

Red Seal Occupational Standard

Painter and Decorator



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Foreword

The Canadian Council of Directors of Apprenticeship (CCDA) recognizes this Red Seal Occupational Standard (RSOS) as the Red Seal standard for the Painter and Decorator trade.

Background

The first National Conference on Apprenticeship in Trades and Industries, held in Ottawa in 1952, recommended that the federal government be requested to cooperate with provincial and territorial apprenticeship committees and officials in preparing analyses of a number of skilled occupations. Employment and Social Development Canada (ESDC) funds the Red Seal Program, which, under the guidance of the CCDA, develops a national occupational standard for each of the Red Seal trades.

Standards have the following objectives:

- to describe and group the tasks performed by skilled workers;
- to identify which tasks are performed in every province and territory;
- to develop instruments for use in the preparation of Interprovincial Red Seal Examinations and assessment tools for apprenticeship and certification authorities;
- to develop common tools for apprenticeship on-the-job and technical training in Canada;
- to facilitate the mobility of apprentices and skilled workers in Canada;
- to supply employers, employees, associations, industries, training institutions and governments with occupational standards.

Any questions, comments, or suggestions for changes, corrections, or revisions to this standard or any of its related products may be forwarded to:

Trades and Apprenticeship Division
Apprenticeship and Sectoral Initiatives Directorate
Employment and Social Development Canada
140 Promenade du Portage, Phase IV
Gatineau, Quebec K1A 0J9

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This standard was prepared by the Apprenticeship and Sectoral Initiatives Directorate of ESDC. The coordinating, facilitating and processing of this standard were undertaken by employees of the standards development team of the Trades and Apprenticeship Division and of New Brunswick, the host jurisdiction for this trade.

Structure of the Occupational Standard

This standard contains the following sections:

Methodology: an overview of the process for development, review, validation and weighting of the standard

Description of the Painter and Decorator trade: an overview of the trade's duties, work environment, job requirements, similar occupations and career progression

Trends in the Painter and Decorator trade: some of the trends identified by industry as being the most important for workers in this trade

Skills for Success Summary: an overview of how each of the skills for success (formerly called essential skills) is applied in this trade

Roles and Opportunities for Skilled Trades in a Sustainable Future: an overarching description of how in the context of climate change, skilled trades play a large role in implementing solutions and adjusting to changes in the world. In addition to highlighting the importance of this awareness, the standard may also contain more details on activities, skills and knowledge elements that are specific to the trade

Industry Expected Performance: description of the expectations regarding the level of performance of the tasks, including information related to specific codes, regulations and standards that must be observed

Language Requirements: description of the language requirements for working and studying in this trade in Canada

Pie Chart of Red Seal Examination Weightings: a graph which depicts the national percentages of exam questions assigned to the major work activities

Task Matrix and Weightings: a chart which outlines graphically the major work activities, tasks and subtasks of this standard and the national percentages of exam questions assigned to the major work activities and tasks

Harmonization of Apprenticeship Training: the aspects of apprenticeship training that participating provinces and territories have agreed upon to substantively align apprenticeship systems across Canada

Major Work Activity (MWA): the largest division within the standard that is comprised of a distinct set of trade activities

Task: distinct actions that describe the activities within a major work activity

Task Descriptor: a general description of the task

Sub-task: distinct actions that describe the activities within a task

Skills:

Performance Criteria: description of the activities that are done as the sub-task is performed

Evidence of Attainment: proof that the activities of the sub-task meet the expected performance of a tradesperson who has reached journeyperson level

Range of Variables: elements and examples (not all inclusive) that provide a more in-depth description of a term used in the performance criteria and evidence of attainment

Knowledge:

Learning Outcomes: describes what should be learned relating to a sub-task while participating in technical or in-school training

Learning Objectives: topics to be covered during technical or in-school training in order to meet the learning outcomes for the sub-task

Range of Variables: elements and examples (not all inclusive) that provide a more in-depth description of a term used in the learning outcomes and learning objectives

Appendix A - Acronyms: a list of acronyms used in the standard with their full name

Appendix B – Tools and Equipment / Outils et équipement: a bilingual non-exhaustive list of tools and equipment used in this trade

Appendix C – Glossary / Glossaire: bilingual definitions or explanations of selected technical terms used in the standard

Methodology

Development of the Standard

A draft standard is developed by analyzing existing industry-developed standards, including the National Occupational Analysis and provincial/territorial apprenticeship curricula. This draft standard breaks down all the tasks performed in the occupation and describes the knowledge and abilities required for a tradesperson to demonstrate competence in the trade.

Harmonization of Apprenticeship Training

An analysis of all provinces' and territories' apprenticeship programs is performed and recommendations are made on harmonizing the name of the trade, the hours of training required and the number of levels of training. Provinces and territories consult with their respective industry stakeholders on these elements and revisions are discussed until consensus is reached. Following the development of the workshop draft of the RSOS, participants discuss and come to consensus on the sequence of training topics, as expressed in the new standard. Their sequencing recommendations are reviewed by stakeholders in participating provinces and territories and further discussions are convened to reach consensus and to identify any exceptions.

Online Survey

Stakeholders are asked to review and validate the activities described in the new standard via an online survey. These stakeholders are invited to participate in this consultation through apprenticeship authorities, as well as national stakeholder groups.

Draft Review

The RSOS development team forwards a copy of the standard to provincial and territorial authorities who consult with industry representatives to review it. Their recommendations are assessed and incorporated into the standard.

Validation and Weighting

Participating provinces and territories also consult with industry to validate and weight the document for the purpose of planning the makeup of the Red Seal Interprovincial Examination for the trade. They validate and weight the major work activities (MWA), tasks and sub-tasks, of the standard as follows:

MWA Each jurisdiction assigns a percentage of questions to each MWA for an examination

that would cover the entire trade.

TasksEach jurisdiction assigns a percentage of exam questions to each task within a MWA. **Sub-tasks**Each jurisdiction indicates, with a YES or NO, whether or not each sub-task is

performed by skilled workers within the occupation in its jurisdiction.

The results of this exercise are submitted to the RSOS development team who then analyzes the data and incorporates it into the document. The RSOS provides the individual jurisdictional validation results as well as the national averages of all responses. The national averages for MWA and task weighting guide the Interprovincial Red Seal Examination plan for the trade.

The validation of the RSOS is used to identify common core sub-tasks across Canada for the occupation. If at least 70% of the responding jurisdictions' industry performs a sub-task, it shall be considered common core. Interprovincial Red Seal Examination questions are limited to the common core sub-tasks identified through this validation process.

Definitions for Validation and Weighting

yes sub-task performed by qualified workers in the occupation in that province or

territory

no sub-task not performed by qualified workers in the occupation in that province or

territory

NV standard <u>Not Validated</u> by that province or territory **ND** trade <u>Not Designated in a province or territory</u>

Not Commonsub-task, task or MWA performed less than 70% of responding jurisdictions; theseCore (NCC)will not be tested by the Interprovincial Red Seal Examination for the tradeNationalaverage percentage of questions assigned to each MWA and task in Interprovincial

average % Red Seal Examination for the trade

Provincial/Territorial Abbreviations

NL Newfoundland and Labrador

NS Nova Scotia

PE Prince Edward Island

NB New Brunswick

QC Quebec
ON Ontario
MB Manitoba

SK Saskatchewan

AB Alberta

BC British Columbia

NT Northwest Territories

YT Yukon Territory

NU Nunavut

Description of the Painter and Decorator Trade

"Painter and Decorator" is this trade's official Red Seal occupational title approved by the CCDA. This standard covers tasks performed by painters and decorators.

Painters and decorators apply decorative and protective finishes in residential, commercial, institutional and industrial settings. They prepare a variety of surfaces (wood, masonry, drywall, plaster, concrete, synthetics, stucco and metal) using a wide variety of tools, equipment and techniques prior to the application of materials such as paint, high performance coatings, waterproofing, fireproofing, clear finishes, wall coverings and specialty finishes. These materials are applied for a variety of reasons such as substrate protection, decoration, sanitation, identification and safety.

Painters and decorators apply the products adhering to manufacturers' recommendations, industry standards and project specific specifications. They take care to protect the environment and other surfaces from unintended overspray, paint splatter or damage by ensuring proper containment or protective coverings are utilized.

Painters and decorators are employed by construction companies, painting/restoration contractors, municipalities, facility owners, maintenance contractors, or they are self-employed. They work on residential, commercial, institutional and industrial projects. Some painters and decorators may work for years on a single site like a condo, office tower, vessels, vats, tunnels, bridges, dams, towers, power plants and other large infrastructure projects. Others may work for contractors that rarely work on the same site more than once, such as residential, office and retail locations.

Painters and decorators may come in contact with hazardous materials such as isocyanates, free silica, lead, volatile organic compounds (VOC), dust, fumes, mists and carcinogenic materials. They protect themselves and others by using required personal protective equipment (PPE) and safety equipment. They must also be aware of these materials' environmental impact (e.g., waterways, air quality, soil contamination).

They may work at heights while preparing surfaces or applying coatings using various types of access equipment such as ladders, scaffolds, swing stages, power elevated work platforms and other specialty equipment requiring good balance and physical flexibility. Painters and decorators build knowledge, confidence and trust in their equipment and co-workers to perform their work in a safe and environmentally responsible manner.

Key attributes for people entering this trade are manual dexterity, excellent colour perception, an eye for detail and artistic aptitude. The trade often requires working in a variety of different positions such as squatting, standing, kneeling and climbing to perform tasks such as abrasive blasting, spraying, and brush and roller work. Painters and decorators must have the ability to plan and schedule work and read drawings. They must have knowledge of many types of products, their properties and their applications and safe handling procedures according to manufacturers' product data and safety data sheets. They must be able to calculate areas and relate such calculations to required material.

Good communication and customer service skills are required by painters and decorators who often interact with home/business owners, contractors, interior designers, architects, engineers, co-workers, other trades and site personnel. Experienced painters and decorators may advance to supervisory positions for painting contractors or in other related fields such as construction management, instructing, estimating or building inspection.

Trends in the Painter and Decorator Trade

Technology

Technology is advancing rapidly in all painting sectors including commercial, institutional, residential and industrial. Lasers with vacuum fume containment are being introduced for paint removal, limiting damage to substrates and replacing abrasive blasting. Carbon dioxide is being used more often in intumescent coatings, creating a thick, highly insulating layer of carbon which protects the substrate from fire. Robots with remote controls and other methods of automated surface preparation are changing the way tasks are performed. Digital technology provides up-to-date electronic documents, reporting and communication on many projects.

Health and Safety

Contractors, supervisors, architects, facility and home owners are more often requiring work be completed according to safety regulations. Health and safety awareness by all parties is becoming more dominant resulting in cleaner and safer job sites.

Tools and Equipment

Smart phones and tablets are used more commonly throughout the industry with greater efficiencies. Drones are being utilized to inspect difficult access areas and for equipment testing.

Products/Materials

There is an increased use of decorative multicolour spray coatings and new coating resins for fibre-reinforced plastics (FRP).

Environmental

Owners, contractors and manufacturers are increasingly more aware and knowledgeable on environmental aspects on job sites and cooperate to ensure compliance.

Industry Specifications

Industry specifications dealing with corrosion and protective coatings have evolved over the years to a point where contractors now require applicators with specialized coating certifications developed by leading international corrosion specialists. Recently, the National Association of Corrosion Engineers (NACE) has purchased the Master Painters Institute (MPI) and has merged with the Society of Protective Coatings (SSPC) to form the Association for Materials Protection and Performance (AMPP). New standards are being developed by these industry stakeholders to advance the quality of work and meet owner demands.

Skills for Success Summary

Skills for Success are needed in a quickly changing world for work, learning and life. They are foundational for building other skills and important for effective social interaction. Everyone benefits from having these skills as they help individuals get a job, progress at their current job and change jobs. They also help individuals become active members of their community and succeed in learning.

Through extensive research and consultations, the Government of Canada launched the new Skills for Success model renewing the previous Essential Skills framework to better reflect the needs of the current and future labour market.

The summary presented here is based on existing Essential Skills profiles and will be updated to align with the new Skills for Success model over time.

Reading

Painters and decorators read a variety of safety-related documentation such as Safety Data Sheets (SDS) to understand the safety and PPE requirements when using a particular material or substance. They read Occupational Health and Safety (OH&S) regulations, and site health and safety policies and procedures. Job site analyses are used to determine the procedures and tasks to follow for all hazardous situations. Painters and decorators read product data sheets (PDS) to find information about products such as specifications and instructions. They also read labels on equipment as well as the instructions for their use. This is important when troubleshooting, or when setting up or using a piece of equipment for the first time to ensure safe and efficient use of the equipment.

Document Use

Painters and decorators interpret and refer to specifications and drawings (paper and electronic formats) to determine the type of paints and coatings to be applied and to which areas. They read assembly drawings and make sketches of items to be built such as containment structures. They refer to tables and charts to determine exposure limits to different chemicals and to select appropriate PPE. They refer to equipment manufacturers' instructions to select equipment and ensure it is assembled correctly. They refer to room finish schedules in the drawings to determine what products, colours and wall coverings are applied to specific surfaces. They also complete time sheets and record quality control information, both manually and electronically, for accurate record-keeping. Information recorded includes batch numbers, temperatures and drying times.

Writing

Painters and decorators complete work orders, job safety analyses, material lists and time sheets. They may write a list of tasks to be performed. They may also sign for materials received.

Oral Communication

Painters and decorators talk with co-workers, supervisors, and other tradespeople to coordinate activities or to clarify procedures. They use communication skills to convey information with supervisors and co-workers, to coordinate activities and clarify new procedures, to instruct apprentices, and to participate in project meetings. They advise customers on selection of colour schemes and wall covering selections. Painters and decorators working in industrial settings use hand signals and/or two-way radios to communicate with crane operators and other tradespeople.

Numeracy

Painters and decorators estimate mix ratios and measure out quantities of paints, thinners, solvents and coatings. They estimate the amount of time, cost and material required to complete a job. They also estimate and calculate measurements such as square and linear footage, coverage and cubic feet per minute (CFM). They calculate the weight of material that can safely be supported on swing stages and platforms. Painters and decorators also use both the metric and imperial measurement systems and therefore must be able to convert between the two systems.

Thinking

Painters and decorators use problem-solving skills to address issues that may arise on the job such as colour mismatches, defects in finishes, or to troubleshoot problems with equipment and PPE. They use decision-making skills to decide on the types of materials and application methods to use on a job, and to determine how to approach the job. They plan time and safety considerations, including hazard assessments, reviewing SDS information about materials and chemicals that may be encountered on site. They plan the materials, PPE and equipment they need for a job and schedule tasks to meet the needs of other trades on site.

Working with Others

Painters and decorators usually work as part of a team that may include apprentices, other journeypersons, and supervisors although they may work alone on some specific tasks or jobs. They coordinate with other trades to achieve tasks. Painters and decorators may perform supervisory functions and guide or monitor the work performance of co-workers, including apprentices and new employees.

Digital Technology

Painters and decorators may use the Internet to look up product and safety information. They may use electronic devices (smart phones/tablets) for accessing drawings and specifications, colour matching, designing graphics and completing reports in work and safety logs.

Continuous Learning

Painters and decorators learn through on-the-job training and observation of co-workers. They may keep up on their product knowledge by talking with suppliers or reading product/equipment information pamphlets or other literature. They may attend upgrading courses when entering a new area of specialization. Painters and decorators may also attend training sessions provided by manufacturers of new or specialty products and by union, association and employer training providers.

Roles and Opportunities for Skilled Trades in a Sustainable Future

Climate change affects all of us. Trades play a large role in implementing solutions and adjusting to changes in the world.

Throughout this standard, there may be specific references to tasks, skills and knowledge that clearly show this trade's role in a more sustainable future. Each trade has different roles to play and contributions to make in their own way.

For example:

- Construction tradespeople need to consider the materials they are using, building methods, and
 improvements to mechanical and electrical installations. There are important changes to codes and
 standards to help meet the climate change goals and commitments set for 2030 and 2050.
 Retrofits and new construction of low-energy buildings provide enormous opportunities for workers
 in this sector. Concepts, such as energy efficiency and regarding buildings as systems are
 foundational.
- Automotive and mechanical trades are seeing a shift towards the electrification of vehicles and
 equipment. As a result, new skills and knowledge will be required for tradespeople working in this
 sector. There are mandates for sales of new light-duty zero-emission vehicles (ZEV) in Canada,
 with the goal of achieving 100% ZEV sales by 2035. Due to this mandate, the demand for these
 vehicles is growing quickly among consumers and fleets. With this escalating demand, the need for
 skilled workers to maintain and repair these vehicles is also increasing.
- In industrial and resource sectors, there is pressure to move towards increased electrification of
 industrial processes. Many industrial and commercial facilities are also being upgraded to improve
 energy efficiency in areas such as lighting systems, and new production processes and
 technologies. There are also opportunities in carbon capture, utilization and storage (CCUS), as
 well as the production and export of low-carbon hydrogen.
- Trades in the service sector may also need to be aware of responsible sourcing, as well as efficient use of products and materials. New ways of working better are always a part of the job.

There are fast-moving changes in guidelines, codes, regulations and specifications. Many are being implemented for the purpose of energy efficiency and climate change. Those that affect specific trades may be mentioned within the standard. Examples of these guidelines and legislation include:

- The National Energy Code of Canada for Buildings (NECB).
- The Canadian Net-Zero Emissions Accountability Act (CNZEAA).
- programs that encourage sustainable building design and construction such as Leadership in Energy and Environmental Design (LEED) and the Zero Carbon Building (ZCB) standards.
- the Montreal Protocol for phasing out R22 refrigerants.
- energy efficiency programs such as ENERGY STAR.
- principles of the United Nations Declaration for the Rights of Indigenous Peoples pertaining to energy sector development.

Apprentices and tradespeople need to increase their climate literacy and reinforce their own understanding of energy issues and environmental practices. It is important for them to understand why these changes are happening and their effect on trades' work. While individual tradespeople and apprentices may not be able to choose certain elements like; the architectural design of buildings, building material selection, regulatory requirements, use of electric vehicles and technologies, they must understand the impact of using these elements in their work. Impacts include using environmentally friendly products and following requirements related to the disposal and recycling of materials.

In apprenticeship, as well as in ongoing professional development, employers and instructors should encourage learning about these concepts, why they are important, how they are implemented, and the overarching targets they are aiming to achieve.

All in all, it's about doing the work better and building a better world.

Industry Expected Performance

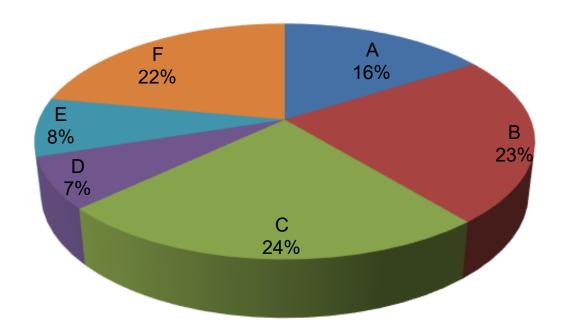
All tasks must be performed according to the applicable jurisdictional codes and standards. All health and safety standards must be respected and observed. Work should be performed efficiently with consideration to quality, safety and the environment. Attention to project requirements must be made including precise quantity calculations of materials to reduce material waste. All requirements of employers, engineers, designers, manufacturers, clients and quality control policies must be met. At a journeyperson level of performance, all tasks must be done with minimal direction and supervision. As a journeyperson progresses in their career, there is an expectation they continue to upgrade their skills and knowledge to maintain pace with industry and promote continuous learning in their trade through mentoring of apprentices.

Language Requirements

It is expected that journeypersons are able to understand and communicate in either English or French, which are Canada's official languages. English or French are the common languages of business as well as languages of instruction in apprenticeship programs.

Pie Chart

of Red Seal Examination Weightings



MWA A	Performs common occupational skills	16%
MWA B	Prepares surfaces	23%
MWA C	Prepares and applies residential, institutional and commercial paints, coatings and finishes	24%
MWA D	Prepares and applies wall coverings	7%
MWA E	Prepares and applies wood finishes	8%
MWA F	Prepares and applies industrial paints and coatings	22%

This pie chart represents a breakdown of the interprovincial Red Seal examination. Percentages are based on the collective input from workers from the trade from across Canada. The Task Matrix on the next pages indicates the breakdown of tasks and sub-tasks within each Major Work Activity and the breakdown of questions assigned to the Tasks. The Interprovincial examination for this trade has 130 questions.

Painter and Decorator

Task Matrix and Weightings

A - Performs common occupational skills

16%

Task A-1 Performs safety-related functions 21%	A-1.01 Uses personal protective equipment (PPE) and safety equipment	A-1.02 Maintains safe work environment	
Task A-2 Uses and maintains tools and equipment	A-2.01 Maintains tools and equipment	A-2.02 Uses rigging, hoisting and lifting equipment	A-2.03 Uses access equipment
Task A-3 Performs routine trade practices 31%	A-3.01 Uses documentation	A-3.02 Determines project requirements	A-3.03 Plans job
	A-3.04 Protects surroundings	A-3.05 Handles materials	
Task A-4 Performs quality control assessments	A-4.01 Assesses substrate conditions and deficiencies	A-4.02 Assesses product conditions and deficiencies	A-4.03 Assesses quality of painted or coated surfaces and wall coverings
Task A-5 Uses communication and mentoring techniques	A-5.01 Uses communication techniques	A-5.02 Uses mentoring techniques	

Task B-6 Performs general surface preparation 29%	B-6.01 Removes existing paints and coatings	B-6.02 Removes existing wall coverings and adhesives	B-6.03 Cleans surfaces
	B-6.04 Primes surfaces	B-6.05 Sands surfaces	B-6.06 Applies caulking
Task B-7 Prepares wood surfaces for paints, coatings and wall coverings	B-7.01 Treats wood surfaces	B-7.02 Repairs minor imperfections in wood	
Task B-8 Prepares concrete and masonry surfaces	B-8.01 Mechanically treats concrete and masonry surfaces	B-8.02 Chemically treats concrete and masonry surfaces	B-8.03 Repairs concrete and masonry surfaces
Task B-9 Prepares metal surfaces 19%	B-9.01 Treats metal surfaces	B-9.02 Repairs metal surfaces	
Task B-10 Prepares plaster surfaces and drywall 18%	B-10.01 Repairs existing plaster surfaces and drywall	B-10.02 Finishes new drywall	

C - Prepares and applies residential, institutional and commercial paints, coatings and finishes

24%

Task	C-1	1
_		

Prepares for application of residential, institutional and commercial paints and coatings

37%

Task C-12

Applies residential, institutional and commercial paints and coatings

48%

C-11.01 Prepares residential, institutional and commercial paints and coatings

C-11.02 Installs residential. institutional and commercial reinforcing mesh

C-12.01 Applies residential, institutional and commercial paints and coatings with brushes

C-12.04 Applies residential, institutional and commercial

C-12.02 Applies residential, institutional and commercial paints and coatings with rollers

C-13.02 Creates faux finishes

C-12.03 Applies residential, institutional and commercial paints and coatings with applicators

Task C-13 Applies decorative/specialty finishes **15**%

paints and coatings with spray equipment C-13.01 Applies paints and

coatings using decorative techniques

graphics

C-13.04 Applies stencils and C-13.05 Creates textured finishes

C-13.03 Applies gilding

C-13.06 Applies multi-spec coatings

D - Prepares and applies wall coverings

Task D-14

Prepares for application of wall coverings

40%

Task D-15

Applies wall coverings

60%

D-14.01 Treats surfaces for wall coverings	D-14.02 Lays out surface	D-14.03 Prepares wall coverings
D-15.01 Applies adhesives	D-15.02 Installs vinyl wall coverings	D-15.03 Installs fabric and natural material wall coverings
D-15.04 Installs rigid wall coverings	D-15.05 Repairs existing wall coverings	

E – Prepares and applies wood finishes

8%

Task E-16	
Prepares for wood	finishing
applications	
48%	

E-16.01 Conditions wood surfaces	E-16.02 Applies wood fillers	E-16.03 Seals wood surfaces
E-16.04 Prepares wood finishing products		
E-17.01 Brushes on wood finishes	E-17.02 Wipes on wood finishes	E-17.03 Sprays on wood finishes

Task E-17 Finishes wood surfaces 52%

F - Prepares and applies industrial paints and coatings

22%

Task F-18
Prepares for application of industrial
paints and coatings
53%

Task F-19 Applies industrial paints and coatings

F-18.01 Prepares industrial paints and coatings	F-18.02 Installs fibre- reinforced plastics (FRP)
F-19.01 Applies industrial paints and coatings with hand tools	F-19.02 Applies industrial paints and coatings with spray equipment

Harmonization of Apprenticeship Training

Provincial and territorial apprenticeship authorities are each responsible for their respective apprenticeship programs. In the spirit of continual improvement, and to facilitate mobility among apprentices in Canada, participating authorities have agreed to work towards harmonizing certain aspects of their programs where possible. After consulting with their stakeholders in the trade, they have reached consensus on the following elements. Note that implementation of these elements may vary from jurisdiction to jurisdiction, depending on their own circumstances. For more information on the implementation in any province and territory, please contact that jurisdiction's apprenticeship authority.

1. Trade name

The official Red Seal name for this trade is Painter and Decorator.

2. Number of Levels of Apprenticeship

The number of levels of technical training recommended for this trade is 3 years.

3. Total Training Hours during Apprenticeship Training

The total hours of training, including both on-the-job and in-school training for this trade is 5400.

4. Sequencing Topics and Related Sub-tasks

The topic titles in the table below are placed in a column for each apprenticeship level for technical training. Each topic is accompanied by the sub-tasks and their reference number. The topics in the grey shaded cells represent those that are covered "in context" with other training in the subsequent years.

Level 1	Level 2	Level 3
	Context	Context
	Safety-Related Functions	Safety-Related Functions
	Routine Trade Practices	
	Quality Control Assessments	Quality Control Assessments
Safety-Related Functions 1.01 Uses personal protective equipment (PPE) and safety equipment 1.02 Maintains safe work environment		
Tools and Equipment 2.01 Maintains tools and equipment 2.02 Uses rigging, hoisting and lifting equipment 2.03 Uses access equipment	Tools and Equipment 2.02 Uses rigging, hoisting and lifting equipment 2.03 Uses access equipment	
Routine Trade Practices 3.01 Uses documentation 3.04 Protects surroundings 3.05 Handles materials		Routine Trade Practices 3.02 Determines project requirements 3.03 Plans job

Level 2 Level 3

Quality Control Assessments

- 4.01 Assesses substrate conditions and deficiencies
- 4.02 Assesses product conditions and deficiencies
- 4.03 Assesses quality of painted or coated surfaces and wall coverings

Communication Techniques

5.01 Uses communication techniques

General Surface Preparation

- $6.01\,\mbox{Removes}$ existing paints and coatings
- 6.02 Removes existing wall coverings and adhesives
- 6.03 Cleans surfaces
- 6.04 Primes surfaces
- 6.05 Sands surfaces
- 6.06 Applies caulking

Wood Surfaces for Paints, Coatings and Wall Coverings (Introduction/Overview)

- 7.01 Treats wood surfaces
- 7.02 Repairs imperfections in wood

Wood Surfaces for Paints, Coatings and Wall Coverings

7.01 Treats wood surfaces

7.02 Repairs imperfections in wood

Concrete and Masonry Surfaces

- 8.01 Mechanically treats concrete and masonry surfaces (Introduction to surfaces)
- 8.02 Chemically treats concrete and masonry surfaces *(Introduction to surfaces)*

Concrete and Masonry Surfaces

- 8.01 Mechanically treats concrete and masonry surfaces
- 8.02 Chemically treats concrete and masonry surfaces
- 8.03 Repairs concrete and masonry surfaces

Concrete and Masonry Surfaces

Mentoring Techniques

5.02 Uses mentoring techniques

- 8.01 Mechanically treats concrete and masonry surfaces
- 8.02 Chemically treats concrete and masonry surfaces
- 8.03 Repairs concrete and masonry surfaces

Metal Surfaces

9.01 Treats metal surfaces 9.02 Repairs metal surfaces

Plaster Surfaces and Drywall

10.01 Repairs existing plaster surfaces and drywall 10.02 Finishes new drywall

Application of Residential, Institutional and Commercial Paints and Coatings (Preparation)

- 11.01 Prepares residential, institutional and commercial paints and coatings
- 11.02 Installs residential, institutional and commercial reinforcing mesh

Application of Residential, Institutional and Commercial Paints and Coatings (Preparation)

- 11.01 Prepares residential, institutional and commercial paints and coatings
- 11.02 Installs residential, institutional and commercial reinforcing mesh

Plaster Surfaces and Drywall 10.01 Repairs existing plaster

surfaces and drywall

Level 2 Level 3

Application of Residential, Institutional and Commercial Paints and Coatings (Applies)

12.01 Applies residential, institutional and commercial paints and coatings with brushes
12.02 Applies residential, institutional and commercial paints and coatings with rollers
12.03 Applies residential, institutional and commercial paints and coatings with applicators (NCC)
12.04 Applies residential, institutional and commercial paints and coatings with spray equipment

Application of Residential, Institutional and Commercial Paints and Coatings (Applies) 12.03 Applies residential, institutional

and commercial paints and coatings with applicators (NCC)
12.04 Applies residential, institutional and commercial paints and coatings with spray equipment

Application of Residential, Institutional and Commercial Paints and Coatings (Applies)

12.04 Applies residential, institutional and commercial paints and coatings with spray equipment

Decorative/Specialty Finishes

13.01 Applies paints and coating using decorative techniques

Decorative/Specialty Finishes

13.01 Applies paints and coating using decorative techniques
13.02 Creates faux finishes
13.03 Applies gilding
13.04 Applies stencils and graphics
13.05 Creates textured finishes

13.06 Applies multi-spec coatings

Wall Coverings (Preparation)

14.01 Treats surfaces for wall coverings
14.02 Lays out surface
14.03 Prepares wall coverings

Wall Coverings (Applies)

15.01 Applies adhesives 15.02 Installs vinyl wall coverings

15.03 Installs fabric and natural material wall coverings

15.04 Installs rigid wall coverings
15.05 Repairs existing wall coverings

Wall Coverings (Applies)

15.01 Applies adhesives 15.02 Installs vinyl wall coverings 15.03 Installs fabric and natural material wall coverings 15.04 Installs rigid wall coverings 15.05 Repairs existing wall coverings

Wood Finishing Applications (Prepares)

16.01 Conditions wood surfaces 16.02 Applies wood fillers 16.03 Seals wood surfaces 16.04 Prepares wood finishing

Wood Surfaces (Finishes)

17.01 Brushes on wood finishes 17.02 Wipes on wood finishes

products

17.03 Sprays on wood finishes

Level 1 Level 2 Level 3

Industrial Paints and Coatings (Prepares)

 $18.01\, \text{Prepares industrial paints and coatings}$

18.02 Installs fibre reinforced plastics (FRP)

Industrial Paints and Coatings (Applies)

19.01 Applies industrial paints and coatings with hand tools
19.02 Applies industrial paints and coatings with power tools

Industrial Paints and Coatings (Applies)

19.01 Applies industrial paints and coatings with hand tools
19.02 Applies industrial paints and coatings with power tools

Major Work Activity A

Performs common occupational skills

Task A-1 Performs safety-related functions

Task Descriptor

Painters and decorators use and maintain personal protective equipment (PPE) and safety equipment to provide protection of self and others.

A-1.01 Uses personal protective equipment (PPE) and safety equipment

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills						
	Performance Criteria	Evidence of Attainment					
A-1.01.01P	select, don, doff and use PPE and safety equipment	PPE and safety equipment are selected, donned, doffed and used according to task					
A-1.01.02P	perform positive and negative airflow system seal tests when donning respirator mask	positive and negative airflow system seal tests are performed when donning respirator mask to ensure proper seal					
A-1.01.03P	clean interior and exterior of respirator mask before and after each use	interior and exterior of respirator mask is cleaned according to manufacturers' specifications before and after each use and kept in a sealed bag or container to ensure proper hygiene					
A-1.01.04P	replace respirator pre-filters and cartridges	respirator pre-filters and cartridges are replaced according to manufacturers' specifications to ensure proper functioning					
A-1.01.05P	replace defective or damaged parts of respirator mask	defective or damaged parts of respirator mask are replaced					
A-1.01.06P	inspect PPE and safety equipment for damage before each use	PPE and safety equipment are inspected for damage before each use					

A-1.01.07P	tag and remove damaged or expired PPE and safety equipment	damaged or expired PPE and safety equipment are tagged and removed according to manufacturers' specifications and instructions, company policies, sitespecific guidelines and Occupational Health and Safety (OH&S) regulations
A-1.01.08P	store PPE and safety equipment	PPE and safety equipment are stored according to manufacturers' specifications to prevent theft, damage and contamination of equipment

	Knowledge							
	Learning Outcomes	Learning Objectives						
A-1.01.01L	demonstrate knowledge of PPE and safety equipment, their characteristics, applications and procedures for use	identify types of PPE and safety equipment, and describe their characteristics, applications and procedures for use						
		describe handling, donning/doffing procedures, prevention of damage and contamination, storage and maintenance of PPE and safety equipment						
A-1.01.02L	demonstrate knowledge of training and certification requirements for PPE and safety equipment	identify training and certification requirements for PPE and safety equipment						
A-1.01.03L	demonstrate knowledge of regulatory requirements for PPE and safety equipment	identify codes, standards and regulations for PPE and safety equipment						

A-1.02 Maintains safe work environment

N	L	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	YT	NU
N'	V	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills						
	Performance Criteria	Evidence of Attainment					
A-1.02.01P	install temporary safety protection	temporary safety protection is installed					
A-1.02.02P	ventilate workplace using <i>methods</i>	workplace is ventilated using methods					
A-1.02.03P	organize work area	work area is organized to minimize possibility of tripping hazards or falling objects					
A-1.02.04P	perform <i>housekeeping duties</i>	housekeeping duties are performed according to company policies and procedures					

A-1.02.05P	recognize and report unsafe work practices and <i>hazards</i>	unsafe work practices and <i>hazards</i> are recognized and reported according to <i>jurisdictional safety regulations</i>
A-1.02.06P	identify location of workplace safety equipment and workplace safety information	location of workplace safety equipment and workplace safety information are identified

temporary safety protection includes: caution tape, signage, guardrails

methods include: setting up fans, opening doors or windows, installing positive and negative air systems **housekeeping duties** include: hanging or taping down extension cords, sweeping up work area, removing tools and equipment not in use

hazards include: asbestos, lead, other designated substances

jurisdictional safety regulations include: OH&S, WHMIS

workplace safety equipment includes: eye wash stations, fire extinguishers, spill kits, first aid kits workplace safety information includes: emergency phone numbers, escape route, evacuation plan

	Knowledge							
	Learning Outcomes	Learning Objectives						
A-1.02.01L	demonstrate knowledge of safe work practices	describe safe work practices to maintain a safe work environment						
		identify components of Workplace Hazardous Materials Information System (WHMIS) and associated certifications						
		describe procedures for working in confined spaces						
		describe precautions taken when working in extreme temperatures						
A-1.02.02L	demonstrate knowledge of certification and regulatory requirements pertaining to safety	identify and describe <i>jurisdictional</i> safety regulations to maintain safe work environment						

Range of Variables

components of WHMIS include: safety data sheets (SDS), labels, training, muster points jurisdictional safety regulations include: OH&S, WHMIS

Task A-2 Uses and maintains tools and equipment

Task Descriptor

Painters and decorators maintain tools and equipment in order to ensure their safe use, longevity and optimal performance. Proper maintenance also avoids product contamination, helps obtain the desired finish and prevents deficiencies.

A-2.01 Maintains tools and equipment

1	NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	YT	NU
١	VV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills								
	Performance Criteria	Evidence of Attainment							
A-2.01.01P	inspect tools and equipment and their components for excessive <i>wear or damage</i>	tools and equipment and their components are inspected for excessive wear or damage							
A-2.01.02P	repair or replace damaged spray equipment components	damaged spray equipment components are repaired or replaced							
A-2.01.03P	lubricate spray equipment components and air-powered tools	spray equipment components and air- powered tools are lubricated according to manufacturers' specifications							
A-2.01.04P	clean spray equipment components	spray equipment components are cleaned according to materials used and manufacturers' specifications							
A-2.01.05P	clean brushes and roller sleeves	brushes and roller sleeves are cleaned using solvent according to industry accepted procedures							
A-2.01.06P	clean hand tools	hand tools are cleaned by using methods							
A-2.01.07P	replace worn power tool components	worn power tool components are replaced according to manufacturers' specifications							
A-2.01.08P	lubricate and top up fluids in abrasive blasting equipment components	abrasive blasting equipment components are lubricated and fluids are topped up							
A-2.01.09P	clean abrasive blasting equipment	abrasive blasting equipment is cleaned by using <i>cleaning methods</i>							
A-2.01.10P	calibrate measuring and testing equipment	measuring and testing equipment are calibrated according to manufacturers' specifications							
A-2.01.11P	store tools and equipment	tools and equipment are stored according to manufacturers' specifications and company policies and procedures							

wear or damage includes: frayed or cut extension cords; flared brushes; worn roller sleeves; worn couplings, nozzles, hoses, blasting pots and rubber seals

methods include: using solvent, sanding or scraping off dried material

cleaning methods includes: emptying pots, blowing out lines, wiping down hoses

	Knowledge								
	Learning Outcomes	Learning Objectives							
A-2.01.01L	demonstrate knowledge of tools and equipment, their components, characteristics, applications, maintenance and procedures for use	identify types of tools and equipment, and their components, and describe their characteristics, applications and procedures for use							
		describe procedures to inspect tools and equipment							
		describe procedures to lubricate and clean tools and equipment							
		describe procedures to sharpen tools and equipment							
		identify hazards and describe safe work practices when maintaining tools and equipment							

A-2.02 Uses rigging, hoisting and lifting equipment

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills							
	Performance Criteria	Evidence of Attainment						
A-2.02.01P	select and use rigging, hoisting and lifting equipment	rigging, hoisting and lifting equipment are selected and used according to task and manufacturers' specifications						
A-2.02.02P	inspect rigging, hoisting and lifting equipment and tag, report and remove from service worn, damaged, expired or defective components	rigging, hoisting and lifting equipment are inspected and worn, damaged, expired or defective components are tagged, reported and removed from service according to jurisdictional safety regulations						
A-2.02.03P	lubricate <i>moving parts</i> of motorized hoisting and lifting equipment	moving parts of motorized hoisting and lifting equipment are lubricated						
A-2.02.04P	store rigging, hoisting and lifting equipment	rigging, hoisting and lifting equipment are stored according to manufacturers' specifications						

A-2.02.05P	calculate weight of materials to be lifted	weight of materials to be lifted is calculated to respect load limits of rigging, hoisting and lifting equipment
A-2.02.06P	set up rigging, hoisting and lifting equipment	rigging, hoisting and lifting equipment are set up according to manufacturers' specifications

jurisdictional safety regulations include: OH&S moving parts include: chains, gears, wheels

	Knowledge					
	Learning Outcomes	Learning Objectives				
A-2.02.01L	demonstrate knowledge of rigging, hoisting and lifting equipment, their components, characteristics, applications and maintenance	identify types of rigging, hoisting and lifting equipment and their components, and describe their characteristics, applications and maintenance				
		describe procedures to inspect rigging, hoisting and lifting equipment				
		describe procedures to record and report damaged and defective rigging, hoisting and lifting equipment				
		describe procedures to store rigging, hoisting and lifting equipment				
A-2.02.02L	demonstrate knowledge of procedures to operate rigging, hoisting and lifting equipment	describe procedures to operate rigging, hoisting and lifting equipment				
		identify <i>factors</i> to consider when selecting hoisting and lifting equipment				
		describe load limitations of rigging, hoisting and lifting equipment				
		identify potential <i>hazards</i> and describe <i>safe work practices</i> pertaining to use of rigging, hoisting and lifting equipment				
A-2.02.03L	demonstrate knowledge of training and certification requirements to operate rigging, hoisting and lifting equipment	identify training and certification requirements to operate rigging, hoisting and lifting equipment				
A-2.02.04L	demonstrate knowledge of regulatory requirements to operate rigging, hoisting and lifting equipment	identify and interpret regulations to operate rigging, hoisting and lifting equipment				

Range of Variables

factors include: load characteristics, environment, safety, anchor points, sling angles **hazards** include: ceiling heights, overhead wires, uneven and unstable surfaces **safe work practices** include: supervision of lifts, securing work area, communication

A-2.03 Uses access equipment

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills					
	Performance Criteria	Evidence of Attainment				
A-2.03.01P	replace deteriorated, worn or damaged access equipment components	deteriorated, worn or damaged access equipment components are replaced				
A-2.03.02P	position stepladders and extension ladders	stepladders and extension ladders are positioned according to <i>health and safety guidelines and regulations</i>				
A-2.03.03P	lay out scaffolding	scaffolding is laid out to ensure all necessary parts and components are present and compatible for assembly				
A-2.03.04P	assemble scaffolding while maintaining level working platform and base	scaffolding is assembled while maintaining level working platform and base				
A-2.03.05P	tie in scaffolding and ladders to structure	scaffolding and ladders are tied in to structure according to jurisdictional regulations to ensure scaffolding and ladders are secured				
A-2.03.06P	install kickboards (toe boards) and guardrails	kickboards (toe boards) and guardrails are installed according to safety regulations				
A-2.03.07P	install outriggers	outriggers are installed according to safety regulations to stabilize scaffolding				
A-2.03.08P	disassemble scaffolding keeping all components together for future assembly	scaffolding is disassembled keeping all components together for future assembly				
A-2.03.09P	store scaffolding and ladders in approved storage locations	scaffolding and ladders are stored in approved storage locations				

Range of Variables

deteriorated, worn or damaged access equipment components include: frayed ropes and cables, broken feet, split planks, UV damage on fibreglass ladders

health and safety guidelines and regulations include: OH&S, local regulations, job site specifications

	Knowledge			
	Learning Outcomes	Learning Objectives		
A-2.03.01L	demonstrate knowledge of access equipment, their components, characteristics and applications	identify types of access equipment and their components, and describe their characteristics and applications		
A-2.03.02L	demonstrate knowledge of procedures to use access equipment	describe procedures to use access equipment		

		describe procedures to store access equipment
		describe procedures to position and connect access equipment
		identify <i>restrictions</i> for access equipment
		explain 3-point contact on access equipment
A-2.03.03L	demonstrate knowledge of training and certification requirements to use access equipment	identify training and certification requirements to use access equipment
A-2.03.04L	demonstrate knowledge of regulatory requirements to use access equipment	identify and interpret regulations to use access equipment

restrictions include: electrical, height, no-step zones, load limitations, no painting of ladders

Task A-3 Performs routine trade practices

Task Descriptor

This task describes common activities performed by painters and decorators. They include using traderelated documentation, determining project requirements, planning jobs, protecting surroundings and handling materials.

A-3.0)1	Uses do	ocume	ntation	1							
NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

		Skills				
	Performance Criteria	Evidence of Attainment				
A-3.01.01P	locate and interpret documentation	documentation is located and interpreted				
A-3.01.02P	complete work-related documents	work-related documents are completed according to company policies and procedures				
A-3.01.03P	document <i>jobsite problems</i>	jobsite problems are documented for future reference in case of deficiencies				

documentation includes: manufacturers' specifications, site-specific documents, drawings (including revisions), permits, work orders, contracts, safety documentation (SDS and WHMIS symbols) work-related documents include: work orders, material lists, time and materials sheets (T&M) jobsite problems include: environmental conditions (relative humidity, wind, temperature, dew point, UV), contaminants (dust, animal waste), congestion, confined space, scheduling delays

	Knowledge					
	Learning Outcomes	Learning Objectives				
A-3.01.01L	demonstrate knowledge of documentation and work-related documents, their characteristics and applications	identify types of documentation and work-related documents , and describe their characteristics and applications				
A-3.01.02L	demonstrate knowledge of procedures to use and complete work-related documents	describe procedures to use and complete work-related documents				
A-3.01.03L	demonstrate knowledge of regulatory requirements pertaining to documentation and work-related documents	identify and interpret standards and regulations pertaining to documentation and work-related documents				

Range of Variables

documentation includes: manufacturers' specifications, site-specific documents, drawings (including revisions), permits, work orders, contracts, safety documentation (SDS and WHMIS symbols) work-related documents include: work orders, material lists, time and materials sheets (T&M) standards include: Association for Materials Protection and Performance (AMPP), International Organization for Standardization (ISO)

A-3.02 Determines project requirements

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills					
	Performance Criteria	Evidence of Attainment				
A-3.02.01P	determine area of substrate to be covered	area of substrate to be covered is determined by estimating or by referencing drawings				
A-3.02.02P	calculate time and labour requirements	time and labour requirements are calculated based on <i>area to be covered</i> and hourly rates				
A-3.02.03P	determine <i>tools and equipment</i> and <i>materials</i> needed for project	tools and equipment and materials needed for project are determined				

A-3.02.04P	determine and recommend product to be used	product to be used is determined and recommended
A-3.02.05P	determine availability of <i>utilities</i>	availability of <i>utilities</i> are determined
A-3.02.06P	determine ventilation requirements	ventilation requirements are determined according to size of project and materials used
A-3.02.07P	determine method of application required	method of application required is determined

area to be covered include: square footage covering, linear footage covering

tools and equipment include: brushes, rollers, extension cords, spray equipment and accessories, ladders, scaffolding, lifting equipment

materials include: paint, wall coverings, masking, drop sheets

utilities include: heating, electricity, water

	Knowledge				
	Learning Outcomes	Learning Objectives			
A-3.02.01L	demonstrate knowledge of procedures to determine project requirements	identify tools and equipment , and materials used for projects, and describe their procedures for use			
		describe procedures to determine project requirements			
		describe procedures to determine sequence and timing of procedures			

Range of Variables

tools and equipment include: brushes, rollers, extension cords, spray equipment and accessories, ladders, scaffolding, lifting equipment

materials include: paint, wall coverings, masking, drop sheets

A-3.03 Plans job

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills					
	Performance Criteria	Evidence of Attainment				
A-3.03.01P	coordinate ordering of materials and paint with supervisor or suppliers	ordering of materials and paint is coordinated with supervisor or suppliers				
A-3.03.02P	organize <i>tools and equipment</i> on site	tools and equipment are organized on site				

A-3.03.03P	determine optimal location for shop on site	optimal location for shop on site is determined
A-3.03.04P	coordinate work with other tradespersons on job site	work with other tradespersons is coordinated on job site
A-3.03.05P	adapt to changing environmental conditions	changing environmental conditions are adapted to
A-3.03.06P	determine, set and adjust working hours and labour requirements	working hours and labour requirements are determined, set and adjusted according to job conditions and requirements
A-3.03.07P	create job safety analysis (JSA) to identify potential hazards	JSA is created to identify potential hazards

tools and equipment include: explosion-proof box, job box, brushes, rollers, paints **environmental conditions** include: relative humidity, wind, snow, temperature, dew point, UV, contaminants (dust, animal waste)

	Knowledge					
	Learning Outcomes	Learning Objectives				
A-3.03.01L	demonstrate knowledge of procedures to plan jobs	identify <i>tools and equipment</i> to be organized on job site				
		describe procedures to plan jobs				
		describe procedures to determine types and amounts of labour and materials required for project				
		describe procedures to identify potential hazards				

Range of Variables

tools and equipment include: explosion-proof box, job box, brushes, rollers, paints

A-3.04 Protects surroundings

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	YT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills								
	Performance Criteria	Evidence of Attainment							
A-3.04.01P	erect hoarding and enclosures around work area	hoarding and enclosures are erected around work area to protect surrounding area and general public using <i>protective products</i> according to manufacturers' specifications and jurisdictional regulations							
A-3.04.02P	cover surrounding objects using protective coverings	surrounding objects are covered using protective coverings to protect against paint splatter and overspray, and for ease of clean-up							
A-3.04.03P	cover electrical outlets, fixtures and other panels and isolate power in room before applying water to substrate for procedures	electrical outlets, fixtures and other panels are covered and power is isolated before applying water to substrate for procedures							
A-3.04.04P	set up controls to prevent environmental contamination	controls are set up to prevent environmental contamination							
A-3.04.05P	wear <i>protective clothing</i> to prevent contamination	protective clothing are worn to prevent contamination							

Range of Variables

protective products include: wallboards, plywood, polyethylene tarps, caution tape, signage **surrounding objects** include: furniture, flooring, lighting fixtures, landscaping, motion detectors, hardware, pull stations, card readers, wall plates, fixtures

protective coverings include: drop cloths, plastic, hoarding, masking

procedures include: wallpaper removal, power washing

protective clothing include: disposable booties, coveralls, hoods

	Knowledge					
	Learning Outcomes	Learning Objectives				
A-3.04.01L	demonstrate knowledge of procedures to protect surroundings	identify <i>protective products</i> and <i>coverings</i> used to protect surroundings, and describe their procedures for use				
		describe procedures to protect surroundings and general public from paint splatter and overspray				

		identify types of <i>protective clothing</i> wom to prevent contamination
A-3.04.02L	demonstrate knowledge of regulatory requirements pertaining to protecting surroundings	identify and interpret codes, standards and regulations pertaining to protecting surroundings

protective products include: wallboards, plywood, polyethylene tarps, caution tape, signage protective coverings include: drop cloths, plastic, hoarding, masking protective clothing include: disposable booties, coveralls, hoods

A-3.05 Handles materials

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	YT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills							
	Performance Criteria	Evidence of Attainment						
A-3.05.01P	acclimatize paints, coatings and wall coverings	paints, coatings and wall coverings are acclimatized to enhance product performance						
A-3.05.02P	store paints, coatings and solvents	paints, coatings and solvents are stored according to <i>manufacturers'</i> specifications and safety regulations						
A-3.05.03P	dispose of used and empty product containers and other <i>hazardous materials</i>	used and empty product containers and other <i>hazardous materials</i> are disposed of according to local recycle program and, environmental and safety regulations						
A-3.05.04P	cover trays and place lids on cans	trays are covered and lids are placed on cans to protect paints and coatings, and to prevent chemical reactions and spills						
A-3.05.05P	dispose of soiled rags in approved containers	soiled rags are disposed of in approved containers to prevent spontaneous combustion						
A-3.05.06P	identify and report <i>designated</i> substances as work progresses	designated substances are identified and reported as discovered						

manufacturers' specifications and safety regulations include: storing in explosive-proof cabinets, identifying possible chemical reactions and synergistic effects between products, storing incompatible materials separately, protecting waterborne products from freezing and overheating

hazardous materials include: empty paint cans, asbestos, lead-based paints

designated substances include: acrylonitrile, arsenic, asbestos, benzene, coke oven emissions, ethylene oxide, isocyanates, lead (in lead-based paints), mercury, silica, vinyl chloride (in polyvinyl chloride-PVC)

	Knowledge						
	Learning Outcomes	Learning Objectives					
A-3.05.01L	demonstrate knowledge of procedures to handle <i>materials</i>	describe procedures to handle and mix types of <i>materials</i>					
		describe procedures to identify, report, remove and dispose of <i>hazardous materials</i> and <i>designated substances</i>					
		identify storage requirements of paints, coatings and solvents					
A-3.05.02L	demonstrate knowledge of regulatory requirements when handling <i>hazardous materials</i> and <i>designated substances</i>	identify standards and environmental regulations when handling <i>hazardous materials</i> and <i>designated substances</i>					
		identify requirements for transportation of dangerous goods (TDG)					

Range of Variables

materials include: solvents, paints, coatings

hazardous materials include: empty paint cans, asbestos, lead-based paints

designated substances include: acrylonitrile, arsenic, asbestos, benzene, coke oven emissions, ethylene oxide, isocyanates, lead (in lead-based paints), mercury, silica, vinyl chloride (in polyvinyl chloride-PVC)

storage requirements include: explosive-proof and ventilated cabinets, protection from freezing, separating incompatibles and reactionary products

Task A-4 Performs quality control assessments

Task Descriptor

Painters and decorators must evaluate jobs in order to provide high quality results. This is done by identifying substrate and product deficiencies and evaluating the final work.

A-4.01 Assesses substrate conditions and deficiencies

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills							
	Performance Criteria	Evidence of Attainment						
A-4.01.01P	perform sensory inspection of wood to identify deficiencies and imperfections and to select repair procedures	sensory inspection of wood is performed to identify deficiencies and imperfections and to select repair procedures						
A-4.01.02P	identify <i>metal conditions and deficiencies</i> using <i>methods</i>	metal conditions and deficiencies are identified using methods						
A-4.01.03P	identify concrete and masonry conditions and deficiencies	concrete and masonry conditions and deficiencies are identified						
A-4.01.04P	identify improperly cured concrete, masonry and plaster surfaces (hot spots)	improperly cured concrete, masonry and plaster surfaces (hot spots) are identified						
A-4.01.05P	inspect substrates to identify contaminants	substrates are inspected to identify contaminants						
A-4.01.06P	identify <i>drywall damage</i>	drywall damage is identified						
A-4.01.07P	inspect drywall surface prior to mudding to identify <i>issues</i>	drywall surface is inspected prior to mudding to identify <i>issues</i>						
A-4.01.08P	identify improperly taped, filled or sanded surfaces	improperly taped, filled or sanded surfaces are identified						
A-4.01.09P	identify <i>paint film defects</i>	paint film defects are identified						
A-4.01.10P	perform visual inspection of caulking to identify improper tooling or gaps	visual inspection of caulking is performed to identify improper tooling or gaps						
A-4.01.11P	perform moisture test of substrate	moisture test of <i>substrate</i> is performed						
A-4.01.12P	perform surface temperature test of substrate and humidity test of environment	surface temperature test of substrate and humidity test of environment are performed						

sensory inspections include: visually, by touch

metal conditions and deficiencies include: mill scale, contaminants, rust patterns, corrosion levels **methods** include: visual check, tape/mechanical pull test

concrete and masonry conditions and deficiencies include: efflorescence, honeycomb, laintance, surface pH, scaling

substrates include: wood, stucco, plaster, drywall, metal

contaminants include: mould, mildew, salt, oil

drywall damages include: structural deficiencies, moisture damage, poor tape adhesion, popping screws **issues** include: nicks, narrow and wide gaps

paint film defects include: blistering, mud cracking, alligatoring, orange peeling, flaking, bleeding, saponification

	Knowledge						
	Learning Outcomes	Learning Objectives					
A-4.01.01L	demonstrate knowledge of <i>substrates</i> , their characteristics and applications	identify types of substrates , and describe their characteristics and applications					
		identify levels of drywall finishes					
		identify substrate reference materials					
		identify problematic substrates					
A-4.01.02L	demonstrate knowledge of procedures to assess substrate conditions and deficiencies	describe procedures to assess substrate conditions and deficiencies					
		identify inspections and tests performed to assess substrate conditions and deficiencies					
		identify possible causes of deficiencies					

Range of Variables

substrates include: wood, stucco, plaster, drywall, metal

levels of drywall finishes include: 1, 2, 3, 4, 5

substrate reference materials include: AMPP Identifiers, Feedback and Failures Guide **problematic substrates** include: galvanized metals, concrete with form release agents present, aluminum

substrate conditions and deficiencies include: scaling, rusting, spalling, peeling and cracking paint **causes of deficiencies** include: excessive moisture; efflorescence; improper masking, filling and sanding; insufficient cure of plaster/masonry

A-4.02 Assesses product conditions and deficiencies

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Sk	ills
	Performance Criteria	Evidence of Attainment
A-4.02.01P	perform visual assessment of products to identify <i>conditions and deficiencies</i>	visual assessment of products are performed to identify <i>conditions and deficiencies</i>
A-4.02.02P	determine product shelf life, pot life, viscosity and batch number	product shelf life, pot life, viscosity and batch number are determined according to manufacturers' specifications and product data sheets
A-4.02.03P	check dye lots, sequential rolls, virgin or recycled materials, lot numbers and imperfections in wall coverings	dye lots, sequential rolls, virgin or recycled materials, lot numbers and imperfections in wall coverings are checked to ensure uniformity
A-4.02.04P	compare different samples of products to finished samples (draw downs)	different samples of products are compared to finished samples (draw downs) to ensure colour match and sheen

Range of Variables

conditions and deficiencies include: compatibilities of coatings; age of product; improperly stored, stirred, strained or mixed paints, stains and epoxies

	Know	rledge
	Learning Outcomes	Learning Objectives
A-4.02.01L	demonstrate knowledge of painting products, their characteristics and applications	identify types of painting products and describe their characteristics and applications
		explain product shelf life, pot life, viscosity and batch number
		explain dye lots, sequential rolls, lot numbers, and difference between virgin and recycled materials
		describe compatibility of coatings
A-4.02.02L	demonstrate knowledge of procedures to assess product conditions and deficiencies	describe procedures to assess product conditions and deficiencies

compatibility of coatings include: waterborne and oil-based paints, primers **conditions and deficiencies** include: compatibilities of coatings; age of product; improperly stored, stirred, strained or mixed paints, stains and epoxies

A-4.03 Assesses quality of painted or coated surfaces and wall coverings

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Sk	ills
	Performance Criteria	Evidence of Attainment
A-4.03.01P	perform visual inspection of surface to determine if patching or touch-ups are necessary	visual inspection of surface is performed to determine if patching or touch-ups are necessary
A-4.03.02P	perform visual inspection of surface to determine if patching or touch-up procedures were performed correctly and that uniform finish has been achieved	visual inspection of surface is performed to determine if patching or touch-up procedures were performed correctly and that uniform finish has been achieved
A-4.03.03P	compare finished surface to samples (draw downs)	finished surface is compared to samples (draw downs) to ensure colour match and sheen
A-4.03.04P	perform visual inspection of primed or painted surface to check coverage and even distribution of paint film	visual inspection of primed or painted surface is performed to check coverage and even distribution of paint film
A-4.03.05P	inspect primer coat	primer coat is inspected using wet mil gauge and dry film thickness gauge
A-4.03.06P	perform visual inspection of painted or coated surface to check for <i>quality of</i> work	visual inspection of painted or coated surface is performed to check for <i>quality</i> of work
A-4.03.07P	perform visual inspection of wall covering to check for <i>quality of work</i>	visual inspection of wall covering is performed to check for <i>quality of work</i>
A-4.03.08P	identify <i>paint film defects</i>	paint film defects are identified

Range of Variables

quality of work (painted or coated surfaces) includes: cut-in lines, even flow of brush work, uniform finish **quality of work** (wall coverings) includes: seam and pattern alignment, shading, absence of air bubbles, use of recommended adhesive, use of recommended primer

paint film defects include: blistering, mud cracking, alligatoring, orange peeling, flaking, bleeding, flashing, blooming, blushing

	Know	vledge
	Learning Outcomes	Learning Objectives
A-4.03.01L	demonstrate knowledge of procedures to assess quality of painted or coated surfaces and wall coverings	describe procedures to assess quality of painted or coated surfaces and wall coverings
		identify inspections performed to assess quality of painted or coated surfaces and wall coverings
		identify possible finished surface conditions and deficiencies
		identify <i>problematic substrates</i>
		explain galvanic action

finished surface conditions and deficiencies include: air entrapment and specks of dry paint, fish eyes, orange peeling, holidays, flashing

problematic substrates include: galvanized metals, aluminum, concrete with form release agents present, metal cladding, plastics

Task A-5 Uses communication and mentoring techniques

Task Descriptor

Learning in the trades is done primarily in the workplace with tradespeople passing on their skills and knowledge to apprentices, as well as sharing knowledge among themselves. Apprenticeship is, and always has been about mentoring – learning workplace skills and passing them on. Because of the importance of this to the trade, this task covers the activities related to communication in the workplace and mentoring skills.

A-5.01 Uses communication techniques

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills					
	Performance Criteria	Evidence of Attainment				
A-5.01.01P	demonstrate communication practices with individuals or in a group	instructions and messages are interpreted by all parties involved in communication				
A-5.01.02P	listen using active listening practices	active listening practices are utilized				
A-5.01.03P	speak clearly using correct industry terminology to ensure understanding	understanding of message is confirmed by both parties				

A-5.01.04P	receive and respond to instructions	response to instructions indicates understanding
A-5.01.05P	receive and respond to feedback on work completed or performed	response to feedback indicates understanding and corrective measures are taken
A-5.01.06P	explain and provide feedback	explanation and feedback is provided and task is carried out as directed
A-5.01.07P	use questions to improve communication	questions enhance understanding, on-the-job training and goal setting
A-5.01.08P	conduct and participate in safety and information meetings	meetings are conducted and attended, information is relayed to workforce, and is applied according to safety criteria
A-5.01.09P	send and receive <i>electronic messages</i>	electronic messages are sent and received using professionalism, plain language and clear expressions according to company policy

active listening includes: hearing, interpreting, reflecting, responding, paraphrasing **electronic messages** include: email, text messages

	Knov	vledge
	Learning Outcomes	Learning Objectives
A-5.01.01L	demonstrate knowledge of trade terminology	define terminology used in trade
A-5.01.02L	demonstrate knowledge of effective communication practices	describe importance of using effective verbal and non-verbal communication with people in the workplace
		identify sources of information to effectively communicate
		identify communication and <i>learning</i> styles
		describe effective listening and speaking skills
		describe how to receive and give instructions effectively
		identify <i>personal responsibilities and attitudes</i> that contribute to on-the-job success
		identify value of equity, diversity and inclusion in workplace

identify communication that constitutes bullying, <i>harassment</i> and <i>discrimination</i>
identify communication styles appropriate to different systems and applications of electronic messages

people in the workplace include: other tradespeople, colleagues, apprentices, supervisors, clients, jurisdictional representatives, manufacturers

sources of information include: regulations, codes, occupational health and safety requirements, jurisdictional requirements, prints, drawings, specifications, company and client documentation **learning styles** include: visual, auditory, reading, writing, kinesthetic

personal responsibilities and attitudes include: asking questions, working safely, accepting constructive feedback, time management and punctuality, respect for authority, good stewardship of materials, tools and property, efficient work practice

harassment: as defined by the Canadian and jurisdictional Human Rights Commissions **discrimination**: as defined by the Canadian Human Rights Act and jurisdictional human rights laws **electronic messages** include: email, text messages

A-5.02 Uses mentoring techniques

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills							
	Performance Criteria	Evidence of Attainment						
A-5.02.01P	identify and communicate learning objective and point of lesson	apprentice or learner can explain objective and point of lesson						
A-5.02.02P	link lesson to other lessons and project	lesson order and unplanned learning opportunities are defined						
A-5.02.03P	demonstrate performance of a skill to an apprentice or learner	steps required to demonstrate a skill are performed						
A-5.02.04P	set up conditions required for apprentice or learner to practice a skill	practice conditions are set up so that skill can be practiced safely by apprentice or learner						
A-5.02.05P	assess apprentice or learner's ability to perform tasks with increasing independence	performance of apprentice or learner improves with practice to a point where skill can be done with little supervision						
A-5.02.06P	give supportive and corrective feedback	apprentice or learner adopts best practice after having been given supportive or corrective feedback						
A-5.02.07P	support apprentices or learners in pursuing technical training opportunities	technical training is completed within timeframe prescribed by apprenticeship authority						

A-5.02.08P	support anti- <i>harassment</i> and anti- <i>discrimination</i> practices in workplace	workplace is <i>harassment</i> - and <i>discrimination</i> -free
A-5.02.09P	assess apprentice or learner suitability to trade during probationary period	apprentice or learner is given constructive feedback that helps them identify their own strengths and weaknesses and suitability for the trade

steps required to demonstrate a skill include: understanding who, what, where, when, why, and how, explaining, showing, giving encouragement, following up to ensure skill is performed correctly practice conditions means: guided, limited independence, full independence harassment: as defined by the Canadian and jurisdictional Human Rights Commissions discrimination: as defined by the Canadian Human Rights Act and jurisdictional human rights laws

	Know	ledge
	Learning Outcomes	Learning Objectives
A-5.02.01L	demonstrate knowledge of strategies for learning skills in workplace	describe importance of individual experience
		describe shared responsibilities for workplace learning
		determine one's own learning preferences and explain how these relate to learning new skills
		describe importance of different types of skills in workplace
		describe importance of skills for success (essential skills) and how they relate to the workplace
		identify different learning styles
		identify different <i>learning needs</i> and strategies to meet them
		identify strategies to assist in learning a skill
A-5.02.02L	demonstrate knowledge of strategies for teaching workplace skills	identify different roles performed by workplace mentor
		describe teaching skills
		explain importance of identifying point of lesson
		identify how to choose an appropriate time to coordinate and present lesson
		explain importance of linking lessons
		identify context for learning skills
		describe considerations in setting up opportunities for skill practice
		explain importance of providing feedback

identify techniques for giving effective feedback
describe a skills assessment
identify methods of assessing progress
explain how to adjust lesson to different situations

skills for success (essential skills) are: reading, document use, writing, oral communication, numeracy, thinking, working with others, digital technology, continuous learning

learning styles include: visual, auditory, reading, writing, kinesthetic

learning needs include: learning disabilities, learning preferences, language proficiency

strategies to assist in learning a skill include: understanding the basic principles of instruction, developing coaching skills, using listening and paraphrasing skills, describing how essential skills relate to tasks, being mature and patient, providing feedback

teaching skills include: identifying point of lesson and reasons for performing task safely and accurately, linking lesson, demonstrating skill, providing practice, giving feedback, assessing skills and progress

Major Work Activity B

Prepares surfaces

Task B-6 Performs general surface preparation

Task Descriptor

Painters and decorators prepare substrates by chemical and mechanical means (using power tools and hand tools), and clean surfaces to ensure the proper adhesion of primer and successive coats. Caulking is applied when needed.

B-6.01 Removes existing paints and coatings

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills							
	Performance Criteria	Evidence of Attainment						
B-6.01.01P	select and use tools, equipment and procedures	tools, equipment and procedures are selected and used according to coating to be removed and substrate						
B-6.01.02P	abrasive blast paints and coatings from substrate	paints and coatings are abrasive blasted from substrate using blasting equipment						
B-6.01.03P	power tool surface	surface is power tooled using <i>hand-held power tools</i> according to profiling specifications						
B-6.01.04P	apply heat or paint stripper/remover	heat or paint stripper/remover is applied according to product data sheets, and chemical and physical characteristics to lift paint or coating for ease of removal by scraping						
B-6.01.05P	scrape lifted paint or coating from substrate	lifted paint or coating is scraped from substrate using scrapers						

Range of Variables

blasting equipment includes: abrasive and hydro blasting equipment, CO₂ blasting equipment, laser, dust collection, vacuum systems

hand-held power tools includes: grinders, needle guns, power sanders, hand-held bristle tool, power scraper, bush/jack hammer

	Knowledge							
	Learning Outcomes	Learning Objectives						
B-6.01.01L	demonstrate knowledge of substrates, their characteristics and applications	identify <i>types of substrates</i> and describe their characteristics and applications						
B-6.01.02L	demonstrate knowledge of procedures to remove existing paints and coatings from substrates	identify blasting equipment, hand-held power tools and hand tools used to remove existing paints and coatings from substrates, and describe their procedures for use						
		describe procedures to remove existing paints and coatings from substrates						
		identify hazards associated with removal of <i>hazardous materials</i>						
B-6.01.03L	demonstrate knowledge of regulatory requirements pertaining to <i>hazardous materials</i>	identify standards and regulations pertaining to removal and disposal of <i>hazardous materials</i>						

types of substrates include: wood, concrete, metal, drywall

blasting equipment includes: abrasive and hydro blasting equipment, CO₂ blasting equipment, laser, dust collection, vacuum systems

hand-held power tools includes: grinders, needle guns, power sanders, hand-held bristle tool, power scraper, bush/jack hammer

hand tools include: paint scrapers, broad knives, combination scrapers, sandpaper

hazardous materials include: lead paints, asbestos, mould, carcinogens, silica dust, toxic vapours, animal waste

B-6.02 Removes existing wall coverings and adhesives

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills						
	Performance Criteria	Evidence of Attainment					
B-6.02.01P	select and use tools, equipment and procedures	tools, equipment and procedures are selected and used according to wall covering and adhesive to be removed, and substrate					
B-6.02.02P	strip wall covering	wall covering is stripped using stripping tools and equipment					
B-6.02.03P	saturate wall coverings with warm water	wall coverings are saturated with warm water to loosen adhesive bond before removal					

B-6.02.04P	peel and scrape off loose wall covering materials	loose wall covering materials are peeled and scraped off
B-6.02.05P	soak adhesive to loosen for scraping and washing	adhesive is soaked to loosen for scraping and washing
B-6.02.06P	remove old adhesive from substrate	old adhesive is removed from substrate using <i>cleaning materials</i>

stripping tools and equipment include: steamers, sponges and water, hand pump sprayers, score/perforator rollers, heat guns

cleaning materials include: trisodium phosphate (TSP) and warm water, soap and water, vinegar, rubbing alcohol

	Know	edge		
	Learning Outcomes	Learning Objectives		
B-6.02.01L	demonstrate knowledge of wall coverings and adhesives, their characteristics and applications	identify <i>types of wall coverings</i> and adhesives, and describe their characteristics and applications		
B-6.02.02L	demonstrate knowledge of procedures to remove wall coverings and adhesives	identify stripping tools and equipment used to remove wall coverings and adhesives, and describe their procedures for use		
		describe procedures to remove wall coverings and adhesives		
		describe stripping methods based on wall covering to be removed		
		identify <i>cleaning materials</i> used to remove adhesives		

Range of Variables

types of wall coverings include: wallpaper, vinyl, veneer, fabric, self-adhering film **stripping tools and equipment** include: steamers, sponges and water, hand pump sprayers, score/perforator rollers, heat guns

stripping methods include: dry stripping, wet stripping

cleaning materials include: trisodium phosphate (TSP) and warm water, soap and water, vinegar, rubbing alcohol

B-6.03 Cleans surfaces

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills							
	Performance Criteria	Evidence of Attainment						
B-6.03.01P	select and use <i>cleaning tools and</i> equipment	cleaning tools and equipment are selected and used according to task and manufacturers' specifications						
B-6.03.02P	determine <i>cleaning procedures</i> to follow	cleaning procedures to follow are determined according to project requirements						
B-6.03.03P	perform <i>cleaning procedures</i>	cleaning procedures are performed						
B-6.03.04P	dry substrate	substrate is dried to ensure that coating adheres to substrate						
B-6.03.05P	blow down surface and vacuum	surface is blown down and vacuumed to eliminate dust and debris from work area						

Range of Variables

cleaning tools and equipment includes: tack cloths, dust brushes, brooms, vacuums, pressure washers, dust collectors

cleaning procedures include: sweeping new drywall, rinsing and wiping surfaces, using degreasers, using pressure washers on concrete, masonry and metal substrates

project requirements include: substrate type and properties, coatings to be used, product and project specifications

	Knowledge					
	Learning Outcomes	Learning Objectives				
B-6.03.01L	demonstrate knowledge of procedures to clean surfaces	identify <i>cleaning tools and equipment</i> used to clean surfaces, and describe their procedures for use				
		describe <i>cleaning procedures</i> used to clean surfaces based on <i>project</i> requirements				
		describe results of unclean surfaces				

cleaning tools and equipment includes: tack cloths, dust brushes, brooms, vacuums, pressure washers, dust collectors

cleaning procedures include: sweeping new drywall, rinsing and wiping surfaces, using degreasers, using pressure washers on concrete, masonry and metal substrates

project requirements include: substrate type and properties, coatings to be used, product and project specifications

results of unclean surfaces include: paint failures, poor quality finish

B-6.04 Primes surfaces

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills							
	Performance Criteria	Evidence of Attainment						
B-6.04.01P	determine priming procedures to follow	priming procedures to follow are determined according to <i>project</i> requirements						
B-6.04.02P	select and use tools and equipment	tools and equipment are selected and used according to task and manufacturers' specifications						
B-6.04.03P	apply primer using techniques	primer is applied using techniques according to manufacturers' specifications						
B-6.04.04P	cover stains with stain-inhibiting primer	stains are covered with stain-inhibiting primer according to manufacturers' specifications to avoid bleed-through to finish coat						

Range of Variables

project requirements include: substrate type and properties, coatings to be used, product specifications **tools and equipment** include: sprayers, brushes, rollers

techniques include: brushing, rolling, spraying

	Knowledge					
	Learning Outcomes	Learning Objectives				
B-6.04.01L	demonstrate knowledge of primers, their characteristics and applications	identify <i>types of primers</i> and describe their characteristics and applications				
		explain <i>reasons for using primers</i>				

B-6.04.02L	demonstrate knowledge of procedures to prime surfaces	identify <i>tools and equipment</i> used to prime surfaces, and describe their procedures for use			
		describe procedures and techniques used to prime surfaces			

types of primers include: waterborne, solvent-based, specialty primers (stain blocker, block filler, epoxybased)

reasons for using primers include: sealing, adhesion, protection

tools and equipment include: sprayers, brushes, rollers

techniques include: brushing, rolling, spraying

B-6.05 Sands surfaces

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills							
	Performance Criteria	Evidence of Attainment						
B-6.05.01P	select sandpaper type and grit	sandpaper type and grit are selected to improve adhesion of subsequent coats, to create desired surface and according to substrate						
B-6.05.02P	select and use sanding tools and equipment	sanding tools and equipment are selected and used according to desired finish						
B-6.05.03P	create surface profile for adhesion of subsequent coats	surface profile is created for adhesion of subsequent coats						
B-6.05.04P	perform <i>sanding procedures</i>	sanding procedures are performed according to project requirements						

Range of Variables

sanding tools and equipment include: power sanders (palm, disk, belt and random orbital), sanding blocks, sponges, steel wool

sanding procedures include: direction, pressure, feathering

	Know	Knowledge						
	Learning Outcomes	Learning Objectives						
B-6.05.01L	demonstrate knowledge of sandpaper, and sanding tools and equipment , their characteristics, applications and operation	identify types of sandpaper, and sanding tools and equipment , and describe their characteristics, applications and operation						
		describe sandpaper grits and backing materials						
B-6.05.02L	demonstrate knowledge of procedures to sand surfaces	describe sanding procedures						
		identify types of surfaces to be sanded						
		explain importance of sanding sequence and relevance to smoothness desired						

sanding tools and equipment include: power sanders (palm, disk, belt and random orbital), sanding blocks, sponges, steel wool

sanding procedures include: direction, pressure, feathering

types of surfaces to be sanded include: wood, metal, drywall, concrete

B-6.06 Applies caulking

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills						
	Performance Criteria	Evidence of Attainment					
B-6.06.01P	prepare substrate for caulking	substrate is prepared for caulking by cleaning, drying completely and priming to ensure adhesion					
B-6.06.02P	cut caulking tube tip at an angle	caulking tube tip is cut at an angle to optimize flow of caulking and ease of tooling					
B-6.06.03P	tool caulking	caulking is tooled for uniformity, aesthetics and to create a tight seal					

	Knowledge					
_	Learning Outcomes	Learning Objectives				
B-6.06.01L	demonstrate knowledge of caulking, its characteristics and applications	identify <i>types of caulking</i> , and describe their characteristics and <i>areas of applications</i>				
		explain reasons for caulking breakdown				

B-6.06.02L	demonstrate knowledge of procedures to apply caulking	identify tools and equipment used to apply caulking, and describe their procedures for use
		describe procedures and techniques used to apply caulking
		describe caulking removal procedures

types of caulking include: epoxy, latex, silicone, polyurethane, latex + silicone (paintable) areas of applications include: filling cracks and joints in trim, sealing around windows and doors reasons for caulking breakdown include: moisture, dirt, dust, insufficient cure time, environmental conditions

Task B-7 Prepares wood surfaces for paints, coatings and wall coverings

Task Descriptor

Painters and decorators prepare the surface by repairing imperfections such as by applying wood filler. Treating wood surfaces prior to painting is an important step in preparing the substrate. It helps to ensure a uniform finish and good adhesion of top coats. Wood surfaces that may be painted range from doors, door frames and sheds to signage, dimensional lumber, siding and shakes.

B-7.01 Treats wood surfaces

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills						
	Performance Criteria	Evidence of Attainment					
B-7.01.01P	determine procedures to follow for treating wood	procedures to follow for treating wood are determined according to <i>project</i> requirements					
B-7.01.02P	seal wood substrate with stain-sealing primer (oil or solvent-based)	wood substrate is sealed with stain- sealing primer (oil or solvent-based) to prevent bleeding through and to prevent finish coat from absorbing into wood according to project requirements					

B-7.01.03P	smooth primed surface	primed surface is smoothed by sanding to ensure a uniform coat
B-7.01.04P	clean surface	surface is cleaned by removing dust using tack cloth or lint-free rag

project requirements include: substrate type and properties, coatings to be used, desired finish, product specifications

wood substrates include: open grain, closed grain

	Knowledge						
	Learning Outcomes	Learning Objectives					
B-7.01.01L	demonstrate knowledge of procedures to treat wood surfaces	identify tools and equipment used to treat wood surfaces, and describe their procedures for use					
		identify types of wood substrates					
		describe procedures to treat wood surfaces based on <i>project requirements</i>					

Range of Variables

wood substrates include: open grain, closed grain

project requirements include: substrate type and properties, coatings to be used, desired finish, product specifications

B-7.02 Repairs minor imperfections in wood

	NL	NS	PE	NB	Q	ON	MB	SK	AB	ВС	NT	ΥT	NU
ĺ	NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills						
	Performance Criteria	Evidence of Attainment					
B-7.02.01P	fill <i>minor imperfections</i> with wood filler	<i>minor imperfections</i> are filled with wood filler according to job requirements					
B-7.02.02P	replace rotted or damaged wood	rotted or damaged wood is replaced using tools and equipment					
B-7.02.03P	check for and repair raised grain by resanding surface	surface is re-sanded and raised grain is repaired to ensure uniform smooth finish					

Range of Variables

minor imperfections include: cracks, dents, nicks, nail holes

	Knowledge							
	Learning Outcomes	Learning Objectives						
B-7.02.01L	demonstrate knowledge of procedures to repair <i>minor imperfections</i> in wood	identify tools and equipment used to repair <i>minor imperfections</i> in wood, and describe their procedures for use						
		describe procedures to repair <i>minor imperfections</i> in wood						
		describe procedures to replace rotted or damaged wood						

minor imperfections include: cracks, dents, nicks, nail holes

Task B-8 Prepares concrete and masonry surfaces

Task Descriptor

Painters and decorators prepare concrete and masonry surfaces using mechanical and chemical treatments to make substrates suitable for application of coatings and to expose aggregate. This includes repairing minor imperfections and filling cracks, gaps and holes.

B-8.01 Mechanically treats concrete and masonry surfaces

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Sk	ills
	Performance Criteria	Evidence of Attainment
B-8.01.01P	select and use tools and equipment	tools and equipment are selected and used according to task and manufacturers' specifications
B-8.01.02P	maintain appropriate profile on substrate at required profile depth	appropriate profile on substrate is maintained at required profile depth
B-8.01.03P	test areas for hardness, moisture and profile depth	areas are tested for hardness, moisture and profile depth

Range of Variables

tools and equipment include: grinders, needle guns, wire brushes, chisels, pressure washers, blasters, blast tracks

	Know	rledge
	Learning Outcomes	Learning Objectives
B-8.01.01L	demonstrate knowledge of concrete and masonry, their characteristics and applications	describe concrete and masonry, and describe their characteristics and applications
B-8.01.02L	demonstrate knowledge of procedures to mechanically treat concrete and masonry surfaces	identify tools and equipment used to mechanically treat concrete and masonry surfaces, and describe their procedures for use
		describe procedures to mechanically treat concrete and masonry surfaces

tools and equipment include: grinders, needle guns, wire brushes, chisels, pressure washers, blasters, blast tracks

B-8.02 Chemically treats concrete and masonry surfaces

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	no	yes	yes	yes	yes	NV	NV	NV

	Skills							
	Performance Criteria	Evidence of Attainment						
B-8.02.01P	mix etching and neutralizing materials	etching and neutralizing materials are mixed according to product data sheets						
B-8.02.02P	work chemical treatment material into substrate	chemical treatment material is worked into substrate using a broom to etch surface and improve adhesion of coating						
B-8.02.03P	remove contaminants, and etching and neutralizing residue	contaminants, and etching and neutralizing residue are removed by pressure washing						
B-8.02.04P	remove efflorescence	efflorescence is removed by pressure washing with a chemical formula						

Range of Variables

etching materials include: muriatic acid, phosphoric acid neutralizing materials include: baking soda, garden lime, water

Knowledge

	Learning Outcomes	Learning Objectives
B-8.02.01L	demonstrate knowledge of etching and neutralizing materials , their characteristics and applications	identify etching materials , and describe their characteristics and applications
		identify <i>neutralizing materials</i> , and describe their characteristics and <i>applications</i>
B-8.02.02L	demonstrate knowledge of procedures to chemically treat concrete and masonry surfaces	identify tools and equipment used to chemically treat concrete and masonry surfaces, and describe their procedures for use
		describe procedures to chemically treat concrete and masonry surfaces
		describe procedures to remove efflorescence, contaminants and, neutralizing and etching residue from concrete and masonry surfaces
		identify <i>hazards</i> and safe work practices when using <i>etching materials</i>

etching materials include: muriatic acid, phosphoric acid

neutralizing materials include: baking soda, garden lime, water

etching material applications include: to create a profile on substrate, to ensure adhesion of coating **neutralizing material applications** include: to ensure adhesion of coating, to apply patterns or textures to concrete, to seal concrete

hazards include: improper mixing sequence, corrosive properties

B-8.03 Repairs concrete and masonry surfaces

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills						
	Performance Criteria	Evidence of Attainment					
B-8.03.01P	select and use tools and equipment	tools and equipment are selected and used according to task and manufacturers' specifications					
B-8.03.02P	identify concrete and masonry surface repair materials that are compatible with coating material	concrete and masonry surface repair materials that are compatible with coating material are identified					

B-8.03.03P	repair imperfections with concrete and masonry surface repair materials	imperfections are repaired with concrete and masonry surface repair materials				
B-8.03.04P	smooth surfaces	surfaces are smoothed				

tools and equipment include: pull scrapers, grinders, chisels, trowels, caulking guns **concrete and masonry surface repair materials** include: grouting compound, epoxies, concrete slurry, caulking, ready-mix concrete, backing rod

imperfections include: cracks, gaps, tie rod holes, honeycombs, efflorescence, foreign debris

	Knowledge						
	Learning Outcomes	Learning Objectives					
B-8.03.01L	demonstrate knowledge of concrete and masonry surface repair materials , their characteristics and applications	identify concrete and masonry surface repair materials and describe their characteristics and applications					
B-8.03.02L	demonstrate knowledge of procedures to perform minor repairs to concrete and masonry surfaces	identify tools and equipment used to perform minor repairs to concrete and masonry surfaces, and describe their procedures for use					
		identify types of <i>imperfections</i> to be repaired					
		describe procedures to perform minor repairs to concrete and masonry surfaces					
		identify hazards and safe work practices when using concrete and masonry surface repair materials					

Range of Variables

concrete and masonry surface repair materials include: grouting compound, epoxies, concrete slurry, caulking, ready-mix concrete, backing rod

tools and equipment include: pull scrapers, grinders, chisels, trowels, caulking guns **imperfections** include: cracks, gaps, tie rod holes, honeycombs, efflorescence, foreign debris

Task B-9 Prepares metal surfaces

Task Descriptor

Painters and decorators prepare metal surfaces to make substrates suitable for application of coatings. This includes cleaning with abrasive blasting, power equipment and hand tools, and applying epoxy, putty and grouts designed for metal surfaces.

B-9.01 Treats metal surfaces

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills							
	Performance Criteria	Evidence of Attainment						
B-9.01.01P	wash metal surfaces with water or solvent to remove <i>contaminants</i>	metal surfaces are washed with water or solvent to remove <i>contaminants</i>						
B-9.01.02P	etch metal surfaces	metal surfaces are etched by applying chemical to soft metal surfaces in order to improve adhesion without damage						
B-9.01.03P	grind metal surfaces to remove sharp edges	metal surfaces are ground to remove sharp edges						
B-9.01.04P	create profile with mechanical treatments	profile is created with mechanical treatments by abrasive blasting or using power tools						

Range of Variables

contaminants include: oil, grease, road salt, manufacturing residue, animal waste

	Knowledge							
	Learning Outcomes	Learning Objectives						
B-9.01.01L	demonstrate knowledge of metals, their characteristics, applications and <i>properties</i>	identify types of metals and describe their characteristics, applications and <i>properties</i>						
B-9.01.02L	demonstrate knowledge of materials and products used to treat metal surfaces	identify materials and products used to treat metal surfaces						
B-9.01.03L	demonstrate knowledge of procedures to treat metal surfaces	identify tools and equipment used to treat metal surfaces, and describe their procedures for use						

identify types of contaminants found on metal surfaces
describe procedures to treat metal surfaces

properties include: hardness, corrosion resistance

tools and equipment include: abrasive blasters, power washers, hand and power tools **contaminants** include: oil, grease, road salt, manufacturing residue, animal waste

B-9.02 Repairs metal surfaces

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills							
	Performance Criteria	Evidence of Attainment						
B-9.02.01P	remove burrs, sharp edges and corrosion	burrs, sharp edges and corrosion are removed by <i>methods</i>						
B-9.02.02P	mix filling compounds	filling compounds are mixed according to manufacturers' specifications						
B-9.02.03P	fill voids and pitting	voids and pitting are filled by applying <i>filling material</i> and letting it cure according to manufacturers' specifications						

Range of Variables

methods include: grinding, scraping, using a wire brush

filling materials include: epoxy, grouts

	Know	rledge
	Learning Outcomes	Learning Objectives
B-9.02.01L	demonstrate knowledge of <i>filling materials</i> , their characteristics and applications	identify <i>filling materials</i> and describe their characteristics and applications
B-9.02.02L	demonstrate knowledge of procedures to repair metal surfaces	identify tools and equipment used to repair metal surfaces, and describe their procedures for use
		describe procedures and <i>methods</i> to repair metal surfaces

filling materials include: epoxy, grouts

methods include: grinding, scraping, using a wire brush

Task B-10 Prepares plaster surfaces and drywall

Task Descriptor

Painters and decorators repair minor damage and imperfections of existing plaster surfaces and drywall. In some jurisdictions, they may also finish new drywall.

B-10.01 Repairs existing plaster surfaces and drywall

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Sk	ills
	Performance Criteria	Evidence of Attainment
B-10.01.01P	remove mould and mildew	mould and mildew are removed by applying mould killer or mildewcide according to manufacturers' specifications
B-10.01.02P	mix compound to required consistency	compound is mixed to required consistency
B-10.01.03P	fill cracks, holes and dents using tools	cracks, holes and dents are filled using tools
B-10.01.04P	correct deficiencies	deficiencies are corrected
B-10.01.05P	replace drywall components	drywall components are replaced
B-10.01.06P	remove damaged drywall and replace or fill with mud compound	damaged drywall is removed and replaced or filled with mud compound

Range of Variables

tools include: broad knives, trowels, sanding sponges, vacuum sanders

deficiencies include: bubbling tape, out-of-square corner bead, loose or improperly installed screws

drywall components include: corner beads, tape

	Know	ledge
	Learning Outcomes	Learning Objectives
B-10.01.01L	demonstrate knowledge of plaster surfaces and drywall, their <i>components</i> , characteristics and applications	identify types of plaster surfaces and drywall, and their <i>components</i> , and describe their characteristics and applications
B-10.01.02L	demonstrate knowledge of procedures to repair existing plaster surfaces and drywall	identify <i>tools</i> used to repair existing plaster surfaces and drywall, and describe their procedures for use
		describe procedures to repair existing plaster surfaces and drywall
		identify <i>imperfections</i> to be repaired
		identify <i>types of compounds</i> used to repair existing plaster surfaces and drywall
		explain setting times and recoat times of various compounds
		describe sequence of application of compound
		identify types of tape
		identify types of corner beads
		identify moisture level of substrate, temperature and humidity required for finishing

drywall components include: corner beads, tape

tools include: broad knives, trowels, sanding sponges, vacuum sanders

imperfections include: holes, cracks, dents, loose tape *types of compounds* include: quick-set, all-purpose

types of tape include: fibreglass, paper (perforated and non-perforated)

types of corner beads include: metal, plastic, paper

B-10.02 Finishes new drywall

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	no	yes	yes	no	yes	NV	NV	NV

	Skills							
	Performance Criteria	Evidence of Attainment						
B-10.02.01P	apply mud and tape	mud and tape are applied using <i>tools</i>						
B-10.02.02P	install corner bead	corner bead is installed using <i>tools and materials</i>						

B-10.02.03P	mix compound to required consistency	compound is mixed to required consistency
B-10.02.04P	spread compound uniformly and feather edges out	compound is spread uniformly and edges are feathered out

tools include: broad knives, trowels, hawks, sanding sponges, pole sanders, tape dispensers **tools and materials** include: corner crimpers, staple guns, contact cement

	Know	vledge
	Learning Outcomes	Learning Objectives
B-10.02.01L	demonstrate knowledge of procedures to finish new drywall	identify <i>tools</i> used to apply mud and tape, and describe their procedures for use
		identify tools and materials used to install corner beads, and describe their procedures for use
		describe procedures to finish new drywall
		identify types of compounds used to repair existing plaster surfaces and drywall
		explain setting times and recoat times of various compounds
		describe sequence of application of compound
		identify <i>types of tape</i> used to finish drywall
		identify types of corner beads
		identify temperature and humidity level required for finishing

Range of Variables

 $\textbf{\textit{tools}} \text{ include: broad knives, trowels, hawks, sanding sponges, pole sanders, tape dispensers}$

tools and materials include: corner crimpers, staple guns, contact cement

types of compounds include: quick-set, all-purpose

types of tape include: fibreglass, paper (perforated and non-perforated)

types of corner beads include: metal, plastic, paper

Major Work Activity C

Prepares and applies residential, institutional and commercial paints, coatings and finishes

Task C-11 Prepares for application of residential, institutional and commercial paints and coatings

Task Descriptor

This task encompasses the preparation of paints and coatings for application to a substrate. It also covers the installation of reinforcing mesh.

C-11.01 Prepares residential, institutional and commercial paints and coatings

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

		Skills
	Performance Criteria	Evidence of Attainment
C-11.01.01P	match colour	colour is matched according to job specifications
C-11.01.02P	mix paints and coatings	paints and coatings are mixed according to product data sheet using tools to ensure adherence, visual appearance and drying time
C-11.01.03P	thin product for application	product is thinned for application according to product data sheet
C-11.01.04P	strain product	product is strained to ensure uniform application
C-11.01.05P	stir, box, shake and mix paints and coatings	paints and coatings are stirred, boxed, shaken and mixed to ensure uniformity

Range of Variables

tools include: stir sticks, mixers

	Know	ledge
	Learning Outcomes	Learning Objectives
C-11.01.01L	demonstrate knowledge of residential, institutional and commercial paints and coatings, their <i>components</i> , characteristics and applications	identify types of residential, institutional and commercial paints and coatings, and describe their components, characteristics and applications
		identify types of solvents
		identify types of high performance coatings
C-11.01.02L	demonstrate knowledge of procedures to prepare residential, institutional and commercial paints and coatings	identify <i>tools</i> used to prepare residential, institutional and commercial paints and coatings, and describe their procedures for use
		describe procedures to prepare residential, institutional and commercial paints and coatings
		describe paint and coating application considerations
		explain <i>environmental conditions</i> and their effects on residential, institutional and commercial paints and coatings

components include: binder, pigment, vehicle

types of residential, institutional and commercial paints and coatings include: waterborne, acrylic,

alkyds

types of solvents include: aromatic, alcohol, blended

types of high performance coatings include: intumescent, waterborne epoxies, urethanes, zinc-rich,

moisture cured

tools include: stir sticks, mixers

paint and coating application considerations include: substrates, drying times
environmental conditions include: substrate moisture content, ambient temperature, humidity, VOC

C-11.02 Installs residential, institutional and commercial reinforcing mesh

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills				
	Performance Criteria	Evidence of Attainment			
C-11.02.01P	apply bonding primer to substrate without profile	bonding primer is applied to substrate without profile			
C-11.02.02P	apply primer to bare substrate with profile	primer is applied to bare substrate with profile			
C-11.02.03P	lay mesh manually and uniformly overlapping	mesh is laid manually and uniformly overlapping to maintain integrity and strength, and according to pre-calculated measurements and manufacturers' instructions			
C-11.02.04P	overlap or butt reinforcing mesh	reinforcing mesh is overlapped or butted to ensure complete coverage where required according to manufacturers' instructions			
C-11.02.05P	calculate ratios to mix base with catalyst	ratios to mix base with catalyst are calculated according to product data sheet			
C-11.02.06P	saturate reinforcing mesh with coating until wetted out	reinforcing mesh is saturated with coating until wetted out using <i>tools and</i> equipment			
C-11.02.07P	apply reinforcing mesh	reinforcing mesh is applied to a smooth, uniform finish in contact with the substrate and <i>failures</i> are prevented			

Range of Variables

tools and equipment include: brushes, rollers, spray equipment

failures include: bubbles, voids, inconsistencies

	Knowledge			
	Learning Outcomes	Learning Objectives		
C-11.02.01L	demonstrate knowledge of residential, institutional and commercial reinforcing mesh, its characteristics and applications	identify types of residential, institutional and commercial reinforcing mesh, and describe its characteristics and applications		
C-11.02.02L	demonstrate knowledge of procedures to install residential, institutional and commercial reinforcing mesh	identify tools and equipment used to install residential, institutional and commercial reinforcing mesh, and describe their procedures for use		
		describe procedures to install residential, institutional and commercial reinforcing mesh		

types of residential, institutional and commercial reinforcing mesh includes: fibreglass, carbon fibre, synthetic fibre

tools and equipment include: brushes, rollers, spray equipment

Task C-12 Applies residential, institutional and commercial paints and coatings

Task Descriptor

Architectural paints and coatings are applied by brushing, rolling, and spraying. The method of application depends on accessibility, desired effect and productivity.

High performance coatings are designed for various purposes such as corrosion and fire resistance, abrasion resistance and flexibility. They may be applied by brush, roller, applicator or spray equipment.

C-12.01 Applies residential, institutional and commercial paints and coatings with brushes

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	YT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills		
	Performance Criteria	Evidence of Attainment	
C-12.01.01P	use tools and equipment to access hard-to-reach areas	tools and equipment are used to access hard-to-reach areas	
C-12.01.02P	lay off and feather paint	paint is laid off and feathered using techniques	

C-12.01.03P	cut in a straight line using brushes	a clean edge is ensured by cutting in a straight line using brushes
C-12.01.04P	maintain uniform coating	uniform coating is maintained according to type of material

tools and equipment include: brush extenders, radiator brushes, extension handles

techniques include: brushing dry to wet, feathering, stippling, texturing

types of material include: alkyd, varnish, latex

	Knowledge			
	Learning Outcomes	Learning Objectives		
C-12.01.01L	demonstrate knowledge of brushes, their characteristics and applications	identify sizes and types of brushes , and describe their characteristics and applications		
		identify <i>types of bristles</i> , and describe their characteristics and applications		
C-12.01.02L	demonstrate knowledge of procedures to apply residential, institutional and commercial paints and coatings with brushes	identify tools and equipment used to apply residential, institutional and commercial paints and coatings in hard-to-reach areas, and describe their procedures for use		
		identify types of brushes used to apply residential, institutional and commercial paints and coatings, and describe their procedures for use		
		describe procedures and techniques to apply residential, institutional and commercial paints and coatings with brushes		
		identify types of paints and coatings that can be applied by brushes		

Range of Variables

types of brushes include: angled sash, radiator

types of bristles include: natural (animal hair), synthetic

tools and equipment include: brush extenders, radiator brushes, extension handles

techniques include: brushing dry to wet, feathering, stippling, texturing

C-12.02

Applies residential, institutional and commercial paints and coatings with rollers

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	YT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills								
	Performance Criteria	Evidence of Attainment							
C-12.02.01P	select tools and equipment	tools and equipment are selected according to manufacturers' product application instructions							
C-12.02.02P	use extension poles and roller cages to access hard-to-reach areas	extension poles and roller cages are used to access hard-to-reach areas							
C-12.02.03P	maintain uniform coating	uniform coating is maintained using techniques							
C-12.02.04P	maintain a wet edge	a wet edge is maintained according to drying time of material							

Range of Variables

tools and equipment include: extension poles, roller sleeves, roller cages, power rollers, paint trays techniques include: back rolling, V or W pattern, feathering

	Know	ledge
	Learning Outcomes	Learning Objectives
C-12.02.01L	demonstrate knowledge of rollers, their characteristics, applications and operation	identify types and sizes of rollers, and describe their characteristics, applications and operation
		identify types and sizes of roller cages and sleeves, and describe their characteristics, applications and operation
		identify types and sizes of naps/piles of sleeves, and describe their characteristics, applications and operation
C-12.02.02L	demonstrate knowledge of procedures to apply residential, institutional and commercial paints and coatings with rollers	identify <i>tools and equipment</i> used to apply residential, institutional and commercial paints and coatings, and describe their procedures for use
		identify types of rollers used to apply residential, institutional and commercial paints and coatings, and describe their procedures for use

describe procedures and techniques to apply residential, institutional and commercial paints and coatings with rollers
identify types of paints and coatings that can be applied by rollers

tools and equipment include: extension poles, roller sleeves, roller cages, power rollers, paint trays **techniques** include: back rolling, V or W pattern, feathering

C-12.03 Applies residential, institutional and commercial paints and coatings with applicators

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills							
	Performance Criteria	Evidence of Attainment						
C-12.03.01P	select applicator	applicator is selected according to manufacturers' product application instructions						
C-12.03.02P	use extension pole to access hard-to- reach areas	extension pole is used to access hard-to- reach areas						
C-12.03.03P	maintain uniform coating	uniform coating is maintained according to manufacturers' product application instructions						
C-12.03.04P	maintain a wet edge	a wet edge is maintained according to drying time of material						

Range of Variables

applicators include: pads, foam squeegees

	Know	ledge
	Learning Outcomes	Learning Objectives
C-12.03.01L	demonstrate knowledge of applicators , their characteristics, applications and operation	identify types of <i>applicators</i> , and describe their characteristics, applications and operation
C-12.03.02L	demonstrate knowledge of procedures to apply residential, institutional and commercial paints and coatings with applicators	describe procedures and <i>techniques</i> to apply residential, institutional and commercial paints and coatings with <i>applicators</i>

applicators include: pads, foam squeegees
techniques include: uniform coating, wet edge

C-12.04

Applies residential, institutional and commercial paints and coatings with spray equipment

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	YT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Sk	ills
	Performance Criteria	Evidence of Attainment
C-12.04.01P	select type and size of tip	type and size of tip are selected according to <i>factors</i> and <i>type of material</i>
C-12.04.02P	use spray equipment extension to access hard-to-reach areas	spray equipment extension is used to access hard-to-reach areas
C-12.04.03P	maintain uniform coating	uniform coating is maintained using techniques
C-12.04.04P	make adjustments to achieve desired atomization and ensure consistent spray pattern	adjustments are made to achieve desired atomization and ensure consistent spray pattern
C-12.04.05P	use shielding while spraying	shielding is used while spraying to minimize and contain overspray
C-12.04.06P	spray edge (banding) then face of substrates to avoid dry spray	edge (banding) then face of substrates are sprayed to avoid dry spray

Range of Variables

factors include: substrate, size and type of job, interior/exterior **types of material** include: lacquer, epoxies, alkyd, varnish, latex

techniques include: using 50% overlap; maintaining motion while spraying, triggering and keeping a

consistent distance from substrate

adjustments include: fluid and airflow, pressure control, tip size, paint viscosity, temperature

	Knowledge							
	Learning Outcomes	Learning Objectives						
C-12.04.01L	demonstrate knowledge of spray equipment, its components, characteristics, applications and operation	identify <i>types of spray equipment</i> and their components, and describe their characteristics, applications and operation						
C-12.04.02L	demonstrate knowledge of procedures to apply residential, institutional and commercial paints and coatings with spray equipment	describe procedures and techniques to apply residential, institutional and commercial paints and coatings with spray equipment						

describe adjustments made during spraying to achieve desired atomization and ensure consistent spray pattern
describe purpose of shielding while spraying
interpret product data sheet information

types of spray equipment include: airless, conventional, high volume low pressure (HVLP), electrostatic, specialized

techniques include: using 50% overlap; maintaining motion while spraying, triggering and keeping a consistent distance from substrate

adjustments include: fluid and airflow, pressure control, tip size, paint viscosity, temperature **factors** include: substrate, size and type of job, interior/exterior

product data sheet information includes: pot life, induction times, viscosity

Task C-13 Applies decorative/specialty finishes

Task Descriptor

Painters and decorators apply specialty finishes on substrates for decorative purposes.

C-13.01 Applies paints and coatings using decorative techniques

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills						
	Performance Criteria	Evidence of Attainment					
C-13.01.01P	cut and roll base coat	base coat is cut and rolled according to job specifications					
C-13.01.02P	allow proper drying time between coats	proper drying time between coats is allowed according to material used and working environment					
C-13.01.03P	create pattern using positive application techniques and negative application techniques	pattern is created using positive application techniques and negative application techniques to achieve desired effect according to job specifications					

positive application techniques include: sponging, striping **negative application techniques** include: stippling, dragging

	Knowledge							
	Learning Outcomes	Learning Objectives						
C-13.01.01L	demonstrate knowledge of decorative techniques, their characteristics and applications	identify types of decorative techniques , and describe their characteristics and applications						
		identify types of paints that can be applied with sponges or rags						
		describe natural random patterns (sea sponges) and artificial patterns (synthetic sponges)						
		explain paint viscosity and its importance in achieving desired decorative technique						
C-13.01.02L	demonstrate knowledge of procedures to apply paints and coatings using decorative techniques	identify tools and equipment used to apply paints and coatings using decorative techniques, and describe their procedures for use						
		describe procedures to apply paints and coatings using decorative techniques						
		explain drying and setup times of finishes used						

Range of Variables

types of decorative techniques include: positive application, negative application tools and equipment include: sponges (sea, synthetic), rags, stippling brushes

C-13.02 Creates faux finishes

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills						
	Performance Criteria	Evidence of Attainment					
C-13.02.01P	apply base coat to match background colour of effect to be imitated	base coat is applied to match background colour of effect to be imitated					
C-13.02.02P	apply colour coat for marble, and primary grain colour for wood	colour coat for marble, and primary grain colour for wood, is applied to produce desired effect					
C-13.02.03P	create intricate effect details	intricate effect details are created					

C-13.02.04P	apply finish coat	finish coat is applied according to job requirements to protect finish
C-13.02.05P	apply multiple layers of finish coat	multiple layers of finish coat are applied to produce illusion of structure, depth and texture

intricate effect details include: cracks in wood knots using a nail, veins of marble using a feather/badger blender

	Knowledge							
	Learning Outcomes	Learning Objectives						
C-13.02.01L	demonstrate knowledge of faux finishes, their components, characteristics and applications	identify types of faux finishes , and describe their characteristics and applications and operation						
		explain drying and setup times of finishes used						
		explain use of tints and stains, and describe their <i>characteristics</i>						
C-13.02.02L	demonstrate knowledge of procedures and techniques to create faux finishes	identify tools and equipment used to create faux finishes, and describe their procedures for use						
		identify <i>intricate</i> effect details used to create faux finishes						
		describe procedures and techniques to create faux finishes						

Range of Variables

types of faux finishes include: wood graining, marbling, sponging, ragging, antiquing, glazing, faux leather, Venetian plaster

characteristics include: translucency, staining power, colour

tools and equipment include: nails, feathers, badger blenders, cheesecloth, sponges, combs, brushes, graining tools

intricate effect details include: cracks in wood knots using a nail, veins of marble using a feather/badger blender

C-13.03 Applies gilding

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	YT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills						
	Performance Criteria	Evidence of Attainment					
C-13.03.01P	apply <i>adhesive</i> to substrate	adhesive is applied to substrate using tools					
C-13.03.02P	position sheets on adhesive before adhesive dries	sheets are positioned on adhesive before adhesive dries using a camel hair brush or gilding tip brush					
C-13.03.03P	smooth down and polish finish to blend in and create a uniform look	finish is smoothed down and polished to blend in and create a uniform look					

Range of Variables

adhesive includes: water size, oil size

tools include: camel hair brush, tweezers, magnifying glass, gilder's tip brush, cotton baton

	Knowledge							
	Learning Outcomes	Learning Objectives						
C-13.03.01L	demonstrate knowledge of gilding, its characteristics and applications	identify gilding, and describe its characteristics and applications						
		identify types of materials used in gilded finishes						
C-13.03.02L	demonstrate knowledge of procedures to apply gilding	identify <i>tools</i> used to apply gilding, and describe their procedures for use						
		identify types of adhesives used to apply gilding						
		describe procedures and techniques to apply gilding						

Range of Variables

types of materials used in gilded finishes include: silver, bronze, gold

tools include: camel hair brush, tweezers, magnifying glass, gilder's tip brush, cotton baton

adhesive includes: water size, oil size

C-13.04 Applies stencils and graphics

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	YT	NU
N۷	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills							
	Performance Criteria	Evidence of Attainment						
C-13.04.01P	create stencil or graphic of image	stencil or graphic of image is created using <i>materials</i>						
C-13.04.02P	position stencil or graphic on substrate	stencil or graphic of image is positioned on substrate according to measurements in job specifications using <i>tools</i>						
C-13.04.03P	create template from template materials	template is created from <i>template</i> materials						
C-13.04.04P	tape stencil to template	stencil is taped to template to protect surrounding area from paint splatter						
C-13.04.05P	dab or spray on paint	paint is dabbed or sprayed on using stencil brushes or spray equipment						
C-13.04.06P	remove stencil template when done	stencil template is removed when done without damaging substrate						

Range of Variables

materials include: cardboard, bristol board, computers *tools* include: masking tape, plastic smoothers, measuring tapes, chalk lines, levels, pencils, cutting knife *template materials* include: cardboard, plastic, metal

	Knowledge						
	Learning Outcomes	Learning Objectives					
C-13.04.01L	demonstrate knowledge of stencils and graphics, their characteristics and applications	identify types of stencils and graphics , and describe their characteristics and applications					
		identify <i>materials</i> used to create stencils or graphics of images					
		identify types of template materials used to create templates					
C-13.04.02L	demonstrate knowledge of procedures to apply stencils and graphics	identify tools used to apply stencils and graphics, and describe their procedures for use					
		describe procedures and techniques to apply stencils and graphics					
		describe procedures to create layout and design using geometric calculations					

types of stencils include: polyester film, paper, metal types of graphics include: vinyl, peel-and-stick, paint-on materials include: cardboard, bristol board, computers template materials include: cardboard, plastic, metal

tools include: masking tape, plastic smoothers, measuring tapes, chalk lines, levels, pencils, cutting knife

C-13.05 Creates textured finishes

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	S	Skills						
	Performance Criteria	Evidence of Attainment						
C-13.05.01P	mix <i>texture coatings</i>	texture coatings are mixed using tools to create an even consistency, texture and grade						
C-13.05.02P	uniformly produce varying degrees of stipple, both random and systematic patterns	varying degrees of stipple, both random and systematic patterns, are produced uniformly using <i>texturing equipment</i>						

Range of Variables

texture coatings include: stucco, powdered textured finishes, drywall compound

tools include: low rpm drill, mixer

texturing equipment includes: texture sprayers (stipple guns), hawks and trowels, texture rollers,

sponges

	Know	rledge
	Learning Outcomes	Learning Objectives
C-13.05.01L	demonstrate knowledge of textured finishes, their characteristics and applications	identify <i>types of textured finishes</i> , and describe their characteristics and applications
		identify types of <i>texture coatings</i> used to create textured finishes, and describe their characteristics and applications
		identify types of finishes
C-13.05.02L	demonstrate knowledge of procedures to create textured finishes	identify <i>tools</i> and <i>texturing equipment</i> used to create textured finishes, and describe their procedures for use
		describe procedures and techniques to create textured finishes

types of textured finishes include: stipple, knock-down

texture coatings include: stucco, powdered textured finishes, drywall compound

types of finishes include: textured roll, hammer, sprayed

tools include: low rpm drill, mixer

texturing equipment includes: texture sprayers (stipple guns), hawks and trowels, texture rollers,

sponges

C-13.06 Applies multi-spec coatings

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Sk	cills
	Performance Criteria	Evidence of Attainment
C-13.06.01P	pre-test spray pattern on sample	spray pattern is pre-tested on sample to confirm uniform finish
C-13.06.02P	apply base coat	base coat is applied using spray gun, brush or roller
C-13.06.03P	spray multi-spec coating uniformly in a criss-cross pattern	multi-spec coating is sprayed uniformly in a criss-cross pattern using equipment

Range of Variables

equipment includes: conventional spray equipment with an internal mix gun, airless, HVLP

	Know	ledge
	Learning Outcomes	Learning Objectives
C-13.06.01L	demonstrate knowledge of multi-spec coatings, their characteristics and applications	identify multi-spec coatings, and describe their characteristics and applications
		describe composition of multi-spec coatings
		describe importance of compatibility of multi-spec coatings and substrates
C-13.06.02L	demonstrate knowledge of procedures to apply multi-spec coatings	identify equipment used to apply multispec coatings, and describe their procedures for use
		describe procedures and techniques to apply multi-spec coatings

composition of multi-spec coatings include: an emulsion of solvent-based paint droplets suspended in water, specialty formulas, acrylic latex suspended in lacquer, acrylic latex in oil equipment includes: conventional spray equipment with an internal mix gun, airless, HVLP

Major Work Activity D

Prepares and applies wall coverings

Task D-14 Prepares for application of wall coverings

Task Descriptor

Painters and decorators must treat the substrate before applying wall coverings. This is done to ensure that the surface is smooth and sealed. It is crucial to ensure moisture levels of the substrate and temperatures and humidity levels are to manufacturers' specifications. The wall covering material must be inspected, acclimatized, measured and cut in preparation for hanging.

D-14.01 Treats surfaces for wall coverings

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

		Skills
	Performance Criteria	Evidence of Attainment
D-14.01.01P	repair imperfections in substrates	imperfections in substrates are repaired using drywall compounds or fillers
D-14.01.02P	seal water, ink and marker stains	water, ink and marker stains are sealed using stain blocking primer to prevent bleed through
D-14.01.03P	apply <i>coatings</i> to substrates	coatings are applied to substrates to prevent absorption of adhesive and allow time for proper positioning of wall coverings

Range of Variables

imperfections in substrates include: dents, scratches

coatings include: alkyd paints, latex paints, specified manufacturers' primers, size

	Know	ledge
	Learning Outcomes	Learning Objectives
D-14.01.01L	demonstrate knowledge of procedures to treat surfaces for wall coverings	identify <i>materials</i> used to treat surfaces for wall coverings, and describe their procedures for use
		describe procedures to repair imperfections in substrates
		describe procedures to treat surfaces for wall coverings

materials include: drywall compounds, fillers, stain blocking primers

imperfections in substrates include: dents, scratches

D-14.02 Lays out surface

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	YT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Sk	ills
	Performance Criteria	Evidence of Attainment
D-14.02.01P	determine start and finish including patterns and locations of seams	start and finish are determined according to room layout, patterns, locations of seams and location of <i>fixed objects in room</i>
D-14.02.02P	draw straight pencil line for starting point of wall coverings using <i>tools</i>	straight pencil line is drawn for starting point of wall coverings using <i>tools</i>
D-14.02.03P	keep wall coverings plumb and pattern consistent in <i>situations</i>	wall coverings are kept plumb and pattern is kept consistent in <i>situations</i>

Range of Variables

fixed objects in room include: doors, windows, openings, fireplaces, fixtures, panels, wall devices (card readers, temperature controls)

tools include: levels, laser levels, plumb bobs, straight edges, measuring tapes, smoothing brushes **situations** include: passing an inside/outside corner; working around wall openings, window returns, door frame reveals and bulkheads

	Know	<i>l</i> ledge
	Learning Outcomes	Learning Objectives
D-14.02.01L	demonstrate knowledge of procedures to lay out surface for wall coverings	identify <i>tools</i> used to lay out surface for wall coverings, and describe their procedures for use
		describe procedures to lay out surface for wall coverings
		describe procedures to determine where to start and finish

tools include: levels, laser levels, plumb bobs, straight edges, measuring tapes, smoothing brushes

D-14.03 Prepares wall coverings

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Sk	tills
	Performance Criteria	Evidence of Attainment
D-14.03.01P	measure and cut sheet of wall covering	sheet of wall covering is measured and cut according to wall covering patterns to ensure alignment with previously cut sheet and to minimize waste
D-14.03.02P	number sheets and reverse every other sheet during installation	every sheet is numbered and every other sheet is reversed to ensure uniformity of colour and random pattern
D-14.03.03P	activate adhesive on pre-pasted wall coverings	adhesive on pre-pasted wall coverings are activated according to <i>manufacturers' specifications</i> to minimize expansion and contraction of wall coverings once placed on wall

Range of Variables

wall covering patterns include: straight, drop, random

manufacturers' specifications include: soaking and booking times, use of pasting machine, adhesive selection, application procedures

	Know	rledge
	Learning Outcomes	Learning Objectives
D-14.03.01L	demonstrate knowledge of wall coverings, their characteristics and applications	identify types of wall coverings, and describe their characteristics and applications
		identify types of wall covering patterns , and describe their characteristics and applications
		explain run and lot number order
		identify types of adhesives and describe their characteristics and applications
		explain purpose of alternating rolls (bolts) of wall covering for drop patterns
		explain how adhesion of material to substrate is affected by temperature and humidity
D-14.03.02L	demonstrate knowledge of procedures and <i>methods</i> to prepare wall coverings	describe procedures and <i>methods</i> to prepare wall coverings prior to hanging

wall covering patterns include: straight, drop, random methods include: pre-soaking, folding, booking, storing

Task D-15 Applies wall coverings

Task Descriptor

Painters and decorators apply different types of wall coverings such as wallpaper, vinyl, veneer and fabric. They also repair damaged wall coverings.

There are many factors to consider when installing wall coverings such as temperature, humidity, air movement, types of wall coverings, and types of adhesives and substrates. These factors affect materials as well as application techniques.

D-15.01 Applies adhesives

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Sk	ills
	Performance Criteria	Evidence of Attainment
D-15.01.01P	set up paste tables	paste tables are set up to lay wall covering while applying adhesive
D-15.01.02P	brush or roll adhesive onto wall covering or substrate and book	adhesive is brushed or rolled onto wall covering or substrate according to manufacturers' specifications ensuring complete coverage and booked
D-15.01.03P	determine spreading rate	spreading rate is determined according to factors
D-15.01.04P	place adhesive on vinyl	adhesive is placed on vinyl using paste machine and ensuring complete coverage

Range of Variables

wall coverings include: wallpaper/borders, paintable embossed paper, photographic murals, paper-backed fabrics, grass cloths, silks, natural weaves, burlaps, acoustical fabric (with or without backing), rigid wall coverings (cork, wood veneer, tack boards, white boards)

factors include: material weight, thickness, environmental conditions

	Know	Knowledge						
	Learning Outcomes	Learning Objectives						
D-15.01.01L	demonstrate knowledge of adhesives, their characteristics and applications	identify types of adhesives and describe their characteristics and applications						
D-15.01.02L	demonstrate knowledge of procedures to apply adhesives on wall coverings , vinyl and substrates	identify tools and equipment used to apply adhesives on wall coverings , vinyl and substrates, and describe their procedures for use						
		describe procedures to apply adhesives on <i>wall coverings</i> , vinyl and substrates						

describe <i>factors</i> to consider when determining spreading rate
describe effect of <i>environmental conditions</i> when applying adhesives on <i>wall coverings</i> , vinyl and substrates

wall coverings include: wallpaper/borders, paintable embossed paper, photographic murals, paper-backed fabrics, grass cloths, silks, natural weaves, burlaps, acoustical fabric (with or without backing), rigid wall coverings (cork, wood veneer, tack boards, white boards)

tools and equipment include: brushes, rollers, paste machines

factors include: material weight, thickness, environmental conditions **environmental conditions** include: temperature, air movement

D-15.02 Installs vinyl wall coverings

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Sk	ills
	Performance Criteria	Evidence of Attainment
D-15.02.01P	place vinyl on substrate	vinyl is placed on substrate according to predetermined layout and numerical sequence
D-15.02.02P	smooth vinyl	vinyl is smoothed using a smoother to eliminate air bubbles
D-15.02.03P	trim excess materials	excess materials are trimmed at top and bottom, and around doors, windows, receptacles and other devices
D-15.02.04P	remove excess glue from surface of vinyl	excess glue is removed from surface of vinyl using a rag or sponge
D-15.02.05P	place second sheet overlapping previous sheet and double cut or butt joint to hide seams	second sheet is placed overlapping previous sheet and double cut or butt jointed to hide seams
D-15.02.06P	smooth out seams	seams are smoothed out using tools and equipment

	Know	Knowledge						
	Learning Outcomes	Learning Objectives						
D-15.02.01L	demonstrate knowledge of vinyl wall coverings, their characteristics and applications	identify types of vinyl wall coverings, and describe their characteristics and applications						
D-15.02.02L	demonstrate knowledge of procedures to install vinyl wall coverings	identify tools and equipment used to install vinyl wall coverings, and describe their procedures for use						
		describe procedures to install vinyl wall coverings						
		explain reasons for reversing patterned materials every alternate length						

tools and equipment include: razor knives, sled knives, smoothing brushes, seam rollers, smoothers, rags, sponges, paint rollers, soft non-metallic spreaders, heat guns, marking devices, double cutters

D-15.03 Installs fabric and natural material wall coverings

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Sk	ills
	Performance Criteria	Evidence of Attainment
D-15.03.01P	place fabric and natural material wall coverings on substrate	fabric and natural material wall coverings are placed on substrate according to predetermined layout and manufacturers' specifications
D-15.03.02P	handle fabric and natural material wall coverings	fabric and natural material wall coverings are handled using methods according to manufacturers' specifications
D-15.03.03P	smooth <i>fabric and natural material wall</i> coverings using a smoother	fabric and natural material wall coverings are smoothed using a smoother to eliminate air bubbles and to avoid creasing and wrinkling
D-15.03.04P	trim excess materials	excess materials are trimmed at top and bottom, and around doors, windows, receptacles and other devices
D-15.03.05P	remove excess glue on fabric and natural material wall coverings	excess glue on <i>fabric and natural material wall coverings</i> is removed using a rag or sponge

D-15.03.06P	place second sheet overlapping previous sheet and double cut and butt joint to hide seams	second sheet is placed overlapping previous sheet and double cut and butt jointed to hide seams
D-15.03.07P	smooth out seams using a smoothing brush	seams are smoothed out using a smoothing brush

fabric and natural material wall coverings include: foils, silks, flocks **methods** include: avoiding stretches, runs, tearing, creasing, wrinkling and soiling

	Knowledge						
	Learning Outcomes	Learning Objectives					
D-15.03.01L	demonstrate knowledge of <i>fabric and natural material wall coverings</i> , their characteristics and applications	identify types of <i>fabric and natural material wall coverings</i> , and describe their characteristics and applications					
D-15.03.02L	demonstrate knowledge of procedures to install <i>fabric and natural material wall coverings</i>	identify tools and equipment used to install fabric and natural material wall coverings, and describe their procedures for use					
		describe <i>methods</i> to handle <i>fabric and natural material wall coverings</i>					
		describe procedures to install fabric and natural material wall coverings					
		explain reasons for reversing patterned materials every alternate length					

Range of Variables

fabric and natural material wall coverings include: foils, silks, flocks

tools and equipment include: razor knives, sled knives, smoothing brushes, seam rollers, smoothers, rags, sponges

methods include: avoiding stretches, runs, tearing, creasing, wrinkling and soiling

D-15.04 Installs rigid wall coverings

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	YT	NU
N۷	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills								
	Performance Criteria	Evidence of Attainment							
D-15.04.01P	place <i>rigid wall coverings</i> on substrate	rigid wall coverings are placed on substrate according to predetermined layout							
D-15.04.02P	smooth <i>rigid wall coverings</i>	rigid wall coverings are smoothed using a smoother to eliminate air bubbles							
D-15.04.03P	trim excess materials at top and bottom	excess materials are trimmed at top and bottom							
D-15.04.04P	remove excess glue on <i>rigid wall</i> coverings	excess glue on <i>rigid wall coverings</i> is removed using a rag or sponge							
D-15.04.05P	place second sheet overlapping previous sheet and double cut or butt joint to hide seams	second sheet is placed overlapping previous sheet and double cut or butt jointed to hide seams according to manufacturers' specifications							
D-15.04.06P	smooth out seams	seams are smoothed using a smoother and seam roller							

Range of Variables

rigid wall coverings include: cork board, white board, veneer wood

	Knowledge						
	Learning Outcomes	Learning Objectives					
D-15.04.01L	demonstrate knowledge of <i>rigid wall coverings</i> , their characteristics and applications	identify types of <i>rigid wall coverings</i> , and describe their characteristics and applications					
D-15.04.02L	demonstrate knowledge of procedures to install <i>rigid wall coverings</i>	identify tools and equipment used to install rigid wall coverings , and describe their procedures for use					
		describe procedures to install <i>rigid wall</i> coverings					

Range of Variables

rigid wall coverings include: cork board, white board, veneer wood *tools and equipment* include: razor knives, sled knives, level, smoothing brushes, seam rollers, smoothers, rags, sponges

D-15.05 Repairs existing wall coverings

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills					
	Performance Criteria	Evidence of Attainment				
D-15.05.01P	remove air bubbles	air bubbles are removed using a syringe				
D-15.05.02P	reseal open seams	open seams are resealed using seam sealer				
D-15.05.03P	stain tears	tears are stained using coloured marker to hide tear				
D-15.05.04P	remove and replace damaged wall covering	damaged wall covering is removed and replaced				

	Knowledge					
	Learning Outcomes	Learning Objectives				
D-15.05.01L	demonstrate knowledge of procedures to repair existing wall coverings	identify tools and equipment used to repair existing wall coverings, and describe their procedures for use				
		describe procedures to repair existing wall coverings				

Range of Variables

tools and equipment include: syringes, seam sealers, coloured markers, levels, razor knives, sled knives, smoothing brushes, seam rollers, smoothers, rags, sponges

Major Work Activity E

Prepares and applies wood finishes

Task E-16 Prepares for wood finishing applications

Task Descriptor

Painters and decorators prepare the surface by repairing imperfections, conditioning and sealing the surface and applying wood filler to ensure a uniform finish and good adhesion of top coats.

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills					
	Performance Criteria	Evidence of Attainment				
E-16.01.01P	dampen wood surface with water	wood surface is dampened with water to raise grain				
E-16.01.02P	sand surface	surface is sanded prior to conditioning				
E-16.01.03P	apply wood conditioning products	wood conditioning products are applied according to manufacturers' specifications for reasons				

Range of Variables

wood conditioning products include: water, manufacturer-specific, wash coat **reasons** include: to open grain to promote even absorption of stain or finishes, to provide a uniform finish

	Knowledge				
	Learning Outcomes	Learning Objectives			
E-16.01.01L	demonstrate knowledge of wood conditioning products , their characteristics and applications	identify wood conditioning products , and describe their characteristics and applications			
		identify woods that may require conditioning			
		identify <i>reasons</i> for conditioning woods			

E-16.01.02L	demonstrate knowledge of procedures to condition wood surfaces	identify tools and equipment used to condition wood surfaces, and describe their procedures for use
		describe procedures to condition wood surfaces
		describe sequence of application of wood conditioning products

wood conditioning products include: water, manufacturer-specific, wash coat
woods that may require conditioning include: open-grained and close-grained softwoods and hardwoods

reasons include: to open grain to promote even absorption of stain or finishes, to provide a uniform finish

E-16.02 Applies wood fillers

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Sk	Skills						
	Performance Criteria	Evidence of Attainment						
E-16.02.01P	level out grain and fill holes and imperfections with wood fillers	grain is levelled out, and holes and imperfections are filled with wood fillers using <i>tools</i> or by hand						
E-16.02.02P	match wood finish using pre-coloured wood fillers or hand-mixed wood fillers	wood finish is matched using pre-coloured wood fillers or hand-mixed wood fillers						

Range of Variables

tools include: putty knives, brushes, cloths

	Know	rledge
	Learning Outcomes	Learning Objectives
E-16.02.01L	demonstrate knowledge of wood fillers, their characteristics and applications	identify <i>types of wood fillers</i> , and describe their characteristics and applications
E-16.02.02L	demonstrate knowledge of procedures to apply wood fillers	identify tools used to apply wood fillers, and describe their procedures for use
		describe procedures to apply wood fillers

types of wood fillers include: paste wood pore filler, putty, plastic wood, putty sticks **tools** include: putty knives, brushes, cloths

E-16.03 Seals wood surfaces

NL	NS	PE	NB	Q	ON	MB	SK	AB	ВС	NT	YT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills						
	Performance Criteria	Evidence of Attainment					
E-16.03.01P	verify that sealer is compatible with substrate and successive coatings	manufacturers' specifications are verified to ensure that sealer is compatible with substrate and successive coatings					
E-16.03.02P	apply sealers	sealers are applied according to job specifications using <i>tools and equipment</i>					

Range of Variables

tools and equipment include: brushes, rollers, sprayers

	Know	ledge
	Learning Outcomes	Learning Objectives
E-16.03.01L	demonstrate knowledge of sealers, their characteristics and applications	identify <i>types of sealers</i> , and describe their characteristics and applications
E-16.03.02L	demonstrate knowledge of procedures to seal wood surfaces	identify tools and equipment used to seal wood surfaces, and describe their procedures for use
		describe procedures to seal wood surfaces
		describe sequence of application of sealers

Range of Variables

types of sealers include: shellacs, varnishes, lacquers, sanding sealers, polyurethane, urethane, acrylic, stain-blocking, intumescent

tools and equipment include: brushes, rollers, sprayers

E-16.04 Prepares wood finishing products

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	YT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills							
	Performance Criteria	Evidence of Attainment						
E-16.04.01P	adjust colour of wood finishing product	colour of wood finishing product is adjusted by adding universal colorants or dyes						
E-16.04.02P	stir wood finishing products	wood finishing products are stirred according to manufacturers' specifications						
E-16.04.03P	adjust viscosity of wood finishing products by adding thinner	viscosity of wood finishing products is adjusted by adding thinner according to manufacturers' specifications to optimize flow of application						

	Know	rledge
	Learning Outcomes	Learning Objectives
E-16.04.01L	demonstrate knowledge of wood finishing products and thinners, their characteristics and applications	identify <i>types of wood finishing products</i> , and describe their characteristics and applications
		identify types of thinners, and describe their characteristics and applications
E-16.04.02L	demonstrate knowledge of procedures to prepare wood finishing products	identify tools and equipment used to prepare wood finishing products, and describe their procedures for use
		describe procedures to prepare wood finishing products
		explain matching draw downs
		describe procedures and methods used to colour match wood finishing products
E-16.04.03L	demonstrate knowledge of procedures to use thinners	describe procedures to use thinners

Range of Variables

types of wood finishing products include: semitransparent, transparent, solid, water-based, alcohol-based, oil-based

Task E-17 Finishes wood surfaces

Task Descriptor

Painters and decorators apply wood finish to protect and enhance the wood surface and to increase the durability of the wood. The finish can be brushed on, sprayed on, or wiped on and off.

E-17.01 Brushes on wood finishes

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

		Skills
	Performance Criteria	Evidence of Attainment
E-17.01.01P	apply wood finish with brush	wood finish is applied uniformly using brush according to <i>manufacturers'</i> specifications ensuring adequate coverage
E-17.01.02P	wipe off excess wood finish	excess wood finish is wiped off to achieve desired results

Range of Variables

manufacturers' specifications include: temperature and humidity allowances, drying and recoating times, thinning ratio

	Know	ledge
	Learning Outcomes	Learning Objectives
E-17.01.01L	demonstrate knowledge of wood finishes that can be brushed on , their characteristics and applications	identify wood finishes that can be brushed on, and describe their characteristics and applications
		explain difference between interior and exterior wood finishes
		explain compatibility of wood finishes
E-17.01.02L	demonstrate knowledge of types of woods, their characteristics and applications	identify <i>types of hardwoods</i> , and describe their characteristics and applications
		identify <i>types of softwoods</i> , and describe their characteristics and applications
		identify types of open-grained woods , and describe their characteristics and applications

		identify <i>types of closed-grained woods</i> , and describe their characteristics and applications
E-17.01.03L	demonstrate knowledge of procedures to brush on wood finishes	identify tools and equipment used to brush on wood finishes, and describe their procedures for use
		describe procedures and techniques to apply wood finishes with brush
E-17.01.04L	demonstrate knowledge of brushes, their types, sizes, characteristics and applications	identify types and sizes of brushes, and describe their characteristics and applications
		identify <i>types of bristles</i> , and describe their characteristics and applications

wood finishes that can be brushed on include: grain filler, penetrating stains, pigmented stains, oil stains

types of hardwoods include: walnut, oak, teak *types of softwoods* include: fir, pine, spruce

types of open-grained woods include: oak, mahogany types of closed-grained woods include: cherry, birch, maple types of bristles include: natural (animal hair), synthetic

E-17.02 Wipes on wood finishes

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Sk	ills
	Performance Criteria	Evidence of Attainment
E-17.02.01P	apply wood finish with <i>cloth material</i>	wood finish is applied with <i>cloth material</i> according to <i>manufacturers' specifications</i> ensuring adequate coverage
E-17.02.02P	wipe off excess wood finish after allowing product to penetrate wood surface	excess wood finish is wiped off after allowing product to penetrate wood surface according to manufacturers' specifications or desired finish

Range of Variables

cloth materials include: lamb's wool, cheese cloth, cotton rags

manufacturers' specifications include: temperature and humidity allowances, drying and recoating times, thinning ratio

	Know	ledge
	Learning Outcomes	Learning Objectives
E-17.02.01L	demonstrate knowledge of wood finishes that can be wiped on , their characteristics and applications	identify wood finishes that can be wiped on, and describe their characteristics, applications and operation
E-17.02.02L	demonstrate knowledge of procedures to wipe on wood finishes	identify <i>cloth materials</i> used to wipe on wood finishes, and describe their procedures and techniques for use

wood finishes that can be wiped on include: Danish oils, lemon oils, stains

cloth materials include: lamb's wool, cheese cloth, cotton rags

E-17.03 Sprays on wood finishes

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Sk	ills
	Performance Criteria	Evidence of Attainment
E-17.03.01P	thin wood finishes	wood finishes are thinned according to manufacturers' specifications to obtain a uniform finish with adequate coverage
E-17.03.02P	apply wood finish with spray equipment	wood finish is applied using spray equipment according to manufacturers' specifications while ensuring proper atomization

Range of Variables

spray equipment includes: HVLP, conventional, air-assisted/airless

	Know	ledge
	Learning Outcomes	Learning Objectives
E-17.03.01L	demonstrate knowledge of wood finishes that can be sprayed on , their characteristics, applications and operation	identify wood finishes that can be sprayed on, and describe their characteristics, applications and operation
E-17.03.02L	demonstrate knowledge of procedures to spray on wood finishes	describe procedures to thin wood finishes before spraying
		describe procedures and <i>techniques</i> to spray on wood finishes
		identify spray equipment used to spray on wood finishes, and describe their procedures for use

wood finishes that can be sprayed on include: non-grain raising stains, spirit stains, penetrating oil stains, clear finishes

techniques include: overlap, even strokes

spray equipment includes: HVLP, conventional, air-assisted/airless

Major Work Activity F

Prepares and applies industrial paints and coatings

Task F-18 Prepares for application of industrial paints and coatings

Task Descriptor

Painters and decorators must prepare for the application of industrial paints and coatings by mixing, thinning, heating and agitating. This task also includes the installation of fibre-reinforced plastic (FRP) which is used in industrial applications such as tank liners and explosion-proof areas to significantly strengthen the coatings.

F-18.01 Prepares industrial paints and coatings

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

		Skills
	Performance Criteria	Evidence of Attainment
F-18.01.01P	determine mil thickness	mil thickness is determined according to job specifications and product data sheet
F-18.01.02P	determine <i>mixing information</i>	mixing information is determined according to product data sheet
F-18.01.03P	mix paints and coatings	paints and coatings are mixed according to product data sheet using tools and equipment
F-18.01.04P	verify coating temperature meets requirements of product data sheet	coating temperature meets requirements of product data sheet

Range of Variables

mixing information includes: ratios, pot life, induction time, additives *tools and equipment* include: pneumatic paddles, mixing sticks

	Know	rledge
	Learning Outcomes	Learning Objectives
F-18.01.01L	demonstrate knowledge of industrial paints and coatings, their characteristics, properties and applications	identify types of industrial paints and coatings, and describe their characteristics, <i>properties and applications</i>
F-18.01.02L	demonstrate knowledge of procedures to prepare industrial paints and coatings	identify tools and equipment used to prepare industrial paints and coatings, and describe their procedures for use
		describe procedures to prepare industrial paints and coatings
		identify hazards, safe work practices and equipment when preparing industrial paints and coatings

properties and applications include: exposure to heat, moisture, water, acids, UV tools and equipment include: pneumatic paddles, mixing sticks safe work practices and equipment include: explosion-proof lighting, ventilation and respiratory equipment

F-18.02 Installs fibre-reinforced plastics (FRP)

NL	NS	PE	NB	QC	ON	MB	SK	AB	BC	NT	ΥT	NU
NV	yes	NV	NV	NV	no	yes	yes	yes	yes	NV	NV	NV

	Skills							
	Performance Criteria	Evidence of Attainment						
F-18.02.01P	apply bonding primer to substrates without profile	bonding primer is applied to substrates without profile						
F-18.02.02P	verify profile and cleanliness of substrate	profile and cleanliness of substrate are verified						
F-18.02.03P	apply primer to bare substrate with profile	primer is applied to bare substrate with profile						
F-18.02.04P	cut matting to fit required substrate area	matting is cut to fit required substrate area						
F-18.02.05P	overlap matting to ensure complete coverage	matting is overlapped to ensure complete coverage						
F-18.02.06P	calculate ratios to mix resin with catalyst	ratios to mix resin with catalyst are calculated according to product data sheet						
F-18.02.07P	saturate mesh with resin	mesh is saturated with resin using tools and equipment						

F-18.02.08P	remove air bubbles	air bubbles are removed using aluminum and spiked (porcupine) rollers to avoid failures in the FRP
F-18.02.09P	apply second resin coat to seal FRP and apply wax coat	second resin coat is applied to seal FRP and wax coat is applied to prevent contact between product and FRP

tools and equipment include: brushes, rollers, spray equipment

	Knowledge					
	Learning Outcomes	Learning Objectives				
F-18.02.01L	demonstrate knowledge of FRP, their characteristics and applications	identify types of FRP, and describe their characteristics and applications				
F-18.02.02L	demonstrate knowledge of procedures to install FRP	identify tools and equipment used to install FRP, and describe their procedures for use				
		describe procedures to install FRP				

Range of Variables

tools and equipment include: brushes, rollers, spray equipment

Task F-19 Applies industrial paints and coatings

Task Descriptor

Industrial coatings are designed for various purposes such as corrosion resistance, fire resistance, abrasion resistance and flexibility. They may be applied by brush, roller or spray equipment. Their application requires skills and training in specialized equipment and processes. Safety considerations are of particular importance to this task.

F-19.01 Applies industrial paints and coatings with hand tools

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	YT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills						
	Performance Criteria	Evidence of Attainment					
F-19.01.01P	verify substrate temperature, humidity, dew point and cleanliness	substrate temperature, humidity dew point and cleanliness are verified according to product data sheets and job specifications					
F-19.01.02P	brush, roll or squeegee on industrial paints and coatings	industrial paints and coatings are brushed, rolled or squeegeed on according to job requirements					
F-19.01.03P	apply uniform coating and measure mil thickness	uniform coating is applied and mil thickness is measured using wet mil gauge					
F-19.01.04P	perform visual inspection during application	visual inspection is performed during application to identify <i>problems</i>					
F-19.01.05P	measure dry film thickness after specified cure time	dry film thickness is measured after specified cure time					
F-19.01.06P	repair problems	problems are repaired by sanding and scraping cured coatings and recoating, or removing and reapplying, according to manufacturers' specifications					

Range of Variables

problems include: runs, sags, misses

	Knowledge						
	Learning Outcomes	Learning Objectives					
F-19.01.01L	demonstrate knowledge of industrial paints and coatings, their characteristics, properties and applications	identify types of industrial paints and coatings, and describe their characteristics, <i>properties and applications</i>					
F-19.01.01L	demonstrate knowledge of procedures to apply industrial paints and coatings with hand tools	identify <i>hand tools</i> used to apply industrial paints and coatings, and describe their procedures for use					
		describe procedures to apply industrial paints and coatings					
		identify hazards and describe safe work practices when applying industrial paints and coatings with <i>hand tools</i>					

properties and applications include: exposure to heat, moisture, water, acids, UV **hand tools** include: squeegees, spiked (porcupine) rollers, brushes, rollers

F-19.02 Applies industrial paints and coatings with spray equipment

NL	NS	PE	NB	QC	ON	MB	SK	AB	ВС	NT	ΥT	NU
NV	yes	NV	NV	NV	yes	yes	yes	yes	yes	NV	NV	NV

	Skills						
	Performance Criteria	Evidence of Attainment					
F-19.02.01P	verify substrate temperature, humidity, dew point and cleanliness	substrate temperature, humidity, dew point and cleanliness are verified according to product data sheets and job specifications					
F-19.02.02P	spray industrial paints and coatings	industrial paints and coatings are sprayed according to job requirements					
F-19.02.03P	adjust pump pressure for atomization and fan of paints and coatings	pump pressure is adjusted for atomization and fan of paints and coatings					
F-19.02.04P	plan sequence of spraying to avoid runs and sags	sequence of spraying is planned to avoid runs and sags					
F-19.02.05P	stripe coat leading edges and welds	leading edges and welds are stripe coated to ensure adequate coverage					
F-19.02.06P	use overlap procedure	overlap procedure is used to apply uniform spray coating by overlapping 50%					

F-19.02.07P	apply uniform coating and measure film thickness using wet mil gauge	uniform coating is applied and film thickness is measured using wet mil gauge at regular intervals according to American Society for Testing and Materials (ASTM) standard
F-19.02.08P	perform visual inspection	visual inspection is performed to identify <i>problems</i>
F-19.02.09P	measure dry film thickness	dry film thickness is measured after specified cure time
F-19.02.10P	repair problems	problems are repaired by sanding and scraping cured coatings and recoating, or removing and reapplying according to manufacturers' specifications and jurisdictional regulations

problems include: runs, sags, misses

	Knowledge						
	Learning Outcomes	Learning Objectives					
F-19.02.01L	demonstrate knowledge of industrial paints and coatings, their characteristics, properties and applications	identify types of industrial paints and coatings, and describe their characteristics, <i>properties and applications</i>					
F-19.02.02L	demonstrate knowledge of procedures to apply industrial paints and coatings with spray equipment	identify spray equipment used to apply industrial paints and coatings, and describe their procedures for use					
		describe procedures to apply industrial paints and coatings with spray equipment					
		describe overspray and its effects on surrounding environment					
		identify hazards and specialized safety procedures and equipment when applying industrial paints and coatings with spray equipment					

Range of Variables

properties and applications include: exposure to heat, moisture, water, acids, UV **spray equipment** include: plural pumps, airless spray pumps with inline heaters, power rollers, conventional spray equipment

specialized safety procedures and equipment include: explosion-proof lighting, ventilation and respiratory equipment, confined space procedures and equipment

Appendix A

Acronyms

AMPP Association for Materials Protection and Performance

ASTM American Society for Testing and Materials

FRP Fibre-reinforced Plastic

HEPA high-efficiency particulate air
HVLP High Volume Low Pressure

ISO International Organization for Standardization

JSA Job Safety Analysis
MPI Master Painters Institute

NACE National Association of Corrosion Engineers

OH&S Occupational Health and Safety
PPE Personal Protective Equipment

PVC Polyvinyl chloride SDS Safety Data Sheet

SSPC Society for Protective Coatings

T&M Time and Materials

TDG Transportation of Dangerous Goods

TSP Trisodium Phosphate

VOC Volatile Organic Compound

WHMIS Workplace Hazardous Materials Information System

Appendix B

Tools and Equipment / Outils et équipement

Personal Protective Equipment (PPE) and Safety Equipment / Équipement de protection individuelle (EPI) et équipement de sécurité

air conditioners/heaters for fresh air hood

air purifiers blast-spray hood

coveralls dust masks

ear plugs and muffs

exhaust fan

eye wash facilities face shields

fall arrest equipment

fire blankets fire extinguishers

fire hoses

first aid equipment fresh air hood

fume and toxic gas detector

gloves goggles hard hat

harness

high-efficiency particulate air (HEPA) air filters

(respirators, exhaust fans, vacuums)

knee pads lanyards latex gloves

respirators (air supplied, vapour, particle)

rope grabs safety glasses safety lines safety vest

self-contained breathing apparatus (SCBA)

signage spill kits

steel toed boots toe guards two-way radios warning tapes cagoule d'adduction d'air frais

conditionneur d'air

masque avec visière et cagoule

combinaisons

masques antipoussières

protecteurs et bouchons d'oreilles

ventilateur d'évacuation

bains oculaires écrans faciaux

équipement contre les chutes

couvertures anti-feu

extincteurs

boyaux d'incendie

trousse de premiers soins cagoule d'adduction d'air frais

détecteur de fumées nocives et de vapeurs

toxiques gants

lunettes à coques casque de sécurité

harnais

filtre à haute efficacité pour les particules de

l'air (HEPA) (respirateurs, ventilateurs

d'extraction, aspirateurs d'air)

protège-genoux cordons de retenue gants en latex

respirateurs (à adduction d'air, contre les

vapeurs, à particule) coulisseau de sécurité lunettes de sécurité lignes de sécurité ailet de sécurité

appareil respiratoire autonome

signalisation

trousse de lutte contre les déversements

bottes à embout d'acier

protège-orteils

radios avec émetteur-récepteur rubans de mise en garde

Hand Tools / Outils à main

air hose repair kits trousses de réparation de tuyau à air

aluminium rollers rouleaux d'aluminium

aprons tabliers

broad knives couteaux à large lame

brooms balais

brush and roller spinners essoreuses pour pinceaux et rouleaux

brush extenders rallonges pour pinceau

brushes (various types of natural (animal hair) pinceaux (divers types de pinceaux à soies and synthetic bristle brushes and various types naturelles [poils d'animaux] et synthétiques et

of handles) divers types de manches)
can hooks crochets pour pot
caulking guns pistolets à calfeutrer
chalk lines cordeau à craie
cheese cloths étamines

chisels outils de coupe

cutters ciseaux

drop sheets toiles de protection
duct tape ruban adhésif
dust pans porte-poussière
dusters chiffons à épousseter

extension poles tiges-rallonges

files limes hammers marteaux

hand masking machine applicateur manuel de ruban-cache

hawk bouclier à mortier hexagon keys clés hexagonales leather chamois chamois de cuir levels and lasers niveaux et lasers masking tape ruban-cache mop vadrouille nail punch chasse-clou

nut drivers presse-écrou pails seaux

paint pads tampons pour peinture paint strainer tamis pour peintures

pencils crayons
pliers plumb bobs fils à plomb

pole sanders putty knives ponceuses à manche couteaux à mastiquer

rags chiffons

razor blades lames de rasoir roller cages cages à rouleaux roller grids grilles pour rouleaux roller sleeves manches à rouleaux sanding blocks bloc de ponçage sanding sponges éponge à ponçage

sandpaper papier sablé
scrapers grattoirs
screwdrivers tournevis
shovel pelle

spiked (porcupine) rollers rouleaux à pointes (porc-épic)

sponges éponges

squeegees raclettes steel wool laine d'acier stir sticks bâtons à mélanger

straight edge rèale

tack cloths chiffons collants tape holders étuis pour ruban tarps/containments bâches/enveloppes de protection

travs bacs trowels truelles

utility knives couteaux universels brosses métalliques wire brushes

wrenches (adjustable, various sizes) clés (réglables, de différentes tailles)

Power Tools and Pneumatic Tools / Outils mécaniques et pneumatiques

burins/grattoirs mécaniques air chisels/scrapers

air dryers séchoirs compressors compresseurs

computer/colour matching software ordinateur/logiciel d'échantillonnage de couleur

dehumidifiers déshumidificateurs

drills perceuses dust collectors dépoussiéreurs fans ventilateurs

grinders (angle grinder, die grinder) meuleuses (meuleuse d'angle, meule à rectifier

les matrices) outil à soies portatif pistolets thermiques

lighting (explosion-proof, halogen, LED) éclairage (antidéflagrant, à halogène, DEL)

> pistolets à aiguilles agitateurs de peinture

pistolets à calfeutrer pneumatiques

mélangeurs pneumatiques rouleaux sous pression

équipement et matériel de décapage par jet de sable à pression : disjoncteur de sûreté (système électrique ou à air), buses (à venturi, à passage direct), cabinet de sablage, dispositifs de décapage, boyaux de sablage, hottes de sablage, matériel de

> sablage à l'eau, matériel de sablage centrifuae

appareils Roto-Peen

ponceuses

imprimantes

aspirateurs (avec filtres HEPA)

needle guns paint agitators plotters pneumatic caulking guns

pneumatic mixers pressure feed rollers

hand-held bristle tool

heat guns

pressurized blasting equipment and

components: deadman switches (electric or air), nozzles (venture, straight bore), blast cabinets, blasting pots, blast hoses, blasting hoods, hydroblast equipment, centrifugal

blasting equipment

printers rotary peeners sanders

vacuum cleaners (with HEPA filters)

Spray Equipment / Équipement de pulvérisation

air-assisted airless spray equipment

airless spray equipment (electric and internal combustion)

conventional spray equipment electrostatic spray equipment HVLP spray equipment

plural component spray pumps power rollers spray equipment components (compressors, inline heaters, pump filters, spray gun extensions, spray guns, spray lines, spray tips, washers and housing, spray whips and swivels, etc.)

spray hoods texture spray machine thermal spray equipment équipement de pulvérisation pneumatique sans air

équipement de pulvérisation sans air (électrique et à combustion interne) équipement de pulvérisation traditionnel équipement de pulvérisation électrostatique équipement de pulvérisation à haut volume et à basse pression (HVBP) pompes de pulvérisation à multicomposants composants des rouleaux mécaniques de pulvérisation (compresseurs, appareils de chauffage instantané, filtres pour pompes, rallonges de pistolet de pulvérisation, pistolets de pulvérisation, lignes de pulvérisation, buse d'injecteur, rondelles et corps, pivots et fouets de pulvérisation, etc.) hottes de pulvérisation pulvérisateur pour peinture texturée

équipement de pulvérisation thermique

Measuring and Testing Equipment / Outils d'essai et de mesure

adhesion tester air monitoring equipment architectural rule blotter test kit calculator clear tape (contaminant tester)

coating temperature probe digital temperature gun dry film thickness gauge holiday detector humidity meter lead test kit measuring cup measuring tape moisture meter profile gauge/replica tape pull test kit salt test kit sling psychrometer thermometers viscosity cup wet mil gauge

vérificateur d'adhésion instrument de surveillance de l'air rèale d'architecte trousse de test sur papier buvard calculatrice ruban transparent (appareil de test de dépôts de contaminants) sonde de température du revêtement pistolet de température numérique jauge d'épaisseur du feuil sec détecteur de manques appareil de mesure de l'humidité appareil de détection du plomb tasse graduée ruban à mesurer appareil de mesure du degré d'humidité profilomètre/bande de réplique trousse de test de traction magnétique trousse de test de teneur en sel psychromètre fronde thermomètres godet de viscosité jauge d'épaisseur du feuil frais

yard stick

Access Equipment and Rigging, Hoisting and Lifting Equipment / Équipement d'accès et équipement de gréage et de lavage

aerial platforms (boom and scissor lifts) plateformes élévatrices (à nacelles et à

ciseaux)

beam rollers rouleaux à poutre

boatswain's chair sellettes

elevated work platforms plateformes de travail élévatrices grounding equipment équipement de mise à la terre ladder jacks échafaudages sur échelles

ladders échelles

mechanical scaffolds échafaudages mécaniques planks (aluminum, wood) planches (aluminium, bois)

platforms plateformes

rigging components (straps, slings, chains and dispositifs de gréage (sangles, élingues,

shackles) chaînes et manilles) rolling scaffolds échafaudages roulants

scaffolding components (stirrups, planks, composants de l'échafaudage (tirants,

outriggers and cross braces) planches, stabilisateurs et traverses) stationary scaffolds échafaudages fixes

suspended access systems échafaudages volants transfer chains chaînes de transfert

Specialty Wall Covering Tools / Outils pour revêtements muraux spéciaux

cutting knives couteaux fraiseurs double cutter fraise double glue gun pistolet à colle

hypodermic needle/syringe aiguille hypodermique/seringue

paste brush brosse à colle
paste machine encolleuse
paste table table pour encoller
perforator perforateur

plastic smoother lisseur en plastique seam roller rouleau à joints

shears/scissorscisaillessled knivescouteaux de peintresmoothing brushpinceau lissantsteam stripperdécolleuse à vapeur

trimming wheels disques de polissage vinyl table table de coupe pour vinyle

water trough/dams bac d'eau/réducteur de volume d'eau

Specialty Finishing Tools and Equipment / Outils et équipement pour finis spéciaux

artistic brushes pinceaux d'artiste badger blender blaireau

camel hair brush brosse à poils de chameau

caulk spatula (various sizes) spatule de calfeutrage (de différentes tailles)

check rollerrouleau décoratifdraggerqueue à lisserfan brushespinceaux éventailsfitch brushespinceaux putois

flogging brushes gilding tip brushes goose feathers graining combs

Japan scraper (pigment scraper)

mottling brushes

newspaper and plastic sheets

notched spreaders piped overgrainer pounce wheels projectors rocker grainer sea sponges stencil brush stencil knife stencils stipplers sword stripers

Venetian plaster trowel

pinceaux pour encoller pinceaux d'enluminure

plumes d'oies

spalters à crans – peignes

grattoir japonais (grattoir à pigment)

pinceaux à marbrer

papier journal et feuilles de plastique

épandeurs à encoches

spalter-brosse roulettes à tailler projecteurs berceau-greneur

éponges naturelles (de mer)

brosse à pochoir couteau de pochoir

pochoirs

outils de pointillage rouleaux-pochoirs

truelle pour le plâtre vénitien

Appendix C

Glossary / Glossaire

abrasive blasting	process used to clean a surface or create a profile with abrasive media such as sand, steel shot, beads, glass, soda or walnut shells	décapage par projection d'abrasif	procédé par lequel on nettoie une surface ou que l'on crée un profil à l'aide d'abrasifs comme du sable, des grenailles d'acier, des perles, du verre, du carbonate de sodium ou des coquilles de noix
acclimatize	bringing a product to ambient temperature before use	acclimater	amener un produit à température ambiante avant l'utilisation
acrylic latex paint	water-thinned paint which employs synthetic acrylic resin as the majority of the binder	peinture acrylique au latex	peinture diluée avec de l'eau et dans laquelle la résine acrylique agit en majeure partie comme agent liant
airless spraying	process of atomization of paint by forcing it through an orifice at high pressure; the effect is often aided by the vaporization of the solvents, especially if the paint has been previously heated	pulvérisation sans air	procédé de pulvérisation de la peinture par lequel la peinture est projetée sous haute pression par un orifice; l'effet est souvent aidé par la vaporisation de solvants, surtout si la peinture a été chauffée
alkyd paint	paint which contains a synthetic alcohol-based resin; alkyd paint must be thinned and cleaned with solvent or paint thinner; it can be used in place of oil-based paints	peinture à l'alkyde	peinture qui contient une résine synthétique à base d'alcool et qui doit être diluée et nettoyée à l'aide de solvant ou de diluant de peinture; elle peut être utilisée au lieu des peintures à base d'huile
alligatoring	paint film cracking that makes the surface look like alligator skin	peau de crocodile	caractéristique d'une surface dont le feuil de peinture craquelé ressemble à la peau d'un crocodile
angled sash brush	angled brush used for cutting-in	pinceau biseauté	pinceau à angle utilisé pour faire le découpage

back priming	applying a coat of paint to the back of woodwork or exterior siding to prevent moisture from entering the wood and causing the grain to swell or wood to warp	enduction d'envers	appliquer une couche de peinture au dos de la boiserie ou du revêtement extérieur afin d'empêcher l'humidité de pénétrer le bois et de faire gonfler le fil ou d'empêcher le gauchissement du bois
backing rod	foam plastic rod inserted in a joint to be sealed to regulate the depth of sealant	tige d'appui	tige en plastique cellulaire insérée dans un joint à sceller pour réduire la profondeur du produit d'étanchéité
bleach	product creating a chemical process to lighten wood finishes and/or to create a uniform colour of wood	agent de blanchiment	produit qui crée un procédé chimique pour éclaircir les finis pour le bois ou pour créer une couleur de bois uniforme
blistering	forming of bubbles or pimples on the painted surface; blistering is caused by moisture in the substrate, by paint having been applied before the previous coat was dry, and by excessive heat during or after application	boursouflure	formation de bulles ou de cloques sur la surface peinte; les boursouflures sont causées par la présence d'humidité dans le subjectile, par de la peinture ayant été appliquée avant que la couche précédente ait complètement séché ou par une chaleur excessive durant ou après l'application
blooming	a cloudy, waxy, powdery, or hazy deposit appearing on the surface of a dried enamel or varnish film immediately after the film has dried and affecting the gloss of the film	bleuissement	un dépôt opaque, cireux, poudreux ou brumeux qui apparaît sur la surface de l'émail ou le film de vernis sec, immédiatement après le séchage, et qui affecte le lustre du film
blushing	a defect that occurs during the drying or curing process because of condensation of moisture occurring on a coating surface and visible as water spot.	opalescence	une défectuosité qui survient lors du séchage ou du durcissement en raison de la condensation de l'humidité sur une surface de revêtement, et qui prend la forme d'une tache d'eau

transvaser

pouring two or more paints together to mix in order to achieve a

consistent colour and

viscosity

plusieurs peintures et les mélanger pour obtenir une couleur et une viscosité uniformes

combiner deux ou

box

broad knife	flexible bladed knife used to apply fillers	couteau à enduire	couteau à lame flexible utilisé pour appliquer les bouche-pores
catalyst	additive added to base to chemically activate the paint or coating for the purpose of curing	catalyseur	adjuvant ajouté au produit de base pour activer chimiquement le durcissement de la peinture ou de l'enduit
checking	kind of paint failure in which many small cracks appear on the surface of the paint	fendillement	sorte de défectuosité de la peinture se caractérisant par l'apparition de plusieurs petites fissures à la surface de la peinture
corner bead	metal, paper or plastic covering protecting and reinforcing corners of drywall	baguette d'angle	revêtement en métal, en papier ou en plastique qui protège et renforce les coins des panneaux de gypse
cracking	splitting of a dry paint or varnish film, usually a result of aging or movement of the substrate; different forms are hair-line cracking, checking, crazing, grain cracking, or alligatoring	craquelage	clivage d'un feuil de peinture ou de vernis sec dû au mûrissement ou au déplacement du subjectile; les différentes formes comprennent les fissures fines, le fendillement, le faïençage les gerçures de la fleur ou la peau de crocodile
doffing	taking off (an item of clothing or personal protective equipment [PPE]). When doffing PPE, it is important to protect self and others from contamination.	enlever	retirer (un vêtement ou de l'EPI). Lorsqu'on retire l'EPI, il est important de protéger les autres et soi-même des contaminants.
donning	putting on (an item of clothing or personal protective equipment (PPE)). When donning PPE, it is important to protect self and others from contamination.	porter	revêtir (un vêtement ou une pièce d'équipement de protection individuelle [EPI]). Lorsqu'on porte l'EPI, il est important de protéger les autres et soi-même des contaminants.
draw down	sample panel created by applying paint being used in order to visualize finished product for comparison and approval	échantillon témoin	panneau échantillon créé par l'application de peinture et utilisé pour visualiser le produit fini aux fins de comparaison et d'approbation

drier	paint ingredient that aids the drying or hardening of the film	siccatif	ingrédient de la peinture qui accélère le processus de séchage ou de durcissement du feuil
efflorescence	deposit of salts that remains on the surface of masonry, brick or plaster when water has evaporated	efflorescence	formation d'un dépôt de sel sur la surface de la maçonnerie, de la brique ou du plâtre après que l'eau se soit évaporée
eggshell	gloss range between flat and semi-gloss; sheen closely resembles the lustre of an eggshell; note that eggshell is a degree of gloss, not a colour	coquille d'œuf	nuance de brillance qui se situe entre le fini mat et le fini semi-brillant dont le lustre ressemble énormément à celui d'une coquille d'œuf; prendre note que coquille d'œuf est un degré de brillance et non pas une couleur
elastomeric	flexible high performance coating used to bridge fractures in concrete or stucco	revêtement élastomère	revêtement flexible de haute performance qui corrige les ruptures dans le béton ou le stuc
electrostatic spraying	paint spraying process using electrically charged particles in the paint and a grounded substrate to significantly reduce overspray	pulvérisation par pression électrostatique	procédé d'application de peinture au pistolet qui consiste à utiliser des particules chargées électriquement dans la peinture et un subjectile mis à la terre pour diminuer de manière significative la surpulvérisation
emulsion	preparation where minute particles of one liquid such as oil are suspended in another such as water; used for poly-mix paint in spraying techniques	émulsion	préparation où d'infimes particules d'un liquide, comme l'huile, sont suspendues dans un autre liquide, comme l'eau; utilisée pour les peintures à mélanges multiples dans les techniques de pulvérisation
enamel	paint that forms an especially smooth, hard film; enamels may be obtained in a full range of glosses and can be either latex, alkyd or oil	émail	peinture qui forme un feuil particulièrement lisse et dur; l'émail est offert dans une gamme complète de brillance et peut être à base de latex, d'alkyde ou d'huile

ероху	product made from synthetic resin derived from petroleum; epoxies, which are generally cured by catalysts, are perhaps the most durable of all coatings	résine d'époxy	produit fait à base de résine synthétique dérivée du pétrole; la résine d'époxy, qui est généralement durci à l'aide de catalyseurs, est probablement le revêtement le plus durable qui existe
etching	to wear away or roughen a substrate with an acid or other chemical agent or with a fine abrasive prior to painting to increase adhesion	mordançage	user un subjectile ou le rendre rugueux à l'aide d'un acide ou d'un agent chimique, ou d'un abrasif fin avant d'appliquer la peinture pour en augmenter l'adhérence
faux finish	technique used to change surfaces into appearing to be of a different material; for instance, to make a wall look like granite, marble or a wood grain	faux fini	technique utilisé pour donner l'impression qu'une surface est faite d'un autre matériau; par exemple, l'imitation de granit, de marbre ou de fil de bois sur un mur
feathering	process used to blend a small area into its surroundings after spot-priming, applying filler or sanding off edges of old paint	ponçage en biseau	procédé par lequel on fusionne un endroit retouché avec le reste de la surface en appliquant du bouche- pores ou en ponçant la surface de l'ancienne peinture
filler	ready-mixed paste or powder used for repairing small holes and cracks in the surface to be painted	bouche-pores	pâte ou poudre prête à l'emploi utilisée pour réparer des petits trous et des petites fissures dans la surface à peindre
film thickness	depth or thickness of the dry coating in millimetres	épaisseur du feuil	profondeur ou épaisseur d'une couche à sec en millimètres
fire retardant	coating which will reduce flame spread, resist ignition when exposed to high temperature, or insulate the substrate and delay damage to the substrate	ignifuge	enduit qui réduit la propagation des flammes, qui ne s'enflamme pas à de hautes températures ou qui isole le subjectile et retarde les dommages faits à celui-ci
fish eyes	paint film defect caused by contaminants such as oil or water deposits	yeux de poissons	défectuosité du feuil de peinture causée par des contaminants comme des dépôts d'huile ou d'eau

flash point	temperature at which a coating or solvent produces vapours that are capable of being ignited	point d'éclair	température à laquelle le revêtement ou le solvant émet des vapeurs qui sont inflammables
flashing	paint film defect caused by inadequate coverage or uneven absorption	embu	défectuosité du feuil de peinture causée par une couverture insuffisante ou une absorption inégale
flat paint	paint with no gloss even when the surface is viewed from an angle; flat finish has even less gloss than an eggshell finish; flat paint is less durable than higher gloss paint	peinture mate	peinture sans brillant même lorsque la surface est observée en angle et dont le fini mat a encore moins de brillant que le fini coquille d'œuf; la peinture mate est moins durable que la peinture très brillante
galvanic action	corrosion caused by dissimilar metals being in contact with each other	action galvanique	corrosion causée par le contact de métaux différents
gilding	applying metal leaf (gold, palladium, brass, aluminum) for decorative effects	dorure	procédé qui consiste à appliquer une feuille de métal (or, palladium, laiton, aluminium) pour obtenir des effets décoratifs
glaze	transparent or translucent coatings applied over a painted surface to produce blended effects of their colours	glacis	enduits transparents ou translucides appliqués sur une surface peinte pour produire des effets de mélange de couleurs
gloss	ability of the finished surface to reflect light in a mirror-like manner; the higher the gloss, the more scrubbable and durable the finish; degrees of gloss include flat, velvet, eggshell, low lustre, semi-gloss and high gloss	brillant	capacité de la surface finie à réfléchir la lumière à la manière d'un miroir; plus le brillant est intense, plus le fini est lavable et durable, et le degré de brillance peut être mat, velours, coquille d'œuf, peu brillant, semi-brillant et très brillant
graining	simulating the grain of wood by means of specially prepared colours or stains and the use of graining tools or special brushing techniques	veinage	reproduction du grain de bois à l'aide de teintures ou de colorants spécialement préparés et d'outils imitant le grain du bois ou de techniques spéciales d'application au pinceau

grout	fluid mortar mixture consisting of cement and water with or without aggregate	coulis	mélange de mortier liquide fait de ciment et d'eau avec ou sans granulats
hoarding	tall screen or fence used to screen off and contain a construction site or work area	palissade	grand écran ou grande clôture servant à masquer ou à délimiter un chantier de construction ou une zone de travaux
holiday tester	specialty tool used to detect pinholes and flaws in coatings on conductive substrates	détecteur de manques	outil spécialisé pour détecter les piqûres et les irrégularités dans les revêtements des subjectiles conducteurs
honeycomb (bug holes)	concrete that, due to lack of the proper amount of fines or vibration, contains abundant interconnected voids or cavities	nids d'abeilles	béton qui, en raison d'un manque de vibration ou de remplissage, contient de nombreux espaces vides ou des cavités communicantes
hot spots	incompletely cured lime spots that bleed through the coating on a plastered wall	zones tendres	zones qui ne sont pas complètement sèches et qui saignent à travers l'enduit appliqué sur un mur en plâtre
induction time	time interval that must elapse after mixing the components of a multi-component paint before application can begin; also known as sweat-in time	temps d'induction	laps de temps qui doit s'écouler entre le mélange des composants d'une peinture à plusieurs composants et l'application de la peinture; aussi appelé temps d'exsudation
intumescent coating	fire retardant coating which, when heated, becomes plastic and produces non-flammable gasses, such as carbon dioxide and ammonia; the gasses are trapped by the film, converting it to an expanding foam; at this stage, the film solidifies, resulting in a thick, highly insulating layer of carbon, which effectively protects the substrate from fire	revêtement intumescent	revêtement ignifuge qui, lorsque chauffé, se transforme en plastique et émet des gaz non inflammables comme le dioxyde de carbone et l'ammoniac; les gaz sont emprisonnés par le feuil, qui les convertit en mousse à expansion, et à ce stade, le feuil se solidifie, produisant une couche épaisse et très isolante de carbone qui protège de manière efficace le subjectile contre le feu

knock-down	a technique used to flatten the top of textured finishes for a unique look	fini écrasé	technique utilisée pour matir le haut des finis texturés pour obtenir une allure unique
lacquer	clear or pigmented coating that dries quickly by evaporation of solvent; transparent protective film; can be matte, eggshell or gloss	laque	enduit transparent ou pigmenté qui sèche rapidement par évaporation du solvant et feuil protecteur transparent qui peut être mat, coquille d'œuf ou brillant
latex	water-based paint product; latex has more permeability than oils and it eliminates odour and dangers associated with organic solvents; latex is fast-drying, has good colour retention, is more resistant to blistering and cleans up easily	latex	peinture à base d'eau; la perméabilité la peinture au latex est supérieure à celle de la peinture à huile et dont l'utilisation permet d'éliminer les odeurs et les dangers associés aux solvants organiques; la peinture au latex sèche rapidement, retient bien la couleur, est plus résistante aux boursouflures et se nettoie facilement
lifting	raising and lifting of the surface as a result of the softening and penetration of a previous film by solvents in the paint being applied over it	détrempe	soulèvement et levée du revêtement à la suite du ramollissement et de la pénétration d'un feuil précédent par des solvants dans la peinture appliqués sur ce feuil
marbling	technique used on surfaces to give appearance of marble	marbrage	technique utilisée sur les surfaces pour donner une apparence marbrée
"maintain a wet edge"	process of stroking or rolling the paint from dry areas back into wet areas to ensure a coat of paint always blends back into itself	« conserver une démarcation humide »	procédé par lequel on applique la peinture par jets ou à l'aide d'un rouleau en passant des sections sèches aux sections humides afin d'assurer un épandage uniforme des couches
masonry	mineral-based building material such as cement, mortar, stone, brick and stucco	maçonnerie	matériau de construction comme le ciment, le mortier, la pierre, la brique et le stuc

mildewcide	chemical agent, often included in exterior paints and caulks, that discourages mildew growth on the paint surface	agent antimoisissure	produit chimique souvent présent dans les peintures et les produits de calfeutrage extérieurs pour empêcher la moisissure de s'installer à la surface de la peinture
mill scale	coating on new steel created by the hot roll process; after weathering, it appears flaky and scaly; must be removed before applying coating	calamine	couche qui se forme sur l'acier lors des opérations de laminage à chaud; la couche écaillée apparaît après une exposition aux intempéries et elle doit être enlevée avant l'application de l'enduit
muriatic acid	chemical used to etch and neutralize concrete substrates prior to applying paints and coatings; it is a diluted solution of hydrochloric acid	acide chlorhydrique	produit chimique utilisé pour décrocher et neutraliser des subjectiles en béton avant d'appliquer les peintures et les enduits; il s'agit d'une solution diluée d'acide chlorhydrique
oil paint	paint which is oil-based and can be diluted with solvent; paint that contains drying oil, oil varnish or oil-modified resin as the film-forming ingredient	peinture à l'huile	peinture à base d'huile qui peut être diluée avec du solvant et qui contient de l'huile siccative, du vernis à l'huile ou de la résine modifiée à l'huile comme ingrédient feuillogène
orange peel	film having the texture of an orange	pelure d'orange	feuil qui a la texture d'une pelure d'orange

peeling

detachment of paint from the surface in ribbons or sheets; like flaking, it is the result of loss of adhesion and film integrity; peeling can be intercoat, or down to the substrate

décollement

détachement de la peinture en filet ou en feuille; comme l'écaillage, le décollement est le résultat de la perte d'adhérence et de l'intégrité du feuil et peut se faire entre les couches ou au niveau du subjectile

pigment

finely ground, natural or synthetic, inorganic or organic, insoluble dispersed particles (powder) which, when dispersed in a liquid vehicle to make paint, may provide, in addition to colour, many of the essential properties of the paint: opacity, hardness, durability, and corrosion resistance: the term is used to include extenders, as well as white or colour pigments; the distinction between powders which are pigments and those which are dyes is generally considered to be on the basis of solubility: pigments being insoluble and dispersed in the material, dyes being soluble or in solution when used

pigment

particules dispersées (poudre) finement broyées, naturelles ou synthétiques, organiques ou inorganiques et insolubles qui, lorsque dispersées dans un liquide pour former de la peinture, peuvent, en plus de la couleur, donner à la peinture ses propriétés de base : opacité, dureté. durabilité et résistance à la corrosion; le terme est utilisé pour parler autant des matières de charge que du blanc ou des pigments de couleur; la distinction entre les poudres qui sont des pigments et les poudres qui sont des colorants se fait généralement selon leur solubilité : les pigments sont insolubles et dispersés dans le matériau alors que les colorants sont solubles ou viennent en solutions lorsqu'on les utilise

plural component coating

coating that is applied using a method that proportions and mixes two or more components of a paint material in the process of delivering them to a spray gun

revêtement à plusieurs composants

revêtement qui est appliqué en utilisant une méthode qui dose et mélange deux ou plusieurs constituants de la peinture lors de leur pulvérisation au pistolet

polyurethane	coatings ranging from hard glossy enamels to soft, flexible coatings; with thorough surface preparation, polyurethanes provide good to very good adhesion, hardness, flexibility and resistance to UV damage	polyuréthanne	variété de revêtements allant d'émaux brillants à des revêtements doux et flexibles; lors d'une préparation approfondie de la surface, le polyuréthane assure une adhésion, un durcissement, une flexibilité et une résistance aux rayons UV qui vont de bon à très bon
pot life	period during which a catalyzed paint can be applied after it has been mixed	durée de vie en pot	période pendant laquelle une peinture catalysée peut être appliquée après avoir été mélangée
primer	coating applied to a substrate for the purpose of sealing, adhesion of subsequent coats, and corrosion control	apprêt	enduit appliqué sur un subjectile pour assurer son étanchéité, l'adhérence des couches subséquentes, et pour protéger contre la corrosion
primer sealer	priming system that minimizes or prevents the penetration of coats into the substrate	apprêt scellant	apprêt qui minimise ou empêche la pénétration des couches dans le subjectile
putty knife	flat-bladed, narrow metal tool for filling cracks and holes	couteau à mastic	outil à lame étroite et plate en métal utilisé pour remplir les fissures et les trous
rag-rolling	method of producing decorative, broken-colour effects by rolling a piece of crumpled fabric or paper over the wet surface	chiffon enroulé	méthode pour produire des effets décoratifs et de ton rompu qui consiste à rouler un morceau de tissu ou de papier froissé sur la surface mouillée
recoat time	minimum and/or maximum period of time between applications of coats of paint	délai de recouvrement	période de temps minimale ou maximale qui doit être allouée entre chaque application de couche de peinture
reinforcing mesh	mesh used to reinforce surface by being embedded in paint or coatings	treillis d'armature	treillis utilisé pour renforcer la surface en étant incorporé à la peinture ou placé entre les couches

resin	natural or synthetic material that is the main ingredient of paint; it binds the ingredients together and improves the coat's adhesion to the surface	résine	matière synthétique ou naturelle qui est l'ingrédient principal de la peinture; elle lie les ingrédients et améliore l'adhésion de la peinture à la surface
runs and sags	blemishes on the film caused by excessive flow of the coating, applying too heavy a coat of paint or thinning the paint too much	coulures et festons	imperfections sur le feuil qui sont causées par un débit trop élevé lors de l'application de l'enduit, par l'application d'une couche de peinture trop épaisse ou par une peinture trop diluée
saponification	a type of paint failure caused by the breakdown of the bonds within a paint due to alkaline conditions and moisture resulting in weakness and uncovering of the paint, exposing the underlying material.	saponification	sorte de défectuosité de la peinture causée par la dégradation des liaisons de la peinture, en raison des conditions alcalines et du taux d'humidité, et qui entraîne une faiblesse et un dévoilement de la peinture qui expose le matériel sous-jacent.
satin finish	gloss range between eggshell and semi-gloss	fini satiné	nuance de brillance qui se situe entre le fini coquille d'œuf et le fini semi brillant
sealer	coating used to prevent excessive absorption of subsequent coats into a porous surface or to prevent stains from bleeding out of the substrate	scellant	revêtement que l'on utilise pour empêcher une trop grande absorption des couches subséquentes par une surface poreuse ou pour prévenir le saignement
seam roller	small wooden or plastic roller for use on wallpaper edges	rouleau à joint	petit rouleau en bois ou en plastique utilisé sur les bords de papier peint
semi-gloss	degree of gloss that is glossier than low lustre but not as glossy as high gloss	semi-brillant	nuance de brillant qui est plus brillante que le fini peu brillant, mais pas aussi brillante que le fini très brillant

natural resin, usually in the form of thin flakes, derived from a resinous substance called lac; shellac is used to seal and finish floors, knots,

gomme laque

résine naturelle qui prend habituellement la forme d'écailles fines et qui est dérivée d'une substance résineuse appelée laque; la gomme laque est utilisée pour calfeutrer et faire la finition de planchers, de nœuds, etc.

size

liquid composition that prevents excessive absorption of paint or wallpaper adhesive into plaster, wallboard, or a similar porous interior surface

apprêture

composition liquide qui empêche que le plâtre, le panneau mural ou toute autre surface intérieure poreuse similaire absorbe de manière excessive la peinture ou l'adhésif du

papier peint

sling psychrometer

a device used with standardized tables and charts to measure physical and thermal properties of moist air.

psychromètre fronde

outil qui mesure avec précision l'humidité relative

solvent

any liquid that can dissolve a resin; generally refers to the liquid portion of paints and coatings that lowers the viscosity of paints and coatings and evaporates as the paint and coating dries

solvant

tout liquide pouvant dissoudre une résine qui fait généralement référence à la portion liquide de peinture et d'enduit qui réduit la viscosité de la peinture ou de l'enduit et qui s'évapore lorsque la couche sèche

spackling compound

powder mixed with water or ready-mix compound that is primarily used to fill large cracks in walls; it dries hard and can be sanded and painted, but does not tolerate much movement in the substrate

plâtre à reboucher

poudre mélangée avec de l'eau ou composé prêt à l'emploi surtout utilisés pour remplir de grosses fissures dans les murs; le produit durcit en séchant et peut être poncé ou peinturé, mais ne tolère pas beaucoup de mouvements de la part du subjectile

spalling

cracking, breaking or splintering of concrete and masonry surfaces usually due to heat

effritement

faïençage, fissuration ou éclatement du béton et des surfaces de maçonnerie généralement dû à la chaleur

spot-priming	application of primer to spots that require additional protection or repair	retouche	application de l'apprêt aux endroits qui ont besoin de protection supplémentaire ou de réparation
stain coating	solution designed to colour a surface (wood or concrete) without hiding it; solid colour and latex stains are available; stains may be latex or oil-based	teinture	solution qui permet de donner une couleur à une surface (bois ou béton) sans la cacher; des couleurs en aplat et des teintures au latex sont offertes et les teintures peuvent être au latex ou à l'huile
stripper	chemical compound in gel or liquid form used to remove old or damaged paint	décapant	composé chimique liquide ou en gel que l'on utilise pour enlever de la vieille peinture ou de la peinture endommagée
substrate	surface that is being painted, coated, blasted, etc.	subjectile	surface qui est peinte, revêtue, pulvérisée, etc.
synthetic brush	paint brush with filaments that are made from a non-absorbent plastic material such as polyester or nylon, rather than animal hair; synthetic brushes are usually used for latex paint	pinceau à poils synthétiques	pinceau dont les filaments sont faits à partir d'un matériel plastique non absorbant comme le polyester ou le nylon plutôt qu'en poils d'animaux; les pinceaux à poils synthétiques sont généralement utilisés pour la peinture au latex
thinner	liquid used to adjust viscosity or to modify other properties of paint, varnish and lacquer; thinner is used to thin and clean up paint	diluant	liquide utilisé pour ajuster la viscosité ou modifier d'autres propriétés de la peinture, du vernis et de la laque; le diluant est utilisé pour diluer et nettoyer la peinture
trisodium phosphate (TSP)	cleaning agent; after the TSP has been dissolved in water, the solution is used in surface preparation; TSP is used to remove gloss, dirt and grease from surfaces	phosphate trisodique	produit nettoyant qui, une fois dissout dans l'eau, est utilisé pour préparer les surfaces; il sert à enlever le brillant, la saleté et la graisse des surfaces
undercoat	coat of paint applied beneath the topcoat	sous-couche	couche de peinture appliquée sous la couche de finition

urethane	product resulting in a tough, chemical-resistant finish	uréthane	produit qui rend un fini très résistant aux agents chimiques
varnish	clear finish in either matte, gloss or satin finish; broadly speaking, a translucent liquid which, when applied to a surface in a thin film, dries to a hard and more or less transparent finish	vernis	fini clair qui peut être mat, brillant ou satiné; en générale, il s'agit d'un liquide translucide qui sèche pour donner un fini plus ou moins transparent et dur lorsqu'on applique une couche mince sur une surface
viscosity	degree of resistance to flow of paint, varnish, or other liquids; viscosity is often referred to as consistency; the higher the viscosity, the thicker the fluid; the lower the viscosity, the thinner the fluid	viscosité	degré de résistance à l'écoulement d'une peinture, d'un vernis ou de tout autre produit liquide; on fait souvent référence à la consistance lorsqu'on parle de la viscosité, et plus elle est forte, plus elle est faible, moins le fluide est épais
volatile organic compound (VOC)	hazardous additive in paint; any carbon compound that evaporates under standard test conditions; essentially, all paint solvents except water are VOCs	composé organique volatil (COV)	adjuvant dangereux contenu dans la peinture et tout composé de carbone qui s'évapore dans des conditions d'essais normales; essentiellement, tous les solvants pour peinture, sauf l'eau, sont des COV
wet edge time	length of time during which a paint can be brushed before it becomes too dry to flow out and blend together	temps de reprise d'une démarcation humide	laps de temps pendant lequel la peinture peut être étendue au pinceau avant qu'elle ne soit trop sèche pour s'étaler et se fondre dans le reste de la peinture
wood filler	filler for wood repairs	bouche-pores	agent de remplissage servant à réparer le bois
wood graining	paint effect used to imitate the grain of real wood	veinage	effet de peinture utilisé pour imiter le fil du bois

wood veneer

very thin sheet of finely grained or coloured woods used to decorate panels on doors and wainscoting, and to form bands or other patterns, which is a form of inlay, and also for covering the whole surface of more common or stronger woods

bois de placage

feuille très mince de bois à grain fin ou de bois de couleur utilisée pour décorer les panneaux de portes et de boiseries, pour former des bandes ou d'autres motifs, ce qui est une forme de marqueterie, et pour recouvrir toute la surface de bois commun ou dur