

ARKANSAS TECH UNIVERSITY
HEALTH & SAFETY POLICY

SCAFFOLDS

This procedure establishes the requirements, directions, and instructions for safety requirements to be implemented with the construction, erection, and dismantling of scaffolds.

The scope of this policy applies to all University jobsite locations where scaffolds may be used. The requirements, as set forth in this policy, should be implemented to the fullest extent possible.

****NOTE** There are several different types of scaffolding. The manufacturer's specifications should be reviewed carefully for any special requirements that apply to each type.**

ASSIGNMENT OF RESPONSIBILITIES

The primary responsibility for the implementation of the requirements of this policy shall rest with the jobsite supervisor, Occupational Safety Coordinator, or the competent person.

A.

The Occupational Safety Coordinator or competent person shall be responsible to provide for the monitoring of work activities to assure compliance to the requirements of this policy and compliance to the contractor's (if applicable) safety requirements.

B.

Supervisors are responsible for employee compliance to safety requirements. In the case of contractors working on campus, the project manager will be responsible for compliance.

C.

Employees are responsible for the following:

1. Ensure they abide by and follow all requirements and guidelines outlined in this policy
2. Ensure that they only erect, use, and dismantle the scaffolding according to regulations and manufacturers requirements.

CONTROL OF SCAFFOLDING

ARKANSAS TECH UNIVERSITY HEALTH & SAFETY POLICY

During construction of a scaffold, 3 types of tags may be used during different stages of the build. Those tags include:

1. **Red tag**- indicates scaffold is incomplete and may not be used by anyone except the scaffold builders.
2. **Yellow tag**- indicates that a scaffold is completed but does not meet all the necessary OSHA/ State safety requirements and all personnel using the scaffold must wear a personal fall arrest system (fall protection).
3. **Green tag**- indicates a complete scaffold and signifies it is safe to use as defined by the manufacturers recommendations, OSHA, and the State.

REVIEW OF SCAFFOLDING

The Occupational Safety Coordinator must be notified of any new plans to build a scaffold and prior to any work being performed on the scaffold.

This is so a visual inspection of the scaffold can be performed prior to work taking place.

REFER TO SCAFFOLD INSPECTION CHECKLIST

SCAFFOLDING REQUIREMENTS

A.

The following requirements are applicable to all guardrails and toe-boards:

1. Guardrails shall be constructed of 2" X 4" lumber, 1/2 inch wire rope, angle iron or the prefabricated rail(s) supplied by the scaffold manufacturer.
2. Top-rails shall be approximately 42 inches above the working surface.
3. Mid-rails shall be approximately 21 inches above the working surface.
4. Wire rope top-rails and mid-rails shall be stretched tight with no more than an approximate 2 inch deflection.
5. Toe-boards shall extend a minimum of 4 inches above the working surface.

ARKANSAS TECH UNIVERSITY HEALTH & SAFETY POLICY

6. When the placement of the scaffold work platform prevent the installation of guardrails, other fall protection equipment shall be used.
7. Guardrails and toe-boards shall be installed on all open sides and ends of scaffolds.
8. Scaffolds and work platforms 4 feet to 10 feet high with a working surface of less than 45 inches shall have standard guardrails installed on all open sides and ends of the scaffold or platform.

B.

The following requirements are applicable to all working surfaces on the scaffold:

1. Working surfaces shall be constructed of scaffold plank, aluminum deck boards or 3/4" construction grade plywood.
2. Scaffold planking shall be scaffold grades or equivalent as recognized by approved grading rules for the species of wood used under the American Lumber Standards.
3. Working surfaces shall be secured by nails, double wrap of #9 wire or cleats.
4. Lumber sizes, when used in this program, refer to nominal size/thickness except where otherwise stated.
5. Scaffold planks shall extend a minimum of 6 inches and a maximum of 12 inches over the end supports.
6. If required, an access/egress ladder shall be provided.
7. Scaffold planks shall not span more than 8 feet between supports/vertical legs.
8. Scaffold planks and plywood shall be free of splits and burns.

C.

The following requirements are applicable to scaffold footing & anchorage:

1. The footing or anchorage shall be capable of carrying the maximum intended load without settling or displacement.
2. The uprights/vertical legs shall be plumb and securely braced to prevent swaying and displacement.

TYPES OF SCAFFOLDS & REQUIREMENTS FOR EACH

A.

Tubular welded frame scaffolding must meet the following requirements:

1. Scaffold shall be cross-braced to assure scaffold is plumb, square, and rigid.
2. Stacking pins shall only be secured with the manufacturer's pins or recommended bolts.
3. Cross braces shall be secured, as designed by the manufacturer.

ARKANSAS TECH UNIVERSITY HEALTH & SAFETY POLICY

4. Stationary scaffolds must be secured horizontally, every 26 feet of height and 30 feet horizontally, to prevent tipping.
5. The height of rolling scaffolds, measured from the ground to the toprail, shall be no more than four times the minimum base dimension (length times the width).
6. All wheels/casters shall be the same size, equipped with a positive locking device, and in good working condition.
7. Wheels shall be locked while personnel are working from the scaffold.
8. Personnel shall not be permitted on mobile scaffold while the scaffold is being moved.



B.

Tube & coupler (tube lock) scaffolding must meet the following requirements:

1. Uprights shall have a maximum spacing of 8 feet.

ARKANSAS TECH UNIVERSITY HEALTH & SAFETY POLICY

2. Uprights shall be placed on secure bases and maintained plumb.
3. Scaffolds shall be limited in heights and working levels to those permitted in Tables 2-10, 11, and 12 of OSHA 29 CFR 1926.451.
4. Horizontal braces shall be installed completely around all exterior uprights and between interior uprights. Braces shall be installed every 6 feet of height.
5. Platform supports shall be coupled/clamped directly to the horizontal braces and extend 4 inches to 12 inches beyond the horizontal braces.
6. All horizontal bracing shall be coupled/clamped directly to the uprights.
7. Diagonal bracing shall be installed at alternating 45 degree angles beginning with the corner upright and repeating every 5th upright on the perimeter. An alternating bracing pattern should be used.



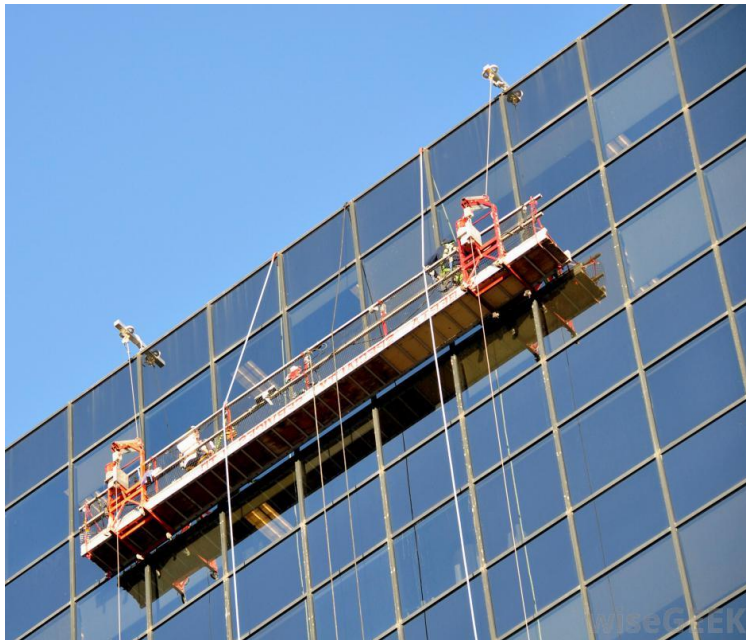
C.

One & two point suspension scaffolding must meet the following requirements:

1. Cable shall be securely anchored and softeners shall be used when necessary.

ARKANSAS TECH UNIVERSITY HEALTH & SAFETY POLICY

2. Cable shall be insulated at the anchor point from the motor to 4 feet above the motor and wherever the cable comes in contact with metal to prevent electrical arcing.
3. Two-point suspension scaffold platforms shall remain level while being raised or lowered.
4. Each employee shall wear a full body harness and be tied off to an independent lifeline. A lifeline shall be supplied for each employee.



D.

Knee brace/cantilever scaffolding must meet the following requirements:

1. Knee brace/cantilever scaffolding shall be welded by a qualified welder and visually inspected before use.

ARKANSAS TECH UNIVERSITY HEALTH & SAFETY POLICY



SCAFFOLD PRE-CAUTIONS AND LIMITATIONS

1. No work shall be performed on an outdoor scaffold when the winds are greater than 40mph.
2. No work shall be performed on an outdoor scaffold that is covered in ice or snow.

ARKANSAS TECH UNIVERSITY HEALTH & SAFETY POLICY

3. Scaffolding must have a minimum clearance of at least 3 feet if erected near any fire or electrical equipment.
4. Scaffolding built near electrical equipment must be grounded by the use of ground straps or cables to reduce the risk of electric shock.
5. Personal fall arrest systems (fall protection) must be worn on any scaffolding that meets or exceeds 6 feet in height.
6. Tools, materials, and debris shall not be allowed to accumulate on scaffolds.
7. Mobile scaffolds will be utilized with locked wheels only. Moving the scaffold from elevated positions will not be permitted.
8. Scaffolding must be inspected prior to each use.

ADDITIONAL SCAFFOLD BUILDING REQUIREMENTS

1. All scaffolds will be fully planked, braced, and guardrail systems installed 6ft and above.
2. All scaffolds 6 ft. or more in height shall include diagonal braces and mid rails.
3. Scaffolding is to be supported on a firm subgrade and sound mudsill material.
4. Base plates are required for all fixed scaffolds.
5. Toe-boards, screen systems, or similar methods must be used to protect those working below elevated decks, structures and leading edges 6 feet or greater above a lower level.
6. Ladder access will be provided for each scaffold. If access or egress prohibits the installation of a swing gate then double safety chain may be used.
7. Scaffold loading must not exceed manufacturer's capacity requirements.

TRAINING REQUIREMENTS

The Occupational Safety Coordinator will be responsible for implementing the employee training and information program. The format for the program may include classroom instruction, practical hands on activities, safety tool box meetings, and other forms of group or singular instructions. The Occupational Safety Coordinator is responsible for assuring supervisors are qualified or competent in the following areas:

**ARKANSAS TECH UNIVERSITY
HEALTH & SAFETY POLICY**

- 1.** Fall hazards and falling object hazards.
- 2.** Electrical hazards (protection from electrical hazards for erecting, maintaining, and dismantling).
- 3.** Fall protection and protection systems.
- 4.** Proper and safe handling of materials.
- 5.** Trained in the maximum intended loads and load-carrying capacities.
- 6.** Any other pertinent requirements.