



COMPETENCY STANDARD FOR Painting for Construction

(Construction Industry Skills Councils)

Level: 2

Competency Standard Code: CSCS0001L2V1

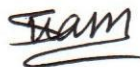
এনএসডিএ এর কার্যনির্বাহী কমিটির
২২/০২/২১ তারিখে অনুষ্ঠিত ৫৯ নম্বর অনুমোদিত

National Skills Development Authority
Prime Minister's Office, Bangladesh


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Introduction

The National Skills Development Authority (NSDA) aims to enhance an individual's employability by certifying completeness with skills. NSDA works to expand the skilling capacity of identified public and private training providers qualitatively and quantitatively. It also aims to establish and operationalize a responsive skill ecosystem and delivery mechanism through a combination of well-defined set of mechanisms and necessary technical supports.

Key priority economic growth sectors identified by the government have been targeted by NSDA to improve current job skills along with existing workforce to ensure required skills to industry standards. Training providers are encouraged and supported to work with industry to address identified skills and knowledge to enable industry growth and increased employment through the provision of market responsive inclusive skills training program. "**Painting for Construction**" is selected as one of the priority occupations of **Construction** Sector. This standard is developed to adopt a demand driven approach to training with effective inputs from Industry Skills Councils (ISC's), employer associations and employers.

Generally, a competency standard informs curriculum, learning materials, assessment and certification of trainees enrolled in TVET. Trainees who successfully pass the assessment will receive a qualification in the National Technical and Vocational Qualification Framework (NTVQF) and will be listed on the NSDA's online portal.

This competency standard is developed to improve skills and knowledge in accordance with the job roles, duties and tasks of the occupation and ensure that the required skills and knowledge are aligned to industry requirements. A series of stakeholder consultations, workshops were held to develop this document.

The document also details the format, sequencing, wording and layout of the Competency Standard for an occupation which is comprised of Units of Competence and its corresponding Elements.


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Overview

A **competency standard** is a written specification of the knowledge, skills and attitudes required for the performance of an occupation, trade or job corresponding to the industry standard of performance required in the workplace.

The purpose of a competency standards is to:

- provide a consistent and reliable set of components for training, recognising and assessing people's skills, and may also have optional support materials
- enable industry recognised qualifications to be awarded through direct assessment of workplace competencies
- encourage the development and delivery of flexible training which suits individual and industry requirements
- encourage learning and assessment in a work-related environment which leads to verifiable workplace outcomes

Competency standards are developed by a working group comprised of representative from NSDA, Key Institutions, ISC, and industry experts to identify the competencies required of an occupation in **Construction sector**.

Competency standards describe the skills, knowledge and attitude needed to perform effectively in the workplace. CS acknowledge that people can achieve technical and vocational competency in many ways by emphasizing what the learner can do, not how or where they learned to do it.

With competency standards, training and assessment may be conducted at the workplace or at training institute or any combination of these.

Competency standards consist of a number of units of competency. A unit of competency describes a distinct work activity that would normally be undertaken by one person in accordance with industry standards.

Units of competency are documented in a standard format that comprises of:

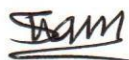
- unit title
- nominal duration
- unit code
- unit descriptor
- elements and performance criteria
- variables and range statement
- curricular content guide
- assessment evidence guide

Together, all the parts of a unit of competency:

- describe a work activity
- guide the assessor to determine whether the candidate is competent or not yet competent

The ensuing sections of this document comprise of a description of the relevant occupation, trade or job with all the key components of a unit of competency, including:

- a chart with an overview of all Units of Competency for the relevant occupation, trade or job including the Unit Codes and the Unit of Competency titles and corresponding Elements
- the Competency Standard that includes the Unit of Competency, Unit Descriptor, Elements and Performance Criteria, Range of Variables, Curricular Content Guide and Assessment Evidence Guide.



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Competency Standards for Painting for Construction, Level-2

NTVQF with Job Classifications

NTVQF LEVELS	EDUCATION SECTORS			Job Classification
	Pre-Vocation Education	Vocational Education	Technical Education	
NTVQF 6			Diploma in engineering or equivalent	Middle Level Manager /Sub Assistant Engr. etc.
NTVQF 5		National Skill Certificate 5 (NSC 5)		Highly Skilled Worker / Supervisor
NTVQF 4		National Skill Certificate 4 (NSC 4)		Skilled Worker
NTVQF 3		National Skill Certificate 3 (NSC 3)		Semi-Skilled Worker
NTVQF 2		National Skill Certificate 2 (NSC 2)		Basic Skilled Worker
NTVQF 1		National Skill Certificate 1 (NSC 1)		Basic Worker
Pre-Voc 2	National Pre-Vocation Certificate 2 (NPVC 2)			Pre-Vocation Trainee
Pre-Voc 1	National Pre-Vocation Certificate 1 (NPVC 1)			Pre-Vocation Trainee


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NTVQF Level Descriptors

NTVQF Level	Knowledge	Skill	Responsibility	Job Class.
6	<ul style="list-style-type: none"> Comprehensive actual and theoretical knowledge within a specific study area with an awareness of the limits of that knowledge 	<ul style="list-style-type: none"> Specialised and restricted range of cognitive and practical skills required to provide leadership in the development of creative solutions to defined problems 	<ul style="list-style-type: none"> Mange a team or teams in workplace activities where there is unpredictable change Identify and design learning programs to develop performance of team members 	Supervisor / Middle Level Manager / Sub Assistant Engr. etc.
5	<ul style="list-style-type: none"> Very broad knowledge of the underlying, concepts, principles, and processes in a specific study area 	<ul style="list-style-type: none"> Very broad range of cognitive and practical skills required to generate solutions to specific problems in one or more study areas. 	<ul style="list-style-type: none"> Take overall responsibility for completion of tasks in work or study Apply past experiences in solving similar problems 	Highly Skilled Worker / Supervisor
4	<ul style="list-style-type: none"> Broad knowledge of the underlying, concepts, principles, and processes in a specific study area 	<ul style="list-style-type: none"> Range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying the full range of methods, tools, materials and information 	<ul style="list-style-type: none"> Take responsibility, within reason, for completion of tasks in work or study Apply past experiences in solving similar problems 	Skilled Worker
3	<ul style="list-style-type: none"> Moderately broad knowledge in a specific study area. 	<ul style="list-style-type: none"> Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools 	<ul style="list-style-type: none"> Work or study under supervision with some autonomy 	Semi-Skilled Worker
2	<ul style="list-style-type: none"> Basic underpinning knowledge in a specific study area. 	<ul style="list-style-type: none"> Basic skills required to carry out simple tasks 	<ul style="list-style-type: none"> Work or study under indirect supervision in a structured context 	Basic Skilled Worker
1	<ul style="list-style-type: none"> Elementary understanding of the underpinning knowledge in a specific study area. 	<ul style="list-style-type: none"> Limited range of skills required to carry out simple tasks 	<ul style="list-style-type: none"> Work or study under direct supervision in a structured context 	Basic Worker
Pre-Voc 2	<ul style="list-style-type: none"> Limited general knowledge 	<ul style="list-style-type: none"> Very limited range of skills and use of tools required to carry out simple tasks 	<ul style="list-style-type: none"> Work or study under direct supervision in a well-defined, structured context. 	Pre-Vocation Trainee
Pre-Voc 1	<ul style="list-style-type: none"> Extremely limited general knowledge 	<ul style="list-style-type: none"> Minimal range of skills required to carry out simple tasks 	<ul style="list-style-type: none"> Simple work or study exercises, under direct supervision in a clear, well defined structured context 	Pre-Vocation Trainee



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List of Abbreviations

NSDA - National Skills Development Authority

CS - Competency Standard

ILO - International Labor Organization

ISC - Industry Skills Council

NPVC - National Pre-Vocation Certificate

NTVQF - National Technical and Vocational Qualifications Framework

SCVC - Standards and Curriculum Validation Committee

TVET - Technical Vocational Education and Training

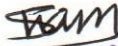
UoC - Unit of Competency

STP – Skills Training Provider

OSH – Occupational Safety and Health

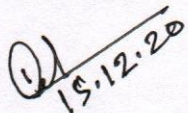
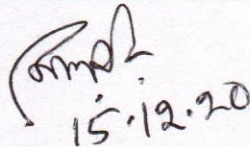
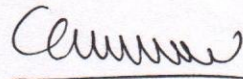
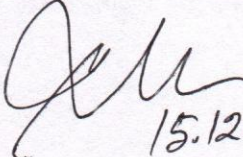
PPE – Personal Protective Equipment

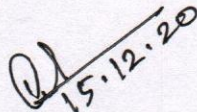
SOP – Standard Operating Procedures


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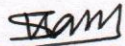
Approval of Competency Standard

Members of the Approval Committee:

Member	Signature
Dulal Krishna Saha Executive Chairman (Secretary) National Skills Development Authority (NSDA)	 15.12.20
Mohammad Rezaul Karim Member (Skills Standard & Certification) Additional Secretary National Skills Development Authority (NSDA)	 15.12.20
Md. Nurul Amin Member (Admin & Finance) Joint Secretary National Skills Development Authority (NSDA)	 15.12.20
Alif Rudaba Member (Planning & Research) and Member (Coordination & Evaluation) Joint Secretary National Skills Development Authority (NSDA)	 15.12.2020


15.12.20

Dulal Krishna Saha
Executive Chairman (Secretary)
National Skills Development Authority (NSDA)
Date:


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National Competency Standards for Painting for Construction, Level-2

Course Structure

SL	Unit Code and Title		UoC Level	Nominal Hours
Generic Competencies				45
1	GU007L2V1	Apply Real Literacy	2	30
2	GU002L1V1	Apply Occupational Health and Safety (OHS) in Workplace	2	15
Sector Specific Competencies				15
4	SUCS002L2V1	Practice Workplace Cleanliness	2	15
Occupation Specific Competencies				300
9	OUPNT001L2V1	Perform Fundamental Works of Construction Painting	2	30
10	OUPNT002L2V1	Use Tools for Construction Painting	2	50
11	OUPNT003L2V1	Perform Painting on Interior Plaster Surface	2	70
12	OUPNT004L2V1	Perform Painting on Exterior Plaster Surface	2	80
13	OUPNT005L2V1	Perform Painting on Metal Surface	2	70
Total Duration (Hours)				360


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Units & Elements at a glance:

Generic Competencies

Code	Unit of Competency	Elements of Competency	Nominal Hours
GU007L2V1	Apply Real Literacy	<ol style="list-style-type: none">1. Control personal / internal skills.2. Interpret issue-based life skills.3. Apply workplace safety and health rules.4. Maintain decent work environment.5. Develop employability skills.6. Use numeracy and literacy skills.	40
GU002L1V1	Apply Occupational Safety and Health (OSH) in the Workplace	<ol style="list-style-type: none">1. Identify OSH policies and procedures2. Apply personal health and safety practices3. Report Hazards and Risks4. Respond to Emergencies5. Maintain Personal well-being	15
Total Hour			55


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Sector Specific Competencies

Code	Unit of Competency	Elements of Competency	Nominal Hours
SUCS002L2V1	Practice Workplace Cleanliness	<ol style="list-style-type: none">1. Sort to dispose unnecessary items2. Systematize the workplace3. Sweep the workplace4. Standardize activities5. Sustain housekeeping activities	15
Total Hours			15



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Occupation Specific Competencies

Code	Unit of Competency	Elements of Competency	Nominal Hours
OUPNT001L2V1	Perform Fundamental Works of Construction Painting	<ol style="list-style-type: none"> 1. Identify basic building components. 2. Identify materials for Construction painting. 3. Perform basic measurement and calculations. 4. Make scaffolding for painting. 5. Match specific paint colour. 	30
OUPNT002L2V1	Use Tools for Construction Painting	<ol style="list-style-type: none"> 1. Identify tools. 2. Use hand tools. 3. Use power tools. 4. Perform basic preventive maintenance. 5. Maintain workplace and store tools equipment. 	50
OUPNT003L2V1	Perform Painting on Interior Plaster Surface	<ol style="list-style-type: none"> 1. Prepare for works. 2. Prepare surface for painting. 3. Apply interior sealer. 4. Apply wall putty 5. Apply paint on the interior surface 6. Maintain workplace and store tools equipment. 	70
OUPNT004L2V1	Perform Painting on Exterior Plaster Surface	<ol style="list-style-type: none"> 1. Prepare for works. 2. Prepare surface for painting. 3. Apply putty on exterior surface 4. Apply exterior sealer 5. Apply paint on the exterior surface 6. Maintain workplace and store tools equipment. 	80
OUPNT005L2V1	Perform Painting on Metal Surface	<ol style="list-style-type: none"> 1. Prepare for works 2. Prepare surface for painting 3. Apply enamel paint on metal surface 4. Maintain workplace and store tools equipment. 	70
Total Duration (Hours)			300


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Generic Competencies


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Unit code and Title	GU007L2V1: Apply Real Literacy
Nominal Hours	30 Hours
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to apply real literacy. It specifically includes – controlling personal/internal skills, interpreting issue-based life skills, applying workplace safety and health rules, maintaining decent work environment, developing employability skills, using numeracy and literacy skills.
Elements of Competency	Performance Criteria <u>Bold & Underlined</u> terms are elaborated in the Range of Variables Training Components
1. Use numeracy and literacy skills	1.1 Speech and correct speaking techniques are practiced. 1.2 Relevant decent words are chosen and pronounced. 1.3 Basic writing is practiced.
2. Control personal/internal skills	2.1 Self-potential is explained. 2.2 Aim in life and <u>plan</u> are set. 2.3 Good family relationship is explained. 2.4 Saying NO in positive way is practiced. 2.5 Techniques of controlling mental pressure are applied. 2.6 Problems and their solution are interpreted. 2.7 Decision making is interpreted. 2.8 <u>Communication</u> and relationship development techniques are interpreted and applied.
3 Interpret issue-based life skills	3.1 Mass participation and leadership is explained. 3.2 Gender awareness is interpreted. 3.3 Sexual and <u>gender-based violence</u> is interpreted.
4 Apply workplace safety and health rules	4.1 Personal and primary health care techniques are interpreted and applied. 4.2 Personal and occupational safety processes are interpreted and followed. 4.3 Primary and emergency treatment techniques are practiced.
5 Maintain decent work environment	5.1 Discipline and behaviour at workplace is interpreted and followed. 5.2 Techniques of searching job and preparation are interpreted.

6. Develop employability skills	6.1 Interview techniques are interpreted and applied. 6.2 Adopting with workplace environment is interpreted. 6.3 Rights and Responsibilities are explained.
Range of Variables	
Variable	Range (may include but not limited to):
1. Plan	1.1 Short term 1.2 Long term
2. Communication	2.1 Verbal 2.2 Non verbal 2.3 Written
3. Gender based violence	3.1 Rape 3.2 Sexual harassment 3.3 Dowry violence
4. Rights	4.1 Leave 4.2 Working hour 4.3 Benefits 4.4 Employment contract 4.5 Identity card
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency	
1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 said NO at workplace 1.2 applied techniques of controlling mental pressure 1.3 applied workplace safety and health rules 1.4 interpreted techniques of searching job and preparation 1.5 explained rights and responsibilities 1.6 interpreted sexual and gender-based violence
2. Underpinning Knowledge	2.1 Self-potential and aim in life 2.2 Family relationship 2.3 Mental pressure 2.4 Personal and primary health 2.5 Personal and occupational safety 2.6 Interview technique 2.7 Decent words 2.8 Sexual and gender-based violence


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3. Underpinning Skills	3.1 Setting aim in life and plan 3.2 Said NO at workplace 3.3 Applying techniques of controlling mental pressure 3.4 Applying communication and relationship development techniques 3.5 Applying workplace safety and health rules 3.6 Following discipline and behaviour at workplace 3.7 Applying interview techniques 3.8 Interpreting techniques of searching job and preparation 3.9 explaining rights and responsibilities 3.10 interpreting sexual and gender-based violence
4. Underpinning Attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource Implications	The following resources must be provided: 5.1 Tools, equipment and physical facilities appropriate to perform activities 5.2 Materials, consumables to perform activities
6. Methods of Assessment	6.1 Written Test 6.2 Demonstration 6.3 Oral Questioning 6.4 Portfolio
7. Context of Assessment	7.1 Competency assessment must be done in NSDA Accredited Assessment center 7.2 Assessment should be done by NSDA certified/ nominated assessor

Accreditation Requirements

Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.


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Unit Code and Title	GU002L2V1: Apply Occupational Safety and Health (OSH) in the Workplace
Unit Descriptor	This unit covers the knowledge, skills and attitudes (KSA) required in carrying out occupational and safety practices in the workplace. It includes the following: identifying OHS policies and procedures, applying personal health and safety practices, reporting hazards and risks, responding to emergencies and maintaining personal well-being.
Nominal Hours	15 Hours
Elements of Competency	Performance Criteria <u>Bold & Underlined</u> terms are elaborated in the Range of Variables
1. Identify OHS policies and procedures.	<p>1.1. <u>OHS policies</u> and <u>safe operating procedures</u> are accessed, clarified if necessary and followed.</p> <p>1.2. <u>Safety signs and symbols</u> are identified and followed</p> <p>1.3. Emergency response, evacuation procedures and other contingency measures are determined according to workplace requirements.</p> <p>1.4. Workplace safety conditions are regularly reported to designated authority.</p>
2. Apply personal health and safety practices	<p>2.1 <u>Personal protective equipment (PPE)</u> and appropriate clothing are worn correctly and stored after use.</p> <p>2.2 A clear and tidy workplace is maintained.</p> <p>2.3 OHS equipment are maintained to keep them operational and compliant with OHS regulations.</p>
3. Report hazards and risks.	<p>3.1 <u>Hazards</u> and risks are identified, assessed and controlled.</p> <p>3.2 Terms of tolerable limits are identified based on threshold limit values (TLV)</p> <p>3.3 Incidents arising from hazards and risks are reported to designated authority</p> <p>3.4 Details of incidents are recorded accurately and clearly.</p>
4. Respond to emergencies	<p>4.1 Alarms and warning devices are responded to.</p> <p>4.2 Workplace <u>emergency procedures</u> are followed.</p> <p>4.3 Emergency response plans and procedures are implemented.</p>


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5. Maintain personal well-being	<p>5.1 OHS policies and procedures are adhered to.</p> <p>5.2 OHS awareness programs are participated in as per workplace guidelines and procedures.</p> <p>5.3 Corrective actions are implemented to correct unsafe condition in the workplace</p> <p>5.4 <u>"Fit to work" records</u> are updated and maintained according to workplace requirements</p>
Range of Variables	
Variables	Range (may include but not limited to):
1. OHS Policies and Procedures	<p>1.1. Bangladesh standards for OHS</p> <p>1.2. Construction Code</p> <p>1.3. Fire Safety Rules and Regulations</p> <p>1.4. Code of Practice</p> <p>1.5. Industry Guidelines</p>
2. Safe Operating Procedures	<p>2.1 Orientation on emergency exits, fire extinguishers, fire escape, etc.</p> <p>2.2 Emergency procedures</p> <p>2.3 First Aid procedures</p> <p>2.4 Tagging procedures</p> <p>2.5 Use of PPE</p> <p>2.6 Safety procedures for hazardous substances</p>
3. Safety Signs and symbols	<p>3.1 Direction signs (exit, emergency exit, etc.)</p> <p>3.2 First aid signs</p> <p>3.3 Danger Tags</p> <p>3.4 Hazard signs</p> <p>3.5 Safety tags</p> <p>3.6 Warning signs</p>
4. Personal Protective Equipment (PPE)	<p>4.1 Gas Mask</p> <p>4.2 Gloves</p> <p>4.3 Safety boots</p> <p>4.4 Helmet</p> <p>4.5 Face mask</p> <p>4.6 Overalls</p> <p>4.7 Goggles and safety glasses</p> <p>4.8 Ear plugs</p> <p>4.9 Sun block</p> <p>4.10 Chemical/Gas detectors</p>
5. Hazards	<p>5.1 Chemical hazards</p> <p>5.2 Biological hazards</p> <p>5.3 Physical Hazards</p>
6. Emergency Procedures	<p>6.1 Fire fighting</p> <p>6.2 Medical and first aid</p> <p>6.3 evacuation</p>
7. "Fit to Work" records	<p>7.1 Medical Certificate every year</p> <p>7.2 Accident reports, if any</p>

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency

1. Critical aspects of competency	Assessment required evidence that the candidate: 1.1 demonstrated knowledge in practicing occupational health and safety in the workplace. 1.2 satisfying the requirements mentioned in the performance Criteria and Range of Variables
2. Underpinning knowledge	2.1 OHS Workplace Policies and Procedures 2.2 Work Safety Procedures 2.3 Emergency Procedures 2.4 Types of Hazards (Biological, Chemical and Physical) and Their Effects 2.5 PPE types and uses 2.6 Personal Hygiene Practices 2.7 OHS Awareness
3. Underpinning skills	3.1 Identifying OHS policies and procedures 3.2 Following personal work safety practices 3.3 Reporting hazards and risks 3.4 Responding to emergency procedures 3.5 Maintaining physical well-being in the workplace
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Sincere and honest to duties 4.3 Promptness in carrying out activities 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect of peers and seniors in workplace 4.8 Communicate with peers and seniors in workplace
5. Resource implications	The following resources must be provided: 5.1 Workplace 5.2 Equipment and outfits appropriate in applying safety measures 5.3 Tools, materials and documentation required 5.4 OHS Policies and Procedures
6. Methods of assessment	6.1 Written Test 6.2 Demonstration 6.3 Oral Questioning 6.4 Portfolio


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7. Context of assessment	7.1 Competency assessment must be done in NSDA Accredited Assessment center 7.2 Assessment should be done by NSDA certified/ nominated assessor
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Sector Specific Competencies


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Unit Code and Title	SUCS002L2V1: Practice Workplace Cleanliness
Nominal Hours	15 Hours
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to practice workplace cleanliness. It specifically includes – sorting to dispose unnecessary items; systematizing the workplace; sweeping the workplace; standardizing activities; and sustaining housekeeping activities.
Elements of Competency	Performance Criteria <u>Bold and Underlined</u> terms are elaborated in the Range of Variables.
1. Sort to dispose unnecessary items	1.1 Items in the workplace are identified and differentiated into necessary and unnecessary. 1.2 <u>Unnecessary items</u> are removed and disposed in accordance with housekeeping procedures. 1.3 Inventory of necessary items are updated and maintained.
2. Systematize the workplace	2.1 Necessary items are supplied with identification marks and arranged in order based on housekeeping procedures. 2.2 The best location to place the necessary items is identified. 2.3 Necessary items are regularly checked in their assigned location.
3. Sweep the workplace	3.1 Workplace is kept neat, clean and tidy before, during and after work hours. 3.2 Tools and equipment are kept clean according to housekeeping procedures. 3.3 <u>Minor repairs</u> are done to tools and equipment, when necessary. 3.4 Defective tools and equipment are reported to proper authority.
4. Standardize activities	4.1 Workplace activities are done based on standard operating procedures. 4.2 Workplace <u>decorum</u> is maintained. 4.3 Accidents are reported to proper authority immediately. 4.4 Work is performed according to OSH procedures.
5. Sustain housekeeping activities	5.1 <u>5S</u> procedure is implemented. 5.2 Bottlenecks are identified, improvements are recommended, and actions are taken.

Range of Variables	
Variables	Range (may include but not limited to):
1. Unnecessary items	1.1 Waste materials 1.2 Papers and other printed materials not related to work activities 1.3 Damaged tools and equipment 1.4 Non-recyclable materials
2. Minor repairs	2.1 Sharpening of tools 2.2 Tightening of nuts, bolts and screws 2.3 Replacing of parts 2.4 Application of oil and lubricants
3. Decorum	3.1 Workplace rules and regulations 3.2 Workplace Code of Ethics
4. 5S	A system of work developed in Japan for housekeeping purposes. It consists of: 4.1 Seri (Sort) 4.2 Seiton (Straighten) 4.3 Seiso (Shine) 4.4 Seiketsu (Standardize) 4.5 Shitsuke (Sustain)
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspects of competency	Assessment required evidence that the candidate: 1.1 evidence of routine practice of 5S in the workplace. 1.2 satisfying the requirements mentioned in the performance criteria and range of variables.
2. Underpinning knowledge	2.1 Meaning and Application of 5S. 2.2 Purposes of 5S. 2.3 Methods of Identifying Weaknesses and Recommending Improvements. 2.4 Principles of efficient workplace.
3. Underpinning skills	3.1 Communicating 3.2 Planning 3.3 Organizing 3.4 Prioritizing 3.5 Recording 3.6 Problem Solving

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4. Underpinning attitudes	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Eagerness to learn 4.5 Tidiness and timeliness 4.6 Environmental concerns 4.7 Respect for rights of peers and seniors at workplace 4.8 Communication with peers and seniors at workplace
5. Resource implications	The following resources must be provided: 5.1. workplace (actual or simulated) 5.2. tools and equipment required to perform activities 5.3. materials consumable to perform activities.
6. Methods of assessment	6.1 Written Test 6.2 Demonstration 6.3 Oral Questioning 6.4 Portfolio
7. Context of assessment	7.1 Competency assessment must be done in NSDA Accredited Assessment center 7.2 Assessment should be done by NSDA certified/ nominated assessor

Accreditation Requirements

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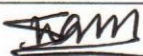

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Occupation Specific Competencies




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Unit Code and Title	OUPNT001L2V1: Perform Fundamental Works of Painting for Construction
Nominal Hours	30 Hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to Perform fundamental works of Construction painting. It includes identifying basic building components, identifying materials for Construction painting, performing basic measurement and calculations, making scaffolding for painting and matching specific paint color.
Elements of Competency	Performance Criteria <u>Bold and Underlined</u> terms are elaborated in the Range of Variables.
1. Identify basic building components.	1.1. <u>Personal Protective Equipment (PPE)</u> are worn as per job requirement. 1.2. <u>Main Building components</u> are identified from a model building structure. 1.3. The functions of the main building components are interpreted. 1.4. Name of main building components is listed.
2. Identify materials for Construction Painting.	2.1 <u>Types of primer</u> are identified. 2.2 <u>Types of paint</u> are identified. 2.3 Paints are selected according to surface. 2.4 Basic of color are explained. 2.5 <u>Materials for plaster surface</u> are identified. 2.6 <u>Materials for wooden surface</u> are identified. 2.7 <u>Materials for metal painting</u> are identified. 2.8 Name of materials required for Construction painting works is listed.
3. Perform basic measurement and calculations	3.1 Measuring units to be used are determined as per workplace requirement. 3.2 Appropriate <u>measuring instruments</u> are selected as per requirement. 3.3 <u>Calculations</u> are performed using appropriate techniques.
4. Make scaffolding for painting	4.1 Types of <u>scaffolding</u> are identified according to the building structure. 4.2 <u>Scaffolding Materials</u> is identified and selected as per job requirements. 4.3 Materials are prepared for making <u>wooden scaffolding components</u> as per job requirement. 4.4 Workplace access and way out routes for assembling scaffolding are identified.


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	<p>4.5 Scaffolding components are erected in accordance with work requirements and workplace rules and regulations.</p> <p>4.6 Installation of scaffolding is carried out in accordance with <u>OSH requirements</u>.</p> <p>4.7 Scaffolding joints and components are checked as per job requirement.</p>
5. Match specific paint color	<p>5.1 Paints are identified and prepared as per job requirements.</p> <p>5.2 Safety precautions are observed during preparation of paint color.</p> <p>5.3 Mixing ratio of materials are maintained as per requirement.</p> <p>5.4 Paint colors are mixed in specific painting.</p> <p>5.5 <u>Unexpected situations</u> are responded to in line with company rules and regulations.</p>
Range of Variables	
Variables	Range (may include but not limited to):
1. Personal Protective Equipment (PPE)	<p>1.1. Dust mask</p> <p>1.2. Safety glasses/Goggles</p> <p>1.3. Gloves</p> <p>1.4. Harness</p> <p>1.5. Safety belt</p> <p>1.6. Ear plug</p> <p>1.7. Safety shoes/boots</p> <p>1.8. Aprons / Safety jacket</p> <p>1.9. Face masks</p> <p>1.10. Helmet</p>
2. Building components	<p>2.1 Column</p> <p>2.2 Lintel</p> <p>2.3 Sunshade</p> <p>2.4 Beam</p> <p>2.5 Slab</p> <p>2.6 False Slab</p> <p>2.7 Parapet wall</p> <p>2.8 Drop wall</p> <p>2.9 Shear wall</p> <p>2.10 Boundary wall</p> <p>2.11 Ceiling</p> <p>2.12 Wall</p> <p>2.13 Balcony</p>

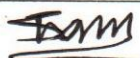
	<ul style="list-style-type: none"> 2.14 Stair 2.15 Roof top 2.16 Overhead water tank 2.17 Parking area 2.18 Door and window 2.19 Bedroom (Master, child, guest etc) 2.20 Washroom / Powder room 2.21 Drawing room / living room 2.22 Foyer 2.23 Dining room
3. Types of primer	<ul style="list-style-type: none"> 3.1. Water based primer for interior <ul style="list-style-type: none"> 3.1.1. Water Sealer 3.1.2. Wall Putty 3.2. Water based primer for exterior <ul style="list-style-type: none"> 3.2.1. Exterior Sealer 3.2.2. Exterior / all-purpose putty 3.3. Oil based primer <ul style="list-style-type: none"> 3.3.1. Anti – corrosive red oxide primer 3.3.2. Plastron sealer / Oil sealer
4. Types of Paint	<ul style="list-style-type: none"> 4.1. Water based paint interior <ul style="list-style-type: none"> 4.1.1. Distemper/Acrylic Distemper/ SPD 4.1.2. Plastic paint/Acrylic Plastic emulsion 4.1.3. Luxury paint/Luxury Silk emulsion 4.2. Water based paint exterior <ul style="list-style-type: none"> 4.2.1. Cement paint 4.2.2. Weather coat / proof / guard paint/Exterior emulsion 4.2.3. Anti-Dirt / dust protective paint 4.3. Oil based paint <ul style="list-style-type: none"> 4.3.1. Synthetic Enamel paint
5. Materials for plaster surface	<ul style="list-style-type: none"> 5.1. Scraper 5.2. Pumice stone (40, 60, 80 & 120) 5.3. Sand paper (80, 120, 150, 240) 5.4. Broom stick 5.5. Flower stick 5.6. Putty knife / Formica 5.7. Duster cloth 5.8. Paint Brush / roller 5.9. Paint mixing pot 5.10. Masking tape 5.11. Polythene


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6. Materials for wooden surface	6.1. Wooden Sand Paper (120, 150, 240 & 320) 6.2. Markin cloth 6.3. Duster cloth 6.4. Paint Brush / roller 6.5. Thinner (T6 / T7 / T8) 6.6. Paint mixing pot 6.7. Masking tape 6.8. Polythene
7. Materials for metal painting	7.1. Emery paper (80, 120) 7.2. Markin cloth 7.3. Duster cloth 7.4. Paint Brush 7.5. Thinner (T6 / T7) 7.6. Paint mixing pot 7.7. Masking tape 7.8. Polythene
8. Measuring instruments	8.1. Measuring cup 8.2. Measuring Tape
9. Calculations	9.1 Area 9.2 Volume
10.Scaffolding	10.1 Wooden scaffolding 10.2 Steel scaffolding 10.3 Bamboo scaffolding 10.4 Suspended scaffolding
11.Scaffolding Materials	11.1 Wood 11.2 Bamboo 11.3 Nail 11.4 Rope
12.Wooden scaffolding components	12.1 Wood bracing 12.2 Wood/ bamboo platform 12.3 Rope 12.4 Nails 12.5 Wood ladder
13.OSH requirements	13.1 Wearing of appropriate PPE 13.2 Disposal of waste materials 13.3 Availability of first aid kit
14.Unexpected situations	14.1 Damaged to materials 14.2 Injury to personnel

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.



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<p>1. Critical aspects of competency</p>	<p>Assessment required evidences that the candidate:</p> <ol style="list-style-type: none"> 1.1 listed the name and functions of main building components 1.2 listed the name of materials required for Construction painting works 1.3 identified types of paint 1.4 performed calculations as per job requirement 1.5 prepared materials for making wooden scaffolding components. 1.6 erected scaffolding components in accordance with OHS requirements.
<p>2. Underpinning knowledge</p>	<ol style="list-style-type: none"> 2.1 Name of main building components. 2.2 Types of surfaces related to painting works. 2.3 Types of paint and their uses 2.4 Types of color and their uses. 2.5 Mixing ratios of different types of color 2.6 Painting materials for plaster surface. 2.7 Painting materials for the wooden surface. 2.8 Painting materials for metal surface. 2.9 OSH requirements for the workplace. 2.10 Name of measuring instruments for paint 2.11 Basic calculations related to paint. 2.12 Types of scaffolding and their uses.
<p>3. Underpinning Skills</p>	<ol style="list-style-type: none"> 3.1 Preparing a list of building components. 3.2 Preparing a list of building painting materials. 3.3 Performing calculations following appropriate methods. 3.4 Preparing materials for making scaffolding components. 3.5 Erecting scaffolding components in accordance with work requirements and workplace rules and regulations.
<p>4. Underpinning attitudes</p>	<ol style="list-style-type: none"> 4.1. Commitment to occupational safety and health. 4.2. Environmental concerns. 4.3. Tidiness and timeliness. 4.4. Respect for the rights of peers and seniors in workplace. 4.5. Eagerness to learn. 4.6. Promptness in carrying out activities. 4.7. Sincere and honest to duties and responsibilities. 4.8. Communication with peers, sub-ordinates and seniors in workplace.



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5. Resource implications	<p>The following resources must be provided:</p> <p>5.1 Workplace location.</p> <p>5.2 Materials are relevant to the proposed activity.</p> <p>5.3 Drawings and specifications are relevant to the task.</p> <p>5.4 Measurement tools are relevant to the proposed activity.</p>
6. Methods of assessment	<p>6.1 Written Test</p> <p>6.2 Demonstration</p> <p>6.3 Oral Questioning</p> <p>6.4 Portfolio</p>
7. Context of assessment	<p>7.1 Competency assessment must be done in NSDA Accredited Assessment center</p> <p>7.2 Assessment should be done by NSDA certified/ nominated assessor</p>

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Unit Code and Title	OUPNT002L2V1: Use Tools for Construction Painting
Nominal Hours	50 Hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to use tools for construction painting. It includes – identifying tools, using hand tools, power tools, performing basic preventive maintenance and maintaining workplace and store tools and equipment.
Elements of Competency	Performance Criteria <u>Bold and Underlined</u> terms are elaborated in the Range of Variables.
1. Identify tools	1.1. <u>Hand tools</u> are identified. 1.2. <u>Power tools</u> are identified. 1.3. Applications of tools are defined.
2. Use hand tools	2.1. OSH are followed and <u>PPE</u> are worn as per job requirement. 2.2. Hand tools are prepared for works according to workplace procedures. 2.3. Proper hand-eye coordination is applied when using hand tools. 2.4. Safety requirements are complied with before, during and after use. 2.5. Unsafe or faulty tools are identified and marked for repair according to workplace procedures.
3. Use power tools	3.1. Power tools are prepared according to manufacturer's instructions. 3.2. Tools are connected to power source following safety procedures. 3.3. Power tools are used following Standard Operating Procedure (SOP).
4. Perform basic preventive maintenance	4.1. Tools are cleaned according to standard procedures. 4.2. Tools are inspected and reported to the supervisor as per workplace procedure. 4.3. Tools are lubricated with appropriate <u>lubricants</u>


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5. Maintain workplace and store tools equipment	5.1. Work area is cleaned in accordance with workplace procedures. 5.2. Tools are cleaned as per manufacturer's recommendation. 5.3. Tools are stored as per workplace procedures.
Range of Variables	
Variable	Range (may include but not limited to):
1. Hand tools	1.1 Paint brushes (1", 3", 4", 5") 1.2 Scraper 1.3 Spatula 1.4 Mixing stick 1.5 Rags 1.6 Putty knife 1.7 Flat screw driver 1.8 Ball pin hammer 1.9 Lifeline and anchorage 1.10 Roller brush 1.11 Steel wire brush 1.12 Jar / Bucket 1.13 Pumice stone 40, 120 1.14 Broom stick / flower stick
2. Power tools	2.1 Dust collector 2.2 Sander machine 2.3 Auto roller 2.4 Multipurpose mixer 2.5 Compressor with spray gun 2.6 Road marking machine
3. Personal protective equipment (PPE)	3.1 Dust mask 3.2 Safety glasses/Goggles 3.3 Gloves 3.4 Harness 3.5 Safety belt 3.6 Safety shoes/boots 3.7 Aprons 3.8 Helmet
4. Lubricants	4.1. Machine oil 4.2. Grease
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical Aspects	Assessment required evidence that the candidate: 1.1. worn PPE as per nature of job 1.2. identified hand tools appropriate to the job 1.3. used hand tools with proper hand-eye coordination 1.4. cleaned and lubricated the tools and equipment 1.5. stored tools following manufacturer's instruction.



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2. Underpinning knowledge	<ul style="list-style-type: none"> 2.1. Definition of tools. 2.2. Functions of different types of tools. 2.3. Types of power source. 2.4. Techniques for using hand tools 2.5. Cleaning technique of tools and workplace.
3. Underpinning skills	<ul style="list-style-type: none"> 3.1. Identifying Appropriate Tools 3.2. Using hand tools appropriate for the job. 3.3. Using following Standard Operating Procedure (SOP) for a specific job. 3.4. Performing basic preventive maintenance of tools and equipment. 3.5. Storing tools as per manufacturer instruction.
4. Underpinning Attitudes	<ul style="list-style-type: none"> 4.1. Commitment to occupational safety and health. 4.2. Environmental concerns. 4.3. Tidiness and timeliness. 4.4. Respect for rights of peers and seniors in workplace. 4.5. Eagerness to learn. 4.6. Promptness in carrying out activities. 4.7. Sincere and honest to duties and responsibilities. 4.8. Communication with peers, sub-ordinates and seniors in workplace.
5. Resource implications	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> 5.1. Workplace location. 5.2. Materials are relevant to the proposed activity. 5.3. Hand tools and power tools to appropriate activity.
6. Methods of assessment	<ul style="list-style-type: none"> 6.1. Written Test 6.2. Demonstration 6.3. Oral Questioning 6.4. Portfolio
7. Context of assessment	<ul style="list-style-type: none"> 7.1. Competency assessment must be done in NSDA Accredited Assessment center 7.2. Assessment should be done by NSDA certified/ nominated assessor

Accreditation Requirements

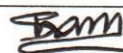
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Unit Code and Title	OUPNT003L2V1: Perform Painting on Interior Plaster Surface
Nominal Hours	70 Hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to perform painting on interior plaster surface. It includes preparing for works, surface for painting, applying interior sealer, applying wall putty, applying paint on the interior surface and maintaining workplace and storing tools and equipment.
Elements of Competency	Performance Criteria <u>Bold and Underlined</u> terms are elaborated in the Range of Variables.
1. Prepare for works	1.1. OSH practices are followed as per job requirement. 1.2. <u>Personal Protective Equipment (PPE)</u> are worn as per nature of the job. 1.3. <u>Tools and equipment</u> are collected as per job requirement. 1.4. <u>Materials</u> are collected as per job requirement.
2. Prepare surface for painting	2.1. <u>Surfaces</u> are inspected to identify <u>Foreign materials</u> as per workplace procedure. 2.2. Surfaces are cleaned thoroughly to make it free from mortar droppings. 2.3. Surfaces are sanded smoothly according to the job requirement. 2.4. Patchworks are performed on <u>surface defects</u> as per requirement.
3. Apply interior sealer	3.1 Materials quantity requirements are calculated as per job requirement. 3.2 Sealer is mixed as per manufacturer's instructions. 3.3 sealer is applied on the prepared surface and allowed to dry as per job requirement. 3.4 Applied sealer is checked as per set <u>standard</u> and rectified if required.


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4. Apply wall putty	<p>4.1. Acrylic wall putty is prepared as per manufacturer's instructions.</p> <p>4.2. Surface defects and undulation are filled with putty as required.</p> <p>4.3. 1st coat of acrylic wall putty is applied as per job requirement.</p> <p>4.4. After applying 1st coat the surface is dried as per standard.</p> <p>4.5. 2nd coat of acrylic wall putty is applied to achieve the required smoothness as per job specification.</p> <p>4.6. Surfaces are sanded smoothly according to the job requirement.</p> <p>4.7. Acrylic wall putty is checked as per set standard and rectified if required.</p>
5. Apply paint on the interior surface	<p>5.1. Paint is selected and collected as per job requirements.</p> <p>5.2. Paint is prepared as per manufactures instructions.</p> <p>5.3. 1st coat is applied on the prepared surface with appropriate tool.</p> <p>5.4. Finishing coat are applied in sequence as per job requirement.</p> <p>5.5. Defects in painting are checked as per set standard and rectified if required.</p>
6. Maintain workplace and store tools equipment	<p>6.1. Work area is cleaned in accordance with workplace procedures.</p> <p>6.2. Unused materials are stored for re-use or disposed following workplace procedures.</p> <p>6.3. Waste and scrap materials are disposed with following workplace procedures.</p> <p>6.4. Tools and equipment's are gathered.</p> <p>6.5. Tools and equipment are cleaned and stored as per manufacturer's recommendation.</p>
Range of Variables	
Variables	Range (may include but not limited to):
1. Personal protective equipment (PPE)	<p>1.1. Dust mask</p> <p>1.2. Safety glasses/Goggles</p> <p>1.3. Gloves</p> <p>1.4. Harness</p> <p>1.5. Safety belt</p> <p>1.6. Safety shoes/boots</p> <p>1.7. Aprons/Safety Jacket</p>



	<p>1.8. Helmet</p> <p>1.9. Ear plug</p>
2. Tools and equipment	<p>2.1 Paint brushes (1", 3", 4", 5")</p> <p>2.2 Scraper</p> <p>2.3 Spatula</p> <p>2.4 Mixing stick / mixture</p> <p>2.5 Putty knife</p> <p>2.6 Roller / auto roller</p> <p>2.7 Steel wire / plastic / taal (plum) brush</p> <p>2.8 Jar / bucket</p> <p>2.9 Sander machine / Vacuum cleaners</p>
3. Materials	<p>3.1 Pumice stone (40, 120)</p> <p>3.2 Sandpaper / Emery paper (80 / 120)</p> <p>3.3 GI wire / Jute rope</p> <p>3.4 Brooms</p> <p>3.5 Markin cloth</p> <p>3.6 Sealer</p> <p>3.7 Putty</p> <p>3.8 Clean water</p> <p>3.9 Top coat (Distemper / Plastic / Easy clean / luxury)</p>
4. Surfaces	<p>4.1 Old/bare plaster surface</p> <p>4.2 New plaster surface</p>
5. Foreign materials	<p>5.1 Substances/Chemicals</p> <p>5.1.1 Grease</p> <p>5.1.2 Oil</p> <p>5.1.3 Alkali / salinity</p> <p>5.1.4 Dust</p> <p>5.1.5 Rust</p> <p>5.1.6 Algae</p> <p>5.1.7 Dampness</p> <p>5.2 Exposed nails, rod, wires</p> <p>5.3 Welding spatters</p>
6. Surface defects	<p>6.1 Scales</p> <p>6.2 Old plaster</p> <p>6.3 Uneven plaster</p> <p>6.4 Moisture</p> <p>6.5 Blistering</p> <p>6.6 Fungus / Algae</p> <p>6.7 Salinity</p> <p>6.8 Dampness</p> <p>6.9 Holes</p>

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	6.10 Minor cracks
7. Standard	7.1 No brush mark is observed 7.2 uniformly applied throughout the respective surfaces
8. Paint	8.1. Distemper/Acrylic Distemper/SPD 8.2. Plastic/Acrylic Plastic Emulsion
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable and consistent to meet the requirements of the current version of the unit of competency.	
1. Critical Aspects	Assessment required evidence that the candidate: <ul style="list-style-type: none"> 1.1 sanded surface to make it free from mortar droppings 1.2 applied coatings of sealer to achieve the required finish 1.3 mixed top coat materials consistently 1.4 applied coating of paint to achieve the required finish.
2. Underpinning knowledge	<ul style="list-style-type: none"> 2.1. Interval between 1st coat and 2nd coat for sealer, putty and painting. 2.2. Classification and use of sand paper. 2.3. Preparation of top coat. 2.4. Required tools and equipment. 2.5. Types of plaster surfaces. 2.6. Surface preparation methods and techniques related to Sealer and distemper/acrylic distemper/SPD paint. 2.7. Foreign materials on surface. 2.8. Types of surface defects. 2.9. Common sizes of paint brush.
3. Underpinning skills	<ul style="list-style-type: none"> 3.1. Performing sanding works on the surfaces. 3.2. Cleaning surfaces with broom to make it dust free. 3.3. Performing patch work on surface defects. 3.4. Filling surface holes with putty as per requirement. 3.5. Applying paints with roller or brush.
4. Underpinning attitudes	<ul style="list-style-type: none"> 4.1. Commitment to occupational safety and health. 4.2. Environmental concerns. 4.3. Tidiness and timeliness. 4.4. Respect for rights of peers and seniors in workplace. 4.5. Eagerness to learn. 4.6. Promptness in carrying out activities. 4.7. Sincere and honest to duties and responsibilities. 4.8. Communication with peers, sub-ordinates and seniors in workplace.


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5. Resource implications	<p>The following resources must be provided:</p> <p>5.1. Tools, equipment and physical facilities appropriate to perform activities.</p> <p>5.2. Materials, consumables to perform activities.</p> <p>5.3. Hand tools and power tools to appropriate activity.</p>
6. Methods of assessment	<p>6.1. Written Test</p> <p>6.2. Demonstration</p> <p>6.3. Oral Questioning</p> <p>6.4. Portfolio</p>
7. Context of assessment	<p>7.1. Competency assessment must be done in NSDA Accredited Assessment center</p> <p>7.2. Assessment should be done by NSDA certified/ nominated assessor</p>
<p>Accreditation Requirements</p> <p>Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p>	


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Unit Code and Title	OUPNT004L2V1: Perform Painting on Exterior Plaster Surface
Nominal Hours	80 Hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to perform painting on exterior plaster surface. It includes preparing for works, surface for painting, applying putty on exterior surface, exterior sealer, painting on the exterior surface and maintaining workplace and storing tools and equipment.
Elements of Competency	Performance Criteria <u>Bold and Underlined</u> terms are elaborated in the Range of Variables.
1. Prepare for works	1.1. OSH practices are followed as per job requirement. 1.2. <u>PPE</u> are worn and per nature of the job. 1.3. <u>Tools and equipment</u> are collected as per job requirement. 1.4. <u>Materials</u> are collected as per job requirement.
2. Prepare surface for painting.	2.1. Scaffolding is laid-out and assembled consistent with the job requirement. 2.2. <u>Surfaces</u> are inspected to identify <u>Foreign materials</u> as per workplace procedure. 2.3. Surfaces are cleaned thoroughly to make it free from mortar droppings. 2.4. Patchworks are performed on <u>Surface defects</u> as per requirement. 2.5. Surface holes are filled with putty / filler material as per requirement. 2.6. Surfaces are sanded smoothly with sandpaper and pumice stone. 2.7. Surfaces are cleaned.
3. Apply putty on exterior surface	3.1. Cement based putty is prepared as per manufacturer's instructions. 3.2. Surfaces are watered as per job requirement. 3.3. Surface defects and undulation are filled with putty as required. 3.4. 1st coat of putty is applied as per job requirement. 3.5. After applying 1st coat the surface is dried as per standard. 3.6. 2nd coat of putty is applied to achieve the required smoothness as per job specification. 3.7. Surfaces are sanded smoothly according to the job requirement.

	3.8. Applied Putty is checked as per set standard and rectified if required.
4. Apply exterior sealer	4.1. Materials quantity requirements are calculated as per job requirement. 4.2. Sealer is mixed as per manufacturer's instructions. 4.3. Sealer is applied on the prepared surface and allowed to dry as per job requirement. 4.4. Applied sealer is checked as per set standard and rectified if required.
5. Apply paint on the exterior surface	5.1. Paint is selected and collected as per job requirements. 5.2. Paint is prepared as per manufactures instructions. 5.3. 1st coat is applied on the prepared surface with appropriate tool. 5.4. Finishing coat are applied in sequence as per job requirement. 5.5. Defects in painting are checked as per set standard and rectified if required.
6. Maintain workplace and store tools equipment	6.1. Work area is cleaned in accordance with workplace procedures. 6.2. Unused materials are stored for re-use or disposed following workplace procedures. 6.3. Waste and scrap materials are disposed with following workplace procedures. 6.4. Tools and equipment's are gathered. 6.5. Tools and equipment are cleaned and stored as per manufacturer's recommendation.

Range of Variables


Variable	Range (may include but not limited to):
1. Personal protective equipment (PPE)	1.1. Dust mask 1.2. Safety glasses/Goggles 1.3. Gloves 1.4. Harness 1.5. Safety belt 1.6. Safety shoes/boots 1.7. Aprons/ Safety Jacket 1.8. Helmet 1.9. Ear plug
2. Tools and equipment	2.1 Paint brushes 2.2 Scaffolding 2.3 Scraper

	<ul style="list-style-type: none"> 2.4 Spatula 2.5 Mixing stick / mixture 2.6 Putty knife 2.7 Iron hook 2.8 Roller / Auto roller / Spray 2.9 Steel wire brush 2.10 Pumice stone (40, 120)
3. Materials	<ul style="list-style-type: none"> 3.1 Weather coat / weather proof / Weather guard 3.2 Cement paint 3.3 Sandpaper / Emery paper (80 / 120) 3.4 Hose pipe 3.5 Jar / bucket 3.6 GI wire / Jute rope 3.7 Broom stick / flower stick 3.8 Markin cloth 3.9 Exterior putty/All Purpose Putty 3.10 Exterior Sealer 3.11 Clean water 3.12 Pumice stone (40, 120)
4. Surfaces	<ul style="list-style-type: none"> 4.1 Old/bare surface 4.2 New surface
5. Foreign materials	<ul style="list-style-type: none"> 5.1 Substances/Chemicals <ul style="list-style-type: none"> 5.1.1 Grease 5.1.2 Oil 5.1.3 Alkali 5.1.4 Dust 5.1.5 Rust 5.1.6 Algae 5.2 Exposed nails, rod, wires 5.3 Welding spatters
6. Surface defects	<ul style="list-style-type: none"> 6.1 Scales 6.2 Grease 6.3 Old plaster 6.4 Dirt 6.5 Blistering 6.6 Fungus 6.7 Damp
7. Standard	<ul style="list-style-type: none"> 7.1. No brush mark is observed 7.2. uniformly applied throughout the respective surfaces
8. Paint	<ul style="list-style-type: none"> 8.1 Weather coat / weather proof / Weather guard 8.2 Cement paint

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.

1. Critical aspects of competency	<p>Assessment required evidence that the candidate:</p> <ol style="list-style-type: none">1.1. laid out scaffolding as per job requirement1.2. inspected surfaces in line with job requirements and standard1.3. sanded surfaces smoothly according to the job requirement1.4. mixed weather coat and cement paint consistently as per manufacturer's instructions1.5. applied coats of weather coat and cement paint in sequence on exterior wall surface.
2. Underpinning Knowledge	<ol style="list-style-type: none">2.1. Materials required for preparing weather coat and cement paint.2.2. Surface preparation methods for weather coat and cement paint.2.3. Patch works on exterior wall surfaces.2.4. Ingredients mixing ratio for weather coat and cement paint.2.5. Method of mixing base materials.2.6. Preparation of weather coat.2.7. Preparation methods of and cement paint.
3. Underpinning Skills	<ol style="list-style-type: none">3.1. Assembling scaffolding in different places and heights.3.2. Filling surface holes with putty.3.3. Preparing surface for applying weather coat and cement paint.3.4. Mixing weather coat and cement paint as per job requirement.3.5. Applying horizontal/ vertical coating of.3.6. Applying weather coat and cement paint in wall surface using rags or brush.
4. Underpinning attitudes	<ol style="list-style-type: none">4.1. Commitment to occupational safety and health.4.2. Environmental concerns.4.3. Tidiness and timeliness.4.4. Respect for rights of peers and seniors in workplace.4.5. Eagerness to learn.4.6. Promptness in carrying out activities.4.7. Sincere and honest to duties and responsibilities.


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	4.8. Communication with peers, sub-ordinates and seniors in workplace.
5. Resource implications	The following resources must be provided: 5.1. Adequate workplaces 5.2. Painting materials 5.3. Tools appropriate to the construction process.
6. Methods of assessment	6.1. Written Test 6.2. Demonstration 6.3. Oral Questioning 6.4. Portfolio
7. Context of assessment	7.1. Competency assessment must be done in NSDA Accredited Assessment center 7.2. Assessment should be done by NSDA certified/ nominated assessor

Accreditation Requirements

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Unit Code and Title	OUPNT005L2V1: Perform Painting on Metal Surface
Nominal Hours	60 Hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to Perform painting on metal surface. It specifically includes preparing for works, surface for painting, applying enamel paint on metal surface and maintaining workplace and store tools equipment.
Elements of Competency	Performance Criteria <u>Bold and Underlined</u> terms are elaborated in the Range of Variables.
1. Prepare for works	1.1. OSH practices are followed as per job requirement. 1.2. <u>PPE</u> are worn and per nature of the job. 1.3. <u>Tools and equipment</u> are collected as per job requirement. 1.4. <u>Materials</u> are collected as per job requirement.
2. Prepare surface for painting.	2.1. Surface is sanded as per job requirement. 2.2. Surface is cleaned as per job requirement. 2.3. Primer/base coat is mixed as per job requirement. 2.4. Primer/base coat is applied. 2.5. <u>Defects</u> of surface are filled with putty. 2.6. Surface is sanded with medium grade sandpaper for further finishing.
3. Apply enamel paint on metal surface	3.1 Enamel paint is prepared as per manufacturers instruction. 3.2 1 st coat of enamel paint is applied on the metal surface as required. 3.3 Metal surface is sanded as per the requirement to make the surface smooth. 3.4 Intermediate coat of enamel paint is applied with appropriate tool as per job requirement. 3.5 Metal surface is sanded further as per the requirement to make the surface shining smoother. 3.6 Top coat of enamel paint is applied to achieve the required finish as per job requirement. 3.7 Defects in painting are checked and rectified if required.
4. Maintain workplace and store tools equipment	4.1 Work area is cleaned in accordance with workplace procedures. 4.2 Unused materials are stored for re-use or disposed following workplace procedures. 4.3 Waste and scrap materials are disposed with following workplace procedures. 4.4 Tools and equipment's are gathered. 4.5 Tools and equipment are cleaned and stored as per manufacturer's recommendation.
Range of Variables	



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Variables	Range (may include but not limited to):
1. Personal protective equipment (PPE)	1.1. Dust mask 1.2. Safety glasses/Goggles 1.3. Gloves 1.4. Harness 1.5. Safety belt 1.6. Safety shoes/boots 1.7. Aprons/ Safety Jacket 1.8. Helmet 1.9. Ear plug
2. Tools and equipment	2.1 Paint brushes 2.2 Scraper 2.3 Spatula 2.4 Mixing stick / mixture 2.5 Putty knife 2.6 Iron hook 2.7 Roller / Auto roller / Spray 2.8 Steel wire brush
3. Materials	3.1 Sandpaper / Emery paper (80 / 120) 3.2 Hose pipe 3.3 Jar / bucket 3.4 Markin cloth 3.5 Pumice stone (40, 120)
4. Defects	4.1. Scales 4.2. Dirt 4.3. Blistering 4.4. Fungus 4.5. Alkali 4.6. Rust
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspects of competency	Assessment required evidence that the candidate: 1.1. rubbed metal surfaces 1.2. applied red oxide primer as per requirement 1.3. sanded metal surface. 1.4. applied enamel paint on metal surface 1.5. checked and rectified defects in painting.
2. Underpinning knowledge	2.1 Tools and materials selection and collection. 2.2 Procedure on tools and equipment checking. 2.3 Surface preparation methods and techniques. 2.4 Method of mixing base materials and maintaining appropriate ratio. 2.5 Preparation of base materials. 2.6 Mixing process enamel paint.


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3. Underpinning skills	<p>3.1 Rubbing surface using emery paper.</p> <p>3.2 Applying prime coat.</p> <p>3.3 Applying prime coat using red oxide.</p> <p>3.4 Mixing enamel paint with thinner as per job requirement.</p> <p>3.5 Applying enamel paint on metal surface.</p> <p>3.6 Rubbing metal surface using emery paper.</p>
4. Underpinning attitudes	<p>4.1. Commitment to occupational health and safety</p> <p>4.2. Environmental concerns</p> <p>4.3. Eagerness to learn</p> <p>4.4. Tidiness and timeliness</p> <p>4.5. Respect for rights of peers and seniors in workplace</p> <p>4.6. Communication with peers and seniors in workplace</p>
5. Resource implications	<p>The following resources must be provided:</p> <p>5.1 Tools, equipment and physical facilities appropriate to perform activities.</p> <p>5.2 Materials, consumables to perform activities.</p>
6. Methods of assessment	<p>Competency should be assessed by:</p> <p>6.1 Written Test</p> <p>6.2 Demonstration</p> <p>6.3 Oral Questioning</p> <p>6.4 Portfolio</p>
7. Context of assessment	<p>7.1 Competency assessment must be done in NSDA Accredited Assessment center</p> <p>7.2 Assessment should be done by NSDA certified/ nominated assessor</p>

Accreditation Requirements

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This Competency Standard for **Painting for Construction** is a document for the development of curricula, teaching and learning materials, and assessment tools. It also serves as the document for providing training consistent with the requirements of industry in order for individuals who graduated through the established standard via competency-based assessment to be suitably qualified for a relevant job.

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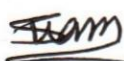
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Unit Code and Title	SUCS002L2V1: Practice Workplace Cleanliness
Nominal Hours	15 Hours
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to practice workplace cleanliness. It specifically includes – sorting to dispose unnecessary items; systematizing the workplace; sweeping the workplace; standardizing activities; and sustaining housekeeping activities.
Elements of Competency	Performance Criteria <u>Bold and Underlined</u> terms are elaborated in the Range of Variables.
1. Sort to dispose unnecessary items	1.1 Items in the workplace are identified and differentiated into necessary and unnecessary. 1.2 <u>Unnecessary items</u> are removed and disposed in accordance with housekeeping procedures. 1.3 Inventory of necessary items are updated and maintained.
	2.1 Necessary items are supplied with identification marks and arranged in order based on housekeeping procedures



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Range of Variables	
Variables	Range (may include but not limited to):
1. Unnecessary items	1.1 Waste materials 1.2 Papers and other printed materials not related to work activities 1.3 Damaged tools and equipment 1.4 Non-recyclable materials
2. Minor repairs	2.1 Sharpening of tools 2.2 Tightening of nuts, bolts and screws 2.3 Replacing of parts 2.4 Application of oil and lubricants
3. Decorum	3.1 Workplace rules and regulations 3.2 Workplace Code of Ethics
4. 5S	A system of work developed in Japan for housekeeping purposes. It consists of: 4.1 Seri (Sort) 4.2 Seiton (Straighten) 4.3 Seiso (Shine) 4.4 Seiketsu (Standardize) 4.5 Shitsuke (Sustain)
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspects of competency	Assessment required evidence that the candidate: 1.1 evidence of routine practice of 5S in the workplace. 1.2 satisfying the requirements mentioned in the performance criteria and range of variables.
2. Underpinning knowledge	2.1 Meaning and Application of 5S. 2.2 Purposes of 5S. 2.3 Methods of Identifying Weaknesses and Recommending Improvements. 2.4 Principles of efficient workplace.
3. Underpinning skills	3.1 Communicating 3.2 Planning 3.3 Organizing 3.4 Prioritizing 3.5 Recording 3.6 Problem Solving



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4. Underpinning attitudes	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Eagerness to learn 4.5 Tidiness and timeliness 4.6 Environmental concerns 4.7 Respect for rights of peers and seniors at workplace 4.8 Communication with peers and seniors at workplace
5. Resource implications	The following resources must be provided: 5.1. workplace (actual or simulated) 5.2. tools and equipment required to perform activities 5.3. materials consumable to perform activities.
6. Methods of assessment	6.1 Written Test 6.2 Demonstration 6.3 Oral Questioning 6.4 Portfolio
7. Context of assessment	7.1 Competency assessment must be done in NSDA Accredited Assessment center 7.2 Assessment should be done by NSDA certified/ nominated assessor

Accreditation Requirements

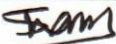
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Occupation Specific Competencies


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Unit Code and Title	OUPNT001L2V1: Perform Fundamental Works of Painting for Construction
Nominal Hours	30 Hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to Perform fundamental works of Construction painting. It includes identifying basic building components, identifying materials for Construction painting, performing basic measurement and calculations, making scaffolding for painting and matching specific paint color.
Elements of Competency	Performance Criteria <u>Bold and Underlined</u> terms are elaborated in the Range of Variables.
1. Identify basic building components.	<p>1.1. <u>Personal Protective Equipment (PPE)</u> are worn as per job requirement.</p> <p>1.2. Main <u>Building components</u> are identified from a model building structure.</p> <p>1.3. The functions of the main building components are interpreted.</p> <p>1.4. Name of main building components is listed.</p>
2. Identify materials for Construction Painting.	<p>2.1 <u>Types of primer</u> are identified.</p> <p>2.2 <u>Types of paint</u> are identified.</p> <p>2.3 Paints are selected according to surface.</p> <p>2.4 Basic of color are explained.</p> <p>2.5 <u>Materials for plaster surface</u> are identified.</p> <p>2.6 <u>Materials for wooden surface</u> are identified.</p> <p>2.7 <u>Materials for metal painting</u> are identified.</p> <p>2.8 Name of materials required for Construction painting works is listed.</p>
3. Perform basic measurement and calculations	<p>3.1 Measuring units to be used are determined as per workplace requirement.</p> <p>3.2 Appropriate <u>measuring instruments</u> are selected as per requirement.</p> <p>3.3 <u>Calculations</u> are performed using appropriate techniques.</p>
4. Make scaffolding for painting	<p>4.1 Types of <u>scaffolding</u> are identified according to the building structure.</p> <p>4.2 <u>Scaffolding Materials</u> is identified and selected as per job requirements.</p> <p>4.3 Materials are prepared for making <u>wooden scaffolding components</u> as per job requirement.</p> <p>4.4 Workplace access and way out routes for assembling scaffolding are identified.</p>


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	<p>4.5 Scaffolding components are erected in accordance with work requirements and workplace rules and regulations.</p> <p>4.6 Installation of scaffolding is carried out in accordance with OSH requirements.</p> <p>4.7 Scaffolding joints and components are checked as per job requirement.</p>
5. Match specific paint color	<p>5.1 Paints are identified and prepared as per job requirements.</p> <p>5.2 Safety precautions are observed during preparation of paint color.</p> <p>5.3 Mixing ratio of materials are maintained as per requirement.</p> <p>5.4 Paint colors are mixed in specific painting.</p> <p>5.5 Unexpected situations are responded to in line with company rules and regulations.</p>
Range of Variables	
Variables	Range (may include but not limited to):
1. Personal Protective Equipment (PPE)	<p>1.1. Dust mask</p> <p>1.2. Safety glasses/Goggles</p> <p>1.3. Gloves</p> <p>1.4. Harness</p> <p>1.5. Safety belt</p> <p>1.6. Ear plug</p> <p>1.7. Safety shoes/boots</p> <p>1.8. Aprons / Safety jacket</p> <p>1.9. Face masks</p> <p>1.10. Helmet</p>
2. Building components	<p>2.1 Column</p> <p>2.2 Lintel</p> <p>2.3 Sunshade</p> <p>2.4 Beam</p> <p>2.5 Slab</p> <p>2.6 False Slab</p> <p>2.7 Parapet wall</p> <p>2.8 Drop wall</p> <p>2.9 Shear wall</p> <p>2.10 Boundary wall</p> <p>2.11 Ceiling</p> <p>2.12 Wall</p> <p>2.13 Balcony</p>

	<ul style="list-style-type: none"> 2.14 Stair 2.15 Roof top 2.16 Overhead water tank 2.17 Parking area 2.18 Door and window 2.19 Bedroom (Master, child, guest etc) 2.20 Washroom / Powder room 2.21 Drawing room / living room 2.22 Foyer 2.23 Dining room
3. Types of primer	<ul style="list-style-type: none"> 3.1. Water based primer for interior <ul style="list-style-type: none"> 3.1.1. Water Sealer 3.1.2. Wall Putty 3.2. Water based primer for exterior <ul style="list-style-type: none"> 3.2.1. Exterior Sealer 3.2.2. Exterior / all-purpose putty 3.3. Oil based primer <ul style="list-style-type: none"> 3.3.1. Anti – corrosive red oxide primer 3.3.2. Plastron sealer / Oil sealer
4. Types of Paint	<ul style="list-style-type: none"> 4.1. Water based paint interior <ul style="list-style-type: none"> 4.1.1. Distemper/Acrylic Distemper/ SPD 4.1.2. Plastic paint/Acrylic Plastic emulsion 4.1.3. Luxury paint/Luxury Silk emulsion 4.2. Water based paint exterior <ul style="list-style-type: none"> 4.2.1. Cement paint 4.2.2. Weather coat / proof / guard paint/Exterior emulsion 4.2.3. Anti-Dirt / dust protective paint 4.3. Oil based paint <ul style="list-style-type: none"> 4.3.1. Synthetic Enamel paint
5. Materials for plaster surface	<ul style="list-style-type: none"> 5.1. Scraper 5.2. Pumice stone (40, 60, 80 & 120) 5.3. Sand paper (80, 120, 150, 240) 5.4. Broom stick 5.5. Flower stick 5.6. Putty knife / Formica 5.7. Duster cloth 5.8. Paint Brush / roller 5.9. Paint mixing pot 5.10. Masking tape 5.11. Polythene

6. Materials for wooden surface	6.1. Wooden Sand Paper (120, 150, 240 & 320) 6.2. Markin cloth 6.3. Duster cloth 6.4. Paint Brush / roller 6.5. Thinner (T6 / T7 / T8) 6.6. Paint mixing pot 6.7. Masking tape 6.8. Polythene
7. Materials for metal painting	7.1. Emery paper (80, 120) 7.2. Markin cloth 7.3. Duster cloth 7.4. Paint Brush 7.5. Thinner (T6 / T7) 7.6. Paint mixing pot 7.7. Masking tape 7.8. Polythene
8. Measuring instruments	8.1. Measuring cup 8.2. Measuring Tape
9. Calculations	9.1 Area 9.2 Volume
10.Scaffolding	10.1 Wooden scaffolding 10.2 Steel scaffolding 10.3 Bamboo scaffolding 10.4 Suspended scaffolding
11.Scaffolding Materials	11.1 Wood 11.2 Bamboo 11.3 Nail 11.4 Rope
12.Wooden scaffolding components	12.1 Wood bracing 12.2 Wood/ bamboo platform 12.3 Rope 12.4 Nails 12.5 Wood ladder
13.OSH requirements	13.1 Wearing of appropriate PPE 13.2 Disposal of waste materials 13.3 Availability of first aid kit
14.Unexpected situations	14.1 Damaged to materials 14.2 Injury to personnel

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.

<p>1. Critical aspects of competency</p>	<p>Assessment required evidences that the candidate:</p> <ol style="list-style-type: none"> 1.1 listed the name and functions of main building components 1.2 listed the name of materials required for Construction painting works 1.3 identified types of paint 1.4 performed calculations as per job requirement 1.5 prepared materials for making wooden scaffolding components. 1.6 erected scaffolding components in accordance with OHS requirements.
<p>2. Underpinning knowledge</p>	<ol style="list-style-type: none"> 2.1 Name of main building components. 2.2 Types of surfaces related to painting works. 2.3 Types of paint and their uses 2.4 Types of color and their uses. 2.5 Mixing ratios of different types of color 2.6 Painting materials for plaster surface. 2.7 Painting materials for the wooden surface. 2.8 Painting materials for metal surface. 2.9 OSH requirements for the workplace. 2.10 Name of measuring instruments for paint 2.11 Basic calculations related to paint. 2.12 Types of scaffolding and their uses.
<p>3. Underpinning Skills</p>	<ol style="list-style-type: none"> 3.1 Preparing a list of building components. 3.2 Preparing a list of building painting materials. 3.3 Performing calculations following appropriate methods. 3.4 Preparing materials for making scaffolding components. 3.5 Erecting scaffolding components in accordance with work requirements and workplace rules and regulations.
<p>4. Underpinning attitudes</p>	<ol style="list-style-type: none"> 4.1. Commitment to occupational safety and health. 4.2. Environmental concerns. 4.3. Tidiness and timeliness. 4.4. Respect for the rights of peers and seniors in workplace. 4.5. Eagerness to learn. 4.6. Promptness in carrying out activities. 4.7. Sincere and honest to duties and responsibilities. 4.8. Communication with peers, sub-ordinates and seniors in workplace.



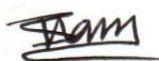
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5. Resource implications	<p>The following resources must be provided:</p> <p>5.1 Workplace location.</p> <p>5.2 Materials are relevant to the proposed activity.</p> <p>5.3 Drawings and specifications are relevant to the task.</p> <p>5.4 Measurement tools are relevant to the proposed activity.</p>
6. Methods of assessment	<p>6.1 Written Test</p> <p>6.2 Demonstration</p> <p>6.3 Oral Questioning</p> <p>6.4 Portfolio</p>
7. Context of assessment	<p>7.1 Competency assessment must be done in NSDA Accredited Assessment center</p> <p>7.2 Assessment should be done by NSDA certified/ nominated assessor</p>
<p>Accreditation Requirements</p> <p>Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p>	



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Unit Code and Title	OUPNT002L2V1: Use Tools for Construction Painting
Nominal Hours	50 Hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to use tools for construction painting. It includes – identifying tools, using hand tools, power tools, performing basic preventive maintenance and maintaining workplace and store tools and equipment.
Elements of Competency	Performance Criteria <u>Bold and Underlined</u> terms are elaborated in the Range of Variables.
1. Identify tools	1.1. <u>Hand tools</u> are identified. 1.2. <u>Power tools</u> are identified. 1.3. Applications of tools are defined.
2. Use hand tools	2.1. OSH are followed and <u>PPE</u> are worn as per job requirement. 2.2. Hand tools are prepared for works according to workplace procedures. 2.3. Proper hand-eye coordination is applied when using hand tools. 2.4. Safety requirements are complied with before, during and after use. 2.5. Unsafe or faulty tools are identified and marked for repair according to workplace procedures.
3. Use power tools	3.1. Power tools are prepared according to manufacturer's instructions. 3.2. Tools are connected to power source following safety procedures. 3.3. Power tools are used following Standard Operating Procedure (SOP).
4. Perform basic preventive maintenance	4.1. Tools are cleaned according to standard procedures. 4.2. Tools are inspected and reported to the supervisor as per workplace procedure. 4.3. Tools are lubricated with appropriate <u>lubricants</u>



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5. Maintain workplace and store tools equipment	5.1. Work area is cleaned in accordance with workplace procedures. 5.2. Tools are cleaned as per manufacturer's recommendation. 5.3. Tools are stored as per workplace procedures.
Range of Variables	
Variable	Range (may include but not limited to):
1. Hand tools	1.1 Paint brushes (1", 3", 4", 5") 1.2 Scraper 1.3 Spatula 1.4 Mixing stick 1.5 Rags 1.6 Putty knife 1.7 Flat screw driver 1.8 Ball pin hammer 1.9 Lifeline and anchorage 1.10 Roller brush 1.11 Steel wire brush 1.12 Jar / Bucket 1.13 Pumice stone 40, 120 1.14 Broom stick / flower stick
2. Power tools	2.1 Dust collector 2.2 Sander machine 2.3 Auto roller 2.4 Multipurpose mixer 2.5 Compressor with spray gun 2.6 Road marking machine
3. Personal protective equipment (PPE)	3.1 Dust mask 3.2 Safety glasses/Goggles 3.3 Gloves 3.4 Harness 3.5 Safety belt 3.6 Safety shoes/boots 3.7 Aprons 3.8 Helmet
4. Lubricants	4.1. Machine oil 4.2. Grease
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical Aspects	Assessment required evidence that the candidate: 1.1. worn PPE as per nature of job 1.2. identified hand tools appropriate to the job 1.3. used hand tools with proper hand-eye coordination 1.4. cleaned and lubricated the tools and equipment 1.5. stored tools following manufacturer's instruction.



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2. Underpinning knowledge	<ul style="list-style-type: none"> 2.1. Definition of tools. 2.2. Functions of different types of tools. 2.3. Types of power source. 2.4. Techniques for using hand tools 2.5. Cleaning technique of tools and workplace.
3. Underpinning skills	<ul style="list-style-type: none"> 3.1. Identifying Appropriate Tools 3.2. Using hand tools appropriate for the job. 3.3. Using following Standard Operating Procedure (SOP) for a specific job. 3.4. Performing basic preventive maintenance of tools and equipment. 3.5. Storing tools as per manufacturer instruction.
4. Underpinning Attitudes	<ul style="list-style-type: none"> 4.1. Commitment to occupational safety and health. 4.2. Environmental concerns. 4.3. Tidiness and timeliness. 4.4. Respect for rights of peers and seniors in workplace. 4.5. Eagerness to learn. 4.6. Promptness in carrying out activities. 4.7. Sincere and honest to duties and responsibilities. 4.8. Communication with peers, sub-ordinates and seniors in workplace.
5. Resource implications	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> 5.1. Workplace location. 5.2. Materials are relevant to the proposed activity. 5.3. Hand tools and power tools to appropriate activity.
6. Methods of assessment	<ul style="list-style-type: none"> 6.1. Written Test 6.2. Demonstration 6.3. Oral Questioning 6.4. Portfolio
7. Context of assessment	<ul style="list-style-type: none"> 7.1. Competency assessment must be done in NSDA Accredited Assessment center 7.2. Assessment should be done by NSDA certified/ nominated assessor

Accreditation Requirements

Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.



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Unit Code and Title	OUPNT003L2V1: Perform Painting on Interior Plaster Surface
Nominal Hours	70 Hours
Unit Descriptor	<p>This unit covers the knowledge, skills and attitude required to perform painting on interior plaster surface.</p> <p>It includes preparing for works, surface for painting, applying interior sealer, applying wall putty, applying paint on the interior surface and maintaining workplace and storing tools and equipment.</p>
Elements of Competency	<p>Performance Criteria <u>Bold and Underlined</u> terms are elaborated in the Range of Variables.</p>
1. Prepare for works	<p>1.1. OSH practices are followed as per job requirement.</p> <p>1.2. <u>Personal Protective Equipment (PPE)</u> are worn as per nature of the job.</p> <p>1.3. <u>Tools and equipment</u> are collected as per job requirement.</p> <p>1.4. <u>Materials</u> are collected as per job requirement.</p>
2. Prepare surface for painting	<p>2.1. <u>Surfaces</u> are inspected to identify <u>Foreign materials</u> as per workplace procedure.</p> <p>2.2. Surfaces are cleaned thoroughly to make it free from mortar droppings.</p> <p>2.3. Surfaces are sanded smoothly according to the job requirement.</p> <p>2.4. Patchworks are performed on <u>surface defects</u> as per requirement.</p>
3. Apply interior sealer	<p>3.1 Materials quantity requirements are calculated as per job requirement.</p> <p>3.2 Sealer is mixed as per manufacturer's instructions.</p> <p>3.3 sealer is applied on the prepared surface and allowed to dry as per job requirement.</p> <p>3.4 Applied sealer is checked as per set <u>standard</u> and rectified if required.</p>


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4. Apply wall putty	<p>4.1. Acrylic wall putty is prepared as per manufacturer's instructions.</p> <p>4.2. Surface defects and undulation are filled with putty as required.</p> <p>4.3. 1st coat of acrylic wall putty is applied as per job requirement.</p> <p>4.4. After applying 1st coat the surface is dried as per standard.</p> <p>4.5. 2nd coat of acrylic wall putty is applied to achieve the required smoothness as per job specification.</p> <p>4.6. Surfaces are sanded smoothly according to the job requirement.</p> <p>4.7. Acrylic wall putty is checked as per set standard and rectified if required.</p>
5. Apply paint on the interior surface	<p>5.1. Paint is selected and collected as per job requirements.</p> <p>5.2. Paint is prepared as per manufactures instructions.</p> <p>5.3. 1st coat is applied on the prepared surface with appropriate tool.</p> <p>5.4. Finishing coat are applied in sequence as per job requirement.</p> <p>5.5. Defects in painting are checked as per set standard and rectified if required.</p>
6. Maintain workplace and store tools equipment	<p>6.1. Work area is cleaned in accordance with workplace procedures.</p> <p>6.2. Unused materials are stored for re-use or disposed following workplace procedures.</p> <p>6.3. Waste and scrap materials are disposed with following workplace procedures.</p> <p>6.4. Tools and equipment's are gathered.</p> <p>6.5. Tools and equipment are cleaned and stored as per manufacturer's recommendation.</p>
Range of Variables	
Variables	Range (may include but not limited to):
1. Personal protective equipment (PPE)	<p>1.1. Dust mask</p> <p>1.2. Safety glasses/Goggles</p> <p>1.3. Gloves</p> <p>1.4. Harness</p> <p>1.5. Safety belt</p> <p>1.6. Safety shoes/boots</p> <p>1.7. Aprons/Safety Jacket</p>

	<p>1.8. Helmet</p> <p>1.9. Ear plug</p>
2. Tools and equipment	<p>2.1 Paint brushes (1", 3", 4", 5")</p> <p>2.2 Scraper</p> <p>2.3 Spatula</p> <p>2.4 Mixing stick / mixture</p> <p>2.5 Putty knife</p> <p>2.6 Roller / auto roller</p> <p>2.7 Steel wire / plastic / taal (plum) brush</p> <p>2.8 Jar / bucket</p> <p>2.9 Sander machine / Vacuum cleaners</p>
3. Materials	<p>3.1 Pumice stone (40, 120)</p> <p>3.2 Sandpaper / Emery paper (80 / 120)</p> <p>3.3 GI wire / Jute rope</p> <p>3.4 Brooms</p> <p>3.5 Markin cloth</p> <p>3.6 Sealer</p> <p>3.7 Putty</p> <p>3.8 Clean water</p> <p>3.9 Top coat (Distemper / Plastic / Easy clean / luxury)</p>
4. Surfaces	<p>4.1 Old/bare plaster surface</p> <p>4.2 New plaster surface</p>
5. Foreign materials	<p>5.1 Substances/Chemicals</p> <p>5.1.1 Grease</p> <p>5.1.2 Oil</p> <p>5.1.3 Alkali / salinity</p> <p>5.1.4 Dust</p> <p>5.1.5 Rust</p> <p>5.1.6 Algae</p> <p>5.1.7 Dampness</p> <p>5.2 Exposed nails, rod, wires</p> <p>5.3 Welding spatters</p>
6. Surface defects	<p>6.1 Scales</p> <p>6.2 Old plaster</p> <p>6.3 Uneven plaster</p> <p>6.4 Moisture</p> <p>6.5 Blistering</p> <p>6.6 Fungus / Algae</p> <p>6.7 Salinity</p> <p>6.8 Dampness</p> <p>6.9 Holes</p>

	6.10 Minor cracks
7. Standard	7.1 No brush mark is observed 7.2 uniformly applied throughout the respective surfaces
8. Paint	8.1. Distemper/Acrylic Distemper/SPD 8.2. Plastic/Acrylic Plastic Emulsion
Evidence Guide The evidence must be authentic, valid, sufficient, reliable and consistent to meet the requirements of the current version of the unit of competency.	
1. Critical Aspects	Assessment required evidence that the candidate: 1.1 sanded surface to make it free from mortar droppings 1.2 applied coatings of sealer to achieve the required finish 1.3 mixed top coat materials consistently 1.4 applied coating of paint to achieve the required finish.
2. Underpinning knowledge	2.1. Interval between 1 st coat and 2 nd coat for sealer, putty and painting. 2.2. Classification and use of sand paper. 2.3. Preparation of top coat. 2.4. Required tools and equipment. 2.5. Types of plaster surfaces. 2.6. Surface preparation methods and techniques related to Sealer and distemper/acrylic distemper/SPD paint. 2.7. Foreign materials on surface. 2.8. Types of surface defects. 2.9. Common sizes of paint brush.
3. Underpinning skills	3.1. Performing sanding works on the surfaces. 3.2. Cleaning surfaces with broom to make it dust free. 3.3. Performing patch work on surface defects. 3.4. Filling surface holes with putty as per requirement. 3.5. Applying paints with roller or brush.
4. Underpinning attitudes	4.1. Commitment to occupational safety and health. 4.2. Environmental concerns. 4.3. Tidiness and timeliness. 4.4. Respect for rights of peers and seniors in workplace. 4.5. Eagerness to learn. 4.6. Promptness in carrying out activities. 4.7. Sincere and honest to duties and responsibilities. 4.8. Communication with peers, sub-ordinates and seniors in workplace.



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5. Resource implications	<p>The following resources must be provided:</p> <p>5.1. Tools, equipment and physical facilities appropriate to perform activities.</p> <p>5.2. Materials, consumables to perform activities.</p> <p>5.3. Hand tools and power tools to appropriate activity.</p>
6. Methods of assessment	<p>6.1. Written Test</p> <p>6.2. Demonstration</p> <p>6.3. Oral Questioning</p> <p>6.4. Portfolio</p>
7. Context of assessment	<p>7.1. Competency assessment must be done in NSDA Accredited Assessment center</p> <p>7.2. Assessment should be done by NSDA certified/ nominated assessor</p>
<p>Accreditation Requirements</p> <p>Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p>	


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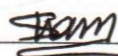
Unit Code and Title	OUPNT004L2V1: Perform Painting on Exterior Plaster Surface
Nominal Hours	80 Hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to perform painting on exterior plaster surface. It includes preparing for works, surface for painting, applying putty on exterior surface, exterior sealer, painting on the exterior surface and maintaining workplace and storing tools and equipment.
Elements of Competency	Performance Criteria <u>Bold and Underlined</u> terms are elaborated in the Range of Variables.
1. Prepare for works	1.1. OSH practices are followed as per job requirement. 1.2. <u>PPE</u> are worn and per nature of the job. 1.3. <u>Tools and equipment</u> are collected as per job requirement. 1.4. <u>Materials</u> are collected as per job requirement.
2. Prepare surface for painting.	2.1. Scaffolding is laid-out and assembled consistent with the job requirement. 2.2. <u>Surfaces</u> are inspected to identify <u>Foreign materials</u> as per workplace procedure. 2.3. Surfaces are cleaned thoroughly to make it free from mortar droppings. 2.4. Patchworks are performed on <u>Surface defects</u> as per requirement. 2.5. Surface holes are filled with putty / filler material as per requirement. 2.6. Surfaces are sanded smoothly with sandpaper and pumice stone. 2.7. Surfaces are cleaned.
3. Apply putty on exterior surface	3.1. Cement based putty is prepared as per manufacturer's instructions. 3.2. Surfaces are watered as per job requirement. 3.3. Surface defects and undulation are filled with putty as required. 3.4. 1st coat of putty is applied as per job requirement. 3.5. After applying 1st coat the surface is dried as per standard. 3.6. 2nd coat of putty is applied to achieve the required smoothness as per job specification. 3.7. Surfaces are sanded smoothly according to the job requirement.

	3.8. Applied Putty is checked as per set standard and rectified if required.
4. Apply exterior sealer	4.1. Materials quantity requirements are calculated as per job requirement. 4.2. Sealer is mixed as per manufacturer's instructions. 4.3. Sealer is applied on the prepared surface and allowed to dry as per job requirement. 4.4. Applied sealer is checked as per set standard and rectified if required.
5. Apply paint on the exterior surface	5.1. Paint is selected and collected as per job requirements. 5.2. Paint is prepared as per manufactures instructions. 5.3. 1st coat is applied on the prepared surface with appropriate tool. 5.4. Finishing coat are applied in sequence as per job requirement. 5.5. Defects in painting are checked as per set standard and rectified if required.
6. Maintain workplace and store tools equipment	6.1. Work area is cleaned in accordance with workplace procedures. 6.2. Unused materials are stored for re-use or disposed following workplace procedures. 6.3. Waste and scrap materials are disposed with following workplace procedures. 6.4. Tools and equipment's are gathered. 6.5. Tools and equipment are cleaned and stored as per manufacturer's recommendation.

Range of Variables

Variable	Range (may include but not limited to):
1. Personal protective equipment (PPE)	1.1. Dust mask 1.2. Safety glasses/Goggles 1.3. Gloves 1.4. Harness 1.5. Safety belt 1.6. Safety shoes/boots 1.7. Aprons/ Safety Jacket 1.8. Helmet 1.9. Ear plug
2. Tools and equipment	2.1 Paint brushes 2.2 Scaffolding 2.3 Scraper

	<ul style="list-style-type: none"> 2.4 Spatula 2.5 Mixing stick / mixture 2.6 Putty knife 2.7 Iron hook 2.8 Roller / Auto roller / Spray 2.9 Steel wire brush 2.10 Pumice stone (40, 120)
3. Materials	<ul style="list-style-type: none"> 3.1 Weather coat / weather proof / Weather guard 3.2 Cement paint 3.3 Sandpaper / Emery paper (80 / 120) 3.4 Hose pipe 3.5 Jar / bucket 3.6 GI wire / Jute rope 3.7 Broom stick / flower stick 3.8 Markin cloth 3.9 Exterior putty/All Purpose Putty 3.10 Exterior Sealer 3.11 Clean water 3.12 Pumice stone (40, 120)
4. Surfaces	<ul style="list-style-type: none"> 4.1 Old/bare surface 4.2 New surface
5. Foreign materials	<ul style="list-style-type: none"> 5.1 Substances/Chemicals <ul style="list-style-type: none"> 5.1.1 Grease 5.1.2 Oil 5.1.3 Alkali 5.1.4 Dust 5.1.5 Rust 5.1.6 Algae 5.2 Exposed nails, rod, wires 5.3 Welding spatters
6. Surface defects	<ul style="list-style-type: none"> 6.1 Scales 6.2 Grease 6.3 Old plaster 6.4 Dirt 6.5 Blistering 6.6 Fungus 6.7 Damp
7. Standard	<ul style="list-style-type: none"> 7.1. No brush mark is observed 7.2. uniformly applied throughout the respective surfaces
8. Paint	<ul style="list-style-type: none"> 8.1 Weather coat / weather proof / Weather guard 8.2 Cement paint



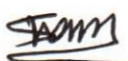
Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.

1. Critical aspects of competency	<p>Assessment required evidence that the candidate:</p> <ol style="list-style-type: none">1.1. laid out scaffolding as per job requirement1.2. inspected surfaces in line with job requirements and standard1.3. sanded surfaces smoothly according to the job requirement1.4. mixed weather coat and cement paint consistently as per manufacturer's instructions1.5. applied coats of weather coat and cement paint in sequence on exterior wall surface.
2. Underpinning Knowledge	<ol style="list-style-type: none">2.1. Materials required for preparing weather coat and cement paint.2.2. Surface preparation methods for weather coat and cement paint.2.3. Patch works on exterior wall surfaces.2.4. Ingredients mixing ratio for weather coat and cement paint.2.5. Method of mixing base materials.2.6. Preparation of weather coat.2.7. Preparation methods of and cement paint.
3. Underpinning Skills	<ol style="list-style-type: none">3.1. Assembling scaffolding in different places and heights.3.2. Filling surface holes with putty.3.3. Preparing surface for applying weather coat and cement paint.3.4. Mixing weather coat and cement paint as per job requirement.3.5. Applying horizontal/ vertical coating of.3.6. Applying weather coat and cement paint in wall surface using rags or brush.
4. Underpinning attitudes	<ol style="list-style-type: none">4.1. Commitment to occupational safety and health.4.2. Environmental concerns.4.3. Tidiness and timeliness.4.4. Respect for rights of peers and seniors in workplace.4.5. Eagerness to learn.4.6. Promptness in carrying out activities.4.7. Sincere and honest to duties and responsibilities.

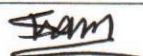

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	4.8. Communication with peers, sub-ordinates and seniors in workplace.
5. Resource implications	The following resources must be provided: 5.1. Adequate workplaces 5.2. Painting materials 5.3. Tools appropriate to the construction process.
6. Methods of assessment	6.1. Written Test 6.2. Demonstration 6.3. Oral Questioning 6.4. Portfolio
7. Context of assessment	7.1. Competency assessment must be done in NSDA Accredited Assessment center 7.2. Assessment should be done by NSDA certified/nominated assessor
<p>Accreditation Requirements</p> <p>Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.</p>	




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Unit Code and Title	OUPNT005L2V1: Perform Painting on Metal Surface
Nominal Hours	70 Hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to Perform painting on metal surface. It specifically includes preparing for works, surface for painting, applying enamel paint on metal surface and maintaining workplace and store tools equipment.
Elements of Competency	Performance Criteria <u>Bold and Underlined</u> terms are elaborated in the Range of Variables.
1. Prepare for works	1.1. OSH practices are followed as per job requirement. 1.2. <u>PPE</u> are worn and per nature of the job. 1.3. <u>Tools and equipment</u> are collected as per job requirement. 1.4. <u>Materials</u> are collected as per job requirement.
2. Prepare surface for painting.	2.1. Surface is sanded as per job requirement. 2.2. Surface is cleaned as per job requirement. 2.3. Primer/base coat is mixed as per job requirement. 2.4. Primer/base coat is applied. 2.5. <u>Defects</u> of surface are filled with putty. 2.6. Surface is sanded with medium grade sandpaper for further finishing.
3. Apply enamel paint on metal surface	3.1 Enamel paint is prepared as per manufacturers instruction. 3.2 1 st coat of enamel paint is applied on the metal surface as required. 3.3 Metal surface is sanded as per the requirement to make the surface smooth. 3.4 Intermediate coat of enamel paint is applied with appropriate tool as per job requirement. 3.5 Metal surface is sanded further as per the requirement to make the surface shining smoother. 3.6 Top coat of enamel paint is applied to achieve the required finish as per job requirement. 3.7 Defects in painting are checked and rectified if required.
4. Maintain workplace and store tools equipment	4.1 Work area is cleaned in accordance with workplace procedures. 4.2 Unused materials are stored for re-use or disposed following workplace procedures. 4.3 Waste and scrap materials are disposed with following workplace procedures. 4.4 Tools and equipment's are gathered. 4.5 Tools and equipment are cleaned and stored as per manufacturer's recommendation.
Range of Variables	



Variables	Range (may include but not limited to):
1. Personal protective equipment (PPE)	1.1. Dust mask 1.2. Safety glasses/Goggles 1.3. Gloves 1.4. Harness 1.5. Safety belt 1.6. Safety shoes/boots 1.7. Aprons/ Safety Jacket 1.8. Helmet 1.9. Ear plug
2. Tools and equipment	2.1 Paint brushes 2.2 Scraper 2.3 Spatula 2.4 Mixing stick / mixture 2.5 Putty knife 2.6 Iron hook 2.7 Roller / Auto roller / Spray 2.8 Steel wire brush
3. Materials	3.1 Sandpaper / Emery paper (80 / 120) 3.2 Hose pipe 3.3 Jar / bucket 3.4 Markin cloth 3.5 Pumice stone (40, 120)
4. Defects	4.1. Scales 4.2. Dirt 4.3. Blistering 4.4. Fungus 4.5. Alkali 4.6. Rust
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspects of competency	Assessment required evidence that the candidate: 1.1. rubbed metal surfaces 1.2. applied red oxide primer as per requirement 1.3. sanded metal surface. 1.4. applied enamel paint on metal surface 1.5. checked and rectified defects in painting.
2. Underpinning knowledge	2.1 Tools and materials selection and collection. 2.2 Procedure on tools and equipment checking. 2.3 Surface preparation methods and techniques. 2.4 Method of mixing base materials and maintaining appropriate ratio. 2.5 Preparation of base materials. 2.6 Mixing process enamel paint.


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3. Underpinning skills	<ul style="list-style-type: none"> 3.1 Rubbing surface using emery paper. 3.2 Applying prime coat. 3.3 Applying prime coat using red oxide. 3.4 Mixing enamel paint with thinner as per job requirement. 3.5 Applying enamel paint on metal surface. 3.6 Rubbing metal surface using emery paper.
4. Underpinning attitudes	<ul style="list-style-type: none"> 4.1. Commitment to occupational health and safety 4.2. Environmental concerns 4.3. Eagerness to learn 4.4. Tidiness and timeliness 4.5. Respect for rights of peers and seniors in workplace 4.6. Communication with peers and seniors in workplace
5. Resource implications	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> 5.1 Tools, equipment and physical facilities appropriate to perform activities. 5.2 Materials, consumables to perform activities.
6. Methods of assessment	<p>Competency should be assessed by:</p> <ul style="list-style-type: none"> 6.1 Written Test 6.2 Demonstration 6.3 Oral Questioning 6.4 Portfolio
7. Context of assessment	<ul style="list-style-type: none"> 7.1 Competency assessment must be done in NSDA Accredited Assessment center 7.2 Assessment should be done by NSDA certified/nominated assessor

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