

Safety Practices for Roofing Torch Use

CHECKLIST

1. Complete the daily checklist for all torching jobs.

PRE-JOB PLANNING

- A. Identify and protect plywood, oriented strand board (OSB), wood plank, wood fiberboard and other combustible building components as follows:
 - a. The job foreman or supervisor shall review daily with the building owner conditions that could present hazards during torching and address them.
 - b. Address possible fire traps and hidden hazards; see No. 3, Torching Safety, Items A through E.
- B. Have a minimum of two 4A:60B:C fire extinguishers available within 10 feet of torch operations.
- C. Train all personnel on the roof on how to use a fire extinguisher.
- D. Inspect penetrations, such as exhaust vents, inside and outside. Lint, grease or other substances if present, shall be cleaned prior to torching work.
- E. Have a cell phone available or other means of communicating with 911 or another emergency responder.
- F. Comply with state and local ordinances where applicable.
- G. Field-of-the-roof installation
 - a. Over combustible¹ roof decks:
 - i. A thermal barrier shall be incorporated into the roof system design using torch-applied polymer-modified bitumen sheet products. Acceptable thermal barriers include one of the following:
 - Minimum 3/4-inch-thick perlite board insulation
 - Minimum 3/4-inch-thick fiberglass board insulation
 - Minimum 1/4-inch-thick gypsum roof board
 - Minimum 3/4-inch-thick stone wool board
 - b. When a thermal barrier is installed, comply with the manufacturer's recommendations and the recommendations contained in The NRCA Roofing Manual.
 - H. Over noncombustible² roof decks:
 - a. Comply with the manufacturer's recommendations and the recommendations contained in The NRCA Roofing Manual.
 - I. Flashing installation: Polymer-modified bitumen flashings shall be installed using one of the following flashing system application methods:
 - a. Torch-and-flop indirect torching
 - b. Cold-applied adhesives
 - c. Mop-applied with hot bitumen
 - d. Direct torching using a single-burner, low-output (105k Btu or less) "detail" torch over combustible¹ or noncombustible² substrates as follows:
 - i. Over combustible¹ substrates, an air-impermeable backer layer with sealed laps installed over the flashing substrate shall be incorporated into the flashing assembly prior to the application of the torch-applied polymer-modified bitumen

sheet finish surface. Acceptable adhered backer layers include one of the following:

- A layer of fiberglass ply sheet, fiberglass base sheet or polymer-modified bitumen base sheet mechanically fastened to the substrate and an additional layer of a minimum of one layer fiberglass ply sheet or polymer-modified bitumen base sheet adhered to the underlying layer in solid mopping's of hot asphalt
 - Minimum of one layer of self-adhering, smooth-surfaced polymer-modified bitumen sheet
- ii. Over noncombustible² substrates, an adhered backer layer with sealed laps installed over the flashing substrate shall be made part of the membrane flashing assembly prior to the application of the torch-applied polymer-modified bitumen sheet finish surface. Acceptable adhered backer plies include one of the following:
- Minimum of one layer of fiberglass ply sheet, fiberglass base sheet or polymer-modified bitumen base sheet adhered in solid mopping's of hot asphalt
 - Minimum of one layer of self-adhering, smooth-surfaced polymer-modified bitumen sheet
 - Note: If the membrane flashing substrate cannot be specifically identified as noncombustible,

TORCHING SAFETY

- A. Only CERTA certified torch applicators shall operate torches when an open flame will contact any part of a roof.
 - a. Using an open flame for roof drying or de-icing over combustible¹ roof surfaces shall not be permitted.
 - b. The use of an open flame torch solely to heat bitumen equipment valves (i.e., hot luggers, felt layers or kettles) or bitumen pipe assemblies is acceptable and may be performed by a noncertified applicator as long as an open flame does not contact combustible¹ roofing materials.
- B. Protect materials that may burn when in contact with an open flame. Never torch directly to any combustible¹ material.
- C. Never torch directly in an area where you cannot see the path of the open flame (including—but not limited to—flashings, corners, curbs, voids, expansion joints and small roof penetrations). Use alternative application methods, such as torch-and-flop indirect torching, cold-applied adhesives or mop-applied with hot bitumen, in these areas.
- D. A lit torch shall only be placed on the roof surface using a functional torch stand.
- E. A lit torch shall never be left unattended.

FIRE WATCH

- A. After all roofing torches have been shut down, a minimum two-hour fire watch shall be conducted by a properly trained and dedicated individual; it shall include checking the roof's underside for smoldering (whenever possible), as well as the top side. There also must be a fire watch during lunch and all breaks.

Activity Hazard Analysis (AHA)

Contractor Name (Performing the Work): The Korte Company		Overall Risk Assessment Code (RAC) (Use highest code)				M	
Foreman Signature (Performing the Work):							
AHA Prepared By (Name/Title): SSHO							
Activity/Work Task: MODIFIED BITUMINOUS ROOFING		Risk Assessment Code (RAC) Matrix					
AHA Signature Log #:		Probability					
Contract Number: List Contract Number Here		Severity	Frequent	Likely	Occasional	Seldom	Unlikely
Date Prepared: August 28, 2020		Catastrophic	E	E	H	H	M
Project Location: Somewhere		Critical	E	H	H	M	L
PRIME CONTRACTOR SECTION: REVIEWED BY: SIGNATURE REQUIRED		Marginal	H	M	M	L	L
SSHO Signature:		Negligible	M	L	L	L	L
QC Manager Signature:		Step 1: Review each Hazard with identified "Controls". Determine RAC (see above).					
Prime Superintendent Signature:							
Notes:		RAC CHART					
		Probability: Likelihood the activity will cause a Mishap (Near Miss, Incident, or Accident). Identify as Frequent, Likely, Occasional, Seldom or Unlikely					E = Extremely High Risk
		Identify as Catastrophic, Critical, Marginal, or Negligible					H = High Risk
		Step 2: Identify the RAC (probability vs. severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of the AHA					M = Moderate Risk
		L = Low Risk					
Job Steps (Work Sequences)		Specific Anticipated Hazards		Controls		RAC	
Site-specific/Job-specific training for workers		Employees not trained in the safe execution of their tasks may harm themselves or others		- Use this Activity Hazard Analysis and other formal and informal training as a means to train workers. NOTE: If the scope of work detailed below changes in any way, contact the Safety Department and complete an AHA amendment detailing the new scope of work. EM 385-1-1, Sect., 1.B.1 - 1.B.3		L	

UFGS 013526 11/15 1.9 Government reserves the right to require the Contractor to revise and resubmit the AHA if it fails to effectively identify the work sequences, specific anticipated hazards, site conditions, equipment, materials, personnel and the control measures to be implemented.

UFGS 013526 1.9.1 Review the AHA list periodically (at least monthly) at supervisory safety meetings, update when procedures, scheduling or hazards change

UFGS 013526 1.9.2 Each employee performing work ... must review the AHA and sign a signature log for that AHA prior to starting work. The SSSH must maintain a signature log on site for every AHA.

Job Steps (Work Sequences)	Specific Anticipated Hazards	Controls	RAC
Put on your personal protective equipment.	Head, foot, or eye injury Personnel being struck by equipment/trucks Hearing damage	<ul style="list-style-type: none"> - Workers entering the job site must wear a hard hat and Class II reflective vest AT ALL TIMES. Routinely inspect hard hats for dents, cracks or deterioration. Replace hard hat after any hard blow or electrical shock. - Safety glasses or face shields must be worn any time work operations can cause foreign objects to get into the eye. - Workers must wear safety-toed work boots with slip-resistant and puncture-resistant soles AT ALL TIMES. - Wear gloves when handling sharp objects. Gloves should fit snugly. Wear the right glove for the job. - Workers shall wear earplugs/earmuffs in high noise work areas where loud or heavy equipment is being used. Clean or replace earplugs regularly. - Do not wear clothing or jewelry that could easily get snagged or caught by equipment or machinery. <p>EM 385-1-1, Sect. 5.A, 5.B, 5.C, 5.D, 5.E, 5.F</p>	L
Receive deliveries and store material	Crushing or pinching hands or feet Excessive material handling Sprains and Strains	<ul style="list-style-type: none"> - When moving material, keep hands and feet clear of pinch points. Stack material on stickers. - Store material in such a manner that it will not be blown or knocked over. - Stay clear of moving machinery, heed backup alarms and get out of the way. - Stage material as close to its final destination as possible. - Use safe lifting techniques. <p>EM 385-1-1, Sect. 14.A</p>	L

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Job Steps (Work Sequences)	Specific Anticipated Hazards	Controls	RAC
Check electrical cords (portable flexible cords)	Electrical Shock Electrocution/Death	<ul style="list-style-type: none"> - Do not use electrical cords with cuts, worn insulation, or visible conductors. - All frayed, patched, oil-soaked or worn electrical cords shall be taken out of service immediately. - Use cords rated for hard or extra-hard usage. - All cords shall have a double-insulated or grounding plug. - Use factory-assembled cord sets as much as possible. Repairs must preserve the original electrical and mechanical integrity of the cord. - Electrical tape fixes are prohibited and replacement plugs must be properly sized and provided with strain relief clamps. - Check that the ground prong is intact. - GFCI protection shall be provided on all circuits serving portable electric hand tools. Use only GFCI protected circuits. - All electrical systems shall comply, with the NEC. <p>EM 385-1-1, Sect. 11.D.05, 11.A.06</p>	L
Inspect tools	Injury due to defective or improperly functioning power tools Electric shock from defective tools. Impact injuries, splinters Impact injuries from spinning tool	<ul style="list-style-type: none"> - Remove defective tools from the job site. - Wooden handles for tools are secured tightly in the tool and free of cracks and splinters. - All saws are equipped with properly functioning manufacture installed guards. - Hand held power tools (saws, drills, grinders) are equipped only with a constant pressure switch. - Pneumatic nailers have a functioning safety device on the muzzle to prevent ejection unless muzzle in contact with work surface. - Only use tools for their intended use. - GFCI protection shall be provided on all circuits serving portable electric hand tools. Use only GFCI protected outlets. - Tag defective tools and remove them from the workplace. <p>EM 385-1-1, Sect. 11.D.05, 13.A, 13.B, 13.C, 13.D, 13.H</p>	L
Re-fuel gas powered tools	Fires, explosions, burns	<ul style="list-style-type: none"> - Use only approved metal safety cans to store and dispense fuel. - Place oily or fuel soaked rags and other combustibles in approved containers. - DO NOT SMOKE WHILE REFUELING. <p>EM 385-1-1, Sect. 9.B, 26.D</p>	L

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Job Steps (Work Sequences)	Specific Anticipated Hazards	Controls	RAC
Inspect, layout, communication, and preparatory instructions	Lack of coordination between workers- Mistakes, Injuries Fire hazards in exhaust vents, inside and outside.	<ul style="list-style-type: none"> - Before beginning each phase of work the foreman will explain to the workers what needs to be done and how the work will proceed. -Inspect and clean any lint, grease or other substances if present prior to any torch work. - All rebar which is below the level where work is ongoing onto which workers could fall must be protected with square type rebar caps. - Be aware of your surroundings while moving materials, watch where you are going. - Never move materials over or above workers. 	L
Moving material	Strains from lifting Striking and injuring co-workers with materials Crushed by	<ul style="list-style-type: none"> - Team lift heavy or awkward materials. - Use safe lifting techniques. - Use material handling aids whenever possible. - Be aware of your surroundings and watch where you are going while carrying material. - Never move materials above coworkers. - When receiving/stocking material through a wall or floor opening, do not stand in front or above the opening where you could fall. - (See training and inspection requirements for reach-lifts below.) - When stocking material above ground level up to 35-feet , a reach-lift will place the pallet as close to the material's final destination as possible, then hand stocking will occur. <p>EM 385-1-1, Sect. 14.A See Activity Hazard Analysis on forklift operation</p>	L
Set up barricades and caution-off area.	Entry of unauthorized personnel Knocking down power lines	<ul style="list-style-type: none"> - Set up warning barricades or temp. fencing and caution off area where earthwork is ongoing to prevent the entry of unauthorized personnel. - Caution tape off power poles and guy wires and be careful when operating heavy equipment near high voltage lines. <p>EM 385-1-1, Sect. 25.B</p>	L

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Job Steps (Work Sequences)	Specific Anticipated Hazards	Controls	RAC
Roll out tools and set up equipment	Tripping - Hoses, Cords, Compressor	<ul style="list-style-type: none"> - Keep corridors and high traffic areas free of cords, hoses, & other equipment. - Completely unroll all hoses and cords, avoid tangles. - Arrange hoses and cords in an orderly fashion. - Clean up scrap materials and debris before and after working in an area. - Maintain Good housekeeping. - All trash and debris shall be put in appropriate locations. - Do not leave tools and materials laying around on the ground. EM385-1-1, Sect. 14.C	L
Cut Material	Cut by utility knife, or razor blades Flying particles- Eye injury Skin or airway irritation	<ul style="list-style-type: none"> - Cut away from yourself. The blade should always be pointed in a direction opposite any body parts. - Wear safety goggles for any work that creates hazardous dust, mist, or fumes EM 385-1-1, Sect. 5.A, 5.B, 5.C, 5.D, 5.E, 5.F, 13.A	L
Spread or mop tar	Impact injuries Splinters Struck by falling material	<ul style="list-style-type: none"> - Make sure that wooden handles for tools are secured tightly in the tool and are free of cracks and splinters. - Wear a dust filtering respirator, gloves, and long-sleeved shirt. - Do not allow workers to stand or walk under the area where roofing operations are ongoing. EM 385-1-1, Sect. 5.A, 5.B, 5.C, 5.D, 5.E, 5.F, 13.A	L

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Job Steps (Work Sequences)	Specific Anticipated Hazards	Controls	RAC
Working from a Ladder - Entering or exiting work areas via Extension Ladder	Falls from, Struck by	<ul style="list-style-type: none"> - Extension ladders are set up so that the horizontal distance from the top support to the ladder base is 1/4 the working length of the ladder. - The top of the ladder is tied off and the side rails extend 36" above the landing. - Step ladders used only in full open position. - Set up ladders on firm level footing. - Don't work from a step ladder leaned against a wall. - All step and extension ladders are equipped with ladder shoes. - Don't work from the top two steps of a step ladder. - Choose the correct size of ladder for the job. - Ladders must be inspected regularly and tagged "do not use" if defective. Remove defective ladders from the job site. - Do not move a ladder while you are on it. - Do not move ladder with tools on it. <p>EM 385-1-1, Sect. 21.I, 24.B</p>	L
Working from an elevated position	Falling- Injury, Death	<ul style="list-style-type: none"> - Whenever you are working from an elevated location that is 6' or more above the lower level you must be protected by either a guardrail system or a personal fall arrest system. - Workers must wear a full body harness and lanyard secured to a safe anchorage point. This may be a bracket specifically designed for fall protection or a structural member. - Lines shall be checked after each move to ensure correct length. - Never allow material or tools to fall on workers below. <p>EM 385-1-1, Sect. 21.A, B, C, H Note: It is a requirement that a Site-specific Fall Rescue Plan be developed, implemented, and reviewed daily prior to the start of work.</p>	M

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Job Steps (Work Sequences)	Specific Anticipated Hazards	Controls	RAC
Hoist and Set Material/Components (Forklift)	Unexpected movements Materials striking and injuring workers Crushed by falling material Swinging loads striking and injuring workers	<ul style="list-style-type: none"> - Assure that there is good communication between workers and the lift operator. - Never walk under a raised load. - Use a tag line on all loads to help stabilize the load and maneuver it into position. EM 385-1-1, Sect. 13.D, 14.A, 21.A, B, C, H, 27.A, B, C See Activity Hazard Analysis on Forklift Operation	L
Cut Material	Cut by utility knife, or razor blades Flying particles- Eye injury Skin or airway irritation	<ul style="list-style-type: none"> - Cut away from yourself. The blade should always be pointed in a direction opposite any body parts. - Wear safety goggles for any work that creates hazardous dust, mist, or fumes EM 385-1-1, Sect. 5.A, 5.B, 5.C, 5.D, 5.E, 5.F, 13.A	L
Apply adhesive (when specified)	Dizziness, nausea, or cumulative damage due to long term occupational exposure	<ul style="list-style-type: none"> - Read through the SDS for every chemical/material that you will be using. Don't assume that a material is not hazardous, just because it doesn't produce any immediate effects. EM 385-1-1, Sect. 6.A, 6.B	L
Install Material	Cut by utility knife, or razor blades Flying particles- Eye injury	<ul style="list-style-type: none"> - Wear safety glasses with side shields when using a hammer. - Keep hand several inches away from whatever you are hitting with a hammer - Do not allow workers below the level from which you are working unless they are protected from falling objects. EM 385-1-1, Sect. 5.A, 5.B, 5.C, 5.D, 5.E, 5.F, 13.A	L

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Job Steps (Work Sequences)	Specific Anticipated Hazards	Controls	RAC
Torch Down Roofing	<p>Leaking hoses</p> <p>Burns</p> <p>Fire</p> <p>Explosion</p>	<ul style="list-style-type: none"> - Operators of torches and their supervisor shall be trained in the safe operation of their equipment, - All torch equipment shall be inspected before each use to ensure that all required safety devices and ancillary equipment are in place and properly functioning. Defective equipment shall be removed from service, replaced or repaired, and reinspected before again being placed in service. - All employees exposed to heating/torching operations shall put on appropriated PPE before beginning operations. -Identify and protect plywood, oriented strand board (OSB), wood plank, wood fiberboard, insulation and other combustible building components. - At least two (2) 4A:60 B:C fire extinguisher shall be kept in the immediate vicinity (within 10 feet of torch work) of welding or cutting operations and maintained in a state of constant readiness for immediate use. - Prior to the start of operations, survey the work area to make sure that it is free of combustible materials. - During all activities, practice good housekeeping . - Purge hoses individually before lighting the torch at the start of each shift. - Clean torch tip openings with appropriate wires, drill, or other devices. - Light torches with appropriate friction lighter. Do not use matches. - Use torches in a safe manner. Keep hands, feet, and clothing away from torch at all times. - Torch valves shall be closed and the gas supply shut off whenever work is suspended. -Only CERT certified torch applicators shall operate torches when an open flame will contact any part of roof <ul style="list-style-type: none"> a. Using an open flame for roof drying or de-icing over combustible roof surfaces shall not be permitted b. The use of an open flame torch solely to heat bitumen equipment falves (i.g, hot luggers, felt layers or kettles) or bitumen pipe assemblies is acceptable and may be performed by a noncertified applicator as long as an open flame does not contact combustible materials. - Protect materials that may burn when in contact with an open flame. Never torch directly on combustibles. - Never torch directly in an area where you cannot see the path of the open flame (including-but not limited to- flashings, corners, curbs, voids, 	L

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Job Steps (Work Sequences)	Specific Anticipated Hazards	Controls	RAC
Fire Watch	Fire	After all roofing torches have been shut down, a minimum of 2 hour fire watch shall be conducted by a properly trained and dedicated individual; it shall include checking the roof's underside for smoldering (whenever possible), as well as the top side. There also must be a fire watch during lunch and all breaks.	
Working in hot weather	Heat Stroke, Heat Exhaustion, Heat Cramps Sunburn	<ul style="list-style-type: none"> - Make sure you always have an adequate supply of cold water available. If your water supply is running low talk to your supervisor. - Take scheduled cool down breaks. - Provide ventilation or air cooling equipment for enclosed work areas. - Use sunscreen. - Respond quickly and decisively in case of an accident. Call 911 immediately. - Know where the emergency numbers are posted, where the first aid kit is, and who is trained in first aid. - Only persons trained in first aid should be allowed to administer first aid. <p>EM 385-1-1, Sect. 6.I - 6.J</p>	L
Roll up Equipment & Clean-up	Slipping, Tripping, or falling, and Delayed Egress	<ul style="list-style-type: none"> - Store equipment out of the way. Roll up hoses and cords at end of day. - Clean up work area at the end of each shift. Stack materials in designated lay down areas. - Never throw or drop scrap and debris to a lower level unless that drop area has been cautioned/barricaded off to prevent workers from entering the area. - Place combustibles in approved containers. <p>EM 385-1-1, Sect. 2.B</p>	L
Responding to an emergency	Delayed emergency response- further injury or loss of life	<ul style="list-style-type: none"> - Respond quickly and decisively in case of an accident. Call 911 immediately. - Know where the emergency numbers are posted, where the first aid kit is, and who is trained in first aid. - Only persons trained in first aid should be allowed to administer first aid. <p>EM 385-1-1, Sect. 3.A, 3.B</p>	L

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Job Steps (Work Sequences)	Specific Anticipated Hazards	Controls	RAC
Administering First Aid	Exposure to blood-borne pathogens	<ul style="list-style-type: none"> - Use appropriate PPE when administering first aid such as gloves, masks, eye protection and/or resuscitation equipment especially when blood is present - Wash after contact with blood or other body fluids - Dispose of soiled material in a labeled leak-proof container <p>EM 385-1-1, Sect. 3.A, 3.B, 3.D</p>	L

Equipment to be Used	Training Requirements & Competent or Qualified Personnel Names	Inspection Requirements
Crane	Crane Operators Certification / License Required Review Crane Data and Lift Plan	<ul style="list-style-type: none"> - Crane to be inspected prior to entry into the facility. - Crane to have current Inspection Certification on window of cab. - Conduct Daily Inspection prior to Use including Back-up Alarm and Maintenance Records. - Operators Manual shall be on ALL equipment. - Crane will be equipped with Fire Extinguisher.
Forklift	Forklift Operator Training and Certification/License Review of Manufacturer's Operating Manual Activity Hazard Analysis Review	<ul style="list-style-type: none"> - Conduct Daily Inspection prior to Use including Back-up Alarm and Maintenance Records. - Operators Manual shall be on ALL equipment. - Forklift will be equipped with Fire Extinguisher.
Scissor lift	Current Scissor lift training is required for all employees operating lifts. Activity Hazard Analysis Review for each worker.	- All lifts will be inspected prior to delivery to job, as well as before each shift of work. Any lift with defective parts will be red-tagged until repairs are made. Daily inspection reports shall be completed and submitted to appropriate authority.
Boom lift	Current boom lift training is required for all employees operating lifts. Activity Hazard Analysis Review for each worker.	- ALL lifts will be inspected prior to delivery to job, as well as Before each shift of work. Any lift with defective parts will be red-tagged until repairs are made.
Ladders	Field workers are trained on the proper usage of a ladder Activity Hazard Analysis Review for each worker.	<ul style="list-style-type: none"> - Ladders to be in good working condition. Metal conductive ladders are not allowed on job-site. - All stickers must be undamaged, clear, and legible. - Inspect daily for broken parts, loose components etc. Any ladder found defective will be tagged, taken out of service and replaced immediately.
Personal Fall Protection System	All workers will be trained in the proper donning and use of Personal Fall Arrest Equipment before beginning work.	- Inspect personal fall arrest equipment (lanyard, harness, D-rings), for frays, burns, hair line cracks, or other defects prior to use.
Power Tools	Trained by site supervisor and authorized to use power tools.	- Inspected daily for broken parts, damaged cords etc. Any equipment found defective will be tagged, taken out of service and replaced immediately.
Hand Tools	Trained by site supervisor before use.	- Inspected daily for broken parts, loose handles or components etc. Any equipment found defective will be tagged, taken out of service and replaced immediately.
Propane Torch	Trained by site supervisor before use.	- Inspected daily for broken parts, loose handles or components etc. Any equipment found defective will be tagged, taken out of service and replaced immediately.

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Equipment to be Used	Training Requirements & Competent or Qualified Personnel Names	Inspection Requirements
Field/Work Truck	Valid Driver's License Required. Valid Insurance Certificate Required. Review Owner's Manual. Activity Hazard Analysis Review for each worker.	<ul style="list-style-type: none"> - Activity Hazard Analysis Review for each worker. - Vehicle must be properly maintained and in good working order. - Owner's Manual must be with vehicle. - Any chemical transported in vehicle requires an SDS be kept with vehicle. - Inspect daily prior to each shift.
Personal Protective Equipment (PPE)	All workers will be trained in the proper donning and use of PPE before beginning work.	- Inspect ALL PPE prior to each use. Any damaged PPE will be replaced immediately.
First Aid Kits	A MINIMUM of 2 individuals trained in CPR/First Aid will be on-site and available to render aid at all times.	- First Aid Kits will be inspected weekly for damage and/or missing items which shall be replaced immediately.

Competent Person

Signature

UFGS 013526 11/15 1.9 Government reserves the right to require the Contractor to revise and resubmit the AHA if it fails to effectively identify the work sequences, specific anticipated hazards, site conditions, equipment, materials, personnel and the control measures to be implemented.

UFGS 013526 1.9.1 Review the AHA list periodically (at least monthly) at supervisory safety meetings, update when procedures, scheduling or hazards change

UFGS 013526 1.9.2 Each employee performing work ... must review the AHA and sign a signature log for that AHA prior to starting work. The SSHO must maintain a signature log on site for every AHA.

Activity/Work Task: MODIFIED BITUMINOUS ROOFING - 07 52 00
Contract Name: SAMPLE ROOF INSTALL
Contract Number: LIST CONTRACT NUMBER HERE

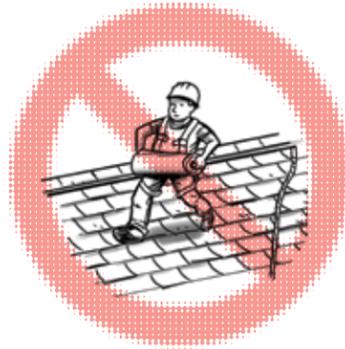
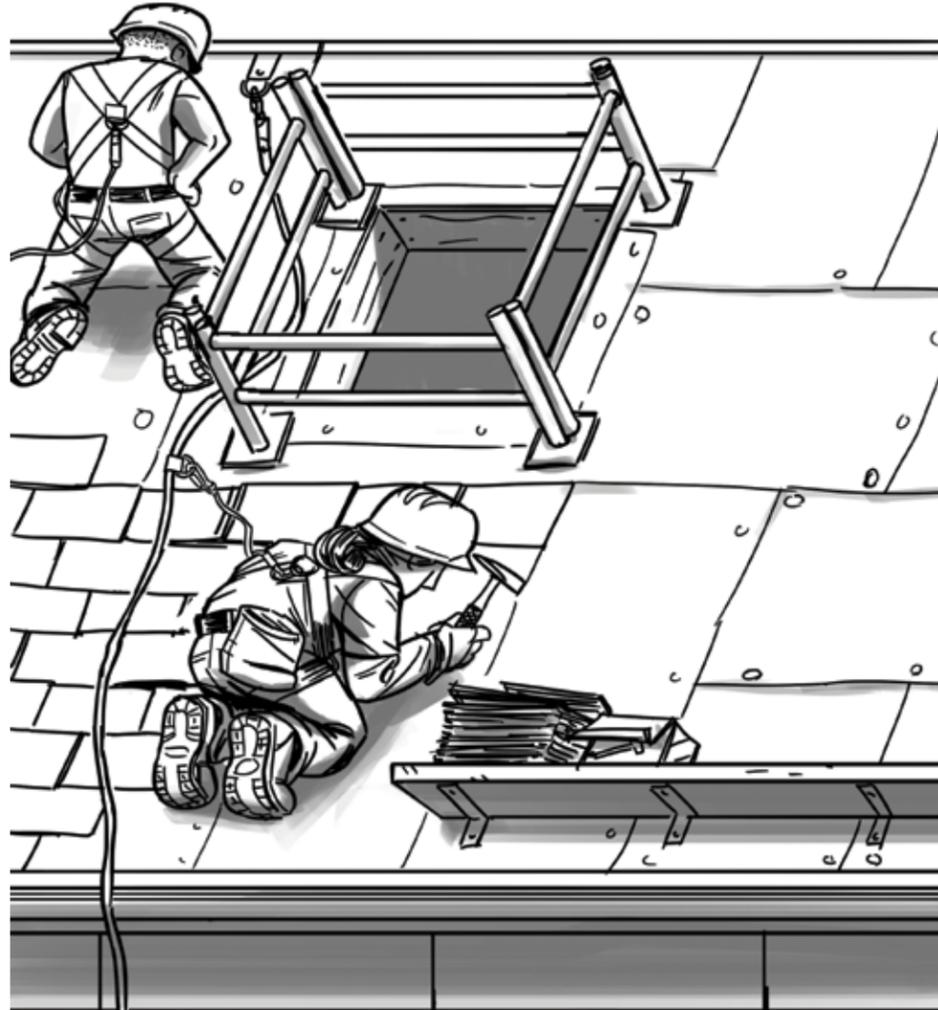
Competent Persons

Name: Signature: Date:

Meeting Attendees

Name: Signature: Date: Name: Signature: Date:

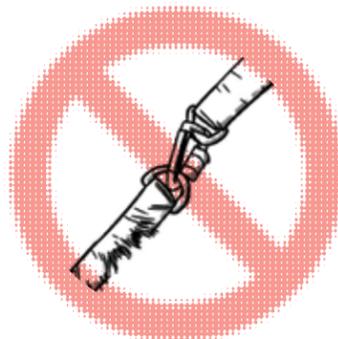
- ✓ Wear a harness and always stay connected
- ✓ Make sure your harness fits
- ✓ Use guardrails or lifelines
- ✓ Inspect all fall protection equipment before use
- ✓ Guard or cover all holes, openings, and skylights



DON'T
disconnect from
the lifeline



DON'T
work around unprotected
openings or skylights



DON'T
use defective equipment

PLAN ahead to get the job done safely.
PROVIDE the right roof equipment.
TRAIN everyone to use the equipment safely.



Occupational
Safety and Health
Administration

1-800-321-OSHA (6742) • TTY 1-877-889-5627
www.osha.gov

I worked construction for 10 years
before my fall. It shattered my body
and my livelihood.

Work safely. Use the right equipment.



Safety Pays. Falls Cost.
www.osha.gov/stopfalls/

PLAN ahead to get the job done safely. **PROVIDE** the right equipment. **TRAIN** everyone to use the equipment safely.

FALLS FROM LADDERS CAN BE PREVENTED!

- ✓ Choose the right ladder for the job
- ✓ Maintain three points of contact
- ✓ Secure the ladder
- ✓ Always face the ladder



DON'T
stand on top or on the
top step of a stepladder



DON'T
overreach



DON'T
place the ladder on
uneven footing



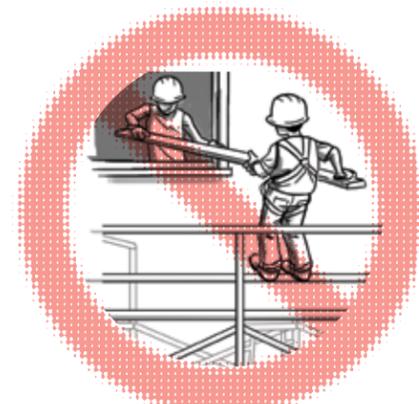
PLAN ahead to get the job done safely.
PROVIDE the right ladder and equipment.
TRAIN everyone to use the equipment safely.

FALLS FROM SCAFFOLDS CAN BE PREVENTED!

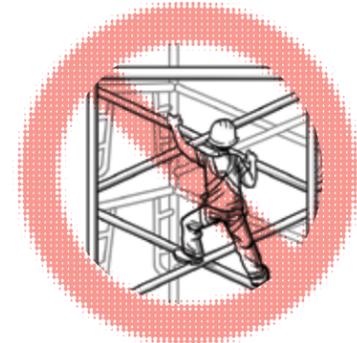
- ✓ Use fully planked scaffolds
- ✓ Ensure proper access to scaffold
- ✓ Plumb and level
- ✓ Complete ALL guardrails
- ✓ Ensure stable footing
- ✓ Inspect before use (by competent person)



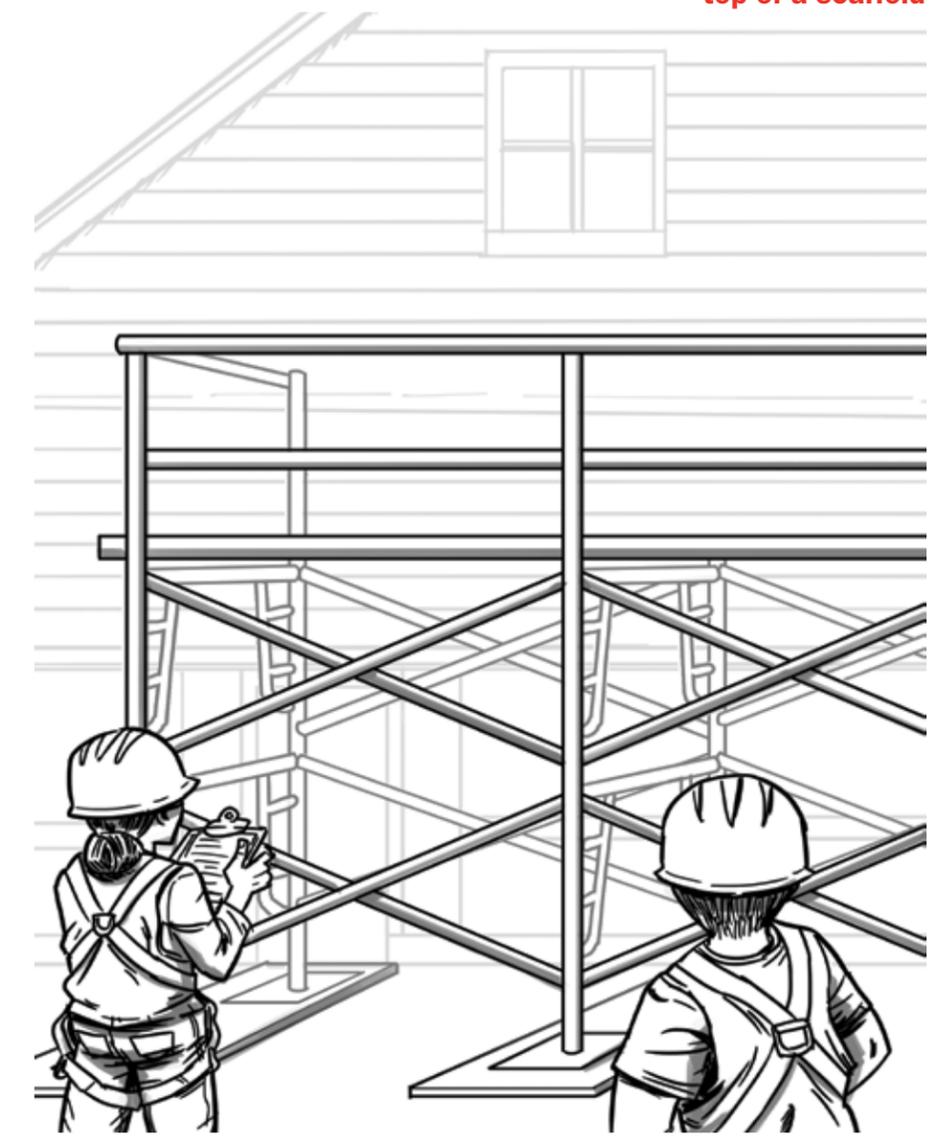
DON'T
use a ladder on
top of a scaffold



DON'T
stand on guardrails



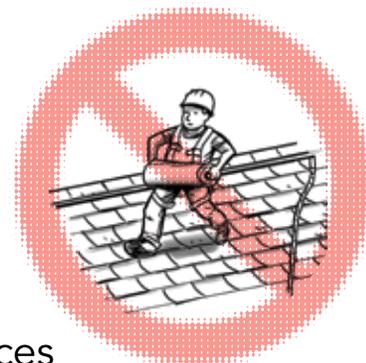
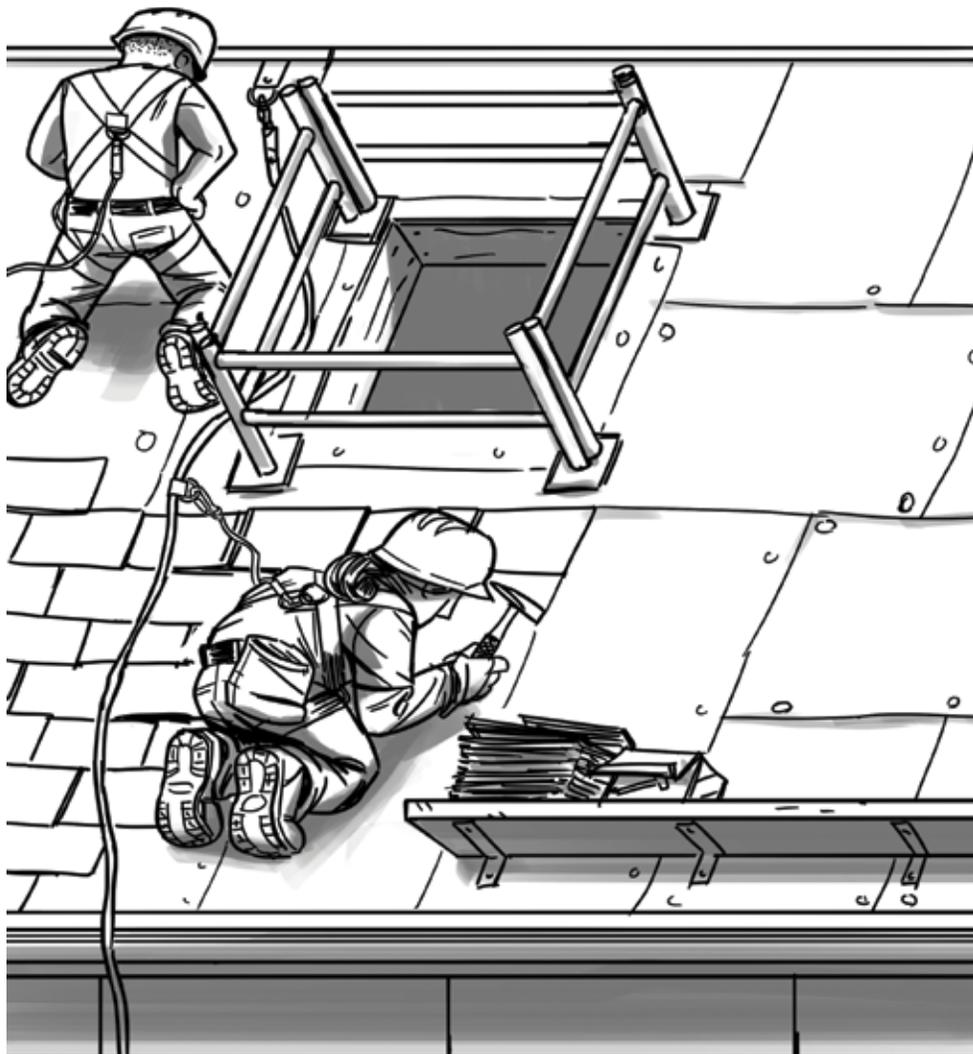
DON'T
climb cross-braces



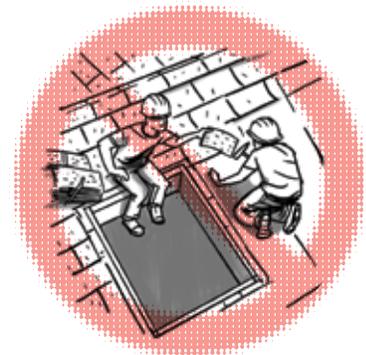
PLAN ahead to get the job done safely.
PROVIDE the right scaffold and equipment.
TRAIN everyone to use the equipment safely.

¡LAS CAÍDAS DESDE TECHOS PUEDEN PREVENIRSE!

- ✓ Use un arnés y siempre quédese conectado
- ✓ Asegúrese de que el arnés le quede a la medida
- ✓ Use barandas o cuerdas de salvamento
- ✓ Inspeccione el equipo de seguridad antes de usarlo
- ✓ Proteja o cubra todos los huecos, aberturas y tragaluces



NO
se desconecte de
la cuerda de
salvamento



NO
trabaje cerca de
tragaluces u aberturas
que no estén protegidas



NO
use equipo defectuoso

PLANIFIQUE con anticipación para hacer el trabajo de forma segura.
PROPORCIONE el equipo para techos correcto.
ADIESTRE a todo el mundo a utilizar el equipo de forma segura.



Departamento de
Trabajo de E.E.U.U.



NIOSH



OSHA® Administración de
Seguridad y Salud
Ocupacional
1-800-321-OSHA (6742) • TTY 1-877-889-5627
www.osha.gov

Trabajé en la construcción por 10 años
antes de mi caída. Destrozó mi cuerpo
y mi forma de ganarme la vida.

Trabaje con seguridad. Use el equipo correcto.



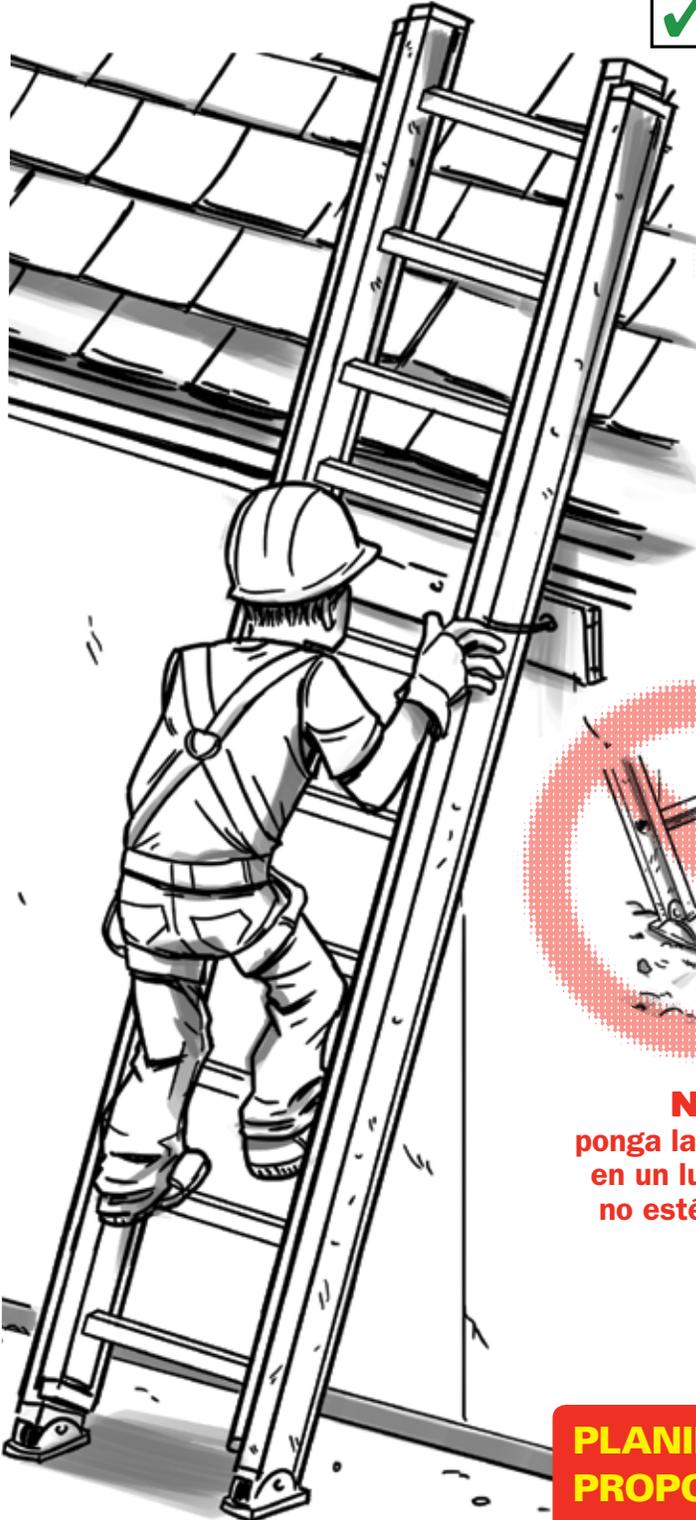
La seguridad paga,
las caídas cuestan.

www.osha.gov/stopfalls/

PLANIFIQUE con anticipación para hacer el trabajo de forma segura. **PROPORCIONE** el equipo correcto.
ADIESTRE a todo el mundo a utilizar el equipo de forma segura.

¡LAS CAÍDAS DESDE ESCALERAS PUEDEN SER PREVENIDAS!

- ✓ Escoja la escalera correcta para el trabajo
- ✓ Mantenga tres puntos de contacto
- ✓ Asegure la escalera
- ✓ Siempre dé la cara a la escalera



NO
se estire para
llegar a lugares
que estén fuera
de su alcance



NO
se pare en el tope o el
último peldaño de una
escalera



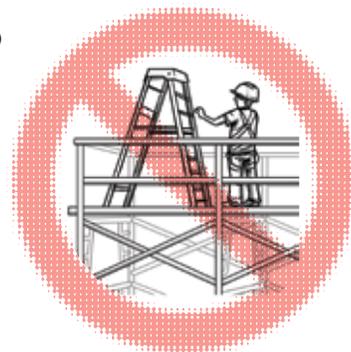
NO
ponga la escalera
en un lugar que
no esté parejo



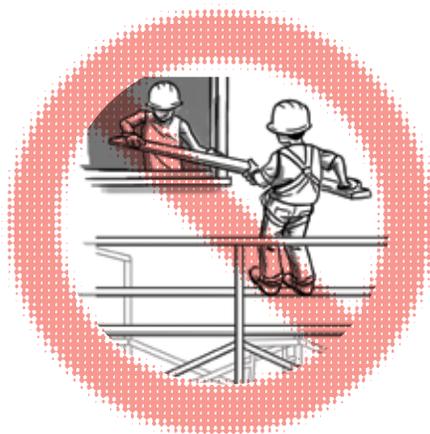
PLANIFIQUE con anticipación para hacer el trabajo de forma segura.
PROPORCIONE la escalera y equipo correctos.
ADIESTRE a todo el mundo a utilizar el equipo de forma segura.

¡LAS CAÍDAS DESDE UN ANDAMIO PUEDEN SER PREVENIDAS!

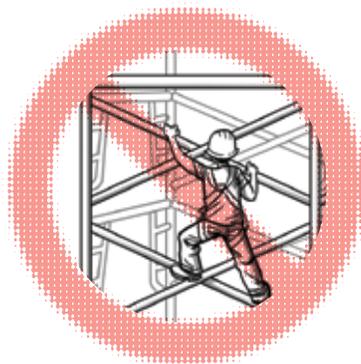
- ✓ Use un andamio que esté totalmente entablado
- ✓ Asegure un acceso apropiado al andamio
- ✓ Aplomado y nivelado
- ✓ Complete TODAS las barandas
- ✓ Asegure un cimiento estable
- ✓ Inspeccione antes de usarlo (por una persona competente)



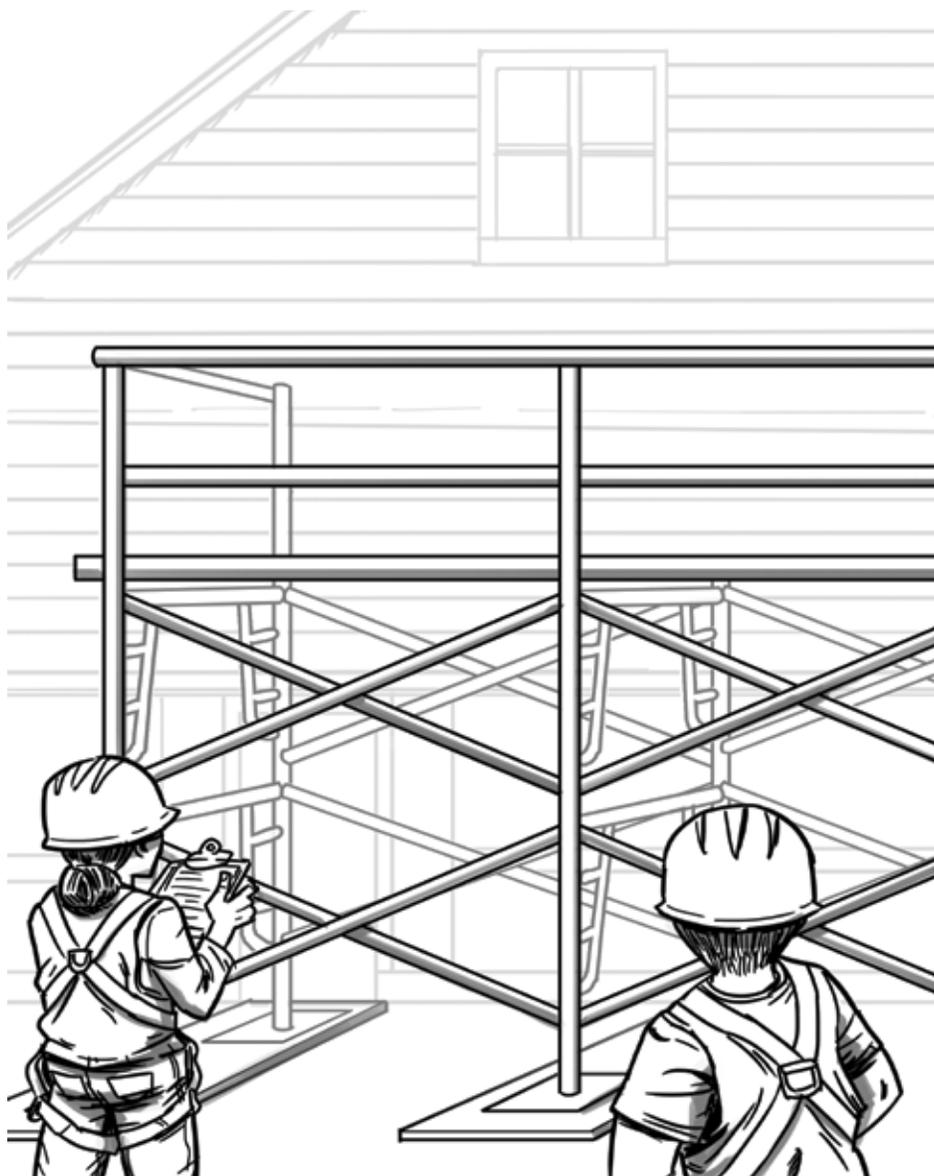
NO
use una escalera
encima del andamio



NO
se pare en
las barandas



NO
suba por
las crucetas



PLANIFIQUE con anticipación para hacer el trabajo de forma segura.
PROPORCIONE el andamio y equipo correctos.
ADIESTRÉ a todo el mundo a utilizar el equipo de forma segura.



Resources referred to throughout the Toolkit



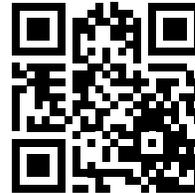
1. [Coronavirus \(COVID-19\)](https://www.go.usa.gov/xvHEE)
go.usa.gov/xvHEE



6. [Symptoms of Coronavirus](https://www.go.usa.gov/xvHmR)
go.usa.gov/xvHmR



2. [Workplaces During the COVID-19 Pandemic](https://www.go.usa.gov/xvucp)
go.usa.gov/xvucp



7. [What to Do If You Are Sick](https://www.go.usa.gov/xvHsF)
go.usa.gov/xvHsF



3. [Restaurants and Bars During the COVID-19 Pandemic](https://www.go.usa.gov/xvuc7)
go.usa.gov/xvuc7



8. [Discontinuation of Isolation for Persons with COVID -19 Not in Healthcare Settings](https://www.go.usa.gov/xvHem)
go.usa.gov/xvHem



4. [Interim Guidance for Businesses and Employers to Plan and Respond to Coronavirus Disease 2019 \(COVID-19\)](https://www.go.usa.gov/xvHma)
go.usa.gov/xvHma



9. [Caring for Someone Sick at Home](https://www.go.usa.gov/xvHew)
go.usa.gov/xvHew



5. [Directory of local health departments](https://bit.ly/LHDDirectory)
bit.ly/LHDDirectory



10. [When and How to Wash Your Hands](https://www.go.usa.gov/xvz7T)
go.usa.gov/xvz7T



11. [Reopening Guidance for Cleaning and Disinfecting Public Spaces, Workplaces, Businesses, Schools, and Homes](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-reopening-guidance)
[go.usa.gov/xvz7R](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-reopening-guidance)



17. [Americans with Disabilities Act](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-americans-with-disabilities-act)
[go.usa.gov/xvHtF](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-americans-with-disabilities-act)



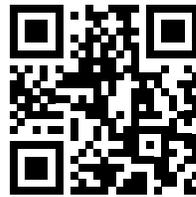
12. [Cleaning and Disinfecting Your Facility](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-cleaning-and-disinfecting-your-facility)
[go.usa.gov/xvzH2](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-cleaning-and-disinfecting-your-facility)



18. [Public Health Recommendations for Community-Related Exposure](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-public-health-recommendations)
[go.usa.gov/xvHz3](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-public-health-recommendations)



13. [Gatherings and Community Events](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-gatherings-and-community-events)
[go.usa.gov/xvHeJ](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-gatherings-and-community-events)



19. [CISA's Guidance on the Essential Critical Infrastructure Workforce](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-cisa-guidance)
[go.usa.gov/xvHuV](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-cisa-guidance)



14. [Use of Cloth Face Coverings to Help Slow the Spread of COVID-19](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-use-of-cloth-face-coverings)
[go.usa.gov/xvzH8](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-use-of-cloth-face-coverings)



20. [Implementing Safety Practices for Critical Infrastructure Workers Who May Have Had Exposure to a Person with Suspected or Confirmed COVID-19](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-implementing-safety-practices)
[go.usa.gov/xvHus](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-implementing-safety-practices)



15. [General Business Frequently Asked Questions](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-general-business-frequently-asked-questions)
[go.usa.gov/xvHtY](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-general-business-frequently-asked-questions)



21. [People Who Are at Higher Risk for Severe Illness](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-people-who-are-at-higher-risk)
[go.usa.gov/xvHJ8](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-people-who-are-at-higher-risk)



16. [EEOC's What You Should Know About the ADA, the Rehabilitation Act and the Coronavirus](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-eeoc-what-you-should-know)
[go.usa.gov/xvHt5](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-eeoc-what-you-should-know)



22. [People Who Need to Take Extra Precautions](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-people-who-need-to-take-extra-precautions)
[go.usa.gov/xvHSR](https://www.eeoc.gov/washington/press/2020/04/2020-04-23-people-who-need-to-take-extra-precautions)



23. [Social Distancing](https://www.go.usa.gov/xvHhV)
go.usa.gov/xvHhV



29. [Print Resources](https://www.go.usa.gov/xv6qa)
go.usa.gov/xv6qa



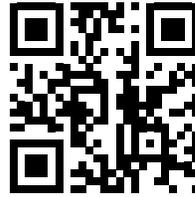
24. [Hierarchy of Controls](https://www.go.usa.gov/xvHhM)
go.usa.gov/xvHhM



30. [Health Promotion Materials](https://www.go.usa.gov/xv6q4)
go.usa.gov/xv6q4



25. [ASHRAE's Guidance for Building Operations During the COVID-19 Pandemic](https://www.bit.ly/ASHRAECOVID19)
bit.ly/ASHRAECOVID19



31. [List N: Disinfectants for Use Against SARS-CoV-2](https://www.go.usa.gov/xv635)
go.usa.gov/xv635



26. [Guidance for Reopening Buildings After Prolonged Shutdown or Reduced Operation](https://www.go.usa.gov/xvHhh)
go.usa.gov/xvHhh



32. [CDC's Travel Health Notices](https://www.go.usa.gov/xv63R)
go.usa.gov/xv63R



27. [Coughing and Sneezing](https://www.go.usa.gov/xv6qN)
go.usa.gov/xv6qN

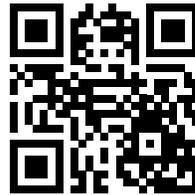


28. [Handwashing: Clean Hands Save Lives](https://www.go.usa.gov/xv6qJ)
go.usa.gov/xv6qJ

Additional Resources



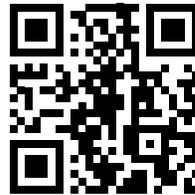
[COVID-19 Factsheets for Businesses and Employers](https://go.usa.gov/xv63M)
go.usa.gov/xv63M



[Hazard Identification and Assessment](https://go.usa.gov/xv6dT)
go.usa.gov/xv6dT



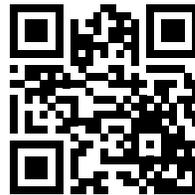
[Personal Protective Equipment](https://go.usa.gov/xv63h)
go.usa.gov/xv63h



[How to Protect Yourself and Others](https://go.usa.gov/xv6dV)
go.usa.gov/xv6dV



[Occupational Safety and Health Administration \(OSHA\) Standards](https://go.usa.gov/xv6ph)
go.usa.gov/xv6ph



[OSHA Ten Steps](https://go.usa.gov/xv6dd)
go.usa.gov/xv6dd



[U.S. Department of Labor](https://go.usa.gov/xv6da)
go.usa.gov/xv6da



[State & Territorial Health Department Websites](https://go.usa.gov/xv6dG)
go.usa.gov/xv6dG



[U.S. Equal Employment Opportunity Commission](https://go.usa.gov/xv6dY)
go.usa.gov/xv6dY



[Coping with Stress](https://go.usa.gov/xv6dg)
go.usa.gov/xv6dg