



DEPARTMENT OF EDUCATION  
SCHOOLS DIVISION OF NEGROS ORIENTAL  
REGION VII

Kagawasan Ave., Daro, Dumaguete City, Negros Oriental



# TLE-IA-CARPENTRY

## Quarter 3 – Module 2 (Week 3 to 4)

### PARTS OF WOODEN SCAFFOLDING



GOVERNMENT PROPERTY  
NOT FOR SALE

**TLE-IA-Carpentry 10**  
**Alternative Delivery Mode**  
**Quarter 3 – Module 2: Parts of Wooden Scaffolding**  
**First Edition, 2020**

**Republic Act 8293, section 176** states that: No copyright shall subsist in any work of the Government of the Philippines. However, prior approval of the government agency or office wherein the work is created shall be necessary for exploitation of such work for profit. Such agency or office may, among other things, impose as a condition the payment of royalties.

Borrowed materials (i.e., songs, stories, poems, pictures, photos, brand names, trademarks, etc.) included in this module are owned by their respective copyright holders. Every effort has been exerted to locate and seek permission to use these materials from their respective copyright owners. The publisher and authors do not represent nor claim ownership over them.

Published by the Department of Education  
Secretary: Leonor Magtolis Briones  
Undersecretary: Diosdado M. San Antonio

**Development Team of the Module**

**Writer:** Romel U. Magdasal

**Editors:** Gemuel C. Ibero

**Reviewers:** Dennis S. Calinao, Gemuel C. Ibero, Howel Jay M. Caluyo,  
Alden B. Deguit, John Paul Jeremiah B. Teves, Clifford O. Ignacio

**Typesetter:** Gemuel C. Ibero

**Layout Artist:** Alden B. Deguit

<b>Management Team:</b> Senen Priscillo P. Paulin, CESO V	Rosela R. Abiera
Fay C. Luarez, TM, Ed.D., Ph.D.	Maricel S. Rasid
Adolf P. Aguilar, Ed.D., TM	Elmar L. Cabrera
Nilita R. Ragay, Ed.D.	
Antonio B. Baguio Jr., Ed.D.	

Printed in the Philippines by \_\_\_\_\_

**Department of Education –Region VII Schools Division of Negros Oriental**

Office Address: Kagawasan, Ave., Daro, Dumaguete City, Negros Oriental  
Tele #: (035) 225 2376 / 541 1117  
E-mail Address: negros.oriental@deped.gov.ph

# **TLE-IA-CARPENTRY**

## **Quarter 3 – Module 2: PARTS OF WOODEN SCAFFOLDING**



# Introductory Message

For the facilitator:

Welcome to the TLE-IA-CARPENTRY (Grade 10) Alternative Delivery Mode (ADM) Module on PARTS OF WOODEN SCAFFOLDING.

This module was collaboratively designed, developed and reviewed by educators both from public and private institutions to assist you, the teacher or facilitator in helping the learners meet the standards set by the K to 12 Curriculum while overcoming their personal, social, and economic constraints in schooling.

This learning resource hopes to engage the learners into guided and independent learning activities at their own pace and time. Furthermore, this also aims to help learners acquire the needed 21st century skills while taking into consideration their needs and circumstances.

In addition to the material in the main text, you will also see this box in the body of the module:



## ***Notes to the Teacher***

This contains helpful tips or strategies that will help you in guiding the learners.










As a facilitator, you are expected to orient the learners on how to use this module. You also need to keep track of the learners' progress while allowing them to manage their own learning. Furthermore, you are expected to encourage and assist the learners as they do the tasks included in the module.



For the learner:

Welcome to TLE-IA-CARPENTRY (Grade 10) Alternative Delivery Mode (ADM) Module on PARTS OF WOODEN SCAFFOLDING.

This module was designed to provide you with fun and meaningful opportunities for guided and independent learning at your own pace and time. You will be enabled to process the contents of the learning resource while being an active learner.

This module has the following parts and corresponding icons:

 <b><i>What I Need to Know</i></b>	This will give you an idea of the skills or competencies you are expected to learn in the module.
 <b><i>What I Know</i></b>	This part includes an activity that aims to check what you already know about the lesson to take. If you get all the answers correct (100%), you may decide to skip this module.
 <b><i>What's In</i></b>	This is a brief drill or review to help you link the current lesson with the previous one.
 <b><i>What's New</i></b>	In this portion, the new lesson will be introduced to you in various ways; a story, a song, a poem, a problem opener, an activity or a situation.
 <b><i>What is It</i></b>	This section provides a brief discussion of the lesson. This aims to help you discover and understand new concepts and skills.
 <b><i>What's More</i></b>	This comprises activities for independent practice to solidify your understanding and skills of the topic. You may check the answers to the exercises using the Answer Key at the end of the module.
 <b><i>What I Have Learned</i></b>	This includes questions or blank sentence/paragraph to be filled in to process what you learned from the lesson.
 <b><i>What I Can Do</i></b>	This section provides an activity which will help you transfer your new knowledge or skill into real life situations or concerns.
 <b><i>Assessment</i></b>	This is a task which aims to evaluate your level of mastery in achieving the learning competency.

 <b><i>Additional Activities</i></b>	In this portion, another activity will be given to you to enrich your knowledge or skill of the lesson learned.
 <b><i>Answer Key</i></b>	This contains answers to all activities in the module.

At the end of this module you will also find:

## ***References***

This is a list of all sources used in developing this module.

The following are some reminders in using this module:

1. Use the module with care. Do not put unnecessary mark/s on any part of the module. Use a separate sheet of paper in answering the exercises.
2. Don't forget to answer *What I Know* before moving on to the other activities included in the module.
3. Read the instruction carefully before doing each task.
4. Observe honesty and integrity in doing the tasks and checking your answers.
5. Finish the task at hand before proceeding to the next.
6. Return this module to your teacher/facilitator once you are through with it.

If you encounter any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator. Always bear in mind that you are not alone.

We hope that through this material, you will experience meaningful learning and gain deep understanding of the relevant competencies. You can do it!



## ***What I Need to Know***

A scaffolding is a temporary structure of wooden poles and planks providing platforms for workers to stand on while doing construction work. It is therefore used to reach those work areas which otherwise are too high for the carpenter. It is made up of rigid elevated platforms which ensure safety for the workers and serve as support for tools and materials.

There are two types of scaffolding, namely, single-pole and double-pole. A single-pole scaffolding is secured by being made to stand against the wall. This is mainly used by painter and other construction workers who use only light equipment. A double-pole scaffolding can stand alone. This is used when heavy equipment and materials are needed for construction.

You are required to go through a series of learning activities in order to complete the learning outcome **Lay Out and Assemble Scaffolds and Braces** of this module. In each learning outcome there are **information sheets**, and **activity sheets**. Follow these activities on your own and answer the Self-Check at the end of each learning activity.

The information content of this quarter is about the **wooden type of scaffolding and its parts**.

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.
- Discuss how a scaffolding is made.
  - Free of Interference
  - Properly balance
- Secure connectors, locks and screws.
- Select appropriate Personal Protective Equipment (PPE)



## ***What I Know***

**A.** Directions: Read the statements carefully. Write the correct answer on your answer sheet or activity notebook.

1. A raised floor is used to step on by workers while working.  
a. Base                      b. floor                      c. platform                      d. pavement
2. It is used to prevent lateral movements of the scaffold.  
a. Diagonal brace                      c. vertical brace  
b. Horizontal brace                      d. Z – brace
3. A part of scaffold that is fixed to support the outriggers.  
a. Post                      b. brace                      c. platform                      d. cleats
4. What is the best lumber suited to make as scaffolding?  
a. Soft lumber                      c. lumber with knots  
b. Strong lumber                      d. lumber with dry rot
5. A part of scaffold that holds the platforms.  
a. Outriggers                      b. uprights                      c. brace                      d. cleat



## Lesson

# 1

## PARTS OF WOODEN SCAFFOLDING



### ***What's In***

Write your answers in your notebook. (5 points each)

1. What are the Parts of scaffolding?
2. Enumerate the basic Procedures of assembling scaffolding.
3. How to disassembles scaffolding.



### ***What's New***

The majority of construction projects, use scaffolding to provide the required access needed to construct, repair or maintain commercial or residential projects.

The risks or dangers associated when working on a construction site, when working at height applicable, as in the case of working from a scaffolding structure additional care, consideration and hazard awareness is essential.

It's important to remember not only does the scaffolding systems or scaffolding supplies have met with current safety regulations, workers also have to be fully trained, qualified and equipped with the correct and adequate personal protective equipment (PPE).

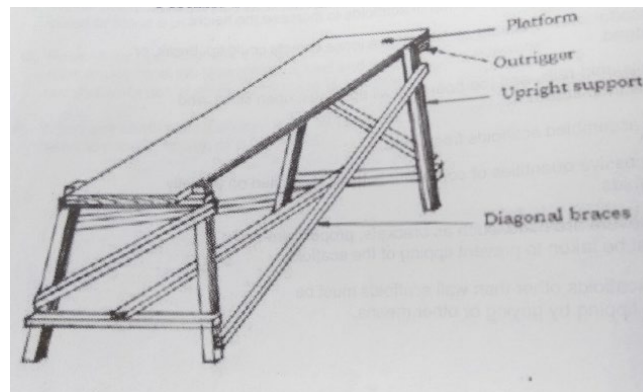


## What Is It

### Identifying parts of a wooden scaffolding

#### ➤ Parts of a Portable Scaffolding:

- **Outrigger** is a part of scaffold that holds the platforms.
- **Uprights or Posts** are used to support the structure.
- **Platforms** are raised floors used to step on by workers while working.
- **Diagonal Braces** are used to prevent lateral movements of the scaffold.
- **Cleats** are fixed to support outriggers.
- **Horizontal Support** is a part that holds the lower portion of the legs or the upright support of the scaffolding.



Portable scaffolding and Its Parts

#### ➤ Safety Rules in the Construction of Wooden Scaffolding

- Use strong lumber for the scaffolding. Never use decayed lumber or lumber with knots, wind shakes, and splinters because they easily break.
- Properly brace the uprights of the scaffolding to prevent lateral movement.
- Nail all the platforms to their supports. If the platforms are not nailed, they may slip or tip off.
- Place enough support for the platform.
- Avoid long protruding platforms beyond the supports. If they can't be avoided, place another support at the end. Unsupported overhanging platforms may break or tip off when stepped on.
- Properly secure the supports of the bracket and cantilever scaffolds.

### ➤ Hints in the Construction of Wooden Scaffolds

- The construction and location of the different parts of scaffolding should be well planned so that they will not affect the proper placing of the building. A haphazard placing of the different parts of scaffolding might make it necessary to dismantle and reconstruct the scaffold. This is a waste of time, effort, and money.
- The platform should be at a convenient height so that the workers on the platform do not have to stoop or stand on their toes while doing the job.
- The platforms should be at level, unless the particular job requires a sloping.



### ***What's More***

- This activity should be done with the supervision of the teacher during the special face to face class scheduled for the performance of the learner.
- Teacher should ask a written approval from the school head and parent consent signed by the parents.

### **Assembling a Wooden Scaffolding**

#### **Tools and Equipment**

- Steel square / try square
- Pull-push rule
- Pencil
- Cross cut saw
- Claw hammer
- Plumb bob
- Spirit level / level hose
- Personal Protective Equipment
- Working drawing of scaffolding

#### **Materials:**

**Note:** All materials such as lumber, nails, and others are dependent on the prepared plan or working drawing of the teacher based on the area where the activity is going to be performed.

**Conditions:**

1. Equipment, tools, and materials must be properly checked.
2. The assembling area must be free from any obstruction.
3. Installation procedures must be precisely followed.

**Procedure:**

1. Prepare all tools, materials, and equipment needed.
2. Lay out the required measurement on the lumber based on the prepared working drawing.
3. Cut the lumber into its proper size.
4. Using fasteners or nails, connect outriggers to upright supports.
5. Secure cleats to outrigger.
6. Nail properly all diagonal braces to the upright support to prevent lateral movement.
7. Nail the platforms to the outriggers.
8. Check the squareness, plumbness, and levelness of the scaffolds.
9. Perform housekeeping after the operation.
10. Notify the teacher for assessment.

**Precautions**

1. Always observe safety precautions while working or performing.
2. Appropriate PPE must be worn during work.

**Disassembling Wooden Scaffold****Materials, Tools, and Equipment**

1. Scaffolding
2. Wrecking bar
3. Claw hammer
4. Nail box

**Procedure:**

1. Remove the connection of platform from outrigger using wrecking bar. Use claw hammer to drive out the fastener, then pull out the nail from the platform.
2. Remove diagonal braces from the upright support.
3. Lay down the upright supports and remove the outrigger from the upright support.
4. Drive out all fasteners using claw hammer.
5. Pull out all fasteners using wrecking bars (Do not use claw hammer in pulling bigger fasteners.)
6. Arrange and restore all dismantled parts.

Your work will be evaluated using the following checklist.

Criteria	Highly observed	Observed	Not observe
Tool and materials are dependent on the plan or the working drawing.			
Does the conditions are performed?			
Does the procedures are strictly followed?			
Does safety precautions are observed			



## ***What I Have Learned***

Write your answer in your activity notebook.

1. Why do we need to stick on the plan in preparing the tools and material during performing the installation of wooden scaffolding?
2. Why do we need to follow strictly the procedure in assembling and dismantling wooden scaffolding?
3. Is it necessary to observe the conditions in assembling and dismantling wooden scaffolding? Why or why not?



## ***What I Can Do***

Search and cut picture of scaffolders who strictly observed and practice safety precautionary measure during assembling of scaffolding. Paste in a one whole sheet of a clean bond paper. Show your creativity in making your output.



## Assessment

### A. Multiple Choice:

**Direction:** Read the statements carefully. Write the correct answer on your answer sheet or activity notebook.

1. A raised is used to step on by worker while working.  
a. Base                      b. floor                      c. platform                      d. pavement
  
2. It is used to prevent lateral movements of the scaffold.  
a. Diagonal brace                      c. vertical brace  
b. Horizontal brace                      d. Z – brace
  
3. A part of scaffold that is fixed to support the outriggers.  
a. Post                      b. brace                      c. platform                      d. cleats
  
4. What is the best lumber suited to make as scaffolding?  
a. Soft lumber                      c. lumber with knots  
b. Strong lumber                      d. lumber with dry knot
  
5. A part of scaffold that holds the platforms.  
a. Outriggers                      b. uprights                      c. brace                      d. cleats

**B. Write **True** if the statement is correct and **False** if it is incorrect.**

1. Prepare all tools, materials, and equipment needed.
2. Cut lumber into different sizes.
3. Nail the platforms to the outriggers.
4. Do not check the squareness, plumbness and levelness of the scaffolds.
5. Secure cleats to outrigger.
6. Do not remove diagonal braces from the upright support.
7. Use claw hammer in pulling bigger fasteners.
8. Arrange and restore all dismantled parts.



## ***Answer Key***

1. True
2. False
3. True
4. False
5. True
6. False
7. False
8. True

### **B.**

1. Platforms
2. Diagonal braces
3. Cleats
4. Strong lumber
5. Outriggers

### **A.**

#### **Assessment**

1. Platforms
2. Diagonal braces
3. cleats
4. strong lumber
5. outriggers

#### **What I Know**

## ***References***

Antonio Blanco Jr., Roderic C. Verano, Technology and Livelihood Module 2, LM II Carpentry, First Edition 2018

Dr. Jesse D. Dagoon, Cyril Judah Mortola, A Textbook in Business Technology IV, Copyright 2005

SEDP Series, Technology and Home Economics III, Business Technology, Business Management 1, Experimental Edition, 1993

Dr. Luz V. Rojo, et.al., Technology and Home Economics I, Revised Edition September 2005

Rita M. de los Santos, et.al., Technology and Livelihood Education I, Copyright 2010

SEDP Series, Technology and Home Economics IV Industrial Technology Civil Technology II Experimental Edition, 1994

**For inquiries or feedback, please write or call:**

Department of Education – Schools Division of Negros Oriental  
Kagawasan, Avenue, Daro, Dumaguete City, Negros Oriental

Tel #: (035) 225 2376 / 541 1117

Email Address: [negros.oriental@deped.gov.ph](mailto:negros.oriental@deped.gov.ph)

Website: [lrmds.depednodis.net](http://lrmds.depednodis.net)

