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SCHOOLS DIVISION OF NEGROS ORIENTAL  
REGION VII

Kagawasan Ave., Daro, Dumaguete City, Negros Oriental



# TLE-IA-CARPENTRY

Quarter 4 – Module 4 (Week 7&8)

## OBSERVE GOOD FORMWORKS REQUIREMENTS



GOVERNMENT PROPERTY  
NOT FOR SALE

**TLE-IA-Carpentry 10**  
**Alternative Delivery Mode**  
**Quarter 4 – Module 4: Observe Good Formworks Requirements**  
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# **TLE-IA-CARPENTRY**

**Quarter 4 – Module 4 (Week 7&8)**

## **OBSERVE GOOD FORMWORKS REQUIREMENTS**



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

After going through this module, you are expected to:

- Observe good formworks requirements.



## ***What I Know***

Direction. Answer the following. Write your answers in a sheet of paper.

1. The requirements of a good formworks.
2. The Economy in Formworks.

### **Lesson**

# **1**

## **GOOD FORMWORKS REQUIRMENTS**



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

A. Supply a word or group of words to make the sentence correct.  
Write your answers in a sheet of paper.

1. Allow the concrete to \_\_\_\_\_ before removing the forms.
2. Remove forms starting at the \_\_\_\_\_ of sloping slabs.
3. Remove the stakes from the ground that support the forms with a \_\_\_\_\_ to avoid damaging the stakes or the forms.
4. Remove forms on \_\_\_\_\_ of the slab to maintain the structural balance.

B. Directions: Supply what is missing. Write your answers in a sheet of paper.

Forms	Period/s
Walls, columns and vertical sides of beams	
Slabs soffits (props left under)	
Beam soffits (props left under)	
For slab spanning over 4. 5 m	
For member spanning up to 6 m	



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

Formwork is used to describe the process of building temporary molds into which fresh concrete is poured to construct designated structural concrete elements and achieve its shape.



## ***What Is It***

### **What are the requirements of good formwork?**

1. Adequately strong to withstand all types of dead and live loads.
2. It should be rigidly constructed and efficiently propped and braced both horizontally and vertically to retain its shape.
3. Joints in the formwork tight against leakage of cement grout.
4. Formwork construction should permit the removal of various parts in desired sequences without damage to the concrete.
5. The formwork material should be cheap, readily available, and reusable.
6. The formwork should be set accurately to the desired line, and levels should have a plane surface.
7. It should be as light as possible.
8. The material of the formwork should not warp or get distorted when exposed to the elements.
9. It should rest in a firm base.



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

### **ECONOMY IN FORMWORKS**

The following are to be kept in view to effect economy in the cost of formwork.

1. The plan of a building should imply a minimum number of variations in the size of rooms, floor area, etc. to permit reuse of the formwork repeatedly.
2. Design should be perfect to use slender sections only in the most economical way.
3. Minimum sawing and cutting of wooden pieces should be made to enable reuse the material many times. The quantity of surface finish depends on the quality of formwork.



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

Direction: Supply a word or group of words to complete the sentence correct. Write your answer in a sheet of paper.

1. Joints in the formwork tight against \_\_\_\_\_ of cement grout.
2. The formwork material should be \_\_\_\_\_, readily available, and \_\_\_\_\_.
3. The formwork should be set \_\_\_\_\_ to the desired line, and levels should have a plane surface.
4. It should be as \_\_\_\_\_ as possible.
5. The material of the formwork should \_\_\_\_\_ or get distorted when exposed to the elements.



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

After successfully performing the assigned task from what I have learned, I will apply the requirements of a good formworks.



## ***Assessment***

Direction: Supply a word or group of words to complete the sentence correct. Write your answer in a sheet of paper.

1. \_\_\_\_\_ to withstand all types of dead and live loads.
2. The formwork should be set \_\_\_\_\_ to the desired line, and levels should have a plane surface.
3. It should be as \_\_\_\_\_ as possible.
4. The formwork material should be \_\_\_\_\_, readily available, and reusable.
5. The plan of a building should imply a \_\_\_\_\_ of variations in the size of rooms, floor area, etc. to permit reuse of the formwork repeatedly.
6. \_\_\_\_\_ should be perfect to use slender sections only in the most economical way.
7. The quantity of surface finish depends on the \_\_\_\_\_.
8. It should rest in a \_\_\_\_\_ base.



## Answer Key

<b>What I Know</b>	Answer may vary
<b>What's In</b>	<b>A.</b> 1. dry 2. top 3. stake puller 4. alternating sides <b>B.</b> 1. 24 to 48 hours (1 to 2 days) 2. 3 days 3. 7 days 4. 14 days 5. 14 days
<b>What I Have Learned</b>	1. leakage 2. cheap, reusable 3. accurately 4. light 5. not warp
<b>Assessment</b>	1. Adequately strong 2. accurately 3. light 4. cheap <b>5.</b> minimum number 6. design 7. Quality of formwork 8. firm



## ***References:***

[https://thacampbell.typepad.com/class\\_handouts/Formwork.pdf](https://thacampbell.typepad.com/class_handouts/Formwork.pdf)

<https://www.scribd.com/document/310259093/CIVL-392-Chapter-6-Formwork>

*Projectmanagement23.com (Formwork Installation Procedures)*

*w.w.w.slideshare.net (Formwork Construction Instruction)*

*MethodstatementHq.com (Safety procedure for Erective and Dismantling Formwork)*

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