



How to present your skills and experience to the construction industry:

A WORKBOOK FOR ABORIGINAL PEOPLE
INTERESTED IN EMPLOYMENT IN CONSTRUCTION



About the CSC

The Construction Sector Council (CSC) – a partnership between industry and government – is a national not-for-profit organization committed to the development of a highly skilled workforce that will support the future needs of Canada’s construction industry.

This report is available in both official languages and can be obtained electronically at www.csc-ca.org.

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SECTION I: Introduction

General background

The Construction Sector Council (CSC) and the construction industry across Canada recognize the population is aging and that this will lead to the retirement of skilled tradespersons. As a result, the construction industry must do all it can to help recruit and train the next generation of skilled tradespersons. First Nations, Métis and Inuit peoples are important sources of new recruits to address this challenge, and the tools and mechanisms must be put in place to help them prepare to enter this industry.

A number of trades training programs are working to increase First Nations, Métis, Inuit, and urban Aboriginal peoples' participation in construction career training and apprenticeships.

Why an Aboriginal employment workbook?

The CSC wants to recruit Aboriginal people to the industry. If you have construction experience or want to enter the construction industry, this workbook will help you:

- assess your level of knowledge and skills with respect to the construction industry through a series of self-assessment charts
- assess your strengths, weaknesses, and gaps with respect to specific construction trades
- create a plan for your future
- put together a quality employment portfolio and résumé

You can do the activities in this workbook on your own or you can discuss them with an employment counsellor at your local Aboriginal Skills and Employment Training Strategy (ASETS¹) centre, where you may be seeking help.

When you are done, your employment portfolio will contain all the information and documents you will need to apply for a job.

Your résumé – two pages describing your relevant education, training, and employment background information – will be your calling card for prospective employers.

Together, these documents will help you put your best foot forward with industry employers, human resource professionals, ASETS centres, and counsellors.

¹ ASETS is the successor program to the Aboriginal Human Resources Development Strategy (AHRDS), which expired in March 2010.

Who should use this workbook?

This workbook is designed to help Aboriginal people find employment in construction.

The workbook will be useful for Aboriginal people:

- getting started in construction
- making construction career and trade decisions
- with construction experience who want to document their skills
- ready to enter apprenticeship in the construction trades

About Prior Learning Assessment and Recognition (PLAR)

Collecting evidence of competencies using portfolio-assisted PLAR

The tools presented in this workbook are based on the Prior Learning Assessment and Recognition (PLAR) process. This process involves identifying, documenting, assessing and recognizing things you have learned through formal and informal study. This may include work and life experience, training, independent study, volunteering, travel, hobbies, and family experiences.

In addition to contributing to your sense of accomplishment, the recognition of prior learning could prompt you to: complete the requirements of an academic or training program; obtain an occupational/professional certification; or enter the employment/labour market.

History of Aboriginal peoples in the construction industry

According to Richard Hill's research and writing in *Skywalkers, a History of Indian Ironworkers* (1987), construction is part of Aboriginal tradition. First Nations, Métis and Inuit peoples have always designed and built diverse structures for a variety of uses including homes, bridges, and sculptures. Among Woodland cultures, early villages were so extensive that Europeans called the structures "castles" and "forts." For generations, Aboriginal peoples have been reshaping their environment to build shelter for their families, to protect their villages, and to express their sacred concerns. Modern architects and engineers are just beginning to recognize the true value of construction techniques of Aboriginal peoples across North America.

Many men and women continue to participate in the construction trades to earn a living and provide for their families. For many, construction is a tradition because of the cooperative approach of the trade. Labour is an important part of Aboriginal societies, where men and women have long worked collectively for the benefit of their communities.

SECTION II:

Getting started

To help you create a more focused employment portfolio and résumé, Section III includes a number of self-assessment charts organized around the following four competency categories:

1. Essential Skills transferable to construction trades
2. Knowledge of common tools used in the construction trades
3. Basic skills and knowledge of 26 construction trades
4. Health and safety in the construction industry

Before you complete the charts in Section III, it is important for you to reflect on your experience in the field of construction. You can start with an informal dialogue or interview with an employment counsellor.

The First Nations' National Building Officers Association reported that, in 2005, there were approximately 250 to 300 Aboriginal home inspectors employed in the industry, serving 651 First Nations communities.

This dialogue will help you identify what could be considered practical experience in the construction industry. This is an important first step to helping you discover what you have learned from your life experiences and to encourage you to complete the process.

This discussion should cover your experiences, trades qualifications and any prerequisites you have completed for entry into the construction workforce. You could also discuss any needs you may have for career counselling and skills upgrading for trades qualifications, and the steps you might need to take to put in place realistic plans for identifying potential job opportunities in the construction industry.

Begin by thinking broadly about your construction experiences. Examples of questions to ask yourself include:

- Why am I interested in the construction trades?
- What experience have I had that I can build on?
 - life experience
 - work experience
 - education and training
- What knowledge do I have related to construction trades in the following areas: basic skills and knowledge, knowledge of common tools, trade-specific skills and safety?
- What qualities, attitudes, and characteristics will support my work in the construction industry?
- What are the personal and lifestyle factors that have influenced me to go in this direction?
- How do I learn best? (e.g., learn by seeing, doing, listening, reading)

Other, more specific, questions to answer include:

- If you have constructed something, are you able to describe the steps involved?
- Did you read a plan or blueprint, or make your own drawing?
- Did you require support or help from someone else?
- Did you work with a contractor?
- Were you working as part of a team with other workers?
- Were you responsible for organizing the job?
- Did you enjoy the work?
- Have you developed construction skills in places other than regular job sites? (e.g., unpaid community work, assisting with home building projects, use of hand or power tools, painting fences, working in a lumberyard, etc.)
- What did you do to ensure your safety and the safety of others while you worked?
- Did you participate in health and safety training, and do you have evidence such as a course outline or a certificate to prove you took the training and the topics covered?
- Is the certificate recent and up-to-date?
- Have you ever taken any other training courses related to construction?
- Do you like using tools?
- Do you enjoy the process of creating and building?
- Do you like physical work?
- Do you enjoy working outdoors?
- Did you purchase construction materials, and what steps did you take to ensure you had all of the right materials for the job?
- Have you noticed improvements in your ability to complete construction-related tasks such as measuring and using basic equipment and tools?

The goal of this self-assessment exercise is to help you identify and articulate your skills and knowledge about the construction industry, and to compare that information against the types of competencies expected by the construction industry.

Once you have completed the self-assessment tools, the next steps will be to plan for your future, and to create your portfolio (Section IV) and your résumé.

The annual First Nations Northern Housing Conference showcases housing innovations from northern and remote communities, as well as their success in providing trades training to their members.

SECTION III: Self-assessment tools

There are four self-assessment tools in this section:

1. Essential Skills transferable to the construction trades (Part A)
2. Knowledge of common tools used in the construction trades (Part B)
3. Construction trades skills and knowledge (Part C)
4. Safety skills and knowledge (Part D)

Once all of these tools have been completed, you will be ready to assemble your portfolio, create your résumé, and achieve your goals!

The Mohawks of the Bay of Quinte, in South Eastern Ontario, were presented with the top prize for building an energy-efficient R-2000 home in 2003. The award was sponsored by the Office of Energy Efficiency, Natural Resources Canada.

PART A

Essential Skills transferable to the construction trades

Human Resources and Skills Development Canada (HRSDC) has identified nine Essential Skills that can be applied to a wide variety of occupations and job categories in all sectors of the Canadian economy. These skills form the basic foundation for developing more advanced skills and knowledge.

The nine Essential Skills are:

- | | |
|------------------------|------------------------|
| 1. Numeracy | 6. Working with Others |
| 2. Reading | 7. Continuous Learning |
| 3. Document Use | 8. Writing |
| 4. Oral Communications | 9. Computer Use |
| 5. Thinking | |

Essential Skills are sometimes referred to as “transferable skills.” For example, your ability to read and write, perform basic mathematical calculations, operate a computer, or participate as a member of a work team may have been acquired in a non-construction job. With relatively little adjustment, these skills can be adapted to specific job requirements within the construction industry and are essential elements of professional competence and high-quality work.

The following nine Essential Skills charts will help you assess how your current level of Essential Skills relate to those used in the construction industry.

The Essential Skills charts² should be used to:

- help identify the skills you have
- guide you in determining which important skills you should be building
- see the kind of skills you will develop as you work in construction
- show you the value of these Essential Skills on the job site
- show the importance of Essential Skills to construction work

Once you have completed the charts, keep them as a reference. You can review the charts before construction interviews to help you remember the skills you are bringing to the job site. This will help you tell a potential employer about the strengths, skills, and abilities you bring that are important and practical for the construction industry.

When preparing your portfolio and your résumé (Section IV):

- review the Essential Skills you have identified as the ones you possess
- identify your strengths
- remember the value these skills bring to your ability to work in construction

Remember:

- You do not need these skills to enter the construction industry.
- You will build these skills as you work in the construction trades.
- Every skill listed has value in construction work.

² Some of the Essential Skills descriptions listed in the charts have been adapted from the *Essential Skills Manual for Carpenters*, which can be found on the *Trade Essentials* project website, www.tradeessentials.ca, along with other resources and information.

Using the chart and the scale, place a check mark in the column that best describes your experience and ability. If you are consistently rating with a “yes,” where possible, you should identify the documents that can help validate your rating (e.g., letter from a current or former employer indicating your experience and abilities). You can do this in the right-hand column under the word “Evidence.”

SELF-ASSESSMENT SCALE

- YES** Able to do this
- SOMEWHAT** Some experience and ability with this
- NO** Not able to do this
- EVIDENCE** In the categories in which you have indicated “yes,” if possible, provide evidence of your ability to do that task or skill. Note: You will not be able to provide evidence for many of these tasks or skills.

1. Numeracy

DESCRIPTION	YES	SOMEWHAT	NO	EVIDENCE
Ability to use numbers and mathematical concepts, such as:	Add and subtract numbers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Multiply numbers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Divide numbers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Use calculators to solve problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Understand and use basic construction fractions when measuring materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Add fractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Subtract fractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Understand, add and subtract decimals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of metric and imperial measurements:	Convert decimals to fractions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Understand and use metric measurements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Understand and use imperial measurements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Convert between metric and imperial measurements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Read, understand and use imperial measuring tape	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Read, understand and use metric measuring tape	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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DESCRIPTION		YES	SOMEWHAT	NO	EVIDENCE
Using numbers to:	Determine quantities of materials needed at the work site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Count construction materials when they arrive or leave the work site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Record quantities of material used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Take measurements and match them with specifications and blueprints	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Measure quantities of cement and water according to the instructions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Calculate the area or perimeter of the work site to determine the quantities of materials needed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Calculate the volume of cement pours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Measure length, height and angles to frame floors and walls, and install drywall, casings and trim	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Measure wood for forms, taking into account cutouts for windows and openings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Calculate elevation when setting the grade for yards, roofs or driveways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Calculate square framing, using the Pythagorean theorem, the 3/4/5 rule	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Compare torque test values to ensure they are within an acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Calculate an average of several readings of pressure in cylinders and compare this average to the range of normal values	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Estimate distance by "pacing" out metres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Making calculations:	Estimate the quantity of material needed for a work day (number of pipes, bricks, cement)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Estimate the cost and amount of time needed to complete a job		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Estimate the weight of materials to be lifted by rope or lift truck		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
In your head		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Using a pen and paper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Using a calculator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

2. Reading

DESCRIPTION		YES	SOMEWHAT	NO	EVIDENCE
Ability to read written materials, such as:	Documents with trade terminology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Scan for information in trade-related material (texts, memos, newsletters, equipment manuals, codes and regulations)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Use tables of contents, headings and sub-headings to locate information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Labels on products and chemicals for information on product ingredients, instructions for use, warnings and emergency procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Forms and work orders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Notes, letters, memos about company policies, changes, training events or safety sheets identifying on-site safety hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Manuals, specifications, regulations:				
	– refer to Workplace Hazardous Materials Information System (WHMIS) when using new products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	– operating and servicing instructions for equipment, vehicles and machines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	– occupational health and safety regulations to determine safe working practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Reports, books, articles in trade journals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Basic blueprints	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Building codes (read and understand)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Search and identify topics in building codes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

3. Document Use

DESCRIPTION	YES	SOMEWHAT	NO	EVIDENCE	
Ability to understand and use written materials, such as:	Safety and hazard signs on construction sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Work orders, material lists and time log sheets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Lists to identify and order parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Material delivery forms to check off materials arriving on-site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	WHMIS labels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Instruction labels on products, materials and machinery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Schedules of activities and priorities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Instructions for mixing cement or grouts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Requisition or estimate forms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Invoices, packing slips and price charts, when receiving, picking up or renting supplies to ensure the amount, price and type of product is correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ability to:	Work order or maintenance sheets, listing descriptions of work to be done, materials used and time needed to complete a job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Maps to locate work sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Locate and interpret information on lists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Create lists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Locate information in tables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Interpret information in tables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Locate and interpret information on forms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Enter information on forms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Find information from many sources (e.g., code books, blueprints, work manuals)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Enter information into pre-set documents and forms (accident report forms, order forms)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ability to create documents by:	Recognize basic information in blueprints: measurements, dimensions, elevations, openings, stairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Recognize more complex blueprint information (e.g., detail drawings, sections, elevations, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Take off measurements from blueprints	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Complete pre-delivery inspection forms, checking that parts and safety features work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Review blueprints, topographic maps, site plans, transits, field books, scale drawings and rough sketches to obtain information about positions, measurements, elevations and dimensions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Read assembly and schematic drawings and diagnostic trees in manuals to identify, maintain and assemble parts and to diagnose problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Making sketches to remember measurements, dimensions or locations for cuts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

4. Oral Communication

DESCRIPTION		YES	SOMEWHAT	NO	EVIDENCE
Types of communication used:	In person	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Two-way radios	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Cell phone/telephone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Using specialized communication signals (e.g., hand signals to signal safety concerns on a construction site)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Using speech to share thoughts and information to:	Listen to and understand instructions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Follow directions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Ask questions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Relay information to supervisors or co-workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Take direction from supervisors or more experienced workers in regard to safety hazards, problems, work progress and how to complete jobs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Interact with co-workers to discuss procedures, ask or answer questions, coordinate tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Interact with workers from other trades to exchange ideas, coordinate work or resolve disagreements (e.g., surveyor helper/instrument person talks with heavy equipment operators about how much earth to remove)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Participate in group discussions (e.g., at staff meetings and training courses, to discuss safety, goals, procedures, job timeframes and projects)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Participate in tool box talks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Overcome environmental factors affecting communication (e.g., distance between crew members on a work site or wearing hearing protection)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

5. Thinking

DESCRIPTION	YES	SOMEWHAT	NO	EVIDENCE
Problem solve: Apply learning from previous experiences to identify possible solutions to a problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Find, evaluate and choose appropriate information to solve a problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Make decisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Plan and organize job tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Find that the wrong supplies have been included in an order	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Devise practical solutions when sequences of work get mixed up, when workers arrive at jobs without the right tools, when jobs take longer than anticipated or when weather interferes with projects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Face problems when measurements, drawings or instrument readings are wrong (investigate and correct error)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cope with mechanical faults, such as equipment breakdowns (consult manuals to troubleshoot problems, seek help or solve the problem by trial and error)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Find that the job does not go as anticipated, deal with problems that arise in completing a task (e.g., electrical or plumbing details that need to be addressed prior to completing your assigned work)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Make decisions, such as: Set up of equipment for jobs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
How to complete jobs most efficiently, based on technical knowledge, experience with procedures and advice from co-workers and supervisors (consider time, cost and efficiency)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Whether to do a job that seems dangerous (determine safest method)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
How to stack or move construction materials, taking into account safety, efficiency, awkwardness of materials and your previous experience with such materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Whether to apply a certain shade of paint to walls or whether to verify the colour with the customer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
The timing and priority of jobs, taking into consideration such factors as the weather, safety, material drying times and time pressures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Plan and organize job tasks: Coordinate with other workers or trades coming before or after you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Think ahead to be prepared for the next part of the job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Adjust work priorities due to interruptions, such as unexpected rain or snow storms, late arrival of supplies or rush orders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Plan for the next day or week by ensuring enough material is available and finding out which trades will be at the work site next	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Spend time at a new job site planning and walking around, matching blueprints, sketches and work orders to the work site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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DESCRIPTION		YES	SOMEWHAT	NO	EVIDENCE
Use memory significantly:	Remember tasks to complete and the sequence in which to do them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Remember requests made by other workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Remember measurements taken, such as height of walls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Remember particulars of jobs, such as types of materials to use and safety concerns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Find information:	Refer to site plans for distance, angles and elevations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Find instructions for tasks by examining materials such as paint containers to identify types of paint, drying time, re-coat times and clean-up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Find out the schedule of activities by asking co-workers, tradespersons and supervisors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Locate information on other workers' drawings and notes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Find information on the operation and maintenance of new equipment by looking in equipment instruction manuals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

6. Working with Others

DESCRIPTION		YES	SOMEWHAT	NO	EVIDENCE
Interacting with others to complete tasks:	Work jointly with a journey person or apprentice to accomplish assigned tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Work as part of a team or crew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Take direction from your immediate supervisor or foreman	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Ask questions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Accept feedback	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Give feedback	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Stay busy on the job site				
	Consult with fellow workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Resolve conflict	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Be aware of hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Clean up the immediate work area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Care for tools and equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Maintain a clean, safe work area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

7. Continuous Learning

DESCRIPTION	YES	SOMEWHAT	NO	EVIDENCE	
Participating in an ongoing process of gaining skills and knowledge (e.g., workplace training), such as:	Engage in learning opportunities to keep skills current and meet career goals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Remain current with building codes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Awareness of advances in technology that impact trade procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Technical courses offered on new products, procedures and equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Apprenticing, learning through a combination of classroom training and on-the-job training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Training related to worker health and safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Staying current by reading trade magazines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

8. Writing

DESCRIPTION	YES	SOMEWHAT	NO	EVIDENCE	
Writing text or typing on a computer to:	Complete forms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Write memos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Write notes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Write lists of materials needed for jobs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Write résumés	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Write short messages, explanations, requests or directions (work orders, memos, detailed messages)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Enter survey notes in books to record measurements for co-workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Fill out reports or maintenance sheets after installing or servicing products for customers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Record information from safety meetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Keep log books, noting activities, pricing for jobs, materials required, appointments and problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Complete incident/accident report forms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

9. Computer Use

DESCRIPTION		YES	SOMEWHAT	NO	EVIDENCE
Using computers and other technical tools (e.g., fax machine):	Use of computer applications				
	- start up computer and monitor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- create documents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- create files and folders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- save, copy or move files and folders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- create tables, graphs and charts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- interpret information in existing spreadsheets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- enter data in existing spreadsheets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- write, send and forward messages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- add attachments to messages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- access a specific website	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- use a search engine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- use electronic field notebooks to complete topographical surveys	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- use computer-generated diagrams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
- word processing (e.g., to write a letter, résumé)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

PART B

Knowledge of common tools used in the construction trades

In this section, you are asked to evaluate your knowledge of common tools and equipment used in the construction trades.

Using the chart and the scale, place a check mark in the column that best describes your skill level in that area. If you are consistently rating yourself as “Fully experienced,” where possible, you should identify the documents that can help validate your rating (e.g., letter from a current or former employer indicating you worked on a framing crew). You can do this in the right-hand column under the word “Evidence.”

SELF-ASSESSMENT SCALE	
F	Fully experienced
S	Some experience
N	No experience
EVIDENCE	Where you have indicated “Fully experienced,” if possible, provide evidence of your competency in the skill or ability identified.

DESCRIPTION	F	S	N	EVIDENCE
Using hand tools: Identify, use and maintain:				
- measuring and layout tools (squares, levels, measuring tapes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
- cutting, drilling and boring tools (chisels, handsaws, spade bits, concrete bits, Forstner bits)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
- fastening tools (hammers, screwdrivers, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Using portable power tools: Identify, use and maintain:				
- skill saw (portable circular saw)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
- sliding compound mitre saw	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
- reciprocating saw	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
- sabre (jig) saw	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
- drills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
- hammer drills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
- drywall guns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
- routers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
- power planer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
- pad sanders, orbital sanders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
- angle grinders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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DESCRIPTION		F	S	N	EVIDENCE
Using stationary power tools:	Identify, use and maintain:				
	- table saw	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- radial arm saw	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- panel saw	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- thickness planer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- jointer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- shaper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- drill press	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Using powder-actuated tools:	Identify types	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Select and operate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Maintain and store	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Using pneumatic tools (compressed-air tools):	Identify types (brad nailers, spikers, roofing staplers, pinners, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Select and operate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Identify and select fasteners	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Maintain and store	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Using general equipment and tools:	Identify, use and maintain:				
	- air compressor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- backhoe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- bobcat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- chipping hammer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- construction heater (install, maintain)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- dewatering pumps: 2", 4", 6"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- forklift	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- front-end loader	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- grinder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- jackhammer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- knuckle boom lift	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- roller compactor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- scissor lift	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
- tamper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Using ladders and scaffolds:	Identify types of ladders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Determine types of work platforms, such as scaffolds and power-elevated work platforms (PEWPs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Secure ladders and work platforms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Check ladders and work platforms prior to and during use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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PART C

Construction trades skills and knowledge

In this section, you can assess your skills and knowledge in one or more of the following 26 construction trades.

1. Boilermaker
2. Bricklayer
3. Carpenter
4. Concrete Finisher
5. Construction Electrician
6. Floor Covering Installer
7. Glazier
8. Heavy-Duty Equipment Mechanic
9. Industrial Instrument Technician and Mechanic
10. Insulator
11. Ironworker
12. Lather
13. Machinist
14. Millwright
15. Mobile Crane Operator
16. Painter and Decorator
17. Plumber
18. Power Line Technician
19. Refrigeration and Air Conditioning Mechanic
20. Roofer
21. Sheet Metal Worker
22. Sprinkler System Installer
23. Steamfitter/Pipefitter
24. Steel Fabricator
25. Tiler
26. Welder

If you have skills and knowledge in one or more of these trades, the following competency charts will help identify your strengths and note any gaps in your learning.

This exercise should help you set goals and prepare a focused résumé where you can highlight your key competencies in a particular trade.

1. Boilermaker (NOC: 7262)

DESCRIPTION: Boilermakers fabricate, assemble, erect, test, maintain and repair boilers, vessels, tanks, towers, heat exchangers and other heavy metal structures.

OTHER TITLES: Construction Boilermaker, Boiler Fitter, Boiler Installer, Industrial Boilermaker, Marine Boilermaker, Pressure Vessel Fabricator

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Steel Fabricator, Steamfitter

MAJOR SKILLS		CAN DO	CANNOT DO
Use tools	Hand tools	<input type="checkbox"/>	<input type="checkbox"/>
	Power tools	<input type="checkbox"/>	<input type="checkbox"/>
	Grinding tools	<input type="checkbox"/>	<input type="checkbox"/>
	Hydraulic tools	<input type="checkbox"/>	<input type="checkbox"/>
	Gasoline-powered tools	<input type="checkbox"/>	<input type="checkbox"/>
	Precision tools	<input type="checkbox"/>	<input type="checkbox"/>
	Pneumatic tools	<input type="checkbox"/>	<input type="checkbox"/>
Use shop fabrication equipment	Material handling equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Band saws, cut-off saw	<input type="checkbox"/>	<input type="checkbox"/>
	Drill presses	<input type="checkbox"/>	<input type="checkbox"/>
	Ironworks	<input type="checkbox"/>	<input type="checkbox"/>
	Brakes	<input type="checkbox"/>	<input type="checkbox"/>
	Shears	<input type="checkbox"/>	<input type="checkbox"/>
	Benders, power rolls	<input type="checkbox"/>	<input type="checkbox"/>
Use oxy-fuel processes	Set up oxy-fuel equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Operate oxy-fuel burning equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Braze and weld using oxy-fuel systems	<input type="checkbox"/>	<input type="checkbox"/>
	Understand flame straightening techniques	<input type="checkbox"/>	<input type="checkbox"/>
Rigging	Use fibre ropes	<input type="checkbox"/>	<input type="checkbox"/>
	Use wire ropes	<input type="checkbox"/>	<input type="checkbox"/>
	Define load mass (weighting) and centre of gravity	<input type="checkbox"/>	<input type="checkbox"/>
	Describe rigging communication	<input type="checkbox"/>	<input type="checkbox"/>
	Use tuggers and hoists	<input type="checkbox"/>	<input type="checkbox"/>
	Use cranes and boom trucks	<input type="checkbox"/>	<input type="checkbox"/>
Blueprint reading	Interpret drawing plans and specifications	<input type="checkbox"/>	<input type="checkbox"/>
	Follow list of materials on drawings	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Welding processes	Identify welding joint symbols	<input type="checkbox"/>	<input type="checkbox"/>
	Identify welding equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Identify welding consumables	<input type="checkbox"/>	<input type="checkbox"/>
	Apply welding procedures	<input type="checkbox"/>	<input type="checkbox"/>
Apply fitting techniques	Use jigs	<input type="checkbox"/>	<input type="checkbox"/>
	Use plate fitting techniques	<input type="checkbox"/>	<input type="checkbox"/>
	Use distortion control	<input type="checkbox"/>	<input type="checkbox"/>
	Install fitting	<input type="checkbox"/>	<input type="checkbox"/>
	Apply bolt-up techniques	<input type="checkbox"/>	<input type="checkbox"/>
	Perform testing techniques	<input type="checkbox"/>	<input type="checkbox"/>
Apply tube expansion techniques	Describe tube expansion procedure	<input type="checkbox"/>	<input type="checkbox"/>
	Use tube removal, installation and expansion tools	<input type="checkbox"/>	<input type="checkbox"/>
	Apply test procedures	<input type="checkbox"/>	<input type="checkbox"/>
Apply layout techniques	Use layout tools (tapes, dividers, chalk lines, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
	Use triangulation (how to square a plate)	<input type="checkbox"/>	<input type="checkbox"/>
	Develop templates (parallel line, radial line, triangulation)	<input type="checkbox"/>	<input type="checkbox"/>

2. Bricklayer (NOC: 7281)

DESCRIPTION: Bricklayers lay bricks, concrete blocks, stone and other similar materials to construct or repair walls, arches, chimneys, fireplaces and other structures in accordance with blueprints and specifications. They work on commercial, residential and industrial applications.

OTHER TITLES: Brick Mason, Refractory Bricklayer, Stonecutter, Mason, Stonemason

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Concrete Finisher, Drywall Finisher

MAJOR SKILLS		CAN DO	CANNOT DO
Drawings and reference materials	Read residential and commercial drawings	<input type="checkbox"/>	<input type="checkbox"/>
	Identify specific information from the building code	<input type="checkbox"/>	<input type="checkbox"/>
	Estimate material quantities and identify construction details	<input type="checkbox"/>	<input type="checkbox"/>
	Identify required permits and inspections	<input type="checkbox"/>	<input type="checkbox"/>
	Sketch and draw simple details	<input type="checkbox"/>	<input type="checkbox"/>
Tools of the trade	Use and maintain hand tools, cutting tools, edge-cutting tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use measuring and layout tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain masonry saw	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain portable power tools	<input type="checkbox"/>	<input type="checkbox"/>
Build fireplaces and chimneys	Select types of materials	<input type="checkbox"/>	<input type="checkbox"/>
	Lay out projects	<input type="checkbox"/>	<input type="checkbox"/>
	Select, use and install fireplace components	<input type="checkbox"/>	<input type="checkbox"/>
Rigging and hoisting	Use scaffolds and ladders	<input type="checkbox"/>	<input type="checkbox"/>
	Use fibre ropes, tie knots, bends and hitches	<input type="checkbox"/>	<input type="checkbox"/>
	Use hoisting equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Use visual and audio signals when lifting	<input type="checkbox"/>	<input type="checkbox"/>
	Construct and use specific scaffolds	<input type="checkbox"/>	<input type="checkbox"/>
	Calculate load weights	<input type="checkbox"/>	<input type="checkbox"/>
Build ornamental masonry	Build arches	<input type="checkbox"/>	<input type="checkbox"/>
	Build corbels	<input type="checkbox"/>	<input type="checkbox"/>
	Install copings and caps	<input type="checkbox"/>	<input type="checkbox"/>
	Install cultured masonry, sculptured masonry, terracotta	<input type="checkbox"/>	<input type="checkbox"/>
Install acid-proof work	Know about types of acid-proof materials	<input type="checkbox"/>	<input type="checkbox"/>
	Lay out acid-proof projects	<input type="checkbox"/>	<input type="checkbox"/>
	Select tools and equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Select acid-proof materials	<input type="checkbox"/>	<input type="checkbox"/>
	Select and install acid-proof system	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Install brick	Select tools and equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Select brick and materials	<input type="checkbox"/>	<input type="checkbox"/>
	Clean and seal surface	<input type="checkbox"/>	<input type="checkbox"/>
	Lay out brick project	<input type="checkbox"/>	<input type="checkbox"/>
	Lay brick and tool joints	<input type="checkbox"/>	<input type="checkbox"/>
Concrete block	Select tools and equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Select concrete block and materials	<input type="checkbox"/>	<input type="checkbox"/>
	Lay out concrete block project	<input type="checkbox"/>	<input type="checkbox"/>
	Lay concrete block and tool joints	<input type="checkbox"/>	<input type="checkbox"/>
Glass block	Install connectors and reinforcing	<input type="checkbox"/>	<input type="checkbox"/>
	Install expansion strips and caulking	<input type="checkbox"/>	<input type="checkbox"/>
	Lay glass block, apply mortar and grout	<input type="checkbox"/>	<input type="checkbox"/>
Insulation and barrier	Select materials for insulation and barrier	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare substratum	<input type="checkbox"/>	<input type="checkbox"/>
	Apply barrier	<input type="checkbox"/>	<input type="checkbox"/>
	Apply insulation	<input type="checkbox"/>	<input type="checkbox"/>
Masonry connectors	Select and use anchor connectors	<input type="checkbox"/>	<input type="checkbox"/>
	Identify types of connectors	<input type="checkbox"/>	<input type="checkbox"/>
Install pavers	Identify types of pavers	<input type="checkbox"/>	<input type="checkbox"/>
	Select tools and equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare surface, layout project	<input type="checkbox"/>	<input type="checkbox"/>
	Select materials, clean and seal, install pavers	<input type="checkbox"/>	<input type="checkbox"/>
Refractory	Identify types of refractory materials	<input type="checkbox"/>	<input type="checkbox"/>
	Lay out refractory project	<input type="checkbox"/>	<input type="checkbox"/>
	Select refractory system, install	<input type="checkbox"/>	<input type="checkbox"/>
Stone	Identify types of materials	<input type="checkbox"/>	<input type="checkbox"/>
	Select materials, anchoring system	<input type="checkbox"/>	<input type="checkbox"/>
	Lay out project, place/set stone	<input type="checkbox"/>	<input type="checkbox"/>
Perform restoration work	Identify problem and determine corrective action required	<input type="checkbox"/>	<input type="checkbox"/>
	Identify existing materials and conditions	<input type="checkbox"/>	<input type="checkbox"/>
	Select materials and use new materials when required	<input type="checkbox"/>	<input type="checkbox"/>
	Apply corrective action	<input type="checkbox"/>	<input type="checkbox"/>
Mortar application	Identify types of mortar	<input type="checkbox"/>	<input type="checkbox"/>
	Select materials for mortar mix, apply mortar, test mortar	<input type="checkbox"/>	<input type="checkbox"/>
	Operate mortar and grout pumps	<input type="checkbox"/>	<input type="checkbox"/>

3. Carpenter (NOC: 7271)

DESCRIPTION: Carpenters construct, erect, install, maintain and repair structures and components of structures made of wood, wood substitutes and other materials. They work on commercial, residential and industrial applications, and are an essential trade in the construction industry.

OTHER TITLES: Finish Carpenter, Maintenance Carpenter, Renovation Carpenter, Rough Carpenter

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Cabinetmaker, Joinery/Benchwork

MAJOR SKILLS		CAN DO	CANNOT DO
Planning and use of drawings	Read residential and commercial drawings	<input type="checkbox"/>	<input type="checkbox"/>
	Identify specific information from the building code	<input type="checkbox"/>	<input type="checkbox"/>
	Estimate material quantities and identify construction details	<input type="checkbox"/>	<input type="checkbox"/>
	Identify required permits and inspections	<input type="checkbox"/>	<input type="checkbox"/>
	Sketch and draw simple details and concrete form details	<input type="checkbox"/>	<input type="checkbox"/>
Tools of the trade	Use and maintain cutting tools, edge-cutting tools, drilling and boring tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use measuring and layout tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain fastening tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain portable power tools, powder-actuated tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use concrete drilling, chipping and grinding tools	<input type="checkbox"/>	<input type="checkbox"/>
Identify materials	Know characteristics of wood	<input type="checkbox"/>	<input type="checkbox"/>
	Select framing and finish lumber, panel products	<input type="checkbox"/>	<input type="checkbox"/>
	Select and use fasteners, adhesives and caulking compounds	<input type="checkbox"/>	<input type="checkbox"/>
	Select and use finish and framing hardware	<input type="checkbox"/>	<input type="checkbox"/>
	List types of concrete, materials, adhesives and treatments	<input type="checkbox"/>	<input type="checkbox"/>
	Calculate quantities of concrete	<input type="checkbox"/>	<input type="checkbox"/>
Rigging and hoisting	Use scaffolds and ladders	<input type="checkbox"/>	<input type="checkbox"/>
	Use fibre ropes, tie knots, bends and hitches	<input type="checkbox"/>	<input type="checkbox"/>
	Use hoisting equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Use visual and audio signals when lifting	<input type="checkbox"/>	<input type="checkbox"/>
	Construct and use specific scaffolds and swing stages	<input type="checkbox"/>	<input type="checkbox"/>
Shop equipment	Use and maintain table saw, radial arm saw, band saw, panel saw	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain drill press, jointer, thickness planer, sanding machine, shaper	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Site layout	Use optical levels, electronic instruments	<input type="checkbox"/>	<input type="checkbox"/>
	Identify site conditions	<input type="checkbox"/>	<input type="checkbox"/>
	Lay out building locations	<input type="checkbox"/>	<input type="checkbox"/>
	Build batter boards, set lines and square corners	<input type="checkbox"/>	<input type="checkbox"/>
	Use and know about drainage systems	<input type="checkbox"/>	<input type="checkbox"/>
Concrete formwork	Build forms for footings, walls, stairs	<input type="checkbox"/>	<input type="checkbox"/>
	Build forms for suspended slab and slab on grade	<input type="checkbox"/>	<input type="checkbox"/>
	Use methods of placing, finishing and curing concrete	<input type="checkbox"/>	<input type="checkbox"/>
	Place embedded metal devices, frames, dock levellers in concrete	<input type="checkbox"/>	<input type="checkbox"/>
	Use stripping techniques on concrete formwork	<input type="checkbox"/>	<input type="checkbox"/>
	Use pre-stressed concrete and know why it's used	<input type="checkbox"/>	<input type="checkbox"/>
Residential housing	Explain types of wood frame construction	<input type="checkbox"/>	<input type="checkbox"/>
	Build foundations, floors, walls and partitions	<input type="checkbox"/>	<input type="checkbox"/>
	Know about types of roofs, gable with ceiling joists, hip roofs, intersecting, unequal pitch intersecting	<input type="checkbox"/>	<input type="checkbox"/>
	List or name types of stairs, e.g., straight, stair with landing, winder, circular	<input type="checkbox"/>	<input type="checkbox"/>
Finishing materials	Apply roofing materials	<input type="checkbox"/>	<input type="checkbox"/>
	Install doors and windows	<input type="checkbox"/>	<input type="checkbox"/>
	Apply exterior finishes	<input type="checkbox"/>	<input type="checkbox"/>
	Apply wall finishes and trim	<input type="checkbox"/>	<input type="checkbox"/>
	Install suspended ceilings and movable partitions	<input type="checkbox"/>	<input type="checkbox"/>
	Build cabinets and apply plastic laminates	<input type="checkbox"/>	<input type="checkbox"/>
Insulation, energy conservation barriers	Use insulation materials and air and vapour barriers	<input type="checkbox"/>	<input type="checkbox"/>
	Use energy conservation construction methods	<input type="checkbox"/>	<input type="checkbox"/>
Special construction features	Build special framing	<input type="checkbox"/>	<input type="checkbox"/>
	Use treated wood and preserved wood foundations	<input type="checkbox"/>	<input type="checkbox"/>
	Use heavy timbers construction	<input type="checkbox"/>	<input type="checkbox"/>
	Use pile foundations and shoring	<input type="checkbox"/>	<input type="checkbox"/>
	Install steel-stud framing and wallboard	<input type="checkbox"/>	<input type="checkbox"/>

4. Concrete Finisher (NOC: 7282)

DESCRIPTION: Concrete finishers smooth and finish freshly poured concrete, apply curing or surface treatments and install, maintain and restore various masonry structures such as floors, ceilings, sidewalks, patios and roads.

OTHER TITLES: Cement Mason, Concrete Mason, Precast Concrete Finisher

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Mason, Bricklayer, Stonemason

MAJOR SKILLS		CAN DO	CANNOT DO
Planning and use of drawings	Read residential and commercial drawings	<input type="checkbox"/>	<input type="checkbox"/>
	Identify specific information from the building code	<input type="checkbox"/>	<input type="checkbox"/>
	Estimate material quantities and identify construction details	<input type="checkbox"/>	<input type="checkbox"/>
	Identify required permits and inspections	<input type="checkbox"/>	<input type="checkbox"/>
	Sketch and draw simple details and concrete form details	<input type="checkbox"/>	<input type="checkbox"/>
Tools of the trade	Use and maintain hand tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use measuring and layout tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain portable power tools, powder-actuated tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use concrete drilling, chipping and grinding tools	<input type="checkbox"/>	<input type="checkbox"/>
Site preparation, place concrete	Carry out site inspection	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare formwork	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare for concrete placement	<input type="checkbox"/>	<input type="checkbox"/>
	Place concrete	<input type="checkbox"/>	<input type="checkbox"/>
	Use different types of concrete, materials, adhesives and treatments	<input type="checkbox"/>	<input type="checkbox"/>
	Calculate quantities of concrete	<input type="checkbox"/>	<input type="checkbox"/>
Concrete finishing	Estimate time required for concrete to set	<input type="checkbox"/>	<input type="checkbox"/>
	Float concrete	<input type="checkbox"/>	<input type="checkbox"/>
	Finish all edges and joints	<input type="checkbox"/>	<input type="checkbox"/>
	Trowel concrete	<input type="checkbox"/>	<input type="checkbox"/>
	Apply curing system	<input type="checkbox"/>	<input type="checkbox"/>
Concrete curing and protection	Use protection system for concrete	<input type="checkbox"/>	<input type="checkbox"/>
	Install protection for concrete	<input type="checkbox"/>	<input type="checkbox"/>
	Use stripping techniques on concrete forms	<input type="checkbox"/>	<input type="checkbox"/>
Jointing	Make and install control joints	<input type="checkbox"/>	<input type="checkbox"/>
	Clean and fill joints	<input type="checkbox"/>	<input type="checkbox"/>
	Use and knowledge of drainage systems	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Restoration work, correct, repair and modify	Conduct inspection for all defects	<input type="checkbox"/>	<input type="checkbox"/>
	Perform repairs	<input type="checkbox"/>	<input type="checkbox"/>
	Use methods of placing, finishing and curing concrete on repairs	<input type="checkbox"/>	<input type="checkbox"/>
	Repair concrete	<input type="checkbox"/>	<input type="checkbox"/>
	Cut and core concrete	<input type="checkbox"/>	<input type="checkbox"/>
Specialty concrete	Perform specialty concrete installations	<input type="checkbox"/>	<input type="checkbox"/>
	Install specialty concrete	<input type="checkbox"/>	<input type="checkbox"/>
	Install high tolerance floors	<input type="checkbox"/>	<input type="checkbox"/>
	Install grouts	<input type="checkbox"/>	<input type="checkbox"/>
Architectural finishes	Apply architectural finishes	<input type="checkbox"/>	<input type="checkbox"/>
	Use texturing techniques	<input type="checkbox"/>	<input type="checkbox"/>
	Apply texturing techniques	<input type="checkbox"/>	<input type="checkbox"/>
Material handling equipment	List types of equipment to move concrete	<input type="checkbox"/>	<input type="checkbox"/>
	Operate material handling equipment	<input type="checkbox"/>	<input type="checkbox"/>
Install concrete grouting	Use concrete grouting	<input type="checkbox"/>	<input type="checkbox"/>
	Install concrete grouting	<input type="checkbox"/>	<input type="checkbox"/>
Install acid-proof work	Use acid-proof work	<input type="checkbox"/>	<input type="checkbox"/>
	Install acid-proof work	<input type="checkbox"/>	<input type="checkbox"/>

5. Construction Electrician (NOC: 7241)

DESCRIPTION: Construction electricians work in a wide variety of residential, commercial and industrial construction buildings and facilities projects, on everything from lighting and climate control systems to communication equipment. They use many specific tools and devices. A construction electrician’s work involves assembling, installing, commissioning, testing, maintaining, servicing and operating electrical systems and equipment.

OTHER TITLES: Electrical Construction, Electrician, Electrician (Construction), Electrician – Construction and Maintenance

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Industrial Instrument Mechanic, Industrial Electrician

MAJOR SKILLS		CAN DO	CANNOT DO
Test equipment	Measure current, resistance, voltage, and power and energy with meters	<input type="checkbox"/>	<input type="checkbox"/>
Conductors and raceways	Install conductors	<input type="checkbox"/>	<input type="checkbox"/>
	Install raceways	<input type="checkbox"/>	<input type="checkbox"/>
	Extract electrical information from construction drawings	<input type="checkbox"/>	<input type="checkbox"/>
Transformers and protective equipment	Install and connect single- and three-phase transformers	<input type="checkbox"/>	<input type="checkbox"/>
	Install and connect instrument transformers	<input type="checkbox"/>	<input type="checkbox"/>
DC machines and controls	Install and connect DC generators	<input type="checkbox"/>	<input type="checkbox"/>
	Install and connect DC motors and motor controllers	<input type="checkbox"/>	<input type="checkbox"/>
AC motors and motor controls	Install and operate single-phase motors	<input type="checkbox"/>	<input type="checkbox"/>
	Connect and operate three-phase motors	<input type="checkbox"/>	<input type="checkbox"/>
	Connect and operate manual and magnetic motor starters	<input type="checkbox"/>	<input type="checkbox"/>
	Install and operate pilot and auxiliary motor control devices	<input type="checkbox"/>	<input type="checkbox"/>
Lighting circuits	Install and operate incandescent, fluorescent and high intensity lighting	<input type="checkbox"/>	<input type="checkbox"/>
	Discharge high intensity discharge (HID) lighting circuits	<input type="checkbox"/>	<input type="checkbox"/>
	Install and operate emergency lighting equipment	<input type="checkbox"/>	<input type="checkbox"/>
Emergency power systems	Install and operate automatic transfer switches	<input type="checkbox"/>	<input type="checkbox"/>
	Install standby power generating systems	<input type="checkbox"/>	<input type="checkbox"/>
	Install uninterruptible power supply systems (UPS)	<input type="checkbox"/>	<input type="checkbox"/>
Programmable logic controllers and automatic control systems	Install and maintain programmable logic controllers (PLC)	<input type="checkbox"/>	<input type="checkbox"/>
	Install input/output field devices	<input type="checkbox"/>	<input type="checkbox"/>
	Install control system protective devices	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Power distribution and system controls	Install services	<input type="checkbox"/>	<input type="checkbox"/>
	Install and terminate cables	<input type="checkbox"/>	<input type="checkbox"/>
	Install high voltage (1,000 volts and more) power distribution systems	<input type="checkbox"/>	<input type="checkbox"/>
	Install low voltage (300 volts and less) power distribution systems	<input type="checkbox"/>	<input type="checkbox"/>
	Install and operate alternators	<input type="checkbox"/>	<input type="checkbox"/>
	Install electrical components of heating and cooling systems	<input type="checkbox"/>	<input type="checkbox"/>
	Install building automation systems	<input type="checkbox"/>	<input type="checkbox"/>
	Install and test fire alarm system	<input type="checkbox"/>	<input type="checkbox"/>
Solid state devices and computers	Install and operate common computer programs	<input type="checkbox"/>	<input type="checkbox"/>
	Install circuit protection devices	<input type="checkbox"/>	<input type="checkbox"/>
	Install and maintain solid state devices	<input type="checkbox"/>	<input type="checkbox"/>

6. Floor Covering Installer (NOC: 7295)

DESCRIPTION: Floor covering installers are skilled workers who install carpets, wood, linoleum, vinyl, and other resilient floor coverings in commercial, residential, institutional and industrial buildings.

OTHER TITLES: Carpet Installer, Carpet Layer, Floor Covering Mechanic, Resilient Floor Installer, Rug Installer, Vinyl Floor Installer

MAJOR SKILLS		CAN DO	CANNOT DO
Planning and drawing	Read residential and commercial drawings	<input type="checkbox"/>	<input type="checkbox"/>
	Estimate material quantities and identify construction details	<input type="checkbox"/>	<input type="checkbox"/>
	Sketch and draw simple details	<input type="checkbox"/>	<input type="checkbox"/>
Tools of the trade	Use and maintain hand tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use measuring and layout tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain portable power tools	<input type="checkbox"/>	<input type="checkbox"/>
Prepare sub-floors	Identify sub-floor types	<input type="checkbox"/>	<input type="checkbox"/>
	Identify underpayment panels	<input type="checkbox"/>	<input type="checkbox"/>
	Perform and meet moisture test requirements	<input type="checkbox"/>	<input type="checkbox"/>
	Apply patching and levelling compounds	<input type="checkbox"/>	<input type="checkbox"/>
	Rectify contaminated sub-floors	<input type="checkbox"/>	<input type="checkbox"/>
	Remove existing floor covering	<input type="checkbox"/>	<input type="checkbox"/>
	Perform preparation procedures for specialty sub-floors	<input type="checkbox"/>	<input type="checkbox"/>
Carpet products	Interpret field test results	<input type="checkbox"/>	<input type="checkbox"/>
	Use trims and edge finishes	<input type="checkbox"/>	<input type="checkbox"/>
	Understand about tackless strips	<input type="checkbox"/>	<input type="checkbox"/>
	Describe carpet cushion types	<input type="checkbox"/>	<input type="checkbox"/>
	Identify types of carpet construction	<input type="checkbox"/>	<input type="checkbox"/>
	Distinguish types of carpet fibres	<input type="checkbox"/>	<input type="checkbox"/>
	Identify types of adhesives and sealers	<input type="checkbox"/>	<input type="checkbox"/>
Use hot-melt seaming tapes	<input type="checkbox"/>	<input type="checkbox"/>	

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MAJOR SKILLS		CAN DO	CANNOT DO
Identify resilient products	Correctly handle and store material	<input type="checkbox"/>	<input type="checkbox"/>
	Identify resilient sheet vinyls	<input type="checkbox"/>	<input type="checkbox"/>
	Identify resilient tiles	<input type="checkbox"/>	<input type="checkbox"/>
	Identify linoleum products	<input type="checkbox"/>	<input type="checkbox"/>
	Identify specialty resilient products	<input type="checkbox"/>	<input type="checkbox"/>
	Identify resilient floor adhesives and sealers	<input type="checkbox"/>	<input type="checkbox"/>
	Identify baseboard materials	<input type="checkbox"/>	<input type="checkbox"/>
	Identify resilient stair components	<input type="checkbox"/>	<input type="checkbox"/>
Install carpet, conventional method	Identify trims and finishes	<input type="checkbox"/>	<input type="checkbox"/>
	Install tackless strip, edge trims, carpet cushion	<input type="checkbox"/>	<input type="checkbox"/>
	Determine carpet seam placement, install seam carpet	<input type="checkbox"/>	<input type="checkbox"/>
	Install tufted construction carpet	<input type="checkbox"/>	<input type="checkbox"/>
	Install woven carpet	<input type="checkbox"/>	<input type="checkbox"/>
	Install patterned carpet	<input type="checkbox"/>	<input type="checkbox"/>
	Install carpet with borders and insets	<input type="checkbox"/>	<input type="checkbox"/>
	Install carpet to stairs by conventional methods	<input type="checkbox"/>	<input type="checkbox"/>
Install carpet, glue-down method	Perform specialized work	<input type="checkbox"/>	<input type="checkbox"/>
	Select adhesives	<input type="checkbox"/>	<input type="checkbox"/>
	Lay out and prepare seams	<input type="checkbox"/>	<input type="checkbox"/>
	Apply adhesives	<input type="checkbox"/>	<input type="checkbox"/>
	Fit and finish carpet	<input type="checkbox"/>	<input type="checkbox"/>
	Install carpet with borders and insets	<input type="checkbox"/>	<input type="checkbox"/>
	Install carpet to stairs, walls	<input type="checkbox"/>	<input type="checkbox"/>
	Perform a double-bond carpet installation	<input type="checkbox"/>	<input type="checkbox"/>
Install resilient tile	Repair glue-down carpet	<input type="checkbox"/>	<input type="checkbox"/>
	Install carpet tiles	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare sub-floor for resilient tile	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare layout and grid lines	<input type="checkbox"/>	<input type="checkbox"/>
	Select adhesives	<input type="checkbox"/>	<input type="checkbox"/>
	Place tiles	<input type="checkbox"/>	<input type="checkbox"/>
	Scribe and fit resilient tiles	<input type="checkbox"/>	<input type="checkbox"/>
	Insert resilient tiles on stairs	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Install resilient sheets	Prepare sub-floor for resilient sheets	<input type="checkbox"/>	<input type="checkbox"/>
	Fit the resilient sheet flooring using freehand method	<input type="checkbox"/>	<input type="checkbox"/>
	Install resilient sheet flooring using flat-lay method	<input type="checkbox"/>	<input type="checkbox"/>
	Apply scribe-fitting techniques	<input type="checkbox"/>	<input type="checkbox"/>
	Apply seam techniques	<input type="checkbox"/>	<input type="checkbox"/>
	Match patterns	<input type="checkbox"/>	<input type="checkbox"/>
	Install flash coving, borders and insets	<input type="checkbox"/>	<input type="checkbox"/>
	Install resilient tension floors	<input type="checkbox"/>	<input type="checkbox"/>
	Install resilient sheet flooring to stairs	<input type="checkbox"/>	<input type="checkbox"/>
	Repair resilient sheet installations	<input type="checkbox"/>	<input type="checkbox"/>
	Perform seam welding procedures	<input type="checkbox"/>	<input type="checkbox"/>
Install specialty resilient products	Install moulded stair products	<input type="checkbox"/>	<input type="checkbox"/>
	Install safety floors	<input type="checkbox"/>	<input type="checkbox"/>
	Install rubber floor products	<input type="checkbox"/>	<input type="checkbox"/>
	Install asphalt plank flooring	<input type="checkbox"/>	<input type="checkbox"/>
	Install resilient wall coverings	<input type="checkbox"/>	<input type="checkbox"/>
	Install conductive floors	<input type="checkbox"/>	<input type="checkbox"/>
Install pre-finished hardwood and laminate floors	Determine sub-floor requirements for hardwood and laminate floors	<input type="checkbox"/>	<input type="checkbox"/>
	Perform layout and measurement procedures	<input type="checkbox"/>	<input type="checkbox"/>
	Glue and clamp hardwood and laminate floors	<input type="checkbox"/>	<input type="checkbox"/>
	Repair hardwood and laminate floors	<input type="checkbox"/>	<input type="checkbox"/>

7. Glazier (NOC: 7292)

DESCRIPTION: Glaziers cut, fit, install and replace glass in residential, commercial and industrial buildings, on exterior walls of buildings and other structures, and in furniture and other products.

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Glazier and Metal Mechanic, Plate Glass Installer, Structural Glass Installer, Stained Glass Glazier, Automotive Glazier

MAJOR SKILLS		CAN DO	CANNOT DO
Tools and equipment	Identify shop tools	<input type="checkbox"/>	<input type="checkbox"/>
	Operate powder-actuated tools	<input type="checkbox"/>	<input type="checkbox"/>
	Sharpen drill bits	<input type="checkbox"/>	<input type="checkbox"/>
	Use power tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use metal fabrication tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use glass-cutting tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use hand and power cups	<input type="checkbox"/>	<input type="checkbox"/>
	Use level, transit and laser	<input type="checkbox"/>	<input type="checkbox"/>
Blueprint reading	Describe common symbols and abbreviations	<input type="checkbox"/>	<input type="checkbox"/>
	Read architectural and shop blueprints	<input type="checkbox"/>	<input type="checkbox"/>
	Use architectural scale rules	<input type="checkbox"/>	<input type="checkbox"/>
	Follow floor plans, sections, elevations and details	<input type="checkbox"/>	<input type="checkbox"/>
	Follow door and window schedules	<input type="checkbox"/>	<input type="checkbox"/>
	Use cutting lists	<input type="checkbox"/>	<input type="checkbox"/>
	Make simple sketches and drawings	<input type="checkbox"/>	<input type="checkbox"/>
Handling glass	Describe the basic use of knots and splicing methods	<input type="checkbox"/>	<input type="checkbox"/>
	Describe lift glass and sealed units	<input type="checkbox"/>	<input type="checkbox"/>
	Crate and uncrate glass	<input type="checkbox"/>	<input type="checkbox"/>
	Sling loads for lifting and hoisting	<input type="checkbox"/>	<input type="checkbox"/>
Cut glass mirrors	Cut plastics and acrylics	<input type="checkbox"/>	<input type="checkbox"/>
	Describe types of glass and glass products	<input type="checkbox"/>	<input type="checkbox"/>
	Describe with glass properties and process	<input type="checkbox"/>	<input type="checkbox"/>
	Describe glass and mirror edge work	<input type="checkbox"/>	<input type="checkbox"/>
	Use cutting tables	<input type="checkbox"/>	<input type="checkbox"/>
	Cut glass and mirrors using cutting machines	<input type="checkbox"/>	<input type="checkbox"/>
	Drill and notch holes in glass mirrors	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Glazing systems and glass	Describe components of glazing systems	<input type="checkbox"/>	<input type="checkbox"/>
	Describe components of structural glazing	<input type="checkbox"/>	<input type="checkbox"/>
	Use formulas for measuring glazing systems	<input type="checkbox"/>	<input type="checkbox"/>
	Install auto glass	<input type="checkbox"/>	<input type="checkbox"/>
	Install curtain wall glazing	<input type="checkbox"/>	<input type="checkbox"/>
	Install door and vent windows	<input type="checkbox"/>	<input type="checkbox"/>
	Glaze putty frames, gasket systems, showcases	<input type="checkbox"/>	<input type="checkbox"/>
	Glaze store front	<input type="checkbox"/>	<input type="checkbox"/>
	Glazing of total vision	<input type="checkbox"/>	<input type="checkbox"/>
	Install suspended glazing	<input type="checkbox"/>	<input type="checkbox"/>
Caulking and sealants	Distinguish between wind seals, wind load, and dead load	<input type="checkbox"/>	<input type="checkbox"/>
	Mix three-part sealant	<input type="checkbox"/>	<input type="checkbox"/>
	Select correct types of shims	<input type="checkbox"/>	<input type="checkbox"/>
	Apply application of caulking and sealants	<input type="checkbox"/>	<input type="checkbox"/>
	Supply silicon glass systems	<input type="checkbox"/>	<input type="checkbox"/>
Metal and aluminum frames	Use spigots	<input type="checkbox"/>	<input type="checkbox"/>
	Determine material requirements	<input type="checkbox"/>	<input type="checkbox"/>
	Select appropriate fasteners	<input type="checkbox"/>	<input type="checkbox"/>
	Drill and tap	<input type="checkbox"/>	<input type="checkbox"/>
	Cut various metals, including aluminum	<input type="checkbox"/>	<input type="checkbox"/>
	Install frames and hardware	<input type="checkbox"/>	<input type="checkbox"/>

8. Heavy-Duty Equipment Mechanic (NOC: 7312)

DESCRIPTION: Heavy-duty equipment mechanics repair, troubleshoot, adjust, overhaul and maintain mobile heavy-duty equipment used in construction, transportation, forestry, mining, oil and gas, material handling, landscaping, land clearing, farming and similar activities.

OTHER TITLES: Construction Equipment Mechanic, Diesel Mechanic, Farm Equipment Mechanic, Heavy-Duty Equipment Technician, Heavy Equipment Mechanic, Heavy Mobile Logging Equipment Mechanic, Locomotive Mechanic, Tractor Mechanic

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Marine Diesel Engine Mechanic, Diesel Engine Mechanic, Commercial Transport Mechanic, Fuel-Injection Mechanic

MAJOR SKILLS		CAN DO	CANNOT DO
Manuals and documentation	Store and transfer electronic data	<input type="checkbox"/>	<input type="checkbox"/>
	Access information using printed material, manuals	<input type="checkbox"/>	<input type="checkbox"/>
	Use and follow diagnostic and troubleshooting flow charts	<input type="checkbox"/>	<input type="checkbox"/>
	Interpret drawings and specifications	<input type="checkbox"/>	<input type="checkbox"/>
	Use documentation for work orders, warranties, service records	<input type="checkbox"/>	<input type="checkbox"/>
Tools of the trade	Use mechanic's hand tools, power metalworking tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use shop cleaning tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use measuring and testing devices, e.g., gauges, meters, precision tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use shop tools, air-operated tools, hydraulic press	<input type="checkbox"/>	<input type="checkbox"/>
Welding practices	Use oxy-acetylene equipment for cutting and welding	<input type="checkbox"/>	<input type="checkbox"/>
	Assemble, test, light, adjust, shut down, disassemble oxy-acetylene equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Use arc welding equipment on ferrous metals	<input type="checkbox"/>	<input type="checkbox"/>
Rigging and hoisting	Select, use, attach rigging equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Use hand signals	<input type="checkbox"/>	<input type="checkbox"/>
	Use block and crib components and equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Use jacks	<input type="checkbox"/>	<input type="checkbox"/>
Hydraulic systems	Service pumps and motors, valves, cylinders and seals	<input type="checkbox"/>	<input type="checkbox"/>
	Service hydraulic system heat exchangers and accumulators	<input type="checkbox"/>	<input type="checkbox"/>
	Service, analyze, troubleshoot advanced hydraulic systems	<input type="checkbox"/>	<input type="checkbox"/>
	Service hydraulic braking system components	<input type="checkbox"/>	<input type="checkbox"/>
	Perform preventive maintenance on hydraulic braking systems	<input type="checkbox"/>	<input type="checkbox"/>
	Troubleshoot hydraulic braking systems	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Pneumatic systems	Service industrial air compressors	<input type="checkbox"/>	<input type="checkbox"/>
	Service air starting systems, air-operated controls, accessories, air dryers	<input type="checkbox"/>	<input type="checkbox"/>
	Service air brake systems and components	<input type="checkbox"/>	<input type="checkbox"/>
	Perform preventive maintenance on air brake systems	<input type="checkbox"/>	<input type="checkbox"/>
	Troubleshoot air brake systems	<input type="checkbox"/>	<input type="checkbox"/>
Engines and engine support systems	Remove, disassemble, store and reinstall diesel engines	<input type="checkbox"/>	<input type="checkbox"/>
	Service all diesel engine components	<input type="checkbox"/>	<input type="checkbox"/>
	Install fuel system components and perform cold tune-up	<input type="checkbox"/>	<input type="checkbox"/>
	Perform pre-start and operating checks and engine tune-up	<input type="checkbox"/>	<input type="checkbox"/>
	Service cooling, lubrication, air induction, exhaust and electrical/electronic sentinel systems	<input type="checkbox"/>	<input type="checkbox"/>
	Remove, disassemble, recondition, assemble, install all types of fuel systems and components	<input type="checkbox"/>	<input type="checkbox"/>
Drive train	Service clutches, single plate, double plate, linkage mechanisms and flywheels	<input type="checkbox"/>	<input type="checkbox"/>
	Service torque converters, fluid couplings and retarder components	<input type="checkbox"/>	<input type="checkbox"/>
	Service automatic transmissions, power shift transmissions	<input type="checkbox"/>	<input type="checkbox"/>
	Remove, disassemble, recondition, assemble, install driveline, bearings and seals	<input type="checkbox"/>	<input type="checkbox"/>
	Service standard and auxiliary transmissions	<input type="checkbox"/>	<input type="checkbox"/>
Steering and suspension	Remove, disassemble, recondition, assemble, install power-steering and components	<input type="checkbox"/>	<input type="checkbox"/>
	Perform preventative maintenance on power-steering systems	<input type="checkbox"/>	<input type="checkbox"/>
	Service track-type machine final drives, steering, undercarriages and working attachments	<input type="checkbox"/>	<input type="checkbox"/>
	Service wheel machine front spring suspension systems, steering and working attachments	<input type="checkbox"/>	<input type="checkbox"/>
Electrical, electronic systems	Remove, disassemble, replace or recondition, assemble, install electrical systems and components	<input type="checkbox"/>	<input type="checkbox"/>
	Repair or replace electrical wire harnesses	<input type="checkbox"/>	<input type="checkbox"/>
	Remove, install, replace electronic systems components	<input type="checkbox"/>	<input type="checkbox"/>
	Program new electronic system components	<input type="checkbox"/>	<input type="checkbox"/>
	Perform calibration/adjustment procedures	<input type="checkbox"/>	<input type="checkbox"/>
Climate controls, accessories	Service and repair heating systems and components	<input type="checkbox"/>	<input type="checkbox"/>
	Service and repair ventilation systems and components	<input type="checkbox"/>	<input type="checkbox"/>
	Service and repair air conditioning systems and components	<input type="checkbox"/>	<input type="checkbox"/>
	Remove, disassemble, replace or recondition, assemble, install structural components, attachments and accessories	<input type="checkbox"/>	<input type="checkbox"/>
	Remove, repair or replace all operator cab components	<input type="checkbox"/>	<input type="checkbox"/>

9. Industrial Instrument Technician and Mechanic (NOC: 2243)

DESCRIPTION: Industrial instrument technicians and mechanics install, repair, maintain and adjust instruments used to measure and control industrial processes such as pulp and paper manufacturing and petrochemical production. These types of instruments are typically used for controlling factors such as:

- flow of gases or liquids
- temperature of materials or stages of a process
- pressure maintained during a process
- level of a material used or created during a process

OTHER TITLES: Industrial Instrumentation, Instrument Mechanic, Instrumentation and Control Technician

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Industrial Electrician, Construction Electrician, Electronic Communication Technician

MAJOR SKILLS		CAN DO	CANNOT DO
DC electricity	Use measuring devices and troubleshoot DC circuits	<input type="checkbox"/>	<input type="checkbox"/>
	Assemble series and parallel circuits	<input type="checkbox"/>	<input type="checkbox"/>
	Assemble combination DC circuits	<input type="checkbox"/>	<input type="checkbox"/>
AC electricity, electronic equipment and wiring installation	Assemble and troubleshoot ladder logic circuits	<input type="checkbox"/>	<input type="checkbox"/>
	Use AC measuring devices and test equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Assemble and test basic electronic circuits	<input type="checkbox"/>	<input type="checkbox"/>
	Install cabling, including fibre optical cabling	<input type="checkbox"/>	<input type="checkbox"/>
	Install field devices	<input type="checkbox"/>	<input type="checkbox"/>
Tubing, fittings and air supply	Bend and install tubing and fittings	<input type="checkbox"/>	<input type="checkbox"/>
	Pressure-test installation	<input type="checkbox"/>	<input type="checkbox"/>
	Service, test and troubleshoot air systems	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Measurement: pressure, level, temperature, flow, density, consistency, viscosity, weight, vibration speed	Use pressure test equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Repair and calibrate pressure devices	<input type="checkbox"/>	<input type="checkbox"/>
	Install pressure gauges and transmitters	<input type="checkbox"/>	<input type="checkbox"/>
	Install, repair and calibrate level measuring devices	<input type="checkbox"/>	<input type="checkbox"/>
	Install, repair and calibrate temperature measuring devices	<input type="checkbox"/>	<input type="checkbox"/>
	Install, repair and calibrate flow meters	<input type="checkbox"/>	<input type="checkbox"/>
	Install density measuring devices	<input type="checkbox"/>	<input type="checkbox"/>
	Repair and calibrate density meters	<input type="checkbox"/>	<input type="checkbox"/>
	Repair and calibrate consistency meters	<input type="checkbox"/>	<input type="checkbox"/>
	Install consistency measuring devices	<input type="checkbox"/>	<input type="checkbox"/>
	Install, repair and calibrate weight measuring devices	<input type="checkbox"/>	<input type="checkbox"/>
	Measure vibration and speed	<input type="checkbox"/>	<input type="checkbox"/>
Process gases	Measure: H ₂ S, CO, CO ₂ , O ₂ and combustibles	<input type="checkbox"/>	<input type="checkbox"/>
	Use gas chromatograph	<input type="checkbox"/>	<input type="checkbox"/>
Environmental protection devices	Install, repair and calibrate indicators and recorders	<input type="checkbox"/>	<input type="checkbox"/>
	Measure: pH, ORP and specific ion, conductivity, stack gases	<input type="checkbox"/>	<input type="checkbox"/>
Signal conditioners, digital electronics, computers	Install, calibrate, troubleshoot and repair signal conditioners	<input type="checkbox"/>	<input type="checkbox"/>
	Test digital circuits	<input type="checkbox"/>	<input type="checkbox"/>
	Program and troubleshoot programmable logic controllers (PLCs)	<input type="checkbox"/>	<input type="checkbox"/>
Regulators and relief valve controllers	Install and maintain regulators and relief valves	<input type="checkbox"/>	<input type="checkbox"/>
	Repair self-actuating temperature controllers	<input type="checkbox"/>	<input type="checkbox"/>
	Install, repair and maintain pneumatic controllers	<input type="checkbox"/>	<input type="checkbox"/>
	Install, repair and maintain electronic controllers	<input type="checkbox"/>	<input type="checkbox"/>
	Read and make loop diagram	<input type="checkbox"/>	<input type="checkbox"/>
Final control elements	Repair and maintain control valves	<input type="checkbox"/>	<input type="checkbox"/>
	Repair and maintain actuators	<input type="checkbox"/>	<input type="checkbox"/>
	Repair and set up valve positioners	<input type="checkbox"/>	<input type="checkbox"/>
	Select and maintain solenoid valves	<input type="checkbox"/>	<input type="checkbox"/>
Process control	Tune control loops	<input type="checkbox"/>	<input type="checkbox"/>
	Troubleshoot process loops	<input type="checkbox"/>	<input type="checkbox"/>

10. Insulator (Heat and Frost) (NOC: 7293)

DESCRIPTION: Heat and frost insulators cover exposed surfaces of pipes, steam generators, ducts, process vats and related equipment using a variety of insulating materials. The materials not only reduce the transfer of heat and cold from plumbing, heating, cooling and refrigeration systems, they can also reduce noise and the chance of fire. Heat and frost insulators work on a wide variety of commercial and industrial sites.

MAJOR SKILLS		CAN DO	CANNOT DO
Planning and drawings	Read blueprints and specifications	<input type="checkbox"/>	<input type="checkbox"/>
	Read and interpret technical drawings and manuals	<input type="checkbox"/>	<input type="checkbox"/>
	Sketch and draw simple details	<input type="checkbox"/>	<input type="checkbox"/>
	Use scale rulers	<input type="checkbox"/>	<input type="checkbox"/>
	Develop layout for fittings	<input type="checkbox"/>	<input type="checkbox"/>
Tools of the trade	Use and maintain hand and power tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use measuring and layout tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain cutting tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain fastening tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use portable pin welding machines	<input type="checkbox"/>	<input type="checkbox"/>
	Use sheet metal tools and equipment	<input type="checkbox"/>	<input type="checkbox"/>
Rigging, ladders and scaffolds	Use and maintain ladders and boatswain chairs	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain scaffolding	<input type="checkbox"/>	<input type="checkbox"/>
	Use approved visual hand signals	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain life lines and safety belts	<input type="checkbox"/>	<input type="checkbox"/>
	Use fibre ropes, knots, bends and hitches	<input type="checkbox"/>	<input type="checkbox"/>
Apply adhesives	Select appropriate adhesives	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare surfaces for adhesive application	<input type="checkbox"/>	<input type="checkbox"/>
	Apply adhesives	<input type="checkbox"/>	<input type="checkbox"/>
	Use thinners and solvents for adhesives and materials	<input type="checkbox"/>	<input type="checkbox"/>
	Use temperature scale for adhesives	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Apply insulation	Apply caulking	<input type="checkbox"/>	<input type="checkbox"/>
	Apply metal and plastic jacketing	<input type="checkbox"/>	<input type="checkbox"/>
	Select jacketing	<input type="checkbox"/>	<input type="checkbox"/>
	Apply insulation to heat-traced systems	<input type="checkbox"/>	<input type="checkbox"/>
	Insulate HVAC (heating, ventilation and air con) systems	<input type="checkbox"/>	<input type="checkbox"/>
	Insulate mechanical systems	<input type="checkbox"/>	<input type="checkbox"/>
	Fabricate materials for insulation	<input type="checkbox"/>	<input type="checkbox"/>
	Make various insulation pads	<input type="checkbox"/>	<input type="checkbox"/>
	Spray application of sealers and coatings	<input type="checkbox"/>	<input type="checkbox"/>
	Install underground insulation	<input type="checkbox"/>	<input type="checkbox"/>
Asbestos abatement procedure	Use and maintain spray equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Perform maintenance repair of damaged area	<input type="checkbox"/>	<input type="checkbox"/>
	Remove asbestos in high risk conditions	<input type="checkbox"/>	<input type="checkbox"/>
	Use procedures for encapsulation or enclosure of asbestos materials	<input type="checkbox"/>	<input type="checkbox"/>
Layout techniques	Use personal protective equipment for asbestos abatement	<input type="checkbox"/>	<input type="checkbox"/>
	Develop patterns for elbows, various seams on metal covers	<input type="checkbox"/>	<input type="checkbox"/>
	Lay out tees and equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Lay out various geometric shapes	<input type="checkbox"/>	<input type="checkbox"/>
	Use and develop isometric drawings	<input type="checkbox"/>	<input type="checkbox"/>
Fire stopping and smoke sealing techniques	Use lines, symbols, scales and dimensions	<input type="checkbox"/>	<input type="checkbox"/>
	Installation of fire stopping	<input type="checkbox"/>	<input type="checkbox"/>
	Calculate fire stopping applications	<input type="checkbox"/>	<input type="checkbox"/>
Industrial application	Determine fire stopping and smoke sealing materials	<input type="checkbox"/>	<input type="checkbox"/>
	Apply insulation of refractory applications (1,500EF+)	<input type="checkbox"/>	<input type="checkbox"/>
	Apply sealants	<input type="checkbox"/>	<input type="checkbox"/>
	Fabricate insulation for tanks, vessels and fittings	<input type="checkbox"/>	<input type="checkbox"/>
	Fabricate removable covers	<input type="checkbox"/>	<input type="checkbox"/>
	Install underground insulating systems	<input type="checkbox"/>	<input type="checkbox"/>
	Install insulation for thermal applications	<input type="checkbox"/>	<input type="checkbox"/>
	Install protective covers	<input type="checkbox"/>	<input type="checkbox"/>
	Insulate for fireproofing	<input type="checkbox"/>	<input type="checkbox"/>
Insulate for soundproofing	<input type="checkbox"/>	<input type="checkbox"/>	
	Insulate for cryogenic applications (-65°C to absolute zero)	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Lead abatement	Determine administrative requirement	<input type="checkbox"/>	<input type="checkbox"/>
	Perform lead abatement procedures	<input type="checkbox"/>	<input type="checkbox"/>
	Determine health effects	<input type="checkbox"/>	<input type="checkbox"/>
Types of insulation materials	Determine types and use of adhesives solvents and thinners	<input type="checkbox"/>	<input type="checkbox"/>
	Determine types and use of cements	<input type="checkbox"/>	<input type="checkbox"/>
	Determine types and use of insulation fasteners and reinforcing materials	<input type="checkbox"/>	<input type="checkbox"/>
	Determine types and use of loose-fill insulation materials	<input type="checkbox"/>	<input type="checkbox"/>
	Determine types and use of poured insulation materials	<input type="checkbox"/>	<input type="checkbox"/>
	Determine types and use of spray insulation materials	<input type="checkbox"/>	<input type="checkbox"/>
	Use types of tapes, vapour barriers and weatherproofing	<input type="checkbox"/>	<input type="checkbox"/>
	Use types of flexible and rigid insulation materials	<input type="checkbox"/>	<input type="checkbox"/>

11. Ironworker (Generalist) (NOC: 7264)

DESCRIPTION: Ironworkers fabricate, erect, hoist, install, repair and service structural ironwork, pre-cast concrete, concrete reinforcing materials, curtain walls, ornamental iron and other metals used in the construction of buildings, bridges, highways, dams and other structures and equipment. An Ironworker is designated as Ironworker (Generalist) under the Interprovincial Red Seal Program.

OTHER TITLES: Ironworker, Metal Building Systems Erector, Reinforcing Ironworker, Structural Steel Erector

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Metal Fabrication, Welder, Ornamental Ironworker

MAJOR SKILLS		CAN DO	CANNOT DO
Tools	Select and use basic construction hand tools to measure and lay up	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain portable power tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use structural connectors and fasteners	<input type="checkbox"/>	<input type="checkbox"/>
	Use architectural fasteners	<input type="checkbox"/>	<input type="checkbox"/>
	Use level and transit	<input type="checkbox"/>	<input type="checkbox"/>
	Use concrete anchors	<input type="checkbox"/>	<input type="checkbox"/>
Metal fabrication power equipment	Use shop material handling and hoisting equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Use power shears	<input type="checkbox"/>	<input type="checkbox"/>
	Use power band saws	<input type="checkbox"/>	<input type="checkbox"/>
	Use power metal bending equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Use a threading machine	<input type="checkbox"/>	<input type="checkbox"/>
Oxy-fuel cutting and fitting structural shapes	Identify proper procedures for operating oxy-fuel cutting and fitting equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Cut, bevel and pierce various thickness of steel plate	<input type="checkbox"/>	<input type="checkbox"/>
	Fit structural shapes including angle-to-angle, channel-to-channel, and 45 and 90 degree pipe fit-ups	<input type="checkbox"/>	<input type="checkbox"/>
	Use oxy-fuel equipment to pre-heat, bend and straighten metals	<input type="checkbox"/>	<input type="checkbox"/>
	Use a portable cutting machine to cut a straight line and bevel on steel plate	<input type="checkbox"/>	<input type="checkbox"/>
	Use a plasma arc cutting machine to cut metal plate	<input type="checkbox"/>	<input type="checkbox"/>
Shielded metal arc welding (SMAW)	Describe safe arc welding practices	<input type="checkbox"/>	<input type="checkbox"/>
	Identify SMAW process	<input type="checkbox"/>	<input type="checkbox"/>
	Identify types of welding machines and power sources	<input type="checkbox"/>	<input type="checkbox"/>
	Use various electrodes for SMAW	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and correct weld faults, arc blow and distortions	<input type="checkbox"/>	<input type="checkbox"/>
	Interpret welding symbols	<input type="checkbox"/>	<input type="checkbox"/>
	Use arc carbon, arc cutting and gouging	<input type="checkbox"/>	<input type="checkbox"/>
	Perform SMAW	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Apply rigging	Use fibre rope	<input type="checkbox"/>	<input type="checkbox"/>
	Use wire rope	<input type="checkbox"/>	<input type="checkbox"/>
	Use wire slings	<input type="checkbox"/>	<input type="checkbox"/>
	Describe and use different types and applications of rigging hardware	<input type="checkbox"/>	<input type="checkbox"/>
	Use mechanical and hydraulic jacks	<input type="checkbox"/>	<input type="checkbox"/>
	Use skids rollers, cribbing and blocking	<input type="checkbox"/>	<input type="checkbox"/>
	Use work platforms, staging and scaffolding	<input type="checkbox"/>	<input type="checkbox"/>
	Identify special lifting equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Describe stake and deadhead anchors	<input type="checkbox"/>	<input type="checkbox"/>
	Demonstrate use of fibre and wire rope reeving	<input type="checkbox"/>	<input type="checkbox"/>
	Describe procedures for heavy rigging and marine rigging	<input type="checkbox"/>	<input type="checkbox"/>
Demonstrate rigging calculations	<input type="checkbox"/>	<input type="checkbox"/>	
Cranes, derricks and auxiliary hoisting equipment	Identify types of mobile and crawler cranes	<input type="checkbox"/>	<input type="checkbox"/>
	Identify types of climbing cranes	<input type="checkbox"/>	<input type="checkbox"/>
	Identify derrick types and their cableways	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and operate auxiliary hoisting equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Identify non-visual hoisting signals and communication	<input type="checkbox"/>	<input type="checkbox"/>
	Demonstrate all hand signals	<input type="checkbox"/>	<input type="checkbox"/>
	Describe steel erection procedures for cranes, derricks and auxiliary hoisting operations	<input type="checkbox"/>	<input type="checkbox"/>
Describe conveyance equipment	<input type="checkbox"/>	<input type="checkbox"/>	
Structural steel erection	Describe steel construction and erection	<input type="checkbox"/>	<input type="checkbox"/>
	Demonstrate application of shims and wedges	<input type="checkbox"/>	<input type="checkbox"/>
	Demonstrate maintenance and inspection of structures	<input type="checkbox"/>	<input type="checkbox"/>
	Describe field fabrication and revision to repairs	<input type="checkbox"/>	<input type="checkbox"/>
	Identify structural components, connection types and details	<input type="checkbox"/>	<input type="checkbox"/>
	Demonstrate fitting and erection of metal decking	<input type="checkbox"/>	<input type="checkbox"/>
	Identify types of bridges and their components	<input type="checkbox"/>	<input type="checkbox"/>
	Describe the procedure for erecting false work	<input type="checkbox"/>	<input type="checkbox"/>
	Describe miscellaneous and architectural steel	<input type="checkbox"/>	<input type="checkbox"/>
Fabricate curtain wall assembly	<input type="checkbox"/>	<input type="checkbox"/>	
Concrete reinforcing fabrication and placement	Identify where rebar is to be placed to reinforce concrete components against common forces	<input type="checkbox"/>	<input type="checkbox"/>
	Select appropriate accessories and bar supports to maintain concrete clearance	<input type="checkbox"/>	<input type="checkbox"/>
	Identify rebar using standard industry bar markings, tags and colour code	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Tendon placement for post tensioning	Describe types and methods of post tensioning concrete	<input type="checkbox"/>	<input type="checkbox"/>
	Describe tendon locations, size and layout of supports	<input type="checkbox"/>	<input type="checkbox"/>
	Pull tendons to stress with jacking equipment	<input type="checkbox"/>	<input type="checkbox"/>
Sketch and read drawings	Interpret basic drawings	<input type="checkbox"/>	<input type="checkbox"/>
	Interpret structural steel erection drawings for a pre-engineered building	<input type="checkbox"/>	<input type="checkbox"/>
	Interpret structural steel erection drawings	<input type="checkbox"/>	<input type="checkbox"/>
	Interpret architectural drawings	<input type="checkbox"/>	<input type="checkbox"/>
	Interpret steel fabrication detail drawings for component correctness and prepare a materials list	<input type="checkbox"/>	<input type="checkbox"/>

12. Lather (Interior Systems Mechanic) (NOC: 7284)

DESCRIPTION: Lathers install ceiling systems and demountable walls, access flooring and partitions. They also install soundproofing, metal lath, drywall, exterior prefabricated wall panels, lead shielding and interior/external metal wall studs.

OTHER TITLES: Acoustical Ceiling Installer, Ceiling Installer, Drywall Applicator, Drywall Finisher, Drywall Installer and Finisher, Drywall Taper, Interior Systems Mechanic, Plasterer, Sheetrock Applicator, Wood Lather

MAJOR SKILLS		CAN DO	CANNOT DO
Planning and drawings	Read blueprints	<input type="checkbox"/>	<input type="checkbox"/>
	Use layout techniques	<input type="checkbox"/>	<input type="checkbox"/>
	Sketch and draw simple details	<input type="checkbox"/>	<input type="checkbox"/>
	Use an architect's scale rule	<input type="checkbox"/>	<input type="checkbox"/>
	Identify lines, symbols and abbreviations	<input type="checkbox"/>	<input type="checkbox"/>
Tools of the trade	Use and maintain hand tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use measuring and layout tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain cutting tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain portable power tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use powder-actuated tools	<input type="checkbox"/>	<input type="checkbox"/>
Rigging, ladders and scaffolds	Use and maintain saw horses, ladders and stilts	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain scaffolding	<input type="checkbox"/>	<input type="checkbox"/>
	Use approved visual hand signals	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain lifelines and safety belts	<input type="checkbox"/>	<input type="checkbox"/>
	Use fibre ropes, knots, bends and hitches	<input type="checkbox"/>	<input type="checkbox"/>
Install insulation	Use appropriate protective gear	<input type="checkbox"/>	<input type="checkbox"/>
	Install vapour barriers	<input type="checkbox"/>	<input type="checkbox"/>
	Install types of thermal and acoustical insulation	<input type="checkbox"/>	<input type="checkbox"/>
	Identify the dangers of using asbestos	<input type="checkbox"/>	<input type="checkbox"/>
	Use mechanical fasteners and adhesives	<input type="checkbox"/>	<input type="checkbox"/>
Install metal framing: non-load bearing	Cut, fit and fasten metal studs	<input type="checkbox"/>	<input type="checkbox"/>
	Use layout methods	<input type="checkbox"/>	<input type="checkbox"/>
	Use steel stud framing, build walls, ceilings and bulkheads	<input type="checkbox"/>	<input type="checkbox"/>
Install gypsum wallboard	Use cutting, fitting and fastening methods for wallboard	<input type="checkbox"/>	<input type="checkbox"/>
	Install different types of wallboard	<input type="checkbox"/>	<input type="checkbox"/>
	Use proper methods of handling and stacking	<input type="checkbox"/>	<input type="checkbox"/>
	Recognize problems when installing and finishing wallboard	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Install beads and mouldings	Cut, fit and fasten beads and mouldings	<input type="checkbox"/>	<input type="checkbox"/>
	Install drywall and plaster beads	<input type="checkbox"/>	<input type="checkbox"/>
	Install drywall mouldings	<input type="checkbox"/>	<input type="checkbox"/>
	Install drywall and plaster expansion joints	<input type="checkbox"/>	<input type="checkbox"/>
	Describe when to use different types of beads and moulding	<input type="checkbox"/>	<input type="checkbox"/>
Install fireproofing and soundproofing	Cut, fit and fasten fire- and soundproofing materials	<input type="checkbox"/>	<input type="checkbox"/>
	Install materials for soundproofing walls and ceilings	<input type="checkbox"/>	<input type="checkbox"/>
	List types of materials used for fire- and soundproofing	<input type="checkbox"/>	<input type="checkbox"/>
Install suspended gypsum wallboard ceilings	Describe cutting, fitting and fastening methods for wallboard	<input type="checkbox"/>	<input type="checkbox"/>
	Perform layout methods	<input type="checkbox"/>	<input type="checkbox"/>
	Install types of gypsum wallboard	<input type="checkbox"/>	<input type="checkbox"/>
	Use proper methods of handling and stacking	<input type="checkbox"/>	<input type="checkbox"/>
	Recognize problems when installing and finishing wallboard	<input type="checkbox"/>	<input type="checkbox"/>
Install acoustical ceilings	Describe cut, fit and fasten methods for acoustical ceiling	<input type="checkbox"/>	<input type="checkbox"/>
	Install acoustical ceilings	<input type="checkbox"/>	<input type="checkbox"/>
	Perform layout methods	<input type="checkbox"/>	<input type="checkbox"/>
	Use different types of acoustical ceiling material	<input type="checkbox"/>	<input type="checkbox"/>
Apply metal lath and wire	Describe cut, fit and fasten methods for metal lath	<input type="checkbox"/>	<input type="checkbox"/>
	Install types of wire	<input type="checkbox"/>	<input type="checkbox"/>
	Install types of lath	<input type="checkbox"/>	<input type="checkbox"/>
Install metal lath and ceilings	Apply metal lath and ceiling types layout methods	<input type="checkbox"/>	<input type="checkbox"/>
	Describe cut, fit and fastening methods for metal lath and ceiling types	<input type="checkbox"/>	<input type="checkbox"/>

13. Machinist (NOC: 7231)

DESCRIPTION: Machinists set up and operate machines. They must possess a wide range of knowledge and skills, including the ability to read engineering drawings, do layout procedures, and use mathematics, as well as machining and assembly. They must be able to work with and communicate with other tradespersons in related metal trades.

OTHER TITLES: Fitter/Turner, Turner, Tool and Die, Engine Machinist, Automotive Machinist, Computer Numerical Control (CNC) Machinist

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Millwright, Specialist Machinist (e.g., Cutter Grinder, Horizontal Drilling Machine Operator)

MAJOR SKILLS		CAN DO	CANNOT DO
Planning and use of drawings	Read and interpret drawings, blueprints and sketches	<input type="checkbox"/>	<input type="checkbox"/>
	Describe first-angle and third-angle projection	<input type="checkbox"/>	<input type="checkbox"/>
	Identify symbols such as surface finishes, scales and tolerances	<input type="checkbox"/>	<input type="checkbox"/>
	Read documents such as work orders, technical data, reference manuals	<input type="checkbox"/>	<input type="checkbox"/>
	Plan work and work activities	<input type="checkbox"/>	<input type="checkbox"/>
Tools of the trade	Identify and use common hand tools, portable power tools	<input type="checkbox"/>	<input type="checkbox"/>
	Maintain and store hand tools and portable power tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use measuring tools such as micrometers, vernier calipers, gear tooth verniers, protractors, sine bars and gauge blocks	<input type="checkbox"/>	<input type="checkbox"/>
	Use layout tools, height gauges, angle plates, scribes	<input type="checkbox"/>	<input type="checkbox"/>
Bench work	Select correct file type and know filing technique	<input type="checkbox"/>	<input type="checkbox"/>
	Use hand saws and know sawing technique, types of saw blades	<input type="checkbox"/>	<input type="checkbox"/>
	Use tools such as drills, reamers and hones	<input type="checkbox"/>	<input type="checkbox"/>
	Use taps and dies	<input type="checkbox"/>	<input type="checkbox"/>
	Identify types of fasteners and tools	<input type="checkbox"/>	<input type="checkbox"/>
Rigging and hoisting	Use rigging and lifting procedures	<input type="checkbox"/>	<input type="checkbox"/>
	Determine load weight	<input type="checkbox"/>	<input type="checkbox"/>
	Use basic body mechanics for lifting and moving equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Use visual and audio signals when lifting	<input type="checkbox"/>	<input type="checkbox"/>
	Test physical properties of materials	<input type="checkbox"/>	<input type="checkbox"/>
	Identify non-metals	<input type="checkbox"/>	<input type="checkbox"/>
	Identify ferrous and non-ferrous metals	<input type="checkbox"/>	<input type="checkbox"/>
Lathes	Identify engine lathes, turret lathes and vertical lathes	<input type="checkbox"/>	<input type="checkbox"/>
	Do set up, turning, threading, drilling, boring and grinding	<input type="checkbox"/>	<input type="checkbox"/>
	Calculate speeds and feeds, turn internal and external surfaces	<input type="checkbox"/>	<input type="checkbox"/>
	Select size and type of cutting tools, boring bars, parting tools	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Grinders	Identify surface, cylindrical and centreless tool and cutter grinder	<input type="checkbox"/>	<input type="checkbox"/>
	Select and maintain grinding wheels	<input type="checkbox"/>	<input type="checkbox"/>
	Mount, balance, true and dress grinding wheels	<input type="checkbox"/>	<input type="checkbox"/>
	Calculate speeds and feeds, and depth of cuts	<input type="checkbox"/>	<input type="checkbox"/>
Drilling machines	Identify radial arm drill, bench and floor drills	<input type="checkbox"/>	<input type="checkbox"/>
	Describe sizes and types of cutting tools	<input type="checkbox"/>	<input type="checkbox"/>
	Perform centre drilling, drilling, counter-boring, countersinking, spot facing, tapping and reaming	<input type="checkbox"/>	<input type="checkbox"/>
	Calculate speeds and feeds, and set up work pieces	<input type="checkbox"/>	<input type="checkbox"/>
Milling machines	Identify vertical, horizontal, ram and turret milling machines	<input type="checkbox"/>	<input type="checkbox"/>
	Set up work pieces with holding devices	<input type="checkbox"/>	<input type="checkbox"/>
	Calculate speeds and feeds	<input type="checkbox"/>	<input type="checkbox"/>
	Use cutting tools, boring bars, end mills and face mills	<input type="checkbox"/>	<input type="checkbox"/>
	Perform facing, contouring, t-slots, dovetails and boring	<input type="checkbox"/>	<input type="checkbox"/>
Boring machines	Identify horizontal boring mills, vertical boring mills	<input type="checkbox"/>	<input type="checkbox"/>
	Set up work pieces with holding devices	<input type="checkbox"/>	<input type="checkbox"/>
	Calculate speeds and feeds	<input type="checkbox"/>	<input type="checkbox"/>
	Use cutting tools, boring bars, milling heads	<input type="checkbox"/>	<input type="checkbox"/>
	Use finishing techniques, drilling, reaming, boring and honing	<input type="checkbox"/>	<input type="checkbox"/>
Planer, shaper and slotters	Identify planers, shapers and slotters	<input type="checkbox"/>	<input type="checkbox"/>
	Set up work pieces with holding devices	<input type="checkbox"/>	<input type="checkbox"/>
	Calculate speeds and feeds	<input type="checkbox"/>	<input type="checkbox"/>
	Use cutting tools, multi-tool heads, milling heads	<input type="checkbox"/>	<input type="checkbox"/>
Power saws	Identify vertical, horizontal and reciprocating saws	<input type="checkbox"/>	<input type="checkbox"/>
	Install saw blades, adjust tension, set and position blade guides	<input type="checkbox"/>	<input type="checkbox"/>
	Perform adjustments such as angles, guides, stops, speeds and feeds	<input type="checkbox"/>	<input type="checkbox"/>
CNC machines	Perform basic CNC programming	<input type="checkbox"/>	<input type="checkbox"/>
	Set up and operate CNC machines	<input type="checkbox"/>	<input type="checkbox"/>
	Select tooling and tool holders	<input type="checkbox"/>	<input type="checkbox"/>
	Load and unload machine	<input type="checkbox"/>	<input type="checkbox"/>

14. Millwright (Industrial Mechanic) (NOC: 7311)

DESCRIPTION: Millwrights/industrial mechanics install industrial plant machinery and ancillary equipment and maintain, repair, rebuild, and replace machinery and equipment.

OTHER TITLES: Fitter, Fitter/Turner, Machinist, Engine Fitter, Engine Machinist

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Marine Engineer, Power Engineer, Stationary Engineer

MAJOR SKILLS		CAN DO	CANNOT DO
Planning, drawings and layout	Read and interpret drawings, blueprints, sketches	<input type="checkbox"/>	<input type="checkbox"/>
	Describe STD codes such as American Society for Testing and Materials (ASTM) and American National Standard Institute (ANSI)	<input type="checkbox"/>	<input type="checkbox"/>
	Produce sketch or drawing and develop material take-off list	<input type="checkbox"/>	<input type="checkbox"/>
	Use drawing, blueprints or sketches, do layouts	<input type="checkbox"/>	<input type="checkbox"/>
	Plan work and work activities	<input type="checkbox"/>	<input type="checkbox"/>
Tools of the trade	Identify and use common hand tools, portable power tools	<input type="checkbox"/>	<input type="checkbox"/>
	Maintain and store hand tools and portable power tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use measuring tools to do layouts to specifications	<input type="checkbox"/>	<input type="checkbox"/>
	Set up and operate shop machines	<input type="checkbox"/>	<input type="checkbox"/>
Fastening devices	List types of materials used for fasteners	<input type="checkbox"/>	<input type="checkbox"/>
	Use torquing procedures	<input type="checkbox"/>	<input type="checkbox"/>
	Use appropriate resins to secure components	<input type="checkbox"/>	<input type="checkbox"/>
	Identify, use retaining devices	<input type="checkbox"/>	<input type="checkbox"/>
	Identify types of fasteners and tools	<input type="checkbox"/>	<input type="checkbox"/>
Rigging and hoisting	Assemble and use scaffolds, lifts and ladders	<input type="checkbox"/>	<input type="checkbox"/>
	Determine load weight	<input type="checkbox"/>	<input type="checkbox"/>
	Safely lift loads, secure, transport and unload machinery	<input type="checkbox"/>	<input type="checkbox"/>
	Use correct hand signals and radio to communicate	<input type="checkbox"/>	<input type="checkbox"/>
Welding, metallurgy	Use oxy-acetylene equipment to do cutting and welding	<input type="checkbox"/>	<input type="checkbox"/>
	Weld or braze metal, achieve proper fusion and penetration	<input type="checkbox"/>	<input type="checkbox"/>
	Use arc welding equipment on ferrous metals	<input type="checkbox"/>	<input type="checkbox"/>
	Identify ferrous and non-ferrous metals	<input type="checkbox"/>	<input type="checkbox"/>
	Perform heat treatment of metal components	<input type="checkbox"/>	<input type="checkbox"/>
Installation and maintenance	Install appropriate metal guards, rails as required for safety	<input type="checkbox"/>	<input type="checkbox"/>
Lubrication	Select proper lubricants and fluids	<input type="checkbox"/>	<input type="checkbox"/>
	Test and analyze lubricants and fluids	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Alignment of machinery	Use transit and laser to level machinery/equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Adjust machinery/equipment in three axes	<input type="checkbox"/>	<input type="checkbox"/>
	Use shims to level machinery/equipment	<input type="checkbox"/>	<input type="checkbox"/>
Power drives	Install all common power drives and components	<input type="checkbox"/>	<input type="checkbox"/>
	Troubleshoot, inspect and analyze power drives and components	<input type="checkbox"/>	<input type="checkbox"/>
	Repair and maintain power drives and components	<input type="checkbox"/>	<input type="checkbox"/>
Material moving systems (MMS)	Install different types of material moving systems (MMS)	<input type="checkbox"/>	<input type="checkbox"/>
	Maintain MMS components, assemblies and sub-assemblies	<input type="checkbox"/>	<input type="checkbox"/>
	Repair, modify and replace MMS, components and assemblies	<input type="checkbox"/>	<input type="checkbox"/>
Machine components	Install all types of shafts, bearings and seals	<input type="checkbox"/>	<input type="checkbox"/>
	Inspect, test and examine shafts, bearings and seals	<input type="checkbox"/>	<input type="checkbox"/>
	Repair, modify and replace shafts, bearings and seals	<input type="checkbox"/>	<input type="checkbox"/>
	Identify types of keys and keyways on shafts and couplings	<input type="checkbox"/>	<input type="checkbox"/>
	Install keys on shafts and couplings	<input type="checkbox"/>	<input type="checkbox"/>
Prime movers	Install prime movers, associated equipment and support systems	<input type="checkbox"/>	<input type="checkbox"/>
	Troubleshoot, inspect and analyze prime movers	<input type="checkbox"/>	<input type="checkbox"/>
	Maintain, repair, modify and replace prime movers and/or support systems	<input type="checkbox"/>	<input type="checkbox"/>
Pumps	Install all types of pumps, pump components, tubing and piping	<input type="checkbox"/>	<input type="checkbox"/>
	Troubleshoot, inspect and identify pump problems	<input type="checkbox"/>	<input type="checkbox"/>
	Maintain, repair, modify and replace pumps	<input type="checkbox"/>	<input type="checkbox"/>
	Install all types of valves and seals	<input type="checkbox"/>	<input type="checkbox"/>
	Maintain, repair and replace valves and seals	<input type="checkbox"/>	<input type="checkbox"/>
Fluid power	Install all types of hydraulic systems	<input type="checkbox"/>	<input type="checkbox"/>
	Use schematics and specifications to install piping	<input type="checkbox"/>	<input type="checkbox"/>
	Install and align hydraulic pump and motor	<input type="checkbox"/>	<input type="checkbox"/>
	Install correct size of reservoir	<input type="checkbox"/>	<input type="checkbox"/>
	Measure, cut bend and install piping	<input type="checkbox"/>	<input type="checkbox"/>
	Install filters, strainers, hydraulic valves and seals	<input type="checkbox"/>	<input type="checkbox"/>
	Record hydraulic data, check specifications and adjust if required	<input type="checkbox"/>	<input type="checkbox"/>
	Troubleshoot/test and identify faults and problems	<input type="checkbox"/>	<input type="checkbox"/>
	Maintain, repair, modify and replace hydraulic components and systems	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Pneumatic systems	Install all types of pneumatic systems and components	<input type="checkbox"/>	<input type="checkbox"/>
	Install and align air compressors and equipment/accessories	<input type="checkbox"/>	<input type="checkbox"/>
	Select required tubing, cut, bend and install	<input type="checkbox"/>	<input type="checkbox"/>
	Select and install pneumatic valves	<input type="checkbox"/>	<input type="checkbox"/>
	Troubleshoot and identify faults and problems	<input type="checkbox"/>	<input type="checkbox"/>
	Maintain, repair, modify and replace pneumatic systems and components	<input type="checkbox"/>	<input type="checkbox"/>
	Record pneumatic pressures, check specifications and adjust	<input type="checkbox"/>	<input type="checkbox"/>
Vacuum systems	Install all types of vacuum systems and components	<input type="checkbox"/>	<input type="checkbox"/>
	Select piping/tubing required, cut, bend and install	<input type="checkbox"/>	<input type="checkbox"/>
	Troubleshoot and identify faults and problems	<input type="checkbox"/>	<input type="checkbox"/>
	Maintain, repair, modify and replace, fine-tune and lubricate vacuum systems	<input type="checkbox"/>	<input type="checkbox"/>
Fans and blowers	Install fans and blowers, associated equipment and support systems	<input type="checkbox"/>	<input type="checkbox"/>
	Troubleshoot and identify faults and problems	<input type="checkbox"/>	<input type="checkbox"/>
	Maintain, repair, modify and replace fans and blowers	<input type="checkbox"/>	<input type="checkbox"/>
Tanks and containers	Install all types of tanks, containers and related components	<input type="checkbox"/>	<input type="checkbox"/>
	Identify faults and problems with tanks and containers such as auto-gauging	<input type="checkbox"/>	<input type="checkbox"/>
	Maintain, repair, modify and replace tanks, containers and components	<input type="checkbox"/>	<input type="checkbox"/>
	Change liners, maintain ventilation system	<input type="checkbox"/>	<input type="checkbox"/>
	Read, record and test vibration analysis data	<input type="checkbox"/>	<input type="checkbox"/>
Vibration analysis	Determine vibration noise measurement	<input type="checkbox"/>	<input type="checkbox"/>
	Identify vibration frequencies in journal and rolling element bearings, mechanical looseness, rubbing, gears, belts, cavitation and hydraulic systems	<input type="checkbox"/>	<input type="checkbox"/>
	Install transducers and related equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Determine vibration limits using manuals and tables	<input type="checkbox"/>	<input type="checkbox"/>
	Use static and dynamic balancing procedures	<input type="checkbox"/>	<input type="checkbox"/>
	Use single and multi-plane balancing methods	<input type="checkbox"/>	<input type="checkbox"/>
	Balance equipment to International Organization for Standardization (ISO) standards	<input type="checkbox"/>	<input type="checkbox"/>
Preventive maintenance (PM)	Use existing data to determine PM requirements	<input type="checkbox"/>	<input type="checkbox"/>
	Use CPM (critical path method) and PERT (program evaluation review technique) in maintenance planning programs	<input type="checkbox"/>	<input type="checkbox"/>
	Perform a safety audit on machinery and equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Follow manufacturers' recommended specifications for PM	<input type="checkbox"/>	<input type="checkbox"/>
	Identify outstanding problems from unusual sounds, vibrations, etc.	<input type="checkbox"/>	<input type="checkbox"/>
	Monitor for wear, adjust and calibrate equipment	<input type="checkbox"/>	<input type="checkbox"/>

15. Mobile Crane Operator (NOC: 7371)

DESCRIPTION: Mobile crane operators (construction industry) operate any hoisting device or structure that incorporates a power-driven drum and wire rope designed for raising, lowering or moving material and is equipped with a hook, either cable-suspended or hydraulically supported, capable of moving in the vertical and horizontal plane and mounted on a base or chassis intended to provide mobility. The mobile crane may be crawler- or wheel-mounted, but excludes boom trucks, side booms and rail-mounted tower or gantry cranes.

OTHER TITLES: Crane Operator, Crane and Hoist Operator, Crane and Hoisting Equipment Operator

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Tower Crane Operator, Hydraulic Boom Crane Operator

MAJOR SKILLS		CAN DO	CANNOT DO
Tools	Use hand tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use power tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use oxy-acetylene cutting torch	<input type="checkbox"/>	<input type="checkbox"/>
	Cut blocking with power saw	<input type="checkbox"/>	<input type="checkbox"/>
Fuels, coolants, oils and lubricants	Fuel-up cranes	<input type="checkbox"/>	<input type="checkbox"/>
	Change and top-up coolant	<input type="checkbox"/>	<input type="checkbox"/>
	Lubricate cranes	<input type="checkbox"/>	<input type="checkbox"/>
Hydraulic systems	Assemble hydraulic hoses and fittings	<input type="checkbox"/>	<input type="checkbox"/>
	Operate basic hydraulic system	<input type="checkbox"/>	<input type="checkbox"/>
	Perform routine maintenance and inspection of crane hydraulic system	<input type="checkbox"/>	<input type="checkbox"/>
Wire rope and rigging hardware	Determine crane capacity	<input type="checkbox"/>	<input type="checkbox"/>
	Pre-plan a crane lift	<input type="checkbox"/>	<input type="checkbox"/>
	Rig a load	<input type="checkbox"/>	<input type="checkbox"/>
	Maintain wire rope and rigging and components hardware	<input type="checkbox"/>	<input type="checkbox"/>
Engine support systems	Service the engine lubrication systems	<input type="checkbox"/>	<input type="checkbox"/>
	Service engine cooling systems	<input type="checkbox"/>	<input type="checkbox"/>
	Service air intake systems	<input type="checkbox"/>	<input type="checkbox"/>
	Service engine electrical systems	<input type="checkbox"/>	<input type="checkbox"/>
	Service engine fuel systems	<input type="checkbox"/>	<input type="checkbox"/>
Hydraulic boom, truck cranes	Perform routine inspection and maintenance of crane hydraulic system	<input type="checkbox"/>	<input type="checkbox"/>
	Assemble and erect crane to working position	<input type="checkbox"/>	<input type="checkbox"/>
	Start, move and shut down the carrier and upper works of a hydraulic boom truck crane	<input type="checkbox"/>	<input type="checkbox"/>
	Determine lifting capacities of crane using load charts	<input type="checkbox"/>	<input type="checkbox"/>
	Perform hoisting operations	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare a crane for transport	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Hydraulic boom, rough terrain cranes	Carry out maintenance of the crane carrier system	<input type="checkbox"/>	<input type="checkbox"/>
	Perform routine inspection and maintenance of crane hydraulic system	<input type="checkbox"/>	<input type="checkbox"/>
	Assemble and erect crane to working position	<input type="checkbox"/>	<input type="checkbox"/>
	Start, move and shut down a rough-terrain crane	<input type="checkbox"/>	<input type="checkbox"/>
	Determine lifting capacities of crane using load charts	<input type="checkbox"/>	<input type="checkbox"/>
	Perform hoisting operations	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare a crane for transport	<input type="checkbox"/>	<input type="checkbox"/>
Lattice boom, truck cranes	Carry out maintenance of the crane carrier system	<input type="checkbox"/>	<input type="checkbox"/>
	Perform routine inspection and maintenance of crane	<input type="checkbox"/>	<input type="checkbox"/>
	Assemble and erect crane to working position	<input type="checkbox"/>	<input type="checkbox"/>
	Start, move and shut down a lattice boom truck crane	<input type="checkbox"/>	<input type="checkbox"/>
	Determine lifting capacities of crane using load charts	<input type="checkbox"/>	<input type="checkbox"/>
	Perform hoisting operations	<input type="checkbox"/>	<input type="checkbox"/>
	Dismantle and prepare a crane for transport	<input type="checkbox"/>	<input type="checkbox"/>
Lattice boom, crawler cranes	Carry out maintenance of the crane carrier system	<input type="checkbox"/>	<input type="checkbox"/>
	Perform routine inspection and maintenance of crane	<input type="checkbox"/>	<input type="checkbox"/>
	Assemble and erect a lattice boom crawler crane to the working position	<input type="checkbox"/>	<input type="checkbox"/>
	Perform routine maintenance and adjustment of lower works components	<input type="checkbox"/>	<input type="checkbox"/>
	Perform routine upper works maintenance and adjustments	<input type="checkbox"/>	<input type="checkbox"/>
	Start, cycle, move and shut down a crawler crane	<input type="checkbox"/>	<input type="checkbox"/>
	Determine lifting capacities of crane using load charts	<input type="checkbox"/>	<input type="checkbox"/>
	Perform hoisting operations	<input type="checkbox"/>	<input type="checkbox"/>
Dismantle and prepare a crane for transport	<input type="checkbox"/>	<input type="checkbox"/>	

16. Painter and Decorator (NOC: 7294)

DESCRIPTION: Painters and decorators apply paint, wallpaper and other finishes to interior and exterior surfaces of buildings and other structures.

OTHER TITLES: Construction Painter, Maintenance Painter, Paperhanger

MAJOR SKILLS		CAN DO	CANNOT DO
Drawings and related documents	Read residential and commercial blueprints	<input type="checkbox"/>	<input type="checkbox"/>
	Estimate material quantities and identify construction details	<input type="checkbox"/>	<input type="checkbox"/>
	Identify lines, symbols, scales and dimensions	<input type="checkbox"/>	<input type="checkbox"/>
	Identify symbols and abbreviations	<input type="checkbox"/>	<input type="checkbox"/>
	Interpret specifications and schedules	<input type="checkbox"/>	<input type="checkbox"/>
Tools of the trade	Use and maintain hand tools and equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain paint application tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain power tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use abrasive products	<input type="checkbox"/>	<input type="checkbox"/>
	Protect surrounding areas	<input type="checkbox"/>	<input type="checkbox"/>
Coating systems	Identify specification, inspection agencies and testing of materials	<input type="checkbox"/>	<input type="checkbox"/>
	Identify basic components of paint and coatings	<input type="checkbox"/>	<input type="checkbox"/>
	Apply coating systems	<input type="checkbox"/>	<input type="checkbox"/>
	Identify appropriate coating systems	<input type="checkbox"/>	<input type="checkbox"/>
Decorative finishes	Identify surface preparation procedures	<input type="checkbox"/>	<input type="checkbox"/>
	Use glazing techniques	<input type="checkbox"/>	<input type="checkbox"/>
	Apply specialty finishes	<input type="checkbox"/>	<input type="checkbox"/>
	Apply texture finishes	<input type="checkbox"/>	<input type="checkbox"/>
Lay out lining and graphics	Lay out lining and graphics	<input type="checkbox"/>	<input type="checkbox"/>
	Apply graphics	<input type="checkbox"/>	<input type="checkbox"/>
Match colours	Use a colour wheel	<input type="checkbox"/>	<input type="checkbox"/>
	Create colours using bases and colour tints	<input type="checkbox"/>	<input type="checkbox"/>
	Match colours	<input type="checkbox"/>	<input type="checkbox"/>
	Identify colour codes	<input type="checkbox"/>	<input type="checkbox"/>
	Identify characteristics of colour	<input type="checkbox"/>	<input type="checkbox"/>
	Identify effect of light on colour	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Prepare surfaces	Use caulking compounds	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare drywall surfaces	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare wood surfaces	<input type="checkbox"/>	<input type="checkbox"/>
	Use abrasive blasting	<input type="checkbox"/>	<input type="checkbox"/>
	Identify paint failures and remedies	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare steel substrates	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare substrates	<input type="checkbox"/>	<input type="checkbox"/>
Spray painting equipment	Identify types of spray systems	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain airless spray equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain air spray equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain specialty spray equipment	<input type="checkbox"/>	<input type="checkbox"/>
Wall coverings	Estimate wall covering quantities	<input type="checkbox"/>	<input type="checkbox"/>
	Execute surface preparation requirements	<input type="checkbox"/>	<input type="checkbox"/>
	Install wall coverings	<input type="checkbox"/>	<input type="checkbox"/>
	Remove wall coverings	<input type="checkbox"/>	<input type="checkbox"/>
	Identify adhesives	<input type="checkbox"/>	<input type="checkbox"/>
	Identify wall covering materials	<input type="checkbox"/>	<input type="checkbox"/>
	Use wall covering tools	<input type="checkbox"/>	<input type="checkbox"/>
Wood finishing products	Prepare wood surfaces for finishing products	<input type="checkbox"/>	<input type="checkbox"/>
	Identify stains, fillers, sealers and topcoats	<input type="checkbox"/>	<input type="checkbox"/>
	Apply finishing products	<input type="checkbox"/>	<input type="checkbox"/>
	Maintain and repair wood finishes	<input type="checkbox"/>	<input type="checkbox"/>
	Identify wood composite products	<input type="checkbox"/>	<input type="checkbox"/>

17. Plumber (NOC: 7251)

DESCRIPTION: Plumbers install, repair and maintain pipes, fixtures and other plumbing equipment used for water distribution and waste water disposal in residential, commercial and industrial buildings.

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Maintenance Plumber

MAJOR SKILLS		CAN DO	CANNOT DO
Use power and pound or activated tools	Use plumbing hand tools, use measuring layout and levelling tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use pipe cutting and threading tools, use power tools, use piping shop tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use builder's level	<input type="checkbox"/>	<input type="checkbox"/>
	Use laser and electronic levels	<input type="checkbox"/>	<input type="checkbox"/>
Select pipes, valves and fittings	Describe plumbing valves	<input type="checkbox"/>	<input type="checkbox"/>
	Describe hangers and supports	<input type="checkbox"/>	<input type="checkbox"/>
	Select piping for specific applications	<input type="checkbox"/>	<input type="checkbox"/>
	Select tubing for specific applications	<input type="checkbox"/>	<input type="checkbox"/>
	Use sealants and gaskets	<input type="checkbox"/>	<input type="checkbox"/>
Cut, weld, braze and solder metals	Identify gases, components and procedures for oxy-fuel cutting and welding	<input type="checkbox"/>	<input type="checkbox"/>
	Assemble, test, light, adjust, shut down and disassemble portable oxy-fuel equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Solder copper fittings and joints	<input type="checkbox"/>	<input type="checkbox"/>
	Weld pipe joints	<input type="checkbox"/>	<input type="checkbox"/>
Read and interpret pipe drawing and specifications	Sketch and draw simple details	<input type="checkbox"/>	<input type="checkbox"/>
	Identify standard piping symbols	<input type="checkbox"/>	<input type="checkbox"/>
	Read and interpret piping drawings	<input type="checkbox"/>	<input type="checkbox"/>
	Estimate material from piping drawings	<input type="checkbox"/>	<input type="checkbox"/>
Lay out drainage and venting systems	Apply the <i>Plumbing Code</i> to single-family residences	<input type="checkbox"/>	<input type="checkbox"/>
Install potable water systems	Design and size potable water systems for single-family residential applications	<input type="checkbox"/>	<input type="checkbox"/>
	Describe water distribution services	<input type="checkbox"/>	<input type="checkbox"/>
	Install hot water heating system	<input type="checkbox"/>	<input type="checkbox"/>
Install and troubleshoot pumps	Describe types of pumps	<input type="checkbox"/>	<input type="checkbox"/>
	Install and troubleshoot pumps	<input type="checkbox"/>	<input type="checkbox"/>
Install gas appliance piping, venting and storage	Describe fuel gases	<input type="checkbox"/>	<input type="checkbox"/>
	Size and install gas piping systems	<input type="checkbox"/>	<input type="checkbox"/>
	Design and install a propane storage system	<input type="checkbox"/>	<input type="checkbox"/>
	Select and change orifices in a burner	<input type="checkbox"/>	<input type="checkbox"/>
Install and test hot water heating systems	Describe types of hot water heating systems	<input type="checkbox"/>	<input type="checkbox"/>
	Describe hot water heating boilers	<input type="checkbox"/>	<input type="checkbox"/>
	Install boilers	<input type="checkbox"/>	<input type="checkbox"/>

18. Power Line Technician (NOC: 7244)

DESCRIPTION: Power line technicians construct, maintain and repair the overhead and underground electrical power transmission and distribution systems that make up the electrical power grid. This involves putting up and maintaining electrical poles, towers and guy wires as well as installing or repairing the live-line wiring and other components required to connect power distribution and transmission networks. Power line technicians also inspect and test overhead and underground power lines and auxiliary equipment, and install and maintain street lighting systems. Because of the nature of their work, they are often working at heights on poles and towers, either on a ladder or in a hydraulic bucket. In some cases, they are required to work in confined spaces like trenches or tunnels to install underground lines or equipment.

OTHER TITLES: Lineman, Operating Lineman, Power Line Electrician, Power Lineman, Power Lineperson, Power Line Worker, Power Line Technician (Lineman)

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Industrial Electrician, Construction Electrician

MAJOR SKILLS		CAN DO	CANNOT DO
Overhead distribution	Construct and maintain overhead distribution lines applying utility standards	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and select materials	<input type="checkbox"/>	<input type="checkbox"/>
	Install, operate and maintain overhead electrical apparatus	<input type="checkbox"/>	<input type="checkbox"/>
Underground residential distribution (URD)	Construct and maintain URD distribution lines, applying utility standards	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and select materials	<input type="checkbox"/>	<input type="checkbox"/>
	Install, operate and maintain URD electrical apparatus	<input type="checkbox"/>	<input type="checkbox"/>
	Identify line status	<input type="checkbox"/>	<input type="checkbox"/>
Transmission	Construct and maintain transmission lines, applying utility standards	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and select materials	<input type="checkbox"/>	<input type="checkbox"/>
	Install, operate and maintain transmission electrical apparatus	<input type="checkbox"/>	<input type="checkbox"/>
Rigging	Identify and demonstrate lifting and rigging components	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and demonstrate distribution rigging	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and demonstrate transmission rigging	<input type="checkbox"/>	<input type="checkbox"/>
Work practices	Identify and demonstrate correct grounding and equi-potential procedures	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and demonstrate lock-out procedures	<input type="checkbox"/>	<input type="checkbox"/>
	Recognize and observe limits of approach	<input type="checkbox"/>	<input type="checkbox"/>
	Demonstrate communication methods	<input type="checkbox"/>	<input type="checkbox"/>
	Perform rescue procedures	<input type="checkbox"/>	<input type="checkbox"/>
	Handle transportation and storage of hazardous materials	<input type="checkbox"/>	<input type="checkbox"/>
Climbing	Climb wood structures	<input type="checkbox"/>	<input type="checkbox"/>
	Climb steel structures	<input type="checkbox"/>	<input type="checkbox"/>
	Work on elevated platforms	<input type="checkbox"/>	<input type="checkbox"/>
	Test for pole (structure) stability	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Equipment	Maintain and use hydraulically equipped vehicles	<input type="checkbox"/>	<input type="checkbox"/>
	Maintain and use stringing equipment (distribution and transmission)	<input type="checkbox"/>	<input type="checkbox"/>
Tools and instruments	Maintain and use live line tools	<input type="checkbox"/>	<input type="checkbox"/>
	Maintain and use test instruments	<input type="checkbox"/>	<input type="checkbox"/>
	Install metering (single phase, three phase, primary, secondary)	<input type="checkbox"/>	<input type="checkbox"/>
	Correct power factor	<input type="checkbox"/>	<input type="checkbox"/>

19. Refrigeration and Air Conditioning Mechanic (NOC: 7313)

DESCRIPTION: Refrigeration and air conditioning mechanics make, install, repair and service residential, commercial and industrial cooling and heating systems. Some work in building maintenance, e.g., servicing the air conditioning systems in high-rise office buildings; others specialize in repairing small, portable refrigeration and freezing units.

OTHER TITLES: Pipefitter – Refrigeration Mechanic Specialty, Refrigeration and Air Conditioning, Refrigeration Mechanic

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Millwright, Pipefitter, Industrial Electrician, Electric Motor System Technician

MAJOR SKILLS		CAN DO	CANNOT DO
Welding and brazing	Use oxy-acetylene and air acetylene welding equipment for welding and brazing	<input type="checkbox"/>	<input type="checkbox"/>
	Perform electric arc welding	<input type="checkbox"/>	<input type="checkbox"/>
Tools	Use charging, evacuation and reclaim tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use hand, precision measuring and power tools	<input type="checkbox"/>	<input type="checkbox"/>
Piping practices	Test for refrigerant leaks	<input type="checkbox"/>	<input type="checkbox"/>
	Install piping for refrigeration systems	<input type="checkbox"/>	<input type="checkbox"/>
Single- and three-phase electricity	Install and operate single-phase electric motor	<input type="checkbox"/>	<input type="checkbox"/>
	Install and operate three-phase electric motor	<input type="checkbox"/>	<input type="checkbox"/>
	Install and test motor starters	<input type="checkbox"/>	<input type="checkbox"/>
	Use electric meters to test for voltage, resistance and current	<input type="checkbox"/>	<input type="checkbox"/>
	Use computers and software to calculate heating and cooling loads	<input type="checkbox"/>	<input type="checkbox"/>
	Test rectifier circuits	<input type="checkbox"/>	<input type="checkbox"/>
Electronics	Troubleshoot motor protection circuits	<input type="checkbox"/>	<input type="checkbox"/>
	Test integrated controls	<input type="checkbox"/>	<input type="checkbox"/>
	Test circuit components	<input type="checkbox"/>	<input type="checkbox"/>
	Test remote monitoring systems	<input type="checkbox"/>	<input type="checkbox"/>
Air conditioning	Interpret electrical and mechanical drawings	<input type="checkbox"/>	<input type="checkbox"/>
	Install and repair fan systems	<input type="checkbox"/>	<input type="checkbox"/>
	Install and replace air-air heat exchangers	<input type="checkbox"/>	<input type="checkbox"/>
	Calculate air conditioner, cooler and freezer loads	<input type="checkbox"/>	<input type="checkbox"/>
	Charge air conditioning system with refrigerant	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Refrigeration system components	Install and maintain compressors	<input type="checkbox"/>	<input type="checkbox"/>
	Install and maintain evaporators and condensers	<input type="checkbox"/>	<input type="checkbox"/>
	Lubricate system components	<input type="checkbox"/>	<input type="checkbox"/>
	Install and calibrate metering devices	<input type="checkbox"/>	<input type="checkbox"/>
	Repair ammonia systems	<input type="checkbox"/>	<input type="checkbox"/>
	Repair absorption systems	<input type="checkbox"/>	<input type="checkbox"/>
	Install and test heat pumps	<input type="checkbox"/>	<input type="checkbox"/>
Mechanical systems	Install fans	<input type="checkbox"/>	<input type="checkbox"/>
	Use rigging to move components	<input type="checkbox"/>	<input type="checkbox"/>
Gas applications	Select and change orifices in a burner	<input type="checkbox"/>	<input type="checkbox"/>
	Select and install gas regulators	<input type="checkbox"/>	<input type="checkbox"/>
	Install and change gas valves	<input type="checkbox"/>	<input type="checkbox"/>
	Test gas-fired appliances	<input type="checkbox"/>	<input type="checkbox"/>
	Install, set up and adjust gas burners	<input type="checkbox"/>	<input type="checkbox"/>

20. Roofer (NOC: 7291)

DESCRIPTION: Roofers build and repair flat roofs using hot asphalt, gravel and waterproof sheet materials. They may also build and repair sloped roofs using asphalt and wood shingles, shakes and masonry or baked clay roofing tiles and metal materials, although this type of work is typically done by a residential Steep Roofer. Their work also involves setting up scaffolding to provide safe access to roofs.

MAJOR SKILLS		CAN DO	CANNOT DO
Identify roofing tools and equipment	Identify roofing hand tools	<input type="checkbox"/>	<input type="checkbox"/>
	Identify roofing power tools	<input type="checkbox"/>	<input type="checkbox"/>
	Perform maintenance on roofing hand tools	<input type="checkbox"/>	<input type="checkbox"/>
	Maintain roofing power tools	<input type="checkbox"/>	<input type="checkbox"/>
	Maintain hot asphalt equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Describe hot asphalt equipment	<input type="checkbox"/>	<input type="checkbox"/>
Rigging and hoisting	Apply roofing rigging techniques	<input type="checkbox"/>	<input type="checkbox"/>
	Apply safe rigging techniques	<input type="checkbox"/>	<input type="checkbox"/>
	Apply roofing hoisting techniques	<input type="checkbox"/>	<input type="checkbox"/>
	Erect and dismantle roofing hoisting equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Describe rooftop delivery systems	<input type="checkbox"/>	<input type="checkbox"/>
	Describe rooftop delivery systems operation	<input type="checkbox"/>	<input type="checkbox"/>
Read blueprints	Identify roof designs and structures	<input type="checkbox"/>	<input type="checkbox"/>
	Describe types of lines, scales and symbols	<input type="checkbox"/>	<input type="checkbox"/>
	Identify terms used for the roofing industry	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and interpret types of blueprints and specifications	<input type="checkbox"/>	<input type="checkbox"/>
Select flat roofing materials	Identify and select insulation and fastening methods	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and select insulation and fastening tools	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and select vapour retarders	<input type="checkbox"/>	<input type="checkbox"/>
	Identify flashing materials	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and select materials used for built-up roofing	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and select materials used in flexible membrane roofing systems	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and select self-adhering bituminous materials	<input type="checkbox"/>	<input type="checkbox"/>
Identify and select thermoplastics	<input type="checkbox"/>	<input type="checkbox"/>	

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MAJOR SKILLS		CAN DO	CANNOT DO
Install flat roofing materials	Install insulation	<input type="checkbox"/>	<input type="checkbox"/>
	Install vapour retarders	<input type="checkbox"/>	<input type="checkbox"/>
	Install flashing materials	<input type="checkbox"/>	<input type="checkbox"/>
	Install materials used for built-up roofing	<input type="checkbox"/>	<input type="checkbox"/>
	Install materials used in flexible membrane roofing systems	<input type="checkbox"/>	<input type="checkbox"/>
	Install self-adhering bituminous materials	<input type="checkbox"/>	<input type="checkbox"/>
	Install thermoplastics	<input type="checkbox"/>	<input type="checkbox"/>
Select steep roofing materials	Identify and select insulation and fastening methods	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and select insulation and fastening tools	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and select eave protection and under-layments	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and select flashing materials	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and select organic, fibreglass and Styrene Butadiene Styrene (SBS) shingles	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and select wood products	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and select concrete and composite materials	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and select steep roofing metallic-unitized materials	<input type="checkbox"/>	<input type="checkbox"/>
Install steep roofing materials	Identify and select slate and other specialty steep roofing materials	<input type="checkbox"/>	<input type="checkbox"/>
	Install insulation	<input type="checkbox"/>	<input type="checkbox"/>
	Install eave protection and under-layments	<input type="checkbox"/>	<input type="checkbox"/>
	Install flashing materials	<input type="checkbox"/>	<input type="checkbox"/>
	Install organic, fibreglass and SBS shingles	<input type="checkbox"/>	<input type="checkbox"/>
	Install wood products	<input type="checkbox"/>	<input type="checkbox"/>
	Install concrete and composite materials	<input type="checkbox"/>	<input type="checkbox"/>
	Install metallic materials	<input type="checkbox"/>	<input type="checkbox"/>
Inspect and repair roofs	Install slate and other specialty steep roofing materials	<input type="checkbox"/>	<input type="checkbox"/>
	List causes of roof failures	<input type="checkbox"/>	<input type="checkbox"/>
	Use special tools and equipment for roof repair	<input type="checkbox"/>	<input type="checkbox"/>
Damp and waterproof structures	Repair flat and steep roofs	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and select damp-proofing and waterproofing materials	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare substrate for damp-proofing and waterproofing	<input type="checkbox"/>	<input type="checkbox"/>
	Damp-proof and waterproof roofs, and above- and below-grade structures	<input type="checkbox"/>	<input type="checkbox"/>

21. Sheet Metal Worker (NOC: 7261)

DESCRIPTION: Sheet metal workers fabricate, assemble, install and repair sheet metal products. They must apply a wide range of knowledge, abilities and skills to perform their duties.

OTHER TITLES: Sheet Metal Fabricator, Sheet Metal Mechanic, Tinsmith

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Metal Fabricator, Metal Press Operator

MAJOR SKILLS		CAN DO	CANNOT DO
Drawings and blueprints	Read and interpret drawings, blueprints, sketches	<input type="checkbox"/>	<input type="checkbox"/>
	Perform computer-aided design (CAD) drawing process	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare a detailed shop drawing	<input type="checkbox"/>	<input type="checkbox"/>
	Read documents such as work orders, technical data, reference manuals	<input type="checkbox"/>	<input type="checkbox"/>
	Plan work and work activities	<input type="checkbox"/>	<input type="checkbox"/>
Tools of the trade	Identify and use common hand tools, portable power tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use riveting techniques and soldering methods	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and use shop tools and equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Describe CAD/computer-aided manufacturing (CAM) equipment uses	<input type="checkbox"/>	<input type="checkbox"/>
Lay out and develop patterns	Draw objects using orthographic projections	<input type="checkbox"/>	<input type="checkbox"/>
	Develop geometric constructions	<input type="checkbox"/>	<input type="checkbox"/>
	Develop patterns for duct fittings	<input type="checkbox"/>	<input type="checkbox"/>
	Develop patterns using parallel line development	<input type="checkbox"/>	<input type="checkbox"/>
	Develop patterns using radial line development	<input type="checkbox"/>	<input type="checkbox"/>
	Develop patterns using triangulation development	<input type="checkbox"/>	<input type="checkbox"/>
	Develop patterns for round fittings	<input type="checkbox"/>	<input type="checkbox"/>
	Develop patterns using a combination of techniques	<input type="checkbox"/>	<input type="checkbox"/>
Identify types and uses of drafting equipment	<input type="checkbox"/>	<input type="checkbox"/>	

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MAJOR SKILLS		CAN DO	CANNOT DO
Fabricate shop projects	Fabricate seams, locks, edges and joints	<input type="checkbox"/>	<input type="checkbox"/>
	Fabricate a project using parallel line development	<input type="checkbox"/>	<input type="checkbox"/>
	Fabricate a project using radial line development	<input type="checkbox"/>	<input type="checkbox"/>
	Fabricate a project using triangulation development	<input type="checkbox"/>	<input type="checkbox"/>
	Fabricate duct fittings	<input type="checkbox"/>	<input type="checkbox"/>
	Fabricate a project to be metal inert gas (MIG)/shielded metal arc (SMA)-welded	<input type="checkbox"/>	<input type="checkbox"/>
	Fabricate a project using heavy gauge metal	<input type="checkbox"/>	<input type="checkbox"/>
	Fabricate a project involving louvers and opposed blade dampers	<input type="checkbox"/>	<input type="checkbox"/>
	Fabricate a stainless steel project	<input type="checkbox"/>	<input type="checkbox"/>
	Finish a stainless steel project	<input type="checkbox"/>	<input type="checkbox"/>
	Fabricate round and rectangular fittings	<input type="checkbox"/>	<input type="checkbox"/>
	Use a press brake and power shear	<input type="checkbox"/>	<input type="checkbox"/>
Install field-measured project	<input type="checkbox"/>	<input type="checkbox"/>	
Materials and equipment	Identify air filters	<input type="checkbox"/>	<input type="checkbox"/>
	Identify fasteners and fastening tools	<input type="checkbox"/>	<input type="checkbox"/>
	Identify insulation and fastening methods	<input type="checkbox"/>	<input type="checkbox"/>
	Identify materials commonly used in sheet metal and architectural industry	<input type="checkbox"/>	<input type="checkbox"/>
	Identify stainless steel and aluminum	<input type="checkbox"/>	<input type="checkbox"/>
	Identify terminal, mixing and induction units	<input type="checkbox"/>	<input type="checkbox"/>
Field installation methods	Use rigging and hoisting equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Install ducts	<input type="checkbox"/>	<input type="checkbox"/>
	Install heating, ventilating and air conditioning (HVAC) system	<input type="checkbox"/>	<input type="checkbox"/>
	Install venting system	<input type="checkbox"/>	<input type="checkbox"/>
Architectural sheet metal components	Install architectural metal	<input type="checkbox"/>	<input type="checkbox"/>
	Identify gutter, flashing and cornice design	<input type="checkbox"/>	<input type="checkbox"/>
	Identify ventilators and louvers	<input type="checkbox"/>	<input type="checkbox"/>
Residential heating requirements	Perform residential furnace installations	<input type="checkbox"/>	<input type="checkbox"/>
	Identify the need for a HVAC system	<input type="checkbox"/>	<input type="checkbox"/>
	Install residential heating and ventilating systems	<input type="checkbox"/>	<input type="checkbox"/>
Blowpipe systems and equipment	Identify blowpipe systems equipment and design	<input type="checkbox"/>	<input type="checkbox"/>
	Identify cyclones	<input type="checkbox"/>	<input type="checkbox"/>
	Identify bag houses	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Stainless steel equipment components	Identify fixtures used in the food service industry	<input type="checkbox"/>	<input type="checkbox"/>
	Implement stainless steel fabrication procedures	<input type="checkbox"/>	<input type="checkbox"/>
	Implement stainless steel finishing procedures	<input type="checkbox"/>	<input type="checkbox"/>
	Implement stainless steel fixture construction	<input type="checkbox"/>	<input type="checkbox"/>
	Identify other materials used in stainless steel fixture construction	<input type="checkbox"/>	<input type="checkbox"/>
Duct system sound attenuation methods	Identify types and construction of sound attenuation	<input type="checkbox"/>	<input type="checkbox"/>
Welding sheet metal skills	Perform arc and MIG welding	<input type="checkbox"/>	<input type="checkbox"/>
	Assemble, ignite, shut down and maintain oxy-fuel gas cutting and welding equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Cut and weld	<input type="checkbox"/>	<input type="checkbox"/>
	Perform plasma cutting	<input type="checkbox"/>	<input type="checkbox"/>
	Perform tungsten inert gas (TIG) welding	<input type="checkbox"/>	<input type="checkbox"/>
	Identify common metals and their characteristics	<input type="checkbox"/>	<input type="checkbox"/>
	Identify welding symbols and joint design	<input type="checkbox"/>	<input type="checkbox"/>

22. Sprinkler System Installer (NOC: 7252)

DESCRIPTION: Sprinkler system fitters fabricate, install, test, maintain, and repair water, foam, carbon dioxide and dry chemical sprinkler systems in buildings for fire protection purposes.

OTHER TITLES: Marine Pipefitter, Fire Sprinkler Installer

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Pipefitter, Plumber

MAJOR SKILLS		CAN DO	CANNOT DO
Basic blueprint reading	Interpret drafting symbols	<input type="checkbox"/>	<input type="checkbox"/>
	Identify different types of drawing (architectural, mechanical, structural)	<input type="checkbox"/>	<input type="checkbox"/>
Pipe valves and fittings	Identify types and uses of valves, pipes and fittings	<input type="checkbox"/>	<input type="checkbox"/>
	Measure and assemble pipes and fittings	<input type="checkbox"/>	<input type="checkbox"/>
Rigging	Identify lifting equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Identify ropes, cables and attachments	<input type="checkbox"/>	<input type="checkbox"/>
	Tie various knots	<input type="checkbox"/>	<input type="checkbox"/>
	Select and use correct safety harness	<input type="checkbox"/>	<input type="checkbox"/>
Wet and dry systems	Identify wet and dry systems	<input type="checkbox"/>	<input type="checkbox"/>
	Describe the operation of wet and dry systems	<input type="checkbox"/>	<input type="checkbox"/>
	Troubleshoot the system	<input type="checkbox"/>	<input type="checkbox"/>
	Repair and maintain the system	<input type="checkbox"/>	<input type="checkbox"/>
Valve stations wet and dry	Identify component parts of a wet and dry system	<input type="checkbox"/>	<input type="checkbox"/>
	Demonstrate functions of accelerators, excess pressure pumps, retard chambers, water motor cones, air suppliers, fire department connections, and secondary water supplies	<input type="checkbox"/>	<input type="checkbox"/>
	Trim a wet and dry valve station	<input type="checkbox"/>	<input type="checkbox"/>
Installation practices	Interpret and explain pipe elevation	<input type="checkbox"/>	<input type="checkbox"/>
	Field check to pre-establish job plan	<input type="checkbox"/>	<input type="checkbox"/>
	Use transit and laser levels	<input type="checkbox"/>	<input type="checkbox"/>
	Use a chalk line	<input type="checkbox"/>	<input type="checkbox"/>
	Define swing joints and centre of title installations	<input type="checkbox"/>	<input type="checkbox"/>
Stand pipe and hose systems	Interpret the National Fire Protection Association (NFPA) 14 standard for installation purposes	<input type="checkbox"/>	<input type="checkbox"/>
	List or describe installation procedures, e.g., anchoring	<input type="checkbox"/>	<input type="checkbox"/>
Residential and dwelling sprinklers	Apply the residential sprinkler provisions as compliant with NFPA standards	<input type="checkbox"/>	<input type="checkbox"/>

23. Steamfitter/Pipefitter (NOC: 7252)

DESCRIPTION: Steamfitters and pipefitters lay out, assemble, fabricate, maintain, troubleshoot and repair piping systems carrying water, steam, chemicals and fuel in heating, cooling, lubricating and other process piping systems.

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Marine Pipefitter, Steamfitter

MAJOR SKILLS		CAN DO	CANNOT DO
Install and maintain propane and natural gas systems	Size pipes and install gas-fitted appliances	<input type="checkbox"/>	<input type="checkbox"/>
	Troubleshoot system	<input type="checkbox"/>	<input type="checkbox"/>
	Adjust burners	<input type="checkbox"/>	<input type="checkbox"/>
	Size and install vents	<input type="checkbox"/>	<input type="checkbox"/>
	Verify electrical connections	<input type="checkbox"/>	<input type="checkbox"/>
	Size and install combustion air ventilation	<input type="checkbox"/>	<input type="checkbox"/>
Solder and braze	Determine heat source	<input type="checkbox"/>	<input type="checkbox"/>
	Select materials – brazing, soldering, silver solder, fluxes	<input type="checkbox"/>	<input type="checkbox"/>
	Perform surface preparation	<input type="checkbox"/>	<input type="checkbox"/>
Use tools and equipment	Use precision measuring tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use power tools	<input type="checkbox"/>	<input type="checkbox"/>
Install and maintain power plant piping systems	Identify steam generator equipment and functions	<input type="checkbox"/>	<input type="checkbox"/>
	Read and interpret schematic drawing	<input type="checkbox"/>	<input type="checkbox"/>
Distinguish various process application	Describe industrial applications	<input type="checkbox"/>	<input type="checkbox"/>
	Describe commercial applications	<input type="checkbox"/>	<input type="checkbox"/>
	Describe marine applications	<input type="checkbox"/>	<input type="checkbox"/>
Assemble, install and maintain low pressure steam heating systems	Identify types of boilers and heat exchangers	<input type="checkbox"/>	<input type="checkbox"/>
	Assemble and install low pressure boilers and trim	<input type="checkbox"/>	<input type="checkbox"/>
	Commission the system	<input type="checkbox"/>	<input type="checkbox"/>
	Troubleshoot the system	<input type="checkbox"/>	<input type="checkbox"/>
	Install and maintain steam traps	<input type="checkbox"/>	<input type="checkbox"/>
Install and maintain hydroponics heating systems	Identify component controls	<input type="checkbox"/>	<input type="checkbox"/>
	Identify types of boilers	<input type="checkbox"/>	<input type="checkbox"/>
	Assemble and install hydroponics boilers	<input type="checkbox"/>	<input type="checkbox"/>
	Commission the system	<input type="checkbox"/>	<input type="checkbox"/>
	Troubleshoot the system	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Fabricate piping and components	Make appropriate templates	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare component for assembly	<input type="checkbox"/>	<input type="checkbox"/>
	Assemble components	<input type="checkbox"/>	<input type="checkbox"/>
Bend pipe and tubing	Determine bending procedure	<input type="checkbox"/>	<input type="checkbox"/>
	Calculate pipe length	<input type="checkbox"/>	<input type="checkbox"/>
	Use machining and hand bend pipe and tube	<input type="checkbox"/>	<input type="checkbox"/>

24. Steel Fabricator (NOC: 7263)

DESCRIPTION: Steel fabricators lay out, fabricate, assemble, fit and install steel or other metal components for buildings, bridges, tanks, towers, boilers, pressure vessels and other similar structures and products. They work in structural steel, boiler and platework fabrication plants and at heavy-machinery manufacturing and shipbuilding companies.

OTHER TITLES: Steel Fabricator, Plater, Plate Work Fitter, Ship Fitter, Structural Steel Fitter, Shop Boilermaker

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Boilermaker, Ironworker, Sheet Metal Worker

MAJOR SKILLS		CAN DO	CANNOT DO
Use trade tools	Use basic hand tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use bench hand grinder	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain portable power tools	<input type="checkbox"/>	<input type="checkbox"/>
Use shop equipment	Use power plate shears	<input type="checkbox"/>	<input type="checkbox"/>
	Use hydraulic brake press	<input type="checkbox"/>	<input type="checkbox"/>
	Use power plate rolls	<input type="checkbox"/>	<input type="checkbox"/>
	Use shop saws	<input type="checkbox"/>	<input type="checkbox"/>
	Use drill presses	<input type="checkbox"/>	<input type="checkbox"/>
	Use power angle rolls	<input type="checkbox"/>	<input type="checkbox"/>
	Burn and weld metals	Describe safe burning practices	<input type="checkbox"/>
Use oxy-fuel equipment		<input type="checkbox"/>	<input type="checkbox"/>
Perform manual arc welding		<input type="checkbox"/>	<input type="checkbox"/>
Familiar with selection of welding electrodes		<input type="checkbox"/>	<input type="checkbox"/>
Weld plate using manual arc welding		<input type="checkbox"/>	<input type="checkbox"/>
Use arc air gouging equipment		<input type="checkbox"/>	<input type="checkbox"/>
List methods to reduce distortion		<input type="checkbox"/>	<input type="checkbox"/>
Blueprint reading	Sketch objects using isometric projection	<input type="checkbox"/>	<input type="checkbox"/>
	Sketch objects using orthographic projection	<input type="checkbox"/>	<input type="checkbox"/>
	Describe standard symbols and abbreviations	<input type="checkbox"/>	<input type="checkbox"/>
	Describe welding symbols and abbreviations	<input type="checkbox"/>	<input type="checkbox"/>
	Interpret structural drawings	<input type="checkbox"/>	<input type="checkbox"/>
Fabricate plate and structural projects	List common fitting procedures	<input type="checkbox"/>	<input type="checkbox"/>
	Fabricate a multiple-joint pipe connection	<input type="checkbox"/>	<input type="checkbox"/>
	Describe laying out and fitting connections to a structural beam (cleats, base plate, bolt connections)	<input type="checkbox"/>	<input type="checkbox"/>
	Outline the layout fabrication of a simple hopper	<input type="checkbox"/>	<input type="checkbox"/>
Develop plate patterns	Describe parallel line development	<input type="checkbox"/>	<input type="checkbox"/>
	Describe radial line development	<input type="checkbox"/>	<input type="checkbox"/>
	Describe triangulation development	<input type="checkbox"/>	<input type="checkbox"/>

25. Tilesetter (NOC: 7283)

DESCRIPTION: Tilesetters cover interior and exterior walls, floors and ceilings with ceramic, marble and quarry tile, mosaics or terrazzo. They are employed by construction companies and masonry contractors, or they may be self-employed.

OTHER TITLES: Specialist in mosaics or terrazzo

MAJOR SKILLS		CAN DO	CANNOT DO
Planning and drawings	Read blueprints	<input type="checkbox"/>	<input type="checkbox"/>
	Use layout techniques	<input type="checkbox"/>	<input type="checkbox"/>
	Sketch and draw simple details	<input type="checkbox"/>	<input type="checkbox"/>
	Estimate materials	<input type="checkbox"/>	<input type="checkbox"/>
	Perform geometrical construction	<input type="checkbox"/>	<input type="checkbox"/>
Tools of the trade	Use and maintain hand tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use measuring, levelling and layout tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain cutting and drilling tools	<input type="checkbox"/>	<input type="checkbox"/>
	Use and maintain mortar and other special tools	<input type="checkbox"/>	<input type="checkbox"/>
Preparation of surfaces	Prepare horizontal surfaces	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare vertical surfaces	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare circular surfaces and columns	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare curved arches	<input type="checkbox"/>	<input type="checkbox"/>
	Prepare stairways	<input type="checkbox"/>	<input type="checkbox"/>
Tiling processes	Lay out tile	<input type="checkbox"/>	<input type="checkbox"/>
	Set tile on vertical surfaces	<input type="checkbox"/>	<input type="checkbox"/>
	Set tile on horizontal surfaces	<input type="checkbox"/>	<input type="checkbox"/>
	Tile circular walls and columns	<input type="checkbox"/>	<input type="checkbox"/>
	Use cleaning materials and protect ceramic tile after installation	<input type="checkbox"/>	<input type="checkbox"/>
Special material	Apply marble and marble mosaics	<input type="checkbox"/>	<input type="checkbox"/>
	Apply ceramic veneers	<input type="checkbox"/>	<input type="checkbox"/>
	Use glass block and tile	<input type="checkbox"/>	<input type="checkbox"/>
Specialized jobs	Install tile fireplaces and fireboxes	<input type="checkbox"/>	<input type="checkbox"/>
	Install tile swimming pools	<input type="checkbox"/>	<input type="checkbox"/>
	Install tile ceilings	<input type="checkbox"/>	<input type="checkbox"/>
	Install tile steam rooms	<input type="checkbox"/>	<input type="checkbox"/>

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MAJOR SKILLS		CAN DO	CANNOT DO
Fastening materials	Use Portland cement grout to fix tile	<input type="checkbox"/>	<input type="checkbox"/>
	Use acid- and alkali-resistant grout to fix tile	<input type="checkbox"/>	<input type="checkbox"/>
	Use grouts and their applications	<input type="checkbox"/>	<input type="checkbox"/>
	Use inserts and accessories	<input type="checkbox"/>	<input type="checkbox"/>
	Use types of backing for tile	<input type="checkbox"/>	<input type="checkbox"/>

26. Welder (NOC: 7265)

DESCRIPTION: Welders operate welding equipment to join ferrous and non ferrous metals using shielded metal arc, gas metal arc, fusion and braze welding using oxy-fuel process. They also perform electric arc gouging and related processes, and oxy-fuel cutting.

SIMILAR TRADES THAT HAVE SOME RELATED SKILLS: Electric Arc Welder, Aviation Welder, Technician, Submerged Arc Welder, Machine Operator, Spot Welder, Welder Fitter, Boilermaker Welder, Steel Fabricator Welder, Ship Building Welder

MAJOR SKILLS		CAN DO	CANNOT DO
Oxy-fuel cutting process	Select, assemble, ignite, shut down and maintain equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Perform freehand and guided cuts on low carbon steel plate	<input type="checkbox"/>	<input type="checkbox"/>
	Use automatic and semi-automatic cutting machines	<input type="checkbox"/>	<input type="checkbox"/>
Fusion and braze welding using oxy-fuel processes	Identify filler metals, fluxes and tips used for fusion and brazing	<input type="checkbox"/>	<input type="checkbox"/>
Shielded metal arc welding (SMAW)	Describe equipment and operation of machines	<input type="checkbox"/>	<input type="checkbox"/>
	Identify types of electrodes used on low carbon steel	<input type="checkbox"/>	<input type="checkbox"/>
	Describe basic weld joints	<input type="checkbox"/>	<input type="checkbox"/>
	Identify causes of weld faults and describe how to prevent	<input type="checkbox"/>	<input type="checkbox"/>
	Perform hard surfacing on low carbon steel	<input type="checkbox"/>	<input type="checkbox"/>
Electric arc cutting, gouging and related processes	Identify electric arc cutting and gouging equipment and its operation	<input type="checkbox"/>	<input type="checkbox"/>
	Gouge cut metals using air carbon arc	<input type="checkbox"/>	<input type="checkbox"/>
Gas metal arc welding (GMAW)	Describe GMAW equipment and its operation	<input type="checkbox"/>	<input type="checkbox"/>
	Identify electrode wires and shielding gases	<input type="checkbox"/>	<input type="checkbox"/>
	Perform fillet and groove welds on low carbon steel	<input type="checkbox"/>	<input type="checkbox"/>
	Perform fillet and groove welds on aluminum	<input type="checkbox"/>	<input type="checkbox"/>
Flux-cored arc welding (FCAW) and metal-cored arc welding (MCAW)	Describe the FCAW and MCAW equipment and its uses	<input type="checkbox"/>	<input type="checkbox"/>
	Identify and select electrode wires and shielding gases for FCAW and MCAW	<input type="checkbox"/>	<input type="checkbox"/>
	Weld fillet and groove welds on low carbon steel	<input type="checkbox"/>	<input type="checkbox"/>
Welding drawing	Identify common welding symbols	<input type="checkbox"/>	<input type="checkbox"/>
Handling and rigging procedures	Use wire and fibre rope	<input type="checkbox"/>	<input type="checkbox"/>
	Use slings	<input type="checkbox"/>	<input type="checkbox"/>
	Use hoisting equipment	<input type="checkbox"/>	<input type="checkbox"/>
	Use rigging hardware	<input type="checkbox"/>	<input type="checkbox"/>

PART D

Safety skills and knowledge used by workers on construction sites

The following competency charts will help you assess your skills and knowledge related to workplace safety in the construction industry. Using safe practices and being aware of danger or potentially dangerous situations on construction sites saves lives. If you have Workplace Hazardous Materials Information System (WHMIS) or other safety training, including rescue training or CPR and first aid, be sure to list them as evidence on the chart as part of the evidence column on the right-hand side.

Please take time to review the following competency charts, thinking carefully about your experiences in the various areas. Using the chart and the scale, place a check mark in the column that best describes your skill level in that area. If you are consistently rating yourself as “Fully experienced,” where possible, you should identify the documents that can help validate your rating (e.g., Certificate for Health & Safety Training or WHMIS certification). You can do this in the right-hand column under the word “Evidence.”

SELF-EVALUATION SCALE

F	Fully experienced
S	Some experience
N	No experience
EVIDENCE	Where you have indicated “Fully experienced,” if possible, provide evidence of your ability to do that task or skill.

Safety

DESCRIPTION		F	S	N	EVIDENCE
Regulations at work	Identify who is responsible for the safety and supervision of workers on job sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Participate in required health and safety training and regularly update qualifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Report on-the-job health and safety incidents and injuries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Implement safe work practices and follow prescribed procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Machinery, tools and equipment	Follow required steps for the inspection of your equipment to prevent tool hazards in the use of:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	– pinch points and guards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	– pneumatic (compressed air) tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	– powder-actuated tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Recognize hazards, such as worn power cords and dull blades	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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DESCRIPTION		F	S	N	EVIDENCE
Workplace hazards	Recognize potential on-the-job hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Perform field-level risk assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Identify and report hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Identify and control potential hazards, including invisible hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mobile equipment	Recognize common equipment hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Practice visibility and traffic control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Follow prescribed rigging and hoisting procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Personal protective equipment (PPE)	Describe purposes of PPE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Identify and select all types of PPE, such as hard hats, eye protection, respiratory protection and hearing protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Follow basic PPE procedures related to:				
	- clothing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- arresting falls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- eye and hearing protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- respiratory equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Select, wear and adjust PPE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Select and wear fall protection equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Excavating and trenching	Understand common causes of injuries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Dial before you dig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Recognize soil types and ground conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Follow proper procedures for shoring, sloping and spoil piles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Practice proper clean-up and erosion control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Personal physical care	Prepare properly to ensure mental and physical fitness for work including:				
	- caring for your back	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	- following alcohol and drug guidelines/work rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Emergency response	Follow emergency preparedness guidelines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Apply basic first aid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Respond properly to fires and explosions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Follow safety procedures related to the handling of compressed gases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Housekeeping	Follow basic steps for cleaning up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Practice approved safety procedures to avoid slips, trips and falls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Place signs and entryway identification in their proper place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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DESCRIPTION		F	S	N	EVIDENCE
Working with chemicals (WHMIS)	Describe the purpose of WHMIS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Read labels accurately	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Read safety data sheets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Recognize hazard symbols	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Protect self by following approved procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ladders and scaffolding	Protect self and others from falls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Describe ladder types	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Use portable ladders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Erect scaffolds according to approved procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Work safely from scaffolds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Environmental factors	Deal with releases of toxic substances and hazardous waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Follow approved procedures for transporting hazardous materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Dispose of hazardous waste by following approved procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Describe your responsibility in relation to environmental health and safety laws and practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Safety certificates

List construction safety tickets or certifications.

- All of the certifications must be valid to be recognized.
- Check the expiry date on certificates.
- You must have the original certificate or a photocopy of the certificate.
- Do not claim a safety certification if you cannot produce the proof. Employers need to see the valid certificate.
- List valid safety certificates on your résumé.

The following list is a sample list of common construction safety courses. There are many other safety courses delivered across Canada.

Please note the exact name of your training course and the province where you received the training.

	VALID CERTIFICATE	EXPIRY DATE
CSTS (Construction Safety Training System)		
First Aid / CPR "A"		
Confined spaces / Respiratory protection		
Trenching safety		
H ₂ S Alive		
Fall protection		
Frame scaffold awareness		
Tube and clamp scaffolding		
Aerial work platform		
Hoisting and rigging		
WHMIS		
Asbestos abatement		
TDG (Transportation of dangerous goods)		
Pipeline construction safety training		

List any other safety or hazard certificates you may have.

.....

.....

.....

SECTION IV:

Planning for your future

Now that you have assessed your skills and knowledge, it is time to plan what you will do with what you have learned so far. There are two tools to help you do this:

1. Identify the strengths, skills and gaps related to jobs in the construction industry
2. Connect your strengths to specific trades

Before you complete the tools, ask: “what is important to me?” Reflect on your dreams and consider where you want to go and how you will get there. Planning short- or long-term goals requires a plan of action.

Here are 10 questions to help you set and achieve your goals.

1. I would like to: _____
2. This goal is important to me because: _____
3. I will know I have reached my goal when: _____
4. What things do I need to reach my goal? _____
5. Is there anyone I need help from to reach my goal? _____
6. What are the challenges I will face? _____
7. I will overcome them by: _____
8. When will I reach this goal? _____
9. The steps I will take to reach this goal: _____
10. When I have reached this goal, I will reward myself by: _____

A goals statement can be a powerful tool to help you to stay focused on your goals. Goal statements can include information about some of your short- and long-term goals, how you are planning to achieve them, and why they are important to you.

A set of guidelines to help you develop an Individual Learning Plan to help you achieve your goals is included in Appendix A.

Strengths, skills and gaps related to jobs in the construction industry

In this first planning tool, you are asked to use the results of your self-assessment to help you identify your specific skills and knowledge related to construction trades. The goal is to help you highlight and document your strengths and any gaps that exist in your skill sets. For example, after completing the self-assessment tools, you may have found that you have used many common carpentry tools, but lack the specific skills related to the use and operation of tools needed by plumbers. Therefore, you may want to concentrate on finding work in carpentry or you may want to seek training related to plumbing.

Another example may be that you have a high degree of competence in several skill areas, but find that you are lacking in technical skills training and advances in technology, such as using digital equipment.

This exercise will help you:

- know where you want to go (e.g., setting goals)
- know what you want to achieve (e.g., apprentice, journeyman)

Please complete the following strengths inventory. Use separate paper, if necessary.

Strengths inventory

ESSENTIAL SKILLS		
MY STRENGTHS (EXISTING SKILLS AND KNOWLEDGE)	SKILLS AND ABILITIES I NEED TO IMPROVE	PLANS TO MAKE IT HAPPEN (WHAT WILL I NEED?)

CONSTRUCTION SKILLS		
MY STRENGTHS (EXISTING SKILLS AND KNOWLEDGE)	SKILLS AND ABILITIES I NEED TO IMPROVE	PLANS TO MAKE IT HAPPEN (WHAT WILL I NEED?)

SAFETY SKILLS		
MY STRENGTHS (EXISTING SKILLS AND KNOWLEDGE)	SKILLS AND ABILITIES I NEED TO IMPROVE	PLANS TO MAKE IT HAPPEN (WHAT WILL I NEED?)

Now that you have completed the inventory, you can plan to build upon your strengths and fill in gaps in your skills and knowledge.

1. Plan it. Focus on one improvement area per month. Write it in your planner.
2. Dream about it. See yourself being the person you hope to be and doing the things you hope to do.
3. Reflect on it. How could your past or your future be different if you improved upon a particular trait or skill set?
4. Did the self-evaluation help to clarify your construction skills and knowledge in relation to specific trades?

Connect your skills to specific construction occupations

Reflect on the work you have done through the self-assessment charts, especially the 26 competency charts and your strengths inventory. Can you now identify which trades best fit your skills, experience and interests?

- 1. List the trades(s) you believe best fit your skills, experience and interests.

.....
.....
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.....

- 2. List the tools, equipment and previous experiences you have related to the 26 trades. List the evidence you have identified in the right-hand column. Use separate paper, if necessary.

TRADE	TOOLS AND EQUIPMENT	PREVIOUS EXPERIENCE	EVIDENCE
.....
.....
.....
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With this information in hand, you are ready to focus your next steps (e.g., job search, training, certification) on the construction trades that are most closely aligned with your interests and strengths.

SECTION V:

Your employment portfolio and résumé

This section is designed to help you:

- gain access to employment in the construction industry
- enroll in education and training programs to enhance your employability
- prepare your portfolio and résumé

The self-assessment activities in Section III and the planning activities in Section IV will help you to either prepare a portfolio and résumé aimed at specific occupations in the industry, or to apply to specific training programs to fill gaps in skills and knowledge related to employment requirements in the industry.

Counsellors play a key role in this process. They can help you to identify and build on existing strengths and competencies, and develop realistic plans to increase your self-confidence and your chances of finding work.

What is an employment portfolio?

It is a good idea to keep in one place all the information you will need when you are applying for a job. This information will include:

- background and life history
- diplomas and certificates
- letters of reference and letters of verification
- job/employment summary
- education history
- résumé

And more!

We suggest that you create an employment portfolio that contains all the listed information and documents. You can take this portfolio with you when you go to a job interview.

- The employment portfolio will help you to talk to the employer about what you know and what you can do.
- The employment portfolio will contain the proof of your skills and knowledge in the form of certificates, diplomas, transcripts and other formal documents.

Many people use a binder for their portfolio. If you do this, be sure to use plastic sleeves to protect your valuable documents. Do not punch holes in them to put them directly into the binder.

Basically, this binder summarizes what you know and what you can do. By having all of this information available in one place, you can easily pick and choose what you will need to help you apply for a particular job. If a potential employer is asking for a particular certificate, and you have it, this is where you will find it when you need it.

Your portfolio can also be used as a way to organize and keep track of your new experiences.

Employment portfolios are useful tools to:

- help us learn about ourselves
- recognize and value our own learning
- get jobs
- get formal education
- set and achieve important goals

Benefits of assembling an employment portfolio

The process of creating your portfolio can help you to identify skills and knowledge from your life that are transferable to other areas, such as construction trades.

Your transferable skills can be used in many different settings and occupations, and in your day-to-day activities. You acquire transferable skills from many areas of your life, including family, community, sports, hobbies, being out on the land, and traditional activities, at work and at school.

For many First Nations, Métis and Inuit people, developing an employment portfolio provides a place to document what you know and can do. It also helps to build confidence, self-esteem and a sense of pride in who you are as an Aboriginal person and your many contributions to our world.

For example, if you are a hunter or have worked a trap line, you would have skills such as tracking (information gathering), observation, planning, time management, communication, safety, marksmanship, etc. Some of these skills are transferable to the construction industry – observing safe practices, communicating with co-workers, planning and organizing the completion of tasks, and gathering information from site maps, drawings, etc.

Your employment portfolio can be used to:

- prepare a focused résumé related to an industry-specific job opportunity
- support you in a job interview
- apply for academic credit
- get into academic or training programs
- continue to identify and document your skills and knowledge
- continue to organize documentation (certificates, licenses, letters of verification, awards, etc.)
- remind yourself of what you have learned from your experiences over the course of your life's journey
- share with family or friends
- reflect on your life

Before assembling your portfolio

There are different ways to document what you have learned in your life. Assembling all the documents that support what you have learned and what you have done is one of the best ways to do this.

There are two categories of documentation:

DIRECT DOCUMENTATION: *things created by you*, such as samples of your work, reports, products, plans, drawings, etc. related to the industry.

INDIRECT DOCUMENTATION: *things written about you by other people*, such as a school transcript or a training certificate (e.g., Workplace Hazardous Materials Information System [WHMIS]), letters written by employers, awards, performance appraisals, etc.

A balance of both types of documentation makes for a solid and more objective portfolio.

Before you put together your portfolio, take some time to reflect on your life and all you have learned. Two ways to help you do this are putting together a chronological record and writing down your life history.

1. THE CHRONOLOGICAL RECORD

Assembling your chronological record is a useful process to help you: reflect on key events (both positive and negative) during your life; identify what you learned from those events; and, when possible, document that learning for use in your portfolio.

The chronological record will help you identify and acknowledge many significant learning events, especially as they relate to your experience in the construction industry.

A chronological record of your life might include: your birth; significant early childhood memories; your school years; moving to a new place or land; traditional activities; close relationships (family, mentors, Elders); children and grandchildren; illness or death; travelling; work and training; returning to school; special roles and responsibilities; and times when you learned important life lessons.

2. LIFE HISTORY PAPER

“The Creator made us to learn by trial and error. Sometimes our greatest teachings have come because we made the greatest mistakes.”

— Mohawk

Your life history paper is intended to tell your story. In this paper, you draw upon some of what you learned in the chronological record to write about who you are as a unique Aboriginal person: your gifts and abilities, your challenges and dreams, and your hopes for the future.

It is especially important that, when possible, you connect your story to your skills and experiences in the construction industry. The questions and topics outlined below are designed to help you write your story. The

length of your life history paper can vary from one to five pages, and depends on the things that you have identified as being both important events in your life, and things you want to include in your portfolio.

Your life history paper could include information such as:

- who I am
- where I come from and where I have lived
- my family
- my special gifts and talents
- personal interests and hobbies
- significant life experiences
- training and/or education
- employment/work experiences
- career goals

NOTE: The chronological record and life history paper are options that some individuals may wish to pursue if they are having difficulty recalling their construction-related experience. Limitations of time, motivation and interest on the part of each individual should help determine whether or not to utilize these tools.

Assembling your portfolio

Now that you have completed your self-assessment, set your goals, and thought about your previous life experiences, you are ready to assemble your portfolio. Here is a checklist to help you do this.

PORTFOLIO ITEM	WHAT IT IS
Title page	Your name and contact information
Introduction (cover letter)	<p>This page is a short letter to your employer. In this letter you will:</p> <ul style="list-style-type: none"> - introduce yourself - state your job objective - say why you are qualified to do this job <p>This letter should only include two or three paragraphs.</p> <p>Ask your employment counsellor for an example of a cover letter and for some suggestions on how to write a good letter.</p>
Résumé	<p>Make sure your résumé matches the job for which you are applying. You may need to change it a little each time you apply for a different job.</p> <p>Ask your employment counsellor for some suggestions on how to write a good résumé. Also see the sample résumé in Appendix B.</p>
Job summary	<p>Your job summary should contain the following information for each job you have had:</p> <ul style="list-style-type: none"> - job title - name of company - address and telephone number of company - dates worked at this company - contact person at the company - duties performed for the company - skills used and knowledge required to do these duties - tools and equipment used - personal characteristics (qualities) required for this job
Education history	<p>Your education history should include the following:</p> <ul style="list-style-type: none"> - name of educational institutions - city, province, country where the education institutions are located - dates attended - degrees, diplomas or certificates received
Awards or other honours	<p>Have you received special recognition for work you have done? This might be an award, a special letter of congratulations or appreciation, or a newspaper article about you.</p> <p><i>Remember to protect these valuable items in a plastic sleeve.</i></p>
Transcripts	<p>You may include transcripts with the grades and marks you received in the educational institutions you have attended.</p> <p><i>Remember to protect these valuable items in a plastic sleeve.</i></p>
Certificates, diplomas	<p>You may include the certificates and diplomas you have received.</p> <p><i>Remember to protect these valuable items in a plastic sleeve.</i></p>
Letters of reference	<p>If you have letters of reference from previous employers or from others who recommend your work or your good character, you may include them.</p> <p><i>Do not punch holes in them for the binder; rather, put them in plastic sleeves to protect them.</i></p>

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PORTFOLIO ITEM	WHAT IT IS
Letter of verification (optional)	<p>This letter is more than the usual letter of recommendation. This type of letter should:</p> <ul style="list-style-type: none"> – specify the period of time you worked under the person’s supervision – describe the particular duties that you were required to perform – describe the learning involved in performing these tasks – evaluate your general level of performance <p>This letter is an important piece of evidence. When you request this letter from your former employer, you may want to provide or enclose background information to make it easier for them.</p> <p><i>Remember to protect these valuable items in a plastic sleeve.</i></p>
Life history paper (optional)	If you have completed a life history paper, you may include it.
Chronological record (optional)	<p>You may include items from your chronological record.</p> <p><i>Again, do not punch holes in them for the binder; rather, put them in plastic sleeves to protect them.</i></p>

Putting together your résumé

The following provides an outline of the typical information that is included in a résumé.

1. Name

2. Contact information

Phone: _____ (where you can be reached or will receive a message)

Cell phone: _____

Address: _____ (full address, including postal code)

E-mail: _____

3. Objective/goal

State the purpose of the résumé.

- For which position are you applying?
- What is your personal goal with this job application?

“To work as a residential framing carpenter”

“To secure a position as a roofer”

“To obtain employment and be apprenticed with a plumbing contractor”

4. Skills/qualifications

Briefly list your main qualifications, skills and abilities (as they relate to the position for which you are applying)

The following are four examples of possible “skills or qualifications” statements.

“Several years’ experience in residential construction, framing, concrete forming, erecting truss systems, installation of siding and exterior trim, installation of doors and windows.”

“Experience in residential and commercial roofing. Tear off and application of asphalt and wood shingles, rolled roofing, built-up and hot tar roofs.”

“Experience as a helper on construction sites. Good knowledge of construction power tools, general construction duties and safe work practices. Some experience in plumbing rough-in, handling of material and trenching and excavation.”

“Punctual and reliable. Good attitude, physically strong and able to follow directions. Valid driver’s license and able to travel for work.”

5. Summary of work experience/employment history

Start with your most recent job and move back in time to include other positions.

Include: the position held, name of the company, address of the company, dates of employment, contact person and phone number (your supervisor, the person who hired you or the head of personnel), duties performed for the company (list the tasks you did), skills used and knowledge required to do these duties (What knowledge did you need and what skills did you use in order to do the job?), tools and equipment used (What tools did you use? What machines did you operate?), personal characteristics required for this job

Remember:

- always include the position, company name and dates of employment
- keep the work experience portion brief
- include only the most important information on duties and responsibilities

EXAMPLE:

Carpenter’s helper, Northern Homes, Sudbury, Ontario

APRIL 2009 – DECEMBER 2010

Duties: Framing and exterior finish on new home construction.

Read blueprints, do layout, install roof trusses, doors and windows.

Use of all power and pneumatic tools. Responsible for site safety and clean-up.

Contact: Bill Franks, Supervisor, Northern Homes, (321) 465-1066

6. Education and training

Start with the most recent education and training and work back in time. Informal education can be included, especially if your regular education is limited.

EXAMPLE:

Pre-trades Carpentry Course	SIAST 20 week pre-employment course, shop and technical training Palliser Campus, Moose Jaw, Saskatchewan January 2008
First Aid and CPR	St. John’s Ambulance Regina, Saskatchewan May 2007
Grade 12	Miller High School Regina, Saskatchewan June 2006

Are you registered with any professional or work-related association? If yes, list them.

7. Driver's license

If you have a valid driver's license state this on the résumé.

8. Safety certificates

List all valid safety certificates relevant to the construction industry.

It can help to attach photocopies of the valid certificates as an addition to your résumé. This way, the employer can see that you really do have the certificates that you have identified. And if they hire you they will already have proof of your safety training.

9. Community involvement and volunteer work

List any organizations or community groups for which you have volunteered or worked. For example, coaching youth soccer or other sports, volunteer work at the bingo, canvassing to raise funds, community clean-up, sports days, pow-wows, etc.

10. Hobbies/interests³

List two or three of your main interests or recreational activities.

11. References

Include the name, title, organization or company and phone number of your references. Make sure that the reference contact information is up-to-date and contact your references to let them know you have included them and that they might be contacted.

Remember: In the construction industry, your best reference is your last employer.

See Appendix B for a sample résumé.

³ Optional – this is not needed on your résumé.

APPENDIX A:

The individual learning plan

Guidelines for developing your individual learning plan:

1. **Diagnose your learning needs.** Base this on an analysis of your employment/training goals and your personal needs and resources.
2. **Define your goals and objectives.** What specific changes do you wish to implement that will help you meet your employment/learning needs?
3. **Specify necessary resources and strategies.** How do you and your team propose to go about accomplishing your objectives?
4. **Identify evidence of accomplishment.** Specify evidence that you will collect to indicate the extent to which you have accomplished your objectives.
5. **Describe how the evidence will be verified.** How will each of your objectives be validated?
6. **Specify the timeframes and person(s) responsible.** When will the activity be completed? Who will be responsible for completing the activity by the date specified?
7. **Implement your learning plan.**

APPENDIX B:

Sample résumé

Stéphane Girard

1652 Lorne St., Sudbury, Ontario P3C 5S2
(705) 673-1256

OBJECTIVE

To obtain full-time employment as an apprentice carpenter

HIGHLIGHTS OF QUALIFICATIONS

- 5-years experience in general construction and framing
- Experienced with all portable power tools
- Able to follow instructions and work safely
- Hard working and dependable

WORK EXPERIENCE

Carpenter *Flamath Homes* February 2010 – September 2010
Sudbury, Ontario
Contact: Don Healey (705) 228-6774

Duties:

- Framing and finishing custom homes
- Interior finish, hanging doors, installation of casing, baseboards, cabinets
- Exterior finish, soffits, fascia, roofing

Carpenter *Built Rite Homes Ltd.* March 2008 – December 2009
Sudbury, Ontario
Contact: Bill Wright (705) 673-4436

Duties:

- Residential framing, floors, trusses, roofing, siding
- Concrete forming and placement for piles, grade beams, basements

Carpenter's helper *Northern Construction* July 2006 – December 2008
Timmins, Ontario

Duties:

- Concrete forming, tying rebar, placing and finishing concrete
- Assisting carpenters in framing and roof construction

EDUCATION

Grade 12 North West High School Timmins, Ontario 2006

SAFETY TICKETS

- CSTS
- WHMIS
- First Aid / CPR

REFERENCES

Available upon request

