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# Facilitator Guide



Sector  
**Construction Skill Development  
Council of India**

Sub-Sector  
**Real Estate and Infrastructure Construction**

Occupation  
**Construction Painting**

Reference ID: **CON/Q0502, Version 3.0**  
**NSQF Level: 3**

## Assistant Construction Painter & Decorator





**Shri Narendra Modi**  
Prime Minister of India

“ Skilling is building a better India.  
If we have to move India towards  
development then Skill Development  
should be our mission. ”



## Acknowledgement

We are thankful to all organizations and individuals who have helped us in the preparation of this Facilitator Guide. We also wish to extend our gratitude to all those who reviewed the content and provided valuable inputs for improving the quality, coherence and content presentation of chapters. This Facilitator Guide will lead to the successful rollout of the skill development initiatives, helping greatly our stakeholders particularly trainees, trainers and assessors etc. We are thankful to our Subject Matter Expert for the content and for helping us in the preparation of this Facilitator Guide.

It is expected that this publication would meet the complete requirements of QP/NOS based training delivery. We welcome suggestions from users, industry experts and other stakeholders for any improvement in future.

## About the Book

The objective of the guide is to provide an approach map for interacting with the trainees undergoing training in this job role. The course aims to provide both theoretical and practical knowledge to the trainees and also to guide them about Assistant Construction and Painting. The guide is neither a substitute nor a complete road map, but an aid to help to pass on the knowledge on all the aspects to the trainees in a systematic manner. It is expected that the trainer is fully conversant with all the contents of the guide. The guide is just to indicate how to proceed in covering a topic and includes some additional information that may be necessary for the trainer to develop better comprehension of the following aspects:

- **Knowledge and Understanding:** Satisfactory operational learning and comprehension to play out the required chore.
- **Performance Criteria:** Pick up the required aptitudes through hands-on preparation and play out the required operations inside the predetermined measures.
- **Professional Skills:** Capacity to settle on operational choices relating to the zone of work.

The job will also include judging comprehension and also help them learn more through hands-on training. But it has to be ensured that these are following the knowledge imparted and time spent on each unit. It is expected that irrespective of the region, knowledge of all aspects will be imparted to trainees.

## Symbols Used



Ask



Activity



Do



Demonstrate



Elaborate



Exercise



Facilitation Notes



Field Visit



Learning Outcomes



Notes



Objectives



Tips



Resources



Summarize




Say



Team Activity

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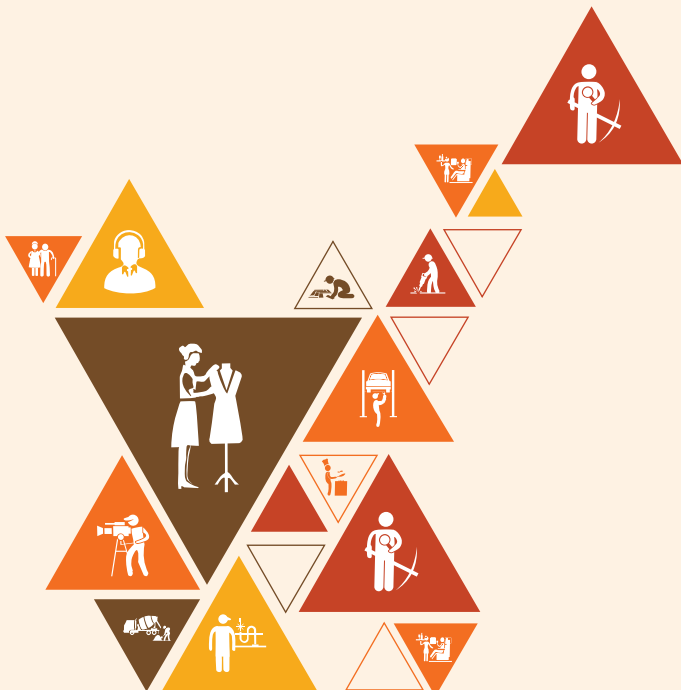
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# 1. Introduction

Unit 1.1 - Introduction to Construction

Unit 1.2 - Role and Responsibilities of an Assistant  
Construction Painter & Decorator



**Bridge Module**

## Key Learning Outcomes

**By the end of this module, participants will be able to:**

1. Explain the role and responsibilities of the Assistant construction painter and decorator.
2. Identify the career progression options for Assistant construction painter and decorator.

## Unit 1.1: Introduction to Construction Industry

### Unit Objectives

By the end of this unit, participants will be able to:

1. Overview of the construction industry.

### Resources to be used

- Available objects such as training kit - trainer guide, presentations, whiteboard, marker, projector, laptop, video films, etc.
- PowerPoint slides, pictures/posters and videos depicting various information about the construction industry, types of construction, basic categories of construction projects, and market segments of the construction industry.

### Say

- In this session, we shall learn key facts about the construction industry, types of construction, basic categories of construction projects, and market segments of the construction industry.
- Let's begin with an ice-breaking session, introduce yourself and ask participants to introduce themselves.

### Team Activity

- **Purpose:** This activity aims to familiarise the participants in the group with one another.
- **Tentative Duration:** 15 Mins
- **Procedure:**
  - ◆ Ask the participants to pronounce their name with an adjective beginning with the initial letter of their name.
  - ◆ Request that they additionally provide a brief introduction of themselves.
- **Expected Outcome:** The outcome of this activity is that the participants will become familiar with each other.

### Say

I hope everyone enjoyed our first activity and now let's move on to the topics covered in this session.

**Ask** 

- What do you understand about the construction industry?
- Do you know how many types of construction are there?

**Elaborate** 

With the help of audio-visual aids and the participant handbook, elaborate:

- Construction Industry
- Construction Industry in India
- Types of Construction
- Construction Project Categories
- Market Segments of the Construction Industry

**Demonstrate** 

Show a PowerPoint presentation to the class on Construction Industry in India - <https://www.slideserve.com/frieda/construction-sector-in-india-powerpoint-ppt-presentation> and ask participants to note down the important points.

**Say** 

Let us now perform an activity based on various market segments of the construction industry.

**Team Activity** 

- **Purpose:** The objective of this activity is to introduce participants to the different market segments within the construction industry.
- **Resources Required:** Presentation materials (slides or handouts) explaining market segments in the construction industry, internet access or library resources for research, whiteboard or flip chart with markers, printed construction industry reports or data (optional but helpful), worksheets for students to complete during the activity.
- **Tentative Duration:** 60-90 minutes
- **Methods/Procedure:**

**Step 1:** Introduction- Begin the activity by discussing the importance of understanding market segments in the construction industry. Explain that market segmentation helps

professionals identify specialized opportunities and areas of expertise within the broader field of construction.

**Step 2:** Presentation- Deliver a presentation on the different market segments within the construction industry. Include information on residential construction, commercial construction, industrial construction, infrastructure development, and specializations like green building, renovation, and restoration. Use visual aids to make the information more engaging and accessible.

**Step 3:** Group Research- Divide the students into small groups and assign each group a specific market segment to focus on. Provide the groups with access to the internet or library resources to conduct research on their assigned market segment. They should explore the scope, current trends, major players, challenges, and potential career opportunities within their segment.

**Step 4:** Group Presentation- Each group presents their findings to the rest of the class. Encourage them to use visuals, statistics, and examples to support their presentation. Allow for a short Q&A session after each presentation to clarify doubts and exchange insights.

**Step 5:** Reflection and Discussion- Lead a class discussion to debrief the activity. Encourage students to share their thoughts on which market segments they find most appealing and why. Discuss the skills and qualifications required for different market segments and how students can prepare to excel in their chosen area.

- **Expected Outcome:** By the end of this classroom activity, students are expected to:
  1. Understand the concept of market segmentation in the construction industry.
  2. Identify the various market segments within the construction field, including residential, commercial, industrial, infrastructure, and specialized sectors.
  3. Analyze the characteristics, opportunities, and challenges associated with each market segment.
  4. Gain insights into potential career paths and specialization options within the construction industry.
  5. Reflect on their interests and skills to make informed decisions about their vocational course and future career goals in construction.

## Say

Did you think the activity improved your understanding? I'm hoping now you have a better idea of the various market segment of the construction industry.

## Summarize

- Note down the important points related to the construction industry, types of construction, and various market segments.
- Revise these points with the participants.

## Notes for Facilitation

- Arrange the relevant handouts and leaflets for a better understanding of the topics
- Arrange audio-visual aids for a better understanding of the topics.
- Ask the participants if they have any questions.
- Encourage every participant to answer those questions and encourage peer learning in the class.



## Unit 1.2: Role and Responsibilities of an Assistant Construction Painter & Decorator

### Unit Objectives

**By the end of this unit, participants will be able to:**

1. Define personal attributes required in the construction painting occupation.
2. Recall the basic terms used in construction painting works.
3. Describe the role and responsibilities of an Assistant construction painter and decorator.
4. Explain the career progression options of an Assistant construction painter and decorator.

### Resources to be used

- Available objects such as training kit - trainer guide, presentations, whiteboard, marker, projector, laptop, video films, etc.
- PowerPoint slides, pictures/posters and videos depicting various information about the role and responsibilities, personal attributes, and career path of an assistant construction painter and decorator.

### Say

- In this session, we shall learn key facts about the role and responsibilities, personal attributes, and career path of an assistant construction painter and decorator.

### Ask

- What do you know about the job role of an assistant construction painter and decorator?
- Do you know the career opportunities available for an assistant construction painter and decorator?

### Elaborate

With the help of audio-visual aids and the participant handbook, elaborate:

- Introduction to Assistant Construction Painter & Decorator
- Role and Responsibilities of an Assistant Construction Painter & Decorator
- Personal Attributes required by an Assistant Construction Painter & Decorator
- Career Path of an Assistant Construction Painter & Decorator



## Demonstrate

Print the handouts or show them on the projector the following web page to the class on guide to painter and decorator responsibilities and roles - <https://au.indeed.com/career-advice/finding-a-job/painter-and-decorator-responsibilities> and ask participants to note down the important points.

## Say

Let us now perform an activity based on various career opportunities available for an assistant construction painter and decorator.

## Activity

- **Purpose:** Familiarize participants with diverse employment opportunities for an assistant construction painter and decorator, highlighting roles, responsibilities, and potential career paths.
- **Resources Required:** PowerPoint Presentation, Handouts or printouts of job descriptions.
- **Tentative Duration:** 60 Mins
- **Procedure:**
  - ◆ Explain the importance of an assistant construction painter and decorator in the construction industry.
  - ◆ Emphasize the objective of exploring employment opportunities in the industry.
  - ◆ Encourage participants to share their initial thoughts on the roles and responsibilities of an assistant construction painter and decorator.
  - ◆ Provide handouts or printouts of various employment opportunities in the construction industry as per different NSQF Levels.
  - ◆ Discuss each opportunity, highlighting roles, responsibilities, and required skills.
  - ◆ Divide participants into small groups.
  - ◆ Assign each group a specific employment opportunity to discuss key aspects, qualifications, skills, and career progression.
  - ◆ Now ask each group to provide a short researched explanation of the opportunity assigned.
  - ◆ Summarize key points, emphasizing the range of career paths and the importance of an Assistant construction painter and decorator.
- **Expected outcome:** Participants gain awareness of the wide range of employment opportunities in the construction industry, understand the specific roles and responsibilities of an assistant construction painter and decorator, and will be inspired to explore potential career paths within the field.

## Say

There are various career opportunities available for an assistant construction painter and decorator, I'm hoping now you have a better idea of them.

## Summarize

- Note down the important points related to the role and responsibilities, personal attributes, and career path of an assistant construction painter and decorator.
- Revise these points with the participants.

## Notes for Facilitation

- Arrange the relevant handouts and leaflets for a better understanding of the topic:
- Arrange audio-visual aids to make them understand
- Ask the participants if they have any questions.
- Encourage every participant to answer those questions and encourage peer learning in the class.

## Exercise

### Key Solutions to PHB Exercise

1. The career path of an Assistant Construction Painter & Decorator is as follows:
  - NSQF Level 3- Assistant Construction Painter & Decorator
  - NSQF Level 3.5- Construction Painter & Decorator
  - NSQF Level 4- Chargehand Painting & Decorating
  - NSQF Level 4.5- Foreman Painting & Decorating
  - NSQF Level 5.5- Supervisor Finishes
2. The roles and responsibilities of an Assistant Construction Painter & Decorator are:
  - Using brushes, rollers, or spray equipment to put on paint or other materials like stains, lacquer, or varnish
  - Getting surfaces ready and cleaning them
  - Taking down old paint and wallpaper
  - Cracks and holes in walls need to be fixed.
  - Mixing and Thinning Paint
  - Putting wallpaper or fabric on walls by measuring, cutting, and putting it up.
  - Putting up scaffolding and building it
  - Guiding customers in choosing colours and wall coverings
  - Providing cost estimates
  - Reading specifications to find out what materials are needed
  - Assistant construction painters and decorators are trained to work safely and take precautions to avoid injury.
3. This job requires the individual to work on-site as an Assistant Painter & Decorator, where they should have good colour perception and writing skills. Additionally, they should be physically fit to withstand working in a difficult and demanding construction environment while also responding to the needs and requirements of the tasks. Work as a Painter and Decorator might take place either indoors or outdoors, independently or in conjunction with a group of other building specialists. The task can be strenuous on the body because it requires one to stand for extended periods, frequently with the arms lifted over their head.
4. There are three types of constructions:
  - Building Construction
  - Industrial Construction
  - Infrastructure Construction







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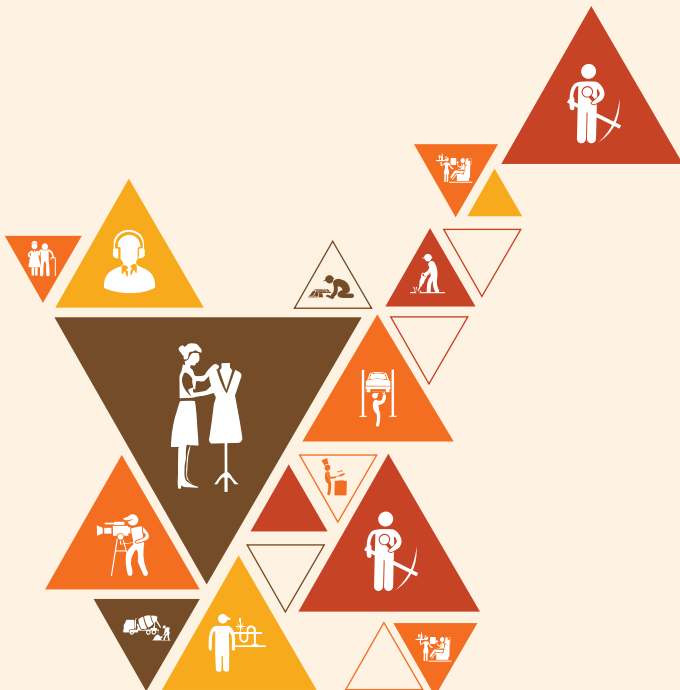
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## 2. Preparation of Basic Surface for Painting Works

Unit 1.1 - Introduction to Construction

Unit 1.2 - Role and Responsibilities of an Assistant Construction Painter & Decorator



CON/N0502

## Key Learning Outcomes

**By the end of this module, participants will be able to:**

1. Select materials, tools and equipment for preparing basic masonry, steel and wooden surfaces for painting.
2. Demonstrate preparation of masonry, metal and wood surfaces for painting works.

## Unit 2.1: Introduction to Surface Preparation

### Unit Objectives

**By the end of this unit, participants will be able to:**

1. List different types of materials such as putties, stoppers, solvents, filler, mordant solutions & stabilizing solutions required for surface preparation.
2. List the various tools required for surface preparation such as scraper, putty knife, chisel knife, knotting brush, nail punch, hammer, dusting brush, dust masks, wire brushes, goggles, filling knife, filling board, gloves & buckets.
3. List the different type of abrasives such as glass, sand paper, sanders and their use.
4. List the different types of cleaning agents used for surface preparation.
5. Describe the different type of fillers used in painting works including their use.
6. Select different types of materials, abrasives, cleaning agents required for surface preparation.
7. Demonstrate filling and levelling of voids and undulations using appropriate fillers as per specifications/instructions.

### Resources to be used

- Available objects such as whiteboard, duster, marker, notepad, pens, participant handbooks, computers, projectors, flipcharts etc.
- PowerPoint slides, pictures/posters depicting different types of materials, abrasives, cleaning agents required for surface preparation.

### Say

In this session, we shall learn about the different types of materials, abrasives, cleaning agents required for surface preparation, type of fillers used in painting works, filling and levelling of voids and undulations using appropriate fillers, etc.

### Ask

- Does anyone know different types of materials, abrasives, cleaning agents required for surface preparation?



## Elaborate

In this unit, we will discuss the following topics:

- Surface Preparation
- Purpose of Surface Preparation
- Importance of Surface Preparation before Coating
- Types of Materials required for Surface Preparation
- Types of fillers
- Types of Cleaning Agents required for Surface Preparation
- Types of Abrasives required for Surface Preparation
- Tools required for Surface Preparation

## Demonstrate

Use a projector and show the following YouTube video- <https://www.YouTube.com/watch?v=iV2mni9KDnY> to participants on how to mix your own filler when patching or filling holes or dents in walls.

## Activity

- **Purpose:** The aim of the activity is to familiarize participants with surface preparation before wall coating. Learn cleaning, repairing, and priming importance for a durable finish.
- **Resources Required:** Classroom with walls (or boards simulating walls), cleaning supplies, patching materials, drop cloths, primer, brushes/rollers (optional).
- **Tentative Duration:** 2 Hours
- Procedure:
  - ◆ Explain the importance of surface preparation before coating walls. Discuss how proper preparation can improve the final finish, enhance paint adhesion, and extend the coating's longevity.
  - ◆ Divide the students into small groups and provide them with cleaning supplies.
  - ◆ Instruct each group to inspect their designated wall surfaces and identify any dirt, dust, grease, or other contaminants.
  - ◆ Students should thoroughly clean the surfaces using soap, water, and scrub brushes, ensuring the walls are free from debris and grease.
  - ◆ Provide each group with patching materials (spackling paste and putty knife).
  - ◆ Instruct students to identify and repair any imperfections on the walls, such as holes, cracks,

or dents.

- ◆ They should apply spackling paste to the imperfections, smooth it out with the putty knife, and let it dry.
- ◆ After drying, demonstrate sanding techniques to create a smooth and even surface.
- Expected outcome: The participants will understand the significance of surface preparation before coating walls.

## Notes for facilitation

- Arrange the relevant handouts and leaflets for a better understanding of the topics
- Arrange audio-visual aids for a better understanding of the topics.
- Ask the participants if they have any questions.
- Encourage every participant to answer those questions and encourage peer learning in the class.



## Unit 1.1: Introduction to Construction Industry

### Unit Objectives

**By the end of this unit, participants will be able to:**

1. Explain the methodology for preparation of different surfaces like masonry, RCC, wood and metal by wet and dry abrading, degreasing, knotting, priming, filling, rust removal of paint system and removal of wall coverings and other similar processes.
2. Demonstrate visual checks performed to assess the surface for type of preparation method.
3. Demonstrate selection of appropriate preparation process as per the type of surface such as plastered masonry and RCC surface, metal surface and wood surface.
4. Demonstrate various surface preparation methods such as washing, stripping/ scarping, abrading, keying, and brushing and other similar methods as per specifications/instructions.
5. Demonstrate preparation of metal surface by degreasing, solvent wiping and abrading using appropriate tools as per specifications/instructions.
6. Demonstrate preparation of wood surface by scraping, solvent wiping and abrading using appropriate tools as per specifications/instructions.

### Resources to be used

- Available objects such as whiteboard, duster, marker, notepad, pens, participant handbooks, computers, projectors, flipcharts etc.
- PowerPoint slides, pictures/posters depicting different types of materials, abrasives, cleaning agents required for surface preparation.

### Say

In this session, we shall learn about the different types of materials, abrasives, cleaning agents required for surface preparation, type of fillers used in painting works, filling and levelling of voids and undulations using appropriate fillers, etc.

### Ask

- Does anyone know different types of materials, abrasives, cleaning agents required for surface preparation?

## Elaborate

In this unit, we will discuss the following topics:

- Surface Preparation
- Purpose of Surface Preparation
- Importance of Surface Preparation before Coating
- Types of Materials required for Surface Preparation
- Types of fillers
- Types of Cleaning Agents required for Surface Preparation
- Types of Abrasives required for Surface Preparation
- Tools required for Surface Preparation

## Demonstrate

Use a projector and show the following YouTube video- <https://www.YouTube.com/watch?v=iV2mni9KDnY> to participants on how to mix your own filler when patching or filling holes or dents in walls.

## Activity

- **Purpose:** The objective of the activity is to familiarize participants with surface preparation before wall coating. Learn cleaning, repairing, and priming importance for a durable finish.
- **Resources Required:** Classroom with walls (or boards simulating walls), cleaning supplies, patching materials, drop cloths, primer, brushes/rollers (optional).
- **Tentative Duration:** 2 Hours
- **Procedure:**
  - ◆ Explain the importance of surface preparation before coating walls. Discuss how proper preparation can improve the final finish, enhance paint adhesion, and extend the coating's longevity.
  - ◆ Divide the students into small groups and provide them with cleaning supplies.
  - ◆ Instruct each group to inspect their designated wall surfaces and identify any dirt, dust, grease, or other contaminants.
  - ◆ Students should thoroughly clean the surfaces using soap, water, and scrub brushes, ensuring the walls are free from debris and grease.
  - ◆ Provide each group with patching materials (spackling paste and putty knife).
- Instruct students to identify and repair any imperfections on the walls, such as holes, cracks,

or dents.

- ◆ They should apply spackling paste to the imperfections, smooth it out with the putty knife, and let it dry.
- ◆ After drying, demonstrate sanding techniques to create a smooth and even surface.
- **Expected outcome:** The participants will understand the significance of surface preparation before coating walls.

## Notes for facilitation

- Arrange the relevant handouts and leaflets for a better understanding of the topics
- Arrange audio-visual aids for a better understanding of the topics.
- Ask the participants if they have any questions.
- Encourage every participant to answer those questions and encourage peer learning in the class.

## Exercise

### Key Solutions to PHB Exercise

1. The different types of materials required for surface preparation are wall putty, waterproofing chemical or stopper, solvent, wall fillers, mordant solution, stabilising solution, etc.
2. The various tools required for surface preparation are Scraper, Putty Knife, Chisel Knife, Knotting Brush, Nail Punch, Hammer, Dusting Brush, Dust Masks, Wire Brushes, Goggles, Filling Knife, Filling Board, Gloves, Buckets, etc.
3. Surface preparation is a critical step in masonry work to ensure a strong and durable construction. It involves cleaning the masonry surface of any debris, dust, or loose material before application. Additionally, repairing cracks and irregularities and removing any existing paint or coatings is essential to provide a clean and sound substrate for the new masonry work. Proper surface preparation enhances adhesion and minimizes the risk of future issues, ensuring a successful and long-lasting masonry project.
4. The various surface preparation methods are:
  - Abrasive Blast Cleaning
  - Wet Abrasive Blast Cleaning
  - Hand and Power Tool Cleaning
  - Flame Cleaning
  - Acid Pickling
  - Ultra-High Pressure Water Jetting
  - Solvent Cleaning
5. Visual Checks keep vital importance while preparing different surfaces. The following need to be checked while the inspection:
  - Check the method for preparing different surfaces like masonry, RCC, wood and metal.
  - Check for welds and cut edges. Welds and cut edges can have defects that provide varying surface profiles, uneven surfaces, or sharp projections that cause coating difficulties. Weld quality inspections rarely include coating needs, therefore welds can have pinholes, projections, severe undercutting, spatter, or residual slag that degrade coating quality. Welds, cut edges, and other unit areas can be ground or filed to promote coating adhesion.
  - Surface cleanliness is essential at all phases of coating, particularly prior to the application of subsequent coatings on painted surfaces. Before painting, surfaces must be thoroughly cleaned, as they might acquire dust, concrete grout leaks, blast cleaning agents, and welding and bolting residues.

- In certain instances, residual blast media embedded in the substrate material can be detrimental to the performance of the coating. To minimise the effects of embedded grit on coating performance in service, it is crucial to select the optimum blast media / substrate combination and blasting settings.









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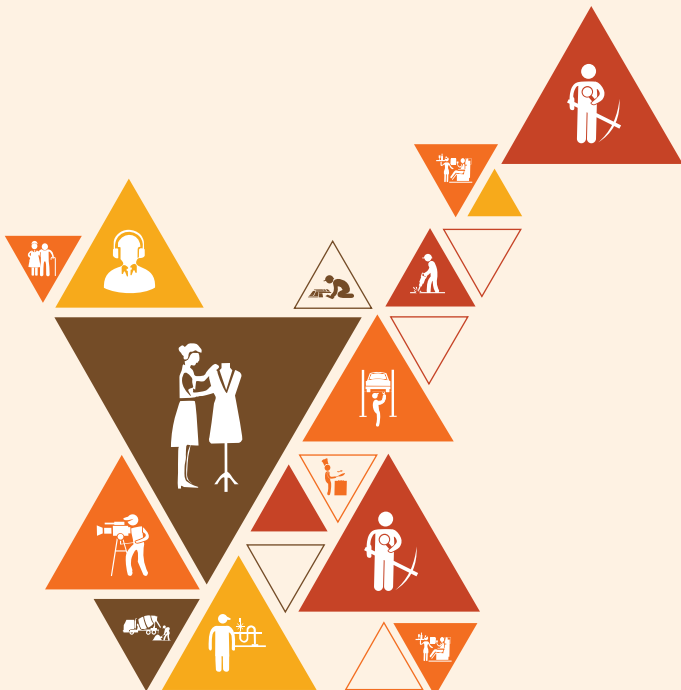
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# 3. Erect and Dismantle Scaffold

Unit 3.1 - Erect and Dismantle Scaffold



CON/N0101

## Key Learning Outcomes

**By the end of this module, participants will be able to:**

1. Identify different components of scaffold.
2. List tools, materials components required for erection of 3.6 meter scaffold.
3. Erect and dismantle scaffold up to 3.6 metres height.
4. Stack all the components of the scaffold after dismantling.

## Unit 3.1: Erect and Dismantle Scaffold

### Unit Objectives

**By the end of this unit, participants will be able to:**

1. Explain scaffolding and its purpose.
2. List the common materials and tools used for erection of scaffolding (pipe, cup lock (vertical and ledgers), H- frames, bamboo and balli.
3. List the functions of different hand tools like hammer, spanner, pulleys, hooks, ropes, etc., used for erection/ dismantling of scaffolds.
4. List the visual checks to be carried out on the scaffolding components to ascertain their usability.
5. Explain the functions of materials, components and accessories used in scaffolding.
6. Explain the methods adopted during the erection of the scaffold to ensure its safety.
7. Explain various checks to be done on completion of erection of scaffolds, such as verticality check, stability check and so on.
8. Explain the sequence and standard procedure to, dismantle the whole scaffold and stack their components.
9. Select different components used in temporary scaffolding such as base, toe board, guard rails, platform, walkways and ladder.
10. Demonstrate preparation of scaffolding base for a scaffold up to 3.6 m height.
11. Demonstrate erection of a scaffold (up to 3.6 m height) using pipes and couplers/ cup lock system/ H frame using appropriate hand tools.
12. Demonstrate the process of conducting verticality check, stability check and rigidity check.
13. Demonstrate the dismantling and stacking of scaffold.

### Resources to be used

- Available objects such as whiteboard, duster, marker, notepad, pens, participant handbooks, computers, projectors, flipcharts etc.
- PowerPoint slides, pictures/posters depicting erection and dismantling of scaffolding.

### Say

In this session, we shall learn about scaffolding and its purpose, common materials and tools used for erection and dismantling of scaffolding, visual checks to be carried out on the scaffolding, erection of a scaffold (up to 3.6 m height) using pipes and couplers, etc.

## Ask

- Does anyone know what is scaffolding?
- What do you know about erection and dismantling of scaffolding?

## Elaborate

In this unit, we will discuss the following topics:

- Scaffolding
- Uses of Scaffold
- Scaffolding Components
- Scaffolding Materials
- Scaffolding Erection and Dismantle
- Hand Tools used in Erection/Dismantle
- Safety Checks
- Safety Check before Dismantling
- Dismantling the Scaffold

## Demonstrate

Use a projector and show the following YouTube video- <https://www.YouTube.com/watch?v=iV2mni9KDnY> to participants on how to mix your own filler when patching or filling holes or dents in walls.

## Activity

- **Purpose:** The aim of the activity is to familiarize participants with surface preparation before wall coating. Learn cleaning, repairing, and priming importance for a durable finish.
- **Resources Required:** Classroom with walls (or boards simulating walls), cleaning supplies, patching materials, drop cloths, primer, brushes/rollers (optional).
- **Tentative Duration:** 2 Hours
- **Procedure:**
  - ◆ Explain the importance of surface preparation before coating walls. Discuss how proper preparation can improve the final finish, enhance paint adhesion, and extend the coating's longevity.
  - ◆ Divide the students into small groups and provide them with cleaning supplies.

- ◆ Instruct each group to inspect their designated wall surfaces and identify any dirt, dust, grease, or other contaminants.
- ◆ Students should thoroughly clean the surfaces using soap, water, and scrub brushes, ensuring the walls are free from debris and grease.
- ◆ Provide each group with patching materials (spackling paste and putty knife).
- ◆ Instruct students to identify and repair any imperfections on the walls, such as holes, cracks, or dents.
- ◆ They should apply spackling paste to the imperfections, smooth it out with the putty knife, and let it dry.
- ◆ After drying, demonstrate sanding techniques to create a smooth and even surface.
- **Expected outcome:** The participants will understand the significance of surface preparation before coating walls.

## Notes for facilitation

- Arrange the relevant handouts and leaflets for a better understanding of the topics
- Arrange audio-visual aids for a better understanding of the topics.
- Ask the participants if they have any questions.
- Encourage every participant to answer those questions and encourage peer learning in the class.

## Exercise



### Key Solutions to PHB Exercise

1. Scaffolding is a temporary structure used in construction, maintenance, or repair work to provide a platform for workers and materials. Its main purpose is to offer a safe and stable working platform at elevated heights, allowing workers to access hard-to-reach areas on buildings or structures. Scaffolding is crucial for ensuring worker safety and facilitating efficient work processes.
2. Five common scaffolding components include:
  - Standards (upright vertical posts)
  - Ledgers (horizontal members connecting the standards)
  - Transoms (horizontal members placed across ledgers)
  - Braces (diagonal members used to stabilize the scaffold)
  - Scaffold planks (platforms where workers stand or place materials)
3. Steps for dismantling the scaffold: i. Remove all workers and materials from the scaffold. ii. Start at the highest level and remove planks, transoms, and ledgers, working downward. iii. Once each level is clear, dismantle the standards, ensuring they are released gradually and not allowed to drop. iv. After dismantling, organize and store the components properly for future use or transport them safely to another location.
4. Hand tools used in the erection or dismantling of scaffolds include:
  - **Scaffold wrench or spanner:** For tightening or loosening scaffold fittings.
  - **Hammer:** For securing scaffold components and driving wedges.
  - **Spirit level:** To ensure the scaffold is level and plumb.
  - **Tape measure:** For accurate measurements during assembly.
  - **Scaffold belt:** A tool belt used to carry small tools and equipment while working on the scaffold.









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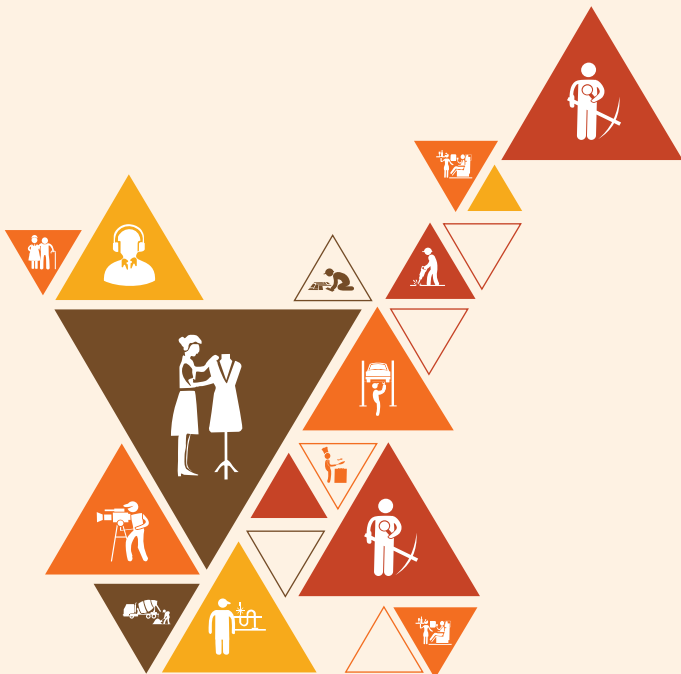
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# 4. Application of Paints to Different Surfaces

Unit 4.1 - Basics of Paints

Unit 4.2 - Application of Paints to Different Surfaces



CON/N0503

## Key Learning Outcomes

**By the end of this module, participants will be able to:**

1. Demonstrate preparation of paint mix using various constituents as per instructions.
2. Demonstrate application of paint to produce film of uniform thickness on masonry, wood and metal surfaces as per specifications and instructions.

## Unit 4.1: Basics of Paints

### Unit Objectives

**By the end of this unit, participants will be able to:**

1. List different painting tool such as brushes, rollers, painting bucket, stirrers, scrapers, sand papers, putty blades and others used for application of paint.
2. Interpret sketches/ specifications related to painting works.
3. List the various painting and finishing material and mixing ingredients such as scrape, primer, base colour, tint base, colorants, varnishes, enamel and other painting ingredients.
4. List the various adhesives used binding coats of paint such as oil, turpentine, mildew remover or other preparations.
5. Describe the standard procedure used for effective mixing and dilution of paints.
6. Select and mix paint ingredients in correct proportion following specifications and as per requirement.
7. Select different types of tools such as brushes, rollers, stirrers, scappers as per the painting surface requirement
8. Demonstrate mixing, pouring and dilution of paints and painting material as per specifications/ instructions.
9. Describe the method followed to protect the adjacent surface prior to painting.
10. Demonstrate proper cleaning, maintenance and upkeep of painting tools and equipment before and after use.

### Resources to be used

- Available objects such as whiteboard, duster, marker, notepad, pens, participant handbooks, computers, projectors, flipcharts etc.
- PowerPoint slides, pictures/posters depicting standard procedure used for effective mixing and dilution of paints.

### Say

In this session, we shall learn about different painting tool, interpretation of sketches/ specifications related to painting works, various painting and finishing material and mixing ingredients, various adhesives used binding coats of paint, standard procedure used for effective mixing and dilution of paints, proper cleaning, maintenance and upkeep of painting tools and equipment before and after use, etc.

## Ask

- Does anyone know what are the tools used for painting works?
- What do you know about various painting and finishing material and mixing ingredients?

## Elaborate

In this unit, we will discuss the following topics:

- Paints
- Characteristics of an Ideal Paint
- Types of Paints
- Tools required for Application of Paints
- Good Quality Paint Brushes and Rollers
- Painting and Finishing Material and Mixing Ingredients
- Adhesives used for Binding Coats of Paint
- Mixing and Dilution of Paint
- Interpreting Construction Drawings
- Painter's Tape
- Cleaning Painting Tools

## Demonstrate

Use a projector and show the following YouTube video- <https://www.YouTube.com/watch?v=OHmmYLBx9N8> to participants on essential painting tools.

## Activity

- **Purpose:** The aim of the activity is to familiarize students with wall painting tools and equipment for practical experience.
- **Resources Required:** Various wall painting tools, paints, safety gear, boards for practice.
- **Tentative Duration:** 4-5 Hours
- **Procedure:**
  - ◆ Introduce the purpose of the activity and emphasize proper tool usage.
  - ◆ Display and explain each tool's use and characteristics.
  - ◆ Stress safety guidelines and provide safety equipment.

- ◆ Divide students into groups and give practice boards.
- ◆ Demonstrate loading paint onto rollers/brushes and different techniques.
- ◆ Encourage experimentation with tools and techniques.
- ◆ Conclude with cleanup and reflection.
- **Expected outcome:** The participants will be able to identify, describe, and use wall painting tools effectively.

## Notes for facilitation

- Arrange the relevant handouts and leaflets for a better understanding of the topics
- Arrange audio-visual aids for a better understanding of the topics.
- Ask the participants if they have any questions.
- Encourage every participant to answer those questions and encourage peer learning in the class.





## Unit 4.2: Application of Paints to Different Surfaces

### Unit Objectives

**By the end of this unit, participants will be able to:**

1. Describe standard method of painting internal and external surfaces.
2. Explain different type of surfaces and their required finish.
3. Explain the ratio and proportion of paint and painting additives used for preparation of paint.
4. Describe the method used for adjusting viscosity of painting mix.
5. Describe the method of application of primer.
6. Demonstrate preparation of paint surfaces as per instructions/specifications prior to painting works.
7. Select different type of painting, finishing material for masonry, wood and metal surfaces
8. Demonstrate application of primer coat to the finished surface as per instructions.
9. Demonstrate application of main coat and final coat on masonry, wood and metal surfaces as per specifications and instructions.

### Resources to be used

- Available objects such as whiteboard, duster, marker, notepad, pens, participant handbooks, computers, projectors, flipcharts etc.
- PowerPoint slides, pictures/posters depicting standard method of painting internal and external surfaces, method of application of primer, preparation of paint surfaces, etc.

### Say

In this session, we shall learn about standard method of painting internal and external surfaces, different type of surfaces and their required finish, ratio and proportion of paint and painting additives, method used for adjusting viscosity of painting mix, method of application of primer, etc.

### Ask

- Does anyone know the difference between paint used for external and internal surfaces?

## Elaborate

In this unit, we will discuss the following topics:

- Process for Interior Wall Painting
- Process for Exterior Wall Painting
- Types of Building Finishes
- Paint Additives
- Paint Viscosity
- Primer
- Usage of Paint Primer
- Steps for Priming a Surface
- Painting Different Surfaces

## Demonstrate

Use a projector and show the following YouTube video- <https://www.YouTube.com/watch?v=8CgSYZnZ0ns> to participants on how to do paint work step by step.

## Activity

- **Purpose:** The purpose of this activity is to teach participants the standard method of painting internal and external surfaces.
- **Resources Required:** Whiteboard/projector, brushes, rollers, paint trays, painter's tape, drop cloths, sandpaper, cleaning supplies, paint (interior and exterior), and safety equipment.
- **Tentative Duration:** 2-3 Hours
- **Procedure:**
  - ◆ Demonstrate how to prepare the surfaces by cleaning them, removing dirt, dust, and old paint (if any).
  - ◆ Show students how to use sandpaper to smoothen rough surfaces and create a suitable base for painting.
  - ◆ Demonstrate how to apply primer properly to ensure better paint adhesion and coverage.
  - ◆ Show how to use painter's tape to protect areas that should not be painted, such as edges, trims, and fixtures.
  - ◆ Demonstrate different painting techniques using brushes and rollers, such as cross-hatching, feathering, and smooth strokes.

- ◆ Now divide class in groups and provide hands-on practice for participants to apply paint on various surfaces using different tools and techniques.
- ◆ Guide students on proper clean-up of paintbrushes, rollers, and other tools to maintain their longevity.
- ◆ Explain how to store paint and painting tools correctly for future use.
- **Expected outcome:** The participants will be able to understand painting steps, use tools effectively, method used for adjusting viscosity of painting mix, method of application of primer, etc.

## Notes for facilitation

- Arrange the relevant handouts and leaflets for a better understanding of the topics
- Arrange audio-visual aids for a better understanding of the topics.
- Ask the participants if they have any questions.
- Encourage every participant to answer those questions and encourage peer learning in the class.

## Exercise

### Key Solutions to PHB Exercise

- 1. Process for Interior Wall Painting:** The process of interior wall painting involves several steps. First, prepare the walls by filling any holes or cracks and sanding the surface. Next, apply a coat of primer to improve paint adhesion. Once the primer is dry, start painting with a roller or brush, working from top to bottom. Apply multiple coats as needed for even coverage, and allow sufficient drying time between coats.
- 2. Tools Required for Application of Paints:** Some essential tools for applying paints include:
  - Paint rollers and roller frames for larger surface areas.
  - Paintbrushes of various sizes for detailed work and edges.
  - Paint trays for holding and loading the paint.
  - Drop cloths or painter's tape to protect surrounding areas.
  - Extension poles for reaching high walls or ceilings.
  - Paint sprayers for larger projects or specialized finishes (optional).
- 3. Selecting an Appropriate Roller Cover:** To select the right roller cover, consider the following:
  - For smooth surfaces, use a short-nap roller cover (3/16 to 3/8 inch).
  - For semi-smooth surfaces, use a medium-nap roller cover (1/2 to 3/4 inch).
  - For rough surfaces, use a long-nap roller cover (3/4 to 1 1/4 inches).
  - Use foam roller covers for smooth and ultra-smooth finishes, such as gloss or satin paints.
- 4. Types of Building Finishes:** Several types of building finishes are used in construction, including:
  - **Paint finishes:** Provides color and protection to surfaces.
  - **Plaster finishes:** Used for interior walls and ceilings.
  - **Wood finishes:** For protecting and enhancing wooden surfaces.
  - **Stucco finishes:** Commonly used for exterior walls.
  - **Tile finishes:** Used for flooring and wall surfaces.
  - **Concrete finishes:** Provides decorative or textured surfaces.
- 5. Process of Priming:** Priming is a crucial step before applying paint. The process involves:
  - Cleaning the surface and ensuring it is dry and free from dust and grease.
  - Applying a coat of primer using a brush or roller.
  - Allowing the primer to dry completely before applying paint.
  - Priming creates a uniform surface, enhances paint adhesion, and helps to achieve a consistent and long-lasting paint finish.







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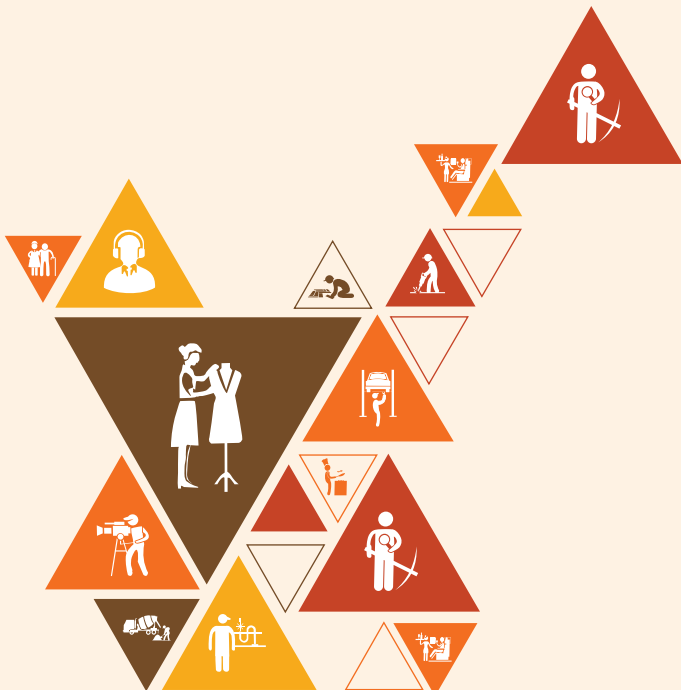
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# 5. Interact and Communicate Effectively

Unit 5.1 - Effective Interaction and Communication



CON/N8001

## Key Learning Outcomes

**By the end of this module, participants will be able to:**

1. Demonstrate effective communication with co-workers, superiors and sub-ordinates across different teams.
2. Provide support to co-workers, superiors and sub-ordinates within the team and across interfacing teams to ensure effective execution of assigned task.



## Unit 5.1: Effective Interaction and Communication

### Unit Objectives

**By the end of this unit, participants will be able to:**

1. Explain the effect and benefit of timely actions relevant to construction painting works with examples.
2. Explain the importance of teamwork and its effects relevant to construction painting works with examples.
3. Explain the importance of proper and effective communication and its adverse effects in case of failure of proper communication.
4. Demonstrate effective communication skills while interacting with co-workers and trade seniors during the assigned task.
5. Demonstrate effective reporting to seniors as per applicable organisational norms.
6. Instruct subordinates in a clear and precise manner with respect to construction painting works.
7. Demonstrate teamwork during assigned tasks.
8. Interpret work sketches construction painting works formats, permits, protocols, checklists etc.
9. Interpret the scope of construction painting works.

### Resources to be used

- Available objects such as whiteboard, duster, marker, notepad, pens, participant handbooks, computers, projectors, flipcharts etc.
- PowerPoint slides, pictures/posters depicting effective interaction and communication at the workplace.

### Say

In this session, we shall learn about the importance of the effect and benefit of timely actions relevant to construction painting works, the importance of teamwork and its effects relevant to construction painting works, proper and effective communication and its adverse effects, effective communication skills while interacting with various stakeholders, etc.

### Demonstrate

Use a projector and show the following YouTube video- <https://www.YouTube.com/watch?v=sEzTXTRo9L4> to participants on how to build effective communication skills.

## Ask



- Does anyone know the Cs of effective communication?
- Why do you think it is important for a construction painter to learn about effective communication?

## Elaborate



In this unit, we will discuss the following topics:

- Time Management
- Effective Communication
- Workplace Communication
- Effective Communication with Stakeholders
- Adverse Effects of Poor Communication
- Teamwork at Workplace
- C's of Teamwork
- Enhancing Teamwork in the Workplace
- Construction Reporting
- Interpreting Scope of Construction Painting Works
- Interpreting Painter Essentials

## Activity



- **Purpose:** The purpose of this activity is to help students understand and practice effective communication skills.
- **Resources Required:** Whiteboard, markers, printed scenarios, timer, notebooks.
- **Tentative Duration:** 60 minutes
- **Procedure:**
  - ◆ Introduce the importance of communication.
  - ◆ Provide communication scenarios to small 4-5 groups.
  - ◆ Scenario 1: Safety Briefing for New Workers

You are the site supervisor on a construction project, and several new workers have joined the team. The challenge is to conduct a safety briefing for the new workers, ensuring they understand the potential hazards on the site, safety protocols, and the proper use of personal protective equipment (PPE).

Scenario 2: Communicating Changes in the Construction Plan

During a construction project, unexpected challenges arise, leading to changes in the initial plan. As the project manager, you need to communicate these changes to the entire construction team effectively, addressing their concerns and ensuring everyone is on the same page to avoid delays and confusion.

- ◆ Groups discuss and come up with solutions.
- ◆ Groups perform role-plays of scenarios.
- ◆ Provide feedback after each role-play.

Note: Trainer can introduce more similar scenarios

- **Expected outcome:** By the end of this practical activity, students are expected to achieve the following:
  1. Improved understanding of effective communication.
  2. Application of knowledge in real-life scenarios.
  3. Ability to adapt communication style.
  4. Enhanced collaboration and teamwork.
  5. Increased confidence in communication skills.

## Notes for facilitation

- Arrange the relevant handouts and leaflets for a better understanding of the topic.
- Arrange audio-visual aids to make them understand effective communication at the work place-  
<https://youtu.be/V1RQG1nB4Kg>
- Ask the participants if they have any questions.
- Encourage other participants to answer those questions and encourage peer learning in the class.

## Exercise

### Key Solutions to PHB Exercise

1. The 7 Cs of effective communication are clear, concise, concrete, correct, coherent, complete, and courteous.
2. Poor communication in construction projects leads to several issues:
  - **Creating Confusion:** Miscommunications among stakeholders and construction professionals can cause misunderstandings, leading to errors, delays, and cost overruns in both the construction site and office. Clear and concise messages are essential to prevent confusion.
  - **Unnecessary Delays:** Inefficient communication, such as delays in information flow, incorrect recipients, or confusing messages, can result in errors that cause project delays. This includes ordering unsuitable materials, skipping construction steps, or misallocating labor.
  - **Budget/Cost Overruns:** Inefficient project communications and time management contribute to over 50% of project budget risks. Poor communication often leads to increased expenditures, affecting the project's budget negatively.
  - **Injuries and Safety Issues:** Poor safety communication is often attributed to workers' lack of safety training vocabulary, fear of speaking out about hazards, and a negative perception of safety communication, focusing only on negatives.
  - **Issues with Stakeholders:** Effective and thorough communication among various stakeholders, including owners, designers, contractors, and laborers, is crucial for project success. Poor project data and miscommunications contribute to a significant portion of project rework, leading to increased expenses and disputes among stakeholders.
3. Every workplace organisation requires communication for day-to-day business, regardless of size, location, goals, etc. It forms a bridge between people to exchange ideas, inform, express their feelings, influence others, etc. Communication is required to communicate within the organisation with managers and employees, etc. and outside with suppliers, buyers, etc.
4. The teamwork can be enhanced in the workplace by:
  - **Concentrate more on "us" than "me"**  
A minor step is to begin speaking in the plural, so that all members feel as though they are a part of the effort. The greater our involvement, the harder we work to obtain the finest results.
  - **Communicate Explicitly**  
Communication is the fundamental prerequisite. We must create an atmosphere in which team members are free to share their thoughts. It is advisable to make an effort to prevent such misunderstandings.
  - **Delegate and believe**  
When working in a team, each assignment symbolises a problem that can be readily overcome via teamwork. Team leaders should be aware of the abilities and qualities of their team

members and assign them jobs where they may demonstrate their value. For this, they must feel at ease while working and have confidence that their bosses have faith in them.

- **Establish shared aims and objectives**

It is crucial to establish a unified business objective and effectively communicate it to team members.

- **Recognize and honour the achievements of others.**

This attitude strengthens the team's trust and teamwork, which will inspire them to achieve the following objectives.

- **Conquer a conflict with success**

Workplace conflicts are prevalent, and people with conflict management abilities are in high demand. Learn this talent if you still lack it.

- **Build a diverse group**

People with varied origins, personalities, and experiences can be a source of innovative ideas. Through intelligent reading, we will recognise that we have the opportunity to maximise each individual's qualities.

- **Believe in Team Building**

It's been said that teams that have fun remain together, thus establishing personal relationships in the workplace is a fantastic way to boost teamwork.

5. The benefits of time management skills to both the person and the company are:

- **Enhanced productivity and performance:** Poor time management causes employees to feel overwhelmed, whereas excellent time management leads to increased efficiency, which in turn improves performance.
- **Providing work on schedule:** This is the most visible advantage of excellent time management, but it is also one of the most crucial. Time management enables workers to meet deadlines, which is essential for meeting client expectations.
- **Less anxiety and stress:** When employees are stressed and anxious, not only do they miss deadlines and produce subpar work, but it also negatively affects their health. As an employer, you are responsible for ensuring that the mental health of your employees is a top priority. Stressed employees are more prone to take sick days and seek alternative jobs.
- **Better-quality work:** With effective time management, employees have the necessary time to produce work that is not only completed on time but also of superior quality.
- **Boosts confidence:** When employees are on top of their responsibilities, it boosts their confidence and enables them to believe in their talents. In turn, this reduces tension and anxiety because the body produces dopamine.

- **Reduces procrastination and wasted time:** Knowing how to prioritise decreases procrastination and promotes a “eat the frog” mentality among staff. This saves downtime and increases productivity.
- **Enhances the work-life balance:** An effective work-life balance When an employee is well-rested and has the opportunity to re-energize, they are in the best position possible to produce their finest work.
- **Make better decisions:** When employees have time to concentrate and work thoroughly, they are not required to make decisions under duress. Instead, individuals can make selections based on all the necessary information to make the greatest choice.









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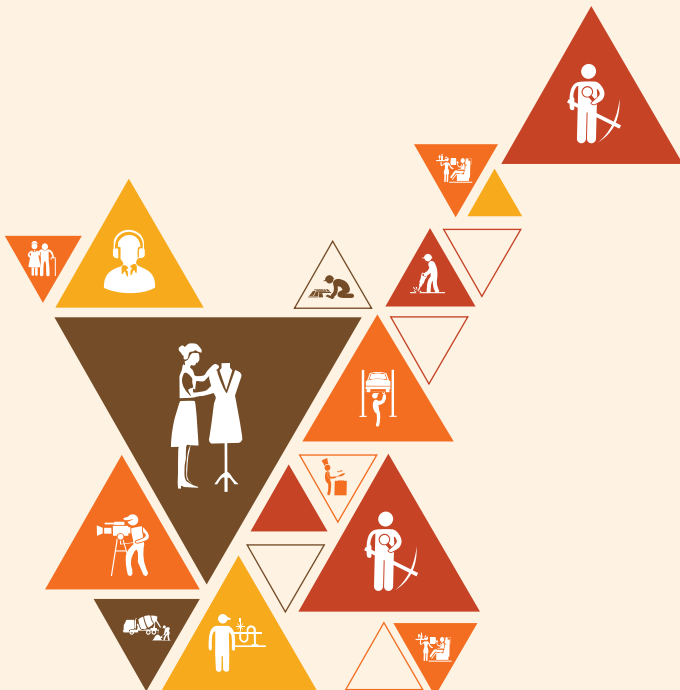


# 6. Follow Safety Norms at Workplace

Unit 6.1 - Workplace Hazards

Unit 6.2 - Fire Safety

Unit 6.3 - Safety Measures at Workplace



CON/N9001

## Key Learning Outcomes

**By the end of this module, participants will be able to:**

1. Identify various hazards at construction site.
2. Use PPE's relevant to electrical works.
3. Perform safe waste disposal at construction site.
4. Demonstrate the activities to check the spread of infection as per medical/ organizational guidelines.

## Unit 6.1: Workplace Hazards

### Unit Objectives

**By the end of this unit, participants will be able to:**

1. Explain the types of hazards at the construction sites and identify the hazards specific to the domain related works.
2. Describe the standard procedure for handling, storing and stacking of material, tools, equipment and accessories.
3. Use PPEs as per work requirements during construction painting jobs.
4. Recall the safety control measures and actions to be taken under emergency situation.
5. Explain the reporting procedure to the concerned authority in case of emergency situations.
6. Explain the types and benefits of basic ergonomic principles, which should be adopted while carrying out specific task at the construction sites.

### Resources to be used

- Available objects such as whiteboard, duster, marker, notepad, pens, participant handbooks, computers, projectors, flipcharts etc.
- PowerPoint slides, pictures/posters depicting the types of hazards at the construction sites, use PPEs as per work requirements during the construction painting job, etc.

### Say

In this session, we shall learn about the importance of the types of hazards at the construction sites and identify the hazards, standard procedure for handling, storing and stacking of material, tools, equipment and accessories, PPEs as per work requirements during construction painting jobs, safety control measures and actions to be taken under an emergency situation, the types and benefits of basic ergonomic principles, etc.

### Ask

- Does anyone know the types of hazards at the construction sites?
- Why do you think it is important to use PPEs as per work requirements during construction jobs?

## Elaborate

In this unit, we will discuss the following topics:

- Workplace Safety
- Workplace Safety at Construction Site
- Workplace Hazards
- Workplace Hazard at Construction Site
- Hazard Identification and Risk Assessment (HIRA)
- Workplace Warning Signs
- Personal Protective Equipment
- Basic Ergonomic Principles
- Emergency Response Plan for Construction Site

## Activity

- **Purpose:** The purpose of this practical activity is to educate students about the importance of Personal Protection Equipment (PPE) used at construction sites.
- **Resources Required:** Various PPE (e.g., hard hat, safety goggles, earplugs, dust masks, reflective vests, gloves, safety boots), hazard posters, and safety guidelines.
- **Tentative Duration:** 60-90 minutes
- **Procedure:**
  - ◆ **Introduction:** Discuss workplace safety and PPE's significance.
  - ◆ **Hazard Awareness:** Identify construction site hazards.
  - ◆ Set up stations with examples of different types of PPE.
  - ◆ Divide the students into groups and assign each group to a station.
  - ◆ Instruct each group to inspect the PPE, discuss its purpose, and identify the types of hazards it protects against.
  - ◆ Allow students to try on the PPE to experience how it fits and functions.
  - ◆ Gather the students for a recap of the key points learned during the activity.
  - ◆ Encourage questions and facilitate a Q&A session to address any remaining doubts.
- **Expected outcome:** The participants will understand PPE's importance, recognize hazards, and know how to use various PPE correctly.

## Notes for facilitation

- Arrange the relevant handouts and leaflets for a better understanding of the topics
- Arrange audio-visual aids for a better understanding of the topics.
- Ask the participants if they have any questions.
- Encourage every participant to answer those questions and encourage peer learning in the class.



## Unit 6.2: Fire Safety

### Unit Objectives

**By the end of this unit, participants will be able to:**

1. Explain the classes of fire and types of fire extinguishers.
2. Demonstrate the operating procedure of the fire extinguishers.

### Resources to be used

- Available objects such as whiteboard, duster, marker, notepad, pens, participant handbooks, computers, projectors, flipcharts, etc.
- PowerPoint slides and pictures/posters depicting the operating procedure of the fire extinguishers.

### Say

In this session, we shall learn about fire safety.

### Ask

- What will you do if a fire breaks out in the workplace?
- What are the emergency situations?
- Explain the method of using a fire extinguisher.

### Demonstrate

Demonstrate the step-by-step evacuation process to the participants; it should include:

- Detection
- Decision
- Alarm
- Reaction
- The movement to an area of refuge or an Assembly station
- Transportation

Also, explain these points, in brief, to make the participants more clear about the process of evacuation and ask them to jot down these points in their notes: -

Clear passageways to all escape routes

- Signage indicating escape routes should be marked.
- Enough exits and routes should be present to allow a large number of people to be evacuated quickly.
- Emergency doors that open easily.
- Emergency lighting where needed.
- Training for all employees to know and use the escape routes.
- A safe meeting point or assembly area for staff.
- Instructions on not using the elevator during a fire

## Elaborate

In this unit, we will discuss the following topics:

- Fire and its Classes
- Fire Safety
- Prevention of a Workplace Fire
- Fire Extinguisher

## Say

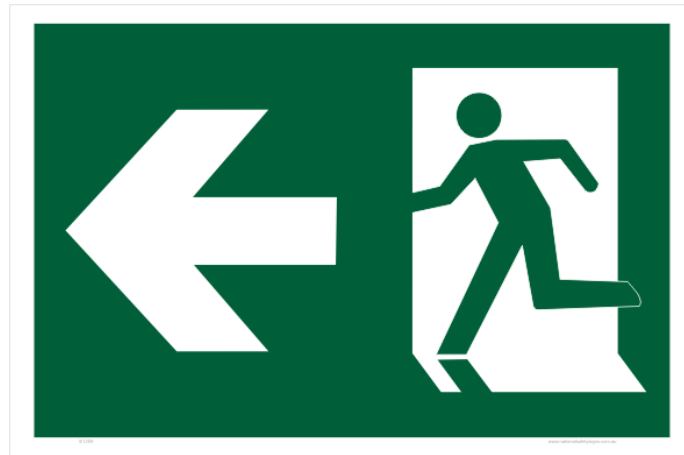
Let us now participate in an activity to understand the concept better.

## Activity

- **Purpose:** The purpose of this activity is to educate participants about the various safety signage at construction sites.
- **Resources Required:** Signage posters/PPT of the following:







- **Tentative Duration:** 60 minutes
- **Procedure:**
  - ◆ Show the PPT with various signs used in safety drills.
  - ◆ Later randomly select the participant and ask them to identify the signage.
- **Expected outcome:** The participant in this activity will be able to recall the various safety signage at construction sites.

## Notes for facilitation

- Arrange the relevant handouts and leaflets for a better understanding of the topics
- Arrange audio-visual aids for a better understanding of the topics.
- Ask the participants if they have any questions.
- Encourage every participant to answer those questions and encourage peer learning in the class.



## Unit 6.3: Safety Measures at Workplace

### Unit Objectives

**By the end of this unit, participants will be able to:**

1. Explain the importance of housekeeping works.
2. Demonstrate safe housekeeping practices.
3. Explain the importance of participation of workers in safety drills.
4. Explain the purpose and importance of vertigo test at construction site.
5. List out basic medical tests required for working at construction site.
6. Demonstrate vertigo test.
7. Demonstrate different methods involved in providing First aid to the affected person
8. Demonstrate safe waste disposal practices followed at construction site.
9. Explain different types of waste at construction sites and their disposal method.

### Resources to be used

- Available objects such as whiteboard, duster, marker, notepad, pens, participant handbooks, computers, projectors, flipcharts etc.
- PowerPoint slides, pictures/posters depicting the steps in safety drills, different methods involved in providing First aid to the affected person, safe waste disposal practices followed at construction site, etc.

### Say

In this session, we shall learn about the importance of housekeeping works, purpose and importance of vertigo test at construction site, basic medical tests required for working at construction site, different methods involved in providing First aid to the affected person, safe waste disposal practices, etc.

### Ask

- Why do you think the safe housekeeping practices are important at construction site?
- Can you tell me how should the construction waste disposed of?

### Elaborate

In this unit, we will discuss the following topics:

- Safety, Health and Environment at Work Place

- Good Housekeeping
- Safety Drills at Construction Site
- Medical Examination for Construction Workers
- Vertigo Test
- First Aid
- Treating Minor Cuts and Scrapes
- Waste Management

## Activity

- **Purpose:** The participant will learn more about the first aid kits in this activity.
- **Resources Required:** Computer, internet.
- **Tentative Duration:** 1 Hour
- **Process:**
  - ◆ Divide participants into 5 groups and provide them with first aid kit essentials.
  - ◆ Ask them to surf the internet and explain the usage of each item included in the kit.
  - ◆ Alternatively show them a video about the usage and ask them to make notes.
  - ◆ Also, provide them cardboard, paper, scissors, glue stick, and colour pens to make the first aid box.
- **Estimated Outcome:** The participants will have detailed knowledge about first aid kits.

## Notes for facilitation

- Arrange the relevant handouts and leaflets for a better understanding of the topics
- Arrange audio-visual aids for a better understanding of the topics.
- Ask the participants if they have any questions.
- Encourage every participant to answer those questions and encourage peer learning in the class.

## Exercise

### Key Solutions to PHB Exercise

1. There are five main types of fire extinguishers:
  - Water.
  - Powder.
  - Foam.
  - Carbon Dioxide (CO<sub>2</sub>).
  - Wet chemical.
2. Personal protective equipment, or “PPE,” is equipment worn to reduce exposure to risks that might result in significant occupational injuries or illnesses. Chemical, radiological, physical, electrical, mechanical, and other job dangers may cause these injuries and diseases.
3. The benefits of workplace safety are:
  - Employee retention increases if they are provided with a safe working environment.
  - Failure to follow OSHA’s laws and guidelines can result in significant legal and financial consequences.
  - A safe environment enables employees to stay invested in their work and increases productivity.
  - Employer branding and company reputation can both benefit from a safe working environment.
4. Good housekeeping on construction sites refers to the practice of keeping the site clean and tidy. After all, construction work is messy, and cleaning up now will only result in more mess later. A clean work environment reduces the likelihood of accidents and improves fire safety. There are fewer things to trip you up if there are no materials, waste, or discarded tools.
5. Construction is a hazardous field in which employees must become proficient. Fortunately, safety training can reduce workplace injuries while informing employees of necessary precautions to take.









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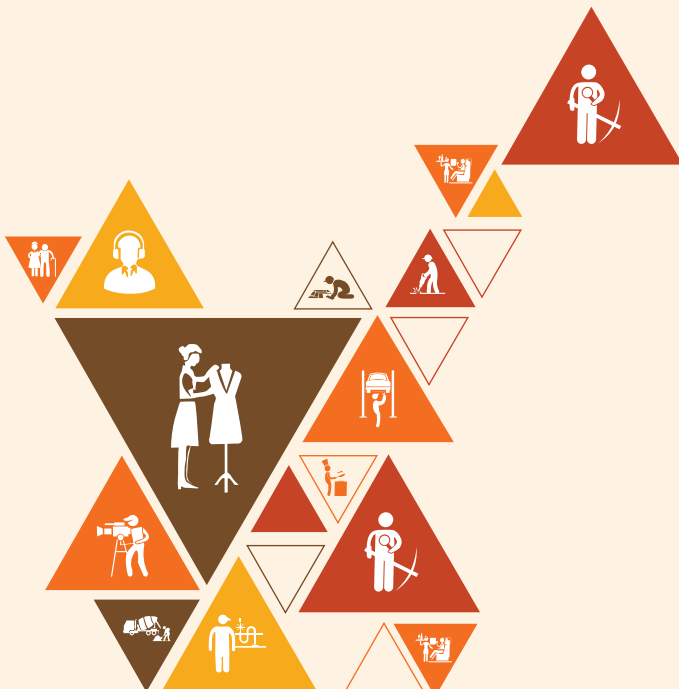
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# 7. Demonstrate Varnishing and Polishing

Unit 7.1 - Varnishing and Polishing on Wooden Surfaces



CON/N0504

## Key Learning Outcomes

**By the end of this module, participants will be able to:**

1. Demonstrate preparation of wood surfaces prior to varnishing and polishing.
2. Demonstrate preparation of paint mix using various constituents as per specifications and instructions
3. Demonstrate application of varnish and polish on various wooden surfaces as per instructions/specifications.

## Unit 7.1: Varnishing and Polishing on Wooden Surfaces

### Unit Objectives

**By the end of this unit, participants will be able to:**

1. List different types of varnishes, polishes pigments and mixtures used in wood polishing.
2. Explain surface preparation method adopted for wooden surfaces.
3. Explain the ratio and proportion of paint and painting additives used for preparation of paint.
4. Describe the method used for adjusting viscosity of paint mix.
5. Describe the method of application of primer.
6. List the various adhesives used in binding coats of paint such as oil, turpentine, mildew remover or other preparations.
7. Describe the standard procedure used for effective mixing and dilution of paints.
8. List various tools and equipment used in painting such as brushes, rollers, painting bucket, stirrers, scrapers, sand papers, putty blades and other painting tools.
9. Explain methodology involved in application of different types of varnishing and polishing of doors, window partitions and other wooden surfaces.
10. Explain the importance of applying bleaching agents on wood surface.
11. Describe the application of finishes, varnishes, putty, primer, sealants, toners, and other relevant finishing materials.
12. Select different types of tools and equipment required for varnishing and polishing of wooden surfaces.
13. Demonstrate preparation of wooden surface using standard surface preparation methods prior to painting.
14. Select appropriate finishing ingredients such as paint, stain, lacquer, shellac, or varnish as per specification/instructions.
15. Demonstrate mixing of paint and additives following standard procedures as per specification/instructions.
16. Demonstrate application of primer coat to the finished wooden surface as per instructions.
17. Demonstrate sanding of surface using appropriate tools as per instructions, for application of next coat.
18. Demonstrate application of main coat and final coat on wood surfaces as per required finish and specification.

### Resources to be used

- Available objects such as whiteboard, duster, marker, notepad, pens, participant handbooks, computers, projectors, flipcharts etc.
- PowerPoint slides, pictures/posters depicting different types of varnishes, polishes pigments and mixtures used in wood polishing.

**Say** 

In this session, we shall learn about different types of varnishes, polishes pigments and mixtures used in wood polishing, surface preparation method adopted for wooden surfaces, ratio and proportion of paint and painting additives used for preparation of paint, various adhesives used in binding coats of paint, standard procedure used for effective mixing and dilution of paints, etc.

**Ask** 

- Does anyone know what is varnishing and polishing on wooden surfaces?

**Elaborate** 

In this unit, we will discuss the following topics:

- Wooden Surfaces
- Surface Preparation of Wooden Surfaces
- Primer Coating on Wooden Surfaces
- Wood Filler and Wood Putty
- Application of Paint on Wooden Surfaces
- Viscosity
- Types of Wood Polish and Finishes for Wooden Surfaces
- Varnish
- Process of Varnishing
- Sanding
- Bleaching Woodworks
- Adhesives used for Binding Coats of Paint
- Finishing Materials
- Tools and Equipment for Woodworking
- Tools and Equipment used for Varnishing and Polishing

## Demonstrate

Use a projector and show the following YouTube video- <https://www.YouTube.com/watch?v=8CgSYZnZ0ns> to participants on how to primer and paint a workpiece.

## Activity

- **Purpose:** The purpose of this activity is to teach participants the process of varnishing and polishing wooden surfaces.
- **Resources Required:** Wooden surfaces (e.g., small wooden boards, wooden blocks, or pre-made wooden items), sandpaper, varnish (preferably water-based or solvent-based), brushes, cloth or lint-free rags, dust masks, safety goggles, wood stain, and wood filler.
- **Tentative Duration:** 4-5 Hours
- **Procedure:**
  - ◆ Distribute the wooden surfaces to the students.
  - ◆ Instruct the students to examine the wood for any imperfections, such as rough edges or visible knots, and to use wood filler if necessary.
  - ◆ Demonstrate how to use sandpaper to smooth the wood surface, starting with a coarse grit and gradually moving to finer grits until the surface is smooth.
  - ◆ If using wood stain, demonstrate how to apply it evenly to the wood surface.
  - ◆ Instruct students to apply the stain on their wooden surfaces and wipe off any excess after a few minutes.
  - ◆ Demonstrate the proper way to apply varnish using a brush, starting from one end and moving in long, even strokes along the grain of the wood.
  - ◆ Instruct students to apply a second coat of varnish after the first one has dried, and explain the importance of multiple coats for better protection.
  - ◆ After the final coat of varnish has dried, demonstrate how to lightly sand the surface with fine-grit sandpaper to remove any imperfections and achieve a smooth finish.
  - ◆ Instruct students to do the same on their wooden surfaces.
- **Expected outcome:** The participants will be able to understand gain knowledge of varnishing techniques, proper application of varnish, and achieve a smooth, protected wooden surface.

## Notes for facilitation

- Arrange the relevant handouts and leaflets for a better understanding of the topics
- Arrange audio-visual aids for a better understanding of the topics.
- Ask the participants if they have any questions.
- Encourage every participant to answer those questions and encourage peer learning in the class.

## Exercise



### Key Solutions to PHB Exercise

1. Types of varnishes used for woodworks: Common types of varnishes used for woodworks include polyurethane varnish, spar varnish (for outdoor use), water-based varnish (environmentally friendly), and oil-based varnish (durable and resistant to wear). Each type has specific properties suited for different applications and finishes.
2. Surface preparation method adopted for wooden surfaces: The surface preparation for wooden surfaces typically involves the following steps: a) Inspection and repair of any imperfections like knots or cracks. b) Sanding to smoothen the surface and remove any existing finish or roughness. c) Cleaning the surface to remove dust and debris, ensuring a clean and even base for the application of varnish or paint.
3. Primer Coating on Wooden Surfaces: Primer coating on wooden surfaces is done to enhance adhesion, improve coverage, and create a uniform base for the topcoat. The process involves applying a coat of primer specifically designed for wood to seal the surface and provide a better bond for the subsequent layers of paint or varnish.
4. Wood Filler and Wood Putty: Wood filler and wood putty are both used to fill gaps, cracks, and imperfections in wood surfaces, but they have different compositions and purposes. Wood filler is typically a mixture of wood dust and a binder (such as epoxy or latex), used to fill larger gaps and holes. Wood putty is a more malleable paste-like substance, often made from clay, and is used for smaller repairs and surface-level imperfections.
5. Examples of wood polishes: There are various types of wood polishes available, including: a) Paste wax polish: Provides a protective layer and enhances the natural beauty of the wood. b) Liquid furniture polish: Easy to apply and leaves a shiny finish. c) Spray-on polishes: Convenient for quick touch-ups and even application. d) Oil-based polishes: Penetrates the wood to nourish and protect it, bringing out the wood's natural grain.









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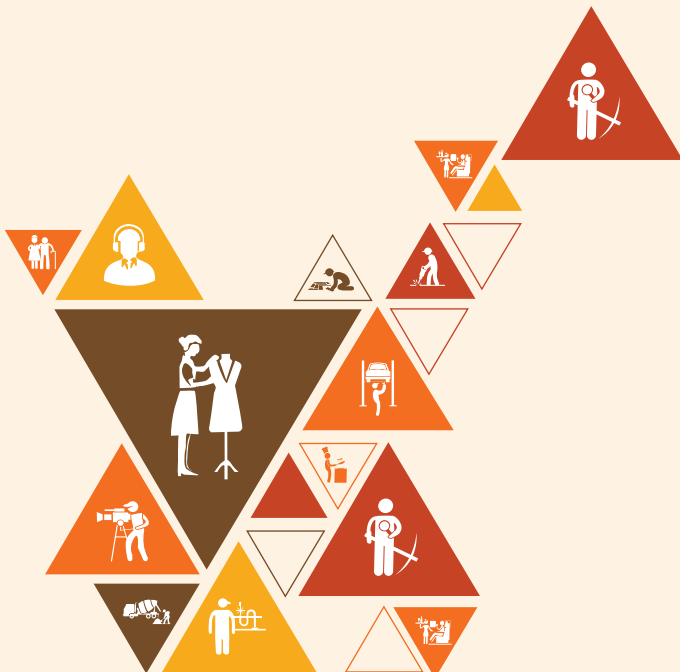


## 8. Employability Skills (30 Hours)

It is recommended that all trainings include the appropriate Employability skills Module. Content for the same can be accessed

<https://www.skillindiadigital.gov.in/content/list>

Scan the QR code below to access the ebook



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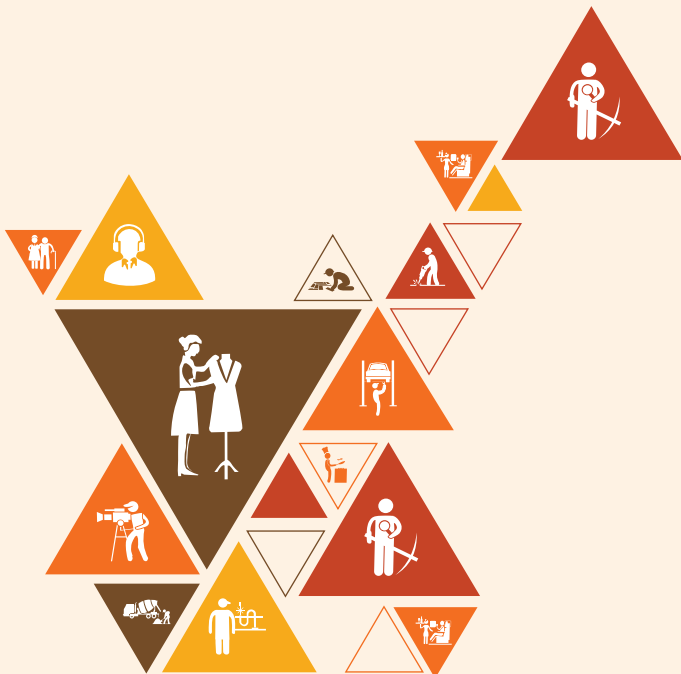


## 9. Annexures

Annexure I - Training Delivery Plan

Annexure II - Assessment Criteria

Annexure III - QR Codes –Video Links



## Annexure I- Training Delivery Plan

Training Delivery Plan			
<b>Program Name:</b>	<b>Assistant Construction Painter &amp; Decorator</b>		
<b>Qualification Pack Name &amp; Ref. ID</b>	CON/Q0502		
<b>Version No.</b>	3.0	<b>Version Update Date</b>	<b>31/08/2023</b>
<b>Pre-requisites to Training (if any)</b>	Minimum Educational Qualification: 5th Class with 1-2 Years of experience for non-trained worker, minimum 18 months experience in the same occupation OR 5th Class with 1-2 Years of experience Minimum 9 months experience as Certified Helper Construction Painter and Decorator		
<b>Training Outcomes</b>	<b>After completing this program, participants will be able to:</b> <ul style="list-style-type: none"> <li>• Explain the process of preparing different types of surfaces for painting.</li> <li>• Elucidate ways to erect and dismantle temporary scaffold up to 3.6-meter height.</li> <li>• Describe the process of applying paint to masonry, metal and wooden surfaces.</li> <li>• Explain the importance of working effectively in a team to deliver desired results at the workplace.</li> <li>• Elucidate ways to work according to personal health, safety and environment protocols at construction site.</li> <li>• Describe the process of carrying out varnishing and polishing of wooden surfaces.</li> </ul>		

S. no	Module name	Session name	Session objectives	NOS reference	Methodology	Training tools/ aids	Duration
1.	Role and Responsibilities of an Assistant Construction Painter & Decorator  T- 08:00 (HH: MM)	1. Role and Responsibilities of an Assistant Construction Painter & Decorator	<ul style="list-style-type: none"> <li>• Overview of construction industry</li> <li>• Define personal attributes required in the construction painting occupation.</li> <li>• Recall the basic terms used in construction painting works.</li> <li>• Describe the role and responsibilities of an Assistant construction painter and decorator.</li> <li>• Explain the career progression options of an Assistant construction painter and decorator.</li> </ul>	Bridge Module	Classroom lecture, games, group participation, group activity	Training Kit-Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop	T- 02:00 T- 06:00

2	Carry out preparation of all type of basic surface for painting works  T- 16:00 P- 46:00 (HH: MM)	1. Introduction to surface Preparation	<ul style="list-style-type: none"> <li>Explain the purpose and steps for surface Preparation.</li> </ul>	CON/ N0502 PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, PC9, KU1, KU2, KU3, KU4, KU5, KU6, KU7, KU8, KU9, KU10, KU11, KU12	Classroom lecture, games, group participation, group activity, field visit	Training Kit-Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop  Tools and Equipment Required: Measuring tape/rule, Ladder, Water level tube, Spirit level, Plumb bob, Rollers, Brushes, paint bucket, sponges, dusting brush, tack rags, paint stirrers, sand paper, masking tape, wall scrappers, scraper, putty knife, chisel knife, knotting brush, nail punch, Hammer, dusting brush, dust masks, wire brushes, goggles, filling knife, filling board, Safety helmets, Hand gloves, Safety shoes, Safety harness, Nose mask	T- 02:00 P- 06:00
		2. Tools, equipment and materials for surface Preparation	<ul style="list-style-type: none"> <li>List different types of materials such as putties, stoppers, solvents, filler, mordant solutions &amp; stabilizing solutions required for surface preparation.</li> <li>List the various tools required for surface preparation such as scraper, putty knife, chisel knife, knotting brush, nail punch, hammer, dusting brush, dust masks, wire brushes, goggles, filling knife, filling board, gloves &amp; buckets.</li> <li>List the different type of abrasives such as glass, sand paper, sanders and their use.</li> </ul>				T- 02:00 P- 06:00
		3. Cleaning of Surface	<ul style="list-style-type: none"> <li>List the different types of cleaning agents used for surface preparation.</li> </ul>				T- 02:00 P- 06:00
		4. Filling of Surface	<ul style="list-style-type: none"> <li>Describe the different type of fillers used in painting works including their use.</li> <li>Demonstrate filling and levelling of voids and undulations using appropriate fillers as per specifications/ instructions.</li> </ul>				T- 02:00 P- 06:00

	5. Methods of Surface Preparation	<ul style="list-style-type: none"> <li>• Explain the methodology for preparation of different surfaces like masonry, RCC, wood and metal by wet and dry abrading, degreasing, knotting, priming, filling, rust removal of paint system and removal of wall coverings and other similar processes.</li> </ul>				T- 02:00 P- 06:00
	6. Methods of Surface Preparation	<ul style="list-style-type: none"> <li>• Demonstrate selection of appropriate preparation process as per the type of surface such as plastered masonry and RCC surface, metal surface and wood surface.</li> <li>• Demonstrate various surface preparation methods such as washing, stripping/</li> <li>• scarping, abrading, keying, and brushing and other similar methods as per specifications/ instructions.</li> </ul>				T- 02:00 P- 06:00
	7. Methods of Surface Preparation	<ul style="list-style-type: none"> <li>• Demonstrate preparation of metal surface by degreasing, solvent wiping and abrading using appropriate tools as per specifications/ instructions.</li> <li>• Demonstrate preparation of wood surface by scraping, solvent wiping and abrading using appropriate tools as per specifications/ instructions.</li> </ul>				T- 02:00 P- 06:00 T- 02:00 P- 06:00

		8. Visual Checks	<ul style="list-style-type: none"> <li>Demonstrate visual checks performed to assess the surface for type of preparation method.</li> </ul>				T- 02:00 P- 04:00
3	Erect and dismantle temporary scaffold up to 3.6-meter height T- 16:00 P- 32:00 (HH: MM)	1. Introduction to scaffolding	<ul style="list-style-type: none"> <li>Explain scaffolding and its purpose.</li> </ul>	CON/ N0101 PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, PC9, PC10, PC11, PC12, KU1, KU2, KU3, KU4, KU5, KU6, KU7, KU8, KU9, KU10, KU11, KU12, KU14, KU15, KU16, KU17	Classroom lecture, games, group participation, group activity, field visit	<p>Training Kit- Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop</p> <p>Tools and Equipment Required: Hammer, Spanner (set), Wrench, Pulley, Rope, Nuts and bolts, Measuring tape, Spirit level, Plumb-bob , Mason’s line , Cup-lock scaffolding components (set), 40 NB pipes, Swivel coupler, Fixed clamp, Steel walers, Steel walkways, Aluminum/ GI ladder, Safety net, Helmet , Safety shoes , Safety belt, Cotton hand gloves, Goggles, Reflective jackets, Safety message boards</p>	

	2. Tools, equipment, and materials	<ul style="list-style-type: none"> <li>List the common materials and tools used for erection of scaffolding (pipe, cup lock (vertical and ledgers), H-frames, bamboo and balli.</li> <li>List the functions of different hand tools like hammer, spanner, pulleys, hooks, ropes, etc., used for erection/ dismantling of scaffolds.</li> </ul>				T- 03:00 P- 05:00
	3. Components used in scaffolding and preparation of base	<ul style="list-style-type: none"> <li>Explain the functions of materials, components and accessories used in scaffolding.</li> <li>Select different components used in temporary scaffolding such as base, toe board, guard</li> <li>rails, platform, walkways and ladder.</li> <li>Demonstrate preparation of scaffolding base for a scaffold up to 3.6 m height.</li> </ul>				T- 03:00 P- 05:00
	4. Erection of scaffolding	<ul style="list-style-type: none"> <li>Explain the methods adopted during the erection of the scaffold to ensure its safety.</li> <li>Demonstrate erection of a scaffold (up to 3.6 m height) using pipes and couplers/ cup lock system/ H frame using appropriate hand tools.</li> </ul>				T- 03:00 P- 05:00



		5. Dismantle the scaffolding	<ul style="list-style-type: none"> <li>Explain the sequence and standard procedure to, dismantle the whole scaffold and stack their components.</li> <li>Demonstrate the dismantling and stacking of scaffold.</li> </ul>				T- 03:00 P- 05:00
		6. Visual Check	<ul style="list-style-type: none"> <li>List the visual checks to be carried out on the scaffolding components to ascertain their usability.</li> <li>Explain various checks to be done on completion of erection of scaffolds, such as verticality check, stability check and so on.</li> <li>Demonstrate the process of conducting verticality check, stability check and rigidity check.</li> </ul>				T- 01:00 P- 07:00
4	Apply paints to masonry, metal and wood surfaces for obtaining plain finishes  T- 24:00 P- 64:00 (HH: MM)	1. Introduction of paints	<ul style="list-style-type: none"> <li>Explain the ideal characteristics of paints.</li> <li>List the most common type of paints.</li> </ul>	CON/N0503 PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, PC9, PC10, PC11, PC12, PC13, PC14, KU1, KU2, KU3, KU4, KU5, KU6, KU7, KU8, KU9, KU10, KU11, KU12, KU14, KU15, KU16, KU17, KU18, KU19	Classroom lecture, games, group participation, group activity, field visit	Training Kit-Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop  Tools and Equipment Required: Measuring tape/rule, Ladder, Water level tube, Spirit level, Plumb bob, Rollers, Brushes, paint bucket, sponges, dusting brush,	T- 02:00 P- 06:00

	2. Painting tools and equipment	<ul style="list-style-type: none"> <li>List different painting tool such as brushes, rollers, painting bucket, stirrers, scrapers, sand papers, putty blades and others used for application of paint.</li> <li>Select different types of tools such as brushes, rollers, stirrers, scrapers as per the painting surface requirement.</li> </ul>			tack rags, paint stirrers, sand paper, masking tape, wall scrappers, scraper, putty knife, chisel knife, knotting brush, nail punch, Hammer, dusting brush, dust masks, wire brushes, goggles, filling knife, filling board, Safety helmets, Hand gloves, Safety shoes, Safety harness, Nose mask	T- 02:00 P- 06:00
	3. Various painting and finishing material, and mixing ingredients	<ul style="list-style-type: none"> <li>List the various painting and finishing material and mixing ingredients such as scrape, primer, base colour, tint base, colorants, varnishes, enamel and other painting ingredients.</li> <li>List the various adhesives used binding coats of paint such as oil, turpentine, mildew remover or other preparations.</li> </ul>				T- 02:00 P- 06:00
	4. Mixing and dilution of paints	<ul style="list-style-type: none"> <li>Describe the standard procedure used for effective mixing and dilution of paints.</li> <li>Select and mix paint ingredients in correct proportion following specifications and as per requirement.</li> <li>Demonstrate mixing, pouring and dilution of paints and painting material as per specifications/ instructions.</li> </ul>				T- 02:00 P- 06:00
	4. Painting of internal surfaces	<ul style="list-style-type: none"> <li>Describe standard method of painting internal I surfaces.</li> </ul>				T- 02:00 P- 06:00
	5. Painting of external surfaces	<ul style="list-style-type: none"> <li>Describe standard method of painting external surfaces.</li> </ul>				T- 02:00 P- 06:00

		6. Preparation of paint surfaces	<ul style="list-style-type: none"> <li>Demonstrate preparation of paint surfaces as per instructions/ specifications prior to painting works.</li> </ul>				T- 02:00 P- 06:00
		7. Preparation of paints	<ul style="list-style-type: none"> <li>Explain the ratio and proportion of paint and painting additives used for preparation of paint.</li> </ul>				T- 02:00 P- 06:00
		8. Viscosity of painting mix	<ul style="list-style-type: none"> <li>Describe the method used for adjusting viscosity of painting mix.</li> </ul>				T- 02:00 P- 06:00
		9. Application of primer coat	<ul style="list-style-type: none"> <li>Describe the method of application of primer.</li> <li>Demonstrate application of primer coat to the finished surface as per instructions.</li> </ul>				T- 02:00 P- 06:00
		10. Application of main coat and final coat	<ul style="list-style-type: none"> <li>Demonstrate application of main coat and final coat on masonry, wood and metal surfaces as per specifications and instructions.</li> </ul>				T- 04:00 P- 04:00
5	<p>Work effectively in a team to deliver desired results at the work place</p> <p>T- 08:00 P- 24:00 (HH: MM)</p>	<p>1. Time management</p> <p>2. Effective communication</p>	<ul style="list-style-type: none"> <li>Explain effect and benefit of timely actions relevant to construction painting works with examples.</li> </ul>	CON/ N8001 PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, KU1, KU2, KU3, KU4, KU5, KU6, KU7, KU8, KU9	Classroom lecture, games, group participation, group activity, field visit Training Kit- Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop		T- 02:00 P- 06:00

			<ul style="list-style-type: none"> <li>• Explain importance of proper and effective communication and its adverse effects in case of failure of proper communication.</li> <li>• Demonstrate effective communication skills while interacting with co-workers and trade seniors during the assigned task.</li> </ul>				T- 02:00 P- 06:00
		3. Team work and effective reporting	<ul style="list-style-type: none"> <li>• Explain importance of team work and its effects relevant to construction painting works with examples.</li> <li>• Demonstrate team work during assigned task.</li> <li>• Demonstrate effective reporting to seniors as per applicable organisational norms.</li> <li>• Instruct subordinates in a clear and precise manner with respect to construction painting works.</li> </ul>				T- 02:00 P- 06:00
		4. Construction drawings	<ul style="list-style-type: none"> <li>• Interpret work sketches construction painting works formats, permits, protocols, checklists etc.</li> <li>• Interpret scope of construction painting works.</li> </ul>				T- 02:00 P- 06:00
6	<p>Work according to personal health, safety and environment protocol at construction site</p> <p>T- 16:00 P- 32:00 (HH: MM)</p>	1. Workplace hazards	<ul style="list-style-type: none"> <li>• Explain the types of hazards at the construction sites and identify the hazards specific to the domain related works.</li> <li>• Describe the standard procedure for handling, storing and stacking of material, tools, equipment and accessories.</li> </ul>	CON/ N9001 PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, PC9, PC10, PC11, 4	Classroom lecture, games, group participation, group activity, field visit	<p>Training Kit-Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop</p> <p>Tools and Equipment Required: Safety Helmets, Face shield,</p>	T- 03:00 P- 05:00

		2. Use of PPEs and emergency situation	<ul style="list-style-type: none"> <li>• Use PPEs as per work requirements during construction painting job.</li> <li>• Recall the safety control measures and actions to be taken under emergency situation.</li> </ul>	PC12, PC13, PC14, KU1, KU2, KU3, KU4, KU5, KU6, KU7, KU8, KU9, KU10, KU11, KU12, KU1		Overalls, Knee pads, Safety shoes, Safety belts, Safety harness, Safety Gloves, Safety goggles, Particle masks, Ear Plugs, Reflective jackets, Fire Extinguisher, Fire prevention kit, First Aid box, Safety tags, Safety Notice board	T- 03:00 P- 05:00
		3. Reporting and basic ergonomic principles	<ul style="list-style-type: none"> <li>• Explain the reporting procedure to the concerned authority in case of emergency situations.</li> <li>• Explain the types and benefits of basic ergonomic principles, which should be adopted while carrying out specific task at the construction sites.</li> </ul>				T- 03:00 P- 05:00
		4. Fire safety	<ul style="list-style-type: none"> <li>• Explain the classes of fire and types of fire extinguishers.</li> <li>• Demonstrate the operating procedure of the fire extinguishers.</li> </ul>				T- 03:00 P- 05:00
		5. Safety measures at workplace	<ul style="list-style-type: none"> <li>• Explain the importance of housekeeping works.</li> <li>• Demonstrate safe housekeeping practices.</li> <li>• Explain the importance of participation of workers in safety drills.</li> <li>• Explain the purpose and importance of vertigo test at construction site.</li> </ul>				T- 03:00 P- 05:00

		6. Medical tests and waste disposals	<ul style="list-style-type: none"> <li>List out basic medical tests required for working at construction site.</li> <li>Demonstrate vertigo test.</li> <li>Demonstrate different methods involved in providing First aid to the affected person</li> <li>Demonstrate safe waste disposal practices followed at construction site.</li> <li>Explain different types of waste at construction sites and their disposal method.</li> </ul>				T- 01:00 P- 07:00
7.	Employability Skills (30 hours)	1. Introduction to Employability Skills	<ul style="list-style-type: none"> <li>Describe the importance of Employability Skills</li> <li>Prepare a note on different industries, trends, required skills</li> </ul>	DGT/VSQ/N0101	Classroom lecture, discussion, Demonstration, practical, Team Activity: Role play, video session	Training Kit-Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop	T- 01:00
		2. Constitutional values - Citizenship	<ul style="list-style-type: none"> <li>Detail the principles of the Constitution of India</li> <li>Identify the various environmentally sustainable practices</li> </ul>	DGT/VSQ/N0101			T- 01:00
		3. Becoming a Professional in the 21st Century	<ul style="list-style-type: none"> <li>Discuss relevant 21st century skills required for employment.</li> <li>Practice critical thinking and decision making skill</li> </ul>	DGT/VSQ/N0101			T- 01:00
		4. Basic English Skills	<ul style="list-style-type: none"> <li>Read English text with appropriate articulation.</li> <li>Practice English words, sentences and punctuation.</li> </ul>	DGT/VSQ/N0101			T- 02:00
		5. Communication Skills	<ul style="list-style-type: none"> <li>Explain the importance of communication at workplace.</li> <li>Demonstrate effective communication strategies</li> <li>Demonstrate how to communicate effectively using verbal and nonverbal communication</li> </ul>	DGT/VSQ/N0101			T- 04:00

	6. Diversity & Inclusion	<ul style="list-style-type: none"> <li>• Explain the need of diversity at workplace</li> <li>• Identify the various PwD policies applicable at workplace</li> <li>• Discuss the significance of PSH Act</li> </ul>	DGT/ VSQ/ N0101			T- 01:00
	7. Financial and Legal Literacy	<ul style="list-style-type: none"> <li>• Discuss various financial institution, products and services</li> <li>• Explain the common component of salary such as Basic, PF, Allowances (HRA, TA, DA, etc.), Tax</li> </ul>	DGT/ VSQ/ N0101			T- 04:00
	8. Essential Digital Skills	<ul style="list-style-type: none"> <li>• Detail the use and features of various MS Office tools, like MS Word, MS Excel, MS PowerPoint, etc.</li> <li>• Demonstrate how to operate digital devices</li> <li>• Create an email id and follow e- mail etiquette to exchange e -mails</li> <li>• Describe the role of digital technology in day-to- day life and the workplace</li> </ul>	DGT/ VSQ/ N0101			T- 03:00
	9. Entrepreneurship	<ul style="list-style-type: none"> <li>• Describe the types of entrepreneurship and enterprises</li> <li>• Describe the 4Ps of Marketing- Product, Price, Place and Promotion and apply them as per requirement</li> </ul>	DGT/ VSQ/ N0101			T- 07:00
	10. Customer Service	<ul style="list-style-type: none"> <li>• Identify types of customers and how to deal with them</li> <li>• Identify methods to get customer feedback and how to implement them</li> <li>• Explain various tools used to collect customer feedback</li> <li>• Discuss the significance of maintaining hygiene and dressing appropriately</li> </ul>	DGT/ VSQ/ N0101			T- 04:00

		11. Apprenticeships and Jobs	<ul style="list-style-type: none"> <li>Practice personal grooming strategies</li> <li>Illustrate the use of online platforms for job hunting</li> <li>Detail the concept of Apprenticeship</li> <li>Demonstrate how to enroll for Apprenticeship programs.</li> <li>Draft a professional Curriculum Vitae (CV)</li> <li>Role play a mock interview</li> </ul>	DGT/ VSQ/ N0101			T- 02:00
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**Option 1: Varnishing and Polishing**

8	Carry out varnishing and polishing of doors, window partitions and other wooden surfaces under supervision	1. Surface preparation of wooden surfaces	<ul style="list-style-type: none"> <li>Explain surface preparation method adopted for wooden surfaces.</li> <li>Demonstrate preparation of wooden surface using standard surface preparation methods prior to painting.</li> </ul>	CON/ N0504 PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, PC9, PC10, PC11, PC12, PC13, PC14, KU1, KU2, KU3, KU4, KU5, KU6, KU7,	Classroom lecture, games, group participation, group activity, field visit	Training Kit-Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop Tools and Equipment Required: Measuring tape/rule, Ladder, Water level tube, Spirit level, Plumb bob, Rollers, Brushes, paint bucket, sponges, dusting brush, tack rags, paint stirrers, sand paper, masking tape, wall scrappers, scraper, putty knife, chisel knife, knotting brush, nail punch, Hammer, dusting brush, dust masks, wire brushes, gog	T- 02:00 P- 06:00
		2. Primer coating on wooden surfaces	<ul style="list-style-type: none"> <li>Describe the method of application of primer.</li> <li>Demonstrate application of primer coat to the finished wooden surface as per instructions.</li> </ul>				T- 02:00 P- 06:00
		3. Tools and equipment	<ul style="list-style-type: none"> <li>List the various adhesives used in binding coats of paint such as oil, turpentine, mildew remover or other preparations.</li> <li>List various tools and equipment used in painting such as brushes, rollers, painting bucket, stirrers, scrapers, sand papers, putty blades and other painting tools.</li> </ul>				T- 02:00 P- 06:00



		4. Mixing and diluting	<ul style="list-style-type: none"> <li>• Explain the ratio and proportion of paint and painting additives used for preparation of paint.</li> <li>• Describe the method used for adjusting viscosity of paint mix.</li> <li>• Describe the standard procedure used for effective mixing and dilution of paints.</li> </ul>			gles, filling knife, filling board, Safety helmets, Hand gloves, Safety shoes, Safety harness, Nose mask	T- 02:00 P- 06:00
		5. Application of bleach on wooden surfaces	<ul style="list-style-type: none"> <li>• Explain the importance of applying bleaching agents on wood surface.</li> </ul>				T- 02:00 P- 06:00
		6. Types of varnishes and wood polish	<ul style="list-style-type: none"> <li>• List different types of varnishes, polishes pigments and mixtures used in wood polishing.</li> </ul>				T- 02:00 P- 06:00
		7. Application of different types of varnishing and polishing	<ul style="list-style-type: none"> <li>• Explain methodology involved in application of different types of varnishing and polishing of doors, window partitions and other wooden surfaces.</li> </ul>				T- 02:00 P- 06:00
		8. Sanding	<ul style="list-style-type: none"> <li>• Demonstrate sanding of surface using appropriate tools as per instructions, for application of next coat.</li> </ul>				T- 02:00 P- 06:00
		9. Application of main coat and final coat on wood surfaces	<ul style="list-style-type: none"> <li>• Demonstrate application of main coat and final coat on wood surfaces as per required finish and specification.</li> </ul>				T- 02:00 P- 06:00

## Annexure II- Assessment Criteria

### CRITERIA FOR ASSESSMENT OF TRAINEES

For updated Assessment criteria please refer to Qualification Pack of this Job role available at <https://www.nqr.gov.in/>

Assessment Criteria for CSDCI- Assistant Construction Painter & Decorator	
Job Role	Assistant Construction Painter & Decorator
Qualification Pack	CON/Q0502
Sector Skill Council	Construction







S. No.	Guidelines for Assessment
1.	Criteria for assessment for each Qualification File will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2.	The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3.	Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective / option NOS/set of NOS
4.	Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below)
5.	Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criterion
6.	To pass a QP, a trainee should score an average of 70% across generic NOS' and a minimum of 70% for each technical NOS
7.	In case of unsuccessful completion, the trainee may seek reassessment on the Qualification File.

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
CON/N0502.Carry out preparation of all type of basic surfaces for painting works	30	70	-	-	100	25
CON/N0101.Erect and dismantle temporary scaffold up to 3.6 meter height	30	70	-	-	100	10
CON/N0503.Apply paints to masonry, metal and wood surfaces for obtaining plain finishes	30	70	-	-	100	35
CON/N8001.Work effectively in a team to deliver desired results at the workplace	30	70	-	-	100	10








CON/N9001.Work according to personal health, safety and environment protocol at construction site	30	70	-	-	100	10
DGT/VSQ/N0101- Employability Skills (30 Hours)	20	30	-	-	50	10
<b>Total</b>	<b>130</b>	<b>235</b>	<b>-</b>	<b>35</b>	<b>400</b>	<b>100</b>

## Annexure-2

## Annexure of QR Codes for Assistant Construction Painter and Decorator

Chapter Name	Unit Name	Topic Name	URL	QR Code
Chapter 1: Role and Responsibilities of an Assistant Construction Painter & Decorator”	Unit 1.1: Introduction to Construction Industry	Construction Industry	<a href="https://youtu.be/nndLyZrGfWc">https://youtu.be/nndLyZrGfWc</a>	 Construction Industry
		Types of Construction	<a href="https://youtu.be/1WVzo2UFyo8">https://youtu.be/1WVzo2UFyo8</a>	 Types of Construction
	Unit 1.2: Role and Responsibilities of an Assistant Construction Painter & Decorator	Role and Responsibilities of an Assistant Construction Painter & Decorator	<a href="https://youtu.be/WClgELOFv2E">https://youtu.be/WClgELOFv2E</a>	 Role and Responsibilities of an Assistant Construction Painter & Decorator
Chapter 2: Preparation of Basic Surface for Painting Works	Unit 2.1: Introduction to Surface Preparation	Surface Preparation	<a href="https://youtu.be/24jZ03d1jxg">https://youtu.be/24jZ03d1jxg</a>	 Surface Preparation
		Purpose of Surface Preparation	<a href="https://youtu.be/0Q2fk5YrS6l">https://youtu.be/0Q2fk5YrS6l</a>	 Purpose of Surface Preparation
		Types of Abrasives required for Surface Preparation	<a href="https://youtu.be/RR-J-n-6k">https://youtu.be/RR-J-n-6k</a>	 Types of Abrasives required for Surface Preparation

Chapter Name	Unit Name	Topic Name	URL	QR Code
	Unit 2.2 Methods of Surface preparation	Surface Preparation for Masonry Work	<a href="https://youtu.be/HhydIbOdj8I">https://youtu.be/HhydIbOdj8I</a>	 Surface Preparation for Masonry Work
Chapter 3: Erect and Dismantle Scaffold	Unit 3.1: Erect and Dismantle Scaffold	Scaffolding	<a href="https://youtu.be/96shGh3rfXw">https://youtu.be/96shGh3rfXw</a>	 Scaffolding
		Uses of Scaffold	<a href="https://youtu.be/5Vj-MosphpY">https://youtu.be/5Vj-MosphpY</a>	 Uses of Scaffold
		Scaffolding ErLection and Dismantle	<a href="https://youtu.be/OKawvyUhUkA">https://youtu.be/OKawvyUhUkA</a>	 Scaffolding Erection and Dismantle
		Safety Checks	<a href="https://youtu.be/AoDWOZE8Wb4">https://youtu.be/AoDWOZE8Wb4</a>	 Safety Checks

Chapter Name	Unit Name	Topic Name	URL	QR Code
Chapter 4: Application of Paints to Different Surface	Unit 4.1: Basics of Paints	Paints	<a href="https://youtu.be/AucnsOoJPKc">https://youtu.be/AucnsOoJPKc</a>	 Paints
		Types of Paints	<a href="https://youtu.be/9i1a80ZHwQ4">https://youtu.be/9i1a80ZHwQ4</a>	 Types of Paints
		Tools required for Application of Paints	<a href="https://youtu.be/Je3cSDj55cg">https://youtu.be/Je3cSDj55cg</a>	 Tools required for Application of Paints
		Adhesives used for Binding Coats of Paint	<a href="https://youtu.be/g2K6PXxyB4">https://youtu.be/g2K6PXxyB4</a>	 Adhesives used for Binding Coats of Paint
	Unit 4.2: Application of Paints to Different Surfaces	Process for Interior Wall Painting	<a href="https://youtu.be/zvbiV1XBh4">https://youtu.be/zvbiV1XBh4</a>	 Process for Interior Wall Painting
		Process for Exterior Wall Painting	<a href="https://youtu.be/ox8dFf_BBmA">https://youtu.be/ox8dFf_BBmA</a>	 Process for Exterior Wall Painting
		Building Finishes	<a href="https://youtu.be/9UTzlyfkAaA">https://youtu.be/9UTzlyfkAaA</a>	 Building Finishes





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