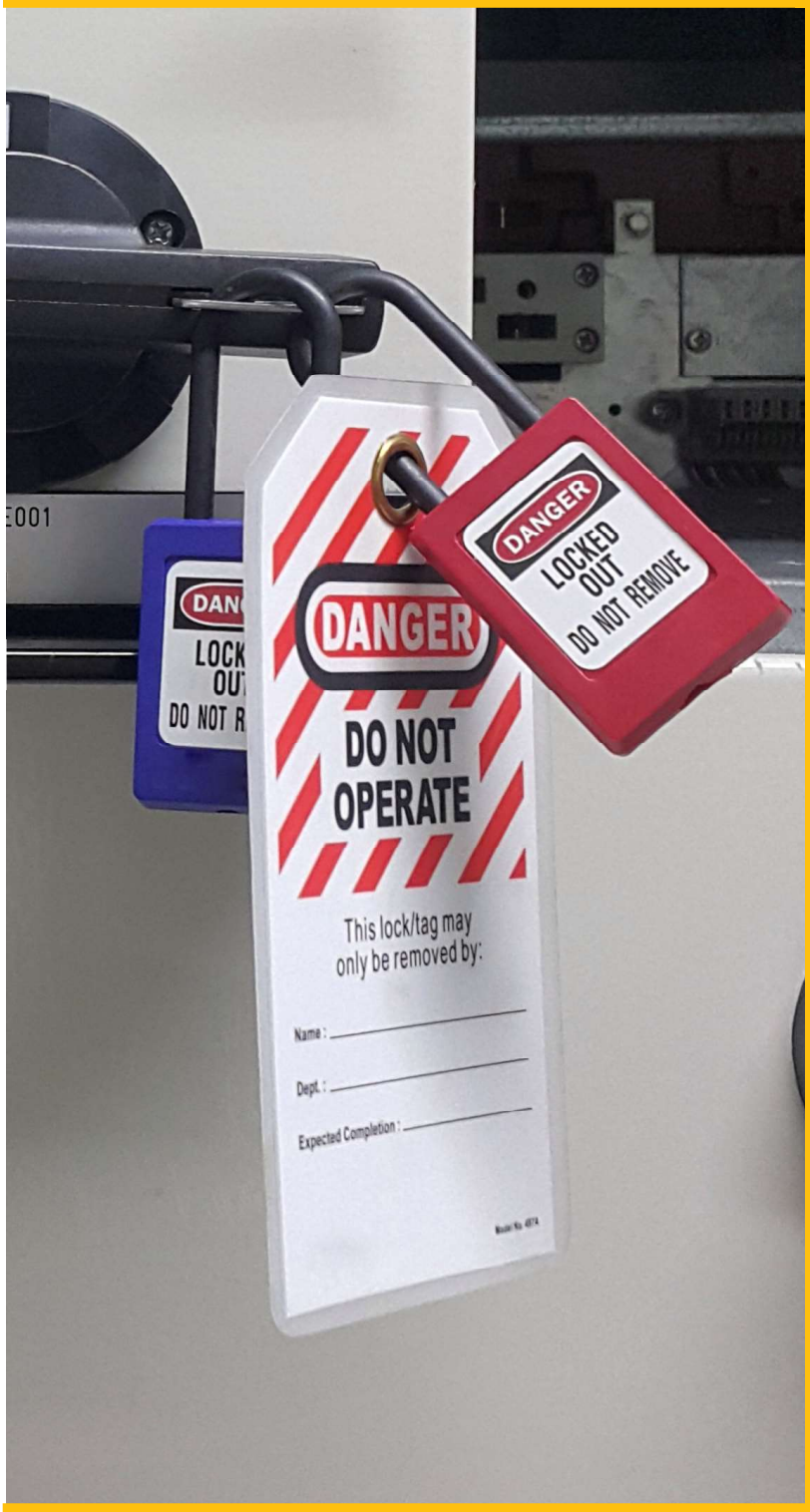
Control of Hazardous Energy

Williamson Roofing Lockout/ Tagout Program



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HS02-011D (09-21)

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Control of Hazardous Energy (Lockout/Tagout) Workplace Program

Williamson Roofing Lockout/Tagout Program

Company Policy

Williamson Roofing LLC is committed to providing a safe and healthful work environment for all our employees. The objective of this Lockout/Tagout Program is to prevent injuries caused by the accidental starting or activation of machinery or systems while undergoing repair, service, or set up. The program is designed to:

- make sure equipment is stopped, isolated from all potentially hazardous energy sources, and locked out before employees perform any maintenance or repair on machinery;
- prevent any unexpected start-up or release of stored energy in the equipment;
- stop unauthorized personnel or remote-control systems from starting equipment while it is serviced;
- provide a secondary control system (tagout) when it is impossible to positively lockout the equipment;
- assign responsibility for the oversight of Lockout/Tagout procedures; and
- ensure that only approved locks, tags, and fasteners provided by the company are used in lockout/tagout procedures.

Responsibility

All employees must comply with the requirements of the Lockout/Tagout Program. Employees should understand that attempting to start, energize, or use a locked-out machine or equipment can cause loss of life or limb to another employee. Questions regarding the lockout/tagout procedures should be directed to management. Management enforces the lockout/tagout procedures including the use of corrective disciplinary action when necessary.

The following designated individuals are responsible for key aspects of the Lockout/Tagout Program:

Program Administrator

Matt Kitchen will maintain, review, and update the Lockout/Tagout Program at least annually, and whenever new equipment or major replacement, repair, renovation, or modification of machines or equipment is performed or installed. The program administrator will:

- establish a Lockout/Tagout Program;
- develop, document, and use the lockout/tagout procedures;
- provide employees with appropriate lockout/tagout training;
- give, at no cost to employees, equipment needed for the Lockout/Tagout Program; and
- ensure continued competency through training.

Authorized Employees

Authorized employees, who must be listed on the Lockout/Tagout Procedure Form (see Appendix A) shall be knowledgeable about:

- the Lockout/Tagout Program and energy control procedures for each piece of equipment;
- the type and magnitude of the energy that each piece of equipment utilizes; and
- the hazards of the energy.

Affected Employees

Affected employees and any other employees whose work operations are or may be in the area, must be knowledgeable about:

- the purpose and the use of lockout/tagout procedures and
- are responsible for ensuring they do not attempt to restart or re-energize machines or equipment during a lockout.

An affected employee may become an authorized employee when that employee's duties include performing servicing or maintenance covered under the Lockout/Tagout Program. Affected employees must be identified on each Lockout/Tagout Procedure Form. (See Appendix A.)

Qualified Employees

A qualified employee is knowledgeable in the operations of the equipment, along with the associated hazards. A qualified employee may work in conjunction with the authorized employee to perform lockout/tagout procedures.

Other Employees

Employees who do not work in areas where lockout may be used will be provided a brief

Lockout/Tagout Procedures

The following procedures are required to ensure employee safety and compliance with the OSHA Control of Hazardous Energy (Lockout/Tagout) Standard.

Prepare for Shutdown

The authorized employee must complete the following:

- Investigate and identify all forms of hazardous energy and know how to control it.
- Obtain a copy of the proper machine-specific Lockout/Tagout Procedure Form located in the shop bookcase for review and use during a lockout of a machine or equipment.
- Notify all affected employees that a lockout or tagout system is going to be used and communicate to all affected persons the following:
  - What is going to be locked/tagged out?
  - Why is it going to be locked/tagged out?
  - How long will the system be unavailable?
  - Who is responsible for the lockout/tagout procedure?
  - Who should employees contact for more information?

Note: Name(s) and job title(s) of affected employees and how they were notified should appear on the Lockout/Tagout Form.

Equipment Shutdown

If the machine or equipment is operating, shut it down using the manufacturer's or employer's normal stopping procedures. Equipment shutdown involves making sure controls are in the OFF position, and verifying that all moving parts such as flywheels, gears, and spindles come to a complete stop. Inform all affected employees that the machine or equipment is going to be shut down, even if they are not involved in the service or maintenance.

Energy Isolation

Isolate the equipment from any energy source. Isolation may mean many things, such as turning off the power at a breaker or shutting a valve. The written instructions for energy isolation will be specific to the system in your workplace. In general, these procedures are used:

- **Electrical Energy**
  Switch electrical disconnects to the OFF position. Visually verify that the breaker connections are in the OFF position. Lock the disconnects in the OFF position.

- **Hydraulic and Pneumatic Potential Energy**
  Set the valves in the CLOSED position and lock them into place. Bleed off the energy by opening the pressure relief valves or closing the airlines.

- **Mechanical Potential Energy**
  Carefully release energy from springs that may still be compressed. If this is not feasible, block the parts that may move if there is a possibility that the spring can transfer energy to it.

- **Gravitational Potential Energy**
  Use a safety block or pin to prevent the part of the system that may fall or move.

- **Chemical Energy**
  Locate chemical supply lines to the system and close and lockout the valves. Where possible, bleed lines or cap ends to remove chemicals from the system.

Apply Lockout/Tagout Devices

Apply the assigned lockout device, such as a padlock, blank flanges, or bolted slip blinds to keep the equipment in a safe (energy-isolating) position. Then, if tags are used, place a tag on the device in the same manner as the lock. Fill tags out completely and correctly using the authorized employee's name who is performing the lockout. Pulling a fuse or flipping a circuit breaker is no substitute for locking out!

These guidelines can help ensure that the lock will not be removed during lockout/tagout procedures:

- Each lock should only have one key. No master keys are allowed.
- There should be as many locks on the system as people who are working on the equipment or machinery. For example, if a maintenance job requires three workers, then three locks should be present. Each of the individuals should place their own lock on the system. Locks can only be removed by those who installed them and should only be removed using a specific process outlined in “Removing Lockout/ Tagout Devices” on page XX of this publication.

Check for Stored Energy

Even after the energy source has been disconnected and the machine has been locked out, hazardous energy may remain in

the machine. Make sure all parts have stopped moving. Dissipate (use up the energy), restrain, or make non-hazardous in some way all stored energy before maintenance or service begins. Ways to release stored energy can include, but are not limited to, the following:

- **Electrical Energy**
  To find a specific method to discharge a capacitor for a system, contact the manufacturer for guidance. Many systems with electrical components, motors, or switch gears contain capacitors. Capacitors store electrical energy. In some cases, capacitors hold a charge and may release energy rapidly. In other cases, capacitors are used to remove spikes and surges to protect other electrical components. Capacitors must be discharged in the lockout process to protect workers from electrical shock.

- **Hydraulic and Pneumatic Potential Energy**
  Setting the valves in the closed position and locking them into place only isolates the lines from more energy entering the system. In most cases, there will still be residual energy left in the lines as pressurized fluid. This residual energy can be removed by bleeding the lines through pressure relief valves. Contact the manufacturer for more specific details.

- **Mechanical Potential Energy**
  Carefully release energy from springs that may still be compressed. If this is not possible, use blocks to hold the parts that may move if the energy is released.

- **Gravitational Potential Energy**
  If feasible, lower the part to a height where falling is impossible. If this is not possible, contact the manufacturer for guidance.

- **Chemical Energy**
  If available, bleed lines to remove chemicals from the system.

Verify Isolation of Equipment

Clear all personnel from dangerous areas and check again to make sure the equipment is isolated correctly. De-energize equipment before repair or maintenance begins by:

- verifying that the main disconnect switch or circuit breaker cannot be moved to the ON position;
- pressing all operating controls to ensure there is no power;
- returning all power switches to the OFF or NEUTRAL position; and
- informing employees in the area that the work is about to begin.

Restoring Equipment to Service

When the servicing or maintenance is complete and the machine or equipment is ready to return to normal operation condition, complete the following steps:

- **Inspection**
  Make certain the work is completed and inventory the tools and equipment that were used.
- **Clean-Up**
  Return all towels, rags, work-aids, parts, spare parts, accessories, and damaged components to the appropriate locations or inventories.
- **Replace Guards**
  Replace all guards possible. Sometimes a particular guard may have to be left off until adjustments can occur during the start sequence, but all other guards should be put back into place.
- **Check Controls**
  All controls should be in NEUTRAL or their safest position.
- **Check for Personnel**
  Check the work area to ensure that all employees have been safely positioned or removed and notified that the lockout/tagout devices are being removed.
- **Remove Locks and Tags**
  Remove only your lock or tag.

Group Lockout Procedures

Group lockout procedures give the same level of protection when multiple authorized employees need to work together to perform maintenance or service on a piece of equipment. A key part of the process is to designate a single responsible employee who is in charge of lockout/tagout and is accountable for the overall procedure. Each authorized employee must apply their lock to the points of isolation on the machine to ensure the equipment cannot be re-energized until every employee has completed the work and is in a safe location. Follow these group lockout procedures:

- One authorized employee selected by Matt Kitchen will coordinate the lockout procedure for all group lockouts.
- These rules will be reviewed with all authorized and affected employees by the group coordinator before the lockout.

- Each employee will affix their lock to the equipment being serviced.
- No employee will be allowed to remove another employee's lock. Each employee will remove their lock when their part of the operation is complete.
- When servicing or maintenance involves more than one shift, the off-going shift will remove their locks as the oncoming shift applies their locks.
- When equipment has only enough room for one lock, the group coordinator will place the lock on the equipment and then place the key to that lock in a cabinet or box. Each authorized employee will then affix their lock to the cabinet or box.

Shift or Personnel Changes

During shift changes or when the authorized employee currently performing the repair must leave before their replacement arrives, Matt Kitchen the Vice President shall place their lock on the equipment and then the authorized employee will remove their lock. Matt Kitchen the Vice President will remove their lock after the replacement authorized employee has placed their lock on the equipment.

If the replacement employee is present during the time that the current authorized employee is preparing to leave, the replacement employee will place their lock on the equipment and then the current employee will remove their lock.

Contractors and Outside Personnel

Whenever outside service personnel, contractors, or vendors are engaged in activities covered by OSHA's Control of Hazardous Energy (Lockout/Tagout) Standard, they must adhere to the host employer's Lockout/Tagout Program and receive Contractor Safety Orientation Training. The host employer's maintenance personnel and the contractor must perform a multiple-person lockout/tagout in all systems, equipment, and machines that the contractor is servicing. In some instances, the contractor may be required to sign a waiver, relieving the company of any liabilities while on site.

Removal of an Authorized Employee's Lockout/Tagout

Each location must develop written emergency procedures that comply with CFR 1910.147(e)(3) for emergency procedures to remove a lock or tag. The removal process should include:

- Employer verifies that the authorized employee who applied the device is not in the facility.
- Reasonable efforts are made to advise the employee that his or her device has been removed.

- Ensure that the authorized employee has this knowledge before he or she returns and resumes work at the facility.

Testing or Positioning Equipment During Lockout/Tagout

In situations when lockout devices must be temporarily removed from the energy-isolating device for testing or positioning, the authorized employee shall consult the Lockout/Tagout Procedure Form and follow the sequence of actions listed for Restoring Equipment to Service. Once the testing or positioning is complete and before servicing or maintenance is continued, de-energize the system and continue with the steps on the Lockout/Tagout Procedure Form.

Training

Employees will be provided training to ensure they know the purpose and function of the Lockout/Tagout Program.

Authorized employees will be trained on the following:

- recognizing hazardous energy sources;
- the type and magnitude of the energy available in the workplace; and
- the method and means needed for energy isolation and control.

Affected employees will be trained on the following:

- the purpose and use of the lockout/ tagout procedure.

Qualified employees who are permitted to work on or near exposed energized parts. shall, at a minimum, be trained in and aware of:

- the electrical lockout/tagout procedures;
- the skills needed to identify exposed live parts from electrical components;
- the skills and techniques necessary to determine the nominal voltage of exposed live parts;
- the appropriate clearance distances specified in CFR 1910.333 (c) and the corresponding voltages to which the qualified person will be exposed; and
- the appropriate personal protective equipment (PPE) provided by Williamson Roofing and identified in the PPE Hazard Assessment.

Other employees, whose work operations are in an area where lockout/tagout procedures may be used, will be instructed on the following:

- the lockout/tagout procedures; and
- the understanding that attempting to start-up any locked-out equipment may cause injury or death.

Authorized and qualified employees will be given training prior to performing any lockout procedures. All affected employees will be given training at the time of hire. Retraining will be given whenever there is a change in:

- job assignment;

- a change in machine, equipment, or processes that would create a new hazard; or
- whenever a change would occur in the Williamson Roofing 's lockout/tagout procedures.

A list of trained employees with the dates and types of training they received will be maintained by Williamson Roofing . Training can be certified using Attachment B (for authorized employees) or Attachment C (for affected employees). Training certificates should be retained in the employee personnel files.

Program Review and Update

The Lockout/Tagout Program will be reviewed or updated at least annually, or whenever there are new equipment or personnel changes that might affect the program. Annually, authorized employees who are not involved with the procedures being inspected will conduct a review of the Lockout/Tagout Procedures for all machines and equipment.

The annual inspection will include:

- a review of employees' responsibilities under the lockout/ tagout procedure;
- a physical inspection of the authorized employee while performing lockout/tagout procedures to correct any problem areas identified; and
- a written certification (see Attachment D) by the inspector that identifies the equipment or machine being inspected, the date of the inspection, the employees included in the inspection, and the person performing the inspection.

These inspections shall be performed by the Shop Supervisor .

If Shop Supervisor is also using the lockout/tagout procedure being inspected, then the inspection shall be performed by another party.

Compliance with the Program

All employees are required to comply with the restrictions and limitations imposed upon them during the use of lockout. The authorized employees are required to perform the lockout per the lockout/tagout procedures. All employees, upon observing a locked-out machine or piece of equipment shall not attempt to start, energize, or use that machine or equipment. Employees who fail to adhere to this policy will automatically be disciplined by Williamson Roofing 's progressive disciplinary policy.

List the name(s)/job title(s) of "authorized" employees in Appendix A on the next page.