

**NOVA SCOTIA
RESIDENTIAL CONSTRUCTION SITE
MANAGER**

COMPETENCY OUTLINE

APPROVED BY INDUSTRY

MARCH 2016

**Developed by:
North Pacific Training & Performance Inc.**



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Acknowledgements

The Competency Outline was prepared with the advice and direction of an Industry Subject Matter Expert Committee. Members include:

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How to Use this Document

This Competency Outline document includes the following sections:

- OAC – This section lists the competencies that the industry has defined as representing the scope of the occupation. Challengers must demonstrate these competencies in order to challenge the program.
- Competency Outline – This section defines the learning tasks and high level content that is included in the scope for each competency. Challengers can use this information to check program content areas against their own knowledge and skill levels.

Occupational Analysis Chart

RESIDENTIAL CONSTRUCTION SITE MANAGER

Apply Regulations and Safe Work Practices A	Locate and Apply Building Codes and By-laws A1	Locate and Apply Safety Regulations and Standards A2	Locate and Apply Site Safety Practices A3	Use Tools and Resources A4		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use Documentation and Organizational Skills B	Interpret Plans and Specifications B1	Review Construction File B2	Perform Occupational Mathematics B3	Apply Record Keeping Practices B4	Work with Others B5	Organize Work B6
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspect Excavation and Foundation C	Review Hazard Assessments B7	Identify Principles of Building Envelope Design B8	Apply Company Specific Change Order Processes B9			
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Verify Framing Work D	Perform Lot Inspection C1	Plan Excavation C2	Verify Work of Other Trades or Occupations C3	Complete Footing Check C4	Inspect Foundation Work C5	Inspect Pre-backfill Work C6
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Verify Framing Work D	Prepare the Site for Framing D1	Verify Subfloor Framing D2	Verify Wall Framing D3	Verify Roofing Structure D4	Verify Windows and Doors Installation D5	Verify Stair Framing D6
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Inspect Exterior Finishes E	Inspect Roofing Systems E1 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Inspect Exterior Barrier(s) Installation E2 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Inspect Facia and Soffit Installation E3 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Inspect Siding Installation E4 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Inspect Brick and Stone Installation E5 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Inspect Eavestroughs and Downspouts Installation E6 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	Verify Stair and Deck Construction E7 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>					
Verify Electrical and Mechanical Systems F	Conduct Planning Meeting(s) with Electrical, Mechanical and Other Contractors F1 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Verify HVAC Rough-In Systems F2 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Verify Plumbing Rough-In Systems F3 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Verify Electrical Rough-In Systems F4 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Verify Other Rough-In Systems F5 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Inspect Interior Finishes G	Inspect Concrete Flatwork G1 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Verify Insulation Installation G2 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Verify Air and Vapour Barrier(s) Installation G3 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Inspect Drywall Installation G4 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Inspect Finish Carpentry G5 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Inspect Painting G6 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	Inspect Flooring and Wall Finishes Installation G7 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>					
Verify of Inspect Other Interior Finishing Work G8 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						
Coordinate Homebuyer Possession H	Monitor Possession Readiness H1 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Conduct Pre-possession Walkthrough H2 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Complete the Possession Process H3 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			

Competency Outline Residential Construction Site Manager

Line (GAC): A APPLY REGULATIONS AND SAFE WORK PRACTICES

Competency: A1 Locate and Apply Building Code and By-laws

LEARNING TASKS		CONTENT
1.	Apply provincial building code.	<ul style="list-style-type: none">• NS Building Code Regulations• NS Fire Code Regulations
2.	Apply local by-laws.	<ul style="list-style-type: none">• Regional municipality by-laws• Building permits• Other permits• Types of inspections• Building by-laws

Line (GAC): A APPLY REGULATIONS AND SAFE WORK PRACTICES

Competency: A2 Locate and Apply Safety Regulations and Standards

LEARNING TASKS		CONTENT
1.	Apply legal and regulatory regulations and standards for a safe residential construction site.	<ul style="list-style-type: none">• WHMIS• OHS• Hazardous materials• Labour and human rights• Workers Compensation Act
2.	Monitor and enforce compliance with safety regulations and standards for each occupation or trade working on the residential construction site.	<ul style="list-style-type: none">• Occupation or trade safety rules• Liability implications and associated risks for Prime Contractors• Unsafe practices and infractions

Line (GAC): A APPLY REGULATIONS AND SAFE WORK PRACTICES

Competency: A3 Locate and Apply Site Safety Practices

LEARNING TASKS		CONTENT
1.	Monitor all workers re use appropriate Personal Protective Equipment (PPE) for hazards unique to their occupation or trade.	<ul style="list-style-type: none"> • Hard hat (Electrically rated hard hats) • Steel-toed boots (CSA work boots with the green triangle patch and OHM symbol) • Gloves • Eye protection • High visibility vest • Hearing protection • Working at heights
2.	Use Personal Protective Equipment (PPE).	<ul style="list-style-type: none"> • Hard hat (Electrically rated hard hats) • Steel-toed boots (CSA work boots with the green triangle patch and OHM symbol) • Gloves • Eye protection • High visibility vest
3.	Apply company-specific policies and procedures related to safe operation at the worksite.	<ul style="list-style-type: none"> • Company-specific safety policies and procedures • Manufacturer and supplier documentation • Incident investigation
4.	Apply industry best practices related to safe operation at the worksite.	<ul style="list-style-type: none"> • Industry best practices

Line (GAC): A APPLY REGULATIONS AND SAFE WORK PRACTICES

Competency: A4 Use Tools and Resources

LEARNING TASKS		CONTENT
1.	Select and use power tools.	<ul style="list-style-type: none"> • Types of power tools <ul style="list-style-type: none"> ○ Drills ○ Screw guns ○ Pneumatic tools, etc. • Safe work practices • Maintenance and storage of power tools
2.	Select and use hand tools.	<ul style="list-style-type: none"> • Types of hand tools <ul style="list-style-type: none"> ○ Measuring ○ Testing ○ Layout ○ Levelling and plumbing, etc. • Safe work practices • Maintenance and storage of hand tools
3.	Maintain a safe work environment when working inside the vehicle (cab).	<ul style="list-style-type: none"> • Good housekeeping/cleanliness • Organization, for example: <ul style="list-style-type: none"> ○ Cell phone ○ Computer ○ Digital camera ○ Daily log ○ Construction file ○ Locking tool box ○ Winter gear ○ Rubber boots ○ Extra coveralls • Maintenance schedule
4.	Ensure safe use of cell phone at the worksite.	<ul style="list-style-type: none"> • Communication etiquette • Rules and regulations • Company policies
5.	Use safe work practices when working with ladders, scaffolds and platforms.	<ul style="list-style-type: none"> • Safe handling and use of step ladders • Safe handling and use of extension ladders • Safe work practices in installation and use of scaffolds and platforms
6.	Protect workers and public from potential hazards on a construction site.	<ul style="list-style-type: none"> • Safe access and egress to the site • Use of temporary fencing

Line (GAC): APPLY REGULATIONS AND SAFE WORK PRACTICES
Assessment Guide

<p>Assessment Objective(s)</p>	<p>To be recognized as a competent RCSM in Nova Scotia, a candidate will demonstrate the following Knowledge and Practical Abilities:</p> <p>Knowledge:</p> <ol style="list-style-type: none"> 1. Identify the NS Building Code and NS Fire Code. (A1-1) 2. Identify regional municipality by-laws, permits and inspections. (A1-2) 3. Describe legal and regulatory regulations and standards for a safe residential construction site such as WHMIS, OHS, etc. (A2-1) 4. Describe occupation or trade safety rules and standards. (A2-2) 5. Describe the use of Personal Protective Equipment (PPE). (A3-1 and A3-2) 6. Describe site safety procedures and practices. (A3-3) 7. Describe the use of various types of power tools. (A4-1) 8. Describe the use of various types of hand tools. (A4-2) 9. Describe good housekeeping practices and maintenance schedules when working inside the vehicle cab. (A4-3) 10. Describe the safe use of cell phone at the worksite. (A4-4) 11. Describe safe handling and use of step ladders, extension ladders, scaffolds and platforms. (A4-5) <p>Practical:</p> <ol style="list-style-type: none"> 1. Apply provincial building code. (A1-1) 2. Apply local by-laws.(A1-2) 3. Apply legal and regulatory regulations and standards for a safe residential construction site. (A2-1) 4. Monitor and enforce compliance with safety regulations and standards for each occupation or trade working on the residential construction site. (A2-2) 5. Monitor all workers re use appropriate Personal Protective Equipment (PPE) (A3-1) 6. Use Personal Protective Equipment (PPE). (A3-2) 7. Apply company-specific policies and procedures related to safe operation at the worksite. (A3-3) 8. Apply industry best practices related to safe operation at the worksite. (A3-4) 9. Select and use power tools. (A4-1) 10. Select and use hand tools. (A4-2) 11. Maintain a safe work environment when working inside the vehicle (cab). (A4-3) 12. Ensure safe use of cell phone at the worksite. (A4-4) 13. Use safe work practices when working with ladders, scaffolds and platforms. (A4-5) 14. Protect workers and public from potential hazards on a construction site. (A4-6)
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<p>Assessment Methods</p>	<p>The following assessment tools and processes will assess this GAC:</p> <p>Portfolio Review:</p> <ul style="list-style-type: none"> • A review by one or more trained Assessors of documentary evidence of competence, submitted by the candidate including work files, record books, work logs, references, etc. • Provides an opportunity, at a distance, to identify areas of competence and to identify where further evidence is required. <p>Competency Interview:</p> <ul style="list-style-type: none"> • An structured interview conducted with one or more trained Assessors • Verbally explore the competencies and tasks within the GAC, both Knowledge and Practical, to establish areas of competence and to identify where further evidence is required. <p>Written assessment:</p> <ul style="list-style-type: none"> • A multiple-choice written examination based on all identified Knowledge abilities • A minimum of 70% must be answered correctly <p>Practical Assessment:</p> <ul style="list-style-type: none"> • Adjudicated performance of selected Practical tasks / activities by a trained Assessor • A minimum of 70% of tasks / activities must meet specified performance criteria
<p>Assessment Variables</p>	<p>The range of context and conditions in the work environment that impact performance and assessment of competency, including:</p> <ul style="list-style-type: none"> • local environmental conditions • established local building practices • variations in building codes • local interpretations of building code • variations in local bylaws and regulations • availability of materials • variations in acceptable construction details • variations in acceptable construction practice between various trade partners • variations in company-specific policies and procedures

Line (GAC): B USE DOCUMENTATION AND ORGANIZATIONAL SKILLS

Competency: B1 Interpret Plans and Specifications

LEARNING TASKS		CONTENT
1.	Read and interpret blueprints for residential buildings.	<ul style="list-style-type: none"> • Types of views • Dimension • Elevation • Projection • Line • Section • Orientation • Scale
2.	Read and interpret symbols and abbreviations used in residential drawings.	<ul style="list-style-type: none"> • Types of symbols • Types of abbreviations
3.	Read and interpret plans that apply to residential construction.	<ul style="list-style-type: none"> • Plot plan • House plan
4.	Read and interpret drawings that apply to residential construction.	<ul style="list-style-type: none"> • Mechanical • Piping and plumbing • Structural • Electrical, etc.
5.	Read and interpret details and specifications.	<ul style="list-style-type: none"> • Scope of work • Specifications for each construction activity <ul style="list-style-type: none"> ○ Details of the materials and installation requirements ○ Components in plans and specifications, such as:: <ul style="list-style-type: none"> ▪ Foundation ▪ Framing ▪ Mechanical ▪ Electrical ▪ Interior finish, etc. • Notes on various plans • Change orders • Construction schedules including interior and exterior finish schedules

Line (GAC): B USE DOCUMENTATION AND ORGANIZATIONAL SKILLS

Competency: B2 Review Construction File

LEARNING TASKS		CONTENT
1.	Organize and maintain the construction file for assigned residential construction projects.	<ul style="list-style-type: none"> • Lot inspection sheets • Plot plan • Land developer information • Detailed specifications • Change orders • Exterior and Interior finish schedules • Permits • Construction schedule • Blueprints • Scope of work • Budget • Purchase order(s) • Daily log • Records <ul style="list-style-type: none"> ○ Progress ○ Safety ○ Deficiencies ○ Inventories etc.
2.	Identify errors and omissions in construction file documentation prior to construction and implement appropriate resolutions.	<ul style="list-style-type: none"> • Errors and omissions
3.	Read and interpret various documents in the construction file.	<ul style="list-style-type: none"> • Technical documents • Contractual documents • Legal documents
4.	Review the construction file periodically to anticipate critical issues.	<ul style="list-style-type: none"> • Circumstances that require special attention • Built-in work compliance with the construction file • Delays • Budget overruns, etc.

Line (GAC): B USE DOCUMENTATION AND ORGANIZATIONAL SKILLS

Competency: B3 Perform Occupational Mathematics

LEARNING TASKS		CONTENT
1.	Perform calculations regarding material and labour.	<ul style="list-style-type: none">• Calculate area, perimeter and volume• Convert to and from Metric and Imperial<ul style="list-style-type: none">○ Lengths○ Areas○ Volumes○ Weights○ Temperatures○ Basic arithmetic functions• Convert fractions• Calculate ratios, etc.
2.	Review contractor invoices.	<ul style="list-style-type: none">• Invoice management system• Application of occupational math

Line (GAC): B USE DOCUMENTATION AND ORGANIZATIONAL SKILLS

Competency: B4 Apply Record Keeping Practices

LEARNING TASKS		CONTENT
1.	Document construction progress, deficiencies, site safety and environmental issues.	<ul style="list-style-type: none"> • Checklists • Standardized forms • Photographs • Daily logs • Inventory documentation for materials, equipment and resources • Electronic and hard copy formats of documentation
2.	Complete inventory documentation for materials, equipment and resources for a residential construction project.	<ul style="list-style-type: none"> • Inventory management system <ul style="list-style-type: none"> ○ Documentary ○ Electronic
3.	Ensure that required permits have been issued and closed for a residential construction project.	<ul style="list-style-type: none"> • Types of permits
4.	Maintain administrative files for assigned residential construction projects.	<ul style="list-style-type: none"> • OH&S documentation • Environmental issues • Insurance • Mortgages • Third party warranties • Change orders • Back charges • Budgets • Purchase orders • Invoices • Back orders • Possession date confirmations • Outstanding seasonal items, etc.

Line (GAC): B USE DOCUMENTATION AND ORGANIZATIONAL SKILLS

Competency: B5 Work with Others

LEARNING TASKS		CONTENT
1.	Demonstrate professional written and verbal communication when corresponding with stakeholders.	<ul style="list-style-type: none"> • Appropriate language and grammar for the situation • Types of stakeholders, such as: <ul style="list-style-type: none"> ○ Clients ○ Subcontractors ○ Suppliers ○ Colleagues ○ Inspectors ○ Building officials ○ Code officers ○ Utilities ○ Regulators ○ Other stakeholders • Appropriate and timely responses to correspondence, requests, notifications, compliances, invoices, etc. • Direction and instructions to ensure compliance with contracts, scopes of work and regulations
2.	Ensure seamless coordination of work between various occupations or trades involved in the construction process.	<ul style="list-style-type: none"> • Various occupations or trades involved in construction, such as: <ul style="list-style-type: none"> ○ Surveyor ○ Excavator ○ Soils engineer ○ Utilities locate services ○ Plumber ○ Electrician ○ Foundation worker ○ Concrete placement/pumper truck ○ Foundation damp proofing and weeping tile contractor ○ Backfilling and rough grading contractor, etc. • Potential conflicts between various occupations or trades that need to be addressed

Line (GAC): B USE DOCUMENTATION AND ORGANIZATIONAL SKILLS

Competency: B6 Organize Work

LEARNING TASKS		CONTENT
1.	Explain the process of assembling construction components into a completed residential building.	<ul style="list-style-type: none"> • Planning activities involved in each stage of construction • Sequence of construction • Resource requirements for a residential building
2.	Identify lead time requirements for materials, labour and inspections.	<ul style="list-style-type: none"> • Booking or lead time required for each activity, material, labour and inspections • Number of days to complete each activity • The total number of days for the project, etc.
3.	Adjust construction project planning in accordance with project management principles.	<ul style="list-style-type: none"> • Basic project management principles • Timeline contingencies for a residential construction project including seasonal items • Adjusting for the impacts of project schedule changes
4.	Schedule work based on critical path activities necessary to maintain the schedule target dates for completion.	<ul style="list-style-type: none"> • Basics of scheduling <ul style="list-style-type: none"> ○ Lead time notification ○ Delay contingencies ○ Critical and non-critical paths ○ Estimation of occupancy dates ○ Coordination of various occupations or trades
5.	Monitor and document project progress on a periodic basis.	<ul style="list-style-type: none"> • Quality of workmanship • Budget • Timelines • Materials and resources
6.	Coordinate project activities with various consultants.	<ul style="list-style-type: none"> • Role(s) of consultants (i.e.: engineers, architects and other specialists) • Requirements for reviews and on-site inspections at particular intervals

Line (GAC): B USE DOCUMENTATION AND ORGANIZATIONAL SKILLS

Competency: B7 Review Hazard Assessments

LEARNING TASKS		CONTENT
1.	Identify hazards and risks unique to the occupation or trade.	<ul style="list-style-type: none"> • General hazards, such as: <ul style="list-style-type: none"> ○ Working at heights <ul style="list-style-type: none"> ▪ Scaffold and ladder safety ▪ Fall protection hazards ▪ Steep roofs hazards ▪ Material loading and placement hazards • Concrete hazards • Enclosed space and toxin accumulation hazards • Drywall hazards • Weather-related hazards such as: <ul style="list-style-type: none"> ○ Slipping hazards ○ Freezing injuries • Balcony barrier protection issues, etc.
2.	Review job hazard assessments on a residential construction site to prevent accidents or injuries arising from hazards.	<ul style="list-style-type: none"> • Site hazard assessments, such as: <ul style="list-style-type: none"> ○ General hazard assessment ○ Enclosed space and toxin accumulation hazard assessment ○ Balcony barrier protection issues assessment ○ Extreme weather hazard assessment • Hazard assessments conducted by specific occupation or trade, such as: <ul style="list-style-type: none"> ○ Excavation contractor ○ Concrete contractor ○ Drywall contractor ○ Foundation contractor ○ Plumbing contractor, etc. • Identification of known risks • Plans of action to address hazards

Line (GAC): B USE DOCUMENTATION AND ORGANIZATIONAL SKILLS

Competency: B8 Identify Principles of Building Envelope Design

LEARNING TASKS		CONTENT
1.	Describe the house as a system and the importance of selection and proper assembly of housing components.	<ul style="list-style-type: none"> • Basic building science principles • Impact of principles on design and construction of residential buildings • House as a system concept
2.	Describe the technical details of common residential building envelopes.	<ul style="list-style-type: none"> • Common building envelope components • Building envelope components in plans, specifications and details • Components that require special attention during construction to ensure an effective building envelope (windows, doors, trim details and flashing)
3.	Ensure that building envelope design principles are applied in the construction of residential buildings.	<ul style="list-style-type: none"> • Principles of sound transfer • Principles of air and moisture movement • Principles of heat transfer • Management and control of sound, air and moisture <ul style="list-style-type: none"> ○ Insulation ○ Air barriers ○ Vapour barriers ○ Water barriers

Line (GAC): B USE DOCUMENTATION AND ORGANIZATIONAL SKILLS

Competency: B9 Apply Company-Specific Change Order Processes

LEARNING TASKS		CONTENT
1.	Review and apply company-specific change order processes.	<ul style="list-style-type: none">• Types of change orders or addendums<ul style="list-style-type: none">○ Impact on plan, budget and timeline○ Impact on the work of other occupations or trades

Line (GAC) B: USE DOCUMENTATION AND ORGANIZATIONAL SKILLS ASSESSMENT GUIDE

<p>Assessment Objective(s)</p>	<p>To be recognized as a competent RCSM in Nova Scotia, a candidate will demonstrate the following Knowledge and Practical Abilities:</p> <p>Knowledge:</p> <ol style="list-style-type: none"> 1. Describe different types of blueprints that apply to residential construction. (B1-1) 2. Recognise commonly used symbols and abbreviations. (B1-2) 3. Describe different types of plans that apply to residential construction. (B1-3) 4. Describe different types of drawings that apply to residential construction. (B1-4) 5. Describe different types of details and specifications that apply to residential construction. (B1-5) 6. Describe various types of documents included in a construction file for assigned residential construction projects. (B2-1) 7. Describe inventory management system for materials, equipment and resources for a residential construction project. (B4-2) 8. Explain the process of assembling construction components into a completed residential building. (B6-1) 9. Identify lead time requirements for materials, labour and inspections. (B6-2) 10. Describe basic project management principles and timeline contingencies for a residential construction project. (B6-3) 11. Identify hazards and risks unique to the occupation or trade. (B7-1) 12. Describe the house as a system and the importance of selection and proper assembly of housing components. (B8-1) 13. Describe the technical details of common residential building envelopes. (B8-2) <p>Practical:</p> <ol style="list-style-type: none"> 1. Read and interpret blueprints for residential buildings. (B1-1) 2. Read and interpret symbols and abbreviations used in residential drawings. (B1-2) 3. Read and interpret plans that apply to residential construction. (B1-3) 4. Read and interpret details and specifications for each construction activity. (B1-5) 5. Organize and maintain the construction file for assigned residential construction projects. (B2-1) 6. Read and interpret various documents in the construction file. (B2-3) 7. Review the construction file periodically to anticipate critical issues. (B2-4) 8. Perform calculations regarding material and labour. (B3-1)
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	<ol style="list-style-type: none"> 9. Document construction progress, deficiencies, site safety and environmental issues. (B4-1) 10. Complete inventory documentation for materials, equipment and resources for a residential construction project. (B4-2) 11. Ensure that required permits have been issued and closed for a residential construction project. (B4-3) 12. Maintain administrative files for assigned residential construction projects. (B4-4) 13. Demonstrate professional written and verbal communication when corresponding with stakeholders. (B5-1) 14. Ensure seamless coordination of work between various occupations or trades involved in the construction process. (B5-2) 15. Schedule work based on critical path activities necessary to maintain the schedule target dates for completion. (B6-4) 16. Monitor and document project progress on a periodic basis. (B6-5) 17. Coordinate project activities with various consultants. (B6-6) 18. Review job hazard assessments on a residential construction site to prevent accidents or injuries arising from hazards. (B7-2) 19. Ensure that building envelope design principles are applied in the construction of residential buildings. (B8-3) 20. Review and apply company-specific change order processes. (B9-1)
<p>Assessment Methods</p>	<p>The following assessment tools and processes will assess this GAC:</p> <p>Portfolio Review:</p> <ul style="list-style-type: none"> • A review by one or more trained Assessors of documentary evidence of competence, submitted by the candidate including work files, record books, work logs, references, etc. • Provides an opportunity, at a distance, to identify areas of competence and to identify where further evidence is required. <p>Competency Interview:</p> <ul style="list-style-type: none"> • An structured interview conducted with one or more trained Assessors • Verbally explore the competencies and tasks within the GAC, both Knowledge and Practical, to establish areas of competence and to identify where further evidence is required. <p>Written assessment:</p> <ul style="list-style-type: none"> • A multiple-choice written examination based on all identified Knowledge abilities • A minimum of 70% must be answered correctly <p>Practical Assessment:</p> <ul style="list-style-type: none"> • Adjudicated performance of selected Practical tasks / activities by a trained Assessor • A minimum of 70% of tasks / activities must meet specified performance criteria

Assessment Variables	<p>The range of context and conditions in the work environment that impact performance and assessment of competency, including:</p> <ul style="list-style-type: none">• local environmental conditions• established local building practices• variations in building codes• local interpretations of building code• variations in local bylaws and regulations• availability of materials• variations in acceptable construction details• variations in acceptable construction practice between various trade• variations in company-specific policies and procedures partners
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Line (GAC): C INSPECT EXCAVATION AND FOUNDATION

Competency: C1 Perform Lot Inspection

LEARNING TASKS		CONTENT
1.	Inspect the physical condition of the lot to assure the lot is ready for construction.	<ul style="list-style-type: none"> • Pre-existing damage, including any damage to: <ul style="list-style-type: none"> ○ Street ○ Roads ○ Sidewalks ○ Public furniture ○ Streetlights ○ Signs, etc. • Drainage issues • Fill material balance of the lot • Trees or other vegetation • Use of documents: <ul style="list-style-type: none"> ○ Plot plan ○ Lot grading plan ○ Foundation plan ○ Lot inspection checklist, etc.
2.	Referring to the plot plan, locate and inspect the utility connections and inspect for any damage.	<ul style="list-style-type: none"> • Utility locate services • Damage to water shut offs • Marking of utilities and easements

Line (GAC): C INSPECT EXCAVATION AND FOUNDATION

Competency: C2 Plan Excavation

LEARNING TASKS		CONTENT
1.	Describe excavation and backfill processes and issues to consider.	<ul style="list-style-type: none"> • Site Survey Plan • Surveying process • Survey measurements and marks
2.	Prepare the lot for excavation.	<ul style="list-style-type: none"> • Damage report • Removal of garbage and standing water • Installation or provision for temporary power and/or portable toilet • Site sign • Scheduling for contractors • Hazard assessment • Cold weather construction practices and safety considerations during excavation <ul style="list-style-type: none"> ○ Frost penetration
3.	Coordinate with the excavator to confirm the details of excavation.	<ul style="list-style-type: none"> • Plot plan • Lot grading plan • Move in and move out of heavy equipment • Creation of a ramp • Utility trench locations, widths, and depths, and rights of way • Location of sewer and water connections • Size of trench under the footing area • Gravel base and backfill of utility trenches • Location of gas, electric, and telephone and cable connections • Placement of excavated fill material • Procedures for unsuitable soils or conditions

Line (GAC): C INSPECT EXCAVATION AND FOUNDATION

Competency: C3 Verify Work of Other Occupation or Trades

LEARNING TASKS		CONTENT
1.	Verify Surveyor's work.	<ul style="list-style-type: none">• Location of stakes to the plot plan
2.	Verify Excavator's work.	<ul style="list-style-type: none">• Excavation of the foundation area and the utility trenches• Depth, level and location
3.	Verify Plumber's work.	<ul style="list-style-type: none">• Connection and placement of the utility lines in the trench• Plumbing trench inspection
4.	Verify Electrician's work.	<ul style="list-style-type: none">• Placement of electrical, telephone and cable lines in the specified conduits to the vicinity of the planned meter location

Line (GAC): C INSPECT EXCAVATION AND FOUNDATION

Competency: C4 Complete a Footing Check

LEARNING TASKS		CONTENT
1.	Describe the purpose of footings and the construction issues to be considered.	<ul style="list-style-type: none"> • Footing layout plans and specifications • Footing package
2.	Coordinate with the foundation contractor to confirm the details of the footing work.	<ul style="list-style-type: none"> • Job specifications for footing work • Plot plan • Lot grading plan • Location of piles or piers to support the deck or stairs based on house plans • Coordinate with plumbing and electrical contractors
3.	Complete a footing check to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Walk around the footings • Key specifications and dimensions • Document any alterations to footings • Top of footing elevation • Footing checklist

Line (GAC): C INSPECT EXCAVATION AND FOUNDATION

Competency: C5 Inspect Foundation Work

LEARNING TASKS		CONTENT
1.	Describe common residential foundation systems.	<ul style="list-style-type: none"> • Properties of soil • Construction techniques based on soil conditions • Types of residential foundation systems • Properties of concrete <ul style="list-style-type: none"> ○ Concrete types and strengths • Work with other occupations or trades during foundation work <ul style="list-style-type: none"> ○ Engineering professionals ○ Utility services, etc. • Foundation components in plans and specifications
2.	Coordinate the ordering and placement of concrete and foundation wall materials package.	<ul style="list-style-type: none"> • Purchase order for concrete • Concrete quality <ul style="list-style-type: none"> ○ Concrete specification ○ Concrete tests • Concrete placement • Foundation wall package
3.	Coordinate with the foundation contractor to confirm the details of the foundation work.	<ul style="list-style-type: none"> • Job specifications for foundation work • Plot and Foundation Plans • Foundation layout, such as: <ul style="list-style-type: none"> ○ Wall heights with top of wall calculations ○ Wall widths, resulting in snap-tie specs ○ Garage door buck elevation ○ Beam pockets ○ Grade beam details and elevations ○ Basement window placement ○ Sleeves for vents ○ Utility mast locations ○ Control joint locations, if required ○ Steel placement patterns ○ Corner pins in the footings for exterior edge of wall ○ Laser level benchmark and field practices ○ Electric meter and gas meter installation and placement

4.	Coordinate and monitor the concrete pour.	<ul style="list-style-type: none"> • Top of wall heights • Level and plumb around the perimeter of the foundation • Quality of pour • Quantity of pour • Continuous pour
5.	Complete a foundation wall inspection to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Foundation wall checklist • Foundation wall inspection <ul style="list-style-type: none"> ○ Cold pour joints or honeycombing ○ Level, plumb, square and straight • Key specifications and dimensions
6.	Review the plans and mark the foundation.	<ul style="list-style-type: none"> • Exterior markings, such as: <ul style="list-style-type: none"> ○ Job and municipal (street) address ○ Rough grading elevations ○ Electrical and gas meter locations ○ Precast step locations ○ Telephone and cable lines ○ Window well locations • Interior markings, such as: <ul style="list-style-type: none"> ○ Electrical panel location

Line (GAC): C INSPECT EXCAVATION AND FOUNDATION

Competency: C6 Inspect Pre-Backfill Work

LEARNING TASKS		CONTENT
1.	Describe common moisture barriers and water proofing systems and when they are required.	<ul style="list-style-type: none"> • Results of water seepage <ul style="list-style-type: none"> ○ Soil bearing failure ○ Structural failure of foundation • Prevention of water seepage • Damp proofing of soil <ul style="list-style-type: none"> ○ Water proofing • Management and drainage of ground water <ul style="list-style-type: none"> ○ Weeping tile system ○ Location of downspouts
2.	Coordinate with the damp proofing contractor to confirm the details of the work.	<ul style="list-style-type: none"> • Job specifications for damp proofing or water proofing • Grade plan
3.	Coordinate with the weeping tile contractor to confirm the details of the work.	<ul style="list-style-type: none"> • Job specifications for weeping tile work <ul style="list-style-type: none"> ○ Window wells (if required) • Grade plan
4.	Complete a weeping tile inspection to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Weeping tile checklist • Slope of the drainage tile from the high point to low point • Connection through the attached garage area • Appropriate gravel cover
5.	Coordinate with the municipality to schedule foundation inspection.	<ul style="list-style-type: none"> • Site inspection protocols • Key personnel involved, such as: <ul style="list-style-type: none"> ○ Building inspector ○ Other municipal officials • Required documentation <ul style="list-style-type: none"> ○ Construction file • Foundation inspection approval
6.	Conduct a pre-backfill inspection with the excavator to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Job specifications for backfill • Quantity and quality of backfill material • Placement of backfill material • Safety during backfilling • Rough grading of lot • Pre-backfill inspection checklist

Line (GAC) C: INSPECT EXCAVATION AND FOUNDATION ASSESSMENT GUIDE

<p>Assessment Objective(s)</p>	<p>To be recognized as a competent RCSM in Nova Scotia, a candidate will demonstrate the following Knowledge and Practical Abilities:</p> <p>Knowledge:</p> <ol style="list-style-type: none"> 1. Describe excavation and backfill processes and issues to consider. (C2-1) 2. Describe the purpose of footings and the construction issues to be considered. (C4-1) 3. Describe common residential foundation systems. (C5-1) 4. Describe foundation markings. (C5-6) 5. Describe common moisture barriers and water proofing systems and when they are required. (C6-1) <p>Practical:</p> <ol style="list-style-type: none"> 1. Inspect the physical condition of the lot to ensure the lot is ready for construction. (C1-1) 2. Referring to the plot plan, locate and inspect the utility connections and inspect for any damage. (C1-2) 3. Prepare the lot for excavation. (C2-2) 4. Coordinate with the excavator to confirm the details of excavation. (C2-3) 5. Verify Surveyor's work. (C3-1) 6. Verify Excavator's work. (C3-2) 7. Verify Plumber's work. (C3-3) 8. Verify Electrician's work. (C3-4) 9. Coordinate with the foundation contractor to confirm the details of the footing work. (C4-2) 10. Complete a footing check to confirm all key specifications have been met. (C4-3) 11. Coordinate the ordering and placement of concrete and foundation wall materials package. (C5-2) 12. Coordinate with the foundation contractor to confirm the details of the foundation work. (C5-3) 13. Coordinate and monitor the concrete pour. (C5-4) 14. Complete a foundation wall inspection to confirm all key specifications have been met. (C5-5) 15. Review the plans and mark the foundation. (C5-6) 16. Coordinate with the damp proofing contractor to confirm the details of the work. (C6-2) 17. Coordinate with the weeping tile contractor to confirm the details of the work. (C6-3) 18. Complete a weeping tile inspection to confirm all key specifications have been met. (C6-4)
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	<p>19. Coordinate with the municipality to schedule foundation inspection. (C6-5)</p> <p>20. Conduct a pre-backfill inspection with the excavator to confirm all key specifications have been met. (C6-6)</p>
<p>Assessment Methods</p>	<p>The following assessment tools and processes will assess this GAC:</p> <p>Portfolio Review:</p> <ul style="list-style-type: none"> • A review by one or more trained Assessors of documentary evidence of competence, submitted by the candidate including work files, record books, work logs, references, etc. • Provides an opportunity, at a distance, to identify areas of competence and to identify where further evidence is required. <p>Competency Interview:</p> <ul style="list-style-type: none"> • An structured interview conducted with one or more trained Assessors • Verbally explore the competencies and tasks within the GAC, both Knowledge and Practical, to establish areas of competence and to identify where further evidence is required. <p>Written assessment:</p> <ul style="list-style-type: none"> • A multiple-choice written examination based on all identified Knowledge abilities • A minimum of 70% must be answered correctly <p>Practical Assessment:</p> <ul style="list-style-type: none"> • Adjudicated performance of selected Practical tasks / activities by a trained Assessor • A minimum of 70% of tasks / activities must meet specified performance criteria •
<p>Assessment Variables</p>	<p>The range of context and conditions in the work environment that impact performance and assessment of competency, including:</p> <ul style="list-style-type: none"> • local environmental conditions • established local building practices • variations in building codes • local interpretations of building code • variations in local bylaws and regulations • availability of materials • variations in acceptable construction details • variations in acceptable construction practice between various trade partners • variations in company-specific policies and procedures

Line (GAC): D VERIFY FRAMING WORK

Competency: D1 Prepare the Site for Framing

LEARNING TASKS		CONTENT
1.	Describe the technical details of residential framing design and construction.	<ul style="list-style-type: none"> • Design and construction of residential framing systems <ul style="list-style-type: none"> ○ Subfloor ○ Walls ○ Roof • Other occupations or trades involved in framing work <ul style="list-style-type: none"> ○ Engineering professionals ○ Utility services, etc. • Framing construction considerations, such as: <ul style="list-style-type: none"> ○ Building envelope ○ Provision for mechanical systems, fixtures and interior finishes ○ Building code • Framing and structure components in plans and specifications
2.	Describe the loads and forces acting on a residential building and their impact on framing design and construction.	<ul style="list-style-type: none"> • Dead loads, such as: <ul style="list-style-type: none"> ○ Wood framing ○ Insulation and drywall ○ Roofing and siding ○ Point loads ○ Mechanical systems ○ Windows and doors ○ Cabinets ○ Flooring and trim ○ Any other fixed items, etc. • Live loads, such as: <ul style="list-style-type: none"> ○ Wind ○ Snow ○ Furniture ○ People • Forces, such as: <ul style="list-style-type: none"> ○ Compression, tension, torsion, shear ○ Hydrostatic forces ○ Soil gas pressure ○ Climatic forces such as sun, UV rays, thermal gain, expansion ○ Temperature and pressure differences ○ Wind ○ Wind driven rain and snow

3.	Coordinate the booking and ordering of framing crew and materials.	<ul style="list-style-type: none"> • Purchase order(s) • Delivery date for framing materials as per: <ul style="list-style-type: none"> ○ Appropriate lead times ○ Based on construction progress • Framing material safe placement on site
4.	Coordinate with the framing contractor to confirm the details of the framing work.	<ul style="list-style-type: none"> • Job specifications for framing, such as: <ul style="list-style-type: none"> ○ Work contract with the framing contractor, along with a scope of work specifying deliverables ○ House plans and engineer drawings (floors, trusses, etc.) ○ Approved layout with any special framing features ○ Specifications for the job number, etc.
5.	Inspect the site to ensure it is ready for framing.	<ul style="list-style-type: none"> • Site preparation for framing, such as: <ul style="list-style-type: none"> ○ Excavation around the foundation walls backfilled ○ Rough grade of site completed ○ Electrical services available for tools ○ Garbage container and bathroom facilities available ○ Job number, address, and building permit posted on the foundation ○ Framing materials for the subfloor delivered, etc.

Line (GAC): D VERIFY FRAMING WORK

Competency: D2 Verify Subfloor Framing

LEARNING TASKS		CONTENT
1.	Describe the technical details of subfloor design and construction.	<ul style="list-style-type: none"> • Components of subfloor <ul style="list-style-type: none"> ○ Foundation walls ○ Beams ○ Joists ○ Sheathing • Design for stairs • Nails, adhesives and screws used for construction • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Verify subfloor framing to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Subfloor framing checklist • Subfloor framing inspection <ul style="list-style-type: none"> ○ Subfloor is complete ○ Load points ○ Subfloor meets the key inspection requirements • Key specifications and dimensions

Line (GAC): D VERIFY FRAMING WORK

Competency: D3 Verify Wall Framing

LEARNING TASKS		CONTENT
1.	Describe the technical details of wall framing design and construction.	<ul style="list-style-type: none"> • Components of wall framing, such as: <ul style="list-style-type: none"> ○ Studs ○ Top and bottom plates ○ Blocking (if required) ○ Sheathing for exterior wall ○ Columns ○ Beams (if required) ○ Backing (between joist and stud spaces) ○ Rough opening in walls • Nails and screws used for construction • Structural requirements of each wall type and variation • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Verify wall framing to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Wall framing checklist • Wall framing inspection, such as: <ul style="list-style-type: none"> ○ Wall framing is complete, level, and square ○ On-centre spacing ○ Wall framing meets the key inspection requirements • Key specifications and dimensions

Line (GAC): D VERIFY FRAMING WORK

Competency: D4 Verify Roofing Structure

LEARNING TASKS		CONTENT
1.	Describe the technical details of roofing design and construction.	<ul style="list-style-type: none"> • Functions of roofs • Types of roofs • Roof layout • Types of roof slopes or pitches • Components of roofing structure, such as: <ul style="list-style-type: none"> ○ Trusses ○ Blocking ○ Lookouts ○ Fascia board ○ Strapping ○ Sheathing • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Verify roofing structure to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Roofing structure checklist • Roofing structure inspection, such as: <ul style="list-style-type: none"> ○ Installation of building membrane where horizontal framing intersects with vertical framing ○ Installation of skylights ○ Installation of plumbing walls ○ Installation of vapour barriers (if applicable) ○ Installation of insulation ○ Installation of attic insulation stops ○ Preparation of rough openings • Key specifications and dimensions

Line (GAC): D VERIFY FRAMING WORK

Competency: D5 Verify Windows and Doors Installation

LEARNING TASKS		CONTENT
1.	Describe the technical details of window design and installation.	<ul style="list-style-type: none"> • Types of windows <ul style="list-style-type: none"> ○ Fixed ○ Venting (various styles) • Window shapes, materials and glass options • Components of window structure: <ul style="list-style-type: none"> ○ Frame (glazing, mullion, transom, jamb) ○ Sash (stiles, rails, screen, hardware) • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Describe the technical details of door design and installation.	<ul style="list-style-type: none"> • Types of doors <ul style="list-style-type: none"> ○ Interior ○ Exterior • Door shapes and materials • Components of door structure: <ul style="list-style-type: none"> ○ Head ○ Sill ○ Jamb ○ Hardware • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
3.	Verify windows and doors installation to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Windows and doors installation checklist • Windows and doors installation inspection, such as: <ul style="list-style-type: none"> ○ Correct location(s) ○ Safe installation ○ Operational ○ Door jambs covered during construction ○ No damage to doors and windows due to traffic of materials and people ○ Prevention of structural damage to doors and windows due to water and moisture ○ Installation of construction locks for additional security • Key specifications and dimensions

Line (GAC): D VERIFY FRAMING WORK

Competency: D6 Verify Stair Framing

LEARNING TASKS		CONTENT
1.	Describe the technical details of stair framing and construction.	<ul style="list-style-type: none"> • Types of stairs, such as: <ul style="list-style-type: none"> ○ Open ○ Closed ○ Straight ○ Winders ○ Curved ○ Landings ○ U or L shapes, etc. • Stair calculations, such as: <ul style="list-style-type: none"> ○ Landing ○ Total rise ○ Total run ○ Line of travel ○ Headroom ○ Nosing and nosing line ○ Finished opening, etc. • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Verify stair framing to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Stair framing checklist • Stair framing inspection such as: <ul style="list-style-type: none"> ○ Correct location(s) ○ Safe installation ○ Stair calculations ○ Foundation extensions, piles or supporting brackets, etc. • Key specifications and dimensions

**Line (GAC) D: VERIFY FRAMING WORK
ASSESSMENT GUIDE**

<p>Assessment Objective(s)</p>	<p>To be recognized as a competent RCSM in Nova Scotia, a candidate will demonstrate the following Knowledge and Practical Abilities:</p> <p>Knowledge:</p> <ol style="list-style-type: none"> 1. Describe the technical details of residential framing design and construction. (D1-1) 2. Describe the loads and forces acting on a residential building and their impact on framing design and construction. (D1-2) 3. Describe the technical details of subfloor design and construction. (D2-1) 4. Describe the technical details of wall framing design and construction. (D3-1) 5. Describe the technical details of roofing design and construction. (D4-1) 6. Describe the technical details of window design and installation.(D5-1) 7. Describe the technical details of door design and installation. (D5-2) 8. Describe the technical details of stair framing and construction. (D6-1) <p>Practical:</p> <ol style="list-style-type: none"> 1. Coordinate the booking and ordering of framing crew and materials. (D1-3) 2. Coordinate with the framing contractor to confirm the details of the framing work. (D1-4) 3. Inspect the site to ensure it is ready for framing. (D1-5) 4. Verify subfloor framing to confirm all key specifications have been met. (D2-2) 5. Verify wall framing to confirm all key specifications have been met. (D3-2) 6. Verify roofing structure to confirm all key specifications have been met. (D4-2) 7. Verify windows and doors installation to confirm all key specifications have been met. (D5-3) 8. Verify stair framing to confirm all key specifications have been met. (D6-2)
<p>Assessment Methods</p>	<p>The following assessment tools and processes will assess this GAC:</p> <p>Portfolio Review:</p> <ul style="list-style-type: none"> • A review by one or more trained Assessors of documentary evidence of competence, submitted by the candidate including work files, record books, work logs, references, etc. • Provides an opportunity, at a distance, to identify areas of competence and to identify where further evidence is required.

	<p>Competency Interview:</p> <ul style="list-style-type: none"> • An structured interview conducted with one or more trained Assessors • Verbally explore the competencies and tasks within the GAC, both Knowledge and Practical, to establish areas of competence and to identify where further evidence is required. <p>Written assessment:</p> <ul style="list-style-type: none"> • A multiple-choice written examination based on all identified Knowledge abilities • A minimum of 70% must be answered correctly <p>Practical Assessment:</p> <ul style="list-style-type: none"> • Adjudicated performance of selected Practical tasks / activities by a trained Assessor • A minimum of 70% of tasks / activities must meet specified performance criteria
<p>Assessment Variables</p>	<p>The range of context and conditions in the work environment that impact performance and assessment of competency, including:</p> <ul style="list-style-type: none"> • local environmental conditions • established local building practices • variations in building codes • local interpretations of building code • variations in local bylaws and regulations • availability of materials • variations in acceptable construction details • variations in acceptable construction practice between various trade partners • variations in company-specific policies and procedures

Line (GAC): E INSPECT EXTERIOR FINISHES

Competency: E1 Inspect Roofing Systems

LEARNING TASKS		CONTENT
1.	Describe how components of a roofing system contribute to the building envelope and an effective exterior finish.	<ul style="list-style-type: none"> • Common residential roofing systems • Components of a roofing system <ul style="list-style-type: none"> ○ Shingles ○ Eave protection and underlayment ○ Types of flashings: <ul style="list-style-type: none"> ▪ Valley flashing ▪ Wall and step flashing ▪ Edge and drip flashing ○ Vents • Installation process for roofs, such as: <ul style="list-style-type: none"> ○ Lapping principle ○ Eave protection ○ Roof underlayment ○ Fasteners ○ Starter row ○ Laying of shingles ○ Attachment of flashings ○ Installation of vents • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Coordinate with the roofing contractor to confirm the details of the roofing work.	<ul style="list-style-type: none"> • Job specifications for roofing work • Environmental considerations • Scope of work such as: <ul style="list-style-type: none"> ○ Labour only, or ○ Labour and materials. • Materials and roofing crew • Shingle delivery and placement
3.	Conduct a roofing system inspection to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Roofing system checklist • Roofing system inspection, such as: <ul style="list-style-type: none"> ○ Aesthetic appearance ○ Colour, dye lot, even spacing and parallel rows ○ Flashing details and lapping principles, etc. • Key specifications and dimensions

Line (GAC): E INSPECT EXTERIOR FINISHES

Competency: E2 Inspect Exterior Barrier(s) Installation System

LEARNING TASKS		CONTENT
1.	Describe the layers that protect a house from water penetration.	<ul style="list-style-type: none"> • Layers of protection <ul style="list-style-type: none"> ○ Primary layer of protection <ul style="list-style-type: none"> ▪ Exterior siding systems ▪ Types of exterior finishes and cladding materials ○ Secondary layer of protection <ul style="list-style-type: none"> ▪ Building membrane (asphalt impregnated or tar paper) and building wrap ▪ Flashings ▪ Rain screen
2.	Describe the technical details of exterior barrier(s) system design and installation.	<ul style="list-style-type: none"> • Exterior barrier(s) system design and installation <ul style="list-style-type: none"> ○ Building membrane installation ○ Flashings installation ○ Rain screen installation • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
3.	Conduct an exterior barrier(s) installation inspection to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Exterior barrier(s) installation checklist • Exterior barrier(s) installation inspection, such as: <ul style="list-style-type: none"> ○ Interface of finish materials ○ Quality of work ○ Manufacturer's requirements for setup, inspection, and use ○ Successive overlapping layers ○ Clean vertical joints ○ Building membrane attached properly to the exterior sheathing of the walls ○ Any rips or tears in the building membrane or wrap repaired ○ Flashings installed as per requirements ○ Flashing over doors or windows extends beyond the frame or end dams ○ Flashing secured with nails ○ Building code requirements, etc. • Key specifications and dimensions

Line (GAC): E INSPECT EXTERIOR FINISHES

Competency: E3 Inspect Fascia and Soffit Installation

LEARNING TASKS		CONTENT
1.	Describe the technical details of fascia and soffit installation.	<ul style="list-style-type: none"> • Function of fascia and soffits • Types of fascia systems <ul style="list-style-type: none"> ○ Finished wood fascia ○ Preformed, prefinished aluminum fascia • Types of soffit systems <ul style="list-style-type: none"> ○ Vented ○ Non-vented • Fascia and soffit installation <ul style="list-style-type: none"> ○ J - channels ○ Attachment with nails and screws • Installation specifications as per building codes, fire codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Conduct a fascia and soffit installation inspection to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Fascia and soffit installation checklist • Fascia and soffit installation inspection, such as: <ul style="list-style-type: none"> ○ Correct airflow and circulation pattern (vented / non-vented soffit) ○ Safe installation ○ No denting or deforming of prefinished fascia ○ Neatly trimmed corners with overlap at the vertical joints ○ Interlocked soffits that form perpendicular lines with the walls of the house, etc. • Key specifications and dimensions

Line (GAC): E INSPECT EXTERIOR FINISHES

Competency: E4 Inspect Siding Installation

LEARNING TASKS		CONTENT
1.	Describe the technical details of siding installation.	<ul style="list-style-type: none"> • Properties of siding <ul style="list-style-type: none"> ○ Types of materials: <ul style="list-style-type: none"> ▪ Vinyl ▪ Composite board ▪ Wood ▪ Stucco ▪ Metal ○ Characteristics ○ Accessories ○ Designs ○ Installation practices • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Conduct a siding installation inspection to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Siding installation checklist • Siding installation inspection, such as: <ul style="list-style-type: none"> ○ Expansion and contraction of material, and allowance ○ Location and levelling of the starter strip ○ Interface between panels and adjacent battens and trim ○ Flashing around windows, doors and other penetrations in the wall ○ Overlap exposure, direction and staggering of joints ○ Types of nails and their proper use ○ Transitions, such as roof intersections ○ Application of caulking material along with proper type and colour, etc. • Key specifications and dimensions

Line (GAC): E INSPECT EXTERIOR FINISHES

Competency: E5 Inspect Brick and Stone Installation

LEARNING TASKS		CONTENT
1.	Describe the technical details of brick and stone installation.	<ul style="list-style-type: none"> • Variety of materials <ul style="list-style-type: none"> ○ Characteristics ○ Designs ○ Installation practices • Key installation considerations <ul style="list-style-type: none"> ○ Support structure to prevent collapse due to weight ○ Mortar type ○ Weep holes ○ Water management issues for manufactured stone or brick slices • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Conduct a brick and stone installation inspection to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Brick and stone installation checklist • Brick and stone installation inspection, such as: <ul style="list-style-type: none"> ○ Lapping principles applied to the building membrane and flashing details ○ Correct installation of rain screen ○ No gaps in the mortar that may hold water ○ Appropriate time to cure for mortar ○ Flashing details ○ Angle iron details ○ Aesthetic grouting of the joints <ul style="list-style-type: none"> ▪ Evenness of the grout spacing ▪ Neatness of the grout application ○ Correct installation of structural support, etc. • Key specifications and dimensions

Line (GAC): E INSPECT EXTERIOR FINISHES

Competency: E6 Inspect Eavestrough and Downspout Installation

LEARNING TASKS		CONTENT
1.	Describe the technical details of eavestrough and downspout installation.	<ul style="list-style-type: none"> • Eavestroughs and downspouts as major elements for the management of rain water • Key installation considerations <ul style="list-style-type: none"> ○ Location of the eavestrough and downspouts ○ Width of the eavestrough based on roof area, pitch and roofing material ○ Trough with a positive drainage to the downspout • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Conduct an eavestrough and downspout installation inspection to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Eavestrough and downspout installation checklist • Downspout installation inspection, such as: <ul style="list-style-type: none"> ○ Specified location based on roof layouts and the house grading plan ○ Extensions installed ○ No damage of extensions during construction, etc. • Eavestrough installation inspection, such as: <ul style="list-style-type: none"> ○ No damage of material during construction ○ No excessive slopes of troughs ○ Galvanized nails and ferrules properly support the trough, etc. • Key specifications and dimensions

Line (GAC): E INSPECT EXTERIOR FINISHES

Competency: E7 Verify Stair and Deck Construction

LEARNING TASKS		CONTENT
1.	Describe the technical details of deck and landing platforms construction.	<ul style="list-style-type: none"> • Types of stairs and decks • Materials <ul style="list-style-type: none"> ○ Dimensional lumber ○ Precast concrete ○ Other materials • Designs and construction practices • Structural components of stairs and decks: <ul style="list-style-type: none"> ○ Structural support (concrete piles or piers) ○ Ledger connection to the frame of the house ○ Structural framing of the deck using dimension lumber components ○ Fall prevention (deck railings) • Key performance and construction considerations • Standard framing practices for framing and levelling the deck • Installation practices for railings and guards • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Coordinate with the contractors to confirm the details of the stair and deck work.	<ul style="list-style-type: none"> • Booking and ordering based on the materials used • Job specifications for stairs and decks <ul style="list-style-type: none"> ○ Location for the stairs marked on the foundation ○ Desired height of the stair landing platform marked on the foundation wall, etc. ○ Location of piles or piers to support the deck or stairs based on house plans ○ Attachment of the deck ledger to the frame of the house
3.	Verify stair and deck construction to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Stairs and deck construction checklist • Stairs and deck construction inspection, such as: <ul style="list-style-type: none"> ○ Correct location(s) ○ Safe installation ○ Functional and as per design requirements ○ Landing area dimensions as per building code ○ Location and the height of the piles to coordinate with the structural loading points of the deck ○ Paper and flashing details followed ○ Railings and guards installed in accordance with the building plans, etc. • Key specifications and dimensions

Line (GAC) E: INSPECT EXTERIOR FINISHES

ASSESSMENT GUIDE

<p>Assessment Objective(s)</p>	<p>To be recognized as a competent RCSM in Nova Scotia, a candidate will demonstrate the following Knowledge and Practical Abilities:</p> <p>Knowledge:</p> <ol style="list-style-type: none"> 1. Describe how components of a roofing system contribute to the building envelope and an effective exterior finish. (E1-1) 2. Describe the layers that protect a house from water penetration. (E2-1) 3. Describe the technical details of exterior barrier(s) system design and installation. (E2-2) 4. Describe the technical details of fascia and soffit installation. (E3-1) 5. Describe the technical details of siding installation. (E4-1) 6. Describe the technical details of brick and stone installation. (E5-1) 7. Describe the technical details of eavestrough and downspout installation. (E6-1) 8. Describe the technical details of deck and landing platforms construction. (E7-1) <p>Practical:</p> <ol style="list-style-type: none"> 1. Coordinate with the roofing contractor to confirm the details of the roofing work. (E1-2) 2. Conduct a roofing system inspection to confirm all key specifications have been met. (E1-3) 3. Conduct an exterior barrier(s) installation inspection to confirm all key specifications have been met. (E2-3) 4. Conduct a fascia and soffit installation inspection to confirm all key specifications have been met. (E3-2) 5. Conduct a siding installation inspection to confirm all key specifications have been met. (E4-2) 6. Conduct a brick and stone installation inspection to confirm all key specifications have been met. (E5-2) 7. Conduct an eavestrough and downspout installation inspection to confirm all key specifications have been met. (E6-2) 8. Coordinate with the contractors to confirm the details of the stair and deck work. (E7-2) 9. Verify stair and deck construction to confirm all key specifications have been met. (E7-3)
<p>Assessment Methods</p>	<p>The following assessment tools and processes will assess this GAC:</p> <p>Portfolio Review:</p> <ul style="list-style-type: none"> • A review by one or more trained Assessors of documentary evidence of competence, submitted by the candidate including work files, record books, work logs, references, etc. • Provides an opportunity, at a distance, to identify areas of competence and to identify where further evidence is required. <p>Competency Interview:</p>

	<ul style="list-style-type: none"> • An structured interview conducted with one or more trained Assessors • Verbally explore the competencies and tasks within the GAC, both Knowledge and Practical, to establish areas of competence and to identify where further evidence is required. <p>Written assessment:</p> <ul style="list-style-type: none"> • A multiple-choice written examination based on all identified Knowledge abilities • A minimum of 70% must be answered correctly <p>Practical Assessment:</p> <ul style="list-style-type: none"> • Adjudicated performance of selected Practical tasks / activities by a trained Assessor • A minimum of 70% of tasks / activities must meet specified performance criteria
<p>Assessment Variables</p>	<p>The range of context and conditions in the work environment that impact performance and assessment of competency, including:</p> <ul style="list-style-type: none"> • local environmental conditions • established local building practices • variations in building codes • local interpretations of building code • variations in local bylaws and regulations • availability of materials • variations in acceptable construction details • variations in acceptable construction practice between various trade partners • variations in company-specific policies and procedures

Line (GAC): F VERIFY ELECTRICAL AND MECHANICAL SYSTEMS

Competency: F1 Conduct Planning Meetings

LEARNING TASKS		CONTENT
1.	Describe the technical details of electrical and mechanical systems installation.	<ul style="list-style-type: none"> • Components of electrical and mechanical systems <ul style="list-style-type: none"> ○ Heating, ventilation, and air conditioning (HVAC) ○ Plumbing, including gas, sewer, and water ○ Electrical, including high voltage for power and low voltage for information, thermostats, doorbells, etc. • Key installation steps for electrical and mechanical systems <ul style="list-style-type: none"> ○ Supply: includes electrical, communication, gas, water and sewer lines (installed during the excavation stage of construction) ○ Rough-in: wires, pipes, ducts, a heating appliance and other components throughout the house ○ Finish: materials to operate and finish the rough-in systems including hot water heaters, sinks and tubs, taps, plugs, switches, lights, heat registers, and fans • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Conduct meetings with each trade or occupation to confirm the details of the electrical and mechanical system installation work.	<ul style="list-style-type: none"> • Job specifications, such as: <ul style="list-style-type: none"> ○ Work contract with a scope of work specifying deliverables for each trade or occupation ○ Permit drawings, specification sheets and plans • Supply of the rough-in materials as well as the skilled labour to complete the installation • Contractor timelines and purchase order(s) • Changes to installation layouts and specifications

Line (GAC): F VERIFY ELECTRICAL AND MECHANICAL SYSTEMS

Competency: F2 Verify HVAC Rough-In Systems

LEARNING TASKS		CONTENT
1.	Describe the technical details of heating, ventilation and air condition (HVAC) system installation.	<ul style="list-style-type: none"> • Common residential heating systems, such as: <ul style="list-style-type: none"> ○ Forced air ○ Hydronic systems ○ Electric • Common types of residential ventilation, such as: <ul style="list-style-type: none"> ○ Heat recovery ○ Bathroom fans ○ Range hood fans ○ Clothes dryers ○ Fresh air intake vents ○ Combustion air for appliances • Installation rough-in requirements for heating and ventilation systems • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Coordinate with the heating / ventilation contractor(s) to confirm the details of the work.	<ul style="list-style-type: none"> • Job specifications for the rough-in work <ul style="list-style-type: none"> ○ Contract, scope of work, approved plans and purchase order(s), etc.
3.	Verify heating system rough-in to confirm all key specifications have been met.	<ul style="list-style-type: none"> • System rough-in checklist • System rough-in inspection <ul style="list-style-type: none"> ○ Work done professionally and properly, and all extra materials and garbage removed from the site • Key specifications and dimensions
4.	Coordinate with the fireplace installer to confirm the details of the work.	<ul style="list-style-type: none"> • Job specifications for the rough-in work <ul style="list-style-type: none"> ○ Contract, scope of work, approved plans and purchase order(s), etc. ○ Specifications for the fireplace model
5.	Verify fireplace rough-in to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Fireplace rough-in checklist • Fireplace rough-in inspection, such as: <ul style="list-style-type: none"> ○ Work done professionally and properly, and all extra materials and garbage removed from the site ○ Fireplace is square, plumb, level and maintains the required clearances as per manufacturer requirements • Key specifications and dimensions

Line (GAC): F VERIFY ELECTRICAL AND MECHANICAL SYSTEMS

Competency: F3 Verify Plumbing Rough-In Systems

LEARNING TASKS		CONTENT
1.	Describe the technical details of plumbing system installation.	<ul style="list-style-type: none"> • Components of the plumbing system <ul style="list-style-type: none"> ○ Under the basement floor slab (ground works) <ul style="list-style-type: none"> ▪ Connection to storm and sanitary services ▪ Backflow prevention valve ▪ Water line shut off and pressure reducing valve ▪ Main and secondary plumbing stacks ▪ Floor drains ▪ Clean out locations and covers ▪ Weeping tile connection non-perforated pipe ▪ Laundry stand pipe ▪ Sump pump barrel and connections ▪ Basement development and bathroom rough-in ○ Mainframe plumbing <ul style="list-style-type: none"> ▪ Installation of all bathtubs and shower bases ▪ Connecting sewer and water piping system to sinks, shower and laundry drains, toilet drains, vents and p-traps in sewer drain lines, and plumbing stack and vent penetrations through the roof ○ Water line and distribution lines ○ Soil gas mitigation ○ Gas line installation, such as: <ul style="list-style-type: none"> ▪ Subdivision gas mains and service stubs ▪ Service lines from the stubs at the boundary of the lot to the meter location on the house ▪ Internal rough-in gas piping from the meter location to the location of the individual gas appliances and equipment ▪ Connection of the individual appliances and gas equipment to the rough-in gas line • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Coordinate with the plumbing contractor to confirm the details of the work.	<ul style="list-style-type: none"> • Job specifications for the rough-in work <ul style="list-style-type: none"> ○ Contract, scope of work, approved plans and purchase order(s), etc. • Trades-approved plans and requirements • Installation of large fixtures (i.e.: tub enclosures)

3.	Verify plumbing rough-in to confirm all key specifications have been met.	<ul style="list-style-type: none">• Plumbing rough-in checklist• Plumbing rough-in inspection, such as:<ul style="list-style-type: none">○ Plumbing system functions properly and is protected against damage in the future○ Work done professionally and properly, and all extra materials and garbage removed from the site○ Consistency of items reviewed and neatness and appearance of the rough-in lines and locations○ Correct location of pipes and drains○ Correct diameter of water supply lines○ Radon mitigation pipes labelled○ As per company's standard rough-in locations○ Appropriate vertical distances from floors and correct dimensions for showers, tub controls, and laundry taps○ Installation of water lines in interior walls to protect from freezing○ Hot and cold lines marked to ensure they are not mixed up at plumbing finish stage○ Drain and p-trap sealed to the drain pipe○ Timely installation of the gas meter○ All plumbing and gas penetrations of the exterior walls and attic space completely caulked and sealed○ Plumbing inspections ordered and completed in a timely fashion○ Re-inspection with the plumber and any corrections after inspection,○ Review of interfaces for all the finishes to be installed, etc.• Key specifications and dimensions
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Line (GAC): F VERIFY ELECTRICAL AND MECHANICAL SYSTEMS

Competency: F4 Verify Electrical Rough-In Systems

LEARNING TASKS		CONTENT
1.	Describe the technical details of electrical system installation.	<ul style="list-style-type: none"> • Components of the electrical system <ul style="list-style-type: none"> ○ Subdivision electrical distribution system, transformers and service stubs to the property line ○ Secondary service lines from the property line service stubs to the electrical meter base ○ Internal electrical distribution system from the meter to the electrical service panel, and the internal wiring from electrical panel to individual outlets, plugs and switches • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Coordinate with the rough-in contractor to confirm the details of the electrical work.	<ul style="list-style-type: none"> • Job specifications for the rough-in work <ul style="list-style-type: none"> ○ Contract, scope of work, approved plans and purchase order(s), etc. • Trades-approved plans and requirements
3.	Inspect the site to ensure it is ready for electrical rough-in work.	<ul style="list-style-type: none"> • Site preparation and inspection for electrical rough-in, such as: <ul style="list-style-type: none"> ○ Confirm location of all the electrical outlets and ceiling lights ○ Walkthrough with the home buyer to discuss electrical layout ○ Change order documents if the home buyer wants to have additional outlets installed ○ Electrical boxes are at specified heights ○ Mark out the rough-in electrical boxes on the frame of the house based on approved wiring layouts etc.
4.	Verify electrical rough-in to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Electrical rough-in checklist • Electrical rough-in inspection, such as: <ul style="list-style-type: none"> ○ Electrical system functions properly and has been protected against damage in the future ○ Work done professionally and properly, and all extra materials and garbage removed from the site ○ Electrical boxes for all outlets and recessed lighting installed ○ Polypans installed around all light, plug, and switch electrical boxes installed in exterior walls and ceilings

		<ul style="list-style-type: none">○ All rough-ins for recessed light fixtures (pot lights) that project into insulated attic spaces are insulation contact rated○ All holes for wires drilled in top plates at attic level are sealed○ Low voltage wiring, including telephone, cable TV, gas fireplace switches, doorbells, and thermostats, are installed as part of the electrical rough-in○ Electrical inspections ordered and completed in a timely fashion, etc.• Key specifications and dimensions
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Line (GAC): F VERIFY ELECTRICAL AND MECHANICAL SYSTEMS

Competency: F5 Verify Other Rough-In Systems

LEARNING TASKS		CONTENT
1.	Verify all rough-ins outlined in the contractual documents have been installed.	<ul style="list-style-type: none">• Other rough-in systems, such as:<ul style="list-style-type: none">○ Security systems○ Home entertainment systems○ Broadband cable / internet access systems○ Speakers○ Intercoms○ Video and computer rooms○ Central vacuum systems• Key specifications and dimensions• Review of interfaces for all the finishes to be installed

Line (GAC) F: VERIFY ELECTRICAL AND MECHANICAL SYSTEMS ASSESSMENT GUIDE

<p>Assessment Objective(s)</p>	<p>To be recognized as a competent RCSM in Nova Scotia, a candidate will demonstrate the following Knowledge and Practical Abilities:</p> <p>Knowledge:</p> <ol style="list-style-type: none"> 1. Describe the technical details of electrical and mechanical systems installation. (F1-1) 2. Describe the technical details of heating, ventilation and air condition (HVAC) system installation. (F2-1) 3. Describe the technical details of plumbing system installation. (F3-1) 4. Describe the technical details of electrical system installation. (F4-1) <p>Practical:</p> <ol style="list-style-type: none"> 1. Conduct meetings with each trade or occupation to confirm the details of the electrical and mechanical system installation work. (F1-2) 2. Coordinate with the heating / ventilation contractor(s) to confirm the details of the work. (F2-2) 3. Verify heating system rough-in to confirm all key specifications have been met. (F2-3) 4. Coordinate with the fireplace installer to confirm the details of the work. (F2-4) 5. Verify fireplace rough-in to confirm all key specifications have been met. (F2-5) 6. Coordinate with the plumbing contractor to confirm the details of the work. (F3-2) 7. Verify plumbing rough-in to confirm all key specifications have been met. (F3-3) 8. Coordinate with the rough-in contractor to confirm the details of the electrical work. (F4-2) 9. Inspect the site to ensure it is ready for electrical rough-in work. (F4-3) 10. Verify electrical rough-in to confirm all key specifications have been met. (F4-4) 11. Verify all rough-ins outlined in the contractual documents have been installed. (F5-1)
<p>Assessment Methods</p>	<p>The following assessment tools and processes will assess this GAC:</p> <p>Portfolio Review:</p> <ul style="list-style-type: none"> • A review by one or more trained Assessors of documentary evidence of competence, submitted by the candidate including work files, record books, work logs, references, etc. • Provides an opportunity, at a distance, to identify areas of competence and to identify where further evidence is required.

	<p>Competency Interview:</p> <ul style="list-style-type: none"> • An structured interview conducted with one or more trained Assessors • Verbally explore the competencies and tasks within the GAC, both Knowledge and Practical, to establish areas of competence and to identify where further evidence is required. <p>Written assessment:</p> <ul style="list-style-type: none"> • A multiple-choice written examination based on all identified Knowledge abilities • A minimum of 70% must be answered correctly <p>Practical Assessment:</p> <ul style="list-style-type: none"> • Adjudicated performance of selected Practical tasks / activities by a trained Assessor • A minimum of 70% of tasks / activities must meet specified performance criteria
<p>Assessment Variables</p>	<p>The range of context and conditions in the work environment that impact performance and assessment of competency, including:</p> <ul style="list-style-type: none"> • local environmental conditions • established local building practices • variations in building codes • local interpretations of building code • variations in local bylaws and regulations • availability of materials • variations in acceptable construction details • variations in acceptable construction practice between various trade partners • variations in company-specific policies and procedures

Line (GAC): G INSPECT INTERIOR FINISHES

Competency: G1 Inspect Concrete Flatwork

LEARNING TASKS		CONTENT
1.	Describe the technical details of placing concrete flatwork.	<ul style="list-style-type: none"> • Use of concrete for flatwork <ul style="list-style-type: none"> ○ Concrete types and strengths ○ Use of admixture ○ Reinforcement using rebar • Use of slump test to measure the fluidity of the concrete mix • Use of compression test to measure the compressive strength of cured concrete • Preparation steps before the placement of concrete including installation of air barrier • Key considerations for placing concrete as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Conduct concrete flatwork inspection to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Concrete flatwork checklist • Concrete flatwork inspection, including confirmation of: <ul style="list-style-type: none"> ○ Concrete surface finish ○ Slope or reasonable flatness of the surface ○ Elevation of the basement ceiling height ○ Elevation of the exterior design grades ○ Concrete delivery slip to confirm that concrete specifications have been met, etc. • Key specifications and dimensions

Line (GAC): G INSPECT INTERIOR FINISHES

Competency: G2 Verify Insulation Installation

LEARNING TASKS		CONTENT
1.	Describe the technical details related to installation of insulation in a new home.	<ul style="list-style-type: none"> • Common insulating materials used in residential construction <ul style="list-style-type: none"> ○ Batt insulation ○ Loose-fill insulation ○ Spray applied foams ○ Rigid insulation • Installation practices for insulation of exterior walls, ceilings, penetrations in building envelopes, floors, basement walls, attics, etc. • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Conduct insulation installation inspection to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Insulation installation checklist • Insulation installation inspection, such as: <ul style="list-style-type: none"> ○ Correct location(s) ○ Safe installation ○ Functional and as per design requirements ○ Continuity of the insulation; no areas missed ○ Insulation installed into all spaces and is properly shaped to fit around penetrations and framing material ○ Insulation installed between the building membrane or wrap and the jambs at window and door openings ○ Joints in insulation sheeting lapped and clamped between two rigid materials, or sealed, • Key specifications and dimensions

Line (GAC): G INSPECT INTERIOR FINISHES

Competency: G3 Verify Air and Vapour Barrier(s) Installation

LEARNING TASKS		CONTENT
1.	Describe how air and vapour barriers are used to control the internal environment of a home.	<ul style="list-style-type: none"> • Need for consistent temperature and humidity • Movement of air and vapour in a building • Common air and vapour barriers used in residential construction and where and how they are installed • Factors affecting the amount of water damage from leaking air • Factors affecting the amount of vapour diffusion through a building envelope • Installation practices to ensure continuous barrier to air and vapour movement • Steps to manage humidity and heat loss • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Verify air and vapour barrier(s) installation to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Air and vapour barrier(s) installation checklist • Air and vapour barrier(s) installation inspection, such as: <ul style="list-style-type: none"> ○ Correct location(s) ○ Safe installation ○ Continuity of the air and vapour barrier ○ Sealing of all barrier penetrations ○ Functional and as per design requirements, etc. • Key specifications and dimensions

Line (GAC): G INSPECT INTERIOR FINISHES

Competency: G4 Inspect Drywall Installation

LEARNING TASKS		CONTENT
1.	Describe the technical details of drywall installation.	<ul style="list-style-type: none"> • Composition of drywall • Use of drywall material with special characteristics • Levels of drywall finish • Recommendations for level of drywall finish for various areas in a home • Drywall delivery and placement • Drywall installation steps, such as: <ul style="list-style-type: none"> ○ Boarding ○ Cutting holes for electrical boxes and other protrusions ○ Attaching drywall panels to wood framing ○ Filling, taping, sanding and finishing of all joints to the level of finish required ○ Drywall texturing ○ Priming and touch-ups • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Conduct drywall installation inspection to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Drywall installation checklist • Drywall installation inspection, such as: <ul style="list-style-type: none"> ○ Safe installation ○ Functional and as per design requirements ○ Meets company standards ○ Work done professionally and properly, and all extra materials and garbage removed from the site, etc. • Key specifications and dimensions

Line (GAC): G INSPECT INTERIOR FINISHES

Competency: G5 Inspect Finish Carpentry

LEARNING TASKS		CONTENT
1.	Describe the technical details of finish carpentry.	<ul style="list-style-type: none"> • Components of finish carpentry <ul style="list-style-type: none"> ○ Interior doors ○ Window and door trim ○ Substrate for hard surface flooring ○ Cabinetry and countertops ○ Closet finishing ○ Railings and handrails ○ Fireplace mantles and facades ○ Attic access, etc. • Coordinate finish carpentry work with work of other trades and installers (i.e.: flooring, painting, etc.) • Specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Conduct finish carpentry inspection to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Finish carpentry checklist • Finish carpentry inspection, such as: <ul style="list-style-type: none"> ○ Functional and as per design requirements ○ Meets company standards ○ Homeowner selections ○ Work done professionally and properly, and all extra materials and garbage removed from the site, etc. • Key specifications and dimensions

Line (GAC): G INSPECT INTERIOR FINISHES

Competency: G6 Inspect Painting

LEARNING TASKS		CONTENT
1.	Describe the technical details of painting work.	<ul style="list-style-type: none"> • Type of painting <ul style="list-style-type: none"> ○ Interior ○ Exterior • Type of paints • Sheen or levels of gloss • Use of stain <ul style="list-style-type: none"> ○ Lacquer ○ Varnish • Steps for painting work <ul style="list-style-type: none"> ○ Preparing surfaces: Caulking trims, and touching up, filling, and sanding all wall surfaces and trim ○ Protecting surfaces: Using masking tape, polyethylene sheeting, and drop sheets to protect material that will not be painted. ○ Application: staining and spraying wood surfaces, cutting in paint edges, and applying finish paint coats • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Conduct painting inspection to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Painting checklist • Painting inspection, such as: <ul style="list-style-type: none"> ○ Nail holes filled ○ Paint, stain and lacquers applied evenly ○ Adjacent surfaces like glass, countertops, and texture drywall paint-free ○ Exterior paint completed as per the architectural controls and customer selections ○ Extra paint available on-site for paint touch-ups ○ Meets company standards ○ Work done professionally and properly, and all extra materials and garbage removed from the site, etc. • Key specifications

Line (GAC): G INSPECT INTERIOR FINISHES

Competency: G7 Inspect Flooring and Wall Finishes Installation

LEARNING TASKS		CONTENT
1.	Describe the technical details of flooring and wall finishes installation.	<ul style="list-style-type: none"> • Common floor finishes in residential construction <ul style="list-style-type: none"> ○ Floor tile ○ Resilient flooring ○ Laminate flooring ○ Wood flooring <ul style="list-style-type: none"> ▪ Manufactured prefinished hardwood ▪ Site-finished wood flooring ○ Carpet flooring • Common wall finishes in residential construction <ul style="list-style-type: none"> ○ Wall tile ○ Wall paper, etc. • Installation specifications as per building codes, standards bodies, material and equipment manufacturers, and industry best practices
2.	Conduct flooring and wall finishes installation inspection to confirm all key specifications have been met.	<ul style="list-style-type: none"> • Flooring and wall finishes installation checklist • Flooring and wall finishes installation inspection, such as: <ul style="list-style-type: none"> ○ Flooring and wall finishes as per the architectural controls and customer selections ○ Meets company standards ○ Work done professionally and properly, and all extra materials and garbage removed from the site, etc. • Key specifications and dimensions

Line (GAC): G INSPECT INTERIOR FINISHES

Competency: G8 Verify or Inspect Other Interior Finishing Work

LEARNING TASKS		CONTENT
1.	Coordinate the completion of work by various trades or occupations.	<ul style="list-style-type: none"> • Work required to complete the interior finishes of a home <ul style="list-style-type: none"> ○ Carpentry and hardware ○ Appliances ○ Electrical ○ Plumbing ○ Mirrors and shower doors ○ Window screens and hardware ○ Wire shelving ○ Fireplaces ○ Carpeting ○ HVAC ○ Final touch-ups and clean-up • Scheduling work of all trades or occupations
2.	Verify or inspect the interior finishing work to ensure the home is ready for final building code inspection.	<ul style="list-style-type: none"> • Interior finish checklist • Interior finish inspection, such as: <ul style="list-style-type: none"> ○ No damage to floors and other new finishes when delivering and placing appliances ○ Light fixtures and all required light bulbs installed ○ All electrical circuits connected to the electrical panel with circuit breakers and tested ○ All finish plumbing components installed and tested for operation and any leaks ○ Fireplace set up, and controls are operational ○ All windows and doors operating prior to possession of the home ○ All mirror and shower doors have been installed to specifications ○ Carpet is undamaged during the finishing work ○ All heat vents, return air vents, humidifiers, air filters, thermostats, humidistats, and other HVAC equipment installed and operational ○ All clean-ups and touch-ups have been completed ○ Workmanship and material of the home meet company's standards

Line (GAC) G: INSPECT INTERIOR FINISHES ASSESSMENT GUIDE

<p>Assessment Objective(s)</p>	<p>To be recognized as a competent RCSM in Nova Scotia, a candidate will demonstrate the following Knowledge and Practical Abilities:</p> <p>Knowledge:</p> <ol style="list-style-type: none"> 1. Describe the technical details of placing concrete flatwork. (G1-1) 2. Describe the technical details related to installation of insulation in a new home. (G2-1) 3. Describe how air and vapour barriers are used to control the internal environment of a home. (G3-1) 4. Describe the technical details of drywall installation. (G4-1) 5. Describe the technical details of finish carpentry. (G5-1) 6. Describe the technical details of painting work. (G6-1) 7. Describe the technical details of flooring and wall finishes installation. (G7-1) <p>Practical:</p> <ol style="list-style-type: none"> 1. Conduct concrete flatwork inspection to confirm all key specifications have been met. (G1-2) 2. Conduct insulation installation inspection to confirm all key specifications have been met. (G2-2) 3. Verify air and vapour barrier(s) installation to confirm all key specifications have been met. (G3-2) 4. Conduct drywall installation inspection to confirm all key specifications have been met. (G4-2) 5. Conduct finish carpentry inspection to confirm all key specifications have been met. (G5-2) 6. Conduct painting inspection to confirm all key specifications have been met. (G6-2) 7. Conduct flooring and wall finishes installation inspection to confirm all key specifications have been met. (G7-2) 8. Coordinate the completion of work by various trades or occupations. (G8-1) 9. Verify or inspect the interior finishing work to ensure the home is ready for final building code inspection. (G8-2)
<p>Assessment Methods</p>	<p>The following assessment tools and processes will assess this GAC:</p> <p>Portfolio Review:</p> <ul style="list-style-type: none"> • A review by one or more trained Assessors of documentary evidence of competence, submitted by the candidate including work files, record books, work logs, references, etc. • Provides an opportunity, at a distance, to identify areas of competence and to identify where further evidence is required.

	<p>Competency Interview:</p> <ul style="list-style-type: none"> • An structured interview conducted with one or more trained Assessors • Verbally explore the competencies and tasks within the GAC, both Knowledge and Practical, to establish areas of competence and to identify where further evidence is required. <p>Written assessment:</p> <ul style="list-style-type: none"> • A multiple-choice written examination based on all identified Knowledge abilities • A minimum of 70% must be answered correctly <p>Practical Assessment:</p> <ul style="list-style-type: none"> • Adjudicated performance of selected Practical tasks / activities by a trained Assessor • A minimum of 70% of tasks / activities must meet specified performance criteria
<p>Assessment Variables</p>	<p>The range of context and conditions in the work environment that impact performance and assessment of competency, including:</p> <ul style="list-style-type: none"> • local environmental conditions • established local building practices • variations in building codes • local interpretations of building code • variations in local bylaws and regulations • availability of materials • variations in acceptable construction details • variations in acceptable construction practice between various trade partners • variations in company-specific policies and procedures

Line (GAC): H COORDINATE HOMEBUYER POSSESSION

Competency: H1 Monitor Possession Readiness

LEARNING TASKS		CONTENT
1.	Review construction schedule and activity to provide a possession date to the homebuyer.	<ul style="list-style-type: none">• Tentative possession date• Confirmed possession date
2.	Schedule a final Building Code inspection with the local authority.	<ul style="list-style-type: none">• Occupancy permit• Inspection report

Line (GAC): H COORDINATE HOMEBUYER POSSESSION

Competency: H2 Conduct Pre-Possession Walkthrough

LEARNING TASKS		CONTENT
1.	Describe the pre-possession walkthrough process.	<ul style="list-style-type: none"> • Purpose <ul style="list-style-type: none"> ○ Check for accuracy and functionality ○ Check for quality ○ Check for damages ○ Educate the homebuyer • Key activities in the pre-possession process <ul style="list-style-type: none"> ○ Before, during and after the walkthrough
2.	Conduct the pre-possession walkthrough with the homebuyer.	<ul style="list-style-type: none"> • Interior and exterior walkthrough to check for <ul style="list-style-type: none"> ○ Requirements in the plans and specifications met ○ All workmanship meets company's quality standards ○ All manuals and warranty documents collected ○ Any damage added to the punch list(s) for repair prior to possession date ○ Operation and maintenance of house systems explained to home buyer • Use of Final Inspection document created by the building code inspector
3.	Prepare the home for possession by addressing any deficiencies.	<ul style="list-style-type: none"> • Punch list for each trade <ul style="list-style-type: none"> ○ Damage or defects ○ Additional repairs • Final clean-up

Line (GAC): H COORDINATE HOMEBUYER POSSESSION

Competency: H3 Complete the Possession Process

LEARNING TASKS		CONTENT
1.	Conduct a well-planned homebuyer orientation and possession inspection.	<ul style="list-style-type: none"> • Company-specific closing procedure explained to home buyer • Walkthrough of the home with the homebuyer to review all completed work, review the punch list, and confirm no outstanding items • Signing of Certificate of Possession (COP) <ul style="list-style-type: none"> ○ Defects ○ Deficiencies • Agreement on outstanding post-possession items including seasonal items that are weather-permitting
2.	Close the construction file	<ul style="list-style-type: none"> • Company-specific closing procedure • Required paperwork <ul style="list-style-type: none"> ○ Orders and invoices ○ Repairs and outstanding defects ○ Other administrative processes and procedures • Schedule, budget and cost review

Line (GAC) H: COORDINATE HOMEBUYER POSSESSION ASSESSMENT GUIDE

<p>Assessment Objective(s)</p>	<p>To be recognized as a competent RCSM in Nova Scotia, a candidate will demonstrate the following Knowledge and Practical Abilities:</p> <p>Knowledge:</p> <ol style="list-style-type: none"> 1. Describe the pre-possession walkthrough process. (H2-1) 2. Describe the homebuyer orientation and possession inspection process. (H3-1) <p>Practical:</p> <ol style="list-style-type: none"> 1. Review construction schedule and activity to provide a possession date to the homebuyer. (H1-1) 2. Schedule a final Building Code inspection with the local authority. (H1-2) 3. Conduct the pre-possession walkthrough with the homebuyer. (H2-2) 4. Prepare the home for possession by addressing any deficiencies. (H2-3) 5. Conduct a well-planned homebuyer orientation and possession inspection. (H3-1) 6. Close the construction file (H3-2)
<p>Assessment Methods</p>	<p>The following assessment tools and processes will assess this GAC:</p> <p>Portfolio Review:</p> <ul style="list-style-type: none"> • A review by one or more trained Assessors of documentary evidence of competence, submitted by the candidate including work files, record books, work logs, references, etc. • Provides an opportunity, at a distance, to identify areas of competence and to identify where further evidence is required. <p>Competency Interview:</p> <ul style="list-style-type: none"> • An structured interview conducted with one or more trained Assessors • Verbally explore the competencies and tasks within the GAC, both Knowledge and Practical, to establish areas of competence and to identify where further evidence is required. <p>Written assessment:</p> <ul style="list-style-type: none"> • A multiple-choice written examination based on all identified Knowledge abilities • A minimum of 70% must be answered correctly <p>Practical Assessment:</p> <ul style="list-style-type: none"> • Adjudicated performance of selected Practical tasks / activities by a trained Assessor • A minimum of 70% of tasks / activities must meet specified performance criteria

Assessment Variables	<p>The range of context and conditions in the work environment that impact performance and assessment of competency, including:</p> <ul style="list-style-type: none">• local environmental conditions• established local building practices• variations in building codes• local interpretations of building code• variations in local bylaws and regulations• availability of materials• variations in acceptable construction details• variations in acceptable construction practice between various trade partners• variations in company-specific policies and procedures
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