

#### DEPARTMENT OF EDUCATION SCHOOLS DIVISION OF NEGROS ORIENTAL REGION VII



Kagawasan Ave., Daro, Dumaguete City, Negros Oriental

# TLE-IA-CARPENTRY

# Quarter 2 – Module 7 SCAFFOLDING HAZARDS





GOVERNMENT PROPERTY FOR SALE

TLE-IA-Carpentry-Grades 9/10
Alternative Delivery Mode
Quarter 2 – Module 7: SCAFFOLDING HAZARDS
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# 9/10

# TLE-IA-CARPENTRY Quarter 2 - Module 7 SCAFFOLDING HAZARDS





After going through this module, you are expected to:

- Prepare work areas for safe laying out and assembling of scaffolds and braces.
- Assemble scaffolds and braces safely and securely.
  - > Free of Interference
  - > Properly balance
- Secure connectors, locks and screws.
- Select appropriate Personal Protective Equipment (PPE)



#### PRE - ASSESSMENT

What are the tools and equipment used in scaffolding? Cite at least five(5). Write in your activity notebook.

#### Lesson

## **SCAFFOLDING HAZARDS**



#### What's In

Write your answers in your notebook.

• Cite at least five (5) tools and equipment used in scaffolding.



## What's New

#### **Scaffolding Hazards**

Here's a list of common work at heights hazards:

- Improper safety measures when raising and dismantling scaffolding
- Lack of guardrails
- Overhead electrical wires and risk of electrocution
- Planks slipping or breaking
- Rolling scaffolds
- Climbing on scaffolding



#### **Scaffolding Hazards**

#### 1. Raising and dismantling scaffolding

When erecting scaffolding, a common hazard is not providing an appropriate platform for the worker as they are installing the next lift.

Also, failure to install tie-ins may result in the scaffolding swaying enough to topple someone off their working platform, especially when the platform is not sufficient.

Accidents are frequently reported in situations where the worker was only working from a platform of one or two planks.

#### 2. Lack of guardrails

The use of guardrails is recommended for any platform higher than 5 feet, but this precaution is often not observed which has resulted in falls and serious injuries.

Many falls from scaffolds are from platforms of less than 10 feet high, so a guardrail should be considered an important control measure.

#### 3. Overhead electrical wires

Contact with electrical wires puts workers in serious danger. Scaffold electrical hazards include failing to observe safe distances from electrical lines, especially when hoisting scaffolding on a jobsite.

#### 4. Planks slipping or breaking

If scaffold planks are unsecured, overloaded or in bad condition, they can break or slide which causes many falls and injuries.

#### 5. Rolling scaffolds

Moving a rolling scaffold while workers are still on the platform can be a very dangerous practice and can cause workers to fall or slip, especially if the working platforms are already insufficient and/or if any of the planks are loose or loaded down too heavily.

#### 6. Overloading platforms

Placing excessive weight on a working platform can cause planks to crack or break. Another common problem is when working material overhangs the scaffold platform and causes the platform to tip and slide.

#### 7. Climbing on scaffolding

Climbing up and down a scaffolding platform rather than using appropriate equipment like ladders poses another serious risk and has resulted in many falls and injuries.

If the scaffolding has not been secured properly, this practice also poses a risk to other workers on the platform.



#### **Scaffolding Safety Checklist**

How do we avoid falls and injuries related to these hazards and improper practices? Let's take a look at the basics of scaffolding safety and some best practices to observe.

#### 1. Choose the right scaffolding system

There are varying types of scaffolds that are better suited to different work sites and tasks. It is important to take the specifics of a job site and the nature of the task into consideration before selecting a scaffolding system.

Rolling scaffolds, for example, are best suited for jobs of shorter duration and are commonly used for electrical and mechanical work; whereas a standard frame scaffold is typically used for longer-term work and heavier loads, and is designed for pedestrians to walk under.

#### 2. Location hazards and safe surfaces

Before erecting a scaffold, check the location for possible hazards like sloping or uneven surfaces, overhead wires, or any other obstructions.

Soil must be compacted and even, and gravel or stone will need to be laid on soft soil or muddy surfaces. Additionally, scaffolding erected on soil will need planks, or mudsills, laid underneath the frame either length-wise or width-wise which must extend approximately one foot beyond the scaffold.

#### 3. Proper assembly

Assembling a scaffold too quickly or without proper attention to detail can result in serious problems.

Follow manufacturer's instructions carefully while assembling a scaffold, ensuring that all braces, parts and fittings have been installed accordingly.

#### 4. Guardrails

Accidents and fatalities are sometimes caused by the lack of a guardrail. A scaffold should always have a guardrail. Most injuries related to lack of guardrails take place on scaffolding at lower heights.

#### 5. Inspection

All components of a scaffold, including the working platforms and planks, must be carefully inspected before and after use. Check for rust, breakage, cracks, and any warping or deterioration.

#### 6. Avoid overloading

It is critical to observe manufacturer's instructions regarding the load-bearing capacity of a scaffold.

Overloading a platform can result in breakage or the platform tipping and knocking over a worker.

#### 7. Careful dismantling

When a scaffold has been up for a longer period of time, rust or deterioration of parts can cause it to become more difficult to take apart.

However, yanking or tugging on components can prove dangerous, causing a worker to lose balance and fall.

Extra care should be taken and workers should wear appropriate fall protection equipment when dismantling any kind of scaffold. Each tier of a scaffold should be completely taken apart before progressing to the next tier.



# What I Have Learned

Supply the missing word/words to make the statement correct.

1.	Accidents are frequently reported in situations where the worker was only
	working from a platform of
2.	Many falls from scaffolds are from platforms of less than 10 feet high, so a
	guardrail should be considered an  Moving a rolling scaffold while workers are still on the platform can be a very dangerous practice and can cause workers
4.	Placing excessive weight on a working platform can cause planks
5.	a scaffolding platform rather than using appropriate
	equipment like ladders poses another serious risk and has resulted in many
	falls and injuries.



# What I Can Do

After successfully performing the assigned task from what I have learned,



## Assessment

A. Fill in the blanks.

Direction: Write your answer/s on your activity notebook/quiz notebook.

1.	The use of guardrails is recommended for any platform, but this precaution is often not observed which has resulted in falls and serious injuries.
2.	include failing to observe safe distances from electrical
	lines, especially when hoisting scaffolding on a jobsite.  Ifare unsecured, overloaded or in bad condition, they can break or slide which causes many falls and injuries.  All components of a scaffold, including the working platforms and planks, must be carefullybefore and after use.
5.	Assembling a scaffoldor without proper attention to detail can
	result in serious problems.
	B. Enumerate the scaffolding safety checklist.

# Answer Key

- 7. Careful dismantling
  - 6. Avoid overloading
    - 5. Inspection
    - 4. Guardrails
  - 3. Proper assembly
- 2. Location hazards and safe surfaces
- 1. Choose the right scaffolding system

#### B. Enumeration

- 5. too quickly
  - 4. inspected
- 3. scaffold planks
- 2. scaffold electrical hazards
  - 1. higher than 5 feet
  - A. Fill in the blanks

#### V E:11 :0 +1

#### Assessment

- 5. climbing up and down
  - 4. to crack or break
    - 3. to fall or slip
- 2. important control measure
  - 1. one or two planks

#### What I Have Learned

- 7. Earmuffs
- 6. Safety harness
- 5. Protective clothing
  - 4. Protective boots
  - 3. Hardhats/helmet
- 2. Goggles/eye protection
- 1. Gloves/hand protection

Pre-Assessment (Answers may vary)

#### What I Know

#### References

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