

PHYSICAL PLANT

OPERATING POLICY AND PROCEDURE

PP/OP 02.18: Scaffolding

DATE: June 12, 2008

PURPOSE

The purpose of this Physical Plant Operating Policy and Procedure (PP/OP) is to provide safety guidelines for Physical Plant personnel who are required to use scaffolding to perform their job duties. These requirements are provided in accordance with the regulation OSHA 1910.28.

REVIEW

This PP/OP will be reviewed in November of every four years by the human resources manager for physical plant and recommendations forwarded to the managing director for physical plant.

POLICY AND PROCEDURE

1. When purchasing, renting, or using existing scaffolding, superintendents, foremen, and section supervisors will ensure that all scaffolding have the following minimum safety features:
 - a. Weight capacity
 - (1) All scaffolds and their components must be constructed to safely support four times the maximum intended load.
 - (2) For example, a scaffold normally expected to hold a 200-pound person and twenty pounds of material should be designed to support 880 pounds without breaking.
 - (3) A scaffold must never be loaded beyond its maximum intended weight.
 - b. Platforms
 - (1) All planking must be scaffold-grade, as recognized by grading rules for the species of wood used.
 - (2) Planks must be laid with the edges close together so tools or materials are prevented from slipping through the platform.
 - (3) Planks must be secured to prevent shifting.

- (a) Plank ends must be overlapped a minimum of twelve inches or nailed.
- (b) Cleating both ends will also prevent shifting.
- (4) Extension of planks over the supports:
 - (a) Scaffold planks must not extend more than eighteen inches nor a minimum of six inches over the supports.
 - (b) The maximum of eighteen inches prevents workers from walking on unsupported plank ends.
 - (c) The minimum six-inch extension prevents the plank from slipping off the support under pressure.

c. Guardrailings

- (1) Elevated work platforms must be surrounded on all open sides and ends with guardrailings consisting of a top rail, mid rail, and toe board.
- (2) Guardrailings should be provided on all elevated surfaces, regardless of height.
- (3) Proper construction on guardrailings
 - (a) The top rail:
 - 1) must be a minimum of 2 inch x 4 inch lumber or the equivalent.
 - 2) must be a minimum of 36 inches and a maximum of 42 inches in height.
 - (b) Midrails:
 - 1) must be made from 1 inch x 4 inch lumber or the equivalent.
 - 2) must be installed approximately half way between the top rail and the platform surface.

- (c) Guardrail features prevent material from falling off the scaffold and striking people below.
 - 1) The toeboard must be a minimum of four inches high.
 - 2) When material is stacked higher than the toeboard, a screen or paneling must extend along the entire opening between the toeboard and mid or toprail.
- (d) For adequate rigidity, space support posts for guardrailing should not be more than eight feet apart.

d. Footing

- (1) The footing or anchorage for scaffolds must be sound, rigid, and capable of carrying the maximum intended load without settling or displacement.
 - (2) Unstable objects such as barrels, boxes, loose brick, or concrete blocks shall not be used to support scaffolds or planks.
2. When using scaffolding in the work place or on a campus job site, the foreman and project supervisor are responsible for ensuring employees are trained and instructed on proper use and precautions.
- a. Before positioning a scaffold, workers should perform a complete inspection of the scaffolding to ensure that it is in sound condition.
 - b. Workers should make sure the electricity is shut off to prevent contact with electric lines, if applicable.
 - c. When materials are being hoisted onto a scaffold, a tag line should be attached to safely control the load and prevent it from striking a worker or damaging the scaffold.
 - d. Slip, trip, and fall hazards:
 - (1) The work platform should be kept clear of tools, materials, and debris that would create a tripping hazard.
 - (2) Scaffolds must not be used if covered with ice and snow. All ice or snow must be removed and planking sanded to prevent slipping.
 - (3) Employees will not work on scaffolds during storms or high winds.

- e. Overhead protection will be provided when workers on the scaffold are exposed to overhead hazards.
 - f. Fall protection is required by all employees when working from scaffolding.
 - g. An access ladder or equivalent safe access will be provided.
 - h. Scaffolds should be provided with a screen between the toeboard and the guardrails where persons are required to work or pass under scaffolds. The screen will extend along the entire opening, consisting of No. 18 gauge U.S. Standard Wire one-half-inch mesh or the equivalent.
 - i. The poles, legs, or uprights of scaffolds will be plumb, secure, and rigidly braced to prevent swaying and displacement.
3. Shop and plant supervisors are responsible for the proper maintenance and storage of the self-owned scaffolding. Maintenance and storage items to follow are:
- a. Workers should check for rust, which if left untreated, can weaken metal scaffolds.
 - b. If a scaffold is damaged in any way it must be repaired immediately and should not be used until the repairs have been completed.
 - c. Scaffolding should be stored in a dry location and in such a manner to prevent damage to the components.

RESPONSIBILITIES

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Position

Section

Month

Human Resources Manager

Review
(Every Four Years)

Nov

Approved: _____
Reviewer

Approved: _____
Managing Director -- Physical Plant