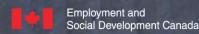


## Trade Profile Carpenter



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# Trade Profile Carpenter



#### **Structure of the Trade Profile**

This profile has two sections that provide a snapshot of the trade's description, and all trade activities as they are organized in the Red Seal Occupational Standard:

**Description of the Carpenter trade:** an overview of the trade's duties, work environment, project requirements, similar occupations and career progression

**Task Matrix:** a chart which outlines graphically the major work activities, tasks and sub-tasks of this standard

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

#### **Description of the Carpenter Trade**

"Carpenter" is this trade's official Red Seal occupational title approved by the CCDA. This standard covers tasks performed by a carpenter.

Carpenters construct, install, renovate and repair residential, civil, institutional, commercial and industrial (ICI) structures made of wood, steel, concrete and other materials.

They can work for a wide array of employers, including new home builders and renovation firms, construction firms, building owners, property managers and tenants, building developers and government departments. Some carpenters are union members and a significant number are self-employed.

While the scope of the carpenter trade includes many aspects of building construction, a growing number of carpenters work for contractors in such areas of trade practice as concrete forming, framing, finishing, interior systems, renovations and surveying. Carpenters are employed in a variety of project environments, including houses under construction or renovation, ICI, civil and infrastructure projects, and plants that pre-fabricate buildings. Carpenters are found working in a variety of sectors such as construction, manufacturing, service, mining, agricultural, institutional, commercial, forestry, and transit and transportation.

Safety is critical to all carpenters. In addition to typical risks of injury resulting from slips and falls, falling objects and the use of hand and power tools, carpenters must be aware of constantly changing work surroundings to mitigate the chance of injury to self and others. The proper use of personal protective equipment (PPE) and related training is very important to carpenters regardless of their location of work. Risk/hazard assessments prior to performing tasks are necessary and important.

Some important competencies of a carpenter are good knowledge of mathematics, the ability to use metric and imperial measurements, an understanding of building science, communication and problem-solving skills, and the ability to work independently or as part of a team. Other skills present in a competent carpenter are the ability to work at heights, the ability to stand or kneel for long periods of time, manual dexterity and good balance. Carpenters must be prepared to work in a variety of working environments including extreme temperatures. Carpentry at times may be a physically demanding occupation requiring the lifting of heavy tools and materials. Carpenters may operate equipment such as mobile elevated work platforms and material moving equipment. Journeyperson carpenters are expected to mentor apprentices given the hands-on nature of the trade.

This standard recognizes similarities and overlaps with the work of other tradespersons such as roofers, lathers (interior systems mechanics), building envelope technicians, drywall finishers and plasterers, floorcovering installers, concrete finishers, ironworkers (reinforcing) and cabinetmakers. Experienced carpenters may advance to supervisory positions, or become independent contractors, due to their involvement in most aspects of building construction.

### Carpenter

#### **Task Matrix**

#### A - Performs common occupational skills

**12**%

Task A-1 Uses and maintains tools and equipment 32%	A-1.01 Uses hand, power and pneumatic tools	A-1.02 Uses stationary tools	A-1.03 Uses powder-actuated tools
	A-1.04 Uses lifting, rigging and hoisting equipment	A-1.05 Uses layout instruments and equipment	A-1.06 Uses tack welding equipment (Not Common Core)
	A-1.07 Uses torch cutting equipment (Not Common Core)		
Task A-2 Performs safety-related activities 26%	A-2.01 Uses personal protective equipment (PPE) and safety equipment	A-2.02 Maintains safe work environment	
Task A-3 Builds and uses temporary access structures 26%	A-3.01 Uses stationary access equipment	A-3.02 Uses mobile access equipment	A-3.03 Erects/dismantles scaffolding
	A-3.04 Modifies scaffolding		
Task A-4 Uses communication and mentoring techniques	A-4.01 Uses communication techniques	A-4.02 Uses mentoring techniques	

Task B-5 Interprets documentation 35%	B-5.01 Interprets project drawings	B-5.02 Interprets specifications	B-5.03 Interprets safety documentation
	B-5.04 Interprets workplace documentation		•
Task B-6 Organizes work 24%	B-6.01 Schedules work sequence	B-6.02 Performs site preparation	B-6.03 Performs quantity takeoff
	B-6.04 Organizes material		
Task B-7 Performs layout 41%	B-7.01 Performs site layout	B-7.02 Lays out concrete formwork	B-7.03 Lays out floors
	B-7.04 Lays out decks	B-7.05 Lays out walls	B-7.06 Lays out ceilings
	B-7.07 Lays out roofs	B-7.08 Lays out stairs	B-7.09 Lays out balustrades

#### C – Performs concrete work

**16**%

Task C-8 Constructs formwork 72%	

C-8.01 Erects excavation shoring and underpinning	C-8.02 Erects concrete falsework	C-8.03 Constructs footing forms
C-8.04 Constructs wall form systems and grade beam formwork	C-8.05 Constructs slab formwork	C-8.06 Constructs column formwork
C-8.07 Constructs stair formwork	C-8.08 Installs embedded reinforcements	C-8.09 Dismantles formwork
C-9.01 Places concrete	C-9.02 Facilitates curing of concrete	C-9.03 Performs basic concrete finishing
C-9.04 Installs pre-cast components	C-9.05 Installs grout	

Task C-9
Installs concrete, cement-based and epoxy products

#### D - Performs framing

**20**%

Task D-10 Constructs floor systems 29%
Task D-11 Constructs deck systems 16%
Task D-12 Constructs wall systems 27%
Task D-13 Constructs roof and ceiling systems 28%

D-10.01 Installs engineered floor systems	D-10.02 Constructs dimensional lumber floor framing
D-11.01 Constructs decks	D-11.02 Installs deck components
D-12.01 Installs engineered wall systems	D-12.02 Constructs dimensional lumber wall framing
D-13.01 Installs engineered trusses	D-13.02 Constructs roof and ceiling framing

#### **E - Performs exterior finishing**

**14**%

Task E-14	
Installs exterior doors and windows	
41%	

Task E-15 **Installs roofing** 

Task E-16

**Installs exterior finishes** 

24%

35%

E-14.01 jambs/fi
E-14.04 and wind
E-15.01 compone
E-16.01 compone

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

#### F -Performs interior finishing

**14**%

Task F-17 Applies wall and ceiling finishes	
1170	

Applies wall and ceiling finishes  17%
Task F-18 Installs flooring 17%
Task F-19 Installs interior doors and windows 31%
Task F-20 Constructs and installs finish components and stairs 35%

F-17.01 Installs wallboard	F-17.02 Applies compound to walls and ceilings	F-17.03 Installs panels, tiles and solid wood finishes
F-17.04 Installs suspended ceilings	F-17.05 Installs demountable wall systems	
F-18.01 Installs underlayment	F-18.02 Installs floor coverings	F-18.03 Installs access flooring
F-19.01 Installs interior jambs/frames	F-19.02 Installs interior doors	F-19.03 Installs interior windows
F-19.04 Installs interior door and window hardware		
F-20.01 Fabricates finish components	F-20.02 Installs finish components and accessories	F-20.03 Constructs stairs

Task	G-21	
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Performs renovation-specific support activities



Task G-22

Performs renovation-specific construction activities



G-21.01 Removes existing material	G-21.02 Protects structure during renovations
G-22.01 Joins new to existing construction	G-22.02 Changes existing structure during renovations