



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



Kagawasan Ave., Daro, Dumaguete City, Negros Oriental

# TLE-IA-CARPENTRY

# Quarter 3 - Module 3 (Week 5 to 6) INSTALL METAL SCAFFOLDING **COMPONENTS**





GOVERNMENT PROPERTY E

TLE-IA-Carpentry 10 Alternative Delivery Mode

**Quarter 3 – Module 3: INSTALL METAL SCAFFOLDING COMPONENTS** 

First Edition, 2020

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# TLE-IA-CARPENTRY

# Quarter 3 – Module 3: INSTALL METAL SCAFFOLDING COMPONENTS



# **Introductory Message**

For the facilitator:

Welcome to the <u>TLE-IA-CARPENTRY</u> (<u>Grade 10</u>) Alternative Delivery Mode (ADM) Module on <u>INSTALL METAL SCAFFOLDING COMPONENTS</u>.

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 <u>TLE-IA-CARPENTRY</u> (<u>Grade 10</u>) Alternative Delivery Mode (ADM) Module on INSTALL METAL SCAFFOLDING COMPONENTS.

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:

6	What I Need to Know	This will give you an idea of the skills or competencies you are expected to learn in the module.
	What I Know	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.
(2) C	What's In	This is a brief drill or review to help you link the current lesson with the previous one.
	What's New	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.
2	What is It	This section provides a brief discussion of the lesson. This aims to help you discover and understand new concepts and skills.
A BC	What's More	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.
	What I Have Learned	This includes questions or blank sentence/paragraph to be filled in to process what you learned from the lesson.
010	What I Can Do	This section provides an activity which will help you transfer your new knowledge or skill into real life situations or concerns.
	Assessment	This is a task which aims to evaluate your level of mastery in achieving the learning competency.

© <sub>©</sub>	Additional Activities	In this portion, another activity will be given to you to enrich your knowledge or skill of the lesson learned.
Q <sub>1</sub>	Answer Key	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!



This module **covers Metal scaffoldings and their types.** That will help the students to learn about metal scaffoldings and how to assemble and disassemble this type of scaffolding.

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)



# What I Know

#### A. True or False

**Direction:** Write the word True if the statement is correct and write False if it is incorrect.

- 1. The right way to check the platform is to climb over the top of the frame ladder and not to swing the side frame.
- 2. To make the platform become level, position the braces with the same height as of the frames.
- 3. Improper assembly or use of scaffolding is not dangerous because it may not result in serious injury or death.
- 4. Using ladder or makeshift devices on top of scaffolds to increase the height is prohibited.
- 5. Move the mobile scaffold by pushing it on the top of the frame.

#### **B.** Multiple Choice

**Direction:** Choose the letter of the correct answer.

- 1. It is a type of scaffold frame used as sideways canopy to straddle objects. This scaffold frame comes with two-locked in stack pins.
  - a. 6.5' walk through scaffolding frame
  - b. Masonry walk through ladder frame

- c. Standard masonry end frame -5' high
- d. Double step masonry frame 4'.6" high
- 2. It is a frame constructed with a climbing ladder on one side.
  - a. 6.5' walk through scaffolding frame
  - b. Masonry walk through ladder frame
  - c. Standard masonry end frame-5' high
  - d. Double step masonry frame 4'.6" high
- 3. It is known as the diagonal brace of the scaffolds .
  - a. Platform
- b. caster
- c. frame
- d. cross braces
- 4. It is a horizontal plank/board found on top of the frame.
  - a. Platform
- b. caster
- c. frame
- d. cross braces
- 5. It is the skeletal structure of the scaffold.
  - a. Platform
- b. frame
- c. lock pin
- d. cross braces



# INSTALL METAL SCAFFOLDING COMPONENTS



# What's In

Write your answers in your notebook.

1. Enumerate the six parts of the portable wooden scaffolding.



# What's New

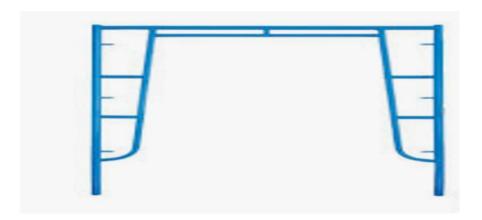
**Metal Scaffolds** are temporary structures outside of a building, that are made of metal poles with planks used by workers while constructing, repairing, or cleaning the building



#### **Types of Metal Scaffolds**

#### Walk through Scaffolding Frame

This 6.5 feet high, 5 feet wide, open type, walk through scaffolding end frame can be used as a sidewalk canopy or to straddle objects. This scaffold frame comes with two locked-in stack pins. This frame requires the CB70 cross brace, and has a durable power coat finish.

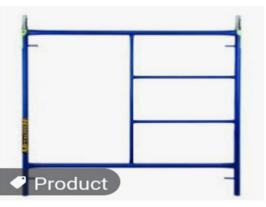


#### Masonry walk through ladder frame

Masonry walk through ladder frame is 6.5 feet high, 5 feet wide, and can be used as a sidewalk canopy or to straddle objects. This frame is constructed with climbing ladder on one side. This frame comes with two locked-in stacking pins.





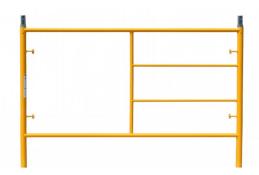


Two locked-instacking pins

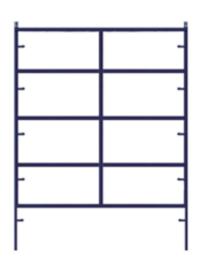
#### Standard masonry end frame-5 feet high

A standard 5 feet by 5 feet single ladder can also be a masonry scaffolding end frame. This scaffold frame comes with two locked-in stack pins. This frame requires the CB70 cross brace, and has a durable powder coat finish.





Double step masonry end frame 4'.6" high Double step masonry frame 4'.6" high





Other types and sizes of standard high masonry end frame

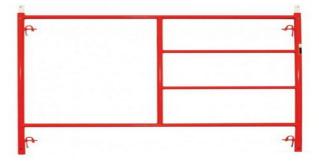
Standard masonry end frame- 4'.6"

(Note: carpentry symbol 'stand for feet, "stand for inches)

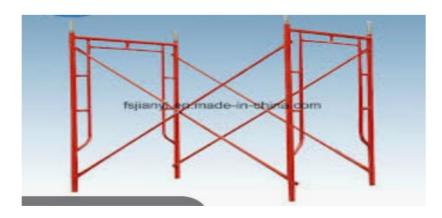
#### PARTS OF A METAL SCAFFOLD



1. Frame is the skeletal structure of a scaffold.



**2. Cross Braces** are the diagonal braces of the scaffold fixed to avoid lateral movement of the structure.



**3. Platform** is the horizonta63l plank or board found on the top of the frame.



**4. Castor** is an accessory used in fitting the parts of a scaffold.



**5. Lock pin** is used to secure the fittings of the scaffold.





# What's More

Write your answer in your notebook.

- 1. What do you think are the difference between wooden and metal scaffoldings?
- 2. Do you think that there are advantages of using metal scaffolding compare to a wooden scaffolding? If yes, give at least five advantages of a metal scaffolding.
- 3. If you think that there are disadvantages of using metal scaffolding, cite at least two examples or scenario on it.



# What I Have Learned

Write your answer in your activity notebook.

- 1. Enumerate the six part of the metal scaffolding and its function.
- 2. What are the different types of the metal scaffolding?



# What I Can Do

Write your answer in your activity notebook

1. Formulate your own step by step procedure on how to assemble the metal scaffolding.



# Assessment

**A. Matching type:** Match the statement in column A that corresponds to the picture in column B. Write the correct answer on your answer sheet.

COLUMN A	COLUMN B	
1. Double step masonry frame 4'6" high	A.	
2. Castor	В.	
3. Double step masonry end frame 4'6"	c.	
4. Standard high masonry end frame	D.	
5. Lock pin	E.	

## **B.** Multiple Choice

**Direction:** Choose the letter of the correct answer.

- 1. It is a type of scaffold frame used as sideways canopy to straddle objects. This scaffold frame comes with two-locked in stack pins.
  - e. 6.5' walk through scaffolding frame
  - f. Masonry walk through ladder frame
  - g. Standard masonry end frame -5' high
  - h. Double step masonry frame 4'6" high
- 2. It is a frame constructed with a climbing ladder on one side.
  - e. 6.5' walk through scaffolding frame
  - f. Masonry walk through ladder frame
  - g. Standard masonry end frame-5' high
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- 4. It is a horizontal plank/board found on top of the frame.b. Platformb. casterc. framed. cross braces
- 5. It is the skeletal structure of the scaffold.
  - b. Platform b. frame c. lock pin d. cross braces



A.f a.s a.s A.4 a.a	1. B 2. C 3. E 4. A 5. D
B. Multiple Choice	A. Matching Type
	Assessment
9. B	5. False
A .4	o: r alse 4. False
2. B 3. D	2. True 3. False
A.I	1. False
B. Multiple Choice	A. True or False
	What I Know

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