carbon monoxide generation. The fuel storage supply must be kept 15 feet away from the tent. If using propane, kerosene or other fuels, monitor the air inside the tent for carbon monoxide.
- Tents must be kept at least 15 feet away from exterior combustion sources such as cooking, bbq's, and vehicles.

Special Requirements for Car Dealer Shows

- Vehicles cannot be displayed in exits, aisles and corridors
- Engines cannot be started inside the building except when setting up the display while the building is not occupied by the public, or to move the vehicle out of the building.
- The vehicle cannot contain more than 5 gallons of fuel while within the building.
- The vendor must notify the fire department in writing 5 days in advance of the event and arrange for an inspection by the fire department after the set-up is completed and before the event opens.

Other Considerations

- People will arrive on campus and need a safe place to walk and park their vehicles. Discuss your parking needs in advance with Parking Services, 715-394-8177.
- Sidewalks are an important aspect of pedestrian safety, especially for individuals with disabilities. Plan your event so existing sidewalks serve as the primary pedestrian walkways. If you are planning an event on the green spaces, additional pedestrian lighting may be necessary.
- All cords, hoses etc. that cross a sidewalk or walkway must be secured with tape or other means to prevent tripping hazards.
- Do not block exits routes/sidewalks leading from building exit doors.
- Fire lanes, including fire lanes that serve as sidewalks, cannot be blocked by tables, chairs, equipment, etc.
- Use signage to direct individuals to your event location. Signage should not be in the normal pedestrian traffic flow.
- Outdoor events may require additional toilet and hand washing facilities. Plan ahead for the placement and number of facilities required.
- Generators may be necessary to supply electrical needs outdoors. Fuel-powered generators create both noise and carbon monoxide. Position generators away from walkways, tents, eating and gathering areas. Mark all cables between your event and the generator to prevent tripping. Station a monitor nearby to warn people of trip hazards.
- Events held within a fenced outdoor area need to have the exits marked using UL listed illuminated or photoluminescent exit signs. A minimum of two exits are required with additional exits needed as determined by the expected attendance (50 inches of exit width per 100 attendees).
- Aisles must be maintained at outdoor events using the same criteria as indoor events.
- Music or other loud noises must be directed away from public residential areas.

Important Partners in Event Safety at UW Superior

Campus Safety	715-394-8114
Environmental Health and Safety	715-394-8073
Facilities Management	715-394-8120
Parking Services	715-394-8177