



# HSE POLICY

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<b>SCAFFOLDING</b>	
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## 1. SCOPE

- 1.1. This policy provides the minimum procedures to be followed when scaffolds and platforms are erected and utilized on worksites.

## 2. DEFINITIONS

Brace	A rigid connection that holds one scaffold member in a fixed position with respect to another member, or to a building or structure.
Cleat	A structural block used at the end of a platform to prevent the platform from slipping off its supports. Cleats are also used to provide footing on sloped surfaces such as crawling boards.
Competent Person	One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.
Coupler	A device for locking together the tubes of a tube and coupler scaffold.
Guardrail	A vertical barrier, consisting of, but not limited to, toprails, midrails, and posts, erected to prevent employees from falling off a scaffold platform or walkway to lower levels.
Lifeline	A component consisting of a flexible line that connects to an anchorage at one end to hang vertically (vertical lifeline), which serves as a means for connecting other components of a personal fall arrest system to the anchorage.
Maximum Intended Load	The total load of all persons, equipment, tools materials, transmitted loads, and other loads reasonably anticipated to be applied to a scaffold or scaffold component at any one time.
Outrigger	The structural member of a supported scaffold used to increase the base width of a scaffold in order to provide support for and increased stability of the scaffold.
Qualified Person	One who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and demonstrated his/her ability to solve or resolve problems related to the subject matter, the work or the project.
Rated Load	The manufacturer's specified maximum load to be lifted by a hoist or to be applied to a scaffold or scaffold component.
Scaffold	Any temporary elevated platform (supported or suspended) and its supporting structure (including points of anchorage), used for supporting employees or materials or both.

Single Pole Scaffold	A supported scaffold consisting of a platform(s) resting on bearers, the outside ends of which are supported on runners secured to a single row of posts or uprights, and the inner ends of which are supported on or in a structure or building wall.
Suspended Scaffolds	Scaffold with one or more platforms, suspended by ropes or other non-rigid means from an overhead structure. Examples include: Single-Point, Two-Point, and Multi-Point Adjustable Suspension Scaffolds; Interior Hung Scaffolds; Float (ship) Scaffolds; Boatswain's Chairs; Catenary Scaffolds.
Three Points of Contact	Term used for a method of safe ladder climbing where between a climber's two hands and two feet, at least three of them are in contact with the ladder rungs/rails at all times while ascending or descending the ladder.
Tube and Coupler Scaffold	A supported or suspended scaffold consisting of a platform(s) supported by tubing, erected with coupling devices connecting uprights, braces, bearers, and runners.

### 3. POLICIES

- 3.1. Scaffolds shall be erected, altered, moved, or dismantled by trained scaffold erectors and under the supervision of Competent Persons. Barricade shall be placed around the area being used during scaffold erection. Any subcontractor using scaffolding on a MAPP project shall ensure all personnel are properly trained for the jobs assigned, regarding scaffolding.
- 3.2. Scaffolds and scaffold components shall be inspected for visible defects by a competent person before each work shift, and after any occurrence, which could affect a scaffold's structural integrity.
- 3.3. Color coded tags assist in easy identification of a scaffold condition. A three-tag system will be used which includes a red or "Danger" tag in conjunction with the yellow and green tags.
  - A red tag means the scaffold is being dismantled, not yet completely erected, or for some reason not safe and shall not be used. Any scaffold that is tagged red shall not be used.
  - A green tag is completed and attached by the erecting crew to scaffolds that have complete handrails, midrails, toeboards, decking are safe for use without fall arrest systems.
  - A yellow tag is completed and attached to scaffolds that cannot be erected with all components complete or to identify a hazard associated with using the scaffold. The yellow tag allows the erecting crew to note what portion of the scaffold is incomplete and also cautions the user as to what to look for. A yellow tag also informs the user that a fall protection device is required while on a scaffold with incomplete guardrails or platforms.

- Scaffolds without tags must not be used and should be reported to the MAPP Superintendent immediately.
- 3.4 A scaffold shall be capable of supporting, without failure, its own weight and at least four times the maximum intended load.
- 3.5 All scaffold work platforms as required should have complete guardrails and toe boards installed.
- 3.6 All scaffold work platforms must be completely decked between the uprights and/or guardrail supports. Scaffold boards are not to extend over their end supports more than 12" or less than 6".
- 3.7 Scaffold platforms shall be a minimum of 18 inches wide.
- 3.8 All scaffold decking shall be made of manufactured system components designed specifically for that purpose or scaffold grade lumber.
- 3.9 No paint or material which would affect proper visual board inspection or work surface safety may be applied to scaffold boards. Scaffold boards may be painted 10 to 12 inches on each end to denote use for scaffold decking only.
- 3.10 The footing or anchorage for all scaffolds shall be sound, rigid, and capable of supporting the loaded scaffold without settling or displacement. Unstable objects such as barrels, boxes, loose bricks, or concrete blocks will not be used to support scaffolds.
- 3.11 Mud sills (12" x 12" minimum size) should be used if scaffold legs are resting on dirt, grass, or a potentially unstable surface such as gravel, sand, shell, etc. Base plates are required at all times. When using leveling jacks, 3/4 of its length must remain inside the scaffold leg.
- 3.12 The poles, legs, or uprights of scaffolds shall be plumb and securely and rigidly braced to prevent swaying and displacement.
- 3.13 Manufactured scaffold components shall not be modified. Scaffold components manufactured by different manufacturers or of dissimilar metals shall not be intermixed.
- 3.14 Supported scaffolds with a height-to-base width ratio of more than four-to-one shall be restrained from tipping by guying, tying, bracing, or equivalent means with a minimum of #9 wire.
- 3.15 When scaffold platforms are more than 24 inches above or below a point of access, an attached ladder or other approved ladder/stair system must be used by scaffold users to reach the platform.
- 3.16 Scaffold bracing shall not be used for access or climbing. Integral prefabricated scaffold access frames must be specifically designed and constructed for use as ladder rungs may be used for access to platforms.
- 3.17 Each employee on a scaffold platform more than 6 feet above the ground or next lower level shall be protected from falling to that lower level by means of a complete guardrail system (fall prevention) or approved personal arrest system.
- 3.18 All scaffold work platforms should have complete guardrails and toe boards installed, however, if the guardrail is incomplete or missing, personal fall protection is required.

- 3.19 All scaffold guardrail systems must meet the design/performance requirements set forth by regulatory agency standards.
- 3.20 Where guardrail systems are incomplete, missing, or moved to allow access for work, personal fall protection shall be used on the affected platform(s).
- 3.21 In addition to wearing proper PPE, employees shall be provided with additional protection from falling hand tools, materials, debris and other objects through the installation of signage, toe boards, barricades, mesh/screens, debris nets, or catch platforms/canopies.

#### **4. SCAFFOLD USE**

- 4.1. Scaffolds shall not be loaded in excess of their maximum intended loads or rated capacities.
- 4.2. Debris shall not be allowed to accumulate on platforms.
- 4.3. Do not stack brick, tile, block, or similar material higher than 24" on the scaffold deck.
- 4.4. Makeshift devices, such as boxes and barrels shall not be used on top of scaffold platforms to increase the working level height of employees.
- 4.5. Ladders shall not be used to increase the working level height of employees.
- 4.6. Where swinging loads are being hoisted onto or near scaffolds such that the loads might contact the scaffold, tag lines or equivalent measures to control the loads shall be used.
- 4.7. Scaffolds shall not be moved or dismantled without first removing all loose tools, materials, and equipment resting on the scaffold deck.
- 4.8. The clearance between scaffolds and power lines shall be as follows: Scaffolds shall not be erected, used, dismantled, altered, or moved such that they or any conductive material handled on them might get closer to exposed and energized lines than as follows:

##### **Insulated Lines (Voltage)**

##### **MINIMUM DISTANCE**

Less than 300 Volts

3 Feet

330 Volts to 50 KV

10 Feet

More than 50 KV

10 Feet Plus 0.4 Inches for each 1 KV over 50 KV or 2 times the length of the line insulator but never less than 10 feet

##### **Uninsulated Lines (Voltage)**

##### **MINIMUM DISTANCE**

Less than 50 KV

10 Feet

More than 50 KV

10 Feet plus 0.4 inches for each 1 KV over 50 KV or 2 times the length of the line insulator, but never less than 10 feet

**5. PERSONAL FALL PROTECTION**

- 5.1. Personal fall protection used on scaffolds shall be attached by a lanyard to a vertical lifeline, horizontal lifeline or approved vertical scaffold structural member.
- 5.2. Personal fall protection is not required while using a designed ladder or access system, provided “three points of contact” are maintained when ascending or descending an approved scaffold ladder (access way).
- 5.3. Employees may not climb any ladder with anything in their hands. Tools and materials may be hoisted up or down by rope or other devices.
- 5.4. Personal fall arrest systems shall have an anchorage point that can withstand at least a 5000lb force.
- 5.5. Approved personal fall protection is required any time employees work on, or erect a scaffold which is not protected by a complete deck and guardrails, and 6 feet or more above the ground or next lower level: or anytime on a suspended scaffold platform. Working as stated above means while traveling, stationary, or at any time exposed to a fall hazard.

**6. TRAINING**

- 6.1. Employees must receive Roles and Responsibilities training before initial assignment. The training must be documented including the employee name, the dates of training and subject.
- 6.2. Scaffolds shall be erected, altered, moved, or dismantled by trained scaffold erectors and under the supervision of Competent Persons trained in accordance with federal, state, and local regulatory guidelines. Any subcontractor using scaffolding on a MAPP project shall ensure all personnel are properly trained for the jobs assigned, regarding scaffolding.
- 6.3. Scaffold user training shall be given for any employee that will work upon scaffolding of any type including the use, hazards of (including fall, electrical, falling objects), fall protection, and load capacities of scaffolding which they are working.
- 6.4. Scaffold training for MAPP employees shall be done upon hire, and annually thereafter. Retraining shall be done at any other time that a person appears incompetent to use a scaffolding through means of inspections and audits, is involved in an incident involving a scaffold, or fails to demonstrate required knowledge.