# **Working Together Safely—Standards for Theocratic Construction and Maintenance**

February 2022

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## INTRODUCTION

- 1. It is a great privilege to serve Jehovah on theocratic projects! We warmly commend you for making yourself available. As we carry out this important activity, how would Jehovah want us to work? He wants us to work together safely.
- 2. As the "Grand Creator," Jehovah God considers life sacred. (Eccl. 12:1; Ps. 36:9) He views all humans as precious and worth protecting. As his servants, we can show that we share his view by applying Scriptural principles in our work habits—never taking unnecessary risks or disregarding safety standards.—Deut. 22:8; Eccl. 10:9.
- 3. Proverbs 3:21-23 says that if you "safeguard practical wisdom and thinking ability . . . , then you will walk on your way in safety." Our goal on all theocratic projects is to carry out our work with zero accidents. This can be achieved if each of us maintains a good attitude toward safety and always chooses to work safely. Therefore, overseers should plan work carefully and ensure that workers are trained and equipped to complete their tasks safely. Volunteers should be quick to follow direction, observe all safety standards, and apply the training they receive.
- 4. This document provides *minimum* safety standards that form part of the organization's safety-awareness program. Please refer to this document before working on any theocratic project. This is your personal copy.
- 5. Chapter 1 discusses general safety and must be read by all volunteers. Chapter 2 deals with high-risk work and must be read by those authorized to do such work. Appendix A lists some of the responsibilities of those who oversee projects at a local Kingdom Hall.
- 6. Jesus said that his true followers would be identified by their love for one another. (John 13:35) One way we can demonstrate this love is by doing all we can to contribute to a safe work environment. We pray for Jehovah's continued blessing on all our theocratic projects and on the efforts we make to keep *working together safely*.—Ps. 127:1.

## CHAPTER 1 BASIC HEALTH AND SAFETY STANDARDS

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## SITE ACCESS CONTROL

- 1. Only volunteers with approved applications or who are authorized by their local elders may work on theocratic construction and maintenance projects. In this document, "project" refers to such construction activities as building, renovation, demolition, disaster reconstruction, and high-risk maintenance work, not to basic maintenance work or minor cleaning tasks. "Site" refers to the location where the work is being carried out, such as a Kingdom Hall, an Assembly Hall, a remote translation office, or a disaster relief site.
  - (1) All construction or maintenance project sites will contain one or more restricted access zones. These restricted access zones consist of the following:
    - General construction and maintenance work areas.
    - High-risk work areas, which include but are not limited to

- Demolition
- Working where the fall distance is 1.8 meters (6 ft) or more, such as from a roof or an elevated platform or near an excavation
- o Working in trenches or excavations of 0.9 meters (3 ft) or more in depth
- Working with or near heavy equipment
- Working near cranes or where loads are being lifted overhead
- (2) Oversight must ensure that the site is structurally safe and that restricted access zones are clearly marked with signs or barriers. Access points to these zones should constantly be monitored so that only people and vehicles authorized by oversight can enter.
- (3) Volunteers must be authorized by oversight to enter a restricted access zone and must comply with any direction provided regarding these zones.
- (4) Any person entering kitchens or food-preparation areas must be authorized by oversight.
- (5) Unless specifically authorized by oversight, no visitors are allowed in any restricted access zone. Authorized visitors must be accompanied by an individual assigned by oversight who is familiar with the risks and the layout of the site. All visitors must wear the protective equipment required for that restricted access zone.

## MINIMUM AGE REQUIREMENTS

- 2. **General Construction and Maintenance Work Areas:** Volunteers who are 17 years of age may work on construction and maintenance projects as long as they are properly supervised and doing so does not violate local government regulations. They, however, are not allowed to perform high-risk work, such as that listed in Chapter 2 of this document.
- 3. **High-Risk Work Areas:** Volunteers who are 18 years of age or older may perform high-risk work if they have been authorized by oversight and have received appropriate training.

## PERSONAL HEALTH AND ATTIRE

4. Be sure to bring a copy of *Working Together Safely—Standards for Theocratic Construction and Maintenance* (printed or electronic) whenever you are on a project, and carry your durable power of attorney (DPA) card at all times.—*km* 1/12 p. 3.

## 5. Personal Health:

- (1) Stay home if you are sick.—Phil. 2:4; *g16.6* p. 6.
- (2) Come to work well-rested and in good physical condition.—DC-80 No. B3.
- (3) Avoid touching your eyes, nose, and mouth with unwashed hands.—q 6/15 p. 3.
- (4) Cough or sneeze into a tissue or the inside of your elbow, not into your hands.
- (5) Wash hands with soap and water for at least 20 seconds after using the washroom, before handling food, or after blowing your nose, coughing, or sneezing.
- (6) Take steps to avoid heat illness and overexposure to the sun. For example, drink plenty of water to prevent dehydration during hot and humid weather.—*g98* 3/22 p. 31; DC-80 No. C10.
- (7) Take steps to avoid hypothermia and frostbite. For example, wear warm clothing or take breaks as needed to warm up.—DC-80 No. C8.

- (8) Take your time and walk carefully in potentially slippery areas, especially surfaces covered by snow and ice.
- (9) Never drive while drowsy. If you feel drowsy, find a safe place to stop and get some sleep.—*g* 7/11 p. 11, box; DC-80 No. H6.
- (10) Show modesty by not doing any work that is beyond your limitations, especially if you are of advanced age, have suffered a previous injury, or have a medical condition. Any limitations should be clearly communicated to your overseer.—Mic. 6:8.

## 6. Attire:

- (1) All volunteers on a project must wear long pants, shirts with short or long sleeves, and suitable footwear.
- (2) Clothing should be modest, not tight or revealing, regardless of working posture.
- (3) Jewelry—including rings, bracelets, necklaces, and hanging earrings—pose a hazard and should not be worn.
- (4) Long hair should be tied back while working.

## SAFE WORK HABITS AND CONDUCT

- 7. Take time to understand how to do each task safely. If you are asked to complete a task that appears unsafe, ask for clarification and carry on only when you can do so safely. A *Job Hazard Analysis* (DC-83) or a *Congregation Job Hazard Analysis* (DC-85) may be reviewed with you before you start certain work. If you have any suggestions to enhance safety, please speak with your overseer.—*g02* 2/22 pp. 4-7; *g85* 7/8 pp. 4-8.
  - (1) Work at a reasonable pace and in a way that will not endanger your safety or that of others (do not take shortcuts; do avoid distractions and overconfidence).
  - (2) Make it a habit to correct quickly any unsafe actions or conditions, especially those brought to your attention by oversight or others.—DC-80 No. B2.
  - (3) Report all near misses to your overseer. The lessons learned from a near miss may prevent an injury or a fatality in the future.—DC-80 No. B1.
  - (4) Practice safe material handling and lifting techniques, and display modesty by getting help when carrying heavy or bulky items.—DC-80 No. C5.
  - (5) Avoid working alone at a site. It is unsafe.
  - (6) Do not text while walking. Mobile devices should be used only in a safe location.
  - (7) Do not bring alcohol to a site. Alcohol can impair your ability to work safely and should not be consumed immediately before or while working.
  - (8) Do not play tricks on others. These can lead to injury.—Prov. 26:19; DC-80 No. B4.
  - (9) Obey all safety guidelines. Volunteers who disregard safety standards after being warned may be asked to leave the project.

## MAINTAINING A SAFE WORK ENVIRONMENT

8. Each individual should maintain a safe work environment by keeping assigned work areas clean, orderly, and secure. A tidy site is a safe site.—DC-80 Nos. A2, J1, J2.

## 9. Housekeeping:

- (1) Regularly examine your surroundings for hazardous conditions, such as items that are damaged or have sharp, unprotected edges or anything that could lead to an injury, property damage, or a fire. If it is not safe to remove the hazard, speak with your overseer.
- (2) Keep work areas free of clutter. Dispose of debris promptly and in appropriate containers.
- (3) Make sure that walkways and other locations are free of slip or trip hazards, such as hoses, cords, or wet surfaces. If hoses or cords cannot be moved to a safer location, ensure that they are firmly fixed in place and clearly marked.
- (4) Work areas should be well-lit, especially stairways and access paths in the work area.
- (5) Place a protective cover on any sharp or protruding objects, such as rebar, stakes, lightning rods, or anything that can be an impalement hazard. Remove any exposed nails, or bend them over.
- (6) Ensure that hazardous wastes are stored and disposed of in accordance with organizational guidelines and local government regulations.
- (7) Dust may contain unknown hazards. Therefore, when sweeping, wet the area and sweep in a way that prevents the dust from becoming airborne. Use only vacuum cleaners that are approved by oversight and that have filters appropriate for the materials being vacuumed.
- (8) Always maintain clear access to emergency exits, fire extinguishers, and electrical panels.

## 10. Stacking and Storage:

- (1) Stack items in such a way that they do not collapse, tip, or fall.
- (2) Store heavier items so that they can be handled by volunteers without causing injury.
- (3) Store materials in a way that does not create a trip hazard or block aisles, passageways, or stairways.
- 11. **Weather:** Be alert to changing weather conditions. If severe weather develops, seek adequate shelter and follow direction from your overseer.

## PERSONAL PROTECTIVE EQUIPMENT

12. Good-quality personal protective equipment (PPE) that is approved by oversight must be used on all construction and maintenance projects. PPE must always be in good condition, fit properly, and be comfortable enough to work in all day. Refer to the *Job Hazard Analysis* (DC-83) or *Congregation Job Hazard Analysis* (DC-85) for any PPE needed to accomplish specific tasks.

# 13. Head Protection:

- Always wear hard hats in project areas where construction and construction like activities are being performed. Appropriate head protection must be worn during maintenance of areas where workers are at risk of head injury.
- (2) Before work begins each day, inspect head protection for damage, such as holes or cracks in the shell or tears in the suspension system. Replace head protection if it appears damaged, it is past its expiration date, or it received a major blow.—DC-80 No. C6.

14. **Protective Footwear:** Always wear protective footwear in construction and maintenance work areas. Protective footwear should be appropriate for the type of work being done and the work environment. Never wear open-toed shoes or sandals in work areas.—DC-80 No. C1.

# 15. Eye Protection:

- (1) **Safety Glasses:** Always wear safety glasses in construction and maintenance work areas. Replace them if they become scratched or hinder visibility.—DC-80 No. C2.
- (2) **Goggles:** Safety goggles should be worn when working with chemicals, as required by the chemicals *Safety Data Sheet* (SDS), or when exposed to flying debris, such as dust, concrete, metal, wood.
- 16. **Face Protection:** To protect your face from chemical splashes or flying debris, such as when grinding or chipping or when cutting or drilling overhead, wear a face shield over your safety glasses or goggles.—DC-80 No. C2.

# 17. Respirators:

- (1) Wear properly fitted respirators—either disposable or reusable—when you are exposed to respiratory hazards, such as dust, mold, smoke, sprays, vapors, viruses.
- (2) Although not considered a respirator, a simple dust mask may provide some relief from nonhazardous airborne dusts but will not adequately protect the wearer from respiratory hazards.
- (3) Self-test the respirator for a good fit to ensure its effectiveness. A good fit requires skin-to-mask contact. Speak with your overseer for training on proper respirator use.
- (4) Volunteers are responsible for maintaining their own respirators as well as following the manufacturer's replacement schedules for the respirator and filter. Replace the respirator when it becomes clogged, torn, or ineffective.—DC-80 No. D2.
- 18. **Hearing Protection:** Always wear hearing protection in high-noise environments. The selection and type of hearing protection should be adequate to protect against the noise levels present. Adequate hearing protection may include wearing earplugs, earmuffs, or both in very high-noise environments.—DC-80 No. C4.
- 19. **Hand Protection:** Wear appropriate gloves, such as rubber, leather, or cut-resistant gloves, for the type of work being done and as specified in the *Job Hazard Analysis* (DC-83) or *Congregation Job Hazard Analysis* (DC-85). Work gloves should not be worn near machine gears or rotating equipment with moving parts.—DC-80 Nos. C12, D3.
- 20. **Safety Vests:** All workers should wear safety vests or high-visibility clothing in construction and maintenance work areas, especially when moving vehicles or heavy equipment are present.
- 21. **Knee Protection:** Wear properly fitted kneepads when work requires being on your knees for an extended period of time.—DC-80 No. C1.

## **HAND TOOLS**

22. Oversight must ensure that all hand tools are regularly inspected. Every tool is designed for a certain job and should be used only for that purpose.

- (1) Do not use tools that are excessively worn, broken, blunt, or damaged. Defective or damaged tools should be repaired before use or removed from the site.—DC-80 No. F4.
- (2) Never store knives or blades with the sharp edge exposed.—DC-80 No. F1.
- (3) Never climb a ladder while holding a cutting instrument or a blade of any kind in your hand.
- (4) Never cut toward yourself or anyone else. Cut at an angle away from your body.

## **LADDERS**

- 23. To the extent possible, ladders should not be used as a work platform unless unique circumstances require their use for a short duration.
  - (1) Keep ladders in safe working condition. Before using, inspect ladders for broken rungs, cracks, or other defects. Tag defective ladders, and remove them from the site.
  - (2) Stepladders should not exceed three meters (10 ft) in height.—DC-80 Nos. E1, E8.
  - (3) Ladder work that requires your feet to be above 1.8 meters (6 ft) is a high risk and requires authorization from your overseer. Before working at that height, you must follow the guidelines in *Working at Heights* (A-137).
  - (4) Never use metal ladders when working on or near electrical equipment. Use only nonconductive ladders, such as fiberglass ladders.
  - (5) Ladders must have solid footing. Never place a ladder on boxes, scaffolds, aerial lifts, or any other unstable objects.—w10 4/15 p. 30, box.
  - (6) Do not use chairs, buckets, boxes, or any other unstable objects as makeshift ladders.
  - (7) Always face a ladder when ascending or descending, and maintain at least three points of contact—for example, both feet and one hand.
  - (8) Never lean past the side rails of a ladder. Climb down, and reposition the ladder as needed.
  - (9) Never stand or sit on or above the top two rungs of any ladder.
  - (10) If a ladder is used in front of a door or could be struck by equipment or pedestrians, the doorway should be barricaded and/or the ladder should be held in place by an attendant.
  - (11) Generally, extension ladders should be erected using a 4:1 ratio, which means for every 1.2 meters (4 ft) of elevation, the ladder base must be moved out 0.3 meters (1 ft) from the wall.
  - (12) The top and bottom of an extension ladder must be secured, such as by tying it off, to prevent movement. Until secured, a second person should hold the ladder to keep it from slipping.
  - (13) Extension ladders that are used to access an elevated platform or a roof should extend at least 0.9 meters (3 ft) above the landing.

## INJURIES AND EMERGENCIES

24. Oversight must consider local circumstances when developing emergency procedures. All workers on site must know where emergency phone numbers and procedures are posted.—DC-80 Nos. A4, A5.

- (1) Familiarize yourself with the posted emergency phone numbers and procedures. Be prepared to follow direction from your overseer in an emergency.
- (2) If you feel safe to do so, remove any immediate hazard that could cause further injury; for example, shut off a machine or any other equipment.
- (3) Never attempt to move an injured person unless his location puts him at risk of further injury. Keep the injured person still and calm. Call the designated emergency phone number, and send someone to inform an overseer.
- (4) Head, neck, back, and eye injuries as well as loss of consciousness should be treated only by those trained in first aid.
- (5) Blood-borne pathogens can cause disease. Avoid contact with another person's blood. If a tool, utensil, or material is contaminated with blood, it must be cleaned and disinfected prior to being used again.—DC-80 No. C7.
- (6) All injuries, including minor incidents and near misses, must be reported to oversight.

## **FOOD SAFETY**

- 25. People can get sick from eating food that is improperly prepared, cooked, or stored. Therefore, food must be protected from contamination. It is vital that all who prepare, cook, or serve food are aware of the hazards related to this work.
  - (1) All volunteers must be properly trained in the basic principles of food safety before being assigned to prepare or serve food. They must maintain exemplary personal hygiene.
  - (2) If you are sick, have a communicable disease, or have an unprotected cut or sore, you cannot be in food-preparation areas.
  - (3) Wash your hands with soap and water for at least 20 seconds before preparing and serving food. This must be done before starting work, returning from a break, and after using the washroom.
  - (4) Local government regulations may require that gloves be worn over washed hands. Gloves should be disposed of after each period of work and before working with a different category of food.
  - (5) Hair restraints must be worn when working in food-preparation and serving areas.
  - (6) Report any appliances that are damaged or not working safely. Do not use appliances without safeguards in place. All sharp utensils should be stored in a way that will prevent injury.
  - (7) Keep meats and dairy products refrigerated at less than 4°C (40°F) until ready for cooking. Oversight must ensure that food kept in cold storage is maintained at a safe temperature. Perishable food, cooked or raw, needs to be kept out of the food danger zone, which is between 5°C (40°F) and 60°C (140°F), since bacteria grows quickly in this range.
  - (8) A food-grade thermometer should be available in food-preparation areas.
  - (9) When measured with a food thermometer, the internal temperature of meats must reach 70°C (160°F) or more, depending on the type of meat, for at least 30 seconds. For further direction on safe cooking temperatures, speak with your overseer.
  - (10) Never leave cooked food at room temperature for more than two hours and no more than one hour if the room temperature is over 32°C (90°F).

- (11) When reheating previously cooked food, heat to a temperature of 74°C (165°F) one time only. Dispose of any leftovers thereafter.—*g01* 12/22 pp. 8-9, box.
- (12) Keep food completely covered to protect prepared food being contaminated by flies.

## FIRE PREVENTION

- 26. Fires can start quickly, spread rapidly, and cause damage that can be devastating to both life and property.—DC-80 Nos. G3, G3a.
  - (1) Use a fire extinguisher only if it is safe to do so and if you have been trained to use it properly.—DC-80 No. G6.
  - (2) Store flammable liquids in sealed safety containers approved by oversight.
  - (3) Store flammable liquid in cabinets or bins made of fire-resistant material and located in a designated safe area. Keep in the work area only the amount needed for one shift
  - (4) Dispose of rags used for flammable liquids, such as paint thinner or other solvents, in enclosed metal containers approved by oversight. Never hang such rags to dry, pile them up, or mix them in with other trash.—DC-80 No. D1.
  - (5) Never use gasoline for cleaning purposes.
  - (6) Never store liquefied petroleum gas (LPG) cylinders indoors. Protect all cylinders from impact, and ensure that they are stored upright. All cylinders larger than 11 kilograms (5 gal) must be secured by a chain or other restraint to prevent them from tipping over.
  - (7) Never burn any fuel in enclosed areas without approval from oversight. Without adequate ventilation, burning fuels in enclosed areas can lead to fatal carbon monoxide poisoning.
  - (8) If something in your work area produces heat, sparks, or open flames, immediately move any flammable and combustible materials away to avoid fires or explosions.

## **CHEMICAL SAFETY**

- 27. Those working with chemicals must understand the hazards involved. All workers should know where to find information on how to work safely with chemicals.
  - (1) Do not bring hazardous chemicals to the site without approval from oversight.
  - (2) Chemical manufacturers and suppliers provide *Safety Data Sheets* (SDS), which contain information on the hazards associated with the chemicals they supply. Oversight must keep a copy of the SDS for all the hazardous chemicals used on a project. SDS should be kept up-to-date and readily available to all those working with chemicals. —DC-80 No. D4.
  - (3) Always wear the personal protective equipment required by the SDS when working with hazardous chemicals.
  - (4) All containers with chemicals must be clearly labeled, indicating the name and the hazards of the chemical. Report to oversight any chemical containers that have missing or unreadable labels.

## **BASIC ELECTRICAL SAFETY**

- 28. Electrical shock kills hundreds of people each year. All workers must take steps to prevent electrical shock.—DC-80 No. A6.
  - (1) All electrical maintenance or inspection work must be performed only by a trained, experienced person authorized by oversight. Where required by local government regulations, electrical work should be performed and/or supervised by licensed professionals.—DC-80 No. G10.
  - (2) Immediately report to oversight any electrical connections, junction boxes, switches, or panels that are damaged or exposed, such as missing protective covers. If safe to do so without touching the equipment, provide a physical barrier to restrict access to the area.
  - (3) Never allow any electrical connections to come into contact with water. When cleaning, do not flood any area with water if electricity is present.
  - (4) Never overload an electrical outlet. Follow direction from oversight regarding what equipment can safely be run on the same circuit. When in doubt, consult an electrician authorized by oversight.

## LOCKOUT/TAGOUT

- 29. Working with energized equipment is high-risk work that can lead to serious injury or loss of life. It is vital that all sources of potentially hazardous energies are identified and controlled.
  - (1) The lockout/tagout procedure requires a worker to use a lockout device, such as a lock, and to put a tag on it as described in Chapter 2 of this document. This must be done during installation, cleaning, repair, or maintenance work to prevent unexpected energizing of any part of the equipment, machine, or system.—DC-80 Nos. F2, F12.
  - (2) Never remove lockout devices installed by another worker. If a lockout device is affecting your work, please speak with your overseer.
  - (3) Anyone who removes or breaks a lockout device that he did not install may be immediately removed from the project. Only oversight may remove a lockout device installed by another worker, following the lockout/tagout procedure.

## **RECOGNIZING CONFINED SPACES**

- 30. Confined spaces—such as pits, wells, or water tanks—can pose a deadly hazard to those working in them. Working in confined spaces is high-risk work.
  - (1) Oversight must ensure that warning signs are posted on confined spaces where there is a risk of being entrapped, crushed, suffocated, asphyxiated, or electrocuted. —DC-80 No. G4.
  - (2) Only trained, experienced individuals who are authorized by oversight may enter a confined space.
  - (3) Anyone entering a confined space that has posted warning signs without having been trained and without authorization from oversight may be immediately removed from the project.

## **WORKING SAFELY AROUND HEAVY EQUIPMENT AND CRANES**

- 31. Heavy equipment presents a risk to anyone on a site. An especially high level of care needs to be taken when working around cranes.
  - (1) Always stay alert and keep a safe distance from heavy equipment. Follow direction from your overseer and/or crane signalers when crane work is in progress.
  - (2) Oversight must establish a "Do Not Enter" zone around cranes. This restricted zone must include the crane rotation area as well as the area where loads are being lifted or carried overhead. Only those authorized by oversight may enter this restricted zone.
  - (3) Oversight must ensure that the risks involved with crane work are controlled at all times.

## MY COMMITMENT TO SAFETY FOR BASIC WORK

- 32. I understand that all construction and maintenance projects have hazards. I also understand that God's Word says that safety and respect for life must be taken very seriously. (Ex. 21:33, 34; Num. 35:22-25; Deut. 22:8) Therefore, for the protection of myself and others
  - (1) I am firmly committed to the goal of zero accidents.
  - (2) I will willingly participate in all safety-training programs and cooperate with the instruction provided by oversight.
  - (3) I will apply the training received, display a humble and modest attitude, and follow direction.
  - (4) I will not develop a complacent attitude towards safety, and if I see something unsafe, I will say something immediately.
  - (5) Before starting a task, I will take the time to plan how to do it in a way that is safe.
  - (6) I understand that overconfidence can be dangerous. Therefore, I will ask my overseer for direction before proceeding if . . .
    - I do not understand a task.
    - I do not feel competent to do it safely.
    - I feel that it is beyond my health or physical limitations.
    - I feel that it is unsafe.
- 33. My participation in basic work on construction and maintenance projects indicates that I have read Chapter 1 of this document in its entirety and agree to apply its standards, whether directed by the congregation, by the Local Design/Construction Department, or by another theocratic construction oversight.

## CHAPTER 2 SAFETY STANDARDS FOR HIGH-RISK WORK

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1. In most cases, this work will be done under the direction of the Local Design/Construction Department or another theocratic construction oversight. A *Job Hazard Analysis* (DC-83) or *Congregation Job Hazard Analysis* (DC-85) must be completed before high-risk work begins. Workers must never work alone when performing high-risk work.

## **HIGH-RISK TOOLS AND EQUIPMENT**

2. All high-risk tools and equipment must be approved by oversight before being used on a project. Before authorizing a person to use this type of equipment, oversight must confirm that the individual has been given the appropriate training. Maintain a list of operators authorized by oversight to use power tools, to operate each type of machine and equipment, and to be drivers. Those who are authorized must remain alert and focused while using such equipment.—DC-80 Nos. F3, F7-F10.

# 3. Power Tools, Machines, and Equipment:

- (1) Before work begins each day, examine power tools, machines, and equipment for defects that could endanger the operator. If the tool, machine, or equipment is unsafe to use, take it out of service immediately and tag it "defective" until repaired or replaced.
- (2) All safety devices and guards must be in place and in good working condition. Never use power tools, machines, or equipment with a damaged or missing guard.
- (3) Tools, machines, and equipment should be used only for what they were designed to do.
- (4) Power tools must be disconnected from their power source when being serviced, such as when changing blades or bits.

(5) Workers must never reach into an energized machine or piece of equipment. The lockout/tagout procedure must be followed when cleaning, servicing, repairing, or removing jammed items.

## 4. Powder-Actuated and Pneumatic Tools:

- (1) Only trained operators authorized by oversight may use powder-actuated and pneumatic tools. Operators may also need to obtain a license or other certification, depending on local government regulations.—DC-80 No. F14.
- (2) All operators and those working close to powder-actuated and pneumatic tools must wear appropriate personal protective equipment, such as eye, ear, or face protection.
- (3) Powder-actuated tools must not be loaded until ready for use. Never store or leave unattended a loaded powder-actuated tool.
- (4) Never point a powder-actuated or pneumatic tool at your body or at anyone else.
- (5) Use only fasteners specifically designed for the material being penetrated.

#### 5. Lasers:

- (1) Only trained operators authorized by oversight may use laser equipment.
- (2) Warning signs should be posted when a laser is in use.
- (3) Only those involved in the laser work should access the area when laser equipment is in use.
- (4) Laser protective eyewear must be worn by all workers in the laser-controlled area.
- (5) The path of the laser beam must be positioned in a way that it will not enter anyone's eyes. When laser equipment is not in use, the beam should be covered.

## 6. Heavy Equipment and Construction Vehicles:

- (1) Only trained, experienced operators authorized by oversight may operate heavy equipment or construction vehicles. In addition, operators may need to obtain a license or other certificate when local government regulations require it.
- (2) Inspect all heavy equipment before work begins each day to confirm that the equipment is in a safe condition. For example, inspect all controls, brakes, alarms, and horns.—DC-80 No. F15.
- (3) The condition of this equipment must meet local government safety regulations. Copies of any required safety testing certificates and insurance documents should be kept on the site.
- (4) All workers must wear high-visibility vests or clothing when moving vehicles or when heavy equipment is present.
- (5) The site safety plan should include a traffic flow that separates vehicle and pedestrian routes and prevents the need for equipment to travel in reverse. If one-way vehicle traffic cannot be established, warning signs must be posted on the site to warn workers that the traffic is two-way.
- (6) Signalers must be used to assist operators of vehicles and heavy equipment, especially if an operator's view of the intended path of travel is obstructed, such as when operating in reverse, or when a person nearby could be endangered by the equipment or its load.

- (7) Only trained signalers authorized by oversight may be used. Signalers must at all times be in plain sight of the operator and remain clear of the intended path of travel. While assisting operators, signalers must not do any other type of work.
- (8) Operators must wear seat belts at all times when operating heavy equipment.
- (9) Operators must not use mobile devices while operating heavy equipment unless the device is being used to communicate with signalers and using the device does not violate any local government regulations.
- (10) Operators must calculate and manage the load-bearing capacity of their equipment and should travel only on surfaces that are suitable for the load-bearing capacity.
- (11) Operators must ensure that before transporting any loads, the load is properly secured and any oversized load meets all local government regulations.
- (12) No part of a vehicle or heavy equipment must come within three meters (10 ft) of overhead power lines.
- 7. **Cranes:** If crane work is to be performed on site, all aspects of the crane operation, including operators, signalers, and equipment safety, must meet local government regulations. Oversight must also ensure that the *Crane Safety* (A-134) guidelines are being followed.

## **WORKING AT HEIGHTS**

- 8. **Fall Prevention/Fall Protection:** Falls are the leading cause of serious injury and death in construction and maintenance work. Significant risk exists even when working from a relatively low height. Therefore, overseers must ensure that all work at heights is undertaken with protection. A fall prevention system, such as edge protection, guardrails, or fall restraint, is the primary means for doing so. If a fall prevention system is not practical, a fall protection system, such as a fall arrest system, will be needed to protect workers. Simply staying away from an open edge when working is not sufficient.
  - (1) "Working at heights" is defined as work that takes place where a person is at risk of falling 1.8 meters (6 ft) or more. Anyone working at heights must be authorized by oversight to do so.
  - (2) Those who are planning or overseeing working at heights must ensure that the *Working at Heights* (A-137) guidelines and any related government regulations are being followed.—DC-80 No. E2.
  - (3) A fall prevention or fall protection system must be in place before working at heights begins. The system must be set up and maintained by a trained, experienced person authorized by oversight.
  - (4) Before fall arrest equipment is used, oversight must have a plan in place and a system established for rescuing someone who has become suspended in a fall arrest harness.
  - (5) Any opening in a floor or on a roof that is larger than five by five centimeters (2 by 2 in.) must be covered. The hole cover must be able to withstand two times the weight of any load that may be placed on it and should be labeled "COVER" or "HOLE" in high-visibility paint. It must be secured from movement and may be removed only by a person authorized by oversight.
  - (6) No one should stand on, walk on, or drive over a protective cover.

#### 9. Roof Work:

(1) Working on a roof or any area that is more than 1.8 meters (6 ft) from the ground is considered working at heights.

- (2) Use only access points that are approved by oversight. If conditions on the roof appear slippery, such as from rain or frost, avoid accessing the roof until it is safe to do so.
- (3) All workers should evacuate a roof when severe weather conditions threaten, such as dark clouds, high winds, lightning, or rain.
- (4) A roof should not be overloaded with materials or workers.
- (5) All tools and materials not in use must be kept a minimum of 60 centimeters (2 ft) from an unprotected edge of a roof.
- (6) Skylights must be protected by a fall prevention system if they are not safe to walk on.

# 10. Scaffolding:

- (1) Scaffolding must be erected and dismantled only under the supervision of a trained, experienced person authorized by oversight. Fall prevention measures must be implemented during the erection and dismantling process.—DC-80 No. E3; Working at Heights (A-137).
- (2) When selecting scaffolding, consider the location, duration, and type of work being done, whether it is a light-, medium-, or heavy-duty job.
- (3) Each day before work begins, scaffolding should be inspected and tagged "safe to use," "caution," "unsafe to use" by a trained, experienced person authorized by oversight.
- (4) All scaffolding must be erected on a solid, stable surface. All exterior scaffolding four meters (12 ft) or more in height should be secured to a stable support and/or to outriggers to prevent movement or tipping.
- (5) All open sides of scaffolding must have guardrails, and where there is danger of tools or material falling on people below, toe boards must also be installed.
- (6) The distance between the scaffolding and the structure should be kept to 10 centimeters (4 in.) or less or 20 centimeters (8 in.) during wall erection. In addition, decking should be secured with no gaps in the platform.
- (7) Workers should use a ladder or an internal stair tower to access the scaffolding platforms. Do not climb on the outside of scaffolding, such as on the end frames or the cross braces, unless the frames are designed with built-in ladders.
- (8) Workers should not lean or reach over guardrails. Reposition the scaffolding as required.
- (9) Scaffolding should not be overloaded with materials or workers.
- (10) No one should be on the scaffolding when it is being moved into position. When scaffolding is not being moved, the wheels must be locked.

## 11. Aerial Lifts:

- (1) Only trained, experienced operators authorized by oversight may use aerial lifts. Operators may also need to obtain a license or other certification depending on local government regulations.—DC-80 No. E6; Working at Heights (A-137).
- (2) Aerial lifts must be inspected according to the manufacturer's instructions each day before work begins.
- (3) Fall restraint harnesses and fixed-length lanyards must be worn when the platform is elevated unless the *Job Hazard Analysis* (DC-83) indicates otherwise.

- (4) Workers must never climb on or extend their body over the guardrails of an aerial lift.
- (5) The operator must always be aware of where he is in relation to other people, machines, and obstructions, especially when raising, lowering, or moving the lift.
- (6) No one should be within two meters (6 ft) of an aerial lift while it is in use.

#### **HIGH-RISK TASKS**

#### 12. Electrical Work:

- (1) Electrical work must be performed only by a trained, experienced person authorized by oversight. Where required by local government regulations, electrical work must be performed and/or supervised by a licensed professional.—DC-80 No. G10.
- (2) Workers should never perform work on live electrical equipment. However, if a trained, experienced person determines that live work must be performed on electrical equipment and oversight approves, a safe live-work procedure must be established and carefully followed.
- (3) All live electrical equipment, such as receptacles, switches, cables, and panels, must be covered to prevent accidental contact.
- (4) All electrical outlets must have ground fault circuit protection during construction.
- (5) A trained, experienced person must verify all electrical installations prior to use. The verification must ensure that the installation is safe and meets all local government regulations.

# 13. Lockout/Tagout Procedure:

- (1) To prevent the unexpected energization or accidental start-up of an electrical circuit, of a pressurized system, or of any other machinery or equipment during installation, cleaning, repair, or maintenance work, follow each step of the lockout/tagout procedure listed below.
  - SURVEY the work for all sources of energy, and record these on the *Job Hazard Analysis* (DC-83) or the *Congregation Job Hazard Analysis* (DC-85) form, citing "lockout/tagout" as a control measure. Consult the manufacturer's lockout/tagout procedure for that particular system or machine if available.—DC-80 No. F2; *Lockout/Tagout* (A-128).
  - NOTIFY workers in the area that the system, machine, or equipment will be locked out.
  - SHUT DOWN all identified energy sources for the system, machine, or equipment by using a stop button or switch.
  - ISOLATE the system, machine, or equipment from its energy sources in the proper order. For example, disconnect circuits, close valves, and block moving parts.
  - LOCKOUT the energy-isolating device(s). Each person working on the system, machine, or equipment must attach his personal lock and tag to the energy-isolating device.
  - DISSIPATE or release any stored or residual energy.
  - VERIFY that all sources of energy have been isolated and are at a zero-energy state. Verification should ensure that the system, machine, or equipment will not start and that no energy remains.

- (2) To restore power after completing work, follow each step listed below.
  - CHECK to see that all foreign items have been removed from the system, machine, or equipment, that guards have been reinstalled, and that all workers are clear of the area.
  - VERIFY that the stop button is engaged or the control switch is off.
  - REMOVE all lockout/tagout equipment from energy-isolating devices. Each worker is responsible for removing his own lock and tag.
  - RESTORE energy according to the manufacturer's lockout/tagout procedure if available. For example, reconnect circuits, open valves, and unblock moving parts.
  - NOTIFY workers in the area that the system, machine, or equipment can be used.

# 14. Trenching and Excavation:

- (1) Oversight must ensure that the *Safety in Trenching and Excavation* (A-132) guidelines and any local government regulations are followed and that all workers have been appropriately trained.—DC-80 No. F16.
- (2) A trained, experienced person authorized by oversight must ensure that trenches and excavations are inspected using the *Trenching and Excavation Safety Checklist* (A-133). This should be done each day before work begins or more often if needed, such as after a rainfall.
- (3) Contact the local utilities agency to confirm whether utilities exist in an area before any excavation work begins, as required in *Safety in Trenching and Excavation*.
- (4) Fall prevention measures must be established if there is a risk of falling 1.8 meters (6 ft) or more into a trench or excavation.

#### 15. Hot Work:

- (1) Oversight must ensure that the precautions in the *Hot Work Operations* (DC-80 No. G9) safety outline and any local government regulations are being followed. —DC-80 No. G3; *Fire Safety* (A-121).
- (2) Oversight should set up a designated hot work area that allows entry only to those performing hot work. Warning signs should be posted to clearly identify this hot work area.
- (3) For any hot work performed outside of a designated hot work area, a *Hot Work Permit* (DC-80 No. G9a) must be filled out.
- (4) Nonflammable barriers and/or screens should be used to protect others from the hazards associated with the hot work.
- (5) A fire guard must be present whenever hot work is performed outside of a designated hot work area. Each fire guard must fill out a *Fire Guard Report* (DC-80 No. G3a).
- (6) Personal protective equipment for hot work hazards must be worn when performing hot work, including eye and face protection and flame-retardant or flame-resistant clothing.

# 16. Refrigerant and Compressed Gases:

(1) Only a trained, experienced person authorized by oversight should perform work with refrigerant gas. The person must be a licensed professional where required by local government regulations.

- (2) Compressed gas cylinders must be handled and transported in an upright position using a handcart or some other means designed for that purpose. If transporting cylinders off site, ensure that all labels required by local government are in place and that hazardous material documentation is prepared.
- (3) All compressed gas cylinders must be equipped with a pressure relief valve. Before using a cylinder, a trained, experienced person authorized by oversight must install a flashback arrestor and regulator (compatible with the gas type).—DC-80 No. G5.
- (4) Compressed gas cylinders must be stored in a well-ventilated area and be secured, such as by chains, in an upright position. Valve protection caps must be firmly in place when cylinders are not in use. Combustible or flammable materials should never be stored near the cylinders.—DC-80 No. G5.

## 17. Demolition:

- (1) Significant demolition projects should be completed by an experienced contractor. If using a contractor is not possible, oversight must ensure that the guidelines found in Safe Demolition Practices (A-141) and Identifying Demolition Hazards (A-142) as well as any local government regulations are followed and that all individuals involved have been trained.—DC-80 No. F17.
- (2) Before demolition begins, an engineering survey and a demolition plan must be completed and approved by oversight to identify and control the hazards.
- (3) Areas where demolition work will be carried out must be clearly identified as "Do Not Enter" zones. Only those authorized by oversight are allowed to enter these restricted zones, and the number of those authorized should be kept to the minimum required.
- (4) Daily inspections should be conducted in areas where demolition work is in progress to ensure that hazard controls are effective and that any new hazards are identified.

# 18. Confined Space Work:

- (1) Oversight must ensure that the *Confined Spaces* (A-131) guidelines and any local government regulations are being followed.—DC-80 No. G4.
- (2) The hazards associated with a confined space must be assessed by a trained, experienced person to identify whether an entry permit will be required before any work in the space begins.
- (3) Only trained, experienced workers authorized by oversight may enter a confined space. Workers must not enter a confined space until oversight has developed an entry plan and a rescue/retrieval plan for the space.
- (4) Workers must never enter a confined space to attempt a rescue. Rescue should be performed only by a trained rescue team using the appropriate rescue retrieval equipment.

## 19. Driving Operations:

- (1) All who drive for project-related activities are responsible for the safe operation of the vehicle and must follow the guidelines found in *Safe Driving* (A-123) and *Driving Safely* (DC-80 No. H6).
- (2) Oversight must maintain an approved list of drivers for each project. Drivers must meet all licensing requirements according to local government regulations.
- (3) All vehicles must be in safe, working condition, be properly registered, and have adequate insurance coverage according to local government regulations.

- (4) Drivers and all passengers must wear safety/seat belts at all times.
- (5) Passengers should be transported only in an approved seating area, and the number of passengers should not exceed the number of available safety/seat belts. Under no circumstances should anyone ride on top of a load.
- (6) Drivers must not use handheld mobile phones to text or to make calls while driving.
- (7) Drivers must never operate a vehicle after consuming alcohol, when drowsy, or while taking medication that impairs their driving ability.
- (8) Drivers must follow local traffic laws as well as safe driving principles, such as maintaining a safe speed, being alert to pedestrians as well as changing road and weather conditions.
- (9) When towing trailers, follow all local government regulations, such as using an appropriate trailer hitch, safety chains, and lighting.

## MY COMMITMENT TO SAFETY FOR HIGH-RISK WORK

- 20. In addition to my commitment to the points noted in Chapter 1 of this document, I also commit to the following:
  - (1) I will only participate in the specific high-risk work for which I have received training and have been approved to perform by oversight.
  - (2) In view of my training, I will promote the proper attitude toward safety and will always endeavor to set a proper example for others.
  - (3) In spite of my training, I will not act in an overconfident manner and I will always cooperate with the direction provided by those in oversight.
  - (4) I once again state that I am firmly committed to the goal of zero accidents.
- 21. My participation in high-risk work on construction and maintenance projects indicates that I have read Chapter 1 and Chapter 2 of these guidelines in their entirety and agree to apply the standards as written, whether directed by the congregation, by the Local Design/Construction Department, or by another theocratic construction oversight.

## APPENDIX A SAFETY PRINCIPLES FOR OVERSIGHT

Personal Example 1
Planning 2
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#### PERSONAL EXAMPLE

1. Since Jehovah views life as precious, a spiritually-minded overseer will set an example for others to imitate. Gideon told his 300 men: "Watch me and do exactly what I do." (Judg. 7:17) He then gave clear direction, trained them, and took the lead as he worked among them. (Judg. 7:18, 19) Today, overseers do well to imitate Gideon's example as they take the lead in theocratic projects. Will volunteers working with you see an overseer who is conscious of his own safety and that of those working with him? (Prov. 22:3) If you, as an overseer, set the right example by not putting production, finances, or schedules ahead of the health and safety of your brothers, you will be able to say, as Gideon said to his men: "Watch me and do exactly what I do."

## **PLANNING**

2. In order to protect others, we must be aware of the hazards that exist on a work site. Therefore, when planning a task, identify all hazards that may exist. Proverbs 21:5 states: "The plans of the diligent surely lead to success." Ask yourself, 'How could the work put volunteers at risk? How can we protect them from harm? What training and equipment will they need?' Various tools have been developed to assist overseers in planning. Before assigning tasks, complete a *Job Hazard Analysis* (DC-83) or a *Congregation Job Hazard Analysis* (DC-85). Those who oversee others should be familiar with the organization's safety guidelines and any relevant local government regulations. Anyone overseeing congregation projects should know and apply the direction in the DC-80 series of safety outlines. Brothers overseeing larger projects should also be well-versed in the *Global Life Safety and Loss Prevention Guidelines* (A-120) series of documents.

## HIERARCHY OF CONTROLS

3. Once all the hazards of a project have been identified, ask yourself: 'What is the likelihood of a hazard causing an injury or illness? How serious would that injury or illness be?' (See *Risk Assessment* [A-130].) The answers to these questions will help determine the level of risk that the hazards present. Based on that information, choose the best control methods to use according to the hierarchy of controls, as shown in the following chart.



- 4. The hierarchy of controls is used to determine which controls are the most effective in reducing risk of injury or illness. The control methods at the top are more effective than those at the bottom. To reduce the risk as much as possible, a combination of one or more control methods from the hierarchy may be needed. The flow of the hierarchy is as follows:
  - (1) **Elimination:** Physically remove the hazard, thus eliminating any risks.
  - (2) **Substitution:** Replace the hazard with something less hazardous, such as a safer tool, a less toxic chemical, or a quieter machine.
  - (3) **Engineering Controls:** Isolate people from the hazard, such as by installing guardrails, barriers, guards on machines, or ventilation.
  - (4) **Administrative Controls:** Change the way people work with the hazard, such as by training, safe work procedures, warning signs and labels, permits, job rotation, or scheduling.
  - (5) **Personal Protective Equipment (PPE):** Reduce worker exposure to the hazard, such as by requiring the use of head protection, protective footwear, eye protection, respirators, or hearing protection. Since PPE is at the bottom of the hierarchy, it should be used in conjunction with other control methods.

## COMMUNICATION

5. Good communication is vital to ensure that volunteers are aware of how to work safely with the hazards present. Overseers and volunteers must continually share information related to the hazards of the work, the effectiveness of controls, and any new health and safety concerns that may arise during a project. Take advantage of all opportunities for communicating health and safety information, such as through initial training, daily safety huddles, and weekly safety talks. Encourage those with secular safety qualifications to share their knowledge and experience with volunteers. If an overseer sets a good example, makes plans for the work to proceed safely, and maintains good communication, at the end of a project, he will be able to say, as "the fine shepherd" Jesus said to his Father, Jehovah: "Of those whom you have given me, I have not lost a single one."—John 18:9; 10:14.