



PROGRAM OUTLINE

Floorcovering Installer

Implementation date: September 1, 2024

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FLOORCOVERING INSTALLER PROGRAM OUTLINE

**APPROVED BY INDUSTRY
JANUARY 2023**

IMPLEMENTATION BEGINNING SEPTEMBER 2024, AS PER TRANSITION PLAN

THIS BC PROGRAM HAS BEEN HARMONIZED AND IS BASED ON RSOS 2023

**Developed by
SkilledTradesBC
Province of British Columbia**

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Section 1

INTRODUCTION

Floorcovering Installer

Foreword

This revised Floorcovering Installer Program Outline is intended as a guide for instructors, apprentices, and employers of apprentices as well as for the use of industry organizations, regulatory bodies, and provincial and federal governments. It reflects updated standards based on the 2023 Red Seal Occupational Standard (RSOS). It was developed by British Columbia industry and instructor subject matter experts.

Practical instruction by demonstration and student participation should be integrated with classroom sessions. Safe working practices, even though not always specified in each operation or topic, are an implied part of the program and should be stressed throughout the apprenticeship.

This Program Outline includes a list of recommended reference textbooks that are available to support the learning objectives and the minimum shop requirements needed to support instruction.

Competencies are to be evaluated through written exams and practical assessments. A passing grade is achieved by getting an overall mark of 70%. See the Assessment Guidelines in Section 4 for more details.

Achievement Criteria are included for those competencies that require a practical assessment. The intent of including Achievement Criteria in the Program Outline is to ensure consistency in training across the many training institutions in British Columbia. Their purpose is to reinforce the theory and to provide a mechanism for evaluation of the learner's ability to apply the theory to practice. It is important that these performances be observable and measurable and that they reflect the skills spelled out in the competency. The conditions under which these performances will be observed and measured must be clear to the learner as well as the criteria by which the learner will be evaluated. The learner must also be given the evaluation criteria.

The performance spelled out in the Achievement Criteria is a suggested performance and is not meant to stifle flexibility of delivery. Training providers are welcome to substitute other practical performances that measure similar skills and attainment of the competency. Multiple performances may also be used to replace individual performances where appropriate.

SAFETY ADVISORY

Be advised that references to the WorkSafe BC safety regulations contained within these materials do not/may not reflect the most recent Occupational Health and Safety Regulation (the current Standards and Regulation in BC can be obtained on the following website: <http://www.worksafebc.com>). Please note that it is always the responsibility of any person using these materials to inform themselves about the Occupational Health and Safety Regulation pertaining to their work.

Acknowledgements

Industry and Instructor Subject Matter Experts retained to assist in the development and review of this Program Outline:

- Anthony Scott Ter Haar
- Jeffrey Jensen
- Kjell Nymark

SkilledTradesBC would like to acknowledge the dedication and hard work of all the industry representatives appointed to identify the training requirements of the Floorcovering Installer occupation.

Previous Contributors

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- Hamish Roper

The Program Outline was prepared with advice and direction of industry subject matter experts within the Construction Industry Training Organization (CITO).

- Dylan Beggs
- Mike Donald
- Allan McClelland
- Mark Niebergal
- Hamish Roper

How to Use this Document

This Program Outline has been developed for the use of individuals from several different audiences. The table below describes how each section can be used by each intended audience.

Section	Training Providers	Employers/ Sponsors	Apprentices	Challengers
Program Credentialing Model	Communicates program length and structure, and all pathways to completion	Illustrates the length and structure of the program	Illustrates the length and structure of the program, and pathway to completion	Illustrates the challenger pathway to Certificate of Qualification
OAC	Communicates the competencies that industry has defined as representing the scope of the occupation	Displays the competencies that an apprentice is expected to demonstrate in order to achieve certification	Displays the competencies apprentices will achieve as a result of program completion	Displays the competencies challengers must demonstrate in order to challenge the program
Training Topics and Suggested Time Allocation	Shows proportionate representation of general areas of competency (GACs) at each program level, the suggested proportion of time spent on each GAC, and percentage of time spent on theory versus practical application	Shows the scope of competencies covered in the technical training, the suggested proportion of time spent on each GAC, and the percentage of that time spent on theory versus practical application	Shows the scope of competencies covered in the technical training, the suggested proportion of time spent on each GAC, and the percentage of that time spent on theory versus practical application	Shows the relative weightings of various competencies of the occupation on which assessment is based
Program Content	Defines the objectives, learning tasks, high level content that must be covered for each competency, as well as defining observable, measurable achievement criteria for objectives with a practical component	Identifies detailed program content and performance expectations for competencies with a practical component; may be used as a checklist prior to signing a recommendation for certification (RFC) for an apprentice	Provides detailed information on program content and performance expectations for demonstrating competency	Allows individual to check program content areas against their own knowledge and performance expectations against their own skill levels
Assessment Guidelines	Shows the general areas of competency covered in each level of technical training, the theory and practical grading weight, and the calculation method for final percentage marks	Shows the general areas of competency covered in the technical training, the grading weight for each GAC, and the percentage of that time spent on theory versus practical application	Shows the general areas of competency covered in each level of technical training, the theory and practical grading weight, and the calculation method for final percentage marks	Shows the relative weightings of various general areas of competency within the occupation on which assessment is based

Section	Training Providers	Employers/ Sponsors	Apprentices	Challengers
Training Provider Standards	Defines the facility requirements, tools and equipment, reference materials (if any) and instructor requirements for the program	Identifies the tools and equipment an apprentice is expected to have access to; which are supplied by the training provider and which the student is expected to own	Provides information on the training facility, tools and equipment provided by the school and the student, reference materials they may be expected to acquire, and minimum qualification levels of program instructors	Identifies the tools and equipment a tradesperson is expected to be competent in using or operating; which may be used or provided in a practical assessment
Appendix – Glossary of Acronyms			Defines program specific acronyms	

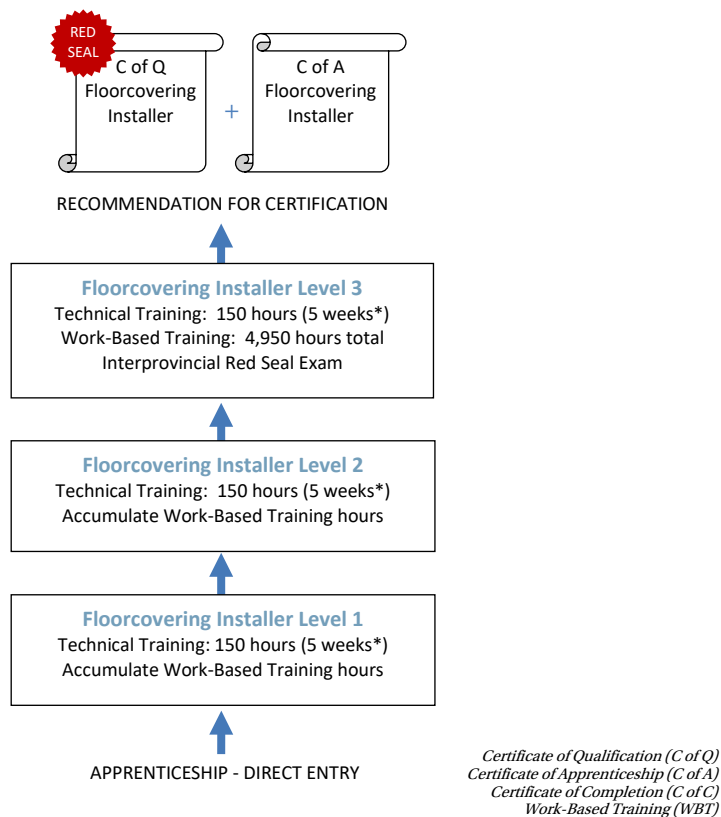
Section 2

PROGRAM OVERVIEW

Floorcovering Installer

Program Credentialing Model

Insert most recent diagram of program credentialing model approved by the SkilledTradesBC Quality Assurance Committee (QAC)



*Suggested duration based on 30-hour week

CROSS-PROGRAM CREDITS
None

Occupational Analysis Chart

FLOORCOVERING INSTALLER

Occupation Description: Floorcovering installers install, replace and repair a variety of floorcoverings. They work with cushion, carpeting, vinyl, resilient tile, sheet flooring, and seasonal carpet. Floorcovering installers install and repair pre-finished wood, unfinished wood, engineered wood, laminate and artificial turf. Floorcovering installers install and repair floorcoverings in residential and industrial/commercial/institutional (ICI) settings.

PERFORM SAFETY-RELATED ACTIVITIES A	Maintain safe work environment A1	Use personal protective equipment (PPE) and safety equipment A2	Use fire safety procedures A3	Follow electrical safety procedures A4		
	1	1	1	1	1	
USE TOOLS AND EQUIPMENT B	Use hand tools B1	Use power and pneumatic tools B2	Use measuring and layout tools B3			
	1	1 2	1			
ORGANIZE WORK C	Plan sequence of installation C1	Handle material C2	Determine layout and materials needed for job C3	Use documentation C4	Use communication techniques C5	Use mentoring techniques C6
		1	1 3	1	1	
PREPARE SUBSTRATE D	Perform quality control D1	Assess floor and sub-floor conditions and deficiencies D2	Conduct field tests D3			
	1	1 2	1			

**Section 2
Program Overview**

INSTALL CARPET E	Describe carpet materials E1 1	Describe carpet cushions E2 1	Remove carpet E3 1	Layout carpet E4 1	Install carpet by conventional method E5 1 2 3	Install carpet by glue-down method E6 1
	Install carpet by double bond method E7 1	Install carpet transitions, trims and bases E8 1	Assemble area rugs and runners E9 3	Install carpet on stairs E10 3	Repair carpet E11 3	Describe hand binding of carpet edges E12 3
	Describe the installation of artificial turf E13 3					
INSTALL RESILIENT FLOORS F	Describe resilient flooring materials F1 1	Install resilient sheet goods F2 1 2	Remove transitions, trims and resilient wall bases F3 1	Complete seams in resilient sheet goods F4 2 3	Repair resilient floors F5 2	Layout for resilient tile F6 2
	Install resilient tile F7 1 2	Install resilient material on stairs F8 3	Install flash coving F9 3	Install rubber sheet and tile F10 3	Install specialty resilient product F11 3	Install resilient transitions, trims and bases F12 1 2 3
INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING G	Undercuts jambs and trims G1 1	Install vapour barriers and underlayment cushion G2 1	Establish layout G3 1 2	Fits materials G4 1 2	Mechanically fastens pre-finished solid and engineered hardwood flooring G5 1 2	Glue down solid and engineered hardwood flooring G6 1

Section 2
Program Overview

Assemble floating floors <div>G7</div>	Install boarders, insets and custom fabrications in wood flooring <div>G8</div>	Install wood and laminate flooring on stairs <div>G9</div>	Repair boards <div>G10</div>	Replace boards <div>G11</div>	Refinishes hardwood flooring <div>G12</div>
<div><div></div><div></div><div>3</div><div></div><div></div></div>	<div><div></div><div></div><div>3</div><div></div><div></div></div>	<div><div></div><div></div><div>3</div><div></div><div></div></div>	<div><div>1</div><div></div><div></div><div></div><div></div></div>	<div><div>1</div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div>3</div><div></div><div></div></div>

Training Topics and Suggested Time Allocation

FLOORCOVERING INSTALLER – LEVEL 1

		% of Time Allocated to:			
		% of Time	Theory	Practical	Total
Line A	PERFORM SAFETY-RELATED ACTIVITIES	5%	50%	50%	100%
A1	Maintain safe work environment		✓	✓	
A2	Use personal protective equipment (PPE) and safety equipment		✓	✓	
A3	Use fire safety procedures		✓	✓	
A4	Follow electrical safety procedures		✓	✓	
Line B	USE TOOLS AND EQUIPMENT	5%	20%	80%	100%
B1	Use hand tools			✓	
B2	Use power and pneumatic tools			✓	
B3	Use measuring and layout tools		✓	✓	
Line C	ORGANIZE WORK	10%	75%	25%	100%
C2	Handle material		✓		
C3	Determine layout and materials needed for a job		✓		
C4	Use documentation		✓	✓	
C5	Use communication techniques		✓	✓	
Line D	PREPARE SUBSTRATE	15%	20%	80%	100%
D1	Perform quality control		✓	✓	
D2	Assess floor and sub-floor conditions and deficiencies		✓	✓	
D3	Conduct field tests		✓	✓	
Line E	INSTALL CARPET	45%	30%	70%	100%
E1	Describe carpet materials		✓		
E2	Describe carpet cushions		✓		
E3	Removes carpet		✓	✓	
E4	Layout carpet		✓	✓	
E5	Install carpet by conventional method		✓		
E6	Install carpet by glue-down method		✓	✓	
E7	Install carpet by double glue-down method		✓	✓	
E8	Install carpet transitions, trims and bases		✓	✓	
LINE F	INSTALL RESILIENT FLOORS	10%	80%	20%	100%
F1	Describe resilient flooring materials		✓		
F2	Install resilient sheet goods		✓		
F3	Remove transitions, trims and resilient wall bases		✓	✓	
F7	Install resilient tile		✓		
F12	Install resilient transition, trims and bases		✓		
LINE G	INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING	10%	80%	20%	100%
G1	Undercut jambs and trims		✓	✓	
G2	Install vapour barriers and underlayment cushion		✓	✓	

		% of Time Allocated to:			
		% of Time	Theory	Practical	Total
G3	Establish layout		✓	✓	
G4	Fits materials		✓	✓	
G5	Mechanically fasten pre-finished solid and engineered hardwood flooring		✓		
G6	Glue down solid and engineered hardwood flooring		✓	✓	
G10	Repair bonds		✓		
G11	Replace boards		✓		
Total Percentage for Floorcovering Installer Level 1			100%		

FLOORCOVERING INSTALLER – LEVEL 2

		% of Time Allocated to:			
		% of Time	Theory	Practical	Total
LINE B	USE TOOLS AND EQUIPMENT	5%	10%	90%	100%
B2	Use power and pneumatic tools		✓	✓	
LINE D	PREPARE SUBSTRATE	10%	10%	90%	100%
D2	Assess floor and sub-floor conditions and deficiencies		✓	✓	
Line E	INSTALL CARPET	35%	10%	90%	100%
E5	Install carpet by conventional method		✓	✓	
Line F	INSTALL RESILIENT FLOORS	45%	20%	80%	100%
F2	Install resilient sheet goods		✓	✓	
F4	Complete seams in resilient sheet goods		✓		
F5	Repair resilient floors		✓	✓	
F6	Layout for resilient tile		✓	✓	
F7	Install resilient tile		✓	✓	
F12	Install resilient transitions, trims and bases		✓	✓	
Line G	INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING	5%	10%	90%	100%
G3	Establish layout		✓	✓	
G4	Fits materials		✓	✓	
G5	Mechanically fasten pre-finished solid and engineered hardwood flooring		✓	✓	
Total Percentage for Floorcovering Installer Level 2		100%			

FLOORCOVERING INSTALLER – LEVEL 3

		% of Time Allocated to:			
		% of Time	Theory	Practical	Total
LINE C	ORGANIZE WORK	5%	100%	0%	100%
C1	Plan sequence of installation		✓		
C3	Determine layout and materials needed for job		✓		
C6	Use mentoring techniques		✓		
Line E	INSTALL CARPET	35%	75%	25%	100%
E5	Install carpet by conventional method		✓	✓	
E9	Assemble area rugs and runners		✓		
E10	Install carpet on stairs		✓	✓	
E11	Repair carpet		✓	✓	
E12	Describe hand binding of carpet edges		✓		
E13	Describe the installation of artificial turf		✓		
Line F	INSTALL RESILIENT FLOORS	35%	20%	80%	100%
F4	Complete seams in resilient sheet goods			✓	
F8	Install resilient material on stairs		✓	✓	
F9	Install flash coving		✓	✓	
F10	Install rubber sheet and tile		✓	✓	
F11	Install speciality resilient product		✓		
F12	Install resilient transitions, trims and bases			✓	
Line G	INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING	25%	70%	30%	100%
G7	Assemble floating floors		✓	✓	
G8	Install borders, insets and custom fabrications in wood		✓	✓	
G9	Install wood and laminate flooring on stairs		✓		
G12	Refinish hardwood flooring		✓		
Total Percentage for Floorcovering Installer Level 3		100%			

Section 3

PROGRAM CONTENT

Floorcovering Installer

Level 1

Floorcovering Installer

Line (GAC): A PERFORM SAFETY-RELATED ACTIVITIES

Competency: A1 Maintain safe work environment

Objectives

To be competent in this area, the individual must be able to:

- Apply safe work practices

LEARNING TASKS

1 Use applicable sections of the WorkSafeBC Regulations

2 Describe safety hazards and precautions

3 Recognize signs of asbestos and lead containing materials

CONTENT

- Harmful substances
- Health hazards from work environment
- Personal protective equipment
- Electrical safety
- Temporary lighting
- Powder actuated tools
- Ladders
- Workplace Hazardous Materials Information System (WHMIS)
- Exposure
 - Asbestos
 - Silica
 - Lead
- Heat stress
- Lockout procedures
- Field level risk assessment (FLRA)
 - Safety attitude
 - Hazards of loose clothing and jewellery
 - Condition of tools
 - Safe use of hand and power tools
 - Guardrails and barricades around openings
- Grounded or double insulated tools and equipment
- Extension cords
 - Safety test
 - Correct gauge
- First aid equipment
 - Location
- Evacuation and emergency procedures
- Housekeeping practices
- Cords and light bulbs
- PPE
- Materials

LEARNING TASKS

CONTENT

4 Recognize sources of silica exposure

5 Describe rights and responsibilities

- Age
- Size
- Types
- Adhesive colours
- Mitigation strategies
- PPE
- Materials
- Mitigation strategies
- Employer
 - Safe worksite
 - Training
 - Safety equipment
 - Job hazard analysis
 - Occupational health and safety program
- Supervisor
 - Health and safety of all workers
- Worker
 - Employee rights
 - WorkSafeBC regulations

Line (GAC):	A	PERFORM SAFETY-RELATED ACTIVITIES
Competency:	A2	Use personal protective equipment (PPE) and safety equipment

Objectives

To be competent in this area, the individual must be able to:

- Select and use personal protective equipment
- Use proper lifting techniques

LEARNING TASKS

1. Use personal protective equipment (PPE)

CONTENT

- WorkSafeBC regulations
- Equipment
 - Selection
 - Inspection
 - Maintenance
 - Storage
 - Expiration dates
 - CSA standards
- Safety footwear
- Hard hats
- Eye protection
 - Glasses
 - Goggles
 - Face shields
- Hearing test requirements
- Hearing protection
 - Ear plugs and canal caps
 - Earmuffs
 - Class/grade selection
- Respiratory protection
 - Respirator types
 - Positive and negative seal check
 - Fit testing
 - Types of breathing hazards
 - Filters and cartridges
 - Protection factors
 - Warning signs of respirator failure
- Protective clothing
 - Reflective vest
 - Long pants
- Hand protection
 - Gloves
 - Barrier creams
 - Knee protection

LEARNING TASKS

2. Lift and move objects safely
3. Use work procedures to reduce the risk of musculoskeletal injuries (MSI)

CONTENT

- Fall protection
 - Training
- Tools and equipment
- Lifting techniques
- Work procedures
- Recognition of signs and symptoms of MSI
- Potential health effects
- Treatment
- Preventative measures
 - PPE
 - Stretching and exercise
- Risk factors
 - Force
 - Repetition
 - Work posture
 - Local contact stress
 - Duration of work
- MSI
 - Back injuries
 - Knee injuries
 - Shoulder and elbow
 - Tendonitis

Line (GAC): **A PERFORM SAFETY-RELATED ACTIVITES**
Competency: **A3 Use fire safety procedures**

Objectives

To be competent in this area, the individual must be able to:

- Explain the theory of fires
- Extinguish fires
- Handle and store fuels and solvent based products

LEARNING TASKS

1. List the three components that must be present before a fire can occur
2. Identify classes of fires and extinguishers
3. Describe the procedure for using a fire extinguisher
4. Describe the safe use of temporary heating
5. Describe the considerations and steps to take prior to fighting a fire
6. Identify combustible and flammable materials

CONTENT

- Fuel
- Oxygen
- Heat
 - Open flame
 - Sparks
 - Cutting processes
 - Static discharge
 - Electrical equipment
- Class A, B, C and D fires
- Types of extinguishers
- PASS
 - Pull
 - Aim
 - Squeeze
 - Sweep
- Propane heaters
- Electric heaters
- Fumes
- Proximity to flammables and combustibles
- Pilot lights
- Warning of others
- Fire department
- Personal method of egress
- WHMIS symbols
- Flash point
- Ignition temperature
- Fuels
- Solvents
- Lubricants
- Oily rags

LEARNING TASKS

7. Use preventative fire safety procedures

CONTENT

- Aerosols
- Sanding dust
- Training requirements
- Handling and storing
 - Flammable liquids and gases
 - Combustible materials
- Working near electrical apparatus
- Responsibilities
- Pre-planning
 - Identify ignition sources
- Hot work permit (site specific)
- Handling and storage of flammable materials
- Ventilation
- Electrical wiring and equipment
- Static electricity
- Controlling spills
- Storage

Line (GAC):	A	PERFORM SAFETY-RELATED ACTIVITIES
Competency:	A4	Follow electrical safety procedures

Objectives

To be competent in this area, the individual must be able to:

- Follow electrical safety procedures

LEARNING TASKS

1. Describe temporary electrical panels and lighting

CONTENT

- Temporary electrical panels
- Lockout procedures
- Temporary lighting
- Protection
 - Cords
 - Lightbulbs
- Electrical cords and plugs
 - Grounded or double insulated tools and equipment
- Extension cords
 - Correct gauge and length
 - Safety and functionality test
- Electrical cords and plugs
 - Pig tails
- Grounded or double insulated tools and equipment
- Extension cords
 - Correct gauge and length
 - Safety and functionality test
- Booster
- Ground fault circuit interrupter (GFCI)

2. Use electrical tools and equipment

Line (GAC): **B USE TOOLS AND EQUIPMENT**

Competency: **B1 Use hand tools**

Objectives

To be competent in this area, the individual must be able to:

- Use hand tools safely

LEARNING TASKS

1. Describe general tool safety

CONTENT

- Purpose
- WorkSafeBC regulations
- Site safety rules
- PPE requirements
- Work procedures
- Manufacturer's recommendations

- ## 2. Identify hand tools

- Purpose
- Safety
- PPE requirements
- Tools
 - Cutting
 - Measuring and marking
 - Fastening
 - Trowels

- ### 3. Maintain hand tools

- Inspect
- Transport and store
- Sharpen
- Clean

- #### 4. Use hand tools

- Purpose
- Safety
- PPE requirements
- Tools
 - Cutting
 - Measuring and marking
 - Fastening
 - Trowels

Line (GAC): **B USE TOOLS AND EQUIPMENT**

Competency: B2 Use power and pneumatic tools

Objectives

To be competent in this area, the individual must be able to:

- Use power and pneumatic tools

LEARNING TASKS

1. Describe general tool safety
2. Identify power and pneumatic tools
3. Maintain power and pneumatic tools
4. Use power and pneumatic tools

CONTENT

- Purpose
- WorkSafeBC regulations
- Site safety rules
- PPE requirements
- Work procedures
- Manufacturer’s recommendations
- Purpose
- Safety
- PPE requirements
- Power tools
 - Sanders
 - Drills/ mixers
 - Nailers/ staplers
 - Heat guns
 - Saws
- Pneumatic tools
 - Nailers/ staplers
 - Compressors and hoses
- Inspect
- Transportation
- Storage
- Consumable components
- Lubrication
- Clean
- Purpose
- Safety
- PPE requirements
- Power tools
 - Sanders
 - Drills/ mixers
 - Nailers/ staplers
 - Heat guns
 - Saws

LEARNING TASKS

CONTENT

- Pneumatic tools
 - Nailers/ staplers
 - Compressors and hoses

Line (GAC):	B	USE TOOLS AND EQUIPMENT
Competency:	B3	Use measuring and layout tools

Objectives

To be competent in this area, the individual must be able to:

- Use measuring and layout tools

LEARNING TASKS

1. Use measuring and marking tools

CONTENT

- Safety
- PPE
- Manufacturer's instructions
- Tools
 - Chalk lines
 - Tape measures
 - Straightedges
 - Beam compass/trammel points
 - Laser
 - Marking
 - Measuring

2. Use cutting and trimming tools

- Safety
- PPE
- Manufacturer's instructions
- Knives
 - Carpet hook
 - Slotted blade
 - Utility
- Cutters
 - Cookie
 - Cushion-back
 - Loop pile
 - Glass block
 - Tack strip
- Trimmers
 - Wall
 - Z-bars
 - Edge
- Shears and scissors
 - Napping

3. Use seaming tools

- Safety
- PPE
- Seaming system
- Manufacturer's instructions

LEARNING TASKS

4. Use stretching and tucking tools

5. Use fastening tools

CONTENT

- Tools
 - Napping shears
 - Needle thimble and sewing palm
 - Row finder
 - Seam iron
 - Seam board
 - Seam rollers
 - Seam squeezer
 - Seam weight
 - Seam sealer applicator
- Safety
- PPE
- Manufacturer's instructions
- Tools
 - Carpet tucker
 - Deadman
 - Knee kicker
 - Mini stretcher
 - Power stretcher
 - Carpet spreader
 - Stair tools
 - Stretching board
- Safety
- PPE
- Pneumatic tool safety precautions
 - Secure connections
 - Air pressure
 - Functional guards
- Electric tool safety precautions
 - Inspecting cords
 - Inspecting ground connections
 - GFCI
- Manufacturer's instructions
- Fastening tools
 - Drive bar
 - Hammers
 - Adhesive spreader
 - Powder-actuated tools
 - Drill and plug fasteners
 - Hot-melt glue gun
 - Staplers and staple guns

Line (GAC): C ORGANIZE WORK

Competency: C2 Handle material

Objectives

To be competent in this area, the individual must be able to:

- Practice safe lifting and moving practices and procedures
- Handle hazardous materials

LEARNING TASKS

1. Describe types of equipment used to move and handle material
2. Practice safe lifting and moving practices and procedures
3. Identify hazardous materials

CONTENT

- Furniture and appliance skids
- Cart
 - Carpet
 - Flat
- Dolly
 - Cradle
 - Linoleum
 - Hand truck/two-wheel
 - Four-wheel
- Pallet jack
- Forklift
- Safety
- PPE
- Staging the job
- Carpet position
- Hard folding/breaking carpet
- Moving of resilient material
 - Barrel roll method
- Lifting techniques
- Tubing material
- Teamwork
- WHMIS Regulations
 - Material safety data sheets (MSDS)
 - Symbols
 - Storage
 - Transportation
 - Labels
 - Health and safety precautions
- PPE
 - Eye protection
 - Respirators
 - Protective clothing
- Types

LEARNING TASKS

CONTENT

- Toxic
- Corrosive
- Flammable
- Explosive

Line (GAC):	C	ORGANIZE WORK
Competency:	C3	Determine layout and materials needed for job

Objectives

To be competent in this area, the individual must be able to:

- Read and interpret specifications, blueprints and related materials
- Estimate materials

LEARNING TASKS

1. Describe plans and views

2. Identify lines used in drawings

3. Read and write dimensions

4. Interpret symbols abbreviations used on prints

5. Describe specifications

6. Use documentation

CONTENT

- Construction prints
- Shop drawings
- Working sketches
- Views
 - Details
 - Elevation
 - Sections
- Plans
 - Site
 - Floor
 - Foundation
- Object
- Dimension
- Extension
- Break
- Centre
- Scale rulers
- Lineal measurements
 - Imperial
 - Metric
 - Conversion
 - Abbreviations
 - Calculations
- Symbols
 - Materials
 - Fixtures
 - Dimensions
 - Positions
- Abbreviations
- Purpose
- Types of information
- Supplier and Manufacturer's information

LEARNING TASKS

7. Describe determining scope of work

8. Estimate materials

9. Scale out measurements from a drawing

CONTENT

- Safety regulations
- Tools and equipment
- Levelling or subfloor material requirements
- Fasteners/adhesives
- Layout direction
- Flooring material
- Baseboard, trims and transitions
- Vapour barriers/retarders
- Acoustical requirements
- Floor protection
- Stair components
- Calculations
 - Geometry
 - Dimensions
 - Material needed
 - Minimal waste, overlap, fills
 - Overage requirements
 - Pattern repeat
- Floor plan
- Finish schedule
- Material widths
- Plan scales
- Pattern match
- Tools
 - Scale ruler
- Ratios
- Room size
- Measurements
 - Lineal metric
 - Lineal feet and yardage
 - Square feet and yardage

Line (GAC): **C ORGANIZE WORK**
Competency: **C4 Use documentation**

Objectives

To be competent in this area, the individual must be able to:

- Apply documents required to job sites

LEARNING TASKS

1. Describe documents required on job sites
2. Describe paperwork required by flooring contractor
3. Apply documents required to job sites
4. Describe jobsite information required for projects
5. Explain coordination of work

CONTENT

- Up to date blueprints and addendum
- Seaming diagrams
- Shop drawings
- Specification book
- Site safety documents
- MSDS
- Moisture and pH
 - Testing documents
- Work orders
- Material lists
- Time and material sheets (T&M)
- Work reports
- Time sheets
- Scaled drawings
- Code and regulations
- Project location
- General contractor, contact person or end user
 - Site rules, requirements, restrictions
 - Adhesives, solvents or open flames
 - Power outlets and breaker panels
 - Water source
 - Emergency information
 - Alarms
- Schedule work with other trades
- Areas for material storage
- Access routes
 - Deliveries
- Elevator and lift sizes
- Parking areas
- Acclimation of materials
- Inspection and inventory of all materials
 - Compatibility of materials

LEARNING TASKS

CONTENT

- Roll sequence numbers
- Protection of surrounding areas
- Safety procedures

Line (GAC): **C ORGANIZE WORK**
Competency: **C5 Use communication techniques**

Objectives

To be competent in this area, the individual must be able to:

- Describe effective communication skills

LEARNING TASKS

1. Describe communication skills required

2. Describe personal responsibilities

3. Describe employer responsibilities

CONTENT

- Customer relations
- Working relationship
 - Floorcovering installers
 - Other trades persons
- Communication
 - Employer
 - Supervisors
- Resolving discrepancies
 - Between industry standards, salespeople commitments and customer expectations
- Communication methods
 - Verbal
 - Written instructions
 - Electronic communications
- Hygiene
- Dress code
- Code of conduct
- Punctuality
- Honesty
- Vehicle requirements
- Conflict management
- Personal learning styles
- On the job training
- Indentureship contracts
- Following Labour Standards Legislation
- Conflict resolution

Line (GAC): **D PREPARE SUBSTRATE**
Competency: **D1 Perform quality control**

Objectives

To be competent in this area, the individual must be able to:

- Identify common practices related to job startup

LEARNING TASKS

1. Describe testing of existing flooring

2. Identify components of quality control

3. Identify product defects

4. Identify wood flooring defects

CONTENT

- Lead
- Asbestos
- Moisture
- Alkalinity

- Acclimation of materials
- Inspection and inventory of all materials
 - Compatibility of materials
 - Roll sequence numbers
- Protection of surrounding areas
- Safety procedures

- Pattern run-off
- Trueness of edge deviation
- Bow and skew
- Discolouration
- Shading

- Grading
- Bow and ski
- Out of square
- Tapered edge
- Splintering
- Uneven stain
- Checks and splits
- Over and under wood
- Tongue and groove mismatch
- Shake
- Insect infestation
- Delamination
- Cupping
- Crowning

Line (GAC): D PREPARE SUBSTRATE

Competency: D2 Assess floor and sub-floor conditions and deficiencies

Objectives

To be competent in this area, the individual must be able to:

- Use patching and levelling compounds
- Prepare substrate for floorcovering

LEARNING TASKS

1. Describe types of subfloor problems
2. Prepare substrate
3. Interpret substrates requirements
4. Describe patching and levelling products

CONTENT

- Highs and lows
- Cracks in concrete
- Joist spacing
- Uneven
- Moisture level
- Alkalinity
- Effects of grade levels
- Floor integrity
- Safety precautions
- Removal of materials
 - Existing flooring
 - Transitions, trims and bases
 - Contaminants
- Removal methods
 - Scraping
 - Sanding
 - Grinding
 - Bead blasting
- Disposal of materials
- Terrazzo, ceramic and natural stone
 - Removal of finishes
 - Preparation for adhesion
 - Filling group lines
- Slate and brick
- Asphalt
- Gypsum products
 - Mixing of product
 - Depth of application
 - Additives
 - Suitable substrates
- Portland cement based products
 - Drying characteristics

LEARNING TASKS

CONTENT

- | | |
|---|---|
| 5. Mix patching materials | <ul style="list-style-type: none"> ○ Depth of application ○ Suitable substrates |
| 6. Apply patching materials | <ul style="list-style-type: none"> • Safety • PPE • Hazardous ingredients • Mixing tools • Mixing ratio • Mixing procedure • Re-stir requirements • Working time/pot life |
| 7. Encapsulate adhesives | <ul style="list-style-type: none"> • Angle of trowel • Number of coats • Sanding/scraping between coats • Calculation of material • Primer |
| 8. Describe building a ramp from one level to another | <ul style="list-style-type: none"> • Tools <ul style="list-style-type: none"> ○ Square notched trowel ○ Smooth edge trowel • Procedures |
| 9. Describe the use of self levelling materials | <ul style="list-style-type: none"> • Trowel angle • Width of the patch • Trowelling across ridges and chatter marks • Vinyl ramping • Shingles • Vinyl composite tiles (VCT) |

Achievement Criteria

- | | |
|-------------|--|
| Performance | The learner will be able to prepare a subfloor |
| Conditions | The learner will be given <ul style="list-style-type: none"> • Materials • Tools • Instructions |
| Criteria | The learner will be evaluated on |

- Safety
- Accuracy
- Completeness
- Housekeeping

Line (GAC): D PERPARE SUBSTRATE

Competency: D3 Conduct field tests

Objectives

To be competent in this area, the individual must be able to:

- Perform moisture and alkalinity test

LEARNING TASKS

1. Describe substrate problems related to moisture movement through a concrete substrate
2. Describe moisture and alkalinity tests
3. Perform moisture test

CONTENT

- Deposits of alkaline salts
- Adhesive failure
- Mould and bacteria issues
- Basic concrete chemistry
- American Society for Testing and Materials (ASTM) standards
- Purposes
- Equipment and materials
- Test
 - Wood substrates
 - Concrete substrates
 - Limitations
 - Procedures
- Qualitative tests
 - Polyethylene sheet
 - Mat bond
 - Electrical resistance
- Quantitative test
 - Anhydrous calcium chloride test
 - Limitations
 - Preparation and acclimation of test area
 - Distribution of tests
 - Pre-test weight
 - Plastic dome
 - Timing of the test
 - Post-test weight
 - Relative humidity or hygrometer test
- Procedures
- pH paper test
- Digital pH testers

Line (GAC): **E INSTALL CARPET**
Competency: **E1 Describe carpet materials**

Objectives

To be competent in this area, the individual must be able to:

- Demonstrate knowledge of carpet materials
- Identify carpet categories

LEARNING TASKS

1. Describe the history and development of the carpet industry
2. Describe fibres used in the manufacture of carpet
3. Identify carpet fibres
4. Describe types of fibre processing
5. Identify carpet categories
6. Describe tufted carpet

CONTENT

- Early history
- Development of the industry
- Fibres
 - Natural
 - Synthetic
 - Processing
 - Dyeing
- Fibre characteristics
 - Testing methods
 - Burn test procedures
- Wool
- Olefin fibres
- Nylon
- Silk
- Polypropylene
- Cotton
- Cellulose
- Fibres
 - Continuous bulk filaments
 - Staple fibres
- Yarn processing
- Plying yarn
- Woven
- Tufted
- Knitted
- Flocked
- Needle-punched
- Fusion-bonded
- Methods
 - Tufting
 - Dyeing

LEARNING TASKS

CONTENT

- | | |
|--|--|
| | <ul style="list-style-type: none"> • Coating • Primary backing • Secondary backings <ul style="list-style-type: none"> ○ Types ○ Functions ○ Optional backings |
| 7. Describe woven carpet | <ul style="list-style-type: none"> • Weaving methods • Machinery used • Dyeing methods |
| 8. Identify types of carpet surfaces | <ul style="list-style-type: none"> • Berber • Level loop • Cut and loop • Plush • Frieze • Saxony • Sculptured • Shag • Textured |
| 9. Describe the final stages of productions | <ul style="list-style-type: none"> • Dyeing methods <ul style="list-style-type: none"> ○ Continuous ○ Piece ○ Print ○ Beck • Topical treatments • Shearing |
| 10. Describe quality and durability considerations | <ul style="list-style-type: none"> • Pile density <ul style="list-style-type: none"> ○ Tufted carpet ○ Woven carpet • Weight <ul style="list-style-type: none"> ○ Yarn ○ Face • Pile height • Yarn ply • Considerations <ul style="list-style-type: none"> ○ Durability ○ Wear ○ Fading ○ Flammability ○ Insulation ○ Pile spacing |

Line (GAC): **E INSTALL CARPET**
Competency: **E2 Describe carpet cushions**

Objectives

To be competent in this area, the individual must be able to:

- Describe common types of characteristics of carpet cushion

LEARNING TASKS

1. Describe the benefits of carpet cushion

2. Describe the types of carpet cushion materials

3. Describe cushion characteristics

CONTENT

- Comfort
- Carpet life
- Acoustics
- Thermal insulation
- Easier maintenance

- Fibre
- Sponge rubber
- Foam
 - Frothed polyurethane
 - Bonded Polyurethane

- Thickness
- Weight and density
- Sizes and widths

Line (GAC):	E	INSTALL CARPET
Competency:	E3	Removes carpet

Objectives

To be competent in this area, the individual must be able to:

- Remove carpet

LEARNING TASKS

1. Identify installation method
2. Describe procedure to remove carpet
3. Remove carpet

CONTENT

- Conventional
- Glue-down
- Double glue-down
- Tool selection
- Installation method
- Carpet width sizing
- Removal of
 - Carpet
 - Cushion
 - Fastener
- Disposal or reinstall
- Tool selection
- Carpet width sizing
- Removal
 - Carpet
 - Cushion
 - Fastener
- Disposal or reinstall

Line (GAC):	E	INSTALL CARPET
Competency:	E4	Layout carpet

Objectives

To be competent in this area, the individual must be able to:

- Layout carpet

LEARNING TASKS

1. Explain layout considerations
2. Determine the quantity of carpet
3. Describe carpet layout

CONTENT

- Size of material
- Seam location
- Pile or pattern direction
- Traffic pattern considerations
- Lighting
- Dye lot
- Pattern match
- Calculations
 - Square feet
 - Square yards
 - Square metres
- Dimensions and shape of area
- Selection of carpet width to an area
- Requirements
 - Number of carpet widths
 - Amount of fill
 - Pattern allowance
 - Additional material for cutting and trimming
- Safety
- PPE
- Tools and equipment
- Types of layout
 - Half drop into an offset
 - Reversible offsets
- Layout direction change
 - Reduce seams
- Large area layout
 - Material handling capabilities
 - Accessibility factors
 - Possibility of cross seams
 - Teamwork
- Pattern carpet layout

LEARNING TASKS

4. Layout carpet

CONTENT

- Set pattern cuts on intervals of pattern repeat
- Directional pattern
- Special considerations
 - Architect specifications
- Safety
- PPE
- Tools and equipment
- Types of layout
 - Half drop into an offset
 - Reversible offsets
- Layout direction change
 - Reduce seams
- Large area layout
 - Material handling capabilities
 - Accessibility factors
 - Possibility of cross seams
 - Teamwork
- Pattern carpet layout
 - Set pattern cuts on intervals of pattern repeat
 - Directional pattern
- Special considerations
 - Architect specifications

Achievement Criteria

Performance	The learner will be able to measure and create a rough drawing to estimate materials required
Conditions	The learner will be given <ul style="list-style-type: none"> • Materials • Tools • Instructions
Criteria	The learner will be evaluated on <ul style="list-style-type: none"> • Safety • Accuracy • Completeness • Housekeeping

Line (GAC):	E	INSTALL CARPET
Competency:	E5	Install carpet by conventional method

Objectives

To be competent in this area, the individual must be able to:

- Describe the installation of carpet by the conventional method
- Describe the installation of patterned carpet

LEARNING TASKS

1. Install tack strips

CONTENT

- Safety
- PPE
- Tools and equipment
- Attaching methods
 - Nail
 - Glue
- Types
 - Pre-nailed
 - Standard
 - Architectural
- Considerations
 - Pin heights
 - Nailing requirements
 - Gulley/tucking space

2. Install cushions

- Safety
- PPE
- Tools and equipment
- Cushion types
- Substrate preparations
- Attaching methods
 - Staple
 - Adhesives
 - Tape
- Considerations
 - Cushion placement
 - Cushion trimming
 - Staggering of staple pattern
 - Staggering of adhesive pattern

3. Describe common seam-cutting tools

- Waste reduction
- Safety precautions
- PPE
- Tools
 - Row finder

LEARNING TASKS

CONTENT

- Cushion-back cutter
 - Loop pile cutter
 - Utility knife
 - Slotted blade carpet knives
 - Glass block cutter
 - Procedures
 - Purposes
 - Maintenance
 - Methods
 - Row to row method seam construction
 - Trace cutting seam-cutting method
 - Blade selection
 - Adjusting the depth of the blade
- 4. Describe tufted carpet cutting
 - Manufacturer's installation instructions
 - Tools and equipment
 - Safety
 - PPE
 - Methods of cutting
 - Row to row
 - Double
 - Row double
 - Straight edge
 - Hand double
 - Trace
 - Hand trace
 - Serpentine free-hand
 - Method to finish
 - Edge seal
 - Purpose
 - Pattern
 - Waste reduction
- 5. Cut tufted carpet
 - Manufacturer's installation instructions
 - Tools and equipment
 - Safety
 - PPE
 - Methods of cutting
 - Row to row
 - Double
 - Row double
 - Straight edge
 - Hand double

LEARNING TASKS

CONTENT

6. Describe woven carpet cutting

- Trace
- Hand trace
- Serpentine free-hand
- Methods to finish
 - Edge seal
- Purpose
- Pattern
- Waste reduction
- Manufacturer's installation instructions
- Tools and equipment
- Safety
- PPE
- Methods to cut
 - Row cutting
 - Across the grain
 - From the face
 - From the back

7. Cut woven carpet

- Methods to finish
 - Edge seal
 - Back butter
- Purpose
- Pattern
- Waste reduction
- Manufacturer's installation instructions
- Tools and equipment
- Safety
- PPE
- Cutting methods
 - Row cutting
 - Across the grain
 - From the face
 - From the back

8. Describe the installation of carpet using the conventional method

- Methods to finish
 - Edge seal
 - Back butter
- Purpose
- Pattern
- Waste reduction
- Safety
- PPE

LEARNING TASKS

CONTENT

- Tools and equipment
 - Seam cutting tools
 - Calculations
 - Measurements
 - Room Area
 - Square the carpet
 - Cuts
 - From the face
 - From the back
 - Consistent pattern
 - Carpet position
 - Problems from hard folding
 - Marring the face
 - Pile crush
 - Damage to primary and secondary backing
 - Prevention of damage
 - Unroll and position
 - Align the carpet
 - Cutting process
 - Relief cuts
 - Along walls
 - Around objects
 - Stretching-in the carpet
 - Size and shape of area
 - Starting point
 - Stretch percentage
 - Stretch sequences
 - Application of stay nailing and temporary stretches
 - Final trim
 - Seam finish
- 9. Describe and measure for pattern conditions
 - Bow
 - Skew/bias
 - Repeat variations
 - Trueness of edge
 - Manufacturer's tolerance
- 10. Describe the installation of patterned carpet
 - Safety
 - PPE
 - Tools and equipment
 - Layout variations for pattern
 - Identification of pattern repeat

LEARNING TASKS

CONTENT

- Cutting and dry laying
- Seam adhesion
 - Iron induction
 - Thermoplastic seaming tape
 - Hand sewing
- Pattern match
- Pattern alignment requirements
 - Dry lines
 - Stay nailing

Line (GAC):	E	INSTALL CARPET
Competency:	E6	Install carpet by glue-down method

Objectives

To be competent in this area, the individual must be able to:

- Install carpet and carpet tile by direct glue-down method

LEARNING TASKS

CONTENT

- | | |
|---|--|
| 1. Describe the installation of glue-down carpet | <ul style="list-style-type: none"> • Safety • PPE • Tools and equipment • Substrate preparation • Adhesive selection • Inspection of carpet • Layout • Acclimation of materials and sundries • Carpet placement • Relief cuts • Seam cutting methods • Adhesive application • Adhesive open time • Rolling of carpet • Restriction of traffic |
| 2. Describe the installation of glue-down carpet tile | <ul style="list-style-type: none"> • Safety • PPE • Tools and equipment • Substrate preparation • Directional layout <ul style="list-style-type: none"> ○ Pattern • Staging • Adhesive application • Adhesive open time • Tile placement • Fit borders and fills • Restriction of traffic |
| 3. Install direct glue carpet | <ul style="list-style-type: none"> • Safety • PPE • Tools and equipment • Substrate preparation • Adhesive selection |

LEARNING TASKS

CONTENT

4. Install carpet border

- Inspection of carpet
- Layout
- Acclimation of materials and sundries
- Carpet placement
- Relief cuts
- Seam cutting methods
- Adhesive application
- Adhesive open time
- Rolling of carpet
- Restriction of traffic

5. Install carpet tile

- Safety
- PPE
- Tools and equipment
- Layout
- Carpet direction
- Mitres
- Seaming
 - Edge seal
- Trimming and grooming
- Traffic control
- Safety
- PPE
- Tools and equipment
- Substrate preparation
- Directional layout
 - Pattern
- Staging
- Adhesive application
- Adhesive open time
- Tile placement
- Fit borders and fills
- Traffic control

Achievement Criteria

Performance	The learner will be able to install carpet by the direct glue-down method
Conditions	The learner will be given <ul style="list-style-type: none"> • Materials • Tools • Instructions

Criteria	The learner will be evaluated on
	<ul style="list-style-type: none">• Safety• Accuracy• Completeness• Housekeeping

Line (GAC):	E	INSTALL CARPET
Competency:	E7	Install carpet by double glue down method

Objectives

To be competent in this area, the individual must be able to:

- Install carpet by double glue down method

LEARNING TASKS

1. Describe the double bond method of carpet installation

CONTENT

- Safety
- PPE
- Tools and equipment
- Manufacturer's instructions
- Substrate preparation
- Conditioning of the materials
- Installation direction
- Seam offset
- Cushion position
- Application of adhesive to substrate
 - Adhesive flash time
- Trimming of the cushion
- Rolling of the cushion
- Carpet position
- Seam construction
- Application of adhesive to cushion
 - Adhesive flash time
- Trimming of the carpet
- Application of seam sealer
- Seam finish
 - Non-silicone backed tape
 - Double stick tape
 - Designer tape
- Adhesive transfer
- Rolling of the carpet
- Restriction of traffic

2. Install carpet cushion

- Safety
- PPE
- Types of cushion
- Tools and equipment
- Manufacturer's instructions
- Substrate preparation
- Installation direction

LEARNING TASKS

3. Install carpet

CONTENT

- Seam offset
- Positioning the cushion
- Adhesive application
- Flash time
- Trimming of the cushion
- Rolling of the cushion
- Carpet position
- Seam finish
 - Non-silicone backed tape
 - Double stick tape
 - Designer tape
- Adhesive application
- Flash time
- Application of seam sealer
- Trimming of the carpet
- Rolling of the carpet
- Adhesive transfer
- Restriction of traffic

Line (GAC):	E	INSTALL CARPET
Competency:	E8	Install carpet transitions, trims and bases

Objectives

To be competent in this area, the individual must be able to:

- Install carpet transitions, trims and bases

LEARNING TASKS

1. Explain the use of carpet transitions
2. Describe the types of transitions used for carpet installations
3. Use transition installation tools
4. Describe types and shapes of metal transitions
5. Layout and cut metal transitions

CONTENT

- Protection of the exposed carpet edges
- Finished appearance
- Metal
- Resilient
- Wood
- Z-bar
- Binding
- Turn and tack
- Layout tools
 - Plumb bobs
 - Lasers
- Installation tools
 - Aviation snips
 - Awl
 - Saws
 - Hammers
 - Mallet
 - Hammer drill
 - Hand roller
 - Punch bar
 - Mitre box
- Purposes
- Types and shapes
 - Naplock/clamp-down/tap-down
 - T-bar
 - Contour
 - Snap-in
 - Top metal/binder bar
 - Stair nose
- Safety
- PPE
- Tools and equipment
 - Mitre box

LEARNING TASKS

CONTENT

6. Fasten metal transitions to substrates

- Hack saw
- Aviation snips
- Alignment
 - Straight transition
 - Contour transition
 - Consistent curve
 - Fairing sticks
 - Templates
 - Shape transfer from the ceiling to floor
- Spanning lengths
- Cutting plan

7. Install top metal/binder bar transition

- Safety
- PPE
- Tools and equipment
- Procedures
- Substrates
 - Wood
 - Concrete
- Inside and outside corners
 - Installation
- Trimming of carpet to fit metal transitions
- Safety
- PPE
- Tools and equipment
- Placement of transition
- Centering of the nail holes
- Inserts and wood plugs
- Fastening
- Mitred edges

8. Install metal transitions on stairs

- Safety
- PPE
- Tools and equipment
- Installation procedures
- Fastening of stair nose transitions
- Mitering of stair nose
 - Inside corners
 - Outside corners
- Wrapping of outside corners using a mitre box
 - Measuring
 - Marking

LEARNING TASKS

CONTENT

9. Install resilient transitions

- Layout
- Cutting
- Nailing
- Safety
- PPE
- Tools and equipment
- Installation procedure
- Styles
 - Butt
 - Wedge
- Cap and track/T and E-type
 - Fastening of the track
 - Installation of the insert
 - Mitre cutting
- Resilient stair nose transitions
 - Measuring
 - Marking
 - Cutting
 - Anchoring

10. Install Z-bar transitions

- Safety
- PPE
- Tools and equipment
- Cutting of the bar
- Tack strip position
- Carpet position
- Carpet tuck
- Bar tap down

11. Install other types of transitions

- Safety
- PPE
- Tools and equipment
- Purpose
- Types of transitions
 - Binding
 - Turn and tack
 - Threshold
 - Aluminum
 - Wood
 - Marble/stone
- Installation procedures

12. Install carpet bases

- Safety

LEARNING TASKS

CONTENT

- PPE
- Tools and equipment
- Procedure
 - Corner treatments
 - Return treatments
 - Dry fitting
 - Adhesive application

Line (GAC):	F	INSTALL RESILIENT FLOORS
Competency:	F1	Describe resilient flooring materials

Objectives

To be competent in this area, the individual must be able to:

- Describe resilient flooring materials

LEARNING TASKS

1. Describe the history and development of the resilient flooring
2. Describe the manufacturing of resilient flooring
3. Describe selection issues
4. Describe resilient flooring materials
5. Describe vinyl tile flooring

CONTENT

- Early history
- Development of the industry
- Use of asbestos
- Vinyl components
- Properties
- Types
 - Linoleum
 - Vinyl
 - Rubber
 - Cork
- Sheet
- Tile
- Plank
- Inlaid vinyl
- Embossed and smooth surfaces
- Layered composite flooring
- Leadership in Energy and Environmental Design (LEED) requirements
- Performance and durability
- Aesthetics
- Substrate condition
- Layers
 - Wear
 - Print
 - Design
 - Foam
 - Backing
- Grades
 - Commercial
 - Light commercial
 - Residential
- Types
 - Vinyl composition tile

LEARNING TASKS

CONTENT

6. Describe resilient sheet flooring

- Solid vinyl tile flooring
 - Applicable standards
 - Classes
 - Dimensions
 - Advantages and disadvantages

7. Describe specialty resilient flooring

- Types
 - Flexible polyvinyl chloride (PVC)
 - Inlaid
 - Rotogravure cushioned
 - Linoleum
- Common dimensions
- Classes/grades
- Advantages and disadvantages
- Types and styles
 - Slip resistant (safety)
 - Sports
 - Roll and tile rubber
 - Static control

8. Describe resilient bases

- Applicable standards
- Dimensions
- Typical uses
- Materials
- Rubber
- Vinyl
- Properties
 - Flexibility
 - Durability
 - Colours and textures
- Types
 - Cove/toe
 - Straight/toeless
 - Tapered base
 - Vent-cove base
 - Profiled
 - Specialty
 - Integral
 - Corner

9. Describe resilient stair coverings

- Stair
 - Treads
 - Nosings
 - Risers

LEARNING TASKS

10. Describe protective edgings for resilient flooring

CONTENT

- Stringers
- Tactile warning strips
- Materials
 - Vinyl
 - Rubber
 - Metal
 - Wood
 - Epoxy
- Types
 - Reducers
 - Contour edging
 - Capping
 - Fillet/cove strip
- Colours
- Dimensions

Line (GAC):	F	INSTALL RESILIENT FLOORS
Competency:	F2	Install resilient sheet goods

Objectives

To be competent in this area, the individual must be able to:

- Describe installing resilient sheet goods

LEARNING TASKS

1. Describe layout considerations
2. Describe layout an area for resilient sheet
3. Describe the tools used for the installation of resilient sheet goods
4. Describe cutting resilient sheet goods

CONTENT

- Size of material
- Traffic pattern
- Lighting
- Size and shape of pattern
- Length and width of the area
- Number of sections required
- Seams
 - Placement
- Fill pieces
- Offsets
 - Half drop into an offset
 - Reversible offsets
 - Pattern matching
- Layout tools
- Underscriber
- Dividers
- Knives
- Hand roller
- Weighted roller
- Pin vice
- Trimmers
- Trowels
- Resilient seam cutter
- Undercut saw
- Straight edge
- Framing square
- Safety
- PPE
- Tools and equipment
- Placement
 - Grout line
 - Seam

LEARNING TASKS

5. Describe hand fitting resilient sheet goods

6. Describe hand fit rotogravure material

CONTENT

- Knife position
- Seaming methods
 - Straight edge and butt
 - Double cut
 - Underscribed
- Pattern
- Material
 - Selection
 - Placement
- Fit
 - Relief cuts
 - Wall fitting
 - Door casings
 - Door jams
 - Around objects
- Preparation
 - Substrate
 - Undercutting of door jams
- Layout
 - Squareness
 - Seam position
 - Pattern balance
- Adhesive application and sequence
- Pattern matching techniques
- Trimming
- Seam
 - Preparation
 - Cutting methods
 - Sealing
 - Protection

Line (GAC):	F	INSTALL RESILIENT FLOORS
Competency:	F3	Remove transitions, trims and resilient wall bases

Objectives

To be competent in this area, the individual must be able to:

- Remove transitions, trims and resilient wall bases

LEARNING TASKS

1. Identify tools and equipment used to remove transitions, trims and resilient wall bases
2. Describe the procedure to remove transitions, trims and resilient wall bases
3. Remove transitions, trims and resilient wall bases

CONTENT

- Safety
- PPE
- Putty knives
- Quarter round lifters
- Pry bars
- Utility knives
- Safety
- PPE
- Tools and equipment
- Material removal
 - Resilient base
 - Wood base
 - Resilient flooring
 - Snap-on wall base
 - Transitions
 - Trims
- Removal procedure
- Disposal
- Waste reduction
- Safety
- PPE
- Tools and equipment
- Material removal
 - Resilient base
 - Wood base
 - Resilient flooring
 - Snap-on wall base
 - Transitions
 - Trims
- Removal procedure
- Disposal
- Waste reduction

Line (GAC): F INSTALL RESILIENT FLOORS

Competency: F7 **Install resilient tile**

Objectives

To be competent in this area, the individual must be able to:

- Describe the installation of resilient tile

LEARNING TASKS

1. Describe the installation of resilient tile
2. Describe the installation of resilient tile to a square layout
3. Describe the installation of resilient tile to a diagonal layout

CONTENT

- Safety
 - PPE
 - Tools and equipment
 - Tile cutter
 - Layout tools
 - Heat gun
 - Hand roller
 - Knives
 - Scrapers
 - Trowels
 - Substrate preparation
 - Lot/run number
 - Layout techniques
 - Grain orientation
- Safety
 - PPE
 - Tools and equipment
 - Adhesive application
 - Batching/shuffling the tile
 - Tile placement
 - Fitting and cutting
 - Straight wall
 - Outside corners
 - Circular obstacles
 - Door jambs
 - Methods
 - Wet-set
 - Dry-set
 - Rolling of tiles
 - Safety
 - PPE
 - Tools and equipment
 - Layout techniques

LEARNING TASKS

CONTENT

- Tile cuts
 - Border
 - Door jamb
- Template

Line (GAC): **F INSTALL RESILIENT FLOORS**
Competency: **F12 Install resilient transitions, trims and bases**

Objectives

To be competent in this area, the individual must be able to:

- Describe the installation of resilient wall base

LEARNING TASKS

1. Describe the tools used for the installation of wall base

CONTENT

- Safety
- PPE
- Tools
 - Layout tools
 - Scriber
 - Base spreader
 - Hand roller
 - Caulk gun
 - Scrapers
 - Base gouge
 - Chalk line
 - Profile base cutter

2. Describe the materials used for resilient wall base

- Standard heights
- Lengths
- Colours
- Materials
 - Rubber
 - Vinyl

3. Describe the installation of resilient wall base

- Safety
- PPE
- Tools and equipment
- Layout procedure
- Adhesive application
 - Contact cement
 - Adhesive tape
- Wall base positioning
- Rolling the base
- Fill sections
- Installation procedures
 - Outside corner
 - Wrapping
 - Inside corner
 - Wrapping

LEARNING TASKS

4. Describe the installation of resilient bases

CONTENT

– Butting

- Safety
- PPE
- Tools and equipment
- Scribe
- Dry fit
- Coping
- Back cutting
- Adhesive application

Line (GAC): **G INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING**

Competency: **G1 Undercuts jambs and trims**

Objectives

To be competent in this area, the individual must be able to:

- Identify types of jambs and trims
- Undercut jambs and trims

LEARNING TASKS

1. Describe jambs and trims

2. Identify types of jambs and trims

3. Describe procedure to undercut jambs and trims

4. Undercut jambs and trims

CONTENT

- Material
 - Wood
 - Metal
 - Medium density fiberboard (MDF)
- Safety
 - Fire code
 - Electrical
- Characteristics
- Applications
- Material
 - Wood
 - Metal
- Safety
 - Fire code
 - Electrical
- Characteristics
- Applications
- Tools and equipment
- PPE
- Safety
 - Fire code
 - Electrical
- Undercut process
- Tools and equipment
- PPE
- Safety
 - Fire code
 - Electrical
- Undercut process

Line (GAC):	G	INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING
Competency:	G2	Installs vapour retarder and underlayment cushion

Objectives

To be competent in this area, the individual must be able to:

- Identify types and classes of vapour retarders
- Identify types and classes of underlayment cushions
- Install vapour retarders and underlayment cushions

LEARNING TASKS

1. Identify types and classes of vapour retarders
2. Identify types and classes of underlayment cushions
3. Describe procedure to install vapour retarders and underlayment cushion

CONTENT

- Safety
- PPE
- Material
 - Asphalt saturated paper (tar paper)
 - Asphalt laminated craft paper
 - Chemical applied
 - 6 ml poly
 - Epoxy
- Class
 - 1
 - 2
- Characteristics
- Applications
- Safety
- PPE
- Types
 - Open cell foam
 - Cork
 - Rubber
 - Felt
- Regulations
 - Sound dampening
- Characteristics
- Applications
- Safety
- PPE
- Tools and equipment
- Vapour retarders
 - Types
 - Class
- Underlayment cushion

LEARNING TASKS

4. Install vapour retarders and underlayment cushion

CONTENT

- Types
- Regulations
 - Sound dampening
- Installation procedure
- Safety
- PPE
- Tools and equipment
- Vapour retarders
 - Types
 - Class
- Underlayment cushion
 - Types
- Regulations
 - Sound dampening
- Installation procedure

Line (GAC): G INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING

Competency: G3 Establish layout

Objectives

To be competent in this area, the individual must be able to:

- Describe the repair damaged prefinished solid and laminate floors

LEARNING TASKS

1. Identify types of flooring material
2. Identify types of pattern of flooring material
3. Describe procedures to establish layout
4. Describe procedure to rack and batch

CONTENT

- Material
 - Laminate
 - Engineered
 - Parquet
 - Solid wood
 - Floating vinyl plank
- Characteristics
- Application
- Types
 - Parquet
 - Herringbone
 - Basket weave
 - Chevron
 - Finger block
- Calculations
- Tools and equipment
- Hazards
- Safety
- PPE
- Layout procedure
 - Direction and layout
 - Start line
 - Control lines
 - Dry laying/racking
 - Starter rows
- Laying out patterns
- Safety
- PPE
- Flooring material
- Dry layout
- Pattern
- Appearance

LEARNING TASKS

5. Rack and batch flooring material

CONTENT

- Colour distribution
- End-joint distribution
- Design
- Waste reduction
- Flooring material
- Dry layout
- Pattern
- Appearance
 - Colour distribution
 - End-joint distribution
- Design
- Waste reduction

Line (GAC): **G INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING**

Competency: **G4 Fits materials**

Objectives

To be competent in this area, the individual must be able to:

- Describe types of wood, laminate, and floating vinyl flooring
- Cut flooring material
- Describe the procedure to fit flooring material

LEARNING TASKS

1. Describe types of hardwood flooring

CONTENT

- Construction
 - Solid
 - Engineered
- Types of installations
 - Nail-down
 - Glue-Down
 - Floating
- Reusability
 - Reconditioned
 - Reused
 - Recycled

2. Describe types of floating flooring

- Types
 - Laminate
 - Floating vinyl plank
- Construction
 - Drop-lock
 - Click flooring
 - Glue together
- Reusability
 - Reconditioned
 - Reused
 - Recycled

3. Describe substrate requirements

- Acclimation
 - Moisture content difference between flooring and substrate
 - Humidity
 - Temperature

4. Describe the procedure to cut flooring material

- Safety
- PPE
- Tools and equipment
 - Table saw

LEARNING TASKS

5. Cut flooring material

6. Describe procedure to fit material

CONTENT

- Sliding compound mitre saw
- Jig-saw
- Drill and bit
- Guillotine cutter
- Circular saw
- Cutting styles
- Waste reduction
- Safety
- PPE
- Tools and equipment
 - Table saw
 - Sliding compound mitre saw
 - Jig-saw
 - Drill and bit
 - Guillotine cutter
 - Circular saw
- Cutting styles
- Waste reduction
- Tools and equipment
 - Table saw
 - Sliding compound mitre saw
 - Jig-saw
 - Drill and bit
 - Guillotine cutter
 - Circular saw
- Safety
- PPE
- Appearance
 - Pattern
 - Colour distribution
- Procedure
 - Measure
 - Mark
 - Cut
 - Scribing and ripping
 - Directional change

Line (GAC):	G	INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING
Competency:	G5	Mechanically fastens pre-finished solid and engineered hardwood flooring

Objectives

To be competent in this area, the individual must be able to:

- Describe the installation of prefinished hardwood flooring

LEARNING TASKS

1. Describe the installation of nail-down solid and engineered hardwood flooring

CONTENT

- Safety
- PPE
- Fastener equipment
 - Pneumatic flooring nailer
 - Manual flooring nailer
 - Pin nailer
 - Brad nailer
 - Hammer
 - Nail set/punch
- Fasteners
 - Cleats
 - Staples
 - Nails
 - Finish
 - Cut
 - Brad
 - Pin
 - Casing
- Fastener spacing and depth
- Fitting techniques
- Spline or slip tongue
- Installation of transitions and mouldings
- Waste reduction

Line (GAC):	G	INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING
Competency:	G6	Glue down solid and engineered hardwood flooring

Objectives

To be competent in this area, the individual must be able to:

- Describe the installation of prefinished hardwood flooring

LEARNING TASKS

1. Describe glue-down hardwood flooring installations
2. Glue-down hardwood flooring installation

CONTENT

- Safety
- PPE
- Tools and equipment
 - Trowel
 - Weighted roller
- Substrate assessment
- Adhesive application
 - Spread rate
 - Ventilation requirements
 - Open times
 - Weighted roller
- Starter rows
- Spline or slip tongue
- Safety
- PPE
- Tools and equipment
 - Trowel
 - Weighted roller
- Substrate assessment
- Adhesive application
 - Spread rate
 - Ventilation requirements
 - Open times
 - Weighted roller
- Starter rows
- Spline or slip tongue

Line (GAC): **G INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING**

Competency: **G10 Repairs boards**

Objectives

To be competent in this area, the individual must be able to:

- Describe the repair of damaged prefinished solid, engineered wood and laminate floors

LEARNING TASKS

1. Describe the repair of boards

CONTENT

- Safety
- PPE
- Tools and equipment
- Repair materials
 - Thermal plastic repair kits
 - Laminate repair kits
 - Putties and crayons
- Tightening of loose boards
 - Gluing loose boards with injection system
- Waste reduction

Line (GAC): **G INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING**

Competency: **G11 Replace boards**

Objectives

To be competent in this area, the individual must be able to:

- Describe the replacement of damaged prefinished solid, engineered wood and laminate floors

LEARNING TASKS

1. Describe the replacement of damaged boards

CONTENT

- Safety
- PPE
- Tools and equipment
 - Specialty tools for laminate floors
- Existing finished surfaces protection
- Fastener removal
- Adhesive application
- New boards fitting and installation of new boards
- Levelling and weight distribution
- Waste reduction

Level 2

Floorcovering Installer

Line (GAC):	B	USE TOOLS AND EQUIPMENT
Competency:	B2	Use power and pneumatic tools

Objectives

To be competent in this area, the individual must be able to:

- Use power and pneumatic tools

LEARNING TASKS

1. Identify power and pneumatic tools
2. Maintain power and pneumatic tools
3. Use power and pneumatic tools

CONTENT

- Purpose
- Safety
 - WorkSafeBC Regulations
 - Site safety rules
- PPE
- Manufacturers' recommendations
- Power tools
 - Grinder
 - Welders
 - Routers
- Pneumatic tools
- Inspection
- Transportation
- Storage
- Consumable components replacement
- Lubricate
- Clean
- Purpose
- Safety
 - WorkSafeBC Regulations
 - Site safety rules
- PPE
- Work procedures
- Manufacturers' recommendations
- Power tools
 - Grinder
 - Welders
 - Routers
- Pneumatic tools

Line (GAC):	D	PERFORM TRADE RELATED SKILLS
Competency:	D2	Assess floor and sub-floor conditions and deficiencies

Objectives

To be competent in this area, the individual must be able to:

- Apply embossing levelers
- Prepare wood subfloors

LEARNING TASKS

1. Apply embossing levellers
2. Install a wood subfloor
3. Patch a wood subfloor

CONTENT

- Safety precautions
- Primers
- Additives
- Mixing ratio
- Housekeeping
- Industry standards
- Manufacturer's requirements
- Application tools
- Drying times
- Finishing procedures
- Safety
- PPE
- Tools
- Nailing sequence
- Fitting to manufacturer's guidelines
- Pattern scribing
- Direct scribing
- Safety
- Tools
- Mixing ratio
- Additives
- Drying times
- Procedures
- Application of product
- Housekeeping

Achievement Criteria

Performance	The learner will be able to apply embossing levelers
Conditions	The learner will be given <ul style="list-style-type: none"> • Materials • Tools

Criteria	<ul style="list-style-type: none"> • Instructions <p>The learner will be evaluated on</p>
	<ul style="list-style-type: none"> • Safety • Accuracy • Completeness • Housekeeping

Line (GAC):	E	INSTALL CARPET
Competency:	E5	Install carpet by conventional method

Objectives

To be competent in this area, the individual must be able to:

- Install carpet by the conventional method
- Install patterned carpet

LEARNING TASKS

1. Use common seam-cutting tools
2. Install carpet using the conventional method

CONTENT

- Safety precautions
- PPE
- Tools
 - Row finder
 - Cushion-back cutter
 - Loop pile cutter
 - Utility knife
 - Slotted blade carpet knives
- Procedures
- Purposes
- Maintenance
- Methods
 - Row to row method seam construction
 - Trace cutting seam-cutting method
 - Blade selection
- Adjusting the depth of the blade
- Safety
- PPE
- Tools and equipment
 - Seam cutters
- Calculations
 - Measurements
 - Room Area
 - Square the carpet
 - Cuts
 - From the face
 - From the back
- Consistent pattern
- Carpet position
 - Problems from hard folding
 - Marring the face
 - Pile crush

LEARNING TASKS

CONTENT

- Damage to primary and secondary backing
 - Prevention of damage to finished surfaces
 - Unroll and position
 - Align the carpet
- Cutting process
 - Relief cuts
 - Along walls
 - Around objects
- Stretching-in the carpet
 - Size and shape of area
 - Starting point
 - Stretch percentage
 - Stretch sequences
 - Application of stay nailing and temporary stretches
 - Final trim
 - Finish seams
- 3. Measure for pattern conditions
- 4. Install patterned carpet
- Bow
- Skew/bias
- Repeat variations
- Trueness of edge
- Manufacturer's tolerance
- Safety
- PPE
- Tools and equipment
- Pattern layout variations
 - Pattern repeat identification
- Cutting and dry laying
- Seam adhesion
 - Heat induction
 - Thermoplastic seaming tape
 - Hand sewing
- Pattern match
- Pattern alignment requirements
 - Dry lines
 - Stay nailing

Achievement Criteria

Performance	The learner will be able to install carpet by the conventional method including carpet cushioning and finishing seams
Conditions	<p>The learner will be given</p> <ul style="list-style-type: none"> • Materials • Tools • Instructions
Criteria	<p>The learner will be evaluated on</p> <ul style="list-style-type: none"> • Safety • Accuracy • Completeness • Housekeeping

Line (GAC):	F	INSTALL RESILIENT FLOORS
Competency:	F2	Install resilient sheet goods

Objectives

To be competent in this area, the individual must be able to:

- Install resilient sheet goods

LEARNING TASKS

1. Layout an area for resilient sheet goods
2. Select tools used for the installation of resilient sheet goods
3. Prepare for installation
4. Install resilient sheet goods

CONTENT

- Measurement
- Number of sections required
- Location of seams
- Fill pieces required
- Offsets
 - Half drop into an offset
 - Reversible offsets
 - Pattern matching
- Layout tools
- Underscriber
- Dividers
- Knives
- Hand roller
- Weighted roller
- Pin vice
- Trimmers
- Trowels
- Resilient seam cutter
- Undercut saw
- Straight edge
- Framing square
- Manufacturer's recommendations
- Substrate conditions
 - Moisture emissions
 - Suitability
- Bond test
- Minimum and maximum installation temperature
- Acclimation of materials
- Safety
- PPE
- Tools and equipment
- Batch number and roll sequence verification

LEARNING TASKS

CONTENT

5. Hand fit resilient sheet goods

- Fitting procedures
 - Direct scribing
 - Pattern scribing
 - Free hand knifing
- Trimming the selvage
- Seam placement
- Adhesive application
- Adhesive open time
- Seam cutting
- Narrow areas
- Stove bars
 - Back buttering
 - Weighting
- Rolling procedure
- Safety
- PPE
- Tools and equipment
- Suitable materials
- Material positioning
- Fit
 - Relief cuts
 - Walls
 - Door casings
 - Door jams
 - Around objects

6. Cut seams in resilient sheet goods

- Safety
- PPE
- Tools and equipment
- Grout line placement
- Knife position
- Seaming techniques
 - Straight edge and butt method
 - Double cut seams
 - Underscribed seams
- Layout
 - Squareness
 - Seam placement
 - Pattern balance
- Adhesive application and sequence
- Pattern matching techniques
- Trimming

LEARNING TASKS

7. Direct scribe resilient sheet goods
8. Flat lay pattern scribe resilient sheet goods

CONTENT

- Sealing and protecting of the seam
- Safety
- PPE
- Suitable materials
- Material preparation
- Scribing tool position
- Setting accurate scribing distance
- Scribing tools
 - Bar scriber
 - Dividers
 - Framing square
- Sheet alignment to reference marks
- Materials
- Scribing location
 - Straight walls
 - Pipes
 - Door casings
 - Radius objects
- Scribe lines transfer
- Cutting of the flooring

Achievement Criteria

Performance	The learner will be able to install resilient sheet goods
Conditions	The learner will be given <ul style="list-style-type: none">• Materials• Tools• Instructions
Criteria	The learner will be evaluated on <ul style="list-style-type: none">• Safety• Accuracy• Completeness• Housekeeping

Line (GAC): **F INSTALL RESILIENT FLOORS**
Competency: **F4 Complete seams in resilient sheet goods**

Objectives

To be competent in this area, the individual must be able to:

- Describe completing seams in resilient sheet goods using chemical welding

LEARNING TASKS

1. Describe chemical seam sealers

2. Describe the process to seal seams using chemical welding

CONTENT

- Hazards and precautions
- PPE
- Tools and equipment
- Compatible flooring materials

- Safety
- PPE
- Tools and equipment
- Manufacturer's instructions
- Mixing requirements
- Seam preparation
- Set-up time
- Cleanup
- Shelf life
- Seam protection

Line (GAC): F INSTALL RESILIENT FLOORS
Competency: F5 Repair resilient floors

Objectives

To be competent in this area, the individual must be able to:

- Repair resilient flooring

LEARNING TASKS

1. Describe the tools used for resilient flooring repair

2. Select repair procedure to be used

3. Repair resilient flooring

CONTENT

- Safety
- PPE
- Layout tools
- Broad knife
- Notched spreader
- Knives
- Heat gun
- Hand roller
- Material identification
- Installation method
- Damage type
 - Asbestos test
- Safety
- PPE
- Tools and equipment
- Existing material removal
- Substrate preparation
- Adhesive applications
- Size and shape of repair material
- Damage type
 - Punctures and gouges
- Hand rolling
- Repair method
 - Inlaid vinyl
 - Full-spread roto-vinyl
 - Perimeter spread felt back
 - Non-patterned commercial sheet vinyl
 - Linoleum
- Seam repair

Achievement Criteria

Performance	The learner will be able to repair resilient floors
Conditions	The learner will be given <ul style="list-style-type: none"> • Materials • Tools • Instructions
Criteria	The learner will be evaluated on <ul style="list-style-type: none"> • Safety • Accuracy • Completeness • Housekeeping

Line (GAC):	F	INSTALL RESILIENT FLOORS
Competency:	F6	Layout for resilient tile

Objectives

To be competent in this area, the individual must be able to:

- Layout an area for resilient tile

LEARNING TASKS

1. Describe layout considerations
2. Perform square tile layout
3. Perform diagonal tile layout

CONTENT

- Traffic pattern
- Lighting
- Fill/boarder size
- Safety
- PPE
- Tools and equipment
- Measurements
- Squareness of the area
- Border width
- Pattern adjustments
- Chalk lines
 - Control line
 - Perpendicular lines
 - 3, 4, 5 method
 - Swinging arcs
 - Centre of a room
- Safety
- PPE
- Tools and equipment
- Measurements
- Centre of the room
- Chalk lines
 - Control line
 - Perpendicular lines
 - 3, 4, 5 method
 - Swinging arcs
 - 45° guidelines
- Border adjustment

Achievement Criteria

Performance	The learner will be able to layout an area for resilient tile
Conditions	<p>The learner will be given</p> <ul style="list-style-type: none"> • Materials • Tools • Instructions
Criteria	<p>The learner will be evaluated on</p> <ul style="list-style-type: none"> • Safety • Accuracy • Completeness • Housekeeping

Line (GAC):	F	INSTALL RESILIENT FLOORS
Competency:	F7	Install resilient tile

Objectives

To be competent in this area, the individual must be able to:

- Install resilient tile

LEARNING TASKS

1. Install resilient tile to a square layout
2. Install resilient tile to a diagonal layout

CONTENT

- Safety
- PPE
- Tools and equipment
- Adhesive application
- Batching/shuffling the tile
- Tile placement
- Fitting and cutting
 - Straight wall
 - Outside corners
 - Circular obstacles
 - Door jambs
- Methods
 - Wet-set
 - Dry-set
- Rolling of tiles
- Safety
- PPE
- Tools and equipment
- Layout techniques
- Tile cuts
 - Border
 - Door jamb
 - Template

Achievement Criteria

Performance	The learner will be able to install resilient tile
Conditions	The learner will be given <ul style="list-style-type: none"> • Materials • Tools • Instructions
Criteria	The learner will be evaluated on <ul style="list-style-type: none"> • Safety • Accuracy • Completeness • Housekeeping

Line (GAC): **F INSTALL RESILIENT FLOORS**
Competency: **F12 Install resilient transitions, trims and bases**

Objectives

To be competent in this area, the individual must be able to:

- Install resilient wall base

LEARNING TASKS

1. Install resilient wall base

CONTENT

- Safety
- PPE
- Tools and equipment
- Layout procedure
- Adhesive application
 - Contact cement
 - Adhesive tape
- Wall base positioning
- Rolling of the base
- Fill sections
- Installation procedures
 - Inside and outside corner
 - Pre-formed corners
 - Mitering

2. Install profiled resilient wall bases

- Safety
- PPE
- Tools and equipment
- Scribe
- Dry fit
- Coping
- Back cutting
- Adhesive application

Achievement Criteria

Performance The learner will be able to install resilient wall base

Conditions The learner will be given

- Materials
- Tools
- Instructions

Criteria The learner will be evaluated on

- Safety
- Accuracy
- Completeness
- Housekeeping

Line (GAC): **G INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING**

Competency: **G3 Establish layout**

Objectives

To be competent in this area, the individual must be able to:

- Establish layout of wood, laminate, and floating vinyl plank flooring

LEARNING TASKS

1. Establish layout

CONTENT

- Calculations
- Tools and equipment
- Hazards
- Pattern
- Appearance
- Layout procedure
 - Direction and layout
 - Start line
 - Control lines
 - Dry laying/racking
 - Starter rows
- Waste reduction

Line (GAC): **G INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING**

Competency: **G4 Fits materials**

Objectives

To be competent in this area, the individual must be able to:

- Fit wood, laminate and floating vinyl plank flooring

LEARNING TASKS

1. Fit material

CONTENT

- Tools and equipment
 - Table saw
 - Sliding compound mitre saw
 - Jig-saw
 - Drill and bit
 - Guillotine cutter
 - Circular saw
- Safety
- PPE
- Appearance
 - Pattern
 - Colour distribution
- Procedure
 - Measure
 - Mark
 - Cut
 - Scribing and ripping
 - Directional change
- Waste reduction

Line (GAC):	G	INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING
Competency:	G5	Mechanically fastens pre-finished solid and engineered hardwood flooring

Objectives

To be competent in this area, the individual must be able to:

- Describe the installation of prefinished hardwood flooring

LEARNING TASKS

1. Install nail-down hardwood flooring

CONTENT

- Safety
- PPE
- Fastener equipment
 - Pneumatic flooring nailer
 - Manual flooring nailer
 - Pin nailer
 - Brad nailer
 - Hammer
 - Nail set/punch
- Fasteners
 - Cleats
 - Staples
 - Nails
 - Finish
 - Cut
 - Brad
 - Pin
 - Casing
- Fastener spacing and depth
- Fitting techniques
- Spline or slip tongue
- Installation
 - Transitions
 - Mouldings
- Waste reduction

Level 3

Floorcovering Installer

Line (GAC):	C	ORGANIZE WORK
Competency:	C1	Plan sequence of installation

Objectives

To be competent in this area, the individual must be able to:

- Describe common practices related to job startup.

LEARNING TASKS

1. Describe documents required on job sites
2. Describe testing of existing flooring
3. Describe jobsite information required for projects
4. Explain coordination of work
5. Describe paperwork required by flooring contractor

CONTENT

- Up to date blueprints and addendum
- Seaming diagrams
- Specification book
- Site safety documents
- MSDS's
- Testing documents for moisture and pH
- Lead
- Asbestos
- Project location
- General contractor, contact person or end user
 - Site rules and requirements
 - Restrictions on adhesives, solvents or open flames
 - Power outlets and breaker panels
 - Water source
 - Emergency information
 - Alarms
- Schedule work with other trades
- Areas for material storage
- Access routes for deliveries
- Elevator and lift sizes
- Parking areas
- Acclimation of materials
- Inspection and inventory of all materials
 - Compatibility of materials
 - Roll sequence numbers
- Protection of surrounding areas
- Safety procedures to be followed
- Work reports
- Time sheets

Line (GAC):	C	ORGANIZE WORK
Competency:	C3	Determine layout and materials needed for job

Objectives

To be competent in this area, the individual must be able to:

- Plan projects

LEARNING TASKS

1. Interpret finishing schedules
2. Use documentation
3. Determine the scope of work

CONTENT

- Purpose
- Format
 - Common schedules
- Trims and transitions
- Building codes and Bylaws
- Tools and equipment
- Levelling or subfloor material requirements
- Fasteners/adhesives
- Direction of layout
- Flooring material
- Baseboard, trims and transitions
- Vapour barriers
- Acoustical requirements
- Floor protection
- Stair components
- Estimate materials

Line (GAC): **C ORGANIZE WORK**
Competency: **C6 Use mentoring techniques**

Objectives

To be competent in this area, the individual must be able to:

- Develop skills to be an effective communicator

LEARNING TASKS

1. Identify employer responsibilities

2. Describe learning styles

3. Describe learning needs

4. Demonstrate knowledge of strategies for learning skills in workplace

5. Demonstrate knowledge strategies for teaching workplace skills

CONTENT

- On the job training
- Indentureship contracts
- Following Labour Standards Legislation
- Conflict resolution

- Visual
- Auditory
- Reading
- Writing
- Kinesthetics

- Abilities
- Preferences
- Language proficiency

- Tyles
- Needs

- Teaching skills
- Adaptation of teaching skills
 - Tyles
 - Needs
- Assessment
- Feedback

Line (GAC):	E	INSTALL CARPET
Competency:	E5	Install carpet by conventional method

Objectives

To be competent in this area, the individual must be able to:

- Install patterned carpet with borders using the conventional method

LEARNING TASKS

1. Describe the installation of patterned carpet with borders using the conventional method
2. Install patterned carpet with borders using the conventional method

CONTENT

- Safety
- PPE
- Tools and equipment
- Layout variations for pattern
 - Identification of pattern repeat
- Cutting and dry laying
- Seam adhesion
 - Thermoplastic seaming tape
 - Hand sewing
 - Heat induction
- Pattern match
 - Boarder placement
- Pattern alignment requirements
 - Dry lines
- Stay nailing
- Safety
- PPE
- Tools and equipment
- Patter layout variations
 - Pattern repeat identification
- Cutting and dry laying
- Seam adhesion
 - Thermoplastic seaming tape
 - Hand sewing
 - Heat induction
- Pattern match
 - Boarder placement
- Pattern alignment requirements
 - Dry lines
 - Stay nailing

Achievement Criteria

Performance	The learner will be able to install patterned carpet with a boarder
Conditions	<p>The learner will be given</p> <ul style="list-style-type: none"> • Materials • Tools • Instructions
Criteria	<p>The learner will be evaluated on</p> <ul style="list-style-type: none"> • Safety • Accuracy • Completeness • Housekeeping

Line (GAC):	E	INSTALL CARPET
Competency:	E9	Assemble area rugs and runners

Objectives

To be competent in this area, the individual must be able to:

- Describe the assembly and installation of area rugs and runners

LEARNING TASKS

1. Describe area rugs and runners

2. Describe the assembly of area rugs and runners

3. Describe the installation of area rugs and runners

CONTENT

- Types
 - Manufactured
 - Custom-made
- Types of cushions
- Characteristics
- Application
- Safety
- PPE
- Tools and equipment
- Layout
- Cutting to size
- Binding
 - Taping
 - Serging
 - Fringing
- Safety
- PPE
- Tools and equipment
- Cushion installation
- Carpet installation

Line (GAC):	E	INSTALL CARPET
Competency:	E10	Install carpet on stairs

Objectives

To be competent in this area, the individual must be able to:

- Describe the installation of stair runner with rolled edges
- Describe the installation of carpet on bullnose cap and band
- Describe the installation of carpet on floating stairs
- Install conventional stair carpet

LEARNING TASKS

1. Describe the installation of stair runners with rolled edges
2. Describe the installation of carpet on bullnose cap and band

CONTENT

- Safety
 - PPE
 - Tools and equipment
 - Regulations
 - Layout determination
 - Runner reference mark options
 - Reference line
 - Template
 - Combination square to guide
 - Tack strip installation
 - Cushion installation
 - Alignment of carpet on reference marks
 - Stretching angles and sequence
 - Affix the carpet
-
- Safety
 - PPE
 - Tools and equipment
 - Tack strip installation
 - Cushion measurement
 - Carpet measurement
 - Edge treatments
 - Carpet positioning
 - Installation procedure
 - Spacing and depths of radius relief cuts
 - Size of triangular cuts
 - Staple placement for each anchoring task
 - Fitting to the contour of the nose
 - Cutting band height and positioning
 - Cap area trimming

LEARNING TASKS

3. Describe the installation of carpet on floating stairs

CONTENT

- Safety
- PPE
- Tools and equipment
- Tack strip placement
- Cushion installation
- Template measurement
- Template test fitting
- Carpet measurement
- Cutting the carpet
- Sealing the carpet edges
- Stretching sequence
- Seam alignment
- Stapling placement

4. Install conventional stair carpet

- Safety
- PPE
- Tools and equipment
- Tack strip installation
- Cushion measurement
- Carpet measurement
- Edge treatments
- Carpet positioning
- Installation procedure

Achievement Criteria

Performance The learner will be able to install conventional stair carpet

Conditions The learner will be given

- Materials
- Tools
- Instructions

Criteria The learner will be evaluated on

- Safety
- Accuracy
- Completeness
- Housekeeping

Line (GAC): **E INSTALL CARPET**
Competency: **E11 Repair carpet**

Objectives

To be competent in this area, the individual must be able to:

- Repair carpet damage

LEARNING TASKS

1. Describe the main categories of carpet repairs

2. Recognize carpet construction for method of repair

3. Patch a damaged section of stretch-in carpet

4. Re-stretch a carpet

CONTENT

- Patching
- Re-stretching
- Seam repair
- Tufting
- Burling
- Re-bonding

- Tufted
- Woven
- Needle-punched
- Vinyl backed carpet

- Safety
- PPE
- Tools and equipment
 - Cookie cutter
- Stay nailing the affected area
- Damaged area
 - Cuts
 - Removal
- Seam adhesive application
- Seam tape placement
- Patch alignment
- Affix the patch

- Safety
- PPE
- Tools and equipment
- Carpet wrinkling causes
- Furniture removal
- Release from walls
- Tack strip checks
- Delaminated section repair
- Stretch sequence
- Tuck and trim

LEARNING TASKS

5. Repair a conventional carpet seam

CONTENT

- Safety
- PPE
- Tools and equipment
- Seam failure causes
- Seam isolation
- Yarn separation
- Seam tape removal
- Seam recutting
- Seam edges sealing
- Replacement piece cutting techniques
- Adhesive application
- Repair rolling and trimming
- Seam streaking avoidance
- Re-stretching and refitting carpeting
- Re-tufting

6. Repair a damaged section of glue-down carpet

- Safety
- PPE
- Tools and equipment
- Damaged area
 - Cuts
 - Removal
- Cut out area replacement
 - Pile direction
 - Carpet pattern
- Re-adhere cut out area

7. Repair a damaged section of double bond carpet

- Safety
- PPE
- Tools and equipment
- Cut out area replacement
 - Pile direction
 - Carpet pattern
- Cushion repair or replacement
- Cut out area carpet replacement
- Seam tape replacement
- Re-adhere carpet

8. Repair or replace damaged carpet tile

- Safety
- PPE
- Tools and equipment
- Layout

LEARNING TASKS

CONTENT

- Pattern
- Colour
- Orientation
- Re-adhere carpet tile

Achievement Criteria

Performance The learner will be able to repair carpet damage

Conditions The learner will be given

- Materials
- Tools
- Instructions

Criteria The learner will be evaluated on

- Safety
- Accuracy
- Completeness
- Housekeeping

Line (GAC):	E	INSTALL CARPET
Competency:	E12	Describe hand binding of carpet edges

Objectives

To be competent in this area, the individual must be able to:

- Describe the binding of carpet edges

LEARNING TASKS

1. Describe tools used to hand bind the edges of carpet
2. Describe the hand binding of carpet edges using the staple method

CONTENT

- Hand binding stapler
- Hot melt glue gun
- Latex adhesive
- Loop pile cutter
- Cushion back cutter
- Slotted blade knife
- Needle and thimble
- Thread
- Throat adjustment of stapler
- Staple sequence and spacing
- Turning the binding tape at corners
- Wrapping and bonding
 - Tension

Line (GAC):	E	INSTALL CARPET
Competency:	E13	Describe the installation of artificial turf

Objectives

To be competent in this area, the individual must be able to:

- Describe the layout and installation of artificial turf

LEARNING TASKS

1. Describe the ground preparation for artificial turf

CONTENT

- Removal of sod
- Compacting of existing ground
- Weed barrier
- Sub-base requirements
- Top based sand requirements
- Safety
- PPE
- Tools and equipment
- Layout and grid lines
- Grid lines using transits and lasers
- Rolling out the turf
- Turf sections assembly
- Cutting and trimming of the turf
- Turf sections stretching
- Seaming of sections
- Turf insets

2. Describe the installation of artificial turf

Line (GAC): F INSTALL RESILIENT FLOORS
Competency: F4 Complete seams in resilient sheet goods

Objectives

To be competent in this area, the individual must be able to:

- Heat weld seams to create an integral floor

LEARNING TASKS

1. Use tools for heat welding seams

CONTENT

- Safety
- PPE
- Heat welder
- Welding tips
- Power groover
- Hand groover
- Skiving knives
- Trim plate
- Cleaning tools
- Sharpeners
- Specialty tools

2. Use heat welding process

- Safety
- PPE
- Tools and equipment
- Manufacturer's recommendations
- Trimming of seams
- Power groover adjustment
- Groove depth maintenance
- Welding tip and rod selection
- Welding positions
- Seam skiving
 - Number of passes
 - Position of trim plate
- Defects
 - Temperature
 - Speed
 - Positions
 - Skiving

Achievement Criteria

Performance	The learner will be able to complete seams in resilient sheet goods using heat welding
Conditions	<p>The learner will be given</p> <ul style="list-style-type: none"> • Materials • Tools • Instructions
Criteria	<p>The learner will be evaluated on</p> <ul style="list-style-type: none"> • Safety • Accuracy • Completeness • Housekeeping

Line (GAC): **F INSTALL RESILIENT FLOORS**
Competency: **F8 Install resilient material on stairs**

Objectives

To be competent in this area, the individual must be able to:

- Install resilient stringers
- Install resilient treads and risers

LEARNING TASKS

1. Describe flash coving of stairs

CONTENT

- Safety
- PPE
- Tools and equipment
- Stair types
 - Enclosed
 - Open
- Substrate preparation
 - Structurally sound
- Cove stick
- Pattern scribe
 - Measure
 - Cut
 - Set
 - Scribe
 - Transfer
- Cutting the step
- Adhesive application
- Stair nosing
- Tread and riser installation techniques
- Rolling techniques

2. Install stair stringers

- Safety
- PPE
- Tools and equipment
- Stair preparation
- Techniques
 - Freehand cut
 - Direct
 - Pattern

3. Install stair treads and risers

- Adhesive application
- Installation techniques
- Rolling techniques
- Safety

LEARNING TASKS

CONTENT

- PPE
- Tools and equipment
- Substrate preparation
- Tread positioning
- Divider positioning
- Scribe and cut
- Riser measurement and cut
- Adhesive application
- Installation procedure

Achievement Criteria

Performance	The learner will be able to install resilient stringers, treads and risers
Conditions	<p>The learner will be given</p> <ul style="list-style-type: none"> • Materials • Tools • Instructions
Criteria	<p>The learner will be evaluated on</p> <ul style="list-style-type: none"> • Safety • Accuracy • Completeness • Housekeeping

Line (GAC):	F	INSTALL RESILIENT FLOORS
Competency:	F9	Install flash coving

Objectives

To be competent in this area, the individual must be able to:

- Install flash coving

LEARNING TASKS

1. Describe flash cove trim
2. Install flash cove trim and cove stick
3. Install flash coving

CONTENT

- Purpose
- Materials
 - Cove cap
 - Cove stick
 - Pre-fabricated
- Profiles
- Safety
- PPE
- Tools and equipment
- Cap installation
 - Measuring
 - Anchoring methods
 - Cutting techniques
- Cove stick installation
 - Cutting methods
 - Anchoring methods
 - Mitering
 - Taper at doorways
- Safety
- PPE
- Tools and equipment
- Material preparation
- Methods
 - Hand fitting
 - Direct scribing
 - Pattern scribing
- Sequence of cutting
- Adhesive application
- Aligning the material
- Installation techniques
 - Heat welding seams
 - Tight scribe seams

Achievement Criteria

Performance	The learner will be able to install flash coving
Conditions	<p>The learner will be given</p> <ul style="list-style-type: none"> • Materials • Tools • Instructions
Criteria	<p>The learner will be evaluated on</p> <ul style="list-style-type: none"> • Safety • Accuracy • Completeness • Housekeeping

Line (GAC): F INSTALL RESILIENT FLOORS

Competency: F10 Install rubber sheet and tile

Objectives

To be competent in this area, the individual must be able to:

- Install rubber sheet and tile

LEARNING TASKS

1. Describe rubber flooring
2. Describe the preparation for rubber floor installation
3. Describe the installation of rubber flooring

CONTENT

- Manufacturing process
- Characteristics
- Uses
- Finishes
- Manufacturer's recommendations
- Acceptable substrates
- Maximum moisture content
- Tests
 - Calcium chloride
 - Relative humidity
 - Bond
- Substrate preparation
- Storage and handling
- Acclimation and staging
- Roll sequencing
- Safety
- PPE
- Tools and equipment
- Directional layout
- Wet lay installations
- Adhesives
 - Transfer
 - Trowel size
 - One-part
 - Mixing
 - Off gassing
 - Two-part
 - Mixing equipment
 - Mixing procedure
 - Pot life
- Fitting and layout methods
 - Tile installation
 - Sheet rubber

LEARNING TASKS

4. Install rubber flooring

CONTENT

- Rolling applications
- Seam cutting techniques
- Weighting the flooring
- Cleanup
- Safety
- PPE
- Tools and equipment
- Directional layout
- Wet lay installations
- Adhesives
 - Transfer
 - Trowel size
 - One-part
 - Mixing
 - Off gassing
 - Two-part
 - Mixing equipment
 - Mixing procedure
 - Pot life
- Fitting and layout methods
 - Tile installation
 - Sheet rubber
- Rolling applications
- Seam cutting techniques
- Weighting the flooring
- Cleanup

Achievement Criteria

Performance The learner will be able to install rubber resilient flooring

Conditions The learner will be given

- Materials
- Tools
- Instructions

Criteria The learner will be evaluated on

- Safety
- Accuracy
- Completeness
- Housekeeping

Line (GAC): **F INSTALL RESILIENT FLOORS**
Competency: **F11 Install specialty resilient product**

Objectives

To be competent in this area, the individual must be able to:

- Describe the installation of specialty resilient material

LEARNING TASKS

1. Define terms used for conductive flooring materials
2. Describe installation requirements for conductive flooring components
3. Describe specialty wall products
4. Describe the installation of specialty wall products

CONTENT

- Static dissipative
- Conductive
- Safety
- PPE
- Tools and equipment
- Manufacturer's instructions
- ASTM standards
- Substrate requirements
- Delivery, storage and handling
- Positioning of grounding strips
- Adhesive selection
- Requirements
 - Sheet material
 - Resilient tile
- Adhesive application
- Rolling of installed material
- Protection of installation
- Wall vinyl for clean rooms/showers
- Acrylic wall covering for clean rooms
- Safety
- PPE
- Tools and equipment
- Substrate requirements
- Substrate preparation
- Techniques
 - Material forming
 - Seam cutting
- Adhesive selection
- Adhesive application
- Seam Treatment

Line (GAC): **F INSTALL RESILIENT FLOORS**
Competency: **F12 Install resilient transitions, trims and bases**

Objectives

To be competent in this area, the individual must be able to:

- Install resilient wall base to straight walls and inside and outside corners

LEARNING TASKS

1. Install wall base

CONTENT

- Removal of existing base
- Layout procedure
- Adhesive application
- Wall base position
- Top of the wall base alignment
- Rolling of the base
- Fill sections
- Installation procedures
 - Fitting technique
 - Pre-formed corners
 - Field lengths
 - Outside corners
 - Inside corners
- Adhesives
 - Contact cement
 - Adhesive tape

Achievement Criteria

Performance The learner will be able to install resilient wall base

Conditions The learner will be given

- Materials
- Tools
- Instructions

Criteria The learner will be evaluated on

- Safety
- Accuracy
- Completeness
- Housekeeping

Line (GAC): **G INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING**

Competency: **G7 Assemble floating floors**

Objectives

To be competent in this area, the individual must be able to:

- Assemble floating floors

LEARNING TASKS

1. Describe the assembly of floating floors

CONTENT

- Safety
- PPE
- Tools and equipment
- Joint type
 - Mechanical
 - Glued
- Characteristics
- Locking joints
- Expansion joints
- Expansion space
- Reducers
- Trims
- Reusability
 - Reconditioned
 - Reused
 - Recycled
- Waste reduction

2. Assemble floating floors

- Safety
- PPE
- Tools and equipment
- Joint type
 - Mechanical
 - Glued
- Characteristics
- Locking joints
- Expansion joints
- Expansion space
- Reducers
- Trims
- Reusability
 - Reconditioned
 - Reused

LEARNING TASKS

CONTENT

- Recycled
- Waste reduction

Line (GAC):	G	INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING
Competency:	G8	Installs borders, insets and custom fabrications in wood flooring

Objectives

To be competent in this area, the individual must be able to:

- Install borders, insets and custom fabrication in wood flooring

LEARNING TASKS

1. Describe types of borders, insets and custom fabrication in wood
2. Describe the installation of borders and insets
3. Install borders and insets

CONTENT

- Boarder design
 - Inset
 - Framing
 - Skirting
 - Apron
 - Log cabin
 - Feature strips
- Types of trims
 - Mouldings
 - Reducers
 - Stair nosing
 - Quarter rounds
 - Wedges
- Insets
 - Corner block
 - Medallion
- Safety
- PPE
- Tools and equipment
- Measuring techniques
- Border design
- Joints
 - Mitre
 - Log cabin
- Adhesives
 - Wood glue
 - Polyurethane
 - Modified polymers
 - Saline
- Waste reduction
- Safety
- PPE
- Tools and equipment

LEARNING TASKS

CONTENT

- Measuring techniques
- Border design
- Joints
 - Mitre
 - Log cabin
- Adhesives
 - Wood glue
 - Polyurethane
 - Modified polymers
- Waste reduction

Line (GAC): **G INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING**

Competency: **G9 Installs wood and laminate flooring on stairs**

Objectives

To be competent in this area, the individual must be able to:

- Describe the installation of wood and laminate flooring on stairs

LEARNING TASKS

1. Describe the installation of wood and laminate flooring on stairs

CONTENT

- Safety
- PPE
- Tools and equipment
- Fasteners
- Code and regulations
- Stair components
 - Stringers
 - Risers
 - Nosings
 - Treads
- Considerations
 - Starting points
 - Tight fit of material
 - Material fastening
 - Existing tread modification
- Waste reduction

Line (GAC): **G INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING**

Competency: **G12 Refinishes hardwood flooring**

Objectives

To be competent in this area, the individual must be able to:

- Describe the refinishing process of hardwood flooring

LEARNING TASKS

1. Describe the refinishing of hardwood flooring

CONTENT

- Safety
- PPE
- Tools and equipment
- Standards and regulations
 - Waste disposal
 - VOCs
- Refinishing process
 - Sanding and screening
 - Filler application
 - Dust removal
 - Stain application
 - Finish application
- Waste reduction

Section 4

ASSESSMENT GUIDELINES

Assessment Guidelines – Level 1

Level 1 Grading Sheet: Subject Competency and Weightings

PROGRAM: IN-SCHOOL TRAINING:		FLOORCOVERING INSTALLER LEVEL 1	
LINE	SUBJECT COMPETENCIES	THEORY WEIGHTING	PRACTICAL WEIGHTING
A	PERFORM SAFETY-RELATED ACTIVITIES	10%	0%
B	USE TOOLS AND EQUIPMENT	5%	0%
C	ORGANIZE WORK	10%	0%
D	PREPARE SUBSTRATE	10%	25%
E	INSTALL CARPET	50%	75%
F	INSTALL RESILIENT FLOORS	10%	0%
G	INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING	5%	0%
	Total	100%	100%
In-school theory/practical subject competency weighting		30%	70%
Final in-school percentage score		IN-SCHOOL %	

In-school Percentage Score Combined theory and practical subject competency multiplied by	80%
Standardized Level Exam Percentage Score The exam score is multiplied by	20%
Final Percentage Score	FINAL%

Assessment Guidelines – Level 2

Level 2 Grading Sheet: Subject Competency and Weightings

PROGRAM: IN-SCHOOL TRAINING:		FLOORCOVERING INSTALLER LEVEL 2	
LINE	SUBJECT COMPETENCIES	THEORY WEIGHTING	PRACTICAL WEIGHTING
B	USE TOOLS AND EQUIPMENT	5%	0%
D	PREPARE SUBSTRATE	15%	5%
E	INSTALL CARPET	10%	20%
F	INSTALL RESILIENT FLOORS	65%	75%
G	INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING	5%	0%
	Total	100%	100%
In-school theory/practical subject competency weighting		30%	70%
Final in-school percentage score		IN-SCHOOL %	

In-school Percentage Score Combined theory and practical subject competency multiplied by	80%
Standardized Level Exam Percentage Score The exam score is multiplied by	20%
Final Percentage Score	FINAL%

Assessment Guidelines – Level 3

Level 3 Grading Sheet: Subject Competency and Weightings

PROGRAM: IN-SCHOOL TRAINING:		FLOORCOVERING INSTALLER LEVEL 3	
LINE	SUBJECT COMPETENCIES	THEORY WEIGHTING	PRACTICAL WEIGHTING
C	ORGANIZE WORK	10%	0%
E	INSTALL CARPET	40%	25%
F	INSTALL RESILIENT FLOORS	40%	75%
G	INSTALL WOOD, LAMINATE, FLOATING VINYL PLANK FLOORING	10%	0%
	Total	100%	100%
In-school theory/practical subject competency weighting		30%	70%
Final in-school percentage score		IN-SCHOOL %	

In-school Percentage Score Combined theory and practical subject competency multiplied by	80%
Standardized Level Exam Percentage Score The exam score is multiplied by	20%
Final Percentage Score	FINAL%

Section 5

TRAINING PROVIDER STANDARDS

Facility Requirements

Classroom Area

- Comfortable seating and tables suitable for learning
- Compliance with the local and national fire code and occupational safety requirements
- Overhead and multimedia projectors with a projection screen
- Whiteboard with marking pens and erasers
- Lighting controls to allow easy visibility of the projection screen while allowing students to take notes
- Windows must have shades or blinds to adjust sunlight
- Heating/Air conditioning for comfort all year round
- In-room temperature control to ensure comfortable room temperature
- Acoustics in the room must allow the instructor to be heard
- Computer lab complete with 6 computers and internet access
- Library complete with reference material for student and instructor use

Shop Area

- 4000 square feet of workshop space per class of 14 students with a minimum ceiling height of 20 feet
 - This includes space for a tool crib
- Adequate lighting and lighting control
- Ventilation as per WorkSafeBC standards
- Refuse and recycling bins for used shop materials
- Level 2 first-aid facilities

Lab Requirements

N/A

Student Facilities

- Adequate lunchroom as per WorkSafeBC requirements
- Adequate washroom facilities as per WorkSafeBC requirements
- Personal storage lockers

Instructor's Office Space

- Desk and filing space
- Computer

Tools and Equipment

Shop Equipment

Required

- N/A

Recommended

- N/A

Shop (Facility) Tools

Standard Tools Levels 1 to 3

- | | |
|--|----------------------------------|
| • Adjustable wrench | • Hand scraper |
| • Air compressors | • Hand stapler |
| • Angle grinder | • Heat gun |
| • Aviation snips | • Hot melt glue gun |
| • Awl | • Jamb saw |
| • Blades (utility, slotted, hooked, saw) | • Jigsaw |
| • Broom | • Laser line |
| • Caulking gun | • Levels |
| • Chalk line | • Lights |
| • Chisels | • Measuring tape |
| • Circular saw | • Mitre box |
| • Claw hammer | • Mitre saw |
| • Cove base adhesive gun | • Moisture meter |
| • Dollies and hand trucks | • Moulding cutter |
| • Dryline | • Moulding lifter |
| • Dust brush | • Nail set |
| • Edger | • Patching trowel |
| • Electric tacker | • Pencils/markers |
| • Extension cords | • Pliers |
| • Files | • Plumb bob |
| • Floor fan | • Pneumatic nailer |
| • Framing square | • Pneumatic tacker |
| • Hacksaw | • Portable electric circular saw |
| • Hammer drill | • Portable table saw |
| • Hammer stapler | • Powder actuated tools |

- Power drill and mixing paddle
- Putty knife
- Router and specialized router bits
- Rubber mallet
- Sanders
- Scale rulers
- Screwdrivers
- Seaming irons
- Sharpening stone
- Soldering guns
- Speed square
- Straightedge
- Stripper machines
- Tee square
- Tool box
- Tool pouch
- Utility knife
- Vacuum cleaners
- Welding guns

Specialty Carpet Tools Levels 1 and 3

- Adhesive trowels
- Brad set
- Carpet cart
- Carpet clamp
- Carpet comb
- Carpet restretcher (crab)
- Carpet seam roller
- Carpet shears
- Carpet spreader
- Carpet tractor
- Carpet tucker
- Cookie cutter
- Cushion-back cutter
- Double cutter
- Double headed crab
- Driving bar
- Hot melt edge sealer tip
- Induction heating irons
- Knee kicker
- Latex squeeze bottle
- Loop pile cutter
- Moisture test kit
- Needles
- Parallel cutter
- Porcupine roller
- Power stretcher
- Row separator
- Seam seal kit
- Seam squeezer
- Sewing palm and thimble
- Stair stretcher
- Stair tool
- Stand-up rollers
- Stand-up scraper
- Staple lifter
- Tack hammer
- Tack strip cutter
- Trowel notcher
- Various knives
- Wall trimmer – conventional

Specialty Resilient Flooring Tools Levels 1 to 3

- Bar scribe
- Bricks (grey, paver bricks)
- Corner scribe
- Cove base gouging tool
- Cove base groover
- Die cutter
- Divider
- Edge trimmer
- Extension hand roller (laminated)
- Hand roller (seam/coving roller)
- Heat seam welding system
- Linoleum dolly (sheet vinyl cradle)
- Mixing paddle
- Moisture test kit
- Paint brushes
- Paint roller and tray
- Power drill
- Profile base cutter
- Propane torch
- Seam roller
- Serpentine straightedge
- Spatula knife (quarter-moon knife)
- Specialized knives
- Spreader or notched steel trowel
- Stand up roller (100 lb. – 125 lb.)
- Straightedge
- Tee square (6 in. or 2 m)
- Tile cutter
- Trim plate
- Two metre straightedge
- Under or recess scribe
- Universal scribe
- Wall roller
- Wall trimmer

Specialty Wood, Laminated, Floating Vinyl Plank Flooring Tools Levels 1 to 3

- Chisels
- Dust collection system
- Edgers
- Files
- Grinder
- Moisture meters
- Nail pullers
- Nailers
- Pry bar
- Sanders
- Scrapers
- Surfacing block plane
- Thermo-hydrometers
- Trammel points
- Wall-jacks

Student Equipment (supplied by school)***Required***

- Miscellaneous hand tools specific to task being performed

Recommended

- N/A

Student Tools (supplied by student)***Required***

- N/A

Recommended

- Knee pads

Reference Materials

Required Reference Materials

N/A

Recommended Resources

Contact Training Facility for Required Reference Material

Suggested Texts

N/A

Recommend Resources

SkilledTradesBC www.skilledtradesbc.ca

WorkSafeBC www.worksafebc.com

Instructor Requirements

Occupation Qualification

The instructor must possess:

- A BC Certificate of Qualification preferably with a Red Seal Endorsement.
- Certificate of Qualification from another Canadian jurisdiction complete with Red Seal Endorsement only.

Work Experience

A minimum of 5 years of experience working in the industry as a journeyperson.

Instructional Experience and Education

It is preferred that the instructor also possesses one of the following:

- An Instructors Diploma or equivalent
- A Bachelor's degree in Education
- A Master's degree in Education

Appendices

**Appendix A
Acronyms**

ASTM	American Society of Testing and Materials
FLRA	Field level risk assessment
GFCI	Ground fault circuit interrupter
LEED	Leadership in Energy and Environmental Design
MSDS	Material safety data sheet
MSI	Musculoskeletal injury
PPE	Personal protective equipment
PVC	Polyvinyl chloride
T&M	Time and material sheets
VCT	Vinyl composite tiles
WHMIS	Workplace Hazardous Materials Information System

Appendix B

Summary of Achievement Criteria

Achievement Criteria are included for competencies that require a practical assessment. The intent of including Achievement Criteria in the Program Outline is to ensure consistency in training across the many training institutions in British Columbia. Their purpose is to reinforce the theory and to provide a mechanism for evaluation of the learner's ability to apply the theory to practice. It is important that these performances be observable and measurable and that they reflect the skills spelled out in the competency. The conditions under which these performances will be observed and measured must be clear to the learner as well as the criteria by which the learner will be evaluated. The learner must also be given the evaluation criteria.

The performance spelled out in the Achievement Criteria is a suggested performance and is not meant to stifle flexibility of delivery. Training providers are welcome to substitute other practical performances that measure similar skills and attainment of the competency. Multiple performances may also be used to replace individual performances where appropriate.

The following tables summarize the practical assessments for each level. **For details, please refer to the Achievement Criteria following the competency in the Program Content section.**

FLOORCOVERING INSTALLER – LEVEL 1 SUMMARY OF ACHIEVEMENT CRITERIA	
SUBJECT COMPETENCY	ACHIEVEMENT CRITERIA TASK
D2 Assess floor and sub-floor conditions and deficiencies	The learner will be able to prepare a subfloor
E4 Layout carpet	The learner will be able to measure and create a rough drawing to estimate materials required
E6 Install carpet by glue-down method	The learner will be able to install carpet by direct glue-down method

FLOORCOVERING INSTALLER – LEVEL 2 SUMMARY OF ACHIEVEMENT CRITERIA	
SUBJECT COMPETENCY	ACHIEVEMENT CRITERIA TASK
D2 Assess floor and sub-floor conditions and deficiencies	The learner will be able to apply embossing levelers
E5 Install carpet by conventional method	The learner will be able to install carpet by conventional method including carpet cushioning and finishing seams
F2 Install resilient sheet goods	The learner will be able to install resilient sheet goods
F5 Repair resilient floors	The learner will be able to repair resilient floors
F6 Layout the resilient tile	The learner will be able to layout an area for resilient tile
F7 Install resilient tile	The learner will be able to install resilient tile
F12 Install resilient transitions, trims and bases	The learner will be able to install resilient wall base

FLOORCOVERING INSTALLER – LEVEL 3 SUMMARY OF ACHIEVEMENT CRITERIA	
SUBJECT COMPETENCY	ACHIEVEMENT CRITERIA TASK
E5 Install carpet by conventional method	The learner will be able to install patterned carpet with a boarder
E10 Install carpet on stairs	The learner will be able to install conventional stair carpet
E11 Repair carpet	The learner will be able to repair carpet damage
F4 Complete seams in resilient sheet goods	The learner will be able to complete seams in resilient sheet goods using heat welding
F8 Install resilient material on stairs	The learner will be able to install resilient stringers, treads and risers
F9 Install flash coving	The learner will be able to install flash coving
F10 Install rubber sheet and tile	The learner will be able to install rubber resilient floor
F12 Install resilient transitions, trims and bases	The learner will be able to install resilient wall bases