

# Lather (Interior Systems Mechanic)

2007

Trades and Apprenticeship Division

Division des métiers et de l'apprentissage

Workplace Partnerships Directorate

Direction des partenariats en milieu de  
travail

National Occupational Classification:

7284

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Latteur/latteuse  
(spécialiste de systèmes intérieurs)

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*The Canadian Council of Directors of Apprenticeship (CCDA) recognizes this National Occupational Analysis as the national standard for the occupation of Lather (Interior Systems Mechanic).*

## Background

The first National Conference on Apprenticeship in Trades and Industries, held in Ottawa in 1952, recommended that the federal government be requested to cooperate with provincial and territorial apprenticeship committees and officials in preparing analyses of a number of skilled occupations. To this end, Human Resources and Social Development Canada (HRSDC) sponsors a program, under the guidance of the CCDA, to develop a series of national occupational analyses.

The National Occupational Analyses have the following objectives:

- to describe and group the tasks performed by skilled workers;
- to identify which tasks are performed in every province and territory;
- to develop instruments for use in the preparation of Interprovincial Red Seal Examinations and curricula for training leading to the certification of skilled workers;
- to facilitate the mobility of apprentices and skilled workers in Canada; and,
- to supply employers, employees, associations, industries, training institutions and governments with analyses of occupations.

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## ACKNOWLEDGEMENTS

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LIST OF PUBLISHED  
NATIONAL OCCUPATIONAL ANALYSES  
(Red Seal Trades)

TITLE	NOC* Code
Agricultural Equipment Technician (2007)	7312
Appliance Service Technician (2005)	7332
Automotive Painter (2005)	7322
Automotive Service Technician (2005)	7321
Baker (2006)	6252
Boilermaker (2003)	7262
Bricklayer (2007)	7281
Cabinetmaker (2007)	7272
Carpenter (2005)	7271
Concrete Finisher (2006)	7282
Construction Electrician (2003)	7241
Cook (2003)	6242
Electrical Rewind Mechanic (1999)	7333
Electronics Technician – Consumer Products (1997)	2242
Floorcovering Installer (2005)	7295
Glazier (2004)	7292
Hairstylist (2005)	6271
Heavy Duty Equipment Technician (2004)	7312
Industrial Electrician (2003)	7242
Industrial Mechanic (Millwright) (2007)	7311
Instrumentation and Control Technician (2007)	2243
Insulator (Heat and Frost) (2007)	7293
Ironworker (Generalist) (2006)	7264
Ironworker (Reinforcing) (2006)	7264
Ironworker (Structural/Ornamental) (2006)	7264
Lather (Interior Systems Mechanic) (2007)	7284
Machinist (2005)	7231

\* National Occupational Classification

<b>TITLE</b>	<b>NOC* Code</b>
Metal Fabricator (Fitter) (2003)	7263
Mobile Crane Operator (2006)	7371
Motorcycle Mechanic (2006)	7334
Motor Vehicle Body Repairer (Metal and Paint) (2005)	7322
Oil Burner Mechanic (2006)	7331
Painter and Decorator (2007)	7294
Partsperson (2005)	1472
Plumber (2003)	7251
Powerline Technician (2004)	7244
Recreation Vehicle Service Technician (2006)	7383
Refrigeration and Air Conditioning Mechanic (2004)	7313
Roofer (2006)	7291
Sheet Metal Worker (2006)	7261
Sprinkler System Installer (2003)	7252
Steamfitter – Pipefitter (2007)	7252
Tilesetter (2004)	7283
Tool and Die Maker (2005)	7232
Transport Trailer Technician (2003)	7321
Truck and Transport Mechanic (2007)	7321
Welder (2004)	7265

**Requests for these National Occupational Analyses may be forwarded to:**

Trades and Apprenticeship Division  
 Workplace Partnerships Directorate  
 Human Resources and Social Development Canada  
 140 Promenade du Portage, Phase IV, 5th Floor  
 Gatineau, Quebec K1A 0J9

**These publications are available to order or download online at: [www.red-seal.ca](http://www.red-seal.ca). Links to Essential Skills Profiles for some of these trades are also available on this website.**

## STRUCTURE OF ANALYSIS

To facilitate understanding of the nature of the occupation, the work performed is divided into the following categories:

<b>Block</b>	the largest division within the analysis which reflects a distinct set of operations relevant to the occupation.
<b>Task</b>	the distinct activity that, combined with others, makes up the logical and necessary steps the worker is required to perform in a block.
<b>Sub-Task</b>	the smallest division of work activities that, combined together, fully describe all duties of a task.
<b>Supporting Knowledge and Abilities</b>	the elements of skill and knowledge that an individual must acquire to adequately perform a sub-task.

Information on the following areas of this occupation is also provided throughout the analysis:

<b>Trends</b>	any shifts or changes in technology that affect the block.
<b>Context</b>	statements written to clarify the intent and meaning of tasks.
<b>Related Components</b>	all components related to a specified task being undertaken.
<b>Tools and Equipment</b>	types of tools and equipment necessary to perform the work on all given tasks identified within the block. More detailed lists of these types are shown in Appendix A.

The appendices located at the end of the analysis are described as follows:

<b>Appendix A Tools and Equipment</b>	a non-exhaustive list of tools and equipment used by a journey person throughout this trade.
<b>Appendix B Glossary</b>	definitions or explanations for terms referred to in this analysis.
<b>Appendix C Acronyms</b>	a list of acronyms used in this analysis with their full name.
<b>Appendix D Block and Task Weighting</b>	the block and task percentages as submitted by each jurisdiction at the validation stage and the national averages of these percentages.
<b>Appendix E Pie Chart</b>	a graph which depicts the national percentages assigned to blocks.
<b>Appendix F Task Profile Chart</b>	a chart which outlines graphically the blocks, tasks, and sub-tasks of this analysis.

### Development of Analysis

A draft analysis is developed by a committee of industry experts in the field led by a team of facilitators from HRSDC. This draft analysis breaks down all the tasks performed in the occupation and describes the knowledge and abilities required for a tradesperson to demonstrate competence in the trade.

The NOA development team then forwards a copy of the analysis and its translation to provincial/territorial authorities for a review of its content and structure. Their recommendations are assessed and incorporated into the analysis.

### Validation and Weighting Method

This copy of the analysis is sent to all provinces/territories for validation/weighting. Each jurisdiction validates the document with the use of a provincial/territorial occupational advisory committee. They examine the blocks, tasks and sub-tasks of the analysis:

- BLOCKS** Each committee assigns percentages to blocks based on the number of questions that they would assign for each block on a hundred question examination of the entire trade.
- TASKS** Each committee assigns percentages to tasks based on the number of questions that would be assigned to each task on a hundred question examination for its block.
- SUB-TASKS** Sub-tasks are examined by each committee and they indicate with a yes or no whether or not the sub-tasks are performed by the skilled workers within the occupation in their jurisdiction.

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

This method for the validation of the National Occupational Analysis also identifies common core sub-tasks across Canada for a specific occupation. The criteria for determining common core depend on the performance of sub-tasks. If at least 70% of the responding jurisdictions perform a sub-task, it shall be considered common core. Interprovincial Red Seal Examinations are based on the common core identified through this validation process.

## Definitions for Validation and Weighting

<b>yes</b>	sub-task is performed by workers in the occupation in a specific jurisdiction.
<b>no</b>	sub-task is not performed by workers in the occupation in a specific jurisdiction.
<b>NV</b>	<u>N</u> ot <u>V</u> alidated by a province/territory.
<b>ND</b>	<u>N</u> ot <u>D</u> esignated in a province/territory.
<b>NOT COMMON CORE (NCC)</b>	sub-task, task or block is performed by less than 70% of responding jurisdictions; these are not to appear on the Interprovincial Red Seal Examination for this trade.
<b>BLOCK %</b>	the average percentage of questions that will be placed on an Interprovincial Red Seal Examination to assess each block of the analysis.
<b>TASK %</b>	the average percentage of questions that will be placed on an Interprovincial Red Seal Examination to assess each task of the analysis.

## Provincial/Territorial Abbreviations

<b>NL</b>	Newfoundland and Labrador
<b>NS</b>	Nova Scotia
<b>PE</b>	Prince Edward Island
<b>NB</b>	New Brunswick
<b>QC</b>	Quebec
<b>ON</b>	Ontario
<b>MB</b>	Manitoba
<b>SK</b>	Saskatchewan
<b>AB</b>	Alberta
<b>BC</b>	British Columbia
<b>NT</b>	Northwest Territories
<b>YT</b>	Yukon Territory
<b>NU</b>	Nunavut



# ANALYSIS



Safe working procedures and conditions, accident prevention, and the preservation of health are of primary importance to industry in Canada. These responsibilities are shared and require the joint efforts of government, employers and employees. It is imperative that all parties become aware of circumstances that may lead to injury or harm. Safe learning experiences and work environments can be created by controlling the variables and behaviours that may contribute to accidents or injury.

It is generally recognized that safety-conscious attitudes and work practices contribute to a healthy, safe and accident-free work environment.

It is imperative to apply and be familiar with the Occupational Health and Safety Acts and Workplace Hazardous Materials Information System (WHMIS) Regulations. As well, it is essential to determine workplace hazards and take measures to protect oneself, co-workers, the public and the environment.

As safety education is an integral part of training in all jurisdictions, personal safety practices are not recorded in this document. However, the technical safety aspects relating to each task and sub-task are included throughout this analysis.

## SCOPE OF THE LATHER (INTERIOR SYSTEMS MECHANIC) TRADE

“Lather (Interior Systems Mechanic)” is this trade’s official Red Seal occupational title approved by the CCDA. This analysis covers tasks performed by a Lather (Interior Systems Mechanic) whose occupational title has been identified by some provinces and territories of Canada under the following names:

	NL	NS	PE	NB	QC	ON	MB	SK	AB	BC	YT	NT	NU
Drywall and Acoustical Mechanic								✓					
Drywall, Acoustic and Lathing Applicator						✓							
Interior Systems Installer					✓								
Interior Systems Mechanic							✓						
Lather (Interior Systems Mechanic)	✓	✓	✓	✓						✓	✓		
Lather - Interior Systems Mechanic									✓				

Lathers handle, erect and install materials that are components in the construction of all or part of a structure. They lay out and install framework for ceiling systems, interior and exterior walls, floors and roofs. Lathers install various types of ceilings (e.g. suspended, spanned, direct contact), shielded walls (e.g. fire, sound, thermal separation) and various sheathing products. They also perform acoustical installations.

Materials that lathers install include: cold rolled steel components (e.g. steel studs, tracks, channels), metal door and window frames, stucco wire, vapour barriers and insulation, sheathing products (e.g. gypsum and cement products), specialty architectural products and metal lath.

Lathers are employed by construction companies and drywall contractors. They may also be self-employed. In the residential construction industry, they construct, maintain and renovate from single family housings to multi-story apartments. In the commercial, institutional and industrial construction sectors they build, maintain and renovate structures such as commercial buildings, schools, hospitals and manufacturing complexes.

Lathers work both indoors and outdoors year round. They may specialize in individual aspects of the trade such as layout, wall framing and drywall installation. Lathers use a variety of hand and power tools. The installation of metal stud framing and suspended ceilings often requires the use of lasers and powder-actuated tools.

Key attributes for people in this trade are good eye-hand coordination, the ability to work at heights and the ability to pay attention to detail. Lathers must be able to read and interpret information from drawings, blueprints and specifications. The work may require lifting and positioning heavy building materials in a fast-paced environment. The work is physically demanding and requires the use of personal protective equipment. Workers in this trade carry out their work in teams and independently.

This analysis recognizes similarities and overlaps with the work of carpenters, sheet metal workers, insulators and drywall tapers.

With experience, lathers may act as mentors and trainers to apprentices in the trade. They may also advance to positions such as estimators, supervisors, training coordinators and project managers.

Self-levelling lasers are becoming more affordable and are accurate over longer distances. There is an increase in the complexity of wall and ceiling systems resulting in requirements for ongoing training.

Safety awareness and training is becoming an essential part of the trade. Such safety training may involve additional certification in areas such as first aid, fall protection and elevated platform operation.

In certain locations, the enforcement of seismic requirements and fire rated installations is becoming more prevalent.

Increasing compliance with industry standards is causing lathers to pay closer attention to construction specifications and details.

The increased demand for structural steel stud framed buildings is resulting in new framing technologies for lathers.

The use of both structural and non-structural panels is becoming more popular due to an increase in the number of approved manufacturers' panelization products. Lathers build panels either on-site or in a shop environment, using these products, in accordance with specifications.

There is an increased demand for better-trained personnel who are prepared to expand their trade knowledge after certification. The need for ongoing learning in the lather trade is driven partly by technological change, as is reflected in the trend toward product-specific training in areas such as firestop and Exterior Insulation Finish System (EIFS) operations.

Cordless power tools are becoming industry standards for framing and are becoming more user-friendly.

Measuring of products is shifting from the use of "gauges" to "mils". The identification of the mils typically has a standardized colour coding system.

*Trends* Laser levelling technology is becoming more accurate, less expensive and more user-friendly.

*Related Components* All components apply.

*Tools and Equipment* See Appendix A.

## Task 1

### Maintains tools and equipment.

*Context* The proper and regular maintenance of the tools of the trade is very important to ensure the safety of the user and a well-constructed finished product.

#### Sub-task

#### 1.01 Maintains hand tools.

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

#### Supporting Knowledge & Abilities

- 1.01.01 knowledge of types of hand tools such as snips, knife, tape measure, hammer and nippers
- 1.01.02 knowledge of hand tool limitations
- 1.01.03 ability to organize and store hand tools
- 1.01.04 ability to clean and lubricate hand tools
- 1.01.05 ability to recognize worn, damaged and defective hand tools

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**Sub-task****1.02 Maintains power tools.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

- 1.02.01 knowledge of types of power tools such as drills, screw guns, hammer drills and drywall routers
- 1.02.02 knowledge of power tool limitations
- 1.02.03 knowledge of manufacturers' operating and maintenance instructions
- 1.02.04 ability to organize and store power tools
- 1.02.05 ability to recognize worn, damaged and defective power tools

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**Sub-task****1.03 Maintains powder-actuated tools.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

- 1.03.01 knowledge of types of powder-actuated tools and their applications
- 1.03.02 knowledge of types of pins and shots
- 1.03.03 knowledge of certification requirements for powder-actuated tools
- 1.03.04 knowledge of manufacturers' operating and maintenance instructions
- 1.03.05 ability to disassemble, clean and lubricate powder-actuated tools
- 1.03.06 ability to organize powder-actuated tools
- 1.03.07 ability to store shots
- 1.03.08 ability to dispose of shots
- 1.03.09 ability to recognize worn, damaged and defective powder-actuated tools

---

**Sub-task****1.04 Maintains gas-actuated tools.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

1.04.01	knowledge of types of gas-actuated tools
1.04.02	knowledge of manufacturers' operating and maintenance instructions
1.04.03	ability to handle and dispose of gas cylinders and batteries
1.04.04	ability to disassemble, clean and lubricate gas-actuated tools
1.04.05	ability to organize and store gas-actuated tools
1.04.06	ability to recognize worn, damaged and defective gas-actuated tools

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**Sub-task****1.05 Maintains pneumatic tools.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	no	ND	NV	ND

Supporting Knowledge & Abilities

1.05.01	knowledge of types of pneumatic tools
1.05.02	knowledge of manufacturers' operating and maintenance instructions
1.05.03	knowledge of handling procedures for air compressors
1.05.04	ability to disassemble, clean and lubricate pneumatic tools
1.05.05	ability to drain air hoses and tanks
1.05.06	ability to organize and store pneumatic tools
1.05.07	ability to recognize worn, damaged and defective pneumatic tools

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**Sub-task****1.06 Maintains layout and measuring devices.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

## Supporting Knowledge & Abilities

1.06.01	knowledge of types of layout and measuring devices such as squares, measuring tape, chalk line and laser level
1.06.02	ability to check accuracy of layout and measuring devices
1.06.03	ability to organize and store layout and measuring devices
1.06.04	ability to clean and lubricate layout and measuring devices
1.06.05	ability to recognize worn, damaged and defective layout and measuring devices

### **Task 2**

### **Organizes work.**

*Context* Lathers use organizational skills to perform their tasks in a safe, efficient and effective manner.

### **Sub-task**

#### **2.01 Communicates with others.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

## Supporting Knowledge & Abilities

2.01.01	knowledge of trade terminology
2.01.02	ability to communicate with supervisors
2.01.03	ability to coordinate work with other trades
2.01.04	ability to participate in safety and information meetings
2.01.05	ability to communicate with laypersons
2.01.06	ability to communicate with engineers and architects
2.01.07	ability to mentor apprentices
2.01.08	ability to recognize audible and visible warning signals

---

**Sub-task****2.02 Uses documentation.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

2.02.01	knowledge of types of documents such as plans, schedules, change orders and specifications
2.02.02	knowledge of company policies and procedures
2.02.03	knowledge of Occupational Health and Safety (OH&S) regulations
2.02.04	knowledge of WHMIS symbols and MSDS
2.02.05	ability to interpret National Building Code
2.02.06	ability to complete work-related documents such as records, time sheets and deficiency lists
2.02.07	ability to fill out safety documentation such as accident reports and hazard assessments
2.02.08	ability to identify and label hazardous materials according to WHMIS
2.02.09	ability to interpret documents such as manuals, manufacturers' specifications and meeting minutes
2.02.10	ability to recognize postings such as stop work orders and warning signs
2.02.11	ability to track and complete change orders

---

**Sub-task****2.03 Uses blueprints and drawings.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

2.03.01	knowledge of different views such as elevation, section and detail
2.03.02	knowledge of components of blueprints and drawings such as symbols, scales and schedules
2.03.03	knowledge of types of projections such as isometric and orthographic
2.03.04	ability to source information on blueprints, drawings and specifications
2.03.05	ability to visualize finished product

- 2.03.06 ability to draw a sketch
- 2.03.07 ability to scale dimensions

**Sub-task**

**2.04 Plans daily tasks.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

- 2.04.01 knowledge of other trades' work requirements
- 2.04.02 knowledge of sequence of operations and schedules
- 2.04.03 knowledge of utility requirements such as electrical, heat, lighting and ventilation
- 2.04.04 ability to determine labour and equipment requirements
- 2.04.05 ability to coordinate work with other trades

**Sub-task**

**2.05 Estimates materials and supplies.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

- 2.05.01 knowledge of area to be completed
- 2.05.02 knowledge of site conditions and restrictions
- 2.05.03 knowledge of available materials
- 2.05.04 ability to interpret plans and specifications
- 2.05.05 ability to perform mathematical calculations such as surface area, linear measurement and quantity requirements in both metric and imperial measurement
- 2.05.06 ability to interpret site measurements

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**Sub-task****2.06****Maintains safe work environment.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

2.06.01	knowledge of types of health hazards such as excessive noise, fumes, dust and mould
2.06.02	knowledge of employer policies and procedures
2.06.03	knowledge of first aid requirements
2.06.04	knowledge of workers' rights and responsibilities
2.06.05	knowledge of training requirements such as fall protection, confined space entry and material handling
2.06.06	knowledge of housekeeping practices
2.06.07	knowledge of fire safety
2.06.08	knowledge of emergency phone numbers
2.06.09	ability to comply with all regulations, policies and procedures in the workplace
2.06.10	ability to locate and recognize safety documentation such as MSDS and WHMIS labels
2.06.11	ability to perform all precautionary inspections to reduce on-site hazards
2.06.12	ability to identify on-site hazards such as electrical, working at heights, overhead dangers and heavy material
2.06.13	ability to erect barricades such as warning tape and plywood over holes in floor
2.06.14	ability to report on-site hazards to appropriate personnel
2.06.15	ability to keep maintenance logs of tools and equipment

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**Task 3****Performs routine trade activities.***Context*

This task is made up of repetitive activities that lathers perform on a daily basis that apply to most aspects of the trade.

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**Sub-task****3.01 Performs measurements.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

3.01.01	knowledge of formulas such as area, radii and surface area
3.01.02	ability to interpret scale from blueprints
3.01.03	ability to transfer information from blueprints to job site
3.01.04	ability to use measurement tools and equipment such as measuring tape, scale rules and calculator
3.01.05	ability to work in both metric and imperial measurements
3.01.06	ability to perform basic mathematical operations

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**Sub-task****3.02 Uses scaffolding and access equipment.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

3.02.01	knowledge of types of access equipment such as ladders, aerial lifts and swing stages
3.02.02	knowledge of types of scaffolding such as tube and clamp, and frame
3.02.03	knowledge of certification requirements for scaffolding and access equipment
3.02.04	knowledge of fall protection requirements when working on access equipment
3.02.05	knowledge of safe use of ladders such as safe angles of ladders and three-point contact rule
3.02.06	knowledge of regulations regarding the use of scaffolding
3.02.07	knowledge of worksite surroundings such as power lines, uneven surfaces and soft ground
3.02.08	knowledge of uses of scaffolding
3.02.09	ability to set up step ladders and extension ladders
3.02.10	ability to work from access equipment

- 3.02.11 ability to erect various types of scaffolding
- 3.02.12 ability to recognize unsafe, worn, damaged and defective scaffolding and access equipment

**Sub-task**

**3.03 Uses jigs and templates.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

- 3.03.01 knowledge of types of jigs such as multi-use and single-use
- 3.03.02 knowledge of types of templates such as manufactured or job built
- 3.03.03 knowledge of material used for jigs and templates such as wood, plywood, drywall, steel studs and track
- 3.03.04 knowledge of applications of jigs and templates such as building bulkheads, pre-fabricated wall panels and inside Q-deck flutes
- 3.03.05 ability to determine when to build and use jigs and templates
- 3.03.06 ability to assemble and square jigs and templates
- 3.03.07 ability to build repetitive internal frame structures using jigs and templates

**Sub-task**

**3.04 Prepares work site.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

- 3.04.01 knowledge of site requirements for tasks such as lighting, power, heating, and ventilation
- 3.04.02 knowledge of requirements for scaffolding and access equipment
- 3.04.03 knowledge of amount and placement of required materials
- 3.04.04 ability to perform job hazard analysis
- 3.04.05 ability to ensure adequate lighting

- 3.04.06 ability to install hoarding as needed
- 3.04.07 ability to protect surrounding environment using materials such as dust barriers and drop cloths

**Sub-task**

**3.05 Handles materials, supplies and products.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

- 3.05.01 knowledge of loading and unloading procedures
- 3.05.02 knowledge of storage procedures for materials such as drywall, ceiling tiles and adhesives
- 3.05.03 knowledge of delivery access to job site
- 3.05.04 knowledge of sequence in which materials are to be used
- 3.05.05 ability to identify materials
- 3.05.06 ability to locate materials to accommodate construction, future partitions and weight distribution
- 3.05.07 ability to operate handling equipment such as pallet jack and drywall cart
- 3.05.08 ability to handle material manually
- 3.05.09 ability to protect and secure materials
- 3.05.10 ability to dispose of surplus and waste material

**Sub-task**

**3.06 Lays out work.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

- 3.06.01 knowledge of installation sequence
- 3.06.02 knowledge of work requirements of other trades
- 3.06.03 knowledge of applied mathematics and geometry such as 3-4-5 triangle (Pythagorean theorem), radii and angles
- 3.06.04 knowledge of construction techniques

- 3.06.05 knowledge of floor, wall and ceiling systems' intended use
- 3.06.06 ability to transfer information from blueprint to job site
- 3.06.07 ability to transfer layout from floor to ceiling for suspended ceilings and bulkheads
- 3.06.08 ability to use layout tools and equipment such as chalk lines, squares, lasers and tape measures
- 3.06.09 ability to determine and mark gridlines
- 3.06.10 ability to use benchmarks to transfer elevations to elements such as door and window openings, bulkheads and ceilings
- 3.06.11 ability to transfer benchmarks from one area to another
- 3.06.12 ability to check gridlines for square
- 3.06.13 ability to identify irregularities on floors, walls and ceiling such as high spots on floor and lowest obstacle for ceiling layout
- 3.06.14 ability to calculate elevation of finished floors and ceilings
- 3.06.15 ability to offset lines to re-establish grid lines
- 3.06.16 ability to lay out corners, angles and radii
- 3.06.17 ability to make allowances to achieve finish dimension on walls, ceilings and floors

**Sub-task**

**3.07 Applies sealants and gaskets.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

- 3.07.01 knowledge of types of sealants such as acoustical, silicone and latex caulking
- 3.07.02 knowledge of types of gaskets such as neoprene and foam
- 3.07.03 knowledge of sealant and gasket applications such as prevention of reaction of dissimilar metals, reduction of sound transmission and prevention of drafts
- 3.07.04 ability to select and use tools such as caulking gun and knife
- 3.07.05 ability to determine amount required for tasks
- 3.07.06 ability to tool sealants
- 3.07.07 ability to remove and dispose of excess sealant

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**Sub-task****3.08****Uses personal protective equipment (PPE) and safety equipment.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

- 3.08.01 knowledge of types of PPE such as safety harnesses, work boots, respirators, hard hats and safety glasses
- 3.08.02 knowledge of types of safety equipment such as fire extinguishers, eye wash stations and first aid kits
- 3.08.03 knowledge of certification and training requirements for PPE and safety equipment
- 3.08.04 knowledge of operation of fire extinguisher equipment
- 3.08.05 knowledge of location of PPE and safety equipment
- 3.08.06 ability to select PPE for task performed
- 3.08.07 ability to follow WHMIS procedures
- 3.08.08 ability to recognize limitations of use of PPE and safety equipment
- 3.08.09 ability to inspect PPE and safety equipment
- 3.08.10 ability to organize and store PPE and safety equipment

<i>Trends</i>	There is an increased use of steel floor decking systems. More efficient building technologies are being developed for the steel framing industry. Seismic restraints are becoming more common in the construction industry.
<i>Related Components (include, but not limited to)</i>	Steel members, studs, tracks, angles, carrying channel, furring channel, fasteners, metal door frames, metal window frames, wood backing (plywood), metal backing (metal strapping), flat metal for cross bracing, bridging (bridging clips and channels), steel joists, bracing, stiffeners, framing accessories.
<i>Tools and Equipment</i>	Hand tools, power tools, layout and measuring tools, scaffolding and access equipment, PPE and safety equipment.

## Task 4

### Erects non-load bearing steel assemblies.

<i>Context</i>	Non-load bearing steel assemblies are used to create walls, ceilings and bulkheads. Their erection should conform to manufacturers' specifications and applicable codes.
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### Sub-task

#### 4.01 Frames non-load bearing walls.

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

### Supporting Knowledge & Abilities

4.01.01	knowledge of non-load bearing wall components such as studs, tracks and channels
4.01.02	knowledge of framing procedures
4.01.03	knowledge of industry standards and applicable building code
4.01.04	knowledge of clearances required for deflection and expansion
4.01.05	knowledge of rough opening sizes

4.01.06	knowledge of attaching surfaces
4.01.07	ability to identify component thicknesses such as gauge and mils
4.01.08	ability to select and use tools and equipment such as hammer drill, screw gun and plumb bob
4.01.09	ability to select and use fasteners such as various self-tapping screws, pin bolts and adhesives
4.01.10	ability to measure and cut components
4.01.11	ability to determine stud spacing
4.01.12	ability to place and attach components

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**Sub-task**

**4.02                      Frames spanned ceilings.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

4.02.01	knowledge of components such as studs and tracks
4.02.02	knowledge of framing procedures
4.02.03	knowledge of industry standards
4.02.04	knowledge of span tables
4.02.05	knowledge of rough opening sizes
4.02.06	knowledge of fastening requirements
4.02.07	knowledge of attaching surfaces
4.02.08	ability to identify component thicknesses such as gauges and mils
4.02.09	ability to select and use tools and equipment such as laser level and screw gun
4.02.10	ability to select and use fasteners such as framing screws, concrete pins and pin bolts
4.02.11	ability to measure and cut components
4.02.12	ability to determine ceiling framing member spacing
4.02.13	ability to place and attach components

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**Sub-task****4.03 Frames suspended drywall ceilings.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

4.03.01	knowledge of components such as tracks, angles, carrying channel and furring channel
4.03.02	knowledge of framing procedures
4.03.03	knowledge of industry standards and applicable building code
4.03.04	knowledge of rough opening sizes
4.03.05	knowledge of material to be installed
4.03.06	knowledge of fastening requirements
4.03.07	knowledge of structural requirements
4.03.08	knowledge of attaching surfaces
4.03.09	ability to check requirements for access panels such as for electrical fixtures, ducts and plumbing
4.03.10	ability to select and use tools and equipment such as laser level, screw gun and nippers
4.03.11	ability to select and use fasteners such as tie wire, hanger wire and eyelets
4.03.12	ability to identify material thicknesses such as gauge and mils of framing members and thickness of drywall
4.03.13	ability to measure and cut components
4.03.14	ability to determine component spacing
4.03.15	ability to attach components

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**Sub-task****4.04 Frames non-load bearing bulkheads.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

4.04.01	knowledge of functions such as cosmetic, concealing electrical and mechanical devices, smoke barrier and defining room transitions
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4.04.02	knowledge of components such as studs and tracks
4.04.03	knowledge of bulkhead architectural features such as light coves, valences and curves
4.04.04	knowledge of framing procedure
4.04.05	knowledge of industry standards
4.04.06	knowledge of component spacing
4.04.07	knowledge of rough opening sizes
4.04.08	knowledge of fastening requirements
4.04.09	knowledge of attaching surfaces
4.04.10	ability to identify material thicknesses
4.04.11	ability to measure and cut components
4.04.12	ability to determine component spacing
4.04.13	ability to brace bulkhead
4.04.14	ability to place and attach components
4.04.15	ability to maximize use of materials
4.04.16	ability to form curves for bulkheads
4.04.17	ability to select and use tools and equipment such as laser level and screw gun
4.04.18	ability to select and use fasteners such as pin bolts, framing screws and drywall screws

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**Sub-task**

**4.05                    Installs metal door and window frames.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

4.05.01	knowledge of types of metal door frames such as welded and knock-down
4.05.02	knowledge of metal door frame swing
4.05.03	knowledge of metal window and door frame throat sizes
4.05.04	knowledge of wall finishes
4.05.05	ability to level and plumb
4.05.06	ability to attach frame to studs and floor
4.05.07	ability to select and use tools and equipment such as spirit level, plumb bob, square and screw gun

4.05.08	ability to select and install fasteners such as screws and anchors
4.05.09	ability to determine throat size of windows and doors
4.05.10	ability to assemble knock-down frames
4.05.11	ability to install shims
4.05.12	ability to determine secure side of window
4.05.13	ability to detect and correct defects such as deformed frames and inconsistent spreaders
4.05.14	ability to place frame in correct position

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### Sub-task

#### 4.06 Installs wood and metal backing.

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

#### Supporting Knowledge & Abilities

4.06.01	knowledge of types of wood and metal backing such as plywood and wide metal strapping
4.06.02	knowledge of wood and metal backing requirements and placement
4.06.03	knowledge of metal strapping thickness
4.06.04	ability to determine backing location
4.06.05	ability to cut and shape backing
4.06.06	ability to fasten wood and metal backing
4.06.07	ability to select and use tools and equipment such as screw gun, circular saw and chop saw
4.06.08	ability to select and use fasteners such as framing screws and drywall screws

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## Task 5

### Erects load bearing steel assemblies.

*Context* All load (wind and/or weight) bearing assemblies need to be designed and approved by engineers before lathers can begin their work. The engineers' specifications shall be strictly adhered to.

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**Sub-task****5.01                    Frames load bearing walls.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

5.01.01	knowledge of types of load bearing walls such as parapet walls and exterior walls
5.01.02	knowledge of load bearing wall components such as studs, flat metal for cross bracing, tracks and bridging
5.01.03	knowledge of framing procedures
5.01.04	knowledge of rough opening sizes
5.01.05	knowledge of attaching surfaces such as concrete and steel
5.01.06	ability to follow engineer's specifications and directions
5.01.07	ability to identify component thicknesses such as gauges and mils
5.01.08	ability to measure and cut components
5.01.09	ability to determine stud spacing
5.01.10	ability to place and attach load bearing wall components such as cross bracing, strapping and bridging clips
5.01.11	ability to select and use tools and equipment such as hammer drill, impact driver, chop saw and plumb bob
5.01.12	ability to perform basic welding
5.01.13	ability to select and use fasteners such as self-drilling screws, pin bolts and powder-actuated fasteners

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**Sub-task****5.02                    Frames exterior ceilings and soffits.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

5.02.01	knowledge of exterior ceiling and soffit components such as furring channel, studs, flat metal, angles and tracks
5.02.02	knowledge of attaching surfaces such as concrete and steel
5.02.03	knowledge of framing procedures

5.02.04	knowledge of rough opening sizes
5.02.05	ability to follow engineer's specifications and directions
5.02.06	ability to identify component thicknesses such as gauges and mils
5.02.07	ability to measure and cut components
5.02.08	ability to determine component spacing
5.02.09	ability to place and attach components
5.02.10	ability to select and use tools and equipment such as hammer drill, impact driver, chop saw and plumb bob
5.02.11	ability to select and use fasteners such as self-drilling screws, pin bolts and powder-actuated fasteners
5.02.12	ability to install vertical bracing for wind load

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### Sub-task

#### 5.03                      **Frames load bearing bulkheads.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	no	yes	ND	NV	ND

### Supporting Knowledge & Abilities

5.03.01	knowledge of functions such as cosmetic, concealing electrical and mechanical devices, protection from weather and defining room transitions
5.03.02	knowledge of types of load bearing bulkheads such as store fronts, light coves and canopies
5.03.03	knowledge of components such as studs, backing, hangers and tracks
5.03.04	knowledge of structural requirements
5.03.05	knowledge of framing procedures
5.03.06	knowledge of component spacing
5.03.07	knowledge of rough opening sizes
5.03.08	knowledge of fastening requirements
5.03.09	knowledge of attaching surfaces
5.03.10	ability to follow engineer's specifications and directions
5.03.11	ability to identify material thicknesses such as gauges and mils
5.03.12	ability to measure and cut components
5.03.13	ability to determine component spacing
5.03.14	ability to place and attach components
5.03.15	ability to maximize use of materials

5.03.16	ability to form curves for bulkheads
5.03.17	ability to select and use tools and equipment such as laser level and screw gun
5.03.18	ability to perform basic welding
5.03.19	ability to select and use fasteners such as pin bolts, framing screws and drywall screws
5.03.20	ability to install bracing and backing

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**Sub-task**

**5.04 Frames load bearing floors.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

5.04.01	knowledge of load bearing floor components such as steel joists, channels, flat metal, bridging, bracing and stiffeners
5.04.02	knowledge of framing procedures
5.04.03	knowledge of rough opening sizes
5.04.04	knowledge of attaching surfaces such as concrete and steel
5.04.05	ability to follow engineers' specifications and directions
5.04.06	ability to identify component thicknesses such as gauges and mils
5.04.07	ability to measure and cut components
5.04.08	ability to determine component spacing
5.04.09	ability to place and attach components
5.04.10	ability to select and use tools and equipment such as hammer drill, impact driver, chop saw and laser level
5.04.11	ability to perform basic welding
5.04.12	ability to select and use fasteners such as self-drilling screws, pin bolts and concrete anchors

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**Sub-task**

**5.05 Frames load bearing roofs.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

## Supporting Knowledge & Abilities

- 5.05.01 knowledge of load bearing roof components such as studs, flat metal for cross bracing, tracks and bridging
- 5.05.02 knowledge of framing procedures
- 5.05.03 knowledge of rough opening sizes
- 5.05.04 knowledge of attaching surfaces such as concrete and steel
- 5.05.05 ability to follow engineers' specifications and directions
- 5.05.06 ability to identify component thicknesses such as gauges and mils
- 5.05.07 ability to measure and cut components
- 5.05.08 ability to determine component spacing
- 5.05.09 ability to place and attach components
- 5.05.10 ability to select and use tools and equipment such as hammer drill, impact driver, chop saw and level
- 5.05.11 ability to perform basic welding
- 5.05.12 ability to select and use fasteners such as self-drilling screws, pin bolts, and nuts and bolts
- 5.05.13 ability to install manufactured trusses
- 5.05.14 ability to install bridging and bracing

<i>Trends</i>	There is a wider variety of wall and ceiling component systems such as drywall grid systems and pre-made wood backing, resulting in faster installation. There is an increased emphasis on smoke and fire stopping, resulting in some lathers specializing in the installation of smoke and fire barriers. Lathers have more choice in the types of clips such as glue-on and friction fit clips. Changes in X-ray technology has led to a decreased use of lead shielding.
<i>Related Components (include, but not limited to)</i>	Steel framing members (steel studs, tracks, angles, carrying channels, furring channels, tie wire, hanger wire), drywall (regular, moisture-resistant, fire-rated, vinyl board, core board), cement board, drywall trim and mouldings, fasteners, caulking, insulation (batt and rigid), frames, security mesh, lead shielding, access panels, acoustical grid and tile, architectural panels, access flooring (pedestals, grids, panels), pre-finished sound panels.
<i>Tools and Equipment</i>	Hand tools, power tools, layout and measuring tools, scaffolding and access equipment, PPE and safety equipment.

## Task 6

### Installs wall systems and components.

<i>Context</i>	Lathers install wall systems and components to match project requirements such as security, reusable partitions and accessibility of covered devices. Components are installed to provide desired appearance and protect against sound and fire.
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#### Sub-task

#### 6.01 Installs demountable walls.

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

#### Supporting Knowledge & Abilities

6.01.01	knowledge of types of demountable wall systems such as gravity lock, side clip and batten systems
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- 6.01.02 knowledge of components such as baseboard, J trim, corner pieces, top track and battens
- 6.01.03 knowledge of types of fastening systems such as progressive and non-progressive
- 6.01.04 knowledge of types of drywall used in demountable wall systems such as vinyl covered, cloth covered and veneer covered
- 6.01.05 knowledge of matching of panels (dye lots)
- 6.01.06 knowledge of sizes of prefinished drywall
- 6.01.07 knowledge of framing systems used with demountable wall systems
- 6.01.08 ability to place studs for windows, doors and corners when framing
- 6.01.09 ability to cut panel and trim to minimize waste
- 6.01.10 ability to cut back of sheets for outside angles and off angles using tools such as routers, knives and rasps
- 6.01.11 ability to hang and fasten sheets
- 6.01.12 ability to cut out openings for windows, doors and other penetrations
- 6.01.13 ability to mitre and install plastic trims and aluminium frames
- 6.01.14 ability to fabricate a finished edge on vinyl covered drywall
- 6.01.15 ability to install aluminium window and door frames in demountable wall systems
- 6.01.16 ability to handle pre-finished products to avoid damage
- 6.01.17 ability to install channels on steel studs for hanging gravity system
- 6.01.18 ability to install gravity clips on the back of drywall
- 6.01.19 ability to select and use tools such as routers, keyhole saw and knife

**Sub-task**

**6.02 Installs drywall.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

- 6.02.01 knowledge of types of drywall such as fire-rated, regular and moisture resistant
- 6.02.02 knowledge of common thicknesses, widths and lengths of drywall
- 6.02.03 knowledge of finished ceiling heights
- 6.02.04 knowledge of multi-layer techniques
- 6.02.05 knowledge of sequence of installation of sheets

6.02.06	ability to place drywall sheets
6.02.07	ability to ensure that studs, and door and window frames are level and plumb during installation of sheets
6.02.08	ability to cut drywall
6.02.09	ability to install drywall on concrete and block walls using materials such as adhesives and concrete nails
6.02.10	ability to bend drywall
6.02.11	ability to cut openings for windows, doors and penetrations
6.02.12	ability to select and use tools such as screw gun, router and drywall lifter
6.02.13	ability to select and use fasteners such as screws, nails and concrete nails

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**Sub-task**

**6.03 Installs drywall trims and mouldings.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

6.03.01	knowledge of types of drywall trim such as corner beads, L beads, J beads, and expansion and control joints
6.03.02	knowledge of corner beads such as plastic, metal, and bullnose
6.03.03	knowledge of types of mouldings such as plaster, cove, step and ornamental
6.03.04	knowledge of trim and moulding locations such as corners, closet edges, transitions and door frames
6.03.05	ability to select trim and mouldings for application or location
6.03.06	ability to measure and cut trim and mouldings
6.03.07	ability to fasten using methods such as screwing, clinching and gluing
6.03.08	ability to install trims to provide reveal

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**Sub-task**

**6.04 Installs security mesh.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

## Supporting Knowledge & Abilities

- 6.04.01 knowledge of mesh properties such as gauge, materials and mesh size
- 6.04.02 knowledge of applications for security mesh such as banks, secure storage rooms and prisons
- 6.04.03 knowledge of required butt at joints
- 6.04.04 ability to cut mesh using tools such as bolt cutters, nibblers, electric shears and circular saw with zip blade
- 6.04.05 ability to attach mesh to framing with fasteners such as security screws and regular screws

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### **Sub-task**

#### **6.05 Installs access panels.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

## Supporting Knowledge & Abilities

- 6.05.01 knowledge of uses and types of access panels such as fire-rated and standard
- 6.05.02 knowledge of panel materials such as plastic, drywall, metal and MDF (medium density fibre) board
- 6.05.03 knowledge of requirements for fire-rated access panels
- 6.05.04 knowledge of panel components such as hinges, springs and latches
- 6.05.05 ability to select panels for application
- 6.05.06 ability to fasten panels in place
- 6.05.07 ability to locate and modify wall and ceiling openings for access panels
- 6.05.08 ability to install framing for opening
- 6.05.09 ability to ensure panels are plumb and aligned

## Task 7

### Installs ceiling systems.

#### Context

Lathers install various ceiling systems for purposes such as cosmetic, acoustic, and concealment of electrical and mechanical devices.

Suspended ceilings are supported by vertical supports and bulkheads or walls. Bulkheads are supported by walls and/or higher substrates such as higher ceilings, slabs and other bulkheads. Non-suspended ceilings are made up of various types of materials such as glued-on tiles, stapled tiles and panels.

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#### Sub-task

##### 7.01

##### Installs suspended component ceilings.

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

#### Supporting Knowledge & Abilities

7.01.01	knowledge of types of suspended component ceilings such as acoustical, drywall and metal linear
7.01.02	knowledge of suspended component ceiling components such as inserts, hanger wire, main and cross tees, perimeter mouldings and panels
7.01.03	knowledge of methods of installing hangers such as tying wires to structure, punched Q-deck and using various anchors
7.01.04	knowledge of types of grid systems such as concealed, fine grid and basket weave
7.01.05	knowledge of requirements for hanger wire according to national, provincial/territorial and municipal building code
7.01.06	knowledge of requirements for utility fixtures
7.01.07	knowledge of types of t-bar systems such as fire-rated and standard
7.01.08	ability to cut, place and secure hardware and panels
7.01.09	ability to cut out holes for electrical and mechanical devices
7.01.10	ability to handle pre-finished products to avoid damage
7.01.11	ability to adapt installation procedures to new systems
7.01.12	ability to locate expansion and control joints
7.01.13	ability to level, square and align ceiling grid
7.01.14	ability to calculate size of border panels to achieve desired ceiling layout
7.01.15	ability to install bridging

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**Sub-task****7.02 Installs non-suspended ceilings.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

7.02.01	knowledge of types of non-suspended ceilings such as glue-on and stapled tiles
7.02.02	knowledge of types of adhesives and fasteners
7.02.03	ability to prepare substrate to eliminate irregularities and ensure bonding
7.02.04	ability to lay out, cut and install strapping/furring
7.02.05	ability to lay out ceiling pattern
7.02.06	ability to level, square and align ceiling
7.02.07	ability to cut out holes for electrical and mechanical devices
7.02.08	ability to install tiles using adhesives and fasteners

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**Task 8****Installs access flooring systems.**

*Context* Access flooring systems allow for air flow, electrical grounding, flexibility in room usage and easy access to wiring. Lathers must ensure that access flooring systems are level and stable.

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**Sub-task****8.01 Installs pedestals and supporting hardware.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

8.01.01	knowledge of types of access floor systems such as rigid grid, free standing and snap lock
8.01.02	knowledge of types of pedestal heads such as grid and gridless
8.01.03	knowledge of types of supporting hardware such as stringers and screws
8.01.04	ability to determine starting point

8.01.05	ability to chalk lines for pedestal location
8.01.06	ability to install grids on pedestals
8.01.07	ability to modify pedestals
8.01.08	ability to place and fasten pedestals with glue and mechanical fasteners
8.01.09	ability to assemble pedestals
8.01.10	ability to level pedestals with laser levelling equipment

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## Sub-task

### 8.02 Installs flooring panels.

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

### Supporting Knowledge & Abilities

8.02.01	knowledge of pre-finished flooring panels
8.02.02	knowledge of installation methods such as mechanically fastened and gravity fit
8.02.03	ability to cut and trim panels to fit
8.02.04	ability to cut holes in panels for penetrations
8.02.05	ability to place and secure panels
8.02.06	ability to select and install ramps and railings for computer access flooring
8.02.07	ability to select and use tools such as screw gun, suction cup panel lifter and band saw

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## Task 9

### Installs sound barriers and lead radiation shielding.

*Context* Lathers install sound barriers to reduce sound transmission between areas to provide occupant privacy and comfort. Lead radiation shielding is installed to prevent radiation exposure in medical facilities and labs.

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**Sub-task****9.01 Installs sound barriers.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

9.01.01	knowledge of types of sound barriers such as acoustical batt insulation, plenum baffles, lead sheeting, steel stud and drywall, and pre-finished sound panels
9.01.02	knowledge of types and properties of batt insulation such as fibreglass and mineral wool
9.01.03	knowledge of types of foil backed insulation such as single and double foil backed
9.01.04	knowledge of types of caulking and their applications
9.01.05	ability to install foil backed insulation with foil tape and tracks
9.01.06	ability to cut and fit insulation
9.01.07	ability to install pre-finished sound panels
9.01.08	ability to install lead sheeting with wafer screws
9.01.09	ability to caulk and seal penetrations and perimeter with acoustical caulking

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**Sub-task****9.02 Installs lead radiation shielding.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

9.02.01	knowledge of installation locations such as hospitals, dental offices and labs
9.02.02	knowledge of thicknesses and weights of lead shielding
9.02.03	knowledge of lead products and their effects
9.02.04	ability to cut shielding with knives and shears
9.02.05	ability to fasten shielding with wafer and drywall screws
9.02.06	ability to install lead-lined drywall on walls and ceilings
9.02.07	ability to cover screws with lead tabs
9.02.08	ability to encase electrical boxes with lead shielding

- 9.02.09 ability to treat inside and outside corners, and door and window frames  
 9.02.10 ability to handle lead shielding with gloves

## Task 10

### Installs smoke and fire barriers.

*Context* Smoke and fire barriers are installed by lathers to control the spread of fire and smoke, and delay the collapse of buildings to allow occupants to escape a building fire. The work must be done according to building codes, regulations and manufacturers' requirements.

#### Sub-task

##### 10.01 Installs shaft wall systems.

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

#### Supporting Knowledge & Abilities

- 10.01.01 knowledge of sequence of construction of shaft walls  
 10.01.02 knowledge of shaft wall components such as J-track, I studs, core board and fire caulking  
 10.01.03 knowledge of types of fasteners such as screws and pins  
 10.01.04 ability to seal all joints and cracks  
 10.01.05 ability to cut and plumb studs and tracks  
 10.01.06 ability to install core board using friction fit method

#### Sub-task

##### 10.02 Seals penetrations.

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

#### Supporting Knowledge & Abilities

- 10.02.01 knowledge of types of penetrations such as pipes, ducts, and electrical wiring

10.02.02	knowledge of materials used to seal penetrations such as fire caulk and mineral wool
10.02.03	knowledge of clearances required for expansion
10.02.04	knowledge of types of fire stop caulking such as liquid and workable
10.02.05	ability to locate and seal around metal sleeves by caulking inside and outside
10.02.06	ability to line holes with fire-rated drywall

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**Sub-task**

**10.03 Encloses beams, columns and staircases to achieve desired fire rating.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

10.03.01	knowledge of methods of installation with or without framing
10.03.02	knowledge of components such as track, studs, fire-rated drywall, caulking and furring channels
10.03.03	knowledge of sequence of assembly of enclosure
10.03.04	ability to use fasteners such as screws, tie wire and pins
10.03.05	ability to cut and fit framing and drywall

<i>Trends</i>	There is an increase in the use of rain screen systems for moisture drainage. New products are being introduced in the market to create the rain screen (e.g. plastic stucco wire with built-in rain screen). Metal lath/plaster ceilings and soffits are quickly disappearing. Pre-manufactured panels are used more frequently. The use of cementitious panels and planks for exterior finish is increasing.
<i>Related Components (include, but not limited to)</i>	Studs, tracks, insulation, expandable foam, sheathing material, foil tape, sheathing tape, membranes, fasteners, lath, sealants, pre-manufactured panels, flashings.
<i>Tools and Equipment</i>	Hand tools, power tools, layout and measuring tools, PPE and safety equipment, scaffolding and access equipment.

## Task 11

### Installs insulation and membranes.

<i>Context</i>	Membranes are installed to create a barrier against vapour, air and water. In an exterior system, insulation is primarily used to stop thermal transfer. Together, they create a continuous and uniform building envelope.
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### Sub-task

#### 11.01 Installs thermal insulation.

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

### Supporting Knowledge & Abilities

11.01.01	knowledge of types of thermal insulation such as fibreglass, mineral fibre, rigid, semi-rigid and batts
11.01.02	knowledge of insulating values such as R-20 and R-12
11.01.03	knowledge of installation procedures

- 11.01.04 knowledge of sealants such as thermal sealant, expandable foam, sheeting tape and foil tape
- 11.01.05 knowledge of PPE
- 11.01.06 knowledge of WHMIS
- 11.01.07 knowledge of attachment methods such as adhesives, friction fit and mechanical fasteners
- 11.01.08 ability to measure and cut insulation
- 11.01.09 ability to lay out insulation panels
- 11.01.10 ability to place and attach insulation
- 11.01.11 ability to use knives and saws

**Sub-task**

**11.02 Installs interior/exterior membranes.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

- 11.02.01 knowledge of types of membranes such as polyethylene films, rubberized non-permeable membrane, aluminium foil and building wrap
- 11.02.02 knowledge of installation procedures
- 11.02.03 knowledge of WHMIS
- 11.02.04 knowledge of attachment methods such as using adhesives and mechanical fasteners
- 11.02.05 knowledge of sealants such as caulking, tape and expandable foam
- 11.02.06 knowledge of manufacturers' specifications
- 11.02.07 ability to measure and cut membranes
- 11.02.08 ability to lay out membranes
- 11.02.09 ability to place and attach membranes
- 11.02.10 ability to use knives, hammer, tacker and stapler

**Task 12**

**Prepares surface for exterior finishes.**

*Context* Lathers create an appropriate substrate for the attachment of various finishes.

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**Sub-task****12.01 Installs exterior sheathing.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

12.01.01	knowledge of types of exterior sheathing material such as glass mat covered gypsum panels, exterior gypsum panels, cement board panels and plywood
12.01.02	knowledge of installation procedures
12.01.03	knowledge of types of fasteners such as screws, nails and pins
12.01.04	knowledge of types of sealants such as spray foam, sheeting tape and caulking
12.01.05	knowledge of manufacturers' specifications
12.01.06	ability to measure, cut and shape exterior sheathing
12.01.07	ability to lay out, place and fasten exterior sheathing
12.01.08	ability to select and use tools such as screw guns, nail guns and cement board cutters

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**Sub-task****12.02 Installs lath.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	no	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

12.02.01	knowledge of types of lath such as expanded metal, rib and welded stucco wire
12.02.02	knowledge of installation procedures
12.02.03	knowledge of fastener spacing
12.02.04	knowledge of types of fasteners such as screws, nails and pins
12.02.05	knowledge of expansion joints and plaster stops
12.02.06	knowledge of manufacturers' specifications
12.02.07	knowledge of flashings
12.02.08	ability to measure, cut and shape lath and stops
12.02.09	ability to lay out, place and fasten lath

- 12.02.10 ability to select and use tools such as screw guns, hammer and nippers
- 12.02.11 ability to install plaster stops, beads and expansion joints
- 12.02.12 ability to cut, shape and install flashings

**Sub-task**

**12.03 Installs Exterior Insulation Finish System (EIFS).**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	no	ND	NV	ND

Supporting Knowledge & Abilities

- 12.03.01 knowledge of installation procedures
- 12.03.02 knowledge of fastener spacing
- 12.03.03 knowledge of types of fasteners such as washers, screws and pins
- 12.03.04 knowledge of expansion joints
- 12.03.05 knowledge of flashings
- 12.03.06 ability to follow manufacturers' specifications
- 12.03.07 ability to measure, cut and shape insulation
- 12.03.08 ability to lay out, place and fasten insulation
- 12.03.09 ability to select and use tools such as screw guns, powder-actuated tools and trowels
- 12.03.10 ability to cut, shape and install flashings
- 12.03.11 ability to create expansion joints and edge details
- 12.03.12 ability to create a rain screen system

**Task 13**

**Installs exterior finishes.**

*Context*

Exterior finishes are installed to protect the building from environmental conditions while adhering to the architects' and engineers' designs.

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**Sub-task****13.01            Fabricates panels.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

13.01.01	knowledge of types of materials used such as steel studs, tracks and sheathing
13.01.02	knowledge of types of fasteners such as screws, nails, pins and clips
13.01.03	knowledge of various finishes
13.01.04	knowledge of building's substrate
13.01.05	ability to use fabrication tools such as chop saws and impact drills
13.01.06	ability to measure, cut, square and shape materials
13.01.07	ability to follow assembly procedures
13.01.08	ability to apply sheathing

---

**Sub-task****13.02            Installs pre-manufactured panels.**

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>
NV	yes	NV	yes	NV	yes	yes	NV	yes	yes	ND	NV	ND

Supporting Knowledge & Abilities

13.02.01	knowledge of installation procedures
13.02.02	knowledge of types of fasteners such as screws, nails, pins and clips
13.02.03	knowledge of joint tolerances
13.02.04	knowledge of various finishes
13.02.05	knowledge of building's substrate
13.02.06	ability to use installation tools such as impact drill and hammer drill
13.02.07	ability to modify panels as a result of site conditions
13.02.08	ability to plan sequence and placement of panels
13.02.09	ability to install temporary braces

## APPENDICES



**Hand Tools**

adjustable wrenches	lather's hatchet
aviation snips	locking C-clamp
bead clincher	magnetic punch
bolt cutter	multi-tip screwdriver
caulking gun	nippers
channel cutters	pliers
circle cutters	pop rivet gun
cold chisel	putty knife
deck punch	rasps
dry line/T-bar clips	rubber mallet
drywall lifter	screw puller
drywall saw	sharpening stone
eye screw pole	square (T, combination, tri (speed square)
files	stapler/hammer tacker
hack saw	stud crimpers
hammers	T-bar grid punch
hand sander	utility knives
hole punch	wrecking bar
keyhole saw	

**Power Tools and Equipment**

abrasive chop saw	hammer drill
angle grinder	heat gun
band saw	hot knife
circular saw	hot wire table
compound mitre saw	impact drill
compressor	jig saw
compressor hose	powder-actuated tools
cordless drill	power nailer/fastener
drywall router	power shears (snips)
drywall screw gun	power stapler
electric drill	reciprocating saw
electric shears	router
gas-actuated tools	table saw
gas powered cut-off saw	

## **Layout and Measuring Devices**

architect scale	magnetic hand level
calculator	moisture meter
centre punch	pencils and markers
chalk line	plumb bob
compass	scratch awl
dry line	spirit level
framing square	straight edge
laser alignment equipment	tape measure (25 ft. and 100 ft.)
laser level	T-bevel
laser measure tool	water level

## **Material Handling and Site Maintenance Equipment**

broom	sawhorses
drywall cart	shop vacuum
extension cord	shovel
floor scraper	squeegee
generator	suction cups
lockup box	temporary heaters
pails	wheel barrel
pallet jack	wheeled dolly
portable fans	wheeled garbage box
portable lights	

## **Scaffolding and Access Equipment**

aluminium bench	portable scaffolds
aluminium planks	rolling scaffolds
boom lifts	scissor-lift
extendable boom lift	stationary scaffolds
ladder jacks	stilts
ladders	swing stage

## **Personal Protective Equipment and Safety Equipment**

coveralls	fall arrest and restraint equipment
ear plugs and muffs	fire extinguishers
evacuation horn	first aid equipment
eye wash facilities	gloves
face shields	goggles

## Personal Protective Equipment and Safety Equipment (continued)

hard hat

knee pads

masks (particle, vapour)

respirators and cartridges

safety glasses

safety vest

steel toe boots

warning signs

warning tapes



<b>barriers</b>	a component that prevents movement or access of fire, smoke, heat/cold, moisture, sound, radiation, dust, light, people and animals
<b>bulkhead</b>	an assembly that forms a change in the ceiling elevation. It can be decorative or functional.
<b>carrying channel</b>	a main support member for other components
<b>corner bead</b>	a trim to guide a trowel to form a uniform corner. It can be made from metal, vinyl or paper
<b>fireproofing</b>	application of a fire resistant material directly or indirectly to protect structural members from fire damage
<b>furring channel</b> (also known as U bar, hat track, strapping)	framing member used to space lath or gypsum board from any surface member over which it is applied
<b>gas-actuated tools</b>	tools that are powered by gas and ignited by electrical charge
<b>hanger</b>	vertical tensile member that carries the steel framework of a suspended ceiling
<b>jig</b>	manufactured or job-built assembly used to guide tools or hold materials for repetitive operations
<b>lath</b>	plastic or metal backing for plaster
<b>lead radiation shielding</b>	material used to reduce radiation and sound exposure
<b>loadbearing members</b>	building components that support both live and dead loads
<b>membrane</b>	continuous barrier used to resist the flow of vapour, air and water
<b>non-suspended ceiling</b>	a ceiling finish applied directly to a solid unsuspended substrate
<b>pedestal</b>	main support component of an access flooring system

<b>rain screen</b>	cavity between substrate and cladding to allow water to escape
<b>security mesh</b>	steel mesh installed for security reasons
<b>shaft wall</b>	assembly used to protect stairwells, ducts and elevator shafts from fire
<b>sheathing</b>	sheet material that covers the exterior of a building's frame
<b>sheeting</b>	something that covers a large area but is very thin
<b>soffit</b>	exterior horizontal ceiling
<b>substrate</b>	underlying surface
<b>suspended ceiling</b>	a ceiling that is supported intermediately from building structure such as concrete slab and steel decking
<b>template</b>	temporary pattern created to assist in fabrication

<b>EIFS</b>	Exterior Insulation Finish System
<b>MSDS</b>	Material Safety Data Sheet
<b>MDF</b>	Medium density fibre
<b>PPE</b>	Personal Protective Equipment
<b>WHMIS</b>	Workplace Hazardous Materials Information System



# APPENDIX D

# BLOCK AND TASK WEIGHTING

## BLOCK A OCCUPATIONAL SKILLS

	<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>	National Average
%	20	10	NV	23	NV	10	10	NV	30	6	ND	NV	ND	15%

Task 1 Maintains tools and equipment.

	<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>	21%
%	60	10	NV	21	NV	10	20	NV	10	15	ND	NV	ND	

Task 2 Organizes work.

	<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>	33%
%	30	30	NV	25	NV	25	40	NV	45	35	ND	NV	ND	

Task 3 Performs routine trade activities.

	<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>	46%
%	10	60	NV	54	NV	65	40	NV	45	50	ND	NV	ND	

## BLOCK B FRAMING

	<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>	National Average
%	30	30	NV	27	NV	25	15	NV	40	35	ND	NV	ND	29%

Task 4 Erects non-load bearing steel assemblies.

	<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>	52%
%	60	60	NV	55	NV	55	40	NV	40	57	ND	NV	ND	

Task 5 Erects load bearing steel assemblies.

	<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>	48%
%	40	40	NV	45	NV	45	60	NV	60	43	ND	NV	ND	

**BLOCK C INTERIOR SYSTEMS**

	<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>	National Average
%	40	30	NV	32	NV	35	50	NV	20	35	ND	NV	ND	35%

Task 6 Installs wall systems and components.

	<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>	33%
%	30	30	NV	30	NV	40	25	NV	40	35	ND	NV	ND	

Task 7 Installs ceiling systems.

	<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>	29%
%	30	30	NV	25	NV	30	15	NV	35	35	ND	NV	ND	

Task 8 Installs access flooring systems.

	<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>	9%
%	5	10	NV	17	NV	5	20	NV	5	5	ND	NV	ND	

Task 9 Installs sound barriers and lead radiation shielding.

	<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>	13%
%	15	10	NV	16	NV	10	20	NV	10	10	ND	NV	ND	

Task 10 Installs smoke and fire barriers.

	<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>	16%
%	20	20	NV	12	NV	15	20	NV	10	15	ND	NV	ND	

**BLOCK D EXTERIOR SYSTEMS**

	<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>	National Average
%	10	30	NV	18	NV	30	25	NV	10	24	ND	NV	ND	21%

Task 11 Installs insulation and membranes.

	<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>	41%
%	50	15	NV	44	NV	55	35	NV	35	50	ND	NV	ND	

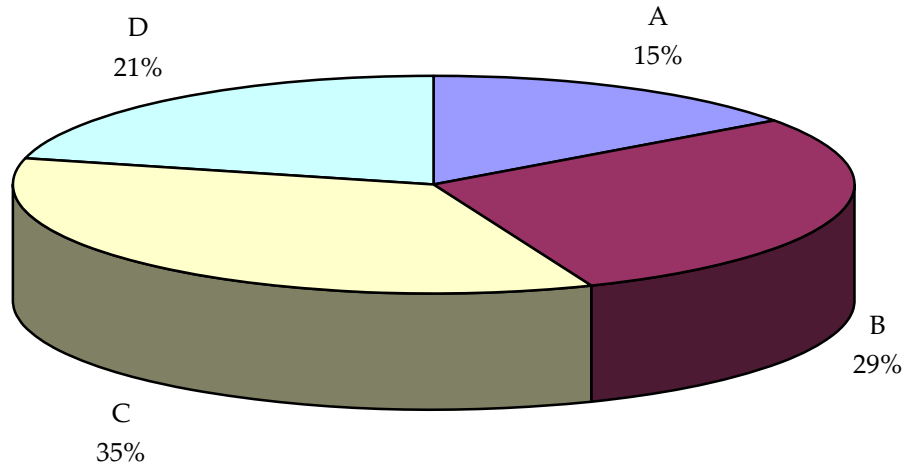
Task 12 Prepares surface for exterior finishes.

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>		
%	35	25	NV	22	NV	30	40	NV	20	30	ND	NV	ND	29%

Task 13 Installs exterior finishes.

<u>NL</u>	<u>NS</u>	<u>PE</u>	<u>NB</u>	<u>QC</u>	<u>ON</u>	<u>MB</u>	<u>SK</u>	<u>AB</u>	<u>BC</u>	<u>NT</u>	<u>YT</u>	<u>NU</u>		
%	15	60	NV	34	NV	15	25	NV	45	20	ND	NV	ND	30%





**TITLES OF BLOCKS**

BLOCK A	Occupational Skills	BLOCK C	Interior Systems
BLOCK B	Framing	BLOCK D	Exterior Systems

\* Average percentage of the total number of questions on an interprovincial examination, assigned to assess each block of the analysis, as derived from the collective input from workers within the occupation from all areas of Canada. Interprovincial examinations typically have from 100 to 150 multiple-choice questions.



# APPENDIX F

## TASK PROFILE CHART - Lather (Interior Systems Mechanic)

	BLOCKS	TASKS	SUB-TASKS				
A	OCCUPATIONAL SKILLS	1. Maintains tools and equipment.	1.01 Maintains hand tools.	1.02 Maintains power tools.	1.03 Maintains powder-actuated tools.	1.04 Maintains gas-actuated tools.	1.05 Maintains pneumatic tools.
			1.06 Maintains layout and measuring devices.				
		2. Organizes work.	2.01 Communicates with others.	2.02 Uses documentation.	2.03 Uses blueprints and drawings.	2.04 Plans daily tasks.	2.05 Estimates materials and supplies.
			2.06 Maintains safe work environment.				
		3. Performs routine trade activities.	3.01 Performs measurements.	3.02 Uses scaffolding and access equipment.	3.03 Uses jigs and templates.	3.04 Prepares work site.	3.05 Handles materials, supplies and products.
			3.06 Lays out work.	3.07 Applies sealants and gaskets.	3.08 Uses personal protective equipment (PPE) and safety equipment.		
B	FRAMING	4. Erects non-load bearing steel assemblies.	4.01 Frames non-load bearing walls.	4.02 Frames spanned ceilings.	4.03 Frames suspended drywall ceilings.	4.04 Frames non-load bearing bulkheads.	4.05 Installs metal door and window frames.
			4.06 Installs wood and metal backing.				
		5. Erects load bearing steel assemblies.	5.01 Frames load bearing walls.	5.02 Frames exterior ceilings and soffits.	5.03 Frames load bearing bulkheads.	5.04 Frames load bearing floors.	5.05 Frames load bearing roofs.

	<b>BLOCKS</b>	<b>TASKS</b>	<b>SUB-TASKS</b>				
C	<b>INTERIOR SYSTEMS</b>	6. Installs wall systems and components.	6.01 Installs demountable walls.	6.02 Installs drywall.	6.03 Installs drywall trims and mouldings.	6.04 Installs security mesh.	6.05 Installs access panels.
		7. Installs ceiling systems.	7.01 Installs suspended component ceilings.	7.02 Installs non-suspended ceilings.			
		8. Installs access flooring systems.	8.01 Installs pedestals and supporting hardware.	8.02 Installs flooring panels.			
		9. Installs sound barriers and lead radiation shielding.	9.01 Installs sound barriers.	9.02 Installs lead radiation shielding.			
		10. Installs smoke and fire barriers.	10.01 Installs shaft wall systems.	10.02 Seals penetrations.	10.03 Encloses beams, columns and staircases to achieve desired fire rating.		
		D	<b>EXTERIOR SYSTEMS</b>	11. Installs insulation and membranes.	11.01 Installs thermal insulation.	11.02 Installs interior/exterior membranes.	
12. Prepares surface for exterior finishes.	12.01 Installs exterior sheathing.			12.02 Installs lath.	12.03 Installs Exterior Insulation Finish System (EIFS).		
13. Installs exterior finishes.	13.01 Fabricates panels.			13.02 Installs pre-manufactured panels.			