FALL PREVENTION IN CONSTRUCTION

2017 STUDENT HANDBOOK

Acknowledgements

The information in this handbook was created by the National Framers Council (NFC), a council of Structural Building Components Association (SBCA). The NFC's goal is to educate framers, general contractors, developers, insurance carriers and other industry professionals about the challenges and the liabilities faced by framers every day. As a means to fulfill its primary mission, NFC has developed a comprehensive, industry-specific, jobsite safety program: Frame-SAFE. The fall protection guidance you will learn today is a chapter excerpt from the Frame-SAFE Safety Manual.

The purpose of this handbook is to identify fall protection practices and related OSHA requirements pertaining to construction framing activities. Many detailed and lengthy requirements are not, however, included in this handbook, and this handbook does not replace any requirements detailed in the actual OSHA regulations for construction—Title 29 Code of Federal Regulations, Part 1926 (the "OSHA Regulations"). This handbook should only be used as a guide relating to the OSHA Regulations. The main goal of this handbook is to help Employees (as defined in handbook) stay safe on any jobsite in the best way possible.

This handbook further explains in easily understood language what Employees can do to comply with safe work practices and some of the OSHA Regulations. This handbook should be used, however, only as a general guide to safety practices for Employees. If any inconsistency ever exists between this handbook and the OSHA Regulations, the OSHA Regulations will always prevail and this handbook should never be considered a substitute for any provisions of the OSHA Regulations.

The final responsibility for safety rests with the Employee. Safe practices on the part of each Employee must be a part of all operations. Employees must follow safety precautions and rules to protect themselves and their fellow Employees.

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Curriculum

Course Information:

The goal of this course is to identify and review appropriate fall protection standards and practices for the benefit of framers. Successful completion of the course will help framers understand fall protection requirements and give them the tools to practice safe, practical fall protection on every jobsite. This course will also teach framers to become more aware of potential fall hazards on the jobsite and the steps to correct them.

Students will learn the following:

1. Requirements of Title 29 Code of Federal Regulations, Part 1926 as they pertain to fall protection

2. Safe use of:

a. Ladders

b. Protection from falling objects

c. Guardrails

d. Scaffolding

e. Personal Fall Arrest Systems (PFAS)

f. Positioning Device Systems

g. Horizontal Lifeline System (HLL)

h. Rescue Plans

3. How and when to create a site-specific fall protection plan, and real-world application of a site-specific plan during roof truss installation

Definitions:

Authorized person - a person approved or assigned by the employer to per-form a specific type of duty or duties or to be at a specific location or locations at the jobsite.

Competent Person - one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazard-ous, or dangerous to employees, and who has authorization to take prompt correc-tive measures to eliminate them.

Designated person - means “authorized person“.

Employee - every laborer or mechanic under the Act regardless of the contrac-tual relationship which may be alleged to exist between the laborer and mechanic and the contractor or subcontractor who engaged him…”Laborer” generally means one who performs manual labor or who labors at an occupation requiring physical strength; “mechanic” generally means a worker skilled with tools.

Employer - contractor or subcontractor within the meaning of the Act. Qualified - one who, by possession of a recognized degree, certificate, or pro-fessional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his ability to solve or resolve problems relating to the subject matter, the work, or the project.

Pre-Training Assessment

Fall Prevention in Construction

Name:_____ Date:_____ Score:_____/ 20

1. One who is capable of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them, is called what?
    - ☐ Foreman
    - ☐ Qualified Person
    - ☐ Competent Person
    - ☐ General Contractor
2. A person approved or assigned by the employer to perform a specific type of duty or duties or to be at a specific location or locations on the jobsite is called what?
    - ☐ Approved Person
    - ☐ Authorized Person
    - ☐ Employee
    - ☐ Qualified Person
3. When an employer can demonstrate that it is infeasible or creates a greater hazard to use conventional fall protection methods, they are allowed to develop and implement their own fall protection plan.
    - ☐ True
    - ☐ False
4. OSHA Fall Protection standards (Subpart M) require fall protection when the distance between the working surface and lower level is greater than:
    - ☐ 15 feet
    - ☐ 6 feet
    - ☐ 12 feet
    - ☐ 8 feet
5. When using ladders, the top of the ladder should extend how many feet past the platform above?
    - ☐ 1 foot
    - ☐ 2 feet
    - ☐ 3 feet
    - ☐ 4 feet

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6. Extension ladders should be overlapped at least how many rungs?
    - 1
    - 2
    - 3
    - 4
7. Materials must be kept at least 6 feet from the leading edge of a hole/opening.
    - True
    - False
8. Guardrail system requirements call for the top rail to withstand how much force?
    - 500 lbs.
    - 250 lbs.
    - 150 lbs.
    - 200 lbs.
9. Guardrail top rails must be how high above the working surface?
    - 24 in. +/- 3 in.
    - 32 in. +/- 3 in.
    - 36 in. +/- 3 in.
    - 42 in. +/- 3 in.
10. When erecting scaffolding, what is the minimum distance required between the scaffold and power lines?
    - 6 feet
    - 8 feet
    - 12 feet
    - 10 feet
11. Employees on a scaffold do not need to use fall protection.
    - True
    - False
12. Personal Fall Arrest Systems (PFAS), which consists of a body harness, lanyard with shock absorbing pack, rope grab and locking snap hook, should be adjusted to prevent an employee from falling no more than how many feet?
    - 4 feet
    - 5 feet
    - 6 feet
    - 8 feet
13. When using a PFAS, what is the maximum arresting force when used with a body harness?
    - 1,500 lbs.
    - 1,750 lbs.
    - 1,800 lbs.
    - 2,000 lbs.

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14. What is the maximum deceleration distance required to bring an employee to a complete stop while using a PFAS?
    - 3.5 feet
    - 4 feet
    - 5 feet
    - 6 feet
15. A Positioning Device System, which consists of a body harness that allows employees to be supported on an elevated vertical surface and work with both hands free while leaning, should be adjusted to prevent an employee from falling no more than how many feet?
    - 1 foot
    - 2 feet
    - 3 feet
    - 6 feet
16. Anchorage points for fall protection must be able to support how many pounds per employee?
    - 5,000 lbs.
    - 4,000 lbs.
    - 2,500 lbs.
    - 1,500 lbs.
17. Two employees may clip in to the same anchorage point.
    - True
    - False
18. When setting roof trusses, workers can walk on the top plate of walls without fall protection if they maintain how many points of contact with the structure around them?
    - 2 feet, 1 hand
    - 2 feet, 2 hands
    - 1 foot, 1 hand
    - None of the above
19. What is the best anchorage point on a truss during installation of bracing and sheathing?
    - Bottom chord
    - Web members
    - Peak
    - Top chord
20. At a minimum, how many trusses should be set, braced and sheathed before using them as an anchor point?
    - 2
    - 3
    - 4
    - 5

I certify that I have reviewed this assessment and all information entered is accurate:

Reviewer Signature:_____ **Date:** _____

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Assessment Answer Key

Fall Prevention in Construction

1. Competent Person
2. Authorized Person
3. True
4. 6 feet
5. 3 feet
6. 3
7. True
8. 200 lbs.
9. 42 in. +/- 3 in.
10. 10 feet
11. False
12. 6 feet
13. 1,800 lbs.
14. 3.5 feet
15. 2 feet
16. 5,000 lbs.
17. False
18. False
19. Top Chord
20. 3

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Post-Training Assessment

Fall Prevention in Construction

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20. At a minimum, how many trusses should be set, braced and sheathed before using them as an anchor point?
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I certify that I have reviewed this assessment and all information entered is accurate:

Reviewer Signature:_____ **Date:** _____

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Reaction Survey

Fall Prevention in Construction

Name:_____ **Date:**_____

Please answer the following questions about today's training. We value your feedback and appreciate your honesty.

1. The classroom and lab facilities were helpful in the learning process
   - ☐ Strongly Agree
   - ☐ Agree
   - ☐ Neutral
   - ☐ Disagree
   - ☐ Strongly Disagree
2. The instructor's experience and contribution were valuable to the teaching process
   - ☐ Strongly Agree
   - ☐ Agree
   - ☐ Neutral
   - ☐ Disagree
   - ☐ Strongly Disagree
3. The instructor's teaching methods were effective
   - ☐ Strongly Agree
   - ☐ Agree
   - ☐ Neutral
   - ☐ Disagree
   - ☐ Strongly Disagree
4. The training materials (classroom handouts, hands-on structure, discussions) were useful and engaging
   - ☐ Strongly Agree
   - ☐ Agree
   - ☐ Neutral
   - ☐ Disagree
   - ☐ Strongly Disagree
5. Evaluate the technical level of this training
   - ☐ It was too technical for me to understand
   - ☐ It was at the correct technical level
   - ☐ It could have been more technical
6. The material presented today was
   - ☐ All new to me
   - ☐ Mostly new to me
   - ☐ I knew some of it before

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- ☐ I knew most of it before

7. The material presented in today's training will be useful to me
   - ☐ True
   - ☐ False
   - ☐ I don't know
8. What areas overall made this training effective?

9. What areas of the training need to be improved?

10. What part of today's training will you use the most when you go back to work?

11. How likely are you to suggest to others that they attend this training?
    - ☐ Very likely
    - ☐ Somewhat likely
    - ☐ Neutral
    - ☐ Not at all likely
12. Overall, what grade would you give today's training?
    - ☐ A
    - ☐ B
    - ☐ C
    - ☐ D

Instructor Signature:_____ **Date:** _____

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