

# WALKING AND WORKING SURFACES As Part of the OSHA 10 Hour Training for General Industry

# Leader's Guide, Fact Sheet & Quiz

Item Number: 5058

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This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation.

#### PREPARING FOR THE MEETING

Here are a few suggestions for using this program:

- a) Review the contents of the Fact Sheet that immediately follows this page to familiarize yourself with the program topic and the training points discussed in the program. The Fact Sheet also includes a list of Program Objectives that details the information that participants should learn from watching the program.
- b) If required by your organization, make an attendance record to be signed by each participant to document the training to be conducted.
- c) Prepare the area and equipment to be used for the training. Make sure the watching environment is comfortable and free from outside distractions. Also, ensure that participants can see and hear the TV screen or computer monitor without obstructions.
- d) Make copies of the Review Quiz included at the end of this Leader's Guide to be completed by participants at the conclusion of the presentation. Be aware that the pages containing the answers to the quiz come <u>before</u> the quiz itself.

#### **CONDUCTING THE PRESENTATION**

- a) Begin the meeting by welcoming the participants. Introduce yourself and give each person an opportunity to become acquainted if there are new people joining the training session.
- b) Introduce the program by its title and explain to participants what they are expected to learn as stated in the Program Objectives of the Fact Sheet.
- c) Play the program without interruption. Upon completion, lead discussions about your organization's specific policies regarding the subject matter. Make sure to note any unique hazards associated with the program's topic that participants may encounter while performing their job duties at your facility.
- d) Hand out copies of the review quiz to all of the participants and make sure each one completes it before concluding the training session.

## 5058 WALKING AND WORKING SURFACES As Part of the OSHA 10 Hour Training for General Industry FACT SHEET

VIDEO LENGTH: 36 MINUTES COURSE DURATION: 1 HOUR

#### **PROGRAM SYNOPSIS:**

This program provides one hour of training on Walking and Working Surfaces, which is one of the six mandatory training topics selected by OSHA as part of its 10 Hour Training for General Industry Program. In addition to the six hours of training on required topics, OSHA requires four more hours of instruction on various elective topics. The combination of required training and elective training must total 10 hours. The 36-minute video presentation in this program, when combined with the included sectional review quiz questions, will provide approximately one hour of training on Walking and Working Surfaces.

The content in this program is not certified by OSHA, but may be used by an organization as part of a training curriculum which is equivalent to that provided in OSHA's 10 Hour General Industry Training.

Falls from heights and same level falls onto walking or working surfaces are among the leading causes of serious work-related injuries and deaths. To ensure workers are provided with safe working and traveling surfaces, OSHA has developed its regulation, 29 CFR 1910 Subpart D, titled "Walking and Working Surfaces." This rule affects a wide range of workers and those employees covered by the regulation must be trained in the nature of the fall hazards in their work area, how to recognize them and the procedures to be followed to minimize those hazards. This program explains the nature of fall hazards in the workplace, how to recognize them and the procedures that must be followed to minimize those hazards.

Other topics include definitions and requirements of the OSHA regulation, personal fall arrest systems, ladder safety, climbing and descending stairs, scaffolding, safety housekeeping and slip and trip hazards.

#### **PROGRAM OBJECTIVES:**

Upon completion of the program, viewers should be able to explain the following:

- What the primary definitions and requirements of the OSHA standard are;
- What the components of a personal fall arrest system are and how to use them properly;
- How to properly select, inspect, set up and work on various types of ladders;
- How to travel on stairs and work on scaffolding safely;
- What general housekeeping practices to follow to prevent injuries;
- How to avoid slips and falls in the workplace.

#### **INSTRUCTIONAL CONTENT:**

#### **SECTION 1: Regulation Overview**

- The surfaces on which workers walk, stand or perform work must be stable, safe and secure if workers are to remain injury free.
- To ensure workers are provided with safe working and traveling surfaces, OSHA has developed its regulation, 29 CFR 1910 Subpart D, titled "Walking and Working Surfaces."
- Falls from heights and same level falls onto walking or working surfaces are among the leading causes of serious work-related injuries and deaths.
- OSHA's final rule on walking and working surfaces better protects workers in general industry from these hazards by updating and clarifying standards and adding training and inspection requirements.
- The rule affects a wide range of workers and those employees covered by the regulation must be trained in the nature of the fall hazards in their work area, how to recognize them and the procedures to be followed to minimize those hazards.
- The Occupational Safety and Health Administration, OSHA, estimates that, on average, approximately 202,000 serious injuries and 345 fatalities occur annually among workers directly affected by the "Walking and Working"

Surfaces" standard.

- The rule incorporates advances in technology, industry best practices and national consensus standards to provide effective and cost-efficient worker protection.
- Specifically, in subpart D, the rule updates general industry standards addressing slip, trip, and fall hazards and in Subpart I it adds requirements for personal fall protection systems.
- The rule benefits employers by providing greater flexibility in choosing a fall protection system.

#### **SECTION 2: Definitions and Requirements**

- To best understand the requirements of the standard it is important to understand the distinction between the terms "hole" and "opening." Each of these terms has a specific meaning in the OSHA regulations.
- OSHA defines a hole as a gap or open space in a floor, roof, or a horizontal walking or working surface that is at least two inches in its least dimension.
- When a walking or working surface has a hole in it, OSHA requires that fall protection be used to prevent injuries to workers.
- Keep in mind that even though you can't fall through a two-inch hole, small holes can cause you to trip and fall.
- An opening is defined by OSHA as a gap or open space in a wall, partition, vertical walking or working surface or similar surface that is at least 30 inches high and at least 18 inches wide, through which a worker can fall to a lower level.
- OSHA requires that fall protection be used to protect any worker on a walking or working surface that is near an opening.
- OSHA defines fall protection as "any equipment, device, or system that prevents a worker from falling from an elevation or mitigates the effect of such a fall."
- The standard allows an employer to choose the most efficient means of fall protection for the specific fall hazards in the workplace. OSHA allows for several types of fall protection to be utilized, including:
- —Covers,
- —Guardrails,
- —Safety Nets,
- Positioning Systems,
- —Travel Restraint Systems,
- Ladder Safety Systems,
- —Personal Fall Arrest Systems.
- Covers are often used to prevent a worker from falling thru a hole. OSHA requires a cover to be sturdy enough to support at least double the maximum load that may be placed on it at any one time.
- The cover must also be properly secured to prevent accidental removal or displacement.
- A guardrail is a barrier erected along an unprotected or exposed side, edge or other area of a walking-working surface to prevent workers from falling to a lower level.
- A standard guardrail consists of a top rail, a mid-rail, and posts. The vertical height of the top rail from the walking surface must be between 39 and 45 inches. The mid-rail is located between the walking surface and top rail.
- In some situations, a toeboard is also required. A toeboard must be at least four inches tall and run the length of the guardrail. The purpose of the toeboard is to prevent materials from falling to a lower level.
- Safety nets are large webs that are positioned below workers. The safety net is designed to catch a falling worker and prevent him or her from contacting a lower level or obstruction during a fall.
- Safety nets must be installed as close as possible to the walking/working surface on which employees are working.
- An employer must ensure that safety nets are regularly inspected for wear, damage and other deterioration.
- Any tools, equipment or materials that fall into a safety net must be removed as soon as possible to prevent a worker who falls into the net from incurring injury from contact.
- A ladder safety system is attached to a fixed ladder and is designed to reduce or eliminate the potential for a worker to fall off the ladder.
- The worker is connected to the system using a full body harness and lanyard. As the worker climbs, a cable grab or similar device follows the worker along a cable or fixed rail that runs the length of the ladder.
- Should the worker fall, this device locks onto the cable and arrests the fall.
- A travel restraint system uses a harness or body belt to prevent a worker from getting too close to an unprotected edge.

- The worker is secured to an anchor point and the length of the lanyard determines the distance he or she can move.
- The lanyard must be short enough to prevent the worker from falling off the edge of the working surface.

#### **SECTION 3: Personal Fall Arrest Systems**

- Personal fall arrest systems are designed to reduce the amount of force imparted on a worker during a fall event and to prevent a worker from hitting a lower level or the ground should a fall occur.
- A personal fall arrest system consists of three main components: an anchor point, a connecting device and a full-body harness.
- OSHA's general industry regulations require an anchor point be able to support 5,000 pounds of "dead weight" per person connected to it.
- OSHA also requires that a qualified person verify the capacity of any anchor point used as part of a fall arrest system.
- As a worker who must use a fall arrest system, you must understand which structures in your facility have been verified as approved anchor points.

#### **SECTION 4: The Connecting Device**

- The connecting device is used to provide a connection between the body harness and the anchor point.
- There are several types of connecting devices, including single lanyards of various lengths and styles, Y-shaped lanyards designed for moving between anchor points and retractable lanyards.
- Connecting devices that are part of a fall arrest system must be rated to support 5,000 pounds and must be labeled as such.
- Be aware that most lanyards are not designed to cross over a beam or other object and then connect back to its self. This is very dangerous because connecting a lanyard to itself reduces the strength of the lanyard by half.
- In addition, this type of connection exposes the lanyard to the sharp edge of a beam, which may cut the lanyard should a fall occur.
- To prevent this type of damage, protect your lanyard by using a beam strap or other device especially designed for this application instead.
- Connecting devices must feature a double-locking snap hook. A double locking snap hook is designed to prevent an inadvertent opening of the keeper gate.
- A double-locking snap hook requires two separate movements to release the keeper gate of the hook.
- Operating this type of hook takes a bit of practice so make sure you are proficient using it before needing to do so above ground.
- To ensure hooks are oriented for maximum strength during a fall and to prevent accidental disengagement, only connect a snap hook to a compatible device intended for this use by the manufacturer.
- This is why you should not connect one snap hook into another and you must not connect two snap hooks into one D-ring. A D-ring is only designed to accommodate one snap hook.
- Like any other piece of safety equipment, you should always inspect your connecting device prior to use.
- Look for any torn stitching, cuts, tears, frayed materials, burns or chemical damage.
- Inspect the hook and keeper gate for any cracks, bending or distortion.
- Look for any indications that the lanyard has been subjected to the force of a fall.
- Look at any energy-absorbing devices for signs of torn stitching or elongation.
- Lanyards and fall limiting devices may also display a red alert tag or provide an indicator when it has been exposed to the force of a fall.
- Any item exposed to a fall must be removed from service.

#### **SECTION 5: The Full Body Harness**

- A full body harness is designed to distribute the shock load of a fall to multiple points on the body, reducing the likelihood of injury.
- In addition, the harness provides a support platform that allows the worker to remain upright and supported after a fall.
- Before putting on a harness, you must first perform an inspection. Check for damaged webbing, torn stitching or distorted buckles and D-rings.
- Also, inspect for any burns or chemical damage.

- Inspect the harness for any indication it has been exposed to a fall. A harness exposed to a fall must be removed from service.
- Once your inspection is complete, it's time to put the harness on; however, sometimes it's hard to tell one part from another in order to get started.
- One way to sort it out is to find the back D-ring and gently shake out the harness so that it falls into shape.
- Once the harness is hanging properly, you can slip your arms through the shoulder straps using the same techniques as putting on a jacket.
- Next, place the chest strap about mid-chest and tighten; and finally, pull the leg straps around your legs and snugly secure the straps.
- Keep in mind that harnesses are designed to have a snug, secure fit while working above ground. Working above ground with loose legs straps is a common mistake that can lead to injury during a fall event.

#### **SECTION 6: Total Fall Distance**

- Remember that a fall arrest system is designed to prevent a worker from hitting the ground during a fall. For this to be accomplished the worker must consider the height of the anchor point, the length of the lanyard or connecting device, the amount of elongation or "stretch" in the system and the worker's height; in order to calculate the "total fall distance" of a fall event.
- For example, a shock-absorbing lanyard may elongate up to 3 ½ feet during a fall; therefore, a 6-foot tall worker using a 6-foot shock-absorbing lanyard may fall 15 ½ feet when using this type of system.
- After adding in a 3-foot safety factor, we can see that the anchor point must be 18 ½ feet above the ground if the worker is to avoid hitting the ground.
- When an anchor point must be lower than 18 ½ feet above the ground, a shorter lanyard must be selected or a different type of lanyard, such as a personal fall limiter or self-retracting life line must be used.
- These devices are equipped with a quick stop device that will limit the fall distance.
- Consult the manufacturer's instructions to determine the fall distance allowed by any particular device and use this information to ensure the device is adequate for your application.

#### **SECTION 7: Ladder Selection**

- The use of ladders as a traveling or working surface to reach elevated areas is not only very common but is also a leading cause of fall related injuries or death.
- Before selecting a ladder and proceeding with your work, first make sure a ladder is the proper tool for the job. If the planned work will involve a great deal of lateral movement or handling heavy tools and materials, an aerial work platform or scaffolding may be a better choice.
- Once you have determined that it is safe to use a ladder for your task, make it a point to choose the correct ladder for the job.
- When selecting the appropriate ladder, make sure it is tall enough or can be extended far enough to safely reach the job at hand without having to over reach for the work or stand above a safe level.
- The two most common types of ladders are stepladders and straight ladders.
- Straight ladders come in two forms, single units and extension ladders. Extension ladders are straight ladders that can be raised for additional height.
- Stepladders are self-supporting and can be used to reach areas away from walls or other means of support.
- Stepladders have a small area on top and a shelf that can hold small tools and materials. This makes them a good choice for painting and for using small hand tools while elevated.
- A straight ladder must be leaned against a wall or other means of support and has no area for the storage of tools or materials.
- An extension ladder is a good choice to reach very high areas.
- A straight ladder, when secured properly, is a good choice for accessing a higher-level working surface.
- Step stools, rolling ladders and various types of specialty ladders are also common choices used to reach items overhead.
- Most ladders are made of aluminum, wood or fiberglass.
- Keep in mind that aluminum ladders conduct electricity and should never be used when working around sources of electricity. Because of this, many facilities do not allow metal ladders to be used at all.
- Wooden ladders often contain weaknesses and defects that are difficult to identify, especially if the ladder is painted.

- Because of this you, should never paint a wooden ladder and you should never use a wooden ladder that is painted.
- When selecting a ladder make sure the ladder is strong enough to support the workload, which is the weight of the worker combined with the weight of all tools and work materials to be used while on the ladder.
- You can check the label on a ladder for its duty rating, which indicates how much weight it can safely support.
- If you intend to use a specialty ladder or multi-function ladder, make sure you read and understand the instructions on its proper use.
- These types of ladders can be folded and adjusted to accommodate a variety of situations and it's imperative that the ladder is level and all locking mechanisms in place and secure before climbing.

#### **SECTION 8: Ladder Inspection**

- After selecting a ladder, you must conduct a thorough pre-use inspection to ensure that the ladder is in good working order.
- Make sure the rungs aren't loose or damaged and clean off any mud or other slippery substances that could cause a slip or fall.
- Check the side rails for cracks and other defects. Also, make sure they aren't bent, dented or bowed.
- Make sure that screws, hinges, rivets and other components aren't loose or missing.
- Inspect the condition of the feet and foot pads.
- On extension ladders, check to see that the extension rope isn't frayed or damaged. Also, make sure the extension locks work properly.
- On step ladders, the spreaders should be inspected to ensure they are in good condition and are able to lock securely.
- On specialty ladders, all moving parts and securing pins and latches must be verified to be in good condition and operating properly.
- If you discover any damage or defect during your inspection, follow your organization's policies for removing the ladder from service.

#### **SECTION 9: Ladder Set Up**

- Once the ladder has been successfully inspected, it is important to set it up properly.
- When setting up a ladder, make sure there are no power lines or other electrical sources overhead. You and any conductive objects or tools you may be using, must stay at least 10 feet or three meters away from energized electrical parts.
- If the work zone is in an area with frequent vehicle or pedestrian traffic, set up a barricade or have a co-worker serve as a watch to alert others of your presence.
- This will not only protect others from objects that may fall from above but will also help prevent pedestrians and moving equipment from knocking over the ladder while you are working.
- If the work zone is in the path of a doorway, make sure the door is secured or have a co-worker stand watch to prevent collisions.
- The area where the ladder will be erected must be cleared of clutter and debris.
- The ladder must be set up on a solid, level surface. If you encounter a surface or soil that isn't firm, place a large flat board underneath the feet of the ladder to keep it stable.
- Bricks, boxes, rocks and similar objects should not be used to stabilize a ladder, as they can easily shift or kick out of place, causing the ladder to fall.
- If you have any doubts about a ladder's stability after set up, use a rope or a stabilizing strap to tie it off to a sturdy, immobile object to prevent the ladder from slipping or sliding.
- A straight ladder should be set up at a 75-degree angle. To achieve this, you should place it one foot away from the wall for every four feet of ladder height.
- For example, if the ladder makes contact with the wall at 20 feet, the feet of the ladder should be placed five feet from the wall.
- The upper section of an extension ladder can also be raised by pulling the rope. When it reaches the height you need, relax the rope so that the upper section drops slightly to engage the locking hooks.
- Any ladder used to access another level must extend three feet or one meter above the landing area and be securely tied off.

#### **SECTION 10: Safe Ladder Use**

- Here are some tips for climbing and working on a ladder safely. First, make sure the soles of your shoes or boots are clean and that your shoelaces are tied before starting your climb.
- Don't climb the ladder while holding anything that could cause you to lose your balance.
- Place your tools in your tool belt or have a co-worker hand them up to you.
- You may also want to use a rope and bucket to haul up tools and materials to the work zone.
- Always face the ladder while climbing and maintain three-point contact by always having one hand and two feet or two hands and one foot on the ladder at all times.
- Climb the ladder slowly and carefully. Climbing too fast can shake the ladder and cause you to lose your balance or cause the ladder to fall.
- While working on any ladder, avoid overreaching and do not lean beyond the side rails.
- One way to remember this is to always keep your belt buckle between the two ladder rails.
- If you must use both hands to perform your task, use your body as the third point of contact with the ladder while working in a stationary position.
- Never use the top two steps on a stepladder or the top three rungs on a straight ladder.
- If you can't reach the work safely, climb down and get a taller ladder. Also, climb down anytime you need to move or reposition your ladder.
- Never attempt to "walk", "bounce" or "hop" a ladder from one place to another.
- Also, do not sit on or straddle the top of a step ladder and do not climb the back of a step ladder or place any body weight on the paint shelf or spreaders. These areas are not designed to support your body weight.
- Only one worker is permitted on a ladder at a time. The weight of a second worker could overload the ladder or cause the ladder to become unstable.
- When it comes to climbing fixed ladders, these same safety rules apply. Make sure your feet are clean, maintain three-point contact, climb slowly and carefully, do not carry tools or items in your hands and only place on person at a time on any one fixed ladder section.
- OSHA regulations now require that when facilities install a new fixed ladder that extends more than 24 feet, it must be equipped with a personal fall arrest system or a ladder safety system to help prevent worker injury should the worker slip and fall from the ladder.
- Eventually, this type of fall protection equipment will be required on all fixed ladders that extend more than 24 feet.

#### **SECTION 11: Stairs**

- All stairways with four or more vertical risers must also be guarded with handrails fastened to a wall or stairway rails supported by uprights.
- To be effective, standard railings must be 30 to 34 inches above the surface of the stair tread, and the handrails must have at least three inches of clearance around them, so you can get a good grip.
- When going up or down stairs, always use the handrail and only take one step at a time.
- Be aware that most fall injuries that occur on stairs occur on the first two or last two stairs.
- Always place your feet solidly on the entire tread of treaded stairs to help maintain balance and a more secure footing.
- If you must carry items up or down stairs, make sure the load doesn't block your forward vision or prevent you from maintaining one hand on the handrail.
- If this isn't feasible or possible, break the load down into smaller units, seek assistance or use an elevator or seek an alternate route.
- Stairways and landings should be kept clear of tools, boxes and other clutter that can become tripping hazards.
- Spills and debris on stairs should be cleaned up immediately.
- If you notice any problems on stairways such as loose railings or damaged floor coverings, follow your organization's policies for marking the hazard and having the issue repaired.
- Finally, never go up or down a stairway that is poorly lit. Notify the proper authority to ensure proper lighting is installed or replaced.

#### **SECTION 12: Scaffolding**

Scaffolding is another type of elevated work surface that is addressed by OSHA's regulation.

- Employees who perform work on a scaffold must be trained by a qualified person to recognize the hazards associated with the type of scaffold being used and to understand how to minimize those hazards.
- In addition, if you are involved in erecting, disassembling, moving, operating, repairing, maintaining or inspecting a scaffold, you must be trained by a competent person to recognize any hazards associated with the specific work and to understand any pertinent requirements.
- Scaffolds can be erected using wood plank, fabricated planks, fabricated platforms and fabricated decks.
- In most situations, all scaffolds and their components must be able to support the weight of the structure and at least four times the maximum intended load, which is the combined weight of all personnel, equipment and any other items that will be on the scaffold at the same time.
- If the height of a scaffold's platform is more than 10 feet above a lower level, a personal fall arrest system, guardrail system or other form of fall protection is required.
- If a guardrail system is utilized for fall protection, it must be installed on all open sides and ends of platforms before the scaffold is approved for use by employees other than the erection and dismantling crews.
- To prevent falling objects from striking workers below a scaffold, either the area around the scaffold must be barricaded to prevent entry or toeboards must be installed along the edge of the scaffold's platforms to prevent falling objects.
- If tools or supplies are stacked higher than the top edge of a toeboard, screens, debris nets, canopies or guardrails must be used to keep them from falling.
- The working surface of a scaffold should remain free of excessive amounts of tools, debris or other items that may fall or become a tripping hazard.
- Workers on, around or below scaffolds must wear hardhats at all times.
- Whenever a scaffold platform is more than two feet above or below the point of access, a suitable ladder, stair tower, ramp, walkway, personnel hoist or other suitable structure is required for access.
- When climbing a scaffold ladder, maintain thee points of contact when climbing. Do not climb on the scaffold's cross braces.
- Do not climb while carrying tools or materials. Use a basket and towline, crane or lift to raise or lower materials to and from a scaffold.
- Working on a scaffold is prohibited whenever covered by snow, ice or other slippery material except during the removal of such hazards.
- Also, do not use a scaffold during heavy rain and thunderstorms.

#### **SECTION 13: Dock Boards**

- A dock board is a portable or fixed device that spans a gap or compensates for a difference in elevation between a loading platform and a transport vehicle. This includes bridge plates, dock plates and dock levelers.
- Dock boards must be verified as capable of supporting the maximum intended load.
- Dock boards must either be anchored in place or be prevented from moving out of a safe position by other equipment or by sufficient contact with the surface.
- In addition, measures such as the use of wheel chocks or dock locks must be used to prevent the transport vehicle or trailer from moving while the dock board is in place.
- When a dock board is used solely by motorized equipment engaged in material handling operations and the dock board is not more than 10 feet above a lower level, then guardrails and handrails are not required.
- In any other instance, guardrails or handrails must be installed to protect workers on dock boards from falling four feet or more to a lower level.

#### **SECTION 14: Safety Housekeeping**

- Good housekeeping goes a long way in preventing slips, trips and falls as well as other situations that often lead to injury.
- Good housekeeping is one of a worker's most important job responsibilities. Practicing good housekeeping procedures must be incorporated into every job and is an integral part of all workers' commitment to workplace safety.
- A messy cluttered work area has many negative effects. For example, an unorganized and messy work area often leads to a worker getting behind in his or her work.
- Getting behind often leads to rushing and frustration, which can quickly cascade into a domino effect of unsafe acts and conditions, resulting in injury. Good housekeeping can prevent this.

- To keep your work area clutter-free, only keep the amount of work supplies needed for your shift on hand.
- Don't store items on stairs, in aisle ways or in front of exits, even for just a short time.
- Make sure areas in front of emergency equipment such as fire extinguishers, eyewash stations and safety showers are not blocked.
- Exit doors and emergency equipment must always be readily accessible and must never blocked or obstructed.
- Tools should be returned to their proper storage location after each use so they can be easily found again when needed and so they won't clutter your work area.
- Falls are the second leading cause of workplace fatalities and the third most common cause of disabling employee injuries.
- Messy or cluttered work areas or travel paths are a factor in many slip, trip and fall injuries. This is just one reason that good housekeeping is so important to preventing injuries.

#### **SECTION 15: Trip and Slip Hazards**

- Tripping hazards come in many forms, including cords and hoses draped across walkways, work materials and tools obstructing aisles and work areas and open file cabinet drawers.
- Make sure to close any drawers once you have finished inserting or removing documents from them.
- Secure cords properly either by marking them as a hazard or taping them to the floor.
- Remember that cords should only cross walkways and aisles temporarily and should be removed as soon as they are no longer needed.
- Travel areas should also not be used for storage.
- Ladders, toolboxes, pallets, buckets and similar items have no place being stored in travel areas, as they can easily become tripping hazards.
- Scrap items and byproducts should be disposed of in proper containers or stacked out of walkways until they can be removed.
- Be aware that stacked materials such as pallets, boards and pipes can shift and move during your work.
- If you discover a tripping hazard, correct the situation if you are able and can do so safely; otherwise, mark the hazard to alert others and follow our organization's protocol for having it corrected.
- Another essential component of good housekeeping and fall prevention is preventing and correcting slipping hazards. Many workplace injuries occur when slippery conditions go unnoticed or ignored.
- Metal shavings, sawdust and other byproducts of equipment and machine operations can easily accumulate to become slipping hazards. Areas where this occurs should be swept on a regular basis.
- If you notice a spill of a non-hazardous liquid, make sure to mark it with a sign or barrier and then take the appropriate steps to clean it up right away.
- Be aware that many substances are considered hazardous and require special clean up procedures by an emergency response team.
- If you notice a leak or spill of a hazardous material or chemical, follow your organization's policies for reporting it so qualified personnel can clean it up properly.
- Slip hazards that are caused by inclement weather often go unnoticed and uncorrected, especially around doorways and exits to the outside.
- Be sure to mark these hazards also and notify the appropriate personnel to rectify the unsafe condition.
- A loss of traction between footwear and the traveling surface is another common cause of falling. To prevent these types of falls, be sure to wear the proper footwear for the traveling surface.
- Many types of safety footwear are equipped with slip-resistant soles. Certain types of soles are designed to provide traction on specific surfaces and under specific conditions.
- Also be aware that slippery substances can become stuck on the bottom of our footwear. This can also cause a loss of traction and a slip and fall.
- Inspect the soles of your footwear for mud, grease or other slipping hazards and clean them off before proceeding to your work area each day.

#### **SECTION 16: Conclusion**

- As we have learned in this program, OSHA's Walking and Working Surfaces regulation was created and updated to better protect all workers from the dangers related to fall hazards in the workplace.
- OSHA's regulation achieves this by requiring worker training on the nature of the fall hazards in their work area, how to recognize them and the procedures that must be followed to minimize those hazards.

## WALKING AND WORKING SURFACES As Part of the OSHA 10 Hour Training for General Industry

#### **ANSWERS TO THE REVIEW QUIZ**

### **SECTION 1: Regulation Overview** 1. a 2. d 3. c **SECTION 2: Definitions and Requirements** 1. b 2. c 3. a 4. a **SECTION 3: Personal Fall Arrest Systems** 1. a 2. d 3. a **SECTION 4: The Connecting Device** 1. b 2. d 3. a **SECTION 5: The Full Body Harness** 1. a 2. b 3. b

SECTION 6: Total Fall Distance
1. a
2. b
3. a
SECTION 7: Ladder Selection
1. c
2. a
3. b
SECTION 8: Ladder Inspection
1. a
2. e
3. a
SECTION 9: Ladder Set Up
1. a
2. a
3. c
SECTION 10: Safe Ladder Use
1. a
2. a
3. c
SECTION 11: Stairs
1. b
2. a
3. c
4. b

SECTION 12: Scaffolding						
1. a						
2. c						
3. d						
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SECTION 13: Dock Boards						
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SECTION 14: Safety Housekeeping						
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SECTION 15: Trip and Slip Hazards						
1. b						
2. b						
3. a						

## WALKING AND WORKING SURFACES As Part of the OSHA 10 Hour Training for General Industry REVIEW QUIZ

The following questions are provided to determine how well you understand the information presented in this program. Name Date **SECTION 1: Regulation Overview** 1. Falls from heights and same level falls onto walking or working surfaces are among the leading causes of serious work-related injuries and deaths. a. True b. False 2. Employees covered by the Walking and Working Surfaces regulation must be trained \_\_\_\_\_\_. a. In the nature of the fall hazards in their work area b. How to recognize fall hazards c. The procedures to be followed to minimize fall hazards d. All of the above 3. Which section of the Walking and Working Surfaces rule includes requirements for personal fall protection systems? a. Section G b. Section H c. Section I d. Section J **SECTION 2: Definitions and Requirements** 1. When a walking or working surface has a hole in it, OSHA does NOT require fall protection be used unless it is large enough for a worker's body to fall through it. a. True b. False 2. An opening is defined by OSHA as a gap or open space in a wall, partition, vertical walking or working surface or similar surface that is at least \_\_\_\_\_ high and at least 18 inches wide. a. 18 inches b. 24 inches c. 30 inches 3. A toeboard must be at least \_\_\_\_\_ tall and run the length of a guardrail. a. 4 inches b. 8 inches c. 12 inches 4. Any tools, equipment or materials that fall into a safety net must be removed as soon as possible. a. True

b. False

#### **SECTION 3: Personal Fall Arrest Systems**

a.	A personal fall arrest system consists of an anchor point, a connecting device and a full-body harness.  True False
	OSHA's general industry regulations require an anchor point be able to support of "dead weight" per rson connected to it.
b. c.	500 pounds 1,000 pounds 2,500 pounds 5,000 pounds
ve	As a worker who must use a fall arrest system, you must understand which structures in your facility have been rified as approved anchor points.
-	True False
SE	CTION 4: The Connecting Device
	Connecting devices that are part of a fall arrest system must be rated to support up to 1,000 pounds and must be beled as such.
	True False
2.	Crossing a lanyard over a beam and then connecting it back to itself is very dangerous because
b. c.	It reduces the lanyard's strength by half It creates a tripping hazard on the beam The sharp edge of the beam may cut the lanyard during a fall Both answers a and c
	Snap hooks should not be connected into another snap hook and two snap hooks should not be connected into one ring.
	True False
SE	CTION 5: The Full Body Harness
1.	Any full body harness that has been exposed to a fall must be removed from service.
	True False
2.	When putting on a full body harness, you should place the chest strap about and tighten.
	Lower chest Mid-chest
	Upper chest
	Harness leg straps are designed to have a very loose fit while working above ground.
	True False

#### **SECTION 6: Total Fall Distance**

a. Trueb. False

1. Which of the following is NOT a factor in calculating the total distance a worker will fall during a fall event?
a. The height of the anchor point
b. The height of the worker
c. The length of the connecting device
d. The elongation or "stretch" of the system
2. A safety factor of must be added to the total fall distance calculation.
a. Two feet
b. Three feet
c. Four-feet
3. A personal fall limiter or self-retracting lifeline may be used when it is necessary to further limit the total fall distance
a. True
b. False
SECTION 7: Ladder Selection
1 are a good choice for reaching very high areas.
<ul><li>a. Stepladders</li><li>b. Single straight ladders</li></ul>
c. Extension ladders
e. Extension ladders
2. Aluminum ladders should NEVER be used when working around sources of electricity.
a. True
b. False
3. You should only use a painted wooden ladder if you are sure it didn't contain any defects before it was painted.
a. True
b. False
SECTION 8: Ladder Inspection
1. After selecting a ladder, you must conduct a thorough pre-use inspection to ensure that the ladder is in good working
order.
a. True
b. False
2. Which of the following should be checked during a ladder inspection?
a. The side rails for cracks or other defects
b. The rungs to see if they are loose or damaged
c. The condition of the feet and foot pads
d. Screws, hinges and rivets to make sure they aren't loose or missing
e. All of the above
3. If you discover any damage or defect during a ladder inspection, the ladder should be removed from service.

1.	When setting up a ladder, you must make sure to stay at least away from energized parts.			
a.	10 feet			
	13 feet			
c.	16 feet			
2.	If you encounter a surface or soil that isn't firm when setting up a ladder, place underneath the feet			
of	the ladder to keep it stable.			
a.	A large flat board			
	Bricks or rocks			
c.	Books or boxes			
3.	A straight ladder should be set up at a angle.			
	55-degree			
	65-degree			
	75-degree			
a.	85-degree			
SE	SECTION 10: Safe Ladder Use			
	When climbing a ladder, you should maintain three-point contact by always having one hand and two feet or two nds and one foot on the ladder at all times.			
a.	True			
b.	False			
2.	When working on a ladder, you can use your body as the third point of contact.			
a.	True			
b.	False			
3.	A newly installed fixed ladder that extends more than must be equipped with a personal fall arrest			
sy:	stem or a ladder safety system.			
a.	12 feet			
	18 feet			
c.	24 feet			
SE	SECTION 11: Stairs			
1.	To be effective, standard railings must be above the surface of the stair tread.			
a.	24 to 30 inches			
	30 to 34 inches			
c.	44 to 48 inches			
2.	Most fall injuries that occur on stairs occur on the first two or last two stairs.			
a.	True			

**SECTION 9: Ladder Set Up** 

b. False

	Which of the following is NOT a good solution to a load that blocks your forward vision or prevents you from aintaining one hand on the handrail?
	Break the load down into smaller units Seek assistance
c.	Turn around and walk backwards with the load
	Use an elevator Seek an alternative route
4.	You should only go up or down a stairway that is poorly lit if it is a familiar route that you take regularly.
	True
b.	False
SE	CTION 12: Scaffolding
	Employees who perform work on a scaffold must be trained by a qualified person to recognize the hazards associated th the type of scaffold being used and to understand how to minimize those hazards.
	True False
	In most situations, all scaffolds and their components must be able to support the weight of the structure and at ast the maximum intended load.
	Twice Three times
	Four times
3.	Which of the following workers are required to wear a hardhat?
	Those working on a scaffold  Those working around a scaffold
c.	Those working below a scaffold
d.	All of the above
	Working on a scaffold is prohibited whenever covered by snow, ice or other slippery material except during the moval of such hazards.
-	True False
SE	CTION 13: Dock Boards
1.	A dock board used between a loading platform and transport device may be portable or fixed.
	True False
2.	Dock boards must be verified as capable of supporting the maximum intended load.
	True False
	When a dock board is used solely by motorized equipment engaged in material handling operations and the dock pard is not more than above a lower level, then guardrails and handrails are not required.
	10 feet
	15 feet 20 feet

#### **SECTION 14: Safety Housekeeping**

- 1. Good housekeeping is one of a worker's most important job responsibilities.
- a. True
- b. False
- 2. Items should only be stored on stairs, in aisle ways or in front of exits for brief periods before being moved to their proper storage area when it is more convenient.
- a. True
- b. False
- 3. Tools should be returned to their proper storage location after each use.
- a. True
- b. False
- 4. Which of the following are benefits of good housekeeping?
- a. Eliminates messy and cluttered work areas
- b. Helps work tasks stay on schedule
- c. Prevents rushing and frustration
- d. Reduces slip and trip hazards
- e. All of the above

#### **SECTION 15: Trip and Slip Hazards**

- 1. Cords may be permanently run across walkways and aisles if they are taped to the floor securely and marked as a hazard.
- a. True
- b. False
- 2. You should only correct those tripping hazards that you have created.
- a. True
- b. False
- 3. Many substances are considered hazardous and require special clean up procedures by an emergency response team.
- a. True
- b. False