

Scaffold Erection, Use, Modification And Dismantling	S.O.P. 6A		Page 1 of 7
	10/01	Rev. 2	
	Review Date:		
	06/04		
Approved By:			
STANDARD OPERATING PROCEDURE			

TABLE OF CONTENTS

- I. Scope and Purpose
- II. Related Procedures and Resources
- III. Personnel Responsibility
- IV. General Requirements
- V. Work Platforms
- VI. Tagging
- VII. Fall Protection
- VIII. Ladders

I. SCOPE AND PURPOSE

- A. To define a Standard Operating Procedure for the erection, use, modification, and dismantling of scaffold.
- B. It is the policy of the Company to provide a safe and healthful place of employment. In areas where scaffolding is to be erected, dismantled, altered, moved or accessed for any purpose, the following procedure shall be utilized.

II. RELATED PROCEDURES AND RESOURCES

- A. S.O.P. 3O, Fall Hazard Management
- B. S.O.P. 3J, Signs, Tags, Barricades, and Labels
- C. 29 CFR 1926.451-454, Scaffolds
- D. 29 CFR 1926.1060, Stairways and Ladders
- E. Scaffold User Field Training Module

III. PERSONNEL RESPONSIBILITY

- A. Supervisor
 - 1. It will be the responsibility of the supervisor to ensure that scaffolding erected, dismantled, stored, shipped, and used for a work surface is done in such a manner that it attempts to fulfill the following:
 - a. All company policies and procedures.
 - b. All client requirements.
 - c. All applicable manufacturer instructions for storage, use, and maintenance.

- d. All applicable federal, state, and local guidelines.
 2. It will be the responsibility of the supervisor to ensure that all scaffolding accessed by employees of this company, but erected by other companies, at a minimum meets the requirements of this Standard Operating Procedure. (Note: Tagging system will be exempt from this requirement.)
 3. It will be the responsibility of the supervisor or his designated representative to ensure that all employees required to perform work from platforms constructed by this company have received training regarding the Purpose, Policy, and Procedures contained in this Standard Operating Procedure.
 4. It will be the responsibility of the supervisor to ensure that a sufficient number of competent persons are present to supervise construction on scaffolds.
 5. It will be the responsibility of the supervisor at no time to allow employees to work on a scaffold during high wind or storms.
 6. It will be the responsibility of the supervisor at no time to allow employees to work on scaffolds on which ice or snow is present.
 7. It will be responsibility of the supervisor to ensure a Competent Person inspects scaffolds every shift prior to their use.
- B. Competent Person
1. It will be the responsibility of the competent person (i.e., defined by the Occupational Safety and Health Administration) to supervise the erection, movement, dismantling, and alteration of all scaffolding under his control.
 2. All scaffolding erected, moved, dismantled, and altered by this company will be tagged at the access point and signed off on by the competent person as per Section VI, Tagging, of this S.O.P.
 3. It will be the responsibility of the Competent Person to verify carrying capacity of a scaffold.
 4. It will be the responsibility of the competent person to assist in the inspection of scaffolds on the jobsite every shift, prior to their use.
- C. Employee
1. It will be the responsibility of the employee to adhere to the policy and procedures contained herein.
 2. It will be the responsibility of the employee to at no time access any work platform constructed by this company that has not been tagged according to this S.O.P.
 3. It will be the responsibility of the employee when accessing a scaffold by ladder to:
 - a. Face the rungs when climbing.
 - b. Use both hands.
 - c. Never carry anything in your hands when ascending or descending.
 - d. Use approved access only.
 4. It will be the responsibility of the employee at no time to ride a manually propelled scaffold.
 5. No scaffold ladder will be accessed by more than one person at a time.

6. Scaffolds will be restricted to the use that they were designed.

IV. GENERAL REQUIREMENTS

- A. Damaged scaffolding and components shall be immediately tagged “Stop; Do Not Use” and removed from service.
- B. All damaged material shall be stored separately from useable materials and shipped back to the main yard as soon as possible.
- C. All scaffolding shall be furnished, erected and altered in accordance with 29 CFR 1926.451.
- D. Scaffold and their components will be capable of supporting without failure at least four times the maximum intended load.
- E. The scaffold location will be inspected to determine ground conditions or strength of supporting structures.
 1. Base Plates or screw jacks with a base plate must be in firm contact with both the sill and the legs of the scaffold.
 2. Mudsill size will be determined only after the total loads imposed on the scaffold and supporting soil or structures are determined, calculated and considered by a qualified person.
- F. All stationary scaffolding in excess of 125 feet and rolling scaffolds in excess of 50 feet shall be designed and certified by a Registered Professional Engineer.
- G. No scaffold will be used for a hoist unless a qualified person has designed the assembly.
- H. All scaffolds shall be tagged in accordance with Section VI of this S.O.P.
- I. All scaffolding and components will be inspected for, but not limited to, the following:
 1. Dents
 2. Excessive rusting
 3. Structural fatigue
 4. Excessive wear and/or damage
 5. Any abnormal observation

V. WORK PLATFORMS

- A. All work platforms erected or altered will be constructed in such a manner that the work, for which they were designed, may be performed safely.
- B. The Company primarily uses manufactured (laminated) scaffold planks.
 1. All laminated scaffold planks will have “OSHA” stamped on the edge as proof of certification.
 2. All laminated scaffold planks will be sealed on the ends.
 - a. Planks owned by the company will be color coded, blue and yellow on the ends.
 - b. Sealing the ends helps to prevent splitting or delaminating.

3. Laminated boards that are splitting or delaminating shall be taken out of service and returned to the main yard for further inspection.
- B. In some cases the company will use solid sawn scaffold planks. Use the following information to verify the planks certification and as a field inspection guide.
1. All load bearing timbers will be marked and identified according to the methods listed as follows:
 - a. Plank Inspection Groups
 - i. Timber Products Inspection (T.P.I.)
 - ii. West Coast Lumber Inspection Bureau (W.C.L.I.B)
 - iii. Western Wood Products Association (WWPA)
 - b. Plank marking method
 - i. Painted stencils
 - ii. High temperature marking (burned marking)
 - iii. Impressed stencils (hammer marking)
 - c. Plank identification
 - i. DI65
 - ii. DI72
 - iii. SCAF PLK
 - iv. Scaffold No. 1
 - v. Scaffold No. 2
 - vi. 171-a or 171-aa
 - vii. 171-b or 171-bb
 2. Solid sawn scaffold planks will not be used until they have been identified as a scaffold grade plank.
 3. All solid sawn scaffold planks will be visually inspected for the following characteristics:
 - a. Knot
 - i. Sound knot - free of decay, firm, smooth with a knot size diameter equal to or less than (\leq) the knot size for the given plank width listed in Table 8A-1

TABLE 8A-1 SOUND KNOTS		
PLANK WIDTH		KNOT SIZE
8 inches	\leq	1.50 inches
10 inches		2.00 inches
12 inches	\leq	2.25 inches

- ii. Unsound knot decay is present, diameter equal to or greater than plank width listed in Table 8A-2.

TABLE 8A-2 UN SOUND KNOTS		
PLANK WIDTH		KNOT SIZE
8 inches	≥	1.00 inches
10 inches	≥	1.50 inches
12 inches	≥	1.50 inches

- b. All solid sawn scaffold planks will be inspected for checks, which are of two types:
 - i. Through check - Separation on two surfaces or the full thickness of a plank that occurs across or through the grow rings.
 - ii. Surface check - Separation on only one surface of a plank.
 - c. All solid sawn scaffold planks will be inspected for splits. In most cases a split occurs at either end of a board and can be prevented if the board is cleared.
 - d. All solid sawn scaffold planks will be inspected for compression wood (i.e., hard, brittle, appears “lifeless” wood and has a different distinguishing color).
 - e. All solid sawn scaffold planks will be inspected for warping (i.e., crooked, bowed, twisted, or cupped planks).
 - f. All solid sawn scaffold planks will be inspected for decay (i.e., slight discoloration, pitting of wood. Any other decay, other than knothole decay, will indicate the necessity for plank replacement).
 - g. Solid sawn scaffold planks, which have knots greater than, or characteristics shown in Table 8A-1 or Table 8A-2 will not be used.
 - h. Solid sawn scaffold planks will not be used for shoring, roadbed, or any capacity other than scaffold board.
- C. Scaffold planks will not be used for service when:
1. Splits are greater than or equal to the width of the board.
 2. Compression wood as described above,
 3. Warped scaffold planks.
 4. Decayed beyond those found above.
 5. Scaffold planks used for any purpose other than scaffold boards.
- D. Work platforms will be fully planked with only scaffold grade planks in good condition.
1. Each plank must overlap the Horizontal bearer bar a minimum of 6 inches or a maximum of 12 inches.
 2. Planks on continuous runs must extend over the supports and overlap each other by at least 12 inches.
 3. Full thickness planks, 2” X 10” scaffold grades, shall never exceed 8 feet.
 4. Loads on work platforms should be evenly distributed and shall not exceed the allowable loads for platform type.

VI. TAGGING

- A. All scaffolding erected, moved, dismantled and altered by personnel of this company will utilize the following system.
- B. All scaffolding will have one of three types of tags.
 - 1. **Green** -Scaffolds meet and/or exceed all applicable requirements.
 - 2. **Yellow** - Scaffolds have limitations placed on it by the competent person.
 - 3. **Red** - Scaffolds will not be accessed by scaffold users.
- C. All scaffolding will have an approved tag at the point of access.
- D. All scaffold tags will be legibly marked.
- E. Tagging system will not be used as a method of circumventing safety requirements.
- F. All Green and Yellow tags will be signed off on by the competent person.
- F. All Red tags will be signed off on by authorized person as designated by a competent person.

VII. FALL PROTECTION

- A. Personal fall arrest systems used on scaffolds shall be attached by lanyard to a vertical lifeline, horizontal lifeline, or scaffold structural member at all times. Vertical lifelines shall not be used when overhead components, such as overhead protection or additional platform levels, are part of a single-point or two-point adjustable suspension scaffold.
- B. When vertical lifelines are used, they shall be fastened to a fixed safe point of anchorage, shall be independent of the scaffold, and shall be protected from sharp edges and abrasion. Safe points of anchorage include structural members of buildings, but do not include standpipes, vents, other piping systems, electrical conduit, outrigger beams, or counterweights.
- C. When horizontal lifelines are used, they shall be secured to two or more structural members of the scaffold, or they may be looped around both suspension and independent suspension lines (on scaffolds so equipped) above the hoist and brake attached to the end of the scaffold. Horizontal lifelines shall not be attached only to the suspension ropes.
- D. When lanyards are connected to horizontal lifelines or structural members on a single-point or two-point adjustable suspension scaffold, the scaffold shall be equipped with additional independent support lines and automatic locking devices capable of stopping the fall of the scaffold in the event one or both of the suspension ropes fail. The independent support lines shall be equal in number and strength to the suspension ropes.
- E. Vertical lifelines, independent support lines, and suspension ropes shall not be attached to each other, nor shall they be attached to or use the same point of anchorage, nor shall they be attached to the same point on the scaffold or personal fall arrest system.

- F. Exceptions to S.O.P. 6A(VII)(A)-(E)
1. Where Basic's on-site "Competent Person" in cooperation with the Safety department, determines the feasibility and safety of providing fall protection for employees erecting or dismantling supported or hanging scaffolds creates a greater hazard, the 100 percent tie-off rule will not be enforced as per OSHA standard 29 CFR 1926.451(g)(2).

VIII. LADDERS

- A. Will have a minimum of 7 inches of clearance between the rungs and any obstruction behind the ladder as well as a minimum clearance of 30 inches between the ladder rung and the most near permanent object on the climbing side.
- B. When unavoidable obstructions are encountered on the climbing side of the ladder clearance may be reduced to 24 inches provided a notation of the obstruction will be written on the scaffold tag.
- C. Step across points at the point of access/egress from the work platform will not be less than 7 inches nor more than 12 inches.
- D. Ladders for access/egress will extend a minimum of 42" above the work platform as measured from the top of the platform to the top horizontal rung of the ladder.
- E. Ladders for access/egress will be placed firmly on a stable surface capable of supporting, without fail, the intended load.
- F. The support point of a ladder will have a stable level and a clean surface 15 inches from the centerline to the sides of the ladder and 30 inches from the ladder rung out on the climbing side of the ladder.
- G. Ladders will be completely locked together during erection.
- H. On bracket style ladder assemblies a minimum of two brackets will be installed on the starter ladder assembly.
- I. On bracket style ladders assembly the top bracket will be within 2 feet of the top ladder rung.
- J. Ladders for access/egress will not exceed 35 feet in height without breaking the continuous climb.