



DEPARTMENT OF EDUCATION
SCHOOLS DIVISION OF NEGROS ORIENTAL
REGION VII

Kagawasan Ave., Daro, Dumaguete City, Negros Oriental



TLE-IA-CARPENTRY

Quarter 2 – Module 2: PREPARE TOOLS, EQUIPMENT AND MATERIALS FOR FABRICATING FORMWORKS ACCORDING TO JOB



GOVERNMENT PROPERTY
NOT FOR SALE

TLE–IA–CARPENTRY–Grades 9/10

Alternative Delivery Mode

Quarter 2 – Module 2: Prepare Tools, Equipment and Materials for Fabricating Formworks According to Job Requirements

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: Marvin B. Ybañez

Editor: Gemuel C. Ibero

Reviewers: Dennis S. Calinao, Gemuel C. Ibero, Howel Jay M. Caluyo, Alden B. Deguit

Layout Artist: Alden B. Deguit

Management Team: 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

9/10

TLE-IA-CARPENTRY

**Quarter 2 – Module 2:
PREPARE TOOLS, EQUIPMENT
AND MATERIALS FOR
FABRICATING FORMWORKS
ACCORDING TO JOB
REQUIREMENTS**





What I Need to Know

The module has one lesson:

Lesson 1 - Select Appropriate PPE

At the end of the module, you should be able to:

1. Identify Personal Protective Equipment used in carpentry job.
2. Select appropriate Personal Protective Equipment (PPE)
3. Practice safety process and PPE in carpentry.



What I Know

Directions: Read each item carefully. Match column A with column B. Write the letter of the correct answer on your activity notebook.

Column A

2. Earmuffs
3. Hard hats
4. Safety glasses
5. Safety-toed footwear

Column B

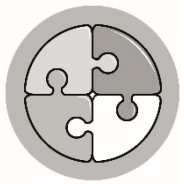
- B. Foot Protection
- C. Eye and Face Protection
- D. Hand Protection
- E. Head Protection

Lesson

1

Select Appropriate PPE

In this module, you will learn to preparing tools, equipment, and materials for fabricating formworks according to job requirements. With this, it is necessary that you learn the different PPE needed in Carpentry. In addition, you are introduced to construction safety process.



What's In

This portion of the module is about some topics for you to review. As a TLE student, you are recommended to review your topics. Reviewing will help you a lot to gain better understanding on the concepts presented throughout your journey in learning Carpentry.



Notes to the Teacher

Teacher is recommended to design an activity to recognize prior learning of the students or you may have some motivational activities to incorporate at the start of this module.



What's New

Directions:

Identify the Types of Personal Protective Equipment (PPE). Copy and answer this in your activity notebook.

1. It protects against crushed toes due to heavy or falling equipment or materials. Hardhats must be worn where there is danger of falling objects.
2. Protect against head injuries related to swinging or falling objects, striking the head against something, or accidental head contact with an electrical hazard.
3. It's generally advisable to wear it at all times at a job site, but it's especially crucial along active roadways, in low lighting, and for dusk and nighttime work.
4. These should fit closely and never be baggy, while allowing for maximum mobility.
5. It should be worn whenever there is a danger of flying debris or harmful dust getting in the eyes.



What is It

Basic Personal Protective Equipment (PPE) for Construction Workers

There are so many potential hazards at a construction site, and personal protective equipment (PPE) is one of the workers' primary lines of defense. Each item is designed to minimize exposure to certain risks of injury or illness, as well as the damage caused by those hazards in the event of a mishap.

Every individual construction site and job duty should be evaluated for specific and unique dangers, and appropriate personal protective equipment required. Some common classes of hazards at construction sites with risks that can be mitigated with appropriated PPE include electrical, fall, chemical, harmful dust, struck-by, penetration, caught-in and caught-between, rollover, and heat.

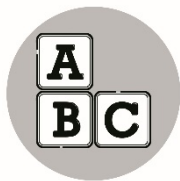
Below is a quick look at some basic personal protective equipment.

PPE for Construction Crews

- **Head protection** – These are essential at most construction sites. They protect against head injuries related to swinging or falling objects, striking the head against something, or accidental head contact with an electrical hazard. Hard hats should be inspected for dents, cracks, and other damage prior to each use; damaged ones should never be worn.
- **Foot protection** – This often refers to steel-toe boots. Work boots should be worn on site that protect against crushed toes due to heavy or falling equipment or materials. They also need puncture-resistant, nonslip soles, as work surfaces can have sharp objects on them, and slips are a major hazard at the job site.
- **Hand protection** – Different types of work gloves are best suited to particular tasks and risks at construction sites. For example, there are heavy-duty leather and canvas gloves for protecting against cuts and burns, welding gloves for welders, heavy-duty rubber gloves for working with concrete, insulated gloves with sleeves for working with electric hazards, and chemical-resistant gloves for working with chemical agents.
- **Work pants and work shirts** – Workers should protect their full legs, full arms, and torso against cuts, scrapes, burns, and other superficial injuries with thick, flexible work pants and shirts. These should fit closely and never be baggy, while allowing for maximum mobility.
- **Face and/or eye protection** – Safety glasses or face shields should be worn whenever there is a danger of flying debris or harmful dust getting in the eyes. Cutting, grinding, welding, chipping, and nailing are some activities that necessitate protective eyewear. Along with basic safety glasses, some other protective wear for the face include welding shields, chemical splash goggles, and dust goggles.
- **Hearing protection** – Chainsaws, jackhammers, and other tools and heavy equipment create noise levels that can damage workers' hearing—particularly with prolonged exposure. Pre-molded or formable ear plugs are usually the best bet, but acoustic foam-lined ear muffs that tightly seal against the head can work well too.
- **Reflective/high-visibility garments** – Brightly colored and/or reflective jackets, vests, or other upper-body clothing is important for worker visibility. It's generally advisable to wear it at all times at a job site, but it's especially crucial along active roadways, in low lighting, and for dusk and nighttime work. In certain circumstances, it's mandated by OSHA.

Other Personal Protective Equipment

This certainly doesn't cover all types of PPE. Personal fall protection, for example, is an entire class of personal protective equipment. There are numerous varieties for all types of elevated construction work. Respiratory protection is another important class at sites where workers are exposed to airborne hazards. Again, every job site and every task must be individually assessed for potential dangers, and workers must be made to wear appropriate personal protective equipment for the situation.



What's More

Directions: Identify the PPE being defined.

1. Brightly colored and/or reflective jackets, vests, or other upper-body clothing is important for worker visibility.
2. It must be worn when cutting, grinding, welding, chipping, and nailing.
3. Protect against head injuries related to swinging or falling objects, striking the head against something, or accidental head contact with an electrical hazard.
4. It protects against hand cuts, burns and electric hazards.
5. Workers should protect their full legs, full arms, and torso against cuts, scrapes, burns, and other superficial injuries with thick, flexible work pants and shirts.
6. It should be worn on site that protect against crushed toes due to heavy or falling equipment or materials.
7. It must be worn when using chainsaws, jackhammers, and other tools and heavy equipment create noise levels that can damage workers' hearing



What I Have Learned

There are so many potential hazards at a construction site, and personal protective equipment (PPE) is one of the workers' primary lines of defense. Each item is designed to minimize exposure to certain risks of injury or illness, as well as the damage caused by those hazards in the event of a mishap.

Every individual construction site and job duty should be evaluated for specific and unique dangers, and appropriate personal protective equipment required. Some common classes of hazards at construction sites with risks that can be mitigated with appropriated PPE include electrical, fall, chemical, harmful dust, struck-by, penetration, caught-in and caught-between, rollover, and heat.



What I Can Do

Direction: Classify the following according to the type of PPE. Write your answers in your notebook.



1.



2.



3.



4.



5.



6.



7.



Assessment

Instruction: Choose the correct answer from the given options. Write your answers in your notebook.

1. What must be worn to lessen the noise in the workplace?
 - a. Hearing protection
 - b. foot protection
 - c. head protection
 - d. hearing protection
2. It should be worn whenever there is a danger of flying debris or harmful dust getting in the eyes. Cutting, grinding, welding, chipping, and nailing are some activities that necessitate protective eyewear.
 - a. Face and/or eye protection
 - b. Work pants and work shirts
 - c. Hand protection
 - d. Head Protection
3. Brightly colored and/or reflective jackets, vests, or other upper-body clothing is important for worker visibility.
 - a. Head Protection
 - b. Foot protection
 - c. Hearing protection
 - d. Reflective/high-visibility garments
4. These should fit closely and never be baggy, while allowing for maximum mobility.
 - a. Foot protection
 - b. Hearing protection
 - c. Work pants and work shirts
 - d. Reflective/high-visibility garments
5. It is used to protect against hand cuts and burns.
 - a. Hearing protection
 - b. foot protection
 - c. head protection
 - d. hand protection
6. It should be worn on site that protect against crushed toes due to heavy or falling equipment or materials.
 - a. Hearing protection
 - b. foot protection
 - c. head protection
 - d. hand protection
7. Used to protect against head injuries related to swinging or falling objects, striking the head against something, or accidental head contact with an electrical hazard.
 - a. Face and/or eye protection
 - b. Work pants and work shirts
 - c. Hand protection
 - d. Head Protection
8. It's generally advisable to wear it at all times at a job site, but it's especially crucial along active roadways, in low lighting, and for dusk and nighttime work.
 - a. Foot protection
 - b. Hearing protection
 - c. Work pants and work shirts
 - d. Reflective/high-visibility garments
9. Personal Protective Equipment that protects against heavy object or tool that could be accidentally dropped on the feet
 - b. Hand protection
 - d. respirators
10. Workers should protect their full legs, full arms, and torso against cuts, scrapes, burns, and other superficial injuries with thick, flexible work pants and shirts.
 - a. Foot protection
 - b. Hearing protection
 - c. Work pants and work shirts
 - d. Reflective/high-visibility garments



Additional Activities

Direction: Match column A with column B. Write the letter of the correct answer to your activity notebook.

Column A

1. Foot protection
2. Hand protection
3. Work pants and work shirts
4. Head Protection
5. Face and/or eye protection
6. Reflective/high-visibility garments
7. Hearing protection

Column B

- a. Hard hats
- b. should fit closely and never be baggy
- c. Safety glasses
- d. ear muffs
- e. gloves
- f. steel-toe boots
- j. vests



Answer Key

What I Know	1. D 2. A 3. E 4. C 5. B
What's New	1. Foot protection 2. Head protection 3. Reflective/high-visibility garments 4. Work pants and work shirts 5. Face and/or eye protection
What's More	1. Reflective/high-visibility garments 2. Face and/or eye protection 3. Head Protection 4. Hand protection 5. Work pants and work shirts 6. Foot protection 7. Hearing protection
What I Can Do	1. Hearing protection 2. Foot protection 3. Reflective/high-visibility garments 4. Work pants and work shirts 5. Face and/or eye protection 6. Head Protection 7. Hand protection
Assessment	1. A 2. A 3. D 4. C 5. D 6. B 7. D 8. D 9. C 10. C
Additional Activities	1. F 2. E 3. B 4. A 5. C 6. J 7. D

References

References for Content:

- <https://www.trekkergroup.com/basic-personal-protective-equipment-ppe-construction-workers/>

References for Pictures:

- <http://neeshsolutions.net/product/universal-ear-muffs/>
- <https://www.cabproducts.com/reflective-safety-apparel/>
- <https://generalfireandsafety.biz/foot-protection/>
- <https://imall.com/product/Work-Clothing-Sets-Jacket-Pants-Men-Women-Long-sleeve-Working-clothes-Factory-Workshop-Workers-uniforms-Auto-repair-Plus-Size/Security-Protection-Workplace-Safety-Supplies/aliexpress.com/32847280986/144-10970027/en>
- https://www.alibaba.com/product-detail/Construction-Work-Head-Protection-Safety-Helmet_60602143526.html

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

Website: lrmds.depednodis.net

