

Scaffolding Safety Plan

Dee Cramer Inc

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Scaffolding Safety Procedures for Construction

Purpose

It is this company's purpose in issuing these procedures to further ensure a safe workplace based on the following formal, written procedures for scaffold work. These procedures will be reviewed and updated as needed to comply with new OSHA regulations, new best practices in scaffolding, and as business practices demand. The Corporation Safety Director is the plan coordinator/manager and is responsible for its implementation.

Copies of the written program may be obtained at Main office, 4221 E. Baldwin Road., Holly, MI 48442.

This written plan describes the work site.

Application

This general scaffold plan applies to All employees who perform work while on a scaffold, who are involved in erecting, disassembling, moving, operating, repairing, maintaining or inspecting scaffolds. All scaffolds on all sites where Dee Cramer is doing work..

General Procedures

The following general procedures apply to all scaffold and aerial lift operations for Dee Cramer Inc.

[Editor's Note: The requirements in our written plan originate from the new scaffolding rule that became effective on November 29, 1996. It contains sample entries and may or may not apply to your operation. In order to be in full compliance you need to be familiar with and use this new rule when completing your written safety plan to fit your specific operation(s).]

Capacity

Taking into account the OSHA rules we must apply and the engineering/manufacturing requirements of our scaffolds, the following rules apply. Note: We have also included in the appendix, the manufacturer's safety requirements for particular scaffold assemblies.

- Each scaffold and scaffold component we use will support, without failure, its own weight and at least four times the maximum intended load applied or transmitted to it.
 - When we use non-adjustable suspension scaffolds, each suspension rope, including connecting hardware, will support, without failure, at least six times the maximum intended load applied or transmitted to that rope.
 - Scaffold shall be designed by a qualified person and shall be constructed and loaded in accordance with that design. Direct connections to roofs and floors and counteweights used to balance adjustable suspension scaffold, shall be capable of resisting at least 4 times the tipping moment imposed by the scaffold operating at the rated load of the hoist. Each suspension rope, including connecting hardware, used on non-adjustable suspension scaffolds shall be capable of supporting without failure at least 6 times the maximum intended load applied or transmitted to that rope.
- The stall load of any scaffold hoist shall not exceed 3 times its rated load.

Platform Construction

This section documents the procedures and safety requirements we use to construct our scaffold platforms.

Type of Scaffold: Supported and suspension scaffolds; Supported scaffolds are platforms supported by legs, outrigger beams, brackets, poles, uprights, posts, frames or similar rigid supports/

A suspension scaffold means one or more platforms suspended by ropes or other non rigid means from an overhead structure

Type of Planking: Scaffold planking shall be capable of supporting without failure, its own weight and at least 4 times the intended load. Solid sawn wood, fabricated planks, and fabricated platforms may be used as scaffold planks following the manufacturer.

Fall protection used: Personal fall arrest systems including; harness, lanyard, components of harness; dee-rings snaphooks, lifelines and anchorage points

The following safety rules apply for this scaffold platform construction:

- Each scaffold plank will be installed so that the space between adjacent planks and the space between the platform and uprights is no more than one inch wide. If, in certain situations, we need to make this space wider, we will attach our demonstration in the appendix to this plan.
- Except for outrigger scaffolds (3 inches) and plastering and lathing operations (18 inches), the front edge of all platforms will not be more than 14 inches from the face of the work, unless we have a guardrail or personal fall arrest system in place that meets regulations.
- Usage shall be performed as through training under MIOSHA regulations

The following additional construction and safety information is included depending on the type of scaffold being erected.

Supported Scaffolds

- Supported scaffolds with a height to base width ratio of more than four to one (4:1) must be restrained from tipping by guying, tying, bracing, or equivalent means.
- Supported scaffold poles, legs, posts, frames, and uprights will always bear on base plates and mud sills or other adequate firm foundations.
- Supported scaffolds with a height to base width ratio of more than 4 to one shall be restrained from tipping by guying, tying, bracing or equivalent means.

Suspension Scaffolds

- Before a scaffold is used, all direct connections will be evaluated by our competent person. Our competent person will confirm, based on the evaluation, that the supporting surfaces are capable of supporting the loads that will be imposed.
- When winding drum hoists are used on a suspension scaffold, they will never contain less than four wraps of the suspension rope at the lowest point of

scaffold travel.

- Dee Cramer will not be using the suspension scaffold system.

However the support for outrigger beams, cornice hooks, parapet clamps and similar devices, shall rest on surfaces capable of supporting at least 4 times the load imposed on them by the scaffold operating at the rated load of the hoist.

Gaining Access to Scaffolds

We know that getting to the working platform is critical to the safety of our employees. This section outlines the mechanical requirements for gaining access to scaffold platforms such as: (1) ladders, (2) ramps and walkways, (3) stairrails, and (4) direct access from another scaffold. This section is divided into two parts. The first part is for workers gaining access to scaffold platforms to do work; the second part is access for employees erecting and dismantling scaffolds.

Working Employees:

- Portable, hook-on, and attachable ladders will be positioned so as not to tip the scaffold.
- All stairrail systems and handrails will be surfaced to prevent injury to our employees from punctures or lacerations, and to prevent snagging of their clothes.
- When scaffold platforms are more than 2 feet above or below a point of access, portable ladders, hook-on ladders, attachable ladders, stair towers, stairway-type ladders, ramps, walkways, or similar surface shall be used. Crossbraces shall NOT be used as a means of access

Erectors and Dismantlers:

[Editor's Note: Effective September 2, 1997 access for employees erecting or dismantling supported scaffolds must be in accordance with 1926.451(e)(9).]

Our company shall provide safe means of access for each employee erecting or dismantling a scaffold where the provision of safe access is feasible and does not create a greater hazard. We shall have a competent person determine whether it is feasible or would pose a greater hazard to provide, and have employees use a safe

means of access. This determination shall be based on site conditions and the type of scaffold being erected or dismantled.

Hook-on or attachable ladders shall be installed as soon as scaffold erection has progressed to a point that permits safe installation and use.

When erecting or dismantling tubular welded frame scaffolds, (end) frames, with horizontal members that are parallel, level and are not more than 22 inches apart vertically may be used as climbing devices for access, provided they are erected in a manner that creates a usable ladder and provides good hand hold and foot space.

Cross braces on tubular welded frame scaffolds shall not be used as a means of access or egress.

Fall Protection Plan

Fall protection planning is critical to the safety and well being of our employees. Our fall protection plan follows the OSHA requirements that are different depending on the type of scaffold we are using. In this plan we address fall protection for our scaffold erectors and dismantlers separately.

One fact never changes. We know we must provide fall protection for any employee on a scaffold more than 10 feet above a lower level.

Working Employees:

This fall protection plan for our working employees is for the following type(s) of scaffold(s):

- To meet all requirements of 1926.502 -OSHA fall protection rule Single or two point adjustable suspension scaffold - We will protect each employee on our single or two point adjustable suspension scaffolds by a personal fall arrest system.

Self-contained adjustable scaffold supported by the frame structure-We will protect each employee on our self-contained, frame structure supported, adjustable

scaffolds by a guardrail system. The guardrail system:

- Has a minimum 200-pound toprail capacity.
- Will be installed before being released for use by our employees.
- Guardrail systems shall be installed along all open sides and ends of platforms. Midrails, screens, mesh, solid panels shall be installed as needed per job site conditions.

Falling Object Protection

All employees must wear hardhats when working on, assembling, or dismantling scaffolds. This is our primary protection from falling objects. Additionally, we will:

- Install all guardrail systems with openings small enough to prevent passage of potential falling objects.
- Prevent tools, materials, or equipment that inadvertently fell from our scaffolds from striking employees by barricading the area below the scaffold.
- Where there is a danger of tools, materials, or equipment falling from a scaffold and striking employees below. All protective guarding will be used per condition of jobsite environment.

Using Scaffolds

Site preparation, scaffold erection, fall protection, and gaining access to the working platform are only some of the requirements for scaffold work. While this all takes concentration and safe work practices, the most dangerous time can be when employees are concentrating on their work and not particularly aware of the hazards of working from scaffolds. It is critical that employees who use scaffolds be trained, among other things, in the recognition of the hazards associated with the type of scaffold being used and to understand the procedures to control or minimize those hazards. Our competent person will inspect all scaffolds and scaffold components for visible defects before each work shift, and after any occurrence that could affect a scaffold's structural integrity. However, in addition to that, all users of scaffolds in this company will know and understand the following safety rules:

- Scaffolds and scaffold components will never be loaded in excess of their

maximum intended loads or rated capacities.

- Debris must not be allowed to accumulate on platforms.
- Scaffolds shall not be moved horizontally while employees are on them. Inspection must be done by a competent person each work shift. Employees shall be prohibited from working on scaffolds cover with snow, ice or other slipper material. Ladders shall not be used on scaffolds to increase the working level height of employees.

Specific Procedures

In addition to the general procedures in this written safety plan, there are procedures that apply to specific types of scaffolds. The safety rules for these specific types of scaffolds are found in 1926.452.

Prohibited Practices

The following practices will never be tolerated in this company:

- Scaffold components manufactured by different manufacturers will never be intermixed unless the components fit together without force and the scaffold's structural integrity is maintained.
- Unstable objects will never be used to support scaffolds or platform units. Footings must be level, sound, rigid, and capable of supporting the loaded scaffold without settling or displacement.
- Crossbraces will never be used as a means of access.
- The use of shore or lean-to scaffolds is prohibited.
- Crossbraces will never be used as a means of access. The use of shore or lean - to scaffolds is prohibited. Unstable objects will never be used to support scaffolds or platform units. Footings must be level, sound, rigid, and capable of supporting the loaded scaffold without settling or displacement. No defective equipment will be used and will be tagged appropriately out of service.

Aerial Lifts

Anytime aerial lifts, including: (1) extensible boom platforms, (2) aerial ladders, (3)

articulating boom platforms, (4) vertical towers, or (5) a combination of any such devices, are used to elevate employees to job-sites above ground, the following safety rules will apply:

- No aerial lift this company owns or uses will be 'field modified' for uses other than those intended by the manufacturer unless: (1) the manufacturer certifies the modification in writing, or (2) any other equivalent entity, such as a nationally recognized testing lab, certifies the aerial lift modification conforms to all applicable provisions of ANSI A92.2-1969, and the OSHA rules at 1926.453. The lift must be at least as safe as the equipment was before modification.

Ladder Trucks and Tower Trucks:

- Aerial ladders must be secured in the lower traveling position by the locking device on top of the truck cab, and the manually operated device at the base of the ladder before the truck is moved for highway travel.

Extensible and articulating boom platforms:

- We will test lift controls each day prior to use to determine they are in safe working condition.
- Only authorized employees can operate an aerial lift.
- A body belt must be worn and a lanyard attached to the boom or basket when working from an aerial lift.
- Only authorized employees can operate an aerial lift. Fall protection shall be used while on platform regulated by equipment recommendations.

Duties of Competent and Qualified Persons

When working with scaffolds in this company there are some tasks that must be done by our competent or a qualified person. By definition they are:

- 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.

- Qualified person-One who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated his/her ability to solve or resolve problems related to the subject matter, the work, or the project.

The following tasks will only be done by the person we have deemed competent or qualified to perform them:

Competent Person:

- We will not intermix scaffold components manufactured by different manufacturers unless the components fit together without force and the scaffold's structural integrity is maintained. Scaffold components manufactured by different manufacturers will not be modified in order to intermix them unless our competent person determines the resulting scaffold is structurally sound.
- Before a suspension scaffold is used, direct connections must be evaluated by our competent person who will confirm, based on the evaluation, that the supporting surfaces are capable of supporting the loads to be imposed.
- Prior to each work shift and after every occurrence that could affect a rope's integrity, suspension scaffold ropes will be inspected by our competent person. Ropes will be replaced if any of the conditions outlined in 1926.451 (d)(10) exist.
- Scaffolds will be erected, moved, dismantled, or altered only under the supervision and direction of a competent person.
- Scaffolds will be erected, moved, dismantled or altered only under the supervision and direction of a competent person, Qualified person. Inspection shall be done before each shift scaffold is being used daily. (complete as required from 1926.450-.454)

Qualified Person:

- Scaffolds must be designed by a qualified person and shall be constructed and loaded in accordance with that design.
- Swaged attachments or spliced eyes on wire suspension ropes of suspension scaffolds will not be used unless they are made by the wire rope

manufacturer or a qualified person.

- We will have each employee who performs work while on a scaffold trained by a person qualified in the subject matter to recognize the hazards associated with the type of scaffold being used and to understand the procedures to control or minimize those hazards.
- Scaffold will be erected, moved, dismantled, or altered only under the supervision and direction of a competent person. Qualified person

Training

Recognizing the need for training for employees who: (1) perform work while on scaffolds, (2) are involved in erecting, disassembling, moving, operating, repairing, maintaining, or inspecting scaffolds, and (3) have lost the requisite proficiency, the following training syllabus is a part of this written safety plan.

Employees Who Use Scaffolds:

Our employees who perform work on scaffolds will be trained by a qualified person to recognize the hazards associated with the type of scaffold being used and to understand the procedures to control or minimize those hazards. The training will include the following areas as applicable:

- The nature of and the correct procedures for dealing with electrical hazards.
- The nature of and the correct procedures for erecting, maintaining, and disassembling the fall protection and falling object protection systems used.
- The proper use of the scaffold, and the proper handling of materials on the scaffold.
- The maximum intended load and the load-carrying capacities of the scaffolds used.
- Any other pertinent requirements of the OSHA rules.

Employees Who Erect, Disassemble, Move, Operate, Repair, Maintain, or Inspect Scaffolds:

Our employees who erect, disassemble, move, operate, repair, maintain, or inspect scaffolds will be trained by our competent person to recognize the hazards associated with the work being done. The training will include the following topics

as applicable:

- The nature of scaffold hazards.
- The correct procedures for erecting, disassembling, moving, operating, repairing, inspecting, and maintaining the type of scaffold in question.
- The design criteria, maximum intended load-carrying capacity, and intended use of the scaffold.
- Any other pertinent requirements of this subpart.

Employees Who Need Retraining:

When we have reason to believe that one of our employees lacks the skill or understanding needed for safe work involving the erection, use or dismantling of scaffolds, we will retrain the employee so that the requisite proficiency is regained. Retraining will be done in at least the following situations:

- Where changes at the worksite present a hazard about which the employee has not been previously trained.
- Where changes in the types of scaffolds, fall protection, falling object protection, or other equipment present a hazard about which an employee has not been previously trained.
- Where inadequacies in an affected employee's work involving scaffolds indicate that the employee has not retained the requisite proficiency.