

## Scaffold Safety Written Program



## Introduction

Scaffolds pose a serious safety hazard if not used or erected properly. It is the policy of UWM to ensure employees are trained on hazards associated with scaffold use, how to properly inspect scaffolds, and safe work practices. UWM will review and evaluate this standard practice instruction on an annual basis, or when changes occur to the governing regulatory standards, that prompt revision of this document, or when facility operational changes occur that require a revision of this document. Effective implementation requires a written program for job safety and health, that is endorsed and advocated by the highest level of management within UWM and that outlines our goals and plans. This written program will be communicated to all required personnel. It is designed to establish clear goals and objectives.

## Contractors

Contractors must follow their company scaffold safety program and may be asked to provide the paperwork to the University as part of the project requirements. Contractors shall not use any University owned scaffold systems under any circumstances without written consent. If consent is provided, the contractor must provide a copy of their most recent scaffold safety program.

## Responsibilities

### ***University Safety and Assurances (US&A)***

US&A has the primary responsibility for implementation and enforcement of the Scaffold Safety Program and is responsible for the following:

- Developing, implementing, and evaluating the Scaffold Safety Program to ensure compliance;
- Provide an avenue for training (online or in-person); and
- Maintain employee training documents.

### ***Supervisors***

Supervisors in support and administrative areas are responsible for providing the necessary direction and support to ensure the effective implementation of the Scaffold Safety Program for their work areas. Supervisors are responsible for the following:

- Make available the scaffold equipment Operator's Manual to the employee;
- Coordinate with Scaffold Competent Personnel for use and inspection of the scaffold.
- Ensure that employees are using the scaffold safely;
- Ensure the proper maintenance of the scaffold (according to the manufacturer's instructions) is performed and hazards are identified and corrected;
- Provide necessary personal protective equipment for each task; and
- Ensure that employees comply with all OSHA regulations while using the scaffold.

### ***Scaffold Competent Person***

A competent person is an employee who can identify existing or predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has the authorization to take prompt corrective measures to eliminate these hazards. Competent Person training will be held every three years from the previous training.

A competent person's responsibilities include (but are not limited to):

- Design and preplanning of the scaffold including weight limitations, scaffold type, fall protection, tie-offs, supports, etc.
- Overseeing the erection of the scaffold
- Final inspection of the scaffold prior to initial occupation for use.
- At a minimum, daily inspection and documentation of the condition of the scaffold and its ability to be occupied safely.
- Inspections of scaffolds after changes / alterations have been made.
- Oversight and inspections of mobile scaffolds.
- Training of other competent persons, scaffold erectors, and users.
- Contact EHS for assistance and guidance in any of the duties associated with being a Competent Person.

### ***Employees***

Employees who are designated as operators are responsible for the following:

- Completing the required safety training course for scaffold use;
- Use the scaffold in a safe manner consistent with their training in accordance with the manufacturer and this program;
- Inspect scaffolds and job sites prior to each work shift and ensure an inspection tag is present;
- Report all equipment malfunctions and/or maintenance needs to their supervisor immediately and do not use the scaffold until issues have been corrected and tagged by a competent person; and
- Comply will all OSHA regulations while using a scaffold.

## **Evaluation Requirements**

The evaluation shall be conducted by a Scaffold Competent Person or a US&A staff member who has the knowledge, training, and experience of scaffold system. A checklist will be used during the inspection to ensure every aspect of assembling the scaffold system is conducted and a tag is placed at the point of entry.

## **Training**

Only trained and authorized operators shall be permitted to inspect and/or use a scaffold. Training will consist of either online or classroom safety training and/or hands-on training depending on the level assigned to the employee. Hands-on training will include a skills test performed on the specific scaffold that the employee will erect and dismantle.

Topics required in the training are listed below:

- A description of fall hazards in the work area or job site;
- Procedures for using fall prevention and protective systems;
- Before the employee operates the scaffold;
- Before a new hazard is introduced into the work environment;
- After any incident or near miss; and/or
- As deemed necessary by a qualified person.
- Access and Egress procedures;
- Equipment limitations;
- Inspection and storage procedures or the equipment.

All employees are required to conduct retraining and be observed every three years to maintain proper performance of any scaffold has been assigned to use for their position. Any employee who refuses such training will not be permitted to operate a scaffold on University property.

Scaffold training must include the following information:

- Safe operation instructions
- Inspection process
- Visibility
- Capabilities
- Stability
- Operating limitations
- Surface conditions
- Loading/unloading operations
- Hazardous locations/conditions
- Any unique scenarios
- Proper PPE

Once the training has been verified as completed and passed the equipment evaluation, the employee will be issued a certificate of completion based on the level of training that expires three years from the date of issuance. The certification shall include the following:

- Employee's name
- Date of the Training
- Level of Training
- The Trainer's name
- The Evaluator's name

### ***Employee Qualifications***

Employees must demonstrate their competence by a passing the training quiz and complete a practical skill's test under observation of a qualified person. Employees must demonstrate the pre-inspection, assembly and disassembly, and safe evaluation of hazards.

### ***Refresher Training***

Refresher training in relevant topics shall be provided to the employee when:

- The operator has been observed to use the scaffold in an unsafe manner;
- The operator has been involved in an accident or a near miss incident;
- The operator is assigned to use a different type of scaffold;
- Condition changes in the workplace that could affect the safe use of the scaffold; and/or
- Three years from the date of expiration per their certificate.

## **Inspection and Maintenance**

The items are in accordance with OSHA regulations. These must be performed prior to the use of the scaffold.

- Each scaffold will be inspected before each daily shift by a competent person and tag will be initialed for the day.
- If repairs are required on a scaffold such that it cannot be safely operated, it must be “Red Tagged” and immediately taken out of service until the repairs have been completed or parts are replaced.
- Maintenance or repair activities are to be performed by a qualified service technician.
- Scaffolds will be kept in a clean condition, free of dirt/debris, excess oil, and grease.

### **Pre-Inspection of Erected Scaffolding**

The three main areas of inspection are for rust, straightness of members, and welds. Only trained employees of UWM will conduct the pre-inspection. Pertinent OSHA regulations and information and guidance provided by the manufacturer of the particular type of scaffolding will be used. The following as a minimum apply:

- Rust. Heavily rusted scaffolding equipment is a possible sign of abuse or neglect. Severely rusted components should be thoroughly inspected and cleaned before approved for use.
- Straightness of members. Mishandling, transporting, and storing may cause damage to scaffolding equipment. All members or parts of all steel scaffolding components should be straight and free from bends, kinks or dents.
- Welds. Scaffolding equipment should be checked before use for damaged welds and any piece of equipment showing damaged welds or rewelding beyond the original factory weld should not be used. The factory weld reference pertains to location and quality of rewelds.
- Check serviceability of locking devices.
- Check alignment of coupling pins and braces.
- Check serviceability of caster brakes (rolling scaffolds).

### **Final Inspection of Erected Scaffolding**

Only trained and authorized employees of UWM will conduct the final inspection of erected scaffolding. Pertinent OSHA regulations and information and guidance provided by the manufacturer of the scaffolding will be used. The following as a minimum apply:

- Check for proper support under every leg of every frame.
- Check for wash out (if outside) due to rain.
- Check to ensure all base plates or adjustment screws are in firm contact with supports.
- Check frames for plumbness and squareness in both directions.
- Check serviceability and correctness of all cross braces.
- Check to ensure that all planking and accessories are properly installed.
- Check to ensure that all guard rails are in place.
- Recheck periodically to ensure conditions remain safe.

### ***Tagging System***

Upon completion of the inspection, a tag will be issued and placed on the scaffold access point. The following system is to be used to indicate an inspection was completed.

A tag must have the date of the inspection and in the inspector's initials. This must be completed each day the scaffold is being used to ensure the conditions have not changed from day to day.

- Green – Tags will be hung on scaffolds that have been inspected and are safe for use.
- Yellow – Tags will be hung on scaffolds that are modified to meet work requirements, and as a result could present a hazard to the user. This tag indicates special requirements for safe use. The tag as a minimum requirement will have:
  - The unusual or potential hazard marked on the reverse side of tag.
  - The preventative measures that must be taken prior to use to mitigate the hazard marked on the reverse.
  - The name of UWM Scaffold Competent Person authorizing the use of scaffold.
  - This tag should not be removed until the scaffold has been returned to a safe condition and an inspection has been completed by a competent person. Based on the results of the new inspection, the appropriate tag will be hung on the scaffold and yellow tag shall be removed.
  - Yellow tag status is not intended to override the green tag system. All efforts should be made to return the scaffold to a "Green Tag" status as soon as possible.
- Red – "Danger/Unsafe for Use" – will be used during erection or dismantling when the scaffold is left unattended and replace all green tags in the event a scaffold has been deemed unfit for use. The tag(s) as a minimum requirement will include:
  - The Work Order number or project number, the inspection date, inspector's name, who filled the front of the tag.
  - The designation, under erection, being dismantled, repairs required or overhead protection only, marked on the reverse side.
  - Scaffold re-inspections must be completed any time when conditions may have changed causing the integrity of the scaffold to be suspect

## Standard Safety Equipment

Employees must use the following safety equipment provided for the scaffolds depending on the assessment of the competent person, US&A, and/or job/environmental hazards:

- Guardrails
- Personal Fall Arrest System (PFAS)
- Hard Hats
- Gloves
- Ladders
- Other PPE maybe needed as assigned

### A competent person

#### Fixed Scaffolding Safety Policy

To ensure safety and serviceability, the following general precautions concerning the care and use of scaffolding will be observed:

- Footing and anchorages. The footing and/or anchorage for scaffolds will be sound, rigid, and capable of carrying the maximum intended load without settling or displacement. Unstable objects such as barrels, boxes, loose brick, or concrete blocks will not be used to support scaffolds or planks.
- Scaffolds and their components will be capable of supporting without failure at least four times the maximum intended load.
- Scaffolds will be maintained in a safe condition at all times in accordance with the manufacturer's recommendations. Fixed scaffolds will not be altered or moved horizontally while they are in use or occupied.
- Any scaffold damaged or weakened from any cause will be immediately repaired and will not be used until repairs have been completed.
- Scaffolds will not be loaded in excess of the working load for which they are intended.
- All load carrying timber members of scaffold framing will be a minimum of 1,500 feet/in<sup>2</sup>. (Stress Grade) construction grade lumber.
- All planking will be scaffold grade as recognized by grading rules for the type of wood used. The scaffold manufacturers recommendations will be followed.
- Nails or bolts used in the construction of scaffolds will be of adequate size and in sufficient numbers at each connection to develop the designed strength of the scaffold. Nails will not be subjected to a straight pull and will be driven full length.
- All planking or platforms will be overlapped (minimum 12 inches) or secured from movement.
- An access scaffold or equivalent safe access will be provided.
- Scaffold planks will extend over their end supports not less than 6 inches nor more than 18 inches.
- The poles, legs, or uprights of scaffolds will be plumb, and securely and rigidly braced to prevent swaying and displacement.
- Materials being hoisted onto a scaffold will have a tag line.
- Overhead protection will be provided for employees on a scaffold exposed to overhead hazards.
- Scaffolds will be provided with a screen between the toe board and the guardrail, extending along the entire opening, consisting of No. 18 gauge U.S. Standard Wire ½ inch mesh or the equivalent, where persons are required to work or pass under the scaffolds.

- Employees will not work on scaffolds which are covered with ice or snow, unless all ice or snow is removed and planking sanded to prevent slipping.
- Tools, materials, and debris will not be allowed to accumulate in quantities to cause a hazard.
- Only treated or protected fiber rope will be used for or near any work involving the use of corrosive substances or chemicals.
- Wire or fiber rope used for scaffold suspension will be capable of supporting at least six times the intended load.
- The use of shore scaffolds or lean-to scaffolds will not be used by UWM.
- Lumber sizes, when used in this section, refer to nominal sizes except where otherwise stated.
- Scaffolds will be secured to permanent structures, through use of anchor bolts, reveal bolts, or other equivalent means. Window cleaners' anchor bolts will not be used.
- Special precautions will be taken to protect scaffold members, including any wire or fiber ropes, when using a heat producing process.

### **Mobile (Rolling) Scaffolding Safety Policy**

To ensure safety and serviceability, the following general precautions concerning the care and use of mobile scaffolding will be observed:

- Working loads. Work platforms and scaffolds will be capable of carrying the design load under varying circumstances depending upon the conditions of use.
- The design load of all scaffolds will be calculated on the basis of:
  - **Light:** Designed and constructed to carry a working load of 25 pounds per square foot.
  - **Medium:** Designed and constructed to carry a working load of 50 pounds per square foot.
  - **Heavy:** Designed and constructed to carry a working load of 75 pounds per square foot.
- Nails, bolts, or other fasteners used in the construction of ladders, scaffolds, and towers will be of adequate size and in sufficient numbers at each connection to develop the designed strength of the unit. Nails will be driven full length. (All nails should be immediately withdrawn from dismantled lumber.)
- All exposed surfaces will be free from sharp edges, burrs or other safety hazards.
- Work levels. The maximum work level height will not exceed four times the minimum or least base dimensions of any mobile scaffold. Where the basic mobile unit does not meet this requirement, suitable outrigger frames will be employed to achieve this least base dimension, or provisions will be made to guy or brace the unit against tipping.
- The minimum platform width for any work level will not be less than 20 inches for mobile scaffolds (towers). Ladder stands will have a minimum step width of 16 inches.
- The supporting structure for the work level will be rigidly braced, using adequate cross bracing or diagonal bracing with rigid platforms at each work level.
- The work level platform of scaffolds (towers) will be of wood, aluminum, or plywood planking, steel or expanded metal, for the full width of the scaffold, except for necessary openings. Work platforms will be secured in place. All planking will be 2-inch (nominal) scaffold grade minimum 1,500 feet/in<sup>2</sup>. (stress grade) construction grade lumber or equivalent.
- All scaffold work levels 10 feet or higher above the ground or floor will have a standard (4-inch nominal) toe board.



- All work levels 10 feet or higher above the ground or floor will have a guardrail of 2 inch x 4 inch nominal or the equivalent installed no less than 36 inches or more than 42 inches high, with a midrail, when required, of 1 inch x 4 inch nominal lumber or equivalent.
- Wheels or casters.
  - Wheels or casters will be inspected to ensure that they are provided with strength and dimensions to support four times the design working load.
  - All scaffold casters will be inspected to ensure that they are provided with a positive wheel and/or swivel lock to prevent movement.
- Where leveling of the elevated work platform is required, screw jacks or other suitable means for adjusting the height will be used.
- Employees are not permitted to ride rolling scaffolds during relocation.
- Adjusting screws may not be extended more than 12 inches.
- Before moving the platform secure all employee equipment and job materials.
- Casters or wheels must have a serviceable locking device.
- Be aware of overhead obstructions when moving scaffolds.
- Never run over electrical cords.
- Never pull scaffolds from the top, always push at base level.
- Work only from the platform area never extend work beyond guardrailing.

### **Erecting of Scaffolding.**

Only trained and authorized employees of UWM will supervise the erection of scaffolding. Pertinent OSHA regulations and information and guidance provided by the manufacturer of the particular type of scaffolding will be used. The following apply:

- Manufacturer's erection instructions will be followed.
- Advance planning considerations will be followed during the erection process.
- Only trained and authorized employees will supervise the erection of scaffolding.
- Each component will be visually inspected before use.
- Defective or unserviceable materials will not be used,
- Only approved lumber will be used.

### **Dismantling of Scaffolding.**

Only trained and authorized employees of UWM will supervise the dismantling of scaffolding. Pertinent OSHA regulations and information and guidance provided by the manufacturer of the scaffolding will be used. The following apply:

- Manufacturers' dismantling instructions will be followed.
- Relocation planning will be considered during the dismantling process.
- Dismantling will be supervised by a competent employee.
- Each component will be visually inspected after use.
- Defective or unserviceable materials will not be stored with serviceable materials.
- Avoid dropping or throwing the components as this could result in damage to the equipment.