Applicable OSHA Standard: 29 CFR 1926 Subpart L

1. Purpose

1.1. The purpose of this program is to provide directions and instructions for Cleveland Integrity Services Inc. requirements to be implemented with the construction, erection, and dismantling of scaffolds and ladders.

2. Scope

2.1. The scope of this program applies to all Cleveland Integrity Services Inc. jobsite locations where scaffolds and ladders may be used. The requirements, as set forth in this program, should be implemented to the fullest extent possible.

3. Responsibilities

3.1.1. The primary responsibility for the implementation of the requirements of this program will rest with the Site Supervisor.

3.1.2. The Company Safety Representative or designee will be responsible to provide for the monitoring of work activities to assure compliance to the requirements of this program and compliance to the Customer/Client safety requirements.

3.1.3. The Site Supervisor and Company management will be responsible for the enforcement and disciplinary action resulting from violation or failure of assigned persons to implement the requirements of this program.

4. Requirements

4.1. A competent person will ensure that scaffolds are safe prior to and during use.

4.2. If unsafe equipment or conditions are observed, these will be tagged out by the competent person. All employees will comply with the tagout. Scaffolding that is tagged out as being unsafe will not be used.

4.3. Only qualified and competent personnel are allowed to modify scaffolding systems. Non-qualified personnel may create hazards and unsafe situations and are therefore prohibited from attempting to modify a scaffolding system.

4.4. The following requirements are applicable to all scaffolds:

4.4.1. Guardrails and Toeboards:

4.4.1.1. Guardrails will be constructed of 2" X 4" lumber, 1/2 inch wire rope, angle iron or the prefabricated rail(s) supplied by the scaffold manufacturer.

4.4.1.2. Toprails will be approximately 42 inches above the working surface.

4.4.1.3. Midrails will be approximately 21 inches above the working surface.

4.4.1.4. Wire rope toprails and midrails will be stretched tight with no more than an approximate 2 inch deflection.

4.4.1.5. Toeboards will extend a minimum of 4 inches above the working surface.

4.4.1.6. When the placement of the scaffold work platform prevents the installation of guardrails, other fall protection equipment will be used.

4.4.1.7. Guardrails and toeboards will be installed on all open sides and ends of scaffolds.

4.4.1.8. Scaffolds and work platforms 4 feet to 10 feet high with a working surface of less than 45 inches will have standard guardrails installed on all open sides and ends of the scaffold or platform.

4.5. Working Surfaces:

4.5.1. Working surfaces will be constructed of scaffold plank, aluminum deck boards or 3/4" construction grade plywood.

4.5.2. Scaffold planking will be scaffold grades or equivalent as recognized by approved grading rules for the species of wood used under the American Lumber Standards.

4.5.3. Working surfaces will be secured by nails, double wrap of #9 wire or cleats.

4.5.4. Lumber sizes, when used in this program, refer to nominal size/thickness except where otherwise stated.

4.5.5. Scaffold planks will extend a minimum of 6 inches and a maximum of 12 inches over the end supports.

4.5.6. If required, an access/egress ladder will be provided.

4.5.7. Scaffold planks will not span more than 8 feet between supports/vertical legs.

4.5.8. Scaffold planks and plywood will be free of splits and burns.

4.6. Scaffold Footing and Anchorage

4.6.1. The footing or anchorage will be capable of carrying the maximum intended load without settling or displacement.

4.6.2. The uprights/vertical legs will be plumb and securely braced to prevent swaying and displacement. NOTE: The requirements for specific types of scaffolds and ladders are described below.

4.6.2.1. Tubular Welded Frame:

4.6.2.1.1. Scaffold will be cross-braced to assure scaffold is plumb, square, and rigid.

4.6.2.1.2. Stacking pins will only be secured with the manufacturer's pins or recommended bolts.

4.6.2.1.3. Cross braces will be secured, as designed by the manufacturer.

4.6.2.1.4. Stationary scaffolds must be secured horizontally, every 26 feet of height and 30 feet horizontally, to prevent tipping.

4.6.2.1.5. The height of rolling scaffolds, measured from the ground to the toprail, will be no more than four times the minimum base dimension (length times the width).

4.6.2.1.6. All wheels/casters will be the same size, equipped with a positive locking device, and in good working condition.

4.6.2.1.7. Wheels will be locked while personnel are working from the scaffold.

4.6.2.1.8. Personnel will not be permitted on mobile scaffold while the scaffold is being moved.

4.6.2.2. Tube and Coupler (Tube-Lock):

4.6.2.2.1. Uprights will have a maximum spacing of 8 feet.

4.6.2.2.2. Uprights will be placed on secure bases and maintained plumb.

4.6.2.2.3. Scaffolds will be limited in heights and working levels to those permitted in Tables 2-10, 11, and 12 of OSHA 29 CFR 1926.451.

4.6.2.2.4. Horizontal braces will be installed completely around all exterior uprights and between interior uprights. Braces will be installed every 6 feet of height.

4.6.2.2.5. Platform supports will be coupled/clamped directly to the horizontal braces and extend 4 inches to 12 inches beyond the horizontal braces.

4.6.2.2.6. All horizontal bracing will be coupled/clamped directly to the uprights.

4.6.2.2.7. Diagonal bracing will 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.

4.6.2.3. One and Two Point Suspension Scaffolds:

4.6.2.3.1. Cable will be securely anchored and softeners will be used when necessary.

4.6.2.3.2. Cable will 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.

4.6.2.3.3. Two-point suspension scaffold platforms will remain level while being raised or lowered.

4.6.2.3.4. Each employee will wear a full body harness and be tied off to an independent lifeline. A lifeline will be supplied for each employee.

4.6.2.4. Knee Brace/Cantilever:

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

4.6.2.5. Ladders:

4.6.2.5.1. Ladders will extend 36 inches above the landing.

4.6.2.5.2. Extension and job-built ladders will be secured to prevent movement or falling.

4.6.2.5.3. Manufactured ladders will be Class I or Class IA with properly working feet.

4.6.2.5.4. The slope of the ladder from the base of the support will be one(1) foot for every 4 feet of ladder length.

4.6.2.5.5. All ladders will be set on a firm base to prevent shifting and tipping.

4.6.2.5.6. Ladders with broken or missing rungs or steps, broken or split side rails, or faulty or defective construction, will not be used.

4.6.2.5.7. Metal ladders will not be used.

4.6.2.5.8. Step ladders will not be used as a leaning ladder.

4.6.2.5.9. Employees will not work off the top two steps of a stepladder.

4.6.2.5.10. Personnel will have both hands free of tools, materials, or equipment, while climbing and descending ladders.

4.6.2.5.11. Personnel will face the ladder when climbing and descending.

5. Training Requirements

5.1. The Company 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. The training will include the following areas, as applicable:

5.1.1. The nature of any electrical hazards, fall hazards and falling object hazards in the work area;

5.1.2. The correct procedures for dealing with electrical hazards and for erecting, maintaining, and disassembling the fall protection systems and falling object protection systems being used;

5.1.3. The proper use of the scaffold, and the proper handling of materials on the scaffold;

5.1.4. The maximum intended load and the load-carrying capacities of the scaffolds used; and

5.1.5. Any other pertinent requirements.

5.2. The Company will have each employee who is involved in erecting, disassembling, moving, operating, repairing, maintaining, or inspecting a scaffold trained by a competent person to recognize any hazards associated with the work in question. The training will include the following topics, as applicable:

5.2.1. The nature of scaffold hazards;

5.2.2. The correct procedures for erecting, disassembling, moving, operating, repairing, inspecting, and maintaining the type of scaffold in question;

5.2.3. The design criteria, maximum intended load-carrying capacity and intended use of the scaffold;

5.2.4. Any other pertinent requirements.

5.3. When the Company has reason to believe that an employee lacks the skill or understanding needed for safe work involving the erection, use or dismantling of scaffolds, the Company will retrain each such employee so that the requisite proficiency is regained. Retraining is required in at least the following situations:

5.3.1. Where changes at the worksite present a hazard about which an employee has not been previously trained; or

5.3.2. 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; or

5.3.3. Where inadequacies in an affected employee's work involving scaffolds indicate that the employee has not retained the requisite proficiency.

5.4. The Site Supervisor will be responsible for implementing the employee training and information program. The format for the program may include classroom instruction, safety tool box meetings, and other forms of group or singular instructions. Instructions are normally communicated verbally or in writing through the employee's Supervisor.

5.5. The Site Supervisor is responsible for assuring Supervisors are qualified or competent in the following areas:

5.5.1. Fall hazards and falling object hazards.

5.5.2. Electrical hazards (protection from electrical hazards for erecting, maintaining, and dismantling).

5.5.3. Fall protection and protection systems.

5.5.4. Proper and safe handling of materials.

5.5.5. Trained in the maximum intended loads and load-carrying capacities.

5.5.6. Any other pertinent requirements.

5.6. All Cleveland Integrity Services Inc. employees will be trained in the above mentioned, along with any additional basic or site requirements.

5.7. Cleveland Integrity Services Inc. will insure that each employee follows the safety guidelines as set forth in Safe Work Practices.

6. Inspection & Tagging Procedures

6.1. A *competent person* will tag all scaffolds, including a single plank working platform.

6.2. A *competent person* must inspect scaffolds and components before each work shift use and after any incident that could weaken it. The scaffold inspection form that has been adopted by the Company is included later in this program.

6.3. All scaffolds will be tagged with a ***Red***, ***Yellow***, or ***Green*** tag. Sample tags are included later in this program. In the event that the scaffold is modified or repaired in any way, the date of modification will be entered on the appropriate scaffold inspection tag.

6.3.1. ***RED*** means the scaffold is unsafe or is under construction, and is not to be used.

6.3.2. ***YELLOW*** means the scaffold does not meet all requirements, and special equipment or rules are required in order to use the scaffold. These requirements must be posted (for example, 100% fall protection required for work performed on the scaffold).

6.3.3. ***GREEN*** means that the scaffold is ***SAFE FOR USE*** and meets all OSHA standards and can be used without any additional rules or equipment. This scaffold meets all load and level requirements, and is tagged with a *competent person* name and contact number.

6.4. ***If there is no tag, no one is allowed on scaffold.***

6.5. The following must be completed for each tag:

6.5.1. Date erected / tagged

6.5.2. Inspected by (name of *competent person* -- printed name and signature

6.5.3. Inspection date

6.5.4. Company responsible for erection/maintaining/dismantling

6.6. ***GREEN TAG requirements***

6.6.1. Green tags will be hung on scaffolds that have been inspected and are safe for use.

6.6.2. A green ***SAFE FOR USE*** tag will be attached to the scaffold at each access point after the initial inspection is complete.

6.7. ***YELLOW TAG requirements***

6.7.1. Yellow ***CAUTION*** tag(s) will replace all green *SAFE FOR USE* tag(s) whenever the scaffold has been modified to meet work requirements, and as a result could present a hazard to the user.

6.7.2. This tag indicates special requirements are necessary for the scaffold to be used safely. Therefore the tag should be considered a *supervisory tag* and, as such, is to be managed by the Company with regard to employees who will work on the scaffolding, as well as the host employer and/or the scaffold erector.

6.7.3. The yellow *CAUTION* tag as a minimum requirement will have:

6.7.3.1. The unusual or potential hazard marked on the reverse.

6.7.3.2. The preventative measures that must be taken prior to use to mitigate the hazard marked on the reverse.

6.7.3.3. The name of the competent person authorizing the use of the yellow-tagged scaffold.

6.7.4. The yellow tag will not to be removed until the scaffold has been returned to a safe condition and an inspection by a *competent person* has been completed. Based on the results of that inspection the appropriate tag (red or green) will be hung on the scaffold and the yellow tag removed.

6.7.5. All scaffolds that have been *"Yellow Tagged"* for CAUTION must still comply with the other provisions of this scaffold safety program and OSHA requirements.

6.7.6. NOTE: Use of the "yellow tag" status is not intended to override the green tag system. All efforts should be made to return the scaffold to a *Green Tag* status as soon as possible.

6.8. ***RED TAG requirements***

6.8.1. A red ***DANGER - UNSAFE FOR USE*** tag will be used during erection or dismantling when the scaffold is left unattended and replace all green *SAFE FOR USE* tags or yellow *CAUTION* tags in the event a scaffold has been deemed unfit for use.

6.8.2. The red tag information will, as a minimum requirement, include:

6.8.2.1. The work order number or project number, the inspection date and the name of the person who performed the inspection filled in on the front of the card.

6.8.2.2. The designation, under erection, being dismantled, repairs required or overhead protection only, marked on the reverse.

6.9. Scaffold re-inspection

6.9.1. Scaffold re-inspections must be completed any time when conditions may have changed causing the integrity of the scaffold to be suspect, or at a frequency determined by the *competent person* or the host employer.

6.9.2. This is in addition to the required initial inspection before each shift.

SCAFFOLDING INSPECTION REPORT

Client: _____

Job No: _____ Date: _____

Scaffold Location: _____Time:_____:_____AM PM

Inspected by: _____

NOTE: Scaffold will not be used unless these items are found satisfactory.

SECTION 1.		Yes	No	Comments
1.	Base plates/screw jacks on firm contact with sills/deck to prevent settling.	____	____	_____
2.	Scaffold appears to be level and verticals are plumb.	____	____	_____
3.	Safe, proper access and egress provided to all work platforms.	____	____	_____
4.	All platforms properly/tightly planked and secured from movement.	____	____	_____
5.	All toeboards secured in place.	____	____	_____
6.	All guardrails and midrails in place.	____	____	_____
7.	Are vertical legs rigidly braced to prevent swaying.	____	____	_____
8.	Scaffold anchored or equalized (4 to 1) to prevent movement (butts/ties installed).	____	____	_____
9.	No energized, unprotected electrical is within 12 feet of the scaffold.	____	____	_____
10.	Has the scaffold been tagged and has not been altered.	____	____	_____

SECTION 2.		Yes	No	Comments
1.	Scaffold planks construction grade lumber and in sound condition.	____	____	_____
2.	Are all planking and toeboards in place and secured.	____	____	_____
3.	All guardrails and midrails in place and secured.	____	____	_____

		Yes	No	Comments
4.	All tools and material raised and lowered to locations just carried by employees.	____	____	_____
5.	Working platforms clear of all loose tools, cords, material, etc.	____	____	_____
6.	Exit ways and ladders clear and unobstructed.	____	____	_____
7.	Stair and planks free of debris or slippery surface.	____	____	_____
8.	Work being performed on the scaffold in accordance with load ratings.	____	____	_____
9.	Have barricades been installed, scaffold tags been placed properly.	____	____	_____

Inspector: _____ _____
Print Sign

Supervisor: _____ _____
Print Sign

Scaffold Size: _____

NOTES:

SCAFFOLD SAFETY AND COMPLIANCE TEST

NAME: _____DATE:_____SCORE:_____

SSN: _____

_____ 1. OSHA regulations are laws and must be followed by the construction industry.

True or False

_____ 2. The safe use of a scaffold is the responsibility of all people involved with the scaffold.

True or False

_____ 3. Scaffolds may only be erected, altered, or dismantled under the supervision of a/an

A. Authorized Person
B. Competent Person
C. Skilled Person
D. Qualified Person

_____ 4. All scaffolds must be built on

A. Anything that looks like it will hold the intended load firmly.
B. Base plates, mud sills, or other adequate firm foundation.
C. It makes no real difference as long as it is braced properly.
D. Solid ground.

_____ 5. Scaffold mud sills help distribute the leg or vertical loads to the soil, asphalt, concrete, etc.

True or False

_____ 6. Where should the bottom runners be placed on the scaffold?

A. Four inches from the bottom of the legs.
B. About knee high.
C. As close to the base as possible.
D. They should always be attached to the screw jacks.

_____ 7. X-Bracing means to attach two braces on each side of the scaffold to form an X shape at all angles.

True or False

_____ 8. How high above the base should handrails be?

A. 38 to 42 inches
B. 36 to 45 inches
C. 42 to 45 inches
D. None of the above

_____ 9. An access ladder should be installed on all scaffolds more than

A. 4 feet above or below a point of access
B. 3 feet above or below a point of access
C. 2 feet above or below a point of access
D. 1 foot above or below a point of access

_____ 10. Ladders should be attached at a place on the scaffold that is less likely to cause

A. Swaying
B. Damage
C. Tripping
D. Injury

_____ 11. Each scaffold deck will be fully planked so that the gap between each plank is no more than

A. 2 inches
B. 1 inch
C. 3 inches
D. There can be no gaps

_____ 12. The minimum board overhang is 10 inches past the bearer bar.

True or False

_____ 13. The maximum overhang of a board 10 feet or less is

A. 18 inches
B. 10 inches
C. 12 inches
D. 9 inches

_____ 14. When planks are overlapped, the minimum overlap is

A. 14 inches
B. 12 inches
C. 16 inches
D. 8 inches

_____ 15. Toeboards are to be on all open sides of a scaffold when the deck is higher than

A. 6 feet or more
B. 8 feet or more
C. 7½ feet or more
D. 10 feet or more

_____ 16. Toeboards must be at least 3½ inches high and have no more than ¼ inch gap between the toeboard and the deck.

True or False

_____ 17. All scaffold end frames must be locked together to prevent

A. Tipping
B. To help scaffold stay plumb
C. Swaying
D. Uplift

_____ 18. A tube and coupler scaffold more than 125 feet in height must be designed by a competent engineer with at least two years scaffold experience.

True or False

_____ 19. Guys or ties should be placed as close to the verticals as possible.

True or False

_____ 20. The casters on mobile scaffolds should never be locked in case they need to be moved during emergencies.

True or False

_____ 21. Horizontal and diagonal bracing is not preferred on a mobile scaffold.

True or False

_____ 22. A scaffold that is made to be heavy-duty will hold 25 pounds per square foot.

True or False

_____ 23. A screw jack will be used on scaffolds to help

A. Make it taller
B. Level it
C. Hold it in place

D. Keep it from falling over

_____ 24. Knot holes in planks may be any size as long as they are not loose or missing.

True or False

____ 25. A scaffold plank must weigh at least

A. 45 pounds
B. 55 pounds
C. 65 pounds
D. None of the above is correct

_____ 26. Scaffold planks that are 10 feet long or more may hang beyond the bearer bar by a minimum/maximum of _____ per the construction standard 29 CFR 1926.450.

A. 6 - 14 inches
B. 8 - 18 inches
C. 6 - 18 inches
D. 6 - 12 inches

_____ 27. Saw kerfs do not damage the integrity of the plank.

True or False

_____ 28. Scaffold erectors do not need to have an understanding of all the factors which may affect the strength, stability, and the effectiveness of a completed scaffold.

True or False

_____ 29. Scaffolds and their components will be capable of supporting, without failure, at least four times the maximum intended load. This is known as a 4 to 1 safety factor.

True or False

_____ 30. On tube and coupler scaffold, the bearers will be at least _____ but not more than _____ inches longer than the post spacing or runner spacing.

A. Not less than 4", not more than 12"
B. Not less than 2", not more than 6"
C. Not less than 6", not more than 14"
D. None of the above

SCAFFOLD SAFETY AND COMPLIANCE TEST

ANSWER SHEET

1. T
2. T
3. B
4. B
5. T
6. C
7. F
8. D
9. C
10. C
11. B
12. F
13. C
14. B
15. D
16. T
17. D
18. F
19. T
20. F
21. F
22. F
23. B
24. F
25. D
26. D
27. F
28. F
29. T
30. A

Scaffold identification tag information for the **FRONT** of **ALL TAGS** (GREEN, YELLOW & RED)

SCAFFOLDING IDENTIFICATION TAG

Scaffold ID# _____

Date Erected D / M / Y	**Expected Removal Date D / M / Y**
Project Name / Number / Scaffold Identification	

I have inspected and approved the scaffold build or erected, to which this tag is attached, and consider it to be

_____ **SAFE** for completion of work as specified

_____ **CAUTION** – Potential or Unusual Hazard

INSPECTED BY: _____ **UNSAFE FOR USE** – Keep off scaffold

_____ Inspector's name **PRINTED**

_____ Inspector's **SIGNATURE**

Date inspected _____ **Time** _____ **AM PM**

RE-INSPECTED

Name _____ **Date** _____	**Name** _____ **Date** _____	**Name** _____ **Date** _____
Name _____ **Date** _____	**Name** _____ **Date** _____	**Name** _____ **Date** _____
Name _____ **Date** _____	**Name** _____ **Date** _____	**Name** _____ **Date** _____

MODIFICATION

Name _____ **Date** _____	**Name** _____ **Date** _____	**Name** _____ **Date** _____
Name _____	**Name** _____	**Name** _____

Date _____	Date _____	Date _____

Scaffold identification for **BACK** of **GREEN TAGS** (Safe for Use)

SCAFFOLDING IDENTIFICATION TAG

The following Contractor / Company has erected this scaffold:

_____

SAFE FOR USE

DO NOT ALTER

DO NOT OVERLOAD

Scaffold identification for back of **YELLOW TAGS** (Caution -- Potential or Unusual Hazard)

SCAFFOLDING IDENTIFICATION TAG

The following Competent Person authorizes the use of this scaffold subject to fulfillment of the conditions listed under the preventive measures section of this tag.

Name: _____

CAUTION

Potential or Unusual Hazard

What is the Potential or Unusual Hazard _____

_____

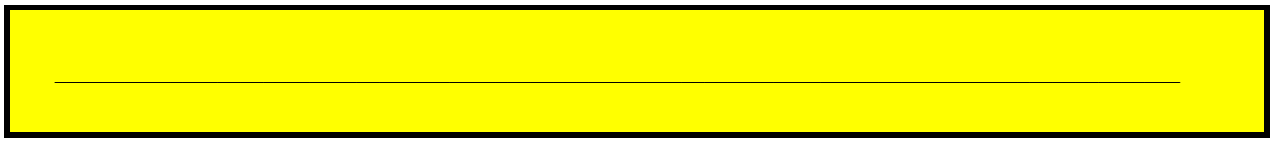
_____

_____

Preventive Measures to be Taken _____

_____

_____



Scaffold identification for **BACK** of **RED TAGS** (Danger – Do Not Use)