Carpenter

On-the-Job Training Guide

2024

1-877-363-0536
apprenticeship@gov.sk.ca
saskapprenticeship.ca

Saskatchewan Apprenticeship and Trade Certification Commission

Online: www.saskapprenticeship.ca

Recognition:
To promote transparency and consistency, this document has been adapted from the 2022 Carpenter Red Seal Occupational Standard (Employment and Social Development Canada).

A complete version of the Occupational Standard can be found at www.red-seal.ca.

STRUCTURE OF THE ON-THE-JOB TRAINING GUIDE

To facilitate understanding of the occupation, this on-the-job training guide contains the following sections:

Task Matrix: a chart which outlines graphically the major work activities, tasks and sub-tasks of this standard detailing the essential skills and the level of training where the content is covered.

Major Work Activity (MWA): the largest division within the standard that is comprised of a distinct set of trade activities.

Task: distinct actions that describe the activities within a major work activity.

Sub-task: distinct actions that describe the activities within a task.

On-the-Job and In-school Training Content for the Carpenter Trade: a chart which outlines the topics of technical training with on-the-job examples for apprentice to achieve relevant experience at work.

TRAINING REQUIREMENTS FOR THE CARPENTER TRADE

To graduate from each level of the apprenticeship program, an apprentice must successfully complete the required technical training and compile enough on-the-job experience to total at least 1800 hours each year. Total trade time required is 7200 hours and at least 4 years in the trade.

Journeyperson to apprentice ratio for this trade is: 1:2

The information contained in this document serves as a guide for employers and apprentices. Apprenticeship training is mutually beneficial to both employer and apprentice. The employer's investment in training apprentices results in skilled and certified workers. The document summarizes the tasks to be covered by the apprentice during their on-the-job portion of apprenticeship training. An apprentice spends approximately 85% of their apprenticeship term training on-the-job.

It is the employer's or journeyperson's responsibility to supervise an apprentice's practical skills development until a satisfactory level of proficiency has been reached.

EMPLOYER TRAINING RESPONSIBILITY

- promote a safety-conscious workplace
- provide mentored, hands-on practice in the use of tools and equipment
- demonstrate procedures relevant to layout, forming, framing, exterior and interior finishing
- further the apprentice's ability to interpret technical drawings
- allow the apprentice to apply procedures used for estimating materials, costing projects and supervising personnel
- ensure that the apprentice can evaluate the end product
- where possible, expose the apprentice to new technology in the Carpenter trade

Employers should make every effort to expose their apprentices to work experience in as many areas of the trade as possible.

In the On-the-Job Training Guide, in-school instruction is listed first; on-the-job suggestions to help employers assist the apprentice to prepare for in-school training are listed next.

The content of the training components is subject to change without notice.

Entrance Requirements for Apprenticeship Training

Your grade twelve transcript (with no modified classes) or GED 12 is your guarantee that you meet the educational entrance requirements for apprenticeship in Saskatchewan. In fact, employers prefer and recommend apprentices who have completed high school. This ensures the individual has all of the necessary skills required to successfully complete the apprenticeship program, and receive journeyperson certification.

Individuals with "modified" or "general" classes in math or science do not meet our entry requirements. These individuals are required to take an entrance assessment prescribed by the SATCC.

English is the language of instruction in all apprenticeship programs and is the common language for business in Saskatchewan. Before admission, all apprentices and/or "upgraders" must be able to understand and communicate in the English language. Applicants whose first language is not English must have a minimum Canadian Language Benchmark Assessment of six (CLB6).

Note: A CLB assessment is valid for a one-year period from date of issue.

Designated Trade Name	**Math Credit** at the Indicated Grade Level❶	**Science Credit** at Grade Level
Carpenter	Grade 10	Grade 10

❶ - (One of the following) WA – Workplace and Apprenticeship; or F – Foundations; or P – Pre-calculus, or a Math at the indicated grade level (Modified and General Math credits are not acceptable.).

*Applicants who have graduated in advance of 2015-2016, or who do not have access to the revised Science curricula will require a Science at the minimum grade level indicated by trade.

For information about high school curriculum, including Math and Science course names, please see: http://www.curriculum.gov.sk.ca/#

Individuals not meeting the entrance requirements will be subject to an assessment and any required training

CARPENTER TASK MATRIX CHART

This chart outlines the major work activities, tasks and sub-tasks from the 2022 National Occupational Analysis. Each sub-task details the corresponding essential skill and level of training where the content is covered. *

* Sub-tasks with numbers in the boxes is where the content will be delivered in training.

A - Performs Common Occupational Skills — 12%

A-1 Uses and maintains tools and equipment	**1.01 Maintains hand, power and pneumatic tools** 1	**1.02 Maintains stationary tools** 1	**1.03 Uses powder-actuated tools.** 1	**1.04 Uses lifting, rigging and hoisting equipment** 1	**1.05 Uses layout equipment** 1, 2
	1.06 Uses tack welding equipment (not common core) 1	**1.07 Uses torch cutting equipment (not common core)** 1			
A-2 Performs safety-related activities	**2.01 Uses personal protective equipment (PPE) and safety equipment** 1	**2.02 Maintains safe work environment** 1			
A-3 Builds and uses temporary access structures	**3.01 Uses stationary access equipment** 1, In Context in 2,3,4	**3.02 Uses mobile access equipment** 1, In Context in 2,3,4	**3.03 Erects/dismantles scaffolding** 1, In Context in 2,3,4	**3.04 Modifies scaffolding** 1, In Context in 2,3,4	
A-4 Uses communication and mentoring techniques	**4.01 Uses communication techniques** 1	**4.02 Uses mentoring techniques** 1			

B – Performs Planning and Layout — 14%

B-5 Interprets documentation	5.01 Interprets project drawings 1, In Context in 2,3,4	5.02 Interprets specifications 1, In Context in 2,3,4	5.03 Interprets safety documentation 1	5.04 Interprets workplace documentation 1	
B-6 Organizes work	6.01 Schedules work sequence 1	6.02 Performs site preparation 1	6.03 Performs quantity take off 1	6.04 Organizes materials 1	
B-7 Performs layout	7.01 Performs site layout 1	7.02 Lays out concrete formwork 1,3	7.03 Lays out floors 1	7.04 Lays out decks 1	7.05 Lays out walls 2
	7.06 Lays out ceilings 2,3	7.07 Lays out roofs 2,3,4	7.08 Lays out stairs 2,3,4	7.09 Lays out balustrades 3, 4	

C – Performs Concrete — 16%

C-8 Constructs formwork	8.01 Erects excavation shoring and underpinning 3	8.02 Erects concrete falsework 3	8.03 Constructs footing forms 1	8.04 Constructs wall and grade beam formwork 1	8.05 Constructs slab on-grade formwork 1
	8.06 Constructs column formwork 3	8.07 Constructs stair formwork 3	8.08 Installs embedded reinforcements 3	8.09 Dismantles formwork 1	

C-9 Installs concrete, cement-based and epoxy products	9.01 Places concrete 1	9.02 Facilitates curing of concrete 1	9.03 Performs basic concrete finishing 1	9.04 Installs pre-case components 3	9.05 Installs grout 3

D – Performs Framing 20%

D-10 Constructs floor systems	10.01 Installs engineered floor systems 1	10.02 Constructs dimensional lumber floor framing 1
D-11 Constructs deck systems	11.01 Constructs decks 1	11.02 Installs deck components 1
D-12 Constructs wall systems	12.01 Installs engineered wall systems 2	12.02 Constructs dimensional lumber wall framing 2
D-13 Constructs roof and ceiling systems	13.01 Installs engineered trusses 2,3,4	13.02 Constructs roof and ceiling framing 2,3,4

E – Performs Exterior Finishing — 14%

E-14 Installs exterior doors and windows	14.01 Installs exterior jambs/frames 2	14.02 Installs exterior doors 2	14.03 Installs exterior windows 2	14.04 Installs exterior door and window hardware 2
E-15 Installs roofing	15.01 Installs roofing components 2	15.02 Installs roof coverings 2		
E-16 Installs exterior finishes	16.01 Installs exterior wall components 2	16.02 Installs exterior wall coverings 2		

F – Performs interior finishing — 14%

F-17 Applies wall and ceiling finishes	17.01 Installs wallboard 3	17.02 Applies compound to wall and ceilings 3	17.03 Installs panels, tiles and solid wood finishes 3,4	17.04 Installs suspended ceiling 3	17.05 Installs demountable wall systems 3
F-18 Installs flooring	18.01 Installs underlayment 4	18.02 Installs floor coverings 4	18.03 Installs access flooring 4		
F-19 Installs interior doors and windows	19.01 Installs interior jambs/frames 3	19.02 Installs interior doors 3	19.03 Installs interior windows 3	19.04 Installs interior door and window hardware 3	

F-20 Constructs and installs finish components and stairs	20.01 Fabricates finish components 3	20.02 Installs finish components and accessories 3	20.03 Constructs stairs 2,3,4

G – Performs renovations 10%

G-21 Performs renovation-specific support activities	21.01 Removes existing material 4	21.02 Protects structure during renovations 4
G-22 Performs renovation-specific construction activities	22.01 Joins new to existing construction 4	22.02 Changes existing structure during renovations 4

TRAINING PROFILE CHART

This Training Profile Chart represents Saskatchewan Apprenticeship and Trade Certification Commission (SATCC) technical training at the topic level.

Level One	Transcript Code	Hours
Safety Awareness	SFTY 101	18
Tools	EQPT 100	42
Scaffolds and Rigging	SCAF 100	15
Construction Documents	BPRT 100	15
Site Layout	CNST 102	30
Concrete	CONC 100	15
Introduction to Framing	FRMG 103	24
Foundations	FDNT 100	45
Building Materials	MATE 101	12
Occupational Skills	REKN 102	24
		240

Level Two	Transcript Code	Hours
Construction Documents	BRPT 200	24
Wall Systems	FRMG 201	36
Roof Framing	FRMG 202	36
Roof Coverings	ROOF 200	12
Exterior Windows and Doors	EXFN 201	12
Exterior Finishes and Accessories	EXFN 200	24
Floor Framing	FRMG 204	36
Wood Stairs	STRS 201	30
		210

Level Three	Transcript Code	Hours
Construction Documents	BPRT 300	24
Commercial Formwork	FNDT 300	42
Concrete Stairs	STRS 301	24
Hip Roof Framing	FRMG 300	30
Interior Finish	INFN 300	42
Doors and Hardware	DOOR 300	36
Advanced Site Layout	CNST 301	12
		210

Level Four	Transcript Code	Hours
Construction Documents	BPRT 401	24
Intersecting Roof	FRMG 400	30
Cabinets (Exceeds)	INFN 401	42
Wood Stairs	STRS 401	36
Interior Finish Components	INFN 402	12
Renovation	RENO 400	12
Advanced Occupational Skills and Project	PROJ 402	18
Building Envelope	INSL 400	24
Carpenter Review (Exceeds)	REV 400	42
		240

ON-THE-JOB AND IN-SCHOOL TRAINING CONTENT FOR THE CARPENTER TRADE

This chart outlines on-the-job examples for apprentices to achieve relevant work experience to prepare for the topics of technical training. Topics of technical training are provided with the associated learning outcomes.

Level One — 8 weeks — 240 hours

Safety Awareness — 18 hours

- identify Occupational Health and Safety regulations
- select personal protective equipment
- identify fall protection
- identify unsafe working environments
- practice hazard identification and control
- identify Workplace Hazardous Material Information System (WHMIS) 2015

Mentors can assist the apprentice to prepare for this section of technical training by:

- *ensuring familiarization with the scope and content of the OH&S Regulations*
- *making the use of personal protective equipment mandatory*
- *demonstrating the proper use and maintenance of fall protection equipment*
- *describing unsafe working conditions and industrial health hazards and monitoring for action appropriate to situations*
- *ensuring the use of site fire equipment is described and demonstrated*
- *describing the seriousness of confined space entry and methods to safely enter these areas*
- *identifying hazardous materials in the workplace and instruct in the use of the Material Safety Data Sheets (MSDS)*
- *ensuring the proper understanding of the Workplace Hazardous Material Information System (WHMIS) system and symbols*

Tools — 42 hours

- use measuring, layout, and testing tools
- use cutting and boring hand tools
- use fastening and dismantling hand tools
- identify electrical systems for portable power tools
- use portable power tools
- identify the compressed air supply system
- use stationary power tools and equipment
- use powder actuated tools

Mentors can assist the apprentice to prepare for this section of technical training by:

- *demonstrating the use and care of common hand, portable and stationary tools and equipment*
- *monitoring the use and care of these tools to ensure competency in their use*
- *having the apprentice complete repetitive projects using these tools and equipment*
- *having the apprentice maintain and sharpen tools*

Scaffolds and Rigging — 15 hours

- describe the safe use of ladders and ramps
- describe the erection, maintenance, and dismantling of wood and metal access scaffolds

- identify basic rigging operations

Mentors can assist the apprentice to prepare for this section of technical training by:

- *explaining the relationship between access equipment and OH&S Regulations and ensuring the apprentice is familiar with the regulations for this equipment*
- *monitoring the use of ladders and ramps and ensuring their proper installation*
- *exposing the apprentice to installation, maintenance and dismantling procedures of numerous types of scaffolds and other access equipment*
- *demonstrating the application and uses of various types of rigging equipment and accessories*
- *demonstrating various knots and hitches and describing their correct applications*
- *demonstrating correct crane signalling and allowing the apprentice to direct operations under supervision*

Construction Documents — 15 hours

- identify construction document standards
- Interpret elevation drawings and floor plans
- interpret site plans, zoning and permits
- interpret footing and foundation plans

Mentors can assist the apprentice to prepare for this section of technical training by:

- *explaining the various pages of construction documents, their functions and having the apprentice interpret various aspects of the job using these documents*
- *assisting to interpret construction document lines, symbols, and abbreviations*
- *explaining the content and use of the National Building Code of Canada and explaining the requirements and reasons for building permits*
- *providing instruction and opportunity for the sketching of miscellaneous simple building components*
- *requiring the repetitive use of the math required to interpret construction documents and calculate quantities using fractions, decimals, percentages, ratios, perimeters, volumes and areas by hand and using calculators*

Site Layout — 30 hours

- identify types of builders' levels.
- calculate elevations using a builder's level
- establish elevations with a builder's level
- describe the procedures for performing a site investigation
- layout a building with hand tools
- establish elevations with a laser level

Mentors can assist the apprentice to prepare for this section of technical training by:

- *explaining and demonstrating how building foundations can be located with hand tools only using tape measures, string lines, levels, and the 3-4-5 method*
- *demonstrating the set-up and use of a builder's level to determine elevations*
- *explaining how different styles of grade rods are marked and how they are read*
- *demonstrating the set-up and use of a laser level and ensuring that specific safety aspects of laser equipment is explained and followed*
- *ensuring that the metric and imperial graduations on measuring tools and instruments are fully understood*

Concrete — 15 hours

- describe concrete mixes and admixtures
- perform a slump test
- perform placement, finishing and curing of concrete
- Describe concrete maintenance repair

Mentors can assist the apprentice to prepare for this section of technical training by:

- *explaining the contents of a concrete mix and the effect different admixtures have on this mix*
- *allowing observation and participation in the testing procedures for concrete*
- *providing opportunities to assist in the placement, finishing and curing of concrete in the various types of building foundation and slab formwork*
- *allowing the apprentice to install various concrete grouting and maintenance products*

Introduction to Framing — 24 hours

- identify types of frame construction
- identify floor framing systems
- identify wall framing systems
- identify roof framing systems
- interpret code requirements for frame construction
- perform basic layouts for framing in building construction

Mentors can assist the apprentice to prepare for this section of technical training by:

- *familiarizing the apprentice with the 2015 NBC as it applies to framing.*
- *exposing the apprentice to joist layouts as it applies to blueprints while helping identify obstacles such as plumbing and ductwork that is to be installed during the build.*
- *allowing the apprentice to frame while under supervision*
- *introducing the apprentice to layout, code regulations, weight restrictions, fasteners, support, anchor, and attachment systems.*

Foundations — 45 hours

- construct formwork for footings
- construct grade beam formwork and pilings
- construct formwork for foundation walls
- identify requirements for foundation moisture control
- construct formwork for slabs-on-grade
- identify concrete reinforcement
- identify procedures for constructing permanent wood foundations
- prepare a quantity takeoff for foundations

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing instruction and opportunities to set-up various types of formwork in various applications*
- *providing manufacturer's installation guides for various formwork applications from websites*
- *explaining the principles and processes for the installation of different types of piling and allowing the observation of installation*
- *demonstrating or providing information for correct drainage and backfilling techniques*

Building Materials — 12 hours

- identify types of wood and lumber used in the construction industry
- identify types of engineered panels and products used in the construction industry
- identify fasteners, anchors, and metals used in the construction industry

Mentors can assist the apprentice to prepare for this section of technical training by:

- *continually identifying and explaining the use of various types of wood, engineered wood and panel products and the proper storage techniques for each*
- *describing the terminology used to identify the various types of nails, screws and fasteners and giving examples of their applications*
- *having the apprentice select the proper materials for projects*

Occupational Skills **24 hours**

- perform basic trade calculations
- identify building codes and standards
- identify the Red Seal Occupational Standard (RSOS) for the carpenter trade
- describe effective communication techniques

Mentors can assist the apprentice to prepare for this section of technical training by:

- *introducing the apprentice to carpentry mathematics*
- *familiarizing the apprentice with the National Building code.*
- *providing a copy of the RSOS from the Red Seal website for future reference*
- *providing the proper mentorship to the apprentice throughout their apprenticeship learning*

Level Two — 7 weeks — 210 hours

Construction Documents — 24 hours

- review construction document standards
- interpret floor framing information
- interpret wall framing information
- interpret roof framing information
- interpret exterior finishing information

Mentors can assist the apprentice to prepare for this section of technical training by:

- *assisting in the interpretation of various pages of construction drawings*
- *ensuring various aspects of the job are interpreted using these documents*
- *explaining and demonstrating the use of various types of scales and the use of scale rulers*

Wall Systems — 36 hours

- construct exterior wall framing
- construct interior wall framing
- identify engineered wall systems
- identify structural timber construction
- prepare a quantity takeoff for wall systems

Mentors can assist the apprentice to prepare for this section of technical training by:

- *ensuring familiarity with the contents of the National Building Code of Canada and how these contents relate to all types of wall and ceiling framing requirements*
- *exposing the apprentice to the interpretation of wall framing construction drawings and details*
- *allowing participation in, or exposure through information, to all aspects of layout, assembly and sheathing of various types of framed walls including standard wood, steel stud and heavy timber types of construction*
- *exposing apprentice to the various types of engineered products used in wall framing and explaining their special installation requirements*
- *providing manufacturer's installation instructions for various engineered products from websites*
- *explaining the framing requirements for the installation of steel door frames*

Roof Framing — 36 hours

- identify the various types of roofs and roof terminology
- construct conventional gable and shed roofs
- assemble engineered gable roof trusses and install sheathing
- calculate gable roofs using metric measurements

Mentors can assist the apprentice to prepare for this section of technical training by:

- *ensuring familiarity with the contents of the National Building Code of Canada and how these contents relate to all types of roof framing requirements*
- *explaining the terminology used to describe different roof styles and shapes*
- *ensuring interpretation of roof framing construction drawings and details*
- *allowing participation in, or exposure through information, to all aspects of layout, assembly and sheathing of various types of framed roofs including standard wood rafter and wood truss systems*
- *explaining the framing requirements for the installation of skylights and other roof openings such as chimney chases*

Roof Coverings — 12 hours

- identify roof covering materials
- install roof coverings
- prepare a quantity takeoff for roof coverings

Mentors can assist the apprentice to prepare for this section of technical training by:

- *explaining the requirements for different roof covering systems*
- *ensuring familiarity with the contents of the National Building Code of Canada and how these contents relate to the requirements for all types of roof coverings*
- *allowing participation in the installation of various types of roof coverings*
- *providing examples of special roof coverings and information regarding their installation requirements*

Exterior Windows and Doors — 12 hours

- install exterior windows
- install exterior doors

Mentors can assist the apprentice to prepare for this section of technical training by:

- *allowing participation in the installation of exterior doors and windows; and in the measuring and retrofitting of windows*
- *demonstrating proper techniques with materials used to seal windows, doors and build-outs*
- *explaining the different applications for various types of caulking and sealants and allow the apprentice to install these products while monitoring speed and technique*

Exterior Finishes and Accessories — 24 hours

- identify types of cornices
- construct cornices
- identify exterior wall coverings
- install exterior wall coverings
- prepare a quantity takeoff for exterior finishes

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing opportunities to install soffit, fascia and various types of wall cladding*
- *demonstrating how a storey pole or layout rod is created and used for siding installation*
- *describing how trim pieces are cut and the installation is sequenced to ensure the shedding of water*

Floor Framing — 36 hours

- design Beams and Supports
- construct Dimensional Lumber Floors
- identify the Requirements for Stairwell Openings
- construct Engineered Floor System
- identify Floor Sheathing and Installation Procedures
- identify Deck Systems
- prepare a Quantity Takeoff for Floor Framing

Mentors can assist the apprentice to prepare for this section of technical training by:

- *familiarizing the apprentice with the 2015 NBC as it applies to floor framing.*
- *exposing the apprentice to joist layouts as it applies to blueprints while helping identify obstacles such as plumbing and ductwork that is to be installed during the build.*
- *allowing the apprentice to sheath floors while under supervision*
- *introducing the apprentice to layout, code regulations, weight restrictions, fasteners, support, anchor, and attachment systems.*

Wood Stairs **30 hours**

- identify terminology and components used in stair construction
- determine code requirements for stairs and landings
- perform mathematical calculations for stairs
- Construct wood stairs
- Calculate dimensions for straight stairwell openings

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing opportunities to calculate the size of stairwell openings*
- *allowing the apprentice assist in the layout and construction of various types of stairs and balustrades*
- *giving exposure and examples using the various formulas used to calculate geometric stairs on paper*

Level Three — 7 weeks — 210 hours

Construction Documents — 24 hours

- review construction document standards
- interpret interior finish drawings
- interpret institutional, commercial and industrial (ICI) drawings

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing instruction and opportunity for the sketching of miscellaneous simple and more elaborate building components*
- *continuing to assist in the interpretation of various pages of a set of commercial blueprints, specifications and room schedules and explaining how they are associated to each other*
- *providing an old set of specifications for the apprentice to study and become familiar with the contents*
- *providing exposure to basic masonry and light structural steel terminology, definitions and applications*

Commercial Formwork — 42 hours

- construct formwork for columns and piers
- construct slab and beam formwork
- describe wall formwork for commercial construction
- prepare a quantity takeoff for industrial, commercial, and institutional (ICI) projects

Mentors can assist the apprentice to prepare for this section of technical training by:

- *describing the parts and the construction of this type of formwork*
- *allowing the apprentice to install, level and align commercial slab, beam and wall and formwork*
- *detailing reasoning and procedures for hoarding ventilation requirements*
- *demonstrating and monitoring the proper setup of heating equipment*

Concrete Stairs — 24 hours

- construct conventional hip roofs
- assemble engineered hip roof trusses and install sheathing
- calculate hip roofs using metric measurements

Mentors can assist the apprentice to prepare for this section of technical training by:

- *describing the components used to make stair formwork*
- *exposing the apprentice to the techniques used to install this type of formwork*
- *allowing the apprentice to work on the concrete placement and the finishing of a set of concrete stairs*

Hip Roof Framing — 30 hours

- conventional hip roofs
- engineered roof trusses and install sheathing
- hip roofs using metric measurements

Mentors can assist the apprentice to prepare for this section of technical training by:

- *ensuring familiarity with the contents of the National Building Code of Canada and how these contents relate to all types of roof framing requirements*
- *explaining the terminology used to describe different roof styles and shapes*
- *ensuring interpretation of roof framing construction drawings and details*
- *allowing participation in, or exposure through information, to all aspects of layout, assembly and sheathing of various types of framed roofs including standard wood rafter and wood truss systems*
- *explaining the framing requirements for the installation of skylights and other roof openings such as chimney chases*

Interior Finish — 42 hours

- identify interior wall systems
- install finish components and accessories
- install ceiling finishes
- prepare a quantity takeoff for interior finishes

Mentors can assist the apprentice to prepare for this section of technical training by:

- *allowing the apprentice to install interior wall and ceiling products, having them work with subtrades periodically if possible*
- *encouraging the apprentice to watch installation techniques by experts*
- *circulating apprentices with company experts to assist in the installation of these products*
- *having the apprentice install baseboard, casings, crown mouldings and other trims*
- *ensuring familiarity with the contents of the National Building Code of Canada and how these contents relate to bathroom hardware and wheelchair accessibility requirements for commercial and residential applications*

Doors and Hardware — 36 hours

- install commercial door frames, doors and hardware
- install residential door frames, doors and hardware
- install specialty doors
- prepare a quantity takeoff for doors and hardware

Mentors can assist the apprentice to prepare for this section of technical training by:

- *explaining the rough opening requirements for various door and specialty door frames*
- *ensuring familiarity with the contents of the National Building Code of Canada and how these contents relate to door and hardware requirements for residential and commercial applications*
- *explaining the importance of being able to read and comprehend installation instructions*
- *assisting the apprentice to install various styles of doors and types of hardware*
- *monitoring the apprentice's ability to interpret instructions during the installation of products*

Advanced Site Layout — 12 hours

- perform basic transit functions
- layout columns and piers

Mentors can assist the apprentice to prepare for this section of technical training by:

- *demonstrating the set-up and use of a transit*
- *demonstrating the use of a transit to locate building foundations*
- *exposing the apprentice to building layout using this instrument*
- *monitoring the apprentice's ability to perform the math functions required to use these systems*
- *coaching the apprentice in the use of scientific calculators for this work*

Level Four — 8 weeks — 240 hours

Construction Documents — 24 hours

- review construction document standards
- interpret mechanical and electrical plans
- interpret building envelope information
- interpret specifications and contracts

Mentors can assist the apprentice to prepare for this section of technical training by:

- *continuing to expose, explain and allow the apprentice to interpret building documents*
- *continuing to encourage, allow and increase the difficulty of estimation duties*

Intersecting Roof — 30 hours

- construct an intersecting roof (imperial)
- calculate an intersecting roof (metric)

Mentors can assist the apprentice to prepare for this section of technical training by:

- *explaining the terminology used for various components used in the construction of these types of roofs*
- *showing the apprentice examples of styles and shapes particular to these types of roofs*
- *having the apprentice interpret blueprints and truss shop drawings particular to this type of roof construction*

Cabinets (Exceeds) — 42 hours

- materials, terminology and design considerations used in the construction of cabinets
- wall cabinets
- base cabinets
- plastic laminate counter tops

Mentors can assist the apprentice to prepare for this section of technical training by:

- *explaining the terminology used for the construction of wall and base cabinets*
- *describing and demonstrating how a storey pole or layout rod is created*
- *exposing the apprentice to construction and installation techniques*
- *describing the types, applications and installation of hardware used for different styles of cabinets*
- *explaining the terminology used particular to laminate, solid and natural product countertops*
- *explaining the techniques and procedures used for the cutting, gluing and installing of laminate materials*
- *demonstrating techniques and tools used to level, align, clamp, join and fasten cabinet components*
- *demonstrating the techniques and tools used to scribe, cut, mitre, butt and install various styles of countertop components*

This section of training exceeds the minimum sequencing as set out by the Carpenter RSOS.

Wood stairs — 36 hours

- construct stairs and balustrades
- calculate stairwell openings
- calculate winders and geometrical stairs

Mentors can assist the apprentice to prepare for this section of technical training by:

- *providing opportunities to calculate the size of stairwell openings*
- *allowing the apprentice assist in the layout and construction of various types of stairs and balustrades*
- *giving exposure and examples using the various formulas used to calculate geometric stairs on paper*

Interior Finish Components — 12 hours

- describe installation procedures for flooring
- describe installation procedures for paneling

Mentors can assist the apprentice to prepare for this section of technical training by:

- *allowing the apprentice to install interior wall and ceiling products, having them work with subtrades periodically if possible*
- *encouraging the apprentice to watch installation techniques by experts*
- *circulating apprentices with company experts to assist in the installation of these products*
- *providing opportunities to install baseboard, casings, crown mouldings and other trims*
- *ensuring familiarity with the contents of the National Building Code of Canada and how these contents relate to bathroom hardware and wheelchair accessibility requirements for commercial and residential applications*

Renovations — 12 hours

- describe renovation-specific support activities
- describe renovation-specific construction activities

Mentors can assist the apprentice to prepare for this section of technical training by:

- *exposing the apprentice to prints and documents specific to renovation work*
- *demonstrating the various procedures used to protect structures and property during renovations*
- *teaching the apprentice to identify components that no longer meet code requirements*
- *demonstrating the techniques used to temporarily shore or underpin existing components to allow for renovation work to occur*
- *demonstrating the procedures used to maintain and improve the building envelope*

Advanced Occupational Skills and Project Planning — 18 hours

- perform a complete quantity takeoff for a residential project.
- organize work.
- use mentoring techniques.

Mentors can assist the apprentice to prepare for this section of technical training by:

- *continuing to expose, explain and allow the apprentice to interpret building documents*
- *continuing to encourage, allow and increase the difficulty of estimation duties*

Building Envelope — 24 hours

- describe the fundamentals of building science
- describe the procedure to insulate and seal the building envelope

Mentors can assist the apprentice to prepare for this section of technical training by:

- *explaining and demonstrating how a correctly installed building envelope affects heat and sound transfer*
- *providing examples of an incorrectly installed building envelope and demonstrate repair techniques*
- *encouraging the apprentice to monitor the mechanical equipment being installed and explaining why this equipment is needed*

Carpenter Review (Exceeds) **42 hours**

- review common occupational skills
- review planning and layout
- review concrete
- review framing
- review exterior finish
- review interior finish
- review renovations

Mentors can assist the apprentice to prepare for this section of technical training by:

- *advising the apprentice that at the end of training they will be given an examination that covers all aspects of all four levels of technical training, not just the final level and to start studying while working*
- *encouraging the apprentice to begin reviewing all materials previously provided both during technical training and at the worksite*
- *prompting the apprentice to ask site personnel any and all questions in order to clarify understanding of past learning experiences*

This section of training exceeds the minimum sequencing as set out by the Carpenter RSOS.

Consider apprenticeship training as an investment in the future of your company and in the future of your workforce. Ultimately, skilled and certified workers increase your bottom line.

Get involved in the apprenticeship training system. Your commitment to training helps to maintain the integrity of the trade.

Do you have employees who have been working in the trade for a number of years but don't have trade certification? Contact your local apprenticeship office for details on how they might obtain the certification they need.

Saskatchewan Apprenticeship & Trade Certification Commission
2140 Hamilton St Regina SK S4P 2E3
Tel: (306) 787-2444
Fax: (306) 787-5105
Toll Free: 1-877-363-0536
Website: www.saskapprenticeship.ca

District Offices
Estevan (306) 637-4930
La Ronge (306) 425-4385
Moose Jaw (306) 694-3735
North Battleford (306) 446-7409
Prince Albert (306) 953-2632
Saskatoon (306) 933-8476
Swift Current (306) 778-8945
Yorkton (306) 786-1394