

IOWA



Welcome Building Coordinators!

Monthly Building Coordinator Meeting

November 17, 2021

Next Meeting:



Wednesday, December 15, 2021 11:00 – Noon

TBD by poll results

Agenda

→ Welcome and Announcements/Updates

- **Design Standards** - Michael Kearns- FM Design and Construction Assistant Director, Capital Projects Quality Management – 25 minutes
- **Fire and Life Safety** - Brent Anderson-FM Occupational Fire & Life Safety Manager – 20 minutes
- **General Safety updates** - Brent Anderson-FM Occupational Fire & Life Safety Manager – 10 minutes
- **Question and Answer**

Design and Construction

The University of Iowa Design Standards and Procedures

November 17, 2021

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II. Community Policies

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Appendix: Organizational Charts

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34.5 Stewardship Decision Framework

(Amended 8/7/20)

Effective August 7, 2020, this policy has been revised. For individual changes, see the [redlined version](#).

The University of Iowa employs a broad project decision-making framework based on stewardship and total-cost-of-ownership. The total-cost-of-ownership is a composite of financial obligations consisting of the costs for the initial capital design and construction; operations and maintenance; utilities and energy; renewal; and decommissioning or demolition. To take future costs into consideration and aid decision making during the planning, design, and construction phases, the University has established design standards, policies, and procedures. Below are some of the policies associated with this framework. Additional University of Iowa Design Standards and Procedures may be found at the following site: <https://www.facilities.uiowa.edu/design-standards-and-procedures>.

- a. Commissioning. All new facilities and major renovations shall be commissioned. Commissioning is a process that assures that building systems are designed, installed, functionally tested, and capable of being maintained and operated based on the defined expectations. Project budgets shall support the cost for commissioning.
- b. Utilities capacity and infrastructure growth funding. All capital project budgets requiring approval of the Board of Regents, State of Iowa, shall include contributions to a utilities infrastructure growth fund for central boiler and chiller plants, where connection to central systems is available. Central plants provide the most cost-efficient production of utilities due to economies of scale. The offset amount apportioned to a capital project will be no

The Issue:

- Standards were not included for all Auxiliary units.
- Format was difficult to use (similar information in Section III and IV)
- Duplicate and contradictory language
- Reactive process with minimal stakeholder engagement
- Intermittent engagement

The Issue:



Send

To

[Mowery, Glen R.](#); [O'Meara, Bradley V.](#); [Stumpf, George P.](#); [Shane, Erin D.](#); [Fish, Benjamin P.](#); [Ney, Richard A.](#); [Galante, Louis M Jr.](#); [Rosenthal, Ann C.](#); [Vanarsdale, Adele S.](#); [Baxter, Darice K.](#); [Henneberry, Steve J.](#); [Visin, David A.](#); [Miller, Robert M.](#); [Boothby, Phillip R.](#); [James, Chris](#)

Cc

[Greiner, Sadie A.](#); [Armstrong, Jason.](#); [Borkowski, Mitchell J.](#); [Cannon, Adam J.](#); [Cassidy, Daniel F.](#); [Dehart, Ryan.](#); [Dykstra, Dean A.](#); [Ehlinger, Elijah P.](#); [Hayes, Jeffery J.](#); [Hintermeister, Gary.](#); [Hoffman, Jennifer L.](#); [Humphreys, Jake W.](#); [Kearns, Michael D.](#); [Keating, Brian F.](#); [Kluseman, Kristine A.](#); [Lietz, Jason L.](#); [Otto, Steven J.](#); [Rundall, Jerry](#)

Subject Deadline for submitting changes to 2019 Design Standards and Procedures



09 2018 Design Stds CHANGE REQUEST FORM - FINAL.doc

132 KB

It is that time of year again. Please let us know if you have any remaining changes, updates, or additions to the current 2019 edition of the University of Iowa Design Standards and Procedures. We will take information through Friday, December 15th, 2019. After that date, we will still accept information; however, we will not ensure that it will be incorporated it into the 2020 edition that we expect to release in January 2020. All information should be sent to Mary Rue as we gather our last changes using the attached form. We will contact individuals regarding their requests as necessary. Changes that have a financial institutional impact may require additional input prior to being incorporated into the 2020 edition. You will be made aware if your request would fall into that situation.

We appreciate your participation in not only maintaining these standards, but more importantly in ensuring the insitutions' standards follow the total cost of ownership decision framework outlined by our institution's operations manual.

If you have any questions, please let us know.

IOWA

Facilities Management

The Goal:

- Include all stakeholders on campus (not FM Design Standards but University of Iowa Design Standards)
- Reformat the entire document (Combine Sections III and IV)
- Develop an active and collaborative process to evaluate, update and create design standards.

The Approach:

→ Align formatting with CSI Divisions

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The Approach:

- Actively engage stakeholders throughout the year
 - 104 Zoom and in person meetings
 - 22 Bluebeam ReVu sessions
- Review existing Standards
- System based vs. Component based evaluations

Where are we now / Where are we going

Getting closer to being **University of Iowa** Design Standards!

→ FM

→ UIHC

→ Housing and Dining

→ Parking and Transportation

→ Public Safety

→ Athletics

→ Registrars Office

→ Rec. Services

Where are we now / Where are we going

- Work with Campus Planning and Colleges and Auxiliary Units to develop more Space Guidelines
- Review Warranties
- Align Standards with University Goals

Questions?

Agenda Topics:

→ Fire & Life Safety



- Get to know the crew
- Information on Fire & Life Safety
- What do they do and why...
- What to expect
- We need your help and look forward to working with you
- Questions and how can we help you?

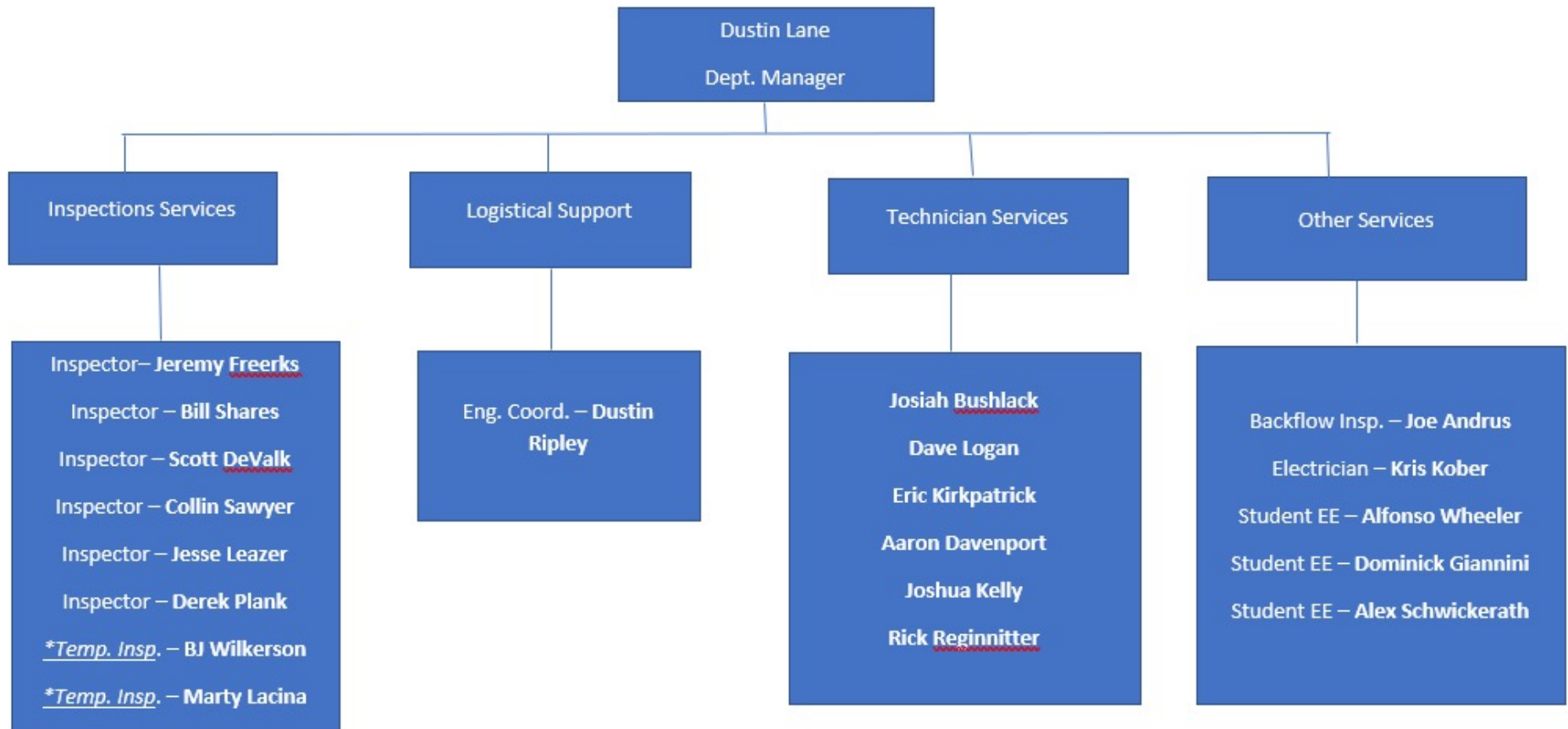
→ Seasonal Safety Topics

- Space Heater Safety
- Power Strip Safety
- Extension Cord Safety
- The weather is turning quickly... Are you ready to walk in it?
- Safety Solutions is coming your way in the near future...



Fire & Life Safety Organizational Chart

FIRE & LIFE SAFETY SHOP (211)



FLS – Fire & Life Safety Shop (211)

Licensed State of Iowa Fire Inspectors and Technicians with NFPA and NICET certifications.

- Perform code required inspections, testing and maintenance
 - Frequency: monthly, semi-annual, annual, and some 5,10,25-year inspections.
 - 15,279 monthly assets: fire extinguishers, exit / emergency lights, sprinkler valves, AED's, egress routes, code compliant items.
 - Programming and Maintenance of 74 buildings' fire alarm systems.
- Responds 24/7 to emergency / non-emergency calls, (average 2/week), assisting DPS / ICFD / CFD.
- Assists with construction and renovation projects.
- Documentation / Reporting to required Agencies / Departments.



Fire & Life Safety in Your Building

- Notifications for Fire Alarm Testing
- Building Coordinator Role in Communication
- What happens during a Fire Safety building visit?



Fire & Life Safety in Your Building

- Fire Alarm Testing Notification – Creation of reoccurring calendar invites, to establish year over year consistency.



Fire & Life Safety in Your Building

What happens during a Fire Safety building visit?

- Fire Alarm system testing – NFPA 72
- Sprinkler System testing – NFPA 25
- Extinguishers, sprinkler valves, exit/emergency lighting and general fire/life safety inspections



Fire & Life Safety in Your Building

What is the Building Coordinator Role?

- Send out notifications via email blast
- Post notifications in building where needed
- Special contact to critical areas



Fire & Life Safety in Your Building

General Fire/Life Safety Inspections – Inspection Report



Fire Inspection Deficiency Report

University of Iowa
Fire and Life Safety
640 South Madison Street
Room 180
Iowa City, IA 52242
(319) 335-6131
fire-safety@uiowa.edu

Building: Adler Journalism
Building Address: 140 W. Washington St
Iowa City, IA 52242

Inspection Date: 9/28/2021
Time In: **Time Out:**

Inspector: Derik Plank
Certification/License: **Certification ID:**
Phone:
Email: derik-plank@uiowa.edu

OVERVIEW

This report is to advise you that the Fire and Life Safety Department for the University of Iowa conducted a Fire Safety Inspection of your building in accordance with the International Fire Code. This report documents areas that do not comply with the code and need to be corrected. A re-inspection of these areas will be conducted next month to ensure compliance with adopted codes.

DEFICIENCIES

Location	Basement Hallway
Description	Stored furniture/material in hallway is blocking egress - remove items from the hallway

2015 IFC Code	315.3.2	Storage in means of egress
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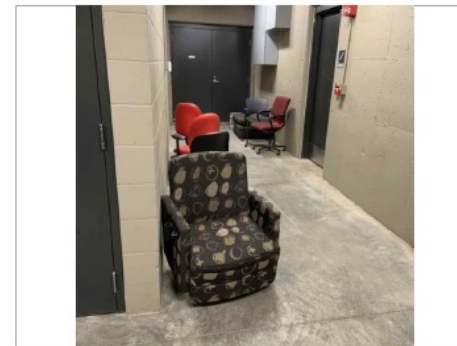
AJB

9/28/2021

Page 2 of 2

Location	Basement Hallway
Description	Stored furniture/material in hallway is blocking egress - remove items from the hallway

2015 IFC Code	315.3.2	Storage in means of egress
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REPORT SUMMARY

Inspector: Derik Plank

UI FLS Manager: Dustin Lane
UI FLS Coordinator: Dustin Ripley

Contacts: (319) 335-5125
Contacts: (319) 330-7929
dustin-lane@uiowa.edu
dustin-ripley@uiowa.edu



QUESTIONS?



Space Heater Utilization - SAFETY

- ▶ **The Iowa State Fire Marshal's Office strictly regulates space heaters in University Buildings. Both electric and fuel-based space heaters have been the source of numerous fires and injuries.**
- ▶ **If you are experiencing uncomfortably cold temperatures indoors please first contact Facilities Management so they can look into the temperature and any issues.**

Space Heater Utilization - SAFETY

- ▶ If you are going to utilize a Space Heater, you need to follow this criteria:
 - ▶ The first choice would be the oil or wax filled type that looks similar to an old steam radiator on wheels. The second choice would be a ceramic style. Both should have a high heat and tip over sensor shut the unit off.
 - ▶ Please avoid the style of space heaters that have exposed heating elements or look like “Glowing Wires”.
 - ▶ Must be UL listed and labeled.
 - ▶ Must have a heating element that cannot exceed 212 Degrees.
 - ▶ Cannot be operated within three feet of any combustible materials, including wastebaskets.
 - ▶ Can only be operated as the instructions stipulate.
 - ▶ Must be shut off when not in use.
 - ▶ Must be plugged directly into a wall outlet.... No power strip/ext. cord.

Space Heaters - SAFETY

NFPA

- ▶ Space heaters are 32% of home heating fires.
- ▶ Space heaters involved in 79% of fatal home heating fires.
- ▶ Space heaters are the second leading cause of home fires behind cooking and are the second leading cause of home fire deaths behind smoking.
- ▶ Half of fatal home space heater fires started because something was too close to the heater and ignited. Keep heaters and things that can burn at least three feet apart.

Space Heaters - SAFETY

Electric Portable Space Heater Safety



When the weather turns cold, it can bring a chill into our homes. Portable space heaters have become a popular way to supplement central heating or heat one room. If you plan to use portable electric space heaters, make sure to follow these tips and recommendations:

HEATER CHECKLIST

- Purchase a heater with the seal of a qualified testing laboratory.
- Keep the heater at least 3 feet (1 metre) away from anything that can burn, including people.
- Choose a heater with a thermostat and overheat protection.
- Place the heater on a solid, flat surface.
- Make sure your heater has an auto shut-off to turn the heater off if it tips over.
- Keep space heaters out of the way of foot traffic. Never block an exit.
- Keep children away from the space heater.
- Plug the heater directly into the wall outlet. Never use an extension cord.
- Space heaters should be turned off and unplugged when you leave the room or go to bed.

Types of electric space heaters

Oil or water-filled radiator
Heated oil or water travels through the heater.

Fan-forced heater
A fan blows warm air over metal coils.

Ceramic heater
Air is warmed over a ceramic heating element.

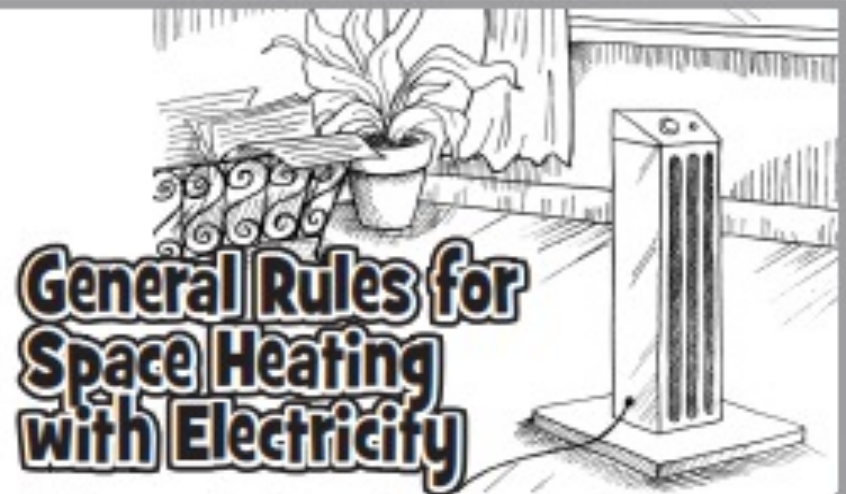
Infrared heaters
Heat is created by infrared bulbs.

Fact

Two in five deaths in space heater fires involve portable electric space heaters.



Space Heaters - SAFETY



1. Keep your heating equipment and anything that can burn at least 3 feet apart.
2. Plug power cords only into outlets with sufficient capacity and never into an extension cord.
2. Turn off heaters when you leave a room or go to bed.
4. Inspect for cracked or broken plugs or loose connections, and replace any before using.
5. Never use or store flammable or combustible liquids near or in rooms with heaters.



Electrical Power Strip SAFETY

Here's why you don't plug space heaters into power strips



Electrical Power Strip SAFETY


HERMISTON, Ore. - A fire department is warning the public about the dangers of plugging a space heater into a power strip.

The Umatilla County Fire District in Oregon [posted the warning on its Facebook page](#) with a picture of a melted power strip.

"The weather is getting colder, and people are pulling out their space heaters. We just wanted to remind you that you should NEVER plug a heater into a power strip," the fire department wrote on its Facebook page. "These units are not designed to handle the high current flow needed for a space heater and can overheat or even catch fire due to the added energy flow. Please share and stay safe this Winter season."

[The Electrical Safety Foundation International](#) says heating equipment is the second leading cause of home fires in the U.S. with more than 65,000 fires being attributed to them each year. The ESFI reports the fire result in hundreds of deaths, thousands of injuries and millions of dollars in property damage

Electrical Power Strip SAFETY









SURGE PROTECTION

Keeping your Electronics and Home Safe

The National Electrical Manufacturers Association estimates that **60-80%** of surges originate from **internal sources** (within a home or business). Keep your valuable electronics **safe** by protecting them from the surges that can **damage or destroy them**.

What is a power surge? A power surge is a sudden and unwanted **increase in voltage** that can damage, degrade or destroy electronic equipment. Surges can occur when large appliances, such as air conditioners, turn on and off. Surges can also originate from electric utilities or lightning.

LEVELS OF PROTECTION

GOOD	Point-of-Use Surge Protection	BEST	Whole Home Surge Protection
	Easy to use - just plug in.		Must be installed by a qualified electrician.
	Only protects electronics plugged into the device .		Provides protection for your entire electrical system at home including large appliances, outlets, and light switches.
	Must be replaced over time or after a major surge event.		Protects against larger surges and provides longer lasting surge protection than point-of-use devices.

No surge protection can handle a **direct lightning strike**. **Disconnect** sensitive electronics if you suspect a surge is coming.

Power strips and surge protectors are **not the same**. Not all power strips offer surge protection.

Electrical SAFETY – Power Strips

20 amp
circuit



15 amp
Plug



Designed to handle a max of 12 amps



7 amps



9 amps



13 amps

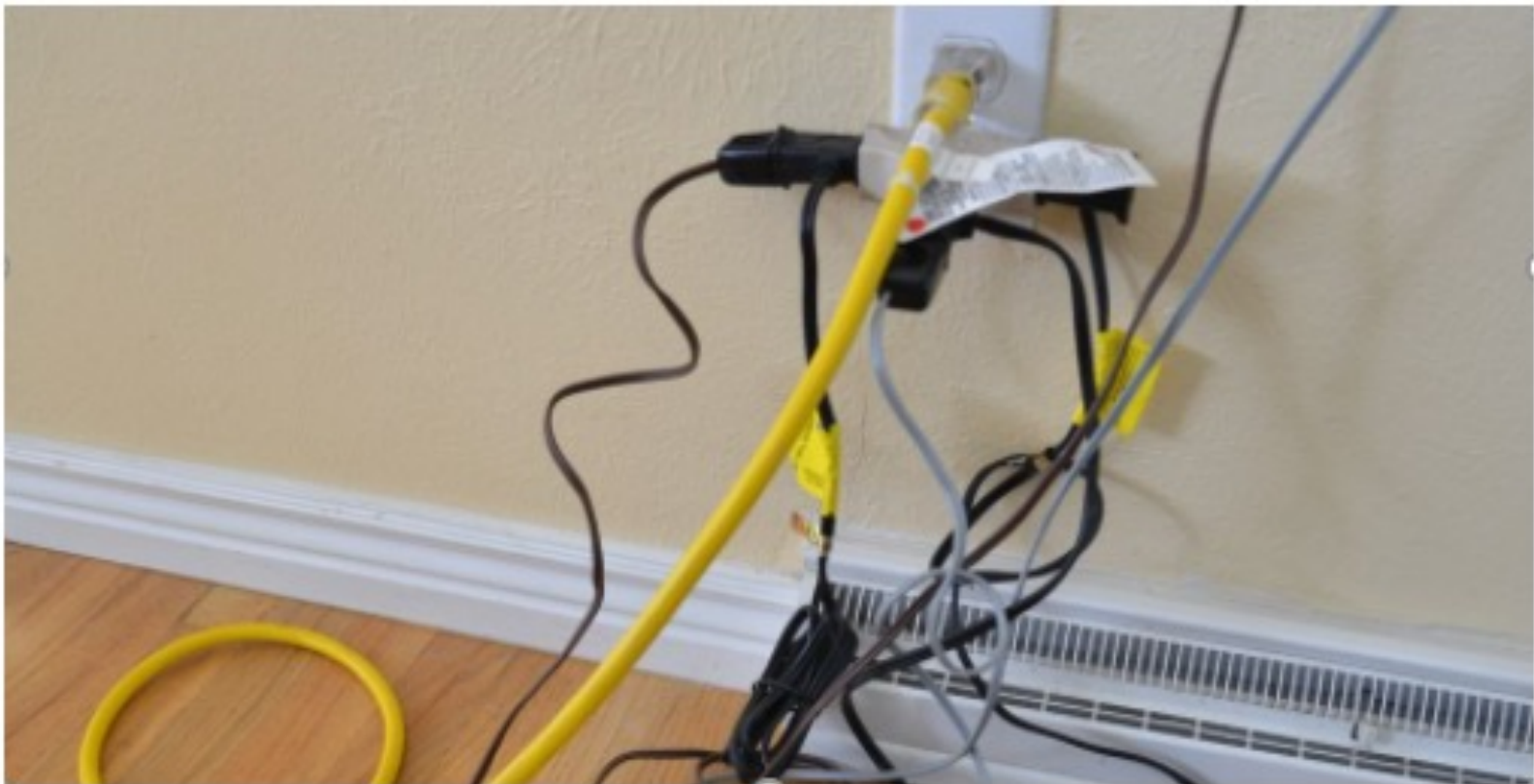


Electrical / Extension Cords SAFETY

- ▶ All electrical cords and plugs must be in good condition. Never use equipment with frayed cords or exposed wires; if discovered, immediately take the equipment out of service and have it repaired or replaced.
- ▶ Extension Cords;
 - ▶ The Iowa State Fire Marshal's Office does not allow extension cords to be used in lieu of permanent wiring. The only exception is approved UL listed power strips for computers and their associated components. Also, multiple plug adapters plugged into wall outlets are not allowed.
- ▶ *See EHS Website under Fire and Electrical Safety –Office Areas for reference.

Electrical SAFETY – Cords/multi plugs

Please do not have this as a practice in your homes / places of work...



Extension Cord SAFETY

Extension Cord Safety Tips

Roughly **3,300 home fires** originate in extension cords each year. Extension cords can overheat and cause fires when used improperly, so **keep these important tips in mind** to protect your home and loved ones.



Never plug an extension cord into another extension cord.



Make sure extension cords are properly rated for their intended use, indoor or outdoor. Never use an indoor extension cord outdoors.

Extension Cord Designations

S: Designed for General Use W: Rated for Outdoor Use J: Standard 300 Voltage Insulation
 T: Made from Vinyl Thermoplastic P: Parallel Wire Construction (Air Conditioner Cords and Household Extension Cords)
 O: Oil-Resistant E: Made from TPE

SJTW SJTW



Never use three-prong plugs with outlets that only have two slots. Never cut off the ground pin to force a fit, which could lead to electric shock.



Only use extension cords that have been approved by an independent testing laboratory, such as the ones listed above.

Cord Length and Amperage Limits

25 – 50 Feet Extension Cords

16 Gauge (1–15 Amps)
 14 Gauge (14–15 Amps)
 12–10 Gauge (16–20 Amps)

100 Feet Extension Cords

16 Gauge (1–10 Amps)
 14 Gauge (11–13 Amps)
 12 Gauge (14–15 Amps)
 10 Gauge (16–20 Amps)

150 Feet Extension Cords

14 Gauge (1–7 Amps)
 12 Gauge (8–10 Amps)
 10 Gauge (11–15 Amps)



Always use GFCI protection when using an extension cord outdoors.



Inspect cords for damage before use. Check for cracked or frayed sockets, loose or bare wires, and loose connections. Discard damaged extension cords.

Extension cords are for temporary use only. A heavy reliance on extension cords is an indication that you have too few outlets to address your needs. Have additional outlets installed where you need them.

- Do not overload extension cords or allow them to run through water or snow on the ground.
- Do not substitute extension cords for permanent wiring.
- Do not run through walls, doorways, ceilings, or floors. If a cord is covered, heat cannot escape, which may result in a fire hazard.
- Do not use an extension cord for more than one appliance.
- Heavy reliance on extension cords is an indication that you have too few outlets to address your needs. Have additional outlets installed where you need them.
- Multiple plug outlets must be plugged directly into mounted electrical receptacles; they cannot be chained together.
- Make sure the extension cord or temporary power strip you use is rated for the products to be plugged in, and is marked for either indoor or outdoor use.
- The appliance or tool that you are using the cord with will have a wattage rating on it. Match this up with your extension cord, and do not use a cord that has a lower rating.
- Never use a cord that feels hot or is damaged in any way. Touching even a single exposed strand can give you an electric shock or burn.
- Never use three-prong plugs with outlets that only have two slots for the plug. Do not cut off the ground pin to force a fit. This defeats the purpose of a three-prong plug and could lead to an electrical shock. Never force a plug into an outlet if it doesn't fit.
- Use extension cords with polarized and/or three-prong plugs.
- Buy only cords approved by an independent testing laboratory, such as Underwriters Laboratories (UL), Intertek (ETL), or Canadian Standards Association (CSA).

Please share this free resource to save lives



www.facebook.com/ESFI.org www.twitter.com/ESFIdotorg www.youtube.com/ESFIdotorg

Extension Cord Safety

REACHING TO SAFETY:

Use Extension Cords Properly

Roughly 3,300 home fires originate in extension cords each year, **killing 50 people and injuring 270 more**. Extension cords can overheat and cause fires when used improperly, so keep these important tips in mind to **protect your home and workplace**.

DON'T attempt to plug extension cords into one another.



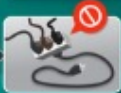
Make sure extension cords are **properly rated** for their intended use, indoor or outdoor, and **meet or exceed the power needs** of the appliance or device being used.



Keep all **outdoor extension cords** clear of snow and standing water.



Do **NOT** overload extension cords.



A heavy reliance on **extension cords** is an indication that you have too few outlets to address your needs. Have **additional outlets installed** where you need them.



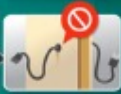
Inspect cords for **DAMAGE** before use. Check for **cracked or frayed sockets**, loose or bare wires, and loose connections.



Do **NOT** nail or staple **electrical cords** to walls or baseboards.



Do **NOT** run through walls, doorways, ceilings or floors. If cord is covered, heat cannot escape, which may result in a **FIRE HAZARD**.



NEVER use **three-prong plugs** with outlets that only have two slots. **Never cut off the ground pin to force a fit**, which could lead to electric shock.



Buy only cords that have been approved by an **independent testing laboratory**.



Do **NOT** substitute **extension cords** for permanent wiring.



DO NOT use an extension cord or a power strip with heaters or fans, which could cause cords to overheat and result in a fire.

Roughly 3,300 (home) fires annually, killing 50 people and injuring 270 more.

- Don't attempt to plug extension cords into one another
- Make sure extension cords are properly rated for their intended use, indoor or outdoor, and meet or exceed the power needs of the device being used
- Keep all outdoor extension cords clear of snow and standing water
- Do NOT overload extension cords
- Heavy reliance on extension cords is an indication that you have too few outlets to address your needs. Have additional outlets installed where you need them
- Inspect cords for damage before use. Check for cracked or frayed sockets, loose or bare wires, and loose connections
- Do NOT nail or staple extension cords to walls or baseboards
- Do NOT run extension cords through walls, doorways, ceilings, or floors. If a cord is covered, heat cannot escape, which may result in a fire hazard
- Never use three-prong plugs with outlets that only have two slots. Never cut off the ground pin to force a fit, which could lead to electric shock
- Buy only cords that have been approved by an independent testing laboratory
- Do NOT substitute extension cords for permanent wiring
- Do NOT use an extension cord or power strip with heaters or fans, which could cause cords to overheat and result in a fire

The average American home was built in 1977, and many existing homes simply can't handle the demands of today's electrical appliances and devices. If you witness any of the following issues, this could be a warning sign that your electrical system is overloaded: buzzing sounds from switches or outlets, discolored outlets, and appliances that seem underpowered. Learn

more at: <https://www.esfi.org/home-electrical-safety>

HOME ELECTRICAL SAFETY

Safety is Smart, Prevention is Power



Each year, electrical malfunctions account for **35,000 home fires** causing over **1,130 injuries**, **500 deaths**, and **\$1.4 billion in property damage**.

The average American home was **built in 1977**. Many existing homes **simply can't handle** the demands of today's electrical appliances and devices.

! Learn the warning signs of an overloaded electrical system:



Frequent tripping of circuit breakers or blowing of fuses



Dimming of lights when other devices are turned on



Buzzing sound from switches or outlets



Discolored outlets



Appliances that seem underpowered

⚡ How to avoid overloading circuits:



Label your circuit breakers to understand the different circuits in your home



Have your home inspected by a qualified electrician if it's older than 40 years or has had a major appliance installed



Have a qualified electrician install new circuits for high energy use devices



Reduce your electrical load by using energy-efficient appliances and lighting

Please share this free resource to save lives



www.facebook.com/ESFI.org

www.twitter.com/ESFI.org

www.youtube.com/ESFI.org

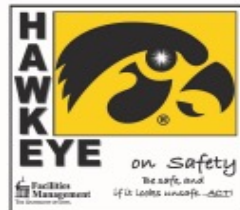
Practice Defensive Walking



Just like defensive driving to avoid accidents, be a “defensive walker” to avoid winter falls

- Plan ahead to prevent last minute rushing
- Assume **ALL** wet, dark areas on pavement are black ice
- Stay inside designated walkways
- Use handrails.
- Try not to carry things in your arms (maybe a backpack?)
- Don't text and walk at the same time.
- Take slow, short steps

...do the Penguin Shuffle



Stop Winter Falls



Walk like a penguin

Winter Walking... It's coming!

Walk SAFE... Winter Walking

- ▶ Most falls on snow/ice result in serious injuries. Don't become a statistic this year.
- ▶ Walking during the winter requires special attention to avoid slipping and falling.
- ▶ The National Safety Council estimates that falls cause more than 1,500 deaths and 300,000 injuries each year.





Injuries from slips and falls occur each year in the parking lots.

IOWA

Questions?

Thank you!

