

**HASKELL**  
America's Design-Build Leader

# Carpentry Level One



Building Materials, Fasteners, and Adhesives 27102-13





# Objectives

Identify safety precautions associated with building materials.

- a. List general safety guidelines for working with building materials.
- b. Cite safety precautions for working with wood building materials.
- c. Cite safety precautions for working with concrete building materials.
- d. Cite safety precautions for working with metal building materials.

Describe the proper method of handling and storing building materials.

- a. List basic material-handling guidelines.
- b. Describe how to handle and store wood building materials.
- c. Describe how to handle and store concrete building materials.
- d. Describe how to handle and store metal building materials.

## Kickoff Activity

- Using the given scenario, complete a job hazard analysis (JHA) form in its entirety. Remember to focus on the relationship between the worker, the task, the tools to be used, and the work environment.



## Section 2.1.0

- Housekeeping
  - Remove all scrap material and lumber with nails protruding.
  - Clean up spills.
  - Remove all combustible scrap materials regularly.
  - Have available containers for the collection and separation of refuse. Containers for flammable or harmful refuse must be covered.
  - Dispose of wastes often.
  - Store all tools and equipment when you're finished using them.





## Section 2.2.0

- Wood safety
  - Wear gloves to prevent embedded splinters, cuts, and scrapes.
  - When stacking lumber, ensure that the boards will not fall or slide.
  - Place the lumber flat on the ground. Do not stand them on end.
  - Do not pile lumber more than 6' high if moving it manually.



## Section 2.3.0

- Dry cement dust can cause:
  - Blood poisoning.
  - Chemical burns to the membranes of the eyes, nose, mouth, throat, or lungs.
  - A fatal lung disease known as silicosis.
- Wet cement or concrete can cause:
  - Chemical burns to the eyes and skin.
  - An allergic skin reaction known as cement dermatitis.



## Section 2.4.0

- Steel product safety
  - Wear thick gloves to prevent penetration by sharp edges of the framing members.
  - Use caution when handling wet steel framing members, which may be slippery.
  - Avoid dropping members or placing heavy loads of steel framing members on electrical cords as they may cut through the cord and create an electrical hazard.



## Section 3.1.1

- Pretask planning
  - Check to make sure the load is not too big, heavy, or hard to grasp.
  - Make sure the load does not have protruding nails, wires, or sharp edges.
  - Make sure the material can be handled by one person.
  - Inspect your path of travel.
  - Always read warning labels and instructions.





## Section 3.1.2

- Proper dress
  - Do not wear loose clothing.
  - Button shirt sleeves; tuck in shirt tails.
  - Remove all jewelry.
  - Tie back and secure long hair underneath your hard hat.
  - A wristwatch, if worn, should be designed to break away if caught in machinery.
  - Wear gloves whenever cuts, splinters, blisters, or other hand injuries are possible.



## Section 3.1.3

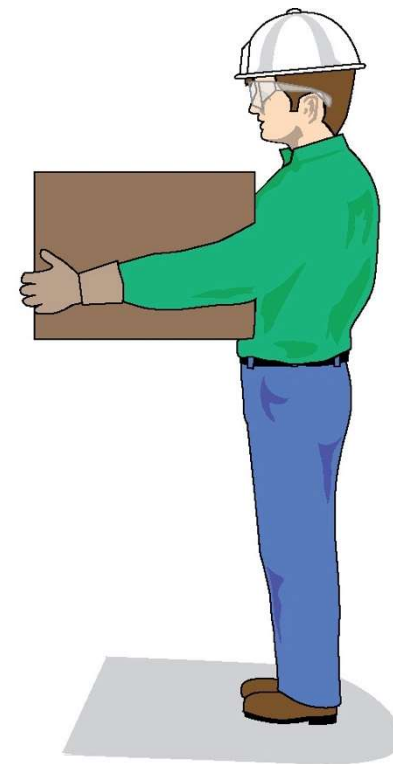
- Know the technique for proper lifting.



BEND YOUR KNEES AND  
GRASP THE OBJECT FIRMLY.



LIFT THE OBJECT BY  
STRAIGHTENING YOUR LEGS.



MOVE FORWARD ONCE YOU  
ARE IN FULL VERTICAL POSITION.

## Section 3.2.0

- There are several factors to consider when unloading and stacking building materials at the job site. These may include the following:
  - The order in which the material will be used
  - The weight of the material
  - The weather conditions



## Section 3.2.0

- Handling and storing wood materials
  - Material should be stacked on a level surface.
  - Separate the lumber, keeping the treated material from the untreated material.
  - Keep the materials banded until it is time to use them.
  - Protect the lumber from the elements with waterproof material.



## Section 3.3.0

- Handling and storing concrete products
  - Portland cement can be stored indefinitely if stored properly.
  - Store bags off the ground and in a dry location.
  - Stack bags closely together.
  - If stored outdoors, stack the bags on pallets and cover them with a waterproof covering.



## Section 3.4.0

- Handling and storing steel products
  - Handle carefully as the steel framing members may have sharp edges.
  - Store members in a dry location and/or covered to prevent exposure to moisture. Despite a galvanized coating, corrosion may occur if the coating is deeply scratched.





## Wrap Up

Review the information on housekeeping and materials handling and storage in *OSHA Safety and Health Standards for the Construction Industry (29 CFR, Part 1926 (1926.25 and 1926 Subpart H))*.

Next Lesson: Calculating Lumber, Panel, and Concrete Quantities  
Review Sections 4.0.0–4.3.4

