



## Appendix R. ATTICS Safety Policy Sept 2024

### Performing inspections and service work in attics

#### Purpose & Goals

Purpose & goal of this safety policy :

- Assess hazards and preventative measures associated with working in attics.
- Identify job tasks
- Identify VSC employee who work in attics by title.
- Establish training & safety equipment necessary to perform work in attics.
- Identify individual responsibilities of manager, supervisors and employees.
- Prevent injury and property damage.



#### Hazard assessment:

All employees must have Confined Space Awareness Safety Training to identify if an attic space is a Permit-Required Confined Space.

#### Risk of Falls during Attic Work

Working in a low attic can be difficult. Employees moving through these spaces may be exposed to fall hazards at the openings between truss chords. Exposed nails, cables, wires, low-hanging rafters or crossbeams, hot conditions, poor lighting, and truss chords hidden by deep insulation, can add to the risk of falling.

#### Determining Structural Integrity of Truss Chords or Ceiling Joists

Workers can be injured if they fall through the ceiling to a lower level. Employers must determine if the walking/working surfaces in attics have the strength and structural integrity to support workers safely (29 CFR 1926.501(a)(2)). Only after this determination has been made should workers be allowed to enter those areas. Using a piece of plywood or planking to stand on could improve footing.

Among the dangers inspectors & service technicians face while performing attic inspections, these four stand out:

- Heat-Related Illnesses
- Electrical Hazards
- Falls
- Harmful Debris

### **Heat-Related Illnesses**

In the heat, attics reach unsafe temperatures, which can lead to heat-related illnesses. These include:

- Heat Rash
- Overheating Cramps
- Heat Exhaustion
- Heat Stroke

These ailments and their symptoms can creep up on you. You further open yourself up to danger by discounting the symptoms and not taking proper safety measures.

Some of these symptoms include, but are not limited to:

- Rashes or red bumps
- Thirst
- Muscle spasms
- Dizziness
- Headaches
- Fainting
- Confusion

### **Electrical Hazards**

Although they may not seem like an obvious threat, electrical exposures pose a significant danger in attics. Why? Insulation and the lack of light in attics can hide poor wiring.



Furthermore, attics may be damp from roof leaks. If insulation gets wet, and there are live wires underneath, the water can conduct electricity and energize the insulation itself, thus increasing your risk of harm.

Electrical currents cause four main types of injuries:

- Electrocution
- Electric shock
- Burns
- Falls

When suffering an electrical injury, you're likely to flinch or jolt back suddenly, thus exposing yourself to injuries from falling.

## Fall

Dark and riddled with insulation, attics make it hard to look where you're stepping. In fact, many attics lack safe walking surfaces altogether, being made of trusses, framing, and loose boards that are unstable to walk on.

VSC has had several accidents of inspectors and service technicians falling through ceilings from attic while attempting to walk across trusses and beams in attics without flooring. These accidents have resulted in injury, property damage to structure and personal property of residence and employees.

***It is VSC policy that no employees will access attics space that does not have proper flooring as seen below.***



## Attic flooring option

As an alternative option to prevent falls through attics the Attic Safety Platform described below can be used in attics without flooring.



Website information for this product:

<https://simplifiedsafety.com/oxford-safety/coversafe-spark/>

Managers have the option to purchase the attic safety platform, request the customer to install flooring, or decline the job. VSC Safety should be consulted for further guidance.

Ladders are **NOT** to be placed on the temporary attic flooring.

## Broken Pipes

When performing inspections or service work in attics of apartment buildings, townhouses, or condominiums, there is a possibility of stepping on vent pipes and fire sprinkler lines if you slip. Breaking these components can not only cause thousands of dollars in water damage but can also seriously injure you in the process.

## Harmful Debris

Attics can have uninvited guests, like insects, rodents, or bats and along with these creatures comes harmful waste.

Attics do pose a danger and not just the danger of stepping through the ceiling, there can be potentially harmful debris, rodent traps, and feces.

In addition to debris from animals, attics may contain mold, toxic vermiculite, asbestos, and other airborne toxins.

## Contact with customer or residence



- Post spotter at ladder
- Do not leave materials or equipment unattended in accessway.
- In nursing homes, schools, hospital, retail or other location with frequent & increase pedestrian traffic, communicate with owner or staff to establish means of avoiding contact.

Thankfully, attic-related injuries and illnesses on the job are avoidable. Here are **four ways to manage your risk against harm**:

### 1. Prepare for hot temperatures.

If you are in a region that reaches high temperatures and/or is high in humidity, then take appropriate precautions. Consider the temperature and risk level before performing any attic inspections. OSHA provides the table below for reference.

Heat Index	Risk Level	Protective Measures
Less than 91°F	<u>Lower</u>	Basic heat safety and planning
91°F to 103°F	<u>Moderate</u>	Implement precautions and heighten awareness
103°F to 115°F	<u>High</u>	Additional precautions to protect workers
Greater than 115°F	<u>Very High</u>	Triggers even more aggressive protective measures

Safety standards should consider the following:

- Water intake
- Frequency of breaks
- Length of workday
- Acclimatization to extreme heat

According to OSHA, you should be looking for these symptoms:

Illness	Symptoms	First Aid
Heat Stroke	<ul style="list-style-type: none"> <li>• Confusion</li> <li>• Fainting</li> <li>• Seizures</li> <li>• Excessive sweating</li> <li>• Red, hot, dry skin</li> <li>• High body temperature</li> </ul>	<ul style="list-style-type: none"> <li>• <b>**Call 911**</b></li> </ul> <p><i>While waiting for help:</i></p> <ul style="list-style-type: none"> <li>• Help worker to shady, cool area to lie down</li> <li>• Loosen clothing, remove outer clothing</li> <li>• Fan air on worker; cold packs in armpits</li> <li>• Wet worker with cool water</li> <li>• Provide fluids (preferably water) ASAP</li> <li>• Stay with worker until help arrives</li> </ul>
Heat Exhaustion	<ul style="list-style-type: none"> <li>• Cool, moist skin</li> <li>• Heavy sweating</li> <li>• Headache</li> <li>• Nausea or vomiting</li> <li>• Dizziness</li> <li>• Weakness</li> <li>• Thirst</li> <li>• Irritability</li> <li>• Fast heartbeat</li> </ul>	<ul style="list-style-type: none"> <li>• Have worker lie down in a cool, shady area</li> <li>• Provide cold fluids</li> <li>• Cool worker with cold compresses</li> <li>• If symptoms worsen or don't improve within 60 minutes, take worker to clinic or ER</li> <li>• Have worker rest for remainder of workday</li> </ul>
Heat Cramps	<p><i>Usually occurs in abdomen, arms or legs:</i></p> <ul style="list-style-type: none"> <li>• Muscle spasms</li> <li>• Pain</li> </ul>	<ul style="list-style-type: none"> <li>• Have worker rest in a cool, shady area</li> <li>• Provide cool beverages</li> <li>• Have worker wait a few hours before returning to duties</li> <li>• If cramps don't go away, have worker seek medical attention.</li> </ul>
Heat Rashes	<p><i>Often appear on neck, upper chest, folds of skin</i></p> <ul style="list-style-type: none"> <li>• Clusters of red bumps on skin</li> </ul>	<ul style="list-style-type: none"> <li>• Have worker take breaks as needed</li> <li>• When possible, worker should prioritize duties in cool and less humid environments</li> </ul>

**2. Have adequate lighting.**

According to OSHA, one of the best things you can do to avoid trips and slips is make sure you can see where you are walking. As we discussed earlier, watching where you're stepping can be particularly difficult in an attic. However, by making sure the area is well-lit, OSHA explains, you better your chances of traversing safely.

Make sure you have a great head light and always carrier an extra flashlight and always make sure you walk on wood.



### **3. Don't rush.**

Traversing attics is tricky, even with proper lighting.

One wrong step, or one slip off a joist and you are likely to **blow a hole in the ceiling**, catch your foot on wire, crush a heating duct, pull loose a bathroom vent, get punctured by a loose nail, twist an ankle...you get the idea.

With so many things that can go wrong during an attic inspection, give yourself permission to slow down and exercise caution.

Take it slow and always know where you are putting your feet.

In addition to avoiding falls, slowing down allows you to assess how you are doing physically.

When working in extreme heat, it's easy to rush the process to get it over with. However, rushing could put you in further danger.

That's why inspectors & service techs should practice physiological monitoring throughout their inspections. OSHA provides this table as a guide for how frequently you should **evaluate your health** while working in the heat:

Suggested Physiological Monitoring Frequency		
Outside Temperature	Workers with Normal Clothing	Workers with Impermeable Clothing
90°F or above	After each 45 minutes of work	After each 15 minutes of work
87.5° - 90°F	After each 60 minutes of work	After each 30 minutes of work
82.5° - 87.5°F	After each 90 minutes of work	After each 60 minutes of work
77.5° - 82.5°F	After each 120 minutes of work	After each 90 minutes of work
72.5° - 77.5°F	After each 150 minutes of work	After each 120 minutes of work

### **4. If it's too dangerous, skip it.**

If you notice these symptoms during a break, take emergency measures and reschedule the inspection for a safer time.

As an expert in your field, you determine what is unsafe—not your client. No matter the possible pushback you receive from clients, your safety always comes first.

Additionally, follow a safety checklist when taking a first look at an attic from the hatch. Ask yourself these questions:

- ✓ Are animal droppings visible?
- ✓ When shining a light, do you see reflections from pests' eyes?
- ✓ Do you see any electrical cables that are loose or exposed?
- ✓ Is there evidence of water damage and/or wood rot?
- ✓ Do you identify vermiculate insulation?
- ✓ Are the joists inaccessible?
- ✓ Does the access hatch not have a safe ladder? Is there not a place you can set up your own ladder safely?
- ✓ If you answer "yes" to any of those questions, entering the attic can put you in danger.

**Hazard assessment (JHA) of VSC work in Attics**

JOB TASKS	HAZARDS	PREVENTION
Service & inspections	A. FALL	A. Use two-man rule at all times. Have spotter outside of entry with communication with tech. Ladder of appropriate height. Evaluate size and configuration of access to elevated space. <b>As a standard safe practice, always have an assistant to accompany service and inspectors for all attic work.</b> Set up fall protection equipment as needed.
Repair leaks		
Install or restoration of fire protection.		
Accessing and working in attic & enclosed spaces	B. HEAT, increase risk of heat related illness during summers months.	B. Use ventilation, open more ceiling tiles if applicable or limit time of exposure by having tech exit attic for breaks every 15 min or as needed. Provide water on site. During extreme heat conditions of summer months an attendant must always be posted outside the space.
Inspection of alarm and fire protection system.		
Running wiring	C. Enclosed restricted obstructed areas (“tight” fitting space)	C. Evaluate route of access to work zone. Do not wear tool belt, carry excess items, or have loose items that can become entangled.
Locating a LV relay module	D. Inadequate lighting (contact with sharps, punctures, head injuries)	D. Use portable lights as needed. Open more ceiling tile for better views. Wear gloves and eye protection.
	E. Irritant dust & insulation	E. Do not use forced ventilation to blow dust into atmosphere. Voluntary use of mask must be N95 only.
	F. Chemical environmental. CPVC glue for pipe or fittings. Fire hazard	F. Set up ventilation or exhaust . Have SDS. Anytime hazardous chemical are used a spotter / assistant must be posted. Have fire extinguisher on site. Take frequent breaks as needed. <b>NO RESPIRATORY PROTECTION ALLOWED!</b> If you smell any strong odors or gas immediately evacuate the areas and notify DM
	G. Insects & rodents	G. Inspect for webs, rodent & droppings. Wear coveralls, long sleeve, gloves. Do not spray insect repellent in unventilated areas.
	H. Exposed utilities (electrical & plumbing, steam pipe)	H. Avoid exposed utilities. Do not remove cables. If utilities are in access way or in work zone take precautions such as LOTO. Contact customer for assistance.

	<ul style="list-style-type: none"> <li>I. Inhalation of chemicals from applying glue</li>   <li>J. Restricted access / entry (small ceiling opening, hatchway)</li>   <li>K. Pedestrian or resident traffic (contact with public or occupants)</li>   <li>L. Fall through ceiling (dry wall martial)</li>   <li>M. Fall from vertical entry and exit.</li>   <li>N. Transporting and lifting material into space.</li>   <li>O. Physical contact with property.</li> </ul>	<p>Do not wear necklace, bracelets or other loos items that can become entangled or contact utilities.</p> <ul style="list-style-type: none"> <li>I. Have glue SDS on site, ventilate space with exhaust system open more ceiling tile if applicable. Take frequent break and exit space as needed. <b>Do not wear respirator unless authorized.</b></li>   <li>J. TBD. Supervisor must conduct site evaluation to site conditions.</li>   <li>K. Post spotter at base of ladder or barricade attic access zone from traffic. Communicate with owner to establish means of avoiding contact. do not leave material or equipment unattended in accessways.</li>   <li>L. No one will access an attic space without proper flooring &amp; support. If needed, portable attic safety platform can be used or request the customer to install flooring.</li>   <li>M. Conduct site evaluation to determine proper fall protection and access.</li>   <li>N. Conduct site evaluation to determine precautions. An assistant will be assigned to attic entrant as need to help with transporting and lifting objects into attic.</li>   <li>O. Request customer to remove all property, materials and other items that may be blocking access to attic entry area.</li> </ul>
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Attics and all related components are inspected visually from an area that does not put either the inspector or the building at risk. The method of inspection is at the sole discretion of the inspector and depends on a number of factors including, but not limited to, accessibility, clearances, insulation levels, stored items, temperature, etc.



### Classifying attics as Confined Space

According to OSHA In many instances, an attic will not be considered a confined space because there is not limited or restricted means for entry and exit. For example, an attic that can be accessed via pull downstairs that resemble the structure of a stationary stairway and do not require an employee to ascend /descend hand-over-hand would not be considered a confined space if there are no impediments to egress.

Attics that are determined to be confined spaces would generally not be permit-required confined spaces because they typically do not contain the types of hazards or potential hazards that make a confined space a permit-required confined space. (those that could impair an entrant's ability to exist the space without assistance). However, extreme heat in an attic can be considered a serious physical hazard such that the attic could be considered permit-required confined space. OSHA has not quantified how hot it must be to trigger the permit-required confined spaces requirements. **However**, heat that is extreme enough to cause heat exhaustion (e.g., dizziness, headaches, severe sweating, cramps) may impede an entrant's ability to exit the attic without assistance and would make a confined space permit required.