Cabinet Makers

NOC 7272

Introduction

Cabinet Makers construct and repair wooden cabinets, furniture, fixtures and related products. They are employed by furniture manufacturing or repair companies, construction companies and cabinet making contractors or they may be self-employed.

The most important Essential Skills for Cabinet Makers are:

- Document Use
- Numeracy
- Problem Solving
- Decision Making

Document Sections

- Reading Text
- Document Use
- Writing
- Numeracy
- Oral Communication
- Thinking Skills
    - Problem Solving
    - Decision Making
    - Critical Thinking
    - Job Task Planning and Organizing
    - Significant Use of Memory
    - Finding Information
- Working with Others
- Computer Use
- Continuous Learning
- Notes

A. Reading Text

Reading Text

Tasks	Complexity Level	Examples
Typical	1 top 2	Cabinet Makers: • read instructions for hardware installation and adhesives which appear on product labels. (1) , (weekly) • read faxes or memos from customers, such as provincial government departments, concerning contracts. (2) • read job specifications which may come in book form to find out the requirements of the job, such as the types of fasteners and caulking required. (2) • read Workplace Hazardous Materials Information (WHMIS) materials and Material Safety Data Sheets (MSDS) to understand the hazards of chemicals such as glues, adhesives and solvents. (2) • read health and safety materials, such as instructions for wearing an air-fed face mask. (2) • read "invitation to quote" documents, which may be 5 or 6 pages in length. (2) • read trade magazines to review advertisements for special tools or jigs. (2) • read manuals for pieces of equipment, such as the vacuum press. (3) • refer to reference books, integrating information to see the best way to construct a certain type of table. (3)
Most Complex	2 to 3	

Reading Summary

The symbol √ is explained in the Use of Symbols section.

	Purpose for Reading			
Type of Text	**To scan for specific information/To locate information**	**To skim for overall meaning, to get the 'gist'**	**To read the full text to understand or to learn**	**To read the full text to critique or to evaluate**
Forms	√	√		
Labels	√	√	√	
Notes, Letters, Memos	√	√	√	
Manuals, Specifications, Regulations	√		√	
Reports, Books, Journals	√		√	

B. Document Use

Document Use

Tasks	**Complexity Level**	**Examples**
Typical	1 to 2	Cabinet Makers: • complete checklists relating to safety precautions. (1) • use a chart to check angles on compound mitres. (2) • refer to tables on labels, which explain the proportions for mixing products. (2)
Most Complex	2 to 3	• refer to sketches or photographs of a piece of furniture, such as a table, in order to draw their own adapted version. They scale the photograph and sketch to scale. Sketches include circles, triangles, squares, rectangles, ellipses and angles. (2) • indicate mitred corners on drawings. (2) • interpret a drawing for a built-in wall unit and panelling to derive a materials list, a cutting list and a layout plan. (3) • refer to assembly or shop drawings and blueprints to check details. (3)

Examples

- create a cutting list before starting to make a table in order to conserve materials.
- make sketches of pieces of furniture for their own use and for co-workers.

Document Use Summary

- Read signs, labels or lists.
- Complete forms by marking check boxes, recording numerical information or entering words, phrases, sentences or text of a paragraph or more. The list of specific tasks varies depending on what was reported.
- Read completed forms containing check boxes, numerical entries, phrases, addresses, sentences or text of a paragraph or more. The list of specific tasks varies depending on what was reported.
- Read tables, schedules or other table-like text (e.g., read work shift schedules).
- Create tables, schedules or other table-like text.
- Enter information on tables, schedules or other table-like text.
- Plot information on graphs (e.g. line, pie, bar).
- Obtain specific information from graphs or charts.
- Interpret information on graphs or charts.
- Construct or draw graphs or charts.
- Recognize common angles such as 15, 30, 45 and 90 degrees.
- Draw, sketch or form common shapes such as circles, triangles, spheres, rectangles, squares, etc.
- Interpret scale drawings (e.g. blueprints or maps).
- Take measurements from scale drawings.
- Draw to scale.
- Read assembly drawings (e.g. those found in service and parts manuals).
- Create assembly drawings.
- Read schematic drawings (e.g. electrical schematics).
- Create schematic drawings.
- Make sketches.
- Obtain information from sketches, pictures or icons (e.g., computer toolbars).

C. Writing

Writing

Tasks	Complexity Level	Examples
Typical	1	Cabinet Makers: • write a list of the tasks to be accomplished during the day. (1) • may write notes to accompany a sketch they have prepared so that other workers will understand it fully. (1) • may write notes to themselves to record how they carried out specific tasks which required new skills or which had elements which were different from the normal. (1)
Most Complex	2 to 3	• make entries in appointment calendars. (1) • write a cutting list outlining the number and dimension of pieces to be cut and the sequence in which they should be cut. (2) • may write price quotations to customers, with detailed job specifications. (3) • may write proposals to customers to outline their qualifications and to convince them to award a contract. (3)

Writing Summary

The symbol √ is explained in the Use of Symbols section.

	Purpose for Writing						
Length	**To organize/ to remember**	**To keep a record/to document**	**To inform/ to request information**	**To persuade/ to justify a request**	**To present an analysis or comparison**	**To present an evaluation or critique**	**To entertain**
Text requiring less than one paragraph of new text	√	√					
Text rarely requiring more than one paragraph	√	√	√	√	√		
Longer text					√		

D. Numeracy

The symbol √ is explained in the Use of Symbols section.

Numeracy

Tasks	Complexity Level	Examples
√ Money Math	1	Cabinet Makers: • may add items for invoices and calculate taxes such as GST or HST. (Money Math), (1) • may schedule appointments with customers, allocating the appropriate time slots on an appointment calendar. (Money Math), (1) • measure wall lengths and heights, mouldings, door measurements and cuts on boards or other building materials. (Measurement and Calculation Math), (1) • measure the correct angle in a mitre. (Measurement and Calculation Math), (2) • calculate the quantity of wood required for a counter, combining the amount of each piece. (Measurement and Calculation Math), (3)
√ Numerical Estimation	1 to 3	• do precision fitting of pieces around a table top so that they fit exactly. (Measurement and Calculation Math), (3) • calculate the number, size and shape of pieces required to make an edging on a round table. (Measurement and Calculation Math), (4) • lay out curves for the finished ends of a cabinet, using a compass. (Measurement and Calculation Math), (4) • estimate the amount of adhesive required for proper coverage on laminated materials. (Numerical Estimation), (1) • schedule the time and cost required to complete a project efficiently. (Numerical Estimation), (2) • estimate the amount of hardware to get or how many sheets of material to order. (Numerical Estimation), (2) • estimate the time and labour costs it will take to complete each stage of a project and to bring it to completion. (Numerical Estimation), (3)

Math Skills Summary

a. Mathematical Foundations Used

The symbol √ is explained in the Use of Symbols section.

Mathematical Foundations Used

Code	Tasks	Examples
	Number Concepts	
√	Whole Numbers	Read and write, count, round off, add or subtract, multiply or divide whole numbers. For example, counting pieces of wood and fastenings.
√	Rational Numbers - Fractions	Read and write, add or subtract fractions, multiply or divide by a fraction, multiply or divide fractions. For example, measuring the dimensions of a space where furniture will fit - e.g., 7 feet by 6 3/4 feet.
√	Rational Numbers - Decimals	Read and write, round off, add or subtract decimals, multiply or divide by a decimal, multiply or divide decimals. Use decimals mainly to refer to dollars and cents. For example, calculate the tax for an invoice.
√	Rational Numbers - Percent	Read and write percents, calculate the percent one number is of another, calculate a percent of a number. For example, developing proportions from a drawing - e.g., a 300 millimetres shelf at 30 millimetres, what percentage is that?
√	Equivalent Rational Numbers	Convert between fractions and decimals or percentages. Convert between decimals and percentages. For example, converting a measurement of 1/8 inch to .125; converting 5/8 to .625.
	Patterns and Relations	
√	Equations and Formulae	Solve problems by constructing and solving equations with one unknown. Use formulae by inserting quantities for variables and solving. Write, simplify and solve two variable algebraic problems. Write, simplify and solve quadratic equations. For example, using a combination of formulae to get measurements of equal pieces that can be angle cut to fit evenly around the circumference of a table top; using formulae to lay out a spiral staircase.

√	Use of Rate, Ratio and Proportion	Use a rate showing comparison between two quantities with different units. Use a ratio showing comparison between two quantities with the same units. Use a proportion showing comparison between two ratios or rates in order to solve problems. For example, using proportion to develop drawings to scale; calculating the ratio of thinner to laquer (10:1). Using scale drawings.
Shape and Spatial Sense		
√	Measurement Conversions	Perform measurement conversions. For example, converting a countertop height from 36 inches to 900 millimetres.
√	Areas, Perimeters, Volumes	Calculate areas. Calculate perimeters. Calculate volumes. For example, finding the circumference of an ellipse.
√	Geometry	Use geometry. For example, working out angles before cutting pieces.
√	Trigonometry	Use trigonometry. For example, finding the side of a triangle. Recognizing common angles. Drawing, sketching and forming common forms and figures.
Statistics and Probability		
√	Summary Calculations	Calculate averages. Calculate rates other than percentages. Calculate proportions or ratios. For example, determining proportion when adapting a photograph of a piece of furniture to a sketch or drawing. Using tables, schedules or other table-like text. Using graphical presentations.

b. How Calculations are Performed

- In their heads.
- Using a pen and paper.
- Using a calculator.

c. Measurement Instruments Used

- Time. For example, using a clock or watch.
- Weight or mass. For example, using a scale.
- Distance or dimension. For example, using a tape measure or plumb line.
- Temperature. For example, using a thermometer to ensure glues and lacquers are used at recommended temperatures.
- Pressure. For example, using an air pressure gauge; using a pressure regulator (e.g., on spray gun or air nailers).
- Angles. For example, using a protractor or sliding T level.
- Use the SI (metric) measurement system.
- Using the imperial measurement system.

E. Oral Communication

Oral Communication

Tasks	Complexity Level	Examples
Typical	1 to 2	Cabinet Makers: • talk with suppliers to order goods and receive deliveries at the shop. (1)
Most Complex	2 to 3	• communicate with colleagues and apprentices to coordinate tasks, such as determining who will use what tools when. (2) • interact with clients to explain how a piece is crafted. (2) • instruct apprentices in how tasks are done, e.g., how to iron on a pre-glued edging, how to trim with a chisel, how to set up a jig for multiple duplication. (2) • may discuss shop drawings with draughtsmen. (2) • interact with subtrades such as plumbers and electricians to plan the sequencing of tasks. (2) • may participate in safety meetings. (2) • may communicate with project managers and designers to convince them of changes which would make designs more effective. (3)

Modes of Communication Used

- In person.
- Using a telephone.

Environmental Factors Affecting Communication

Cabinet makers work in a noisy and dusty environment. They carry out limited verbal communication, turning off saws and other tools before entering into in-depth communication.

Oral Communication Summary

The symbol √ is explained in the Use of Symbols section.

	Purpose for Oral Communication (Part I)					
Type	**To greet**	**To take messages**	**To provide /receive information, explanation, direction**	**To seek, obtain information**	**To co-ordinate work with that of others**	**To reassure, comfort**
Listening (little or no interaction)						
Speaking (little or no interaction)						
Interact with co-workers			√	√	√	
Interact with those you supervise or direct			√	√	√	√
Interact with supervisor/ manager			√	√	√	
Interact with peers and colleagues from other organization						
Interact with customers/ clients/ public			√	√		
Interact with suppliers, servicers			√	√		
Participate in group discussion			√	√		
Present information to a small group						
Present information to a large group						

The symbol √ is explained in the Use of Symbols section.

	Purpose for Oral Communication (Part II)					
Type	**To discuss (exchange information, opinions)**	**To persuade**	**To facilitate, animate**	**To instruct, instill understanding, knowledge**	**To negotiate, resolve conflict**	**To entertain**
Listening (little or no interaction)						
Speaking (little or no interaction)						
Interact with co-workers	√	√		√		
Interact with those you supervise or direct	√	√		√		
Interact with supervisor/ manager	√	√		√		
Interact with peers and colleagues from other organization						
Interact with customers/ clients/ public	√	√		√		
Interact with suppliers, servicers	√					
Participate in group discussion	√					
Present information to a small group						
Present information to a large group						

F. Thinking Skills

1. Problem Solving

Problem Solving

Tasks	Complexity Level	Examples
Typical	1 to 2	Cabinet Makers: • may find that equipment, such as a belt sander or a thickness planer, breaks down. They call in a repair person immediately or rent another piece of equipment. (1) • use problem solving strategies to work out the steps to follow when building a piece from a photograph. (2) • may find that several laminated sheets in an order arrived damaged. They talk to the customer to find out if the customer wants to substitute a different material or wait until a re-order can be completed. (2)
Most Complex	1 to 2	

2. Decision Making

Decision Making

Tasks	Complexity Level	Examples
Typical	1 to 2	Cabinet Makers: • decide how long glued pieces will stay in the press. (1) • decide which tool will work best to complete a detail. (2) • decide what procedures to use to build a piece. (2) • may make design decisions, such as what type of leg to use on a table. (2) • decide priorities for the delivery schedule. (2)
Most Complex	2	

3. Critical Thinking

Critical Thinking information was not collected for this profile.

4. Job Task Planning and Organizing

Job Task Planning and Organizing

Complexity Level	Examples
3	Own job planning and organizing • Cabinet makers may plan several weeks to several months in advance. They coordinate their work with other trades, such as plumbers or electricians. Disruptions from rush jobs or phone calls may be frequent, after which they return to their planned work schedule. There may be considerable variety in work activities, since many cabinet making shops take a variety of projects, calling for different materials and specifications.

5. Significant Use of Memory

Examples

- remember formulae and standard measurements, such as the height of a cabinet or vanity.
- remember standard allowances for openings - e.g., the drawer should be 1 inch smaller than the opening.
- may remember the stock numbers of commonly used materials, such as plastic laminates.
- remember customers names and faces and the details of their past orders.

6. Finding Information

Finding Information

Tasks	Complexity Level	Examples
Typical	1 to 2	Cabinet Makers: • may contact suppliers to get information, such as at what pressure the sprayer should be set. (1) • may call on experts, such as community college instructors, to get guidance on what chemicals would react best with Honduras Mahogany to give a rich colour. (1) • look in catalogues and supplier brochures to get information , such as the allowances for hinges. (1) • refer to manuals and reference materials to learn how to carry out various procedures. (2)

G. Working with Others

Participation in Supervisory or Leadership Activities

- Participate in formal discussions about work processes or product improvement.
- Have opportunities to make suggestions on improving work processes.
- Monitor the work performance of others.
- Inform other workers or demonstrate to them how tasks are performed.
- Orient new employees.
- Select contractors and suppliers.
- Assign routine tasks to other workers.
- Identify training that is required by, or would be useful for, other workers.

H. Computer Use

Computer Use

Tasks	Complexity Level	Examples
Typical	2 to 3	Cabinet Makers: • use word processing. For example, they type proposals. (2) • use computer-assisted design, manufacture or machining. For example, they can use specialized programs like Cabinetware and 3d Architect, to design and produce dimensional lists. (CAD/CAM, Car-CAD, equipment with numerical control controlled by computer). (3)

Computer Use Summary

- Use word processing.
- Use computer-assisted design, manufacture or machining.

I. Continuous Learning

How Learning Occurs
Learning may be acquired:

- As part of regular work activity.
- From co-workers.
- Through training offered in the workplace.
- Through reading or other forms of self-study
    - at work.
    - on worker's own time.
    - using materials available through work.
    - using materials obtained through a professional association or union.
    - using materials obtained on worker's own initiative.
- Through off-site training
    - during working hours at no cost to the worker.
    - partially subsidized.
    - with costs paid by the worker.

J. Other Information

In addition to collecting information for this Essential Skills Profile, our interviews with job incumbents also asked about the following topics.

Attitudes
The cabinet makers interviewed felt that cabinet makers should be patient and meticulous. They should feel a pride in workmanship. They should have a positive attitude and enjoy the challenges of problem solving. They should be flexible in the face of changes to building methods and materials. They should be organized, self-motivated and able to work in methodical sequence.

Future Trends Affecting Essential Skills
While computerization is still rare in the cabinet making trade, CAD programs and CNC trimmers and routers are becoming more common. In addition, those cabinet makers who become private entrepreneurs will need to have skills in word processing, accounting programs, database management and use of e-mail. In addition, they may use Internet browsers in the future to look at supplier websites and to locate rare equipment.

K. Notes

This profile is based on interviews with job incumbents across Canada and validated through consultation with industry experts across the country.
For information on research, definitions, and scaling processes of Essential Skills Profiles, please consult the Readers' Guide to Essential Skills Profiles (http://www.hrsdc.gc.ca/eng/jobs/les/profiles/readersguide.shtml).