



## SUSPENDED SCAFFOLD with HAZARD AWARENESS (SSHA)

Test Version "A" – Revised 5.2003

## **INSTRUCTIONS:**

- Print your name on the Scantron sheet in spaces provided
- Darken in the letters corresponding to your name on the Scantron sheet
- Darken in the test version in the Test Form section
- Record all answers on the provided Scantron sheet
- Return Scantron sheet and exam to instructor when finished
- 1. Who would be most likely to use a suspended scaffold on a high-rise building?
  - A. Steelworkers
  - B. Concrete workers
  - C. Mechanical installers
  - D. Mechanics
  - E. Glaziers
- 2. Is it mandatory that workers using a suspended scaffold, use fall arrest equipment?
  - A. No
  - B. Yes, in all cases
  - C. Only on multi-tier scaffolds
  - D. Only with single suspended systems
  - E. Only on multiple suspended systems
- 3. Which of the following is a true statement regarding lifelines?
  - A. They have a safety factor of 4:1
  - B. They are independently anchored
  - C. They are strung horizontally
  - D. They are anchored to the structure face
  - E. They must be at least 5/16 inch rope
- 4. On which suspended scaffold system would a davit be a part?
  - A. Upper support system
  - B. Lower support system
  - C. Fall arrest system
  - D. Guardrail system
  - E. Suspended System

## 5. Where is a lanyard used?

- A. With the tie-back
- B. With the outrigger beam
- C. With the suspended system
- D. With the davit
- E. With a fall arrest system





- 6. Under what circumstance is it acceptable for a worker to be disconnected from the fall arrest equipment?
  - A. When climbing off the scaffold
  - B. When the scaffold reaches the top point
  - C. When working on the roof during rigging
  - D. When the fall hazard has been removed
  - E. When the scaffold is moving up or down
- 7. Why are 16-foot outriggers equipped with a splice plate in the middle?
  - A. To increase the beam strength
  - B. To meet the design requirements
  - C. For the attachment of ropes
  - D. For the support of counterweights
  - E. For transportation in elevators
- 8. Why is it recommended to use wood blocks when a parapet clamp is used to support a suspended scaffold?
  - A. So the clamp fits the parapet
  - B. For increased arm reach
  - C. To raise the clamp above the parapet
  - D. To spread the point loading over a greater area
  - E. So the clamp grips the parapet
- 9. Why are davits made to pivot when attached to a building?
  - A. To allow a greater arm reach beyond the building surface
  - B. For additional horizontal reach of the work platform
  - C. So the suspended scaffold can be moved onto the roof
  - D. As a means for raising and lowering the work platform
  - E. To lock it in a horizontal position while in use
- 10. What is the most important step that will ensure the support components meet the design requirements?
  - A. They are over-designed
  - B. They are inspected for safety
  - C. Their past history is suitable
  - D. There are multiple back-ups
  - E. They are easily erected
- 11. What is the purpose of a pre "walk the job" procedure?
  - A. To allow a person to be comfortable
  - B. To determine which ropes to use
  - C. To ensure pedestrians are clear of the area
  - D. To pick up all equipment after the job is done
  - E. To determine the best support device
- 12. In the following formula, what does the "W" represent?

W = 
$$\frac{Lxax4}{b}$$

- A. Width of a backspan
- B. Amount of counterweight
- C. Length of the arm reach
- D. Position of the fulcrum
- E. Weight of the load





13. If the outrigger arm reach is 4 ft., what is the minimum length of the backspan?

- A. 4 ft.
- B. 8 ft.
- C. 12 ft.
- D. 16 ft.
- E. 20 ft.

14. What is the purpose of requiring the support system to have a safety ratio of 4:1?

- A. To satisfy regulatory officials and prevent any legal action in case of accidents
- B. To determine at what time and situation the platform might be overlooked
- C. To assist the designer in determining the length of outrigger beam to be used
- D. To ensure the Suspended Scaffold does not cause the support system to fail
- E. To make certain that the wire ropes are attached at the proper location
- 15. If tie-back ropes are used with transportable support system, what is one of the requirements?
  - A. They are taut and at right angles to the platform
  - B. They are loose
  - C. They are short
  - D. They are single strand
  - E. Two are always used

16. What is the most common diameter of wire rope used with suspended scaffold?

- A. ¼ inch
- B. 5/16 inch
- C. 3/8 inch
- D. 7/16 inch
- E. ½ inch
- 17. What is the purpose of a wire rope thimble?
  - A. It prevents the wire rope strands from unraveling
  - B. It prevents the shackle from being punched and left rigid
  - C. It ensures that the clamps are properly located on the wire rope
  - D. It prevents the wire rope from being crushed as it is bent
  - E. It keeps the individual wire rope strands together
- 18. What is one of the considerations when a J-bolt is used at a wire rope termination when used with suspended scaffolds?
  - A. You must torque the bolts
  - B. You must not re-use them
  - C. You will need at least four
  - D. You must space them 6" apart
  - E. You must never re-tighten them
- 19. Which type of hoist has limited ability to raise or lower a work platform quickly?
  - A. Manually operated hoists
  - B. Pneumatically operated hoist
  - C. Traction operated hoist
  - D. Drum operated hoist
  - E. Electronically operated hoist





- 20. What is the main requirement when a hand tucked eye splice is used for a wire rope termination?
  - A. It must be done in a factory setting
  - B. A trained person must do it
  - C. It must be tested and labeled
  - D. Only one is allowed per rope
  - E. The rope can only be used once
- 21. What is the recommended type of wire rope clamp?
  - A. U-bolt
  - B. J-bolt
  - C. Machine bolt
  - D. Carriage bolt
  - E. Shackle bolt
- 22. On two-point suspended work platforms, how is the platform kept level?
  - A. Locate the stirrups on the platform ends
  - B. Maintain equal spacing of the stirrups
  - C. Placing support systems equal to hoist spacing
  - D. Both hoists must operate simultaneously
  - E. Ensure both shackles are the same
- 23. Which of the following is critical for workers to determine regarding the choice of work platform?
  - A. The load capacity of the platform
  - B. The length of the platform
  - C. Type of material used on the platform
  - D. How long the platform has been in use
  - E. The manufacturer of the platform
- 24. When a wire rope is terminated, what is the minimum number of clamps that must be used?
  - A. 1
  - **B.** 2
  - **C**. 3
  - D. 4
  - **E**. 5
- 25. If there is no suitable anchor point for the fall arrest lifeline, what should the worker do?
  - A. Refuse the job and notify the owner
  - B. Report the situation to local authorities
  - C. Tie off to the work platform
  - D. Tie off to the suspension system
  - E. Double your life insurance policy
- 26. What does the "B" represent when referring to the "ABD" of fall arrest equipment?
  - A. The worker's harness
  - B. Support ability of the harness
  - C. Support ability of the connection drive
  - D. The anchorage of the lifeline
  - E. The anchorage of the support system





- 27. What is recommended to prevent fall arrest lanyard roll out?
  - A. Use double locking snap hooks
  - B. Keep lanyards as short as possible
  - C. Locate rope grabs as high as possible
  - D. Ensure lifelines are vertical
  - E. Have "D" rings between shoulders
- 28. When selecting a fall arrest body harness, which of the following guidelines should you use?
  - A. Select the harness that has one "D" ring
  - B. Select the harness that has several "D" rings
  - C. Select the harness that has never been used
  - D. Select the harness that provides good freedom
  - E. Select the harness that best fits your body
- 29. At what point on the lifeline should the rope grab be placed?
  - A. As close to the platform as possible
  - B. As high above the worker as possible
  - C. At a point as convenient as possible
  - D. At a point at right angles to the worker
  - E. Wherever the lanyard is kept taut
- 30. To what are trolley lines attached?
  - A. The special lifelines at the platform ends
  - B. Structural parts of the above platform
  - C. The main wire rope support system
  - D. The second wire rope support system
  - E. At the mid-point of the upper platform
- 31. If the normally accepted practice of securing fall arrest equipment cannot be achieved, what should be done?
  - A. Do the best you can
  - B. Check with regulatory people
  - C. Consult competent experts
  - D. Increase the safety factor
  - E. Refuse to do the job
- 32. When is it recommended that fall arrest equipment be inspected?
  - A. Once every year
  - B. Once every month
  - C. Once every week
  - D. Before every use
  - E. After prolonged storage
- 33. What record must be kept after the twice-annual fall arrest equipment inspection?
  - A. No record is required to be kept
  - B. Location of inspection and the date
  - C. Only the inspector's name
  - D. Inspector's name and the date
  - E. Inspector's name and credentials





- 34. What is wrong with using fall arrest protective equipment made up of components from different manufacturers?
  - A. Nothing, provided the manufacturers are reputable
  - B. Nothing, provided the manufacturers are approved
  - C. The safety factor for each component may be too low
  - D. The cost of all the components may be unacceptable
  - E. The components may not be compatible with one another
- 35. From what source will you find the criteria for the inspection of fall arrest equipment?
  - A. Scaffold & Access Industry Association
  - B. OSHA regulations
  - C. ANSI codes and guidelines
  - D. Equipment manufacturers
  - E. Local officials
- 36. Where can you get inspection guidelines for fall arrest equipment?
  - A. The manufacturer
  - B. The structure owner
  - C. Regulatory officials
  - D. Government agencies
  - E. Insurance companies
- 37. Who writes codes for suspended scaffolds?
  - A. The owner of the structure in question
  - B. Specially trained competent persons
  - C. Local worker's compensation organizations
  - D. American National Standards Institute
  - E. Scaffold & Access Industry Association
- 38. Which of the following must be checked when ensuring the counterweights are adequate?
  - A. They are located as close to the fulcrum as possible
  - B. They comply with the counterweight formula
  - C. They are free to move in a side-to-side motion
  - D. They have a safety factor ratio of 10:1
  - E. They are easily adjusted depending on the loads
- 39. What should be done if the wire rope has a slight kink in it?
  - A. Nothing, just use it
  - B. Replace the rope
  - C. Try to take the kink out
  - D. Splice in a new section
  - E. Check with the manufacturer
- 40. When installing the rigging for a suspended scaffold system on a roof, must the workers always wear fall arrest equipment?
  - A. No, this is not a requirement
  - B. Yes, this is always a requirement
  - C. Yes, if there is only one worker
  - D. Yes, if the roof is unguarded
  - E. Yes, provided there is suitable anchorage





- 41. What is one of the safety features of a fall arrest rope grab while in use?
  - A. The manufacturer stands behind it
  - B. There is a build-in quick-release feature
  - C. The brake is manually operated
  - D. It can be easily moved from line to line
  - E. It always stays attached to the lifeline
- 42. Which of the following is one of the considerations you must take regarding a lifeline?
  - A. Coil it on the platform
  - B. Wrap it around the support wire
  - C. Ensure it has a 6:1 safety ratio
  - D. Protect it from sharp edges
  - E. Use the largest size possible
- 43. Who participates in setting the ANSI Standards?
  - A. A committee made up of elected officials
  - B. A committee made up of experts
  - C. A committee made up from the public
  - D. People that have an interest
  - E. Engineers who design scaffolds
- 44. On a twice-annual basis who must do an inspection of fall arrest equipment?
  - A. Equipment manufacturer
  - B. A competent person
  - C. An engineer
  - D. OSHA representative
  - E. ANSI representative
- 45. Which of the following would be a situation where double rigging of a suspended scaffold would be used?
  - A. Systems with more than two suspension points
  - B. With platforms located one above another
  - C. If three or more workers are on the platform
  - D. When excessive wind is to be encountered
  - E. To allow ease in horizontal platform movement
- 46. What does the "A" stand for when referring to the "ABC" of fall arrest equipment?
  - A. The worker's harness
  - B. Support ability of the harness
  - C. Support ability of the connection device
  - D. The anchorage of the lifeline
  - E. The anchorage of the support system
- 47. For imported wire rope used to support a suspended scaffold in the United States of America, what would be the approximate comparable size to ta 5/16 inch rope?
  - A. 5 mm
  - B. 6 mm
  - C. 8 mm
  - D. 10 mm
  - E. 12 mm





- 48. Why must the spacing between support systems be equal to the spacing between work platform hoists?
  - A. So the hoists work easier
  - B. To avoid side loading
  - C. To prevent tipping
  - D. To avoid tie-down
  - E. For uniform lifting
- 49. From the examples below, which would not be considered as part of the suspended system?
  - A. Rollers
  - B. Counterweights
  - C. Workers
  - D. Hoists
  - E. Wire Ropes

## 50. What type of suspended scaffold does not require guardrails on all open sides?

- A. There are none
- B. Single point
- C. Two point
- D. Bosun chair
- E. Aerial platform