

2010-2011 EDITION

CAREERS

CONSTRUCTION



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The Construction Industry

All you have to do is look around you to see that the construction industry is part of our lives. Family homes, hospitals, refineries, and bridges – what all of these places have in common is that they were built by construction workers and contractors. They are occupied by industrial concerns, retailers, families, patients, citizens – in short, by us.

Construction sites all over the province are swarming with construction workers and contractors, who spend a week, a few months, or several years working on them and then moving on to other projects. In Québec, one person in 20 works in the construction industry. And this doesn't include suppliers of materials and services whose jobs depend indirectly on the sector. In fact, \$40 billion is spent annually on construction work. To put this in concrete terms, for every \$10 spent, \$1 is allocated to construction.

It is often said that the construction industry is special. In fact, this is due to its instability, seasonal variations, and the mobility of its labour force. To this must be added the fact that the Quebec construction industry accommodates a large number of small businesses, and it is governed by a unique labour-relations and workforce-management system.

In this brochure, you will find short descriptions of the 26 construction trades and the 6 specialized occupations, presented in the form of data sheets. Each data sheet describes the tasks of the trade or occupation, the training and apprenticeship programs, what skills and interests an individual must have, and the job prospects and apprenticeship systems. In addition, for each trade or occupation, statistical tables show the number of workers, the wages and salaries, the number of apprentices entering the industry, the average age of the workforce, and the number of employers hiring workers.

First, please read this introductory section, which summarizes the major features of the Quebec regulatory environment for the construction labour force and presents an analysis of the job prospects.

Have a good read!



Commission
de la construction
du Québec

The Commission de la construction du Québec is an organization mandated to administer the *Act Respecting Labour Relations, Vocational Training, and Workforce Management in the Construction Industry* (Act R-20). The CCQ oversees the application of the collective agreements, ensures that the standards for hiring workers and workforce mobility are respected, ensures the competency of the workforce, and implements measures and mechanisms for vocational training. It also administers the complementary social benefits plans. Its board of directors is composed of employer and union representatives and members appointed by the government.

Cover page:

They learned a trade that they love, they are determined, and they are already making their mark. They are **Kevin Jeanson**, **Mathieu Boily**, and **Anne Rocheleau**.

Kevin Jeanson is a bricklayer-mason who earned his diploma at the Centre de formation professionnelle Pierre-Dupuy. He won the gold medal in his trade's category at the 2009 Olympiades québécoises de la formation professionnelle et technique and represented Canada at the 40th WorldSkills competition.

Mathieu Boily is a refrigeration mechanic and a graduate of the Centre de formation professionnelle de Québec. He won the silver medal in his trade's category at the 2009 Olympiades québécoises de la formation professionnelle et technique 2009 and represented Canada at the 40th WorldSkills competition.

Anne Rocheleau is a carpenter-joiner who graduated from the Centre de formation professionnelle Le Chantier. In May 2009, she won the "Construction Trades" section of the Chapeau, les filles! competition.

Job Prospects in the Construction Trades



The recession had a modest impact on activity in the construction industry. The proof is that the volume of work in 2009 totalled 133 million hours worked, just 3% less than in 2008. Moreover, a total of 145,206 workers were employed on construction sites in 2009, an employment level comparable to that in 2008. There has not been a higher number of workers since 1976. It should be noted, however, that only the civil engineering and roadwork sector grew in activity, while activity in the other sectors fell off, with industrial construction affected most severely.

In a recovering economic situation, job prospects are promising for graduates from vocational schools in coming years. The need for workers in a number of trades and occupations will be high due to rising demand and high worker turnover. This is the case for tile setters, painters, plasterers, and resilient flooring layers. In addition, vigorous activity in the civil engineering and roadwork sector will generate much work for surveyors, heavy equipment mechanics, and linemen.

The demand for workers will also be strong in the institutional and commercial sector. There will be a particular need for cement finishers, tinsmiths, reinforcing steel erectors, refrigeration mechanics, crane operators, elevator mechanics, ornamental iron workers, erector mechanics (glaziers), and roofers, for whom the labour pool is limited. A return to growth in jobs should also be expected for workers in certain industrial trades and occupations, including welders, structural steel erectors, and millwrights. In addition, those who work in residential construction will be in demand, but workers who are already available will be able to fulfil part of the need.

All sectors return to strong performance

The civil engineering and roadwork sector, which includes 35,000 employees, will benefit from public investments related to the Québec Infrastructure Plan, with a projected injection of more than \$40 billion into the road network, public transit, and municipal, health-care, and education infrastructure by 2013. Hydro-Québec will also contribute to the rise in demand; the La Romaine hydroelectric complex, notably, will require more than 1,000 workers per year from 2010 to 2016.

In 2009, the institutional and commercial sector, which employs more than 85,000 workers, registered its first drop in 17 years, a situation that will be redressed thanks to numerous projects in the institutional sector in coming years. Institutional construction will, in fact, be the engine of growth, and the accelerator will come from construction of university hospitals: Centre hospitalier de l'Université de Montréal (CHUM) and the McGill University Health Centre (MUHC). These projects will counterbalance the lull in commercial construction.

¹ Many workers are employed in more than one sector.

Meanwhile, the industrial sector, which has almost 20,000 employees, has come through a period of instability and uncertainty. Nevertheless, in the medium term, better economic conditions will reinvigorate industrial construction, which will count on new major mine projects and a gradual improvement in other subsectors. In fact, the aluminum industry will profit from the firming up of the economic recovery to start projects, as will the chemical and petroleum products industry.

Finally, residential construction, which hires more than 50,000 workers, should follow demographic trends, which have recently been revised upward. The formation of about 45,000 households every year is forecast for the next five years due to the increased number of immigrants admitted to Québec and a mini-baby boom. Thus, activity in this sector will remain high.

Job prospects are therefore encouraging for the construction trades and occupations. The construction industry offers good opportunities to graduates of vocational schools, both men and women, and generates jobs all over the province.

An annual need for 14,000 new workers

Since 2002, the construction industry has admitted between 11,00 and 15,000 new workers annually. These admissions reflect the vitality of the construction industry and its capacity to meet the challenge of growth and sustain the level of employment.

Up to 2013, all trades will continue to see considerable demand. The industry will have growing replacement needs due to ageing of workers and high turnover. On an annual basis, about 13% of workers stop working in construction at least temporarily, due to retirement, change of industry, creation of a company, and other reasons, while 6% rejoin the industry. In net terms, the recruitment needs of the construction industry are thus at 7%, strictly for replacements. Given the forecast growth in jobs, the industry will have to call upon about 14,000 new workers per year.

Several trades are affected by worker ageing

Ageing of the workforce is a concern for a number of industry stakeholders, since several thousand workers will leave the industry in coming years due to their age. Today, a record 18,700 workers in the industry are aged 55 and over. Ageing is a factor mainly for crane operators, millwrights, heavy equipment mechanics, heavy equipment operators, shovel operators, boiler makers, linemen, and pipe fitters.

Replacement of retiring workers is, however, only one aspect of worker turnover in construction. Moreover, a number of people collecting retirement pensions from the construction industry continue to work. In total, replacements will have to be found for between 1,500 and 2,000 net departures of workers aged 55 and over.

On the other hand, the trend toward ageing does not affect those in the trowel trades (bricklayer-masons, tile setters, cement finishers, plasterers), carpenter-joiners, electricians specializing in security systems, refrigeration mechanics, elevator mechanics, fire-protection mechanics, and several finishing and covering trades (interior systems installers, roofers). In these trades, there is an evolution in the age structure resulting from the current situation: because there are numerous apprentices, the age level is adjusting rapidly as a function of recruitment.

Finally, an interesting fact to note is that the average overall age of workers has been dropping almost constantly, from 40.5 years 1998 to 38.9 years in 2009. There has thus been a slight trend toward younger workers created by the arrival of large numbers of new apprentices.

Looking at the age of the labour force in 2008, we note that the crane operator is the trade with the oldest workers, while the trade of roofer has the youngest workers. However, replacement of those leaving for retirement is only one of the factors in turnover among construction workers, as a number of beneficiaries of the construction pension plans continue to work. In short, departures must be found for 1,500 to 2,000 net departures of workers aged 55 years and over.

Access to the Construction Industry

The Québec construction industry has established hiring criteria for the labour force, with which construction companies must comply. The fundamental principle is always competency, which must be acquired through training and work experience. Although the vocational studies diploma (DEP) is the preferred gateway, a person without a diploma may enter the industry during a labour shortage. To do this, the person must obtain an employment guarantee for 150 hours from his or her employer and meet specific criteria.

One essential: The competency certificate

To demonstrate their competency and be able to work in the construction industry, individuals must have a competency certificate. There are three categories:

- **Apprentice:** This certificate is issued to an individual who is admitted to a trade apprenticeship. The apprenticeship may last from one to five periods of 2,000 hours each. Once these apprenticeship periods are completed, the apprentice may take a provincial qualification examination in order to obtain a journeyman competency certificate.
- **Journeyman:** This certificate is issued to individuals who have demonstrated their competency in one or another of the 26 construction trades and have passed the provincial qualification examination in this trade.
- **Occupation:** The CCQ issues, upon request, an occupation competency certificate to a person who supplies a certificate showing that he or she has taken and passed the course “Connaissance générale de l’industrie de la construction,” which has been approved by the industry and is offered by the CCQ. This competency certificate allows the holder to practise one of the 30 construction occu-

pations (the specialized occupations – the six described in this brochure – require a vocational studies diploma).

The number of places available for this course in each region is determined annually by the CCQ, taking into account the estimated needs. These needs are assessed by the industry’s employer and union representatives, and the number of places available for the current year is published in the newspaper that serves each region concerned.



Training: A Priority for the Industry

Since 1987, the training system has been modernized. Each trade has its own study program, and there are nine vocational training centres specializing in the construction trades. Employers and unions are involved in the management of these specialized centres. Some 60 other centres also offer training in the construction trades. Study programs involve 600 to 1,800 hours (20 to 60 weeks) of training, depending on the trade.

To evaluate the need for graduates in each of the construction trades, the CCQ consults with the some 250 employers and union representatives sitting on 26 different vocational sub-committees under its aegis. In 2008, this exercise led the industry to estimate that it would need 6,800 workers with a diploma every year from 2008 to 2011.



Some 5,200 graduates were admitted into the industry in 2009.

In addition, to make up for the current lack of graduates and maintain the quality of the labour force, all apprentices who have not graduated and are admitted during a labour shortage must undertake obligatory training.

Training pays off!

Whether or not they hold a vocational studies diploma, apprentices must complete the apprenticeship program that is provided for their trade before they may become journeymen. The apprenticeship program is divided into periods of 2,000 hours each, while the total number of apprenticeship periods for each trade varies from 1 to 5, depending on the complexity of the trade and the variety of skills to be acquired. Once the apprenticeship is completed, apprentices may take the provincial qualification examination that will enable them to obtain the journeyman competency certificate for their trade.

Credits for hours of apprenticeship may be added to the apprentice's file to accelerate the accumulation of apprenticeship hours (a maximum number of hours has been established for each trade). Both those who hold a vocational studies diploma (graduate apprentices) and those who do not may benefit from this measure. Here is an overview:

Holder of a DEP recognized for practising the trade: This person may subtract all of the hours devoted to obtaining the DEP from the hours set out for the apprenticeship program. For example, for the trade of bricklayer-mason, the duration of training leading to a DEP is evaluated at 900 hours. The trade is composed of three apprenticeship periods totalling 6,000 hours. The apprentice will thus have to complete only 5,100 hours before being eligible to take the provincial qualification examination.

6,000 hours set out for the apprenticeship program – 900 hours completed to obtain the DEP = 5,100 hours

Non-graduate apprentice: Apprentices who were admitted into the industry due to a labour shortage must accumulate apprenticeship hours by taking one or more of the upgrading courses offered by the industry. In other words, the more upgrading training an apprentice receives, the more quickly he or she will be able to reach the status of journeyman. The number of hours credited varies depending on the activity.

Each trade has its own training and apprenticeship hours. In this brochure, you will find the number of hours leading toward obtaining a DEP under the heading "Training" and the number of hours set out for the apprenticeship period under the heading "Duration of training." The hours of credit activities can be found in the "Répertoire des activités de perfectionnement," which is available on the CCQ's Web site, www.ccq.org.

Earning a Living in Construction

Harmonious labour relations, greater accessibility for new workers, and a modern vocational training system make construction a very dynamic industry. For young people seeking a job, the construction industry offers undeniable advantages. Here are some of them.

Interesting hourly wages: up to \$34 per hour for a journeyman*

You can make a good living in construction! The minimum hourly wage is \$13 for an apprentice and up to \$34 for a journeyman.

The volume of work varies by season, but in all trades there are employees who work all year round. As soon as they enter the industry, graduates are able to earn good annual salaries. A carpenter-joiner with a diploma will work, for example, an average of 1,000 hours in the first year and earn \$19,200, as well as having the right to a range of social benefits. The average salary of a journeyman carpenter-joiner who works regularly on construction sites was over \$48,000 in 2009. This sum does not take account of work that might be done in sectors not covered by the collective agreements (residential renovation, for example).

Extended insurance coverage

From the first hour worked in the construction industry, the employer contributes to the insurance plans administered by the CCQ. There are several levels of coverage, established according to the number of hours worked by the employee. The more hours accumulated in a worker's file, the better is his or her insurance coverage.

These insurance plans may include life insurance and health insurance (medications, glasses, dental care, etc.), as well as a variety of health programs, for both employees and their dependents. Workers may also receive salary insurance benefits in case of short- or long-term disability.

* As of time of printing, the 2010-13 collective agreements had not been finalized. Therefore, the salaries given are those in the 2007-10 collective agreements.



Kevin Jeanson

An attractive pension plan

When workers enter the construction industry, they and their employers contribute to the pension plan (an amount is deducted at source for every hour worked). The funds obtained are invested in various financial vehicles. The retirement pension to which a worker has the right depends on the total of contributions accumulated and the yield of the pension fund.

The pension fund for workers in the construction industry totals around \$10 billion, which makes it one of the largest pension funds in Canada.

Financial incentives to retrain and upgrade

All construction companies are required to pay \$0.20 per hour worked into one of the industry's two training funds. These funds provide support to holders of a valid competency certificate who have worked in recent years and take upgrading courses in an activity related to their trade or occupation.

These funds, with assets of more than \$160 million, were created under the industry's collective agreements. The first, called the Fonds de formation de l'industrie de la construction (FFIC), is for workers in the industrial, civil engineering, and commercial and institutional sectors. The second, the Plan de formation du secteur résidentiel, is for workers in the residential sector.

Compensation may be paid to workers who avail themselves of upgrading and retraining activities – for example, reimbursement of travel and lodging costs, and payment of contributions to the insurance fund so that workers maintain their coverage. This way, workers keep their coverage. In 2008–09, almost 22,000 workers participated in an upgrading activity.

As you can see, the construction industry offers very attractive working conditions, matched in few other industries!

*As you can see,
the construction industry
offers very attractive
working conditions,
matched in few
other industries.*

Women on the Rise in the Construction Industry!

Along with its union and employer partners, the CCQ has committed itself to encouraging women to join the construction industry, with a target of 2% of the total employed labour force being female. To reach this objective, the CCQ has instituted the following measures:

- A woman with a secondary-level vocational studies diploma may obtain an apprentice competency certificate when an employer agrees to hire her. The certificate expires two years after it is obtained and may be renewed, as long as the holder has worked 150 hours in the industry during those two years.
- A woman holding recognition of vocational studies may obtain an apprentice competency certificate when an employer agrees to hire her. The certificate expires two years after it is obtained and may be renewed, as long as the holder has worked 150 hours in the industry during those two years.
- A woman may renew her occupation competency certificate if the CCQ's records show that she has worked in an occupation for at least 5,000 hours in the industry since January 1, 1971 and for at least one hour over a period of five consecutive years starting August 1, 1989.
- The CCQ gives priority to women when it recommends workers to an employer.

The female workforce in the construction industry has grown continually since 1997. In 2009, there were 1,731 women working in the industry. This number represents almost 1.2% of the total labour force, four times more than 10 years ago.

For a number of years, the CCQ has been conducting activities with a view to attracting women to the construction industry. For the 14th edition of this competition, two students each won a \$2,000 prize, becoming role models for women who wish to join the construction industry. They are Mylène Leclerc, diving student, winner in the “Construction Trades” section, and Marie Louise De Weber, carpentry-joinery student, winner in the “Construction Contractor” section.



Source: CCQ.

The 10 trades and occupations with the most women employees, 2009

Trade/occupation	Total
Painter	415
Labourer	264
Carpenter-joiner	263
Electrician	151
Plasterer	116
Surveyor	80
Tile setter	51
Pipe fitter	41
Tinsmith	34
Heavy equipment operator	34
Total women employees in these trades and occupations	1,449
Total women employees	1,731

Source: CCQ.

Women are most numerous in the trades of painter, carpenter-joiner, electrician, and plasterer and in the occupation of labourer.

Job Prospects

in the construction trades and occupations

	Employees in 2009	Average age in 2009	New employees in 2009	Job prospects from 2010 to 2013*	
TRADES TO DISCOVER					
Insulator	861	41	19	Good	Employment rising strongly, high availability.
Boiler maker	739	45	25	Quite good	Employment rising very strongly, very high availability. Ageing workforce.
Cement finisher	2,369	38	239	Excellent	Employment rising strongly, good availability. High turnover.
Reinforcing steel erector	1,249	36	89	Excellent	Employment rising strongly, good availability.
Erector mechanic (glazier)	1,921	39	143	Excellent	Employment rising slightly, low availability.
Interior systems installer	2,461	36	133	Quite good	Employment rising slightly, high availability. High turnover.
Ornamental iron worker	932	41	38	Excellent	Employment rising strongly, good availability.
THE CLASSICS					
Carpenter-joiner	38,396	38	2,608	Good	Employment rising slightly, good availability.
Electrician (excluding the specialty of security systems installer)	14,152	38	763	Good	Employment rising strongly, high availability.
Electrician specializing in security systems installation	1,075	39	51	Good	Employment rising strongly, high availability.
Tinsmith	4,023	39	196	Excellent	Employment rising strongly, good availability.
Welder	241	42	29	Excellent	Employment rising strongly, good availability. High turnover.
Pipe welder (high pressure)	533	48	7	Good	Employment rising strongly, very high availability. Ageing workforce.
Pipe fitter	7,903	38	430	Good	Employment rising strongly, high availability.
FOR THE MECHANICALLY MINDED					
Refrigeration mechanic	2,841	36	196	Excellent	Employment rising strongly, good availability.
Elevator mechanic	941	39	55	Excellent	Employment rising slightly, good availability. Graduates find jobs easily.
Heavy equipment mechanic	434	43	33	Good	Employment rising strongly, high availability. Ageing workforce.
Fire-protection mechanic	995	36	59	Good	Employment rising strongly, high availability.
Millwright	1,144	46	19	Good	Employment rising strongly, high availability. Ageing workforce.



	Employees in 2009	Average age in 2009	New employees in 2009	Job prospects from 2010 to 2013*	
GET BEHIND THE WHEEL					
Crane operator (excluding the the specialty of cement pump operator)	1,147	46	23	Excellent	Employment rising strongly, good availability. Ageing workforce.
Shovel operator	5,698	42	189	Good	Employment rising slightly, good availability. Ageing workforce.
Heavy equipment operator	6,660	44	264	Good	Employment rising slightly, good availability. Ageing workforce.
IF YOU LIKE STRAIGHT LINES					
Surveyor	1,024	38	129	Good	Employment rising slightly, good availability.
Bricklayer-mason	4,867	36	376	Good	Employment rising slightly, good availability. High turnover.
Tile setter	1,940	38	186	Excellent	Employment rising slightly, low availability.
Painter	5,281	43	331	Good	Employment rising slightly, good availability. High turnover.
Plasterer	2,996	38	207	Good	Employment rising slightly, good availability. High turnover.
Resilient flooring layer	1,190	41	108	Good	Employment rising slightly, good availability. High turnover.
FOR THE ADVENTUROUS					
Blaster-driller	593	41	46	Quite good	Employment rising slightly, high availability.
Roofer	5,418	35	632	Excellent	Employment rising lightly, very low availability. High turnover.
Structural steel erector	1,730	42	49	Good	Employment rising strongly, high availability.
Lineman	835	44	34	Excellent	Employment rising strongly, good availability. Ageing workforce.
Diver	116	34	12	Good	Employment rising slightly, good availability. High turnover.

Source: Commission de la construction du Québec, May 2010.

*** Methodology:**

The need for workers by trade falls into five categories (very low, low, quite low, quite high, high, and very high), according to the results of five parameters:

- (1) Average annual growth in forecast volume of work from 2010 to 2013.
- (2) Average rate of availability (a measurement of unemployment), in November 2009, of holders of competency certificates (apprentices, journeymen, occupation workers), according to the CCQ's records.
- (3) Unemployment rate of new graduates, in March 2009, according to the La Relance survey by the Ministère de l'Éducation, du Loisir and du Sport.
- (4) Forecast erosion rate (net departures before integration of new workers), according to the CCQ's records.
- (5) Proportion of workers aged 55 years and over in 2009, according to the CCQ's records.



Blaster

Description of the occupation

- Performs blasting work and all other work requiring the use of explosives
- Fragments or cuts up bedrock
- Demolishes structures
- Breaks up isolated rocks
- Removes tree roots
- Dynamites trenches
- Breaks up ice jams
- May have to use various tools and equipment linked to drilling, including manual, pneumatic, and hydraulic drills

Access to construction sites

- Individuals who present to the CCQ an academic transcript attesting to their having graduated with a DEP – Surveying and Topography may register for the 15-hour course *Cours de connaissance générale de l'industrie de la construction* (CCGIC), in order to obtain an occupation competency certificate.
 - The number of places reserved for the CCGIC depends on labour needs established annually by the construction industry.
- AND
- To perform the occupation of blaster on a construction site, individuals must hold a shotfirer certificate (issued by the CCQ) a general explosives permit (issued by the Sûreté du Québec) and an occupation competency certificate.

Skills and interests

- Like to work outdoors and be able to work outdoors under all climatic conditions
- Acquire knowledge related to application of concepts of geology, mineralogy, mathematics, physics, and chemistry
- Be physically strong
- Be independent, disciplined, responsible, and careful
- Respect the workplace health and safety rules
- Be available to travel to various regions

TRAINING

Study program:

Vocational studies diploma (DEP) – Forage et dynamitage (5092)

Duration of training:

900 hours

Academic prerequisite:

Category 1*, be over 18 years of age, and meet the requirements for obtaining the general explosives permit issued by the Sûreté du Québec.

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Occupation

Average annual salary

Blaster*	\$49,403
Those with at least 500 hours of work	\$56,566
Proportion**	76%

* Average salary in 2009 for this occupation for those having worked at least one hour of work.

** Proportion of workers in this occupation having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Blaster	\$29.84	\$29.84	\$25.96
Driller	\$29.84	\$29.84	\$26.81

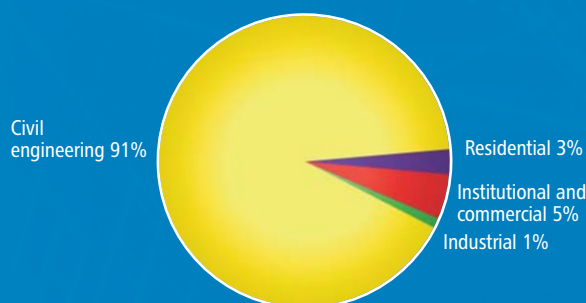
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ		
Blaster	10	16
Driller	19	30
Placement rate for graduates*	78.7%	80.0%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	10
Bas-Saint-Laurent—Gaspésie	59
Côte-Nord	54
Eastern Townships	59
Island of Montréal	16
Laval—Laurentides—Lanaudière	76
Mauricie—Bois-Francs	36
Montréal	59
Outaouais	25
Québec City	126
Saguenay—Lac-Saint-Jean	65
Other regions and James Bay	8
Total	593

Number of women employed

5

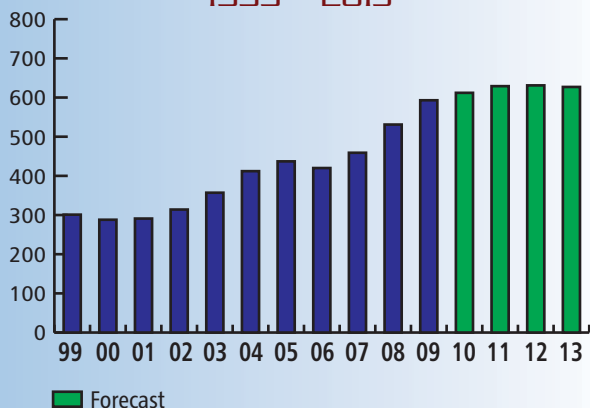
Mobility of workers

Proportion of workers asked to travel from one region to another:*

Blaster	61%
Driller	66%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Blaster	37	36%	55%	9%	169
Driller	43	20%	61%	19%	424
Total, Blaster-drillers	41	24%	60%	16%	593
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- The numerous roadwork sites and development of hydroelectric power stations will mean sustained demand for blaster-drillers in coming years. After a drop at the beginning of the 2000s, the number of blaster-drillers has risen constantly, and 593 were on the job in 2009.
- In 2009, 123 construction companies hired blaster-drillers. Most of these companies worked in the civil engineering and roadwork sector. The occupation of blaster-driller is among the most mobile in the construction industry: almost two thirds of employees in this occupation work outside of their region of residence.
- The average annual salary of these workers is over \$44,500. In fact, 76% of blaster-drillers work more than 500 hours and earn \$56,600 per year.
- A total of 46 new blaster-drillers joined the industry in 2009, which is above the average for the last five years.
- Since there is an abundance of civil engineering and roadwork projects, job prospects will remain quite good for blaster-drillers. However, a large number of workers are currently available and could fulfil part of the demand.



Training offered

in the following institution:

- CFP 24-Juin (Sherbrooke)





Boiler Maker

Trade

Description of the trade

- Manufactures, builds, assembles, installs, demolishes, and maintains a wide range of tanks, reservoirs, towers, and boilers, as well as other bracings, and auxiliary accessories made of steel, fibreglass, or another material
- Applies rigging, bolting, oxygen cutting, and welding techniques and assembles composite materials

Access to construction sites

- Present to the CCQ the original of the vocational studies diploma in boiler making and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the three apprenticeship periods of 2,000 hours each (6,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to physical properties of steel, application of welding techniques, assembly and disassembly of scaffoldings, reading of plans and specifications, mathematics, and geometric shapes
- Be in good physical condition (be able to work in uncomfortable positions) and have good manual dexterity
- Be able to move heavy objects and work at heights
- Respect workplace health and safety rules
- Be available to travel to remote regions

TRAINING

Study program:

Vocational studies diploma
– Chaudronnerie (5165)

Duration of training:

1,290 hours

Academic prerequisite:

Category 1*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$36,754
Journeyman**	\$48,319
Those with at least 500 hours of work	\$57,157
Proportion***	80%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of journeymen having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$19.52	\$19.51	\$18.59
2nd period	\$22.78	\$22.76	\$21.69
3rd period	\$27.66	\$27.64	\$26.33
Journeyman	\$32.54	\$32.52	\$30.98

Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	21	25
Placement rate for graduates*	93.2%	60.0%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	20
Bas-Saint-Laurent—Gaspésie	99
Côte-Nord	22
Eastern Townships	36
Island of Montréal	64
Laval—Laurentides—Lanaudière	122
Mauricie—Bois-Francs	83
Montréal	102
Outaouais	9
Québec City	73
Saguenay—Lac-Saint-Jean	109
Other regions and James Bay	0
Total	739

Number of women employed

5

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Boiler maker	60%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	27	73%	25%	2%	92
Journeyman	47	9%	58%	33%	647
Total, boiler makers	45	17%	54%	29%	739
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- This is one of the most mobile trades in the construction industry. Only two workers in five stay in their region of residence. The industry includes 73 construction contractors that hire boiler makers. The largest employer alone accounts for a third of the activity in boiler making.
- Employment dropped considerably in 2009, to reach 739 working boiler makers, due to the poor situation in the industrial sector, in which almost all of boiler-making activity is done. However, strong growth in activity is forecast for coming years, thanks to the expected recovery of industrial construction, notably in the aluminum sector.
- In 2009, 25 apprentices, all of whom had a diploma, were admitted to the industry. This is a slightly higher number than the average observed in recent years. Setting aside the less favourable situation in 2009, new graduates easily find employment after completing their training. In the first year of work, an apprentice receives an average annual salary of almost \$37,000. Four out of every five journeyman working at least 500 hours per year earn an average salary of \$57,000.
- Despite a very large pool of workers currently available, the need for boiler makers should be quite high in coming years, due to a very strong increase in demand forecast on construction sites.



Training offered

in the following institution:

- CF des métiers de l'acier (Montréal)





Bricklayer-mason

Trade

Description of the trade

- Cuts and saws pieces of masonry, and applies mortar, cement, and all other adhesives
- Joint-points masonry pieces such as bricks, blocks, and stones
- Erects various types of walls, foundations, partitions, chimneys, fireplaces, and furnaces. May also lay refractory cement

Some bricklayer-masons work in the specialized sector of masonry restoration.

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in bricklaying-masonry and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the three apprenticeship periods of 2,000 hours each (6,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to mathematics, geometry, alignment, and spatial perception of masonry elements
- Be precise
- Be able to work in a team
- Be in good physical condition
- Be able to move around on scaffoldings and work at heights

TRAINING

Study program:

Vocational studies diploma – Briquetage-maçonnerie (5303) and Masonry-bricklaying (5803)

Duration of training:

900 hours

Academic prerequisite:

Category 2*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$15,760
Journeyman**	\$30,411
Those with at least 500 hours of work	\$40,327
Proportion***	71%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of journeymen having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$19.12	\$19.32	\$18.10
2nd period	\$22.31	\$22.54	\$21.12
3rd period	\$27.09	\$27.37	\$25.64
Journeyman	\$31.87	\$32.20	\$30.17

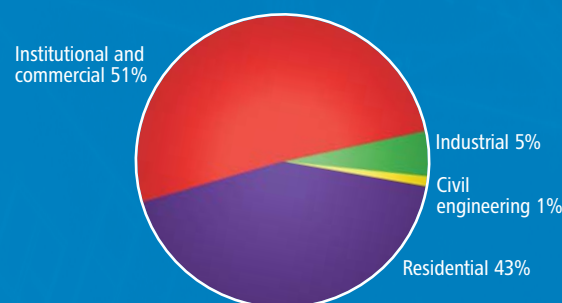
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	572	376
Placement rate for graduates*	83.1%	78.1%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	39
Bas-Saint-Laurent—Gaspésie	106
Côte-Nord	21
Eastern Townships	195
Island of Montréal	788
Laval—Laurentides—Lanaudière	1,235
Mauricie—Bois-Francs	314
Montréal	1,209
Outaouais	233
Québec City	568
Saguenay—Lac-Saint-Jean	147
Other regions and James Bay	12
Total	4,867

Number of women employed

18

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Bricklayer-mason	14%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	27	70%	29%	1%	2,359
Journeyman	44	15%	64%	21%	2,508
Total, bricklayer-masons	36	42%	47%	11%	4,867
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- In 2009, 4,867 bricklayer-masons were employed on construction sites, a slight drop compared to the preceding year. The institutional and commercial sector and the residential sector share almost all of the volume of work. About 1,300 employers hire bricklayer-masons.
- The rise in jobs for bricklayer-masons should continue in coming years, but at a less vigorous rate than in past years. The institutional and commercial sector should continue at a good pace in the near future, while activity should remain high in the residential sector.
- In 2009, 376 new apprentices joined the industry, three quarters of whom had a diploma. During the first year, employees earned an average salary of almost \$16,000. The average annual salary of a journeyman working at least 500 hours falling under the collective agreements was over \$40,000.
- Despite a pool of bricklayer-masons with a current good rate of availability, job prospects are good for coming years, due mainly to high worker turnover and slightly rising demand.



Training offered

in the following institutions:

- Centre d'excellence en formation industrielle (Windsor)
- CF Le Chantier (Laval)
- CF Rimouski-Neigette
- CFP Access Career Centre* (Saint-Lambert)
- CFP de l'Outaouais (Gatineau)
- CFP Jonquière
- CFP Paspébiac – Bonaventure (Bonaventure)
- CFP Pierre-Dupuy (Longueuil)
- CFP Qualitech (Cap-de-la-Madeleine)
- CFP 24-Juin (Sherbrooke)
- École des métiers de la construction de Montréal*
- École professionnelle de Saint-Hyacinthe
- École des métiers et occupations de l'industrie de la construction de Québec

* This school offers the program in English only.





Carpenter-joiner

Trade

Description of the trade

- Erects frames for walls, floors, and roofs
- Builds formwork
- Installs furnishings built into the building (counters, cupboards, shelving, etc.)
- Installs wood flooring, exterior siding, and joinery components such as doors and windows, stairs, mouldings, and hardware
- Lays out, cuts, assembles, and forms wood and metal pieces

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in carpentry-joinery and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the three apprenticeship periods of 2,000 hours each (6,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to applied mathematics, taking imperial and metric measurements, and interpretation of plans and technical specifications
- Be multi-skilled and independent
- Be able to work in a team and on scaffoldings
- Be able to use a wide variety of tools and safety equipment
- Be in good physical condition

TRAINING

Study program:

Vocational studies diploma – Charpenterie-menuiserie (1428) and Carpentry (1928)

Duration of training:

1,350 hours

Academic prerequisite:

Category 1*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$19,206
Journeyman**	\$36,007
Those with at least 500 hours of work	\$48,018
Proportion***	72%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of journeymen having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$19.29	\$19.28	\$17.77
2nd period	\$22.51	\$22.50	\$20.73
3rd period	\$27.33	\$27.32	\$25.18
Journeyman	\$32.15	\$32.14	\$29.62

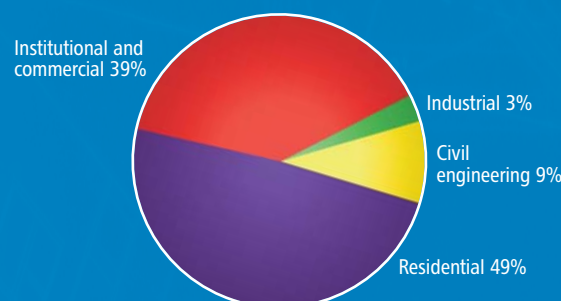
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	3,694	2,608
Placement rate for graduates*	86.4%	82.8%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	870
Bas-Saint-Laurent–Gaspésie	1,956
Côte-Nord	676
Eastern Townships	1,958
Island of Montréal	2,125
Laval–Laurentides–Lanaudière	8,280
Mauricie–Bois-Francs	2,940
Montréal	7,381
Outaouais	2,190
Québec City	7,797
Saguenay–Lac-Saint-Jean	2,120
Other regions and James Bay	103
Total	38,396

Number of women employed

263

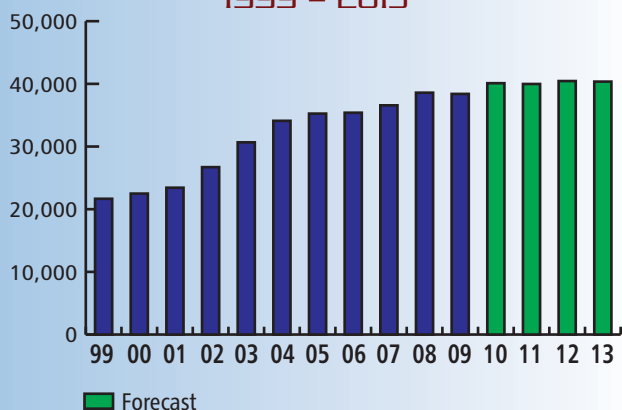
Mobility of workers

Proportion of workers asked to travel from one region to another:*

Carpenter-joiner	15%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	31	56%	41%	3%	18,892
Journeyman	44	14%	67%	19%	19,504
Total, carpenter-joiners	38	35%	54%	11%	38,396
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- In 2009, 38,396 carpenter-joiners were working on construction sites – double the number 10 years ago. This trade has the largest number of workers, almost one quarter of all construction workers. It is also one of the trades with the most women: there were 263 active female carpenter-joiners in 2009.
- Activity is concentrated in the residential sector and the institutional and commercial sector. More than 10,600 employers hire carpenter-joiners. Institutional and commercial construction should regain strength in coming years, while the level of activity should remain high in the residential sector.
- The industry integrated 2,608 apprentices in 2009, more than half of whom had a diploma. The proportion of new graduate apprentices has increased steadily. In the first year, an apprentice earns an average of \$19,200, while a journeyman who works at least 500 hours receives an average annual salary of over \$48,000 for work falling under the construction collective agreements.
- Job prospects are good for carpenter-joiners, despite the current good availability of workers, since demand will rise in coming years.



Training offered

in the following institutions:

- Centre Polymétier (Rouyn-Noranda)
- CF Le Chantier (Laval)
- CFP A.-W.-Gagné (Sept-Îles)
- CFP Châteauguay-Valley (Ormstown)**
- CFP de Châteauguay
- CFP de l'Outaouais (Gatineau)
- CFP du Nunavik (Inukjuak)**
- CFP Jonquière
- CFP Paspébiac-Bonaventure (Bonaventure)
- CFP Pavillon-de-L'Avenir (Rivière-du-Loup)
- CFP Pierre-Dupuy (Longueuil)
- CFP Pozer (Saint-Georges)
- CFP Qualitech (Cap-de-la-Madeleine)
- CFP 24-Juin (Sherbrooke)
- École des métiers de la construction de Montréal*
- École des métiers et occupations de l'industrie de la construction de Québec
- École professionnelle de Saint-Hyacinthe

* This school also offers the program in English.

** This school offers the program in English only.





Cement Finisher

Trade

Description of the trade

- Prepares and finishes cement surfaces on floors, walls, sidewalks, and pavement
- Applies metallic waterproofing, including the protective coating
- Installs waterproofing membranes

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in preparing and finishing concrete and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the two apprenticeship periods of 2,000 hours each (4,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to properties of cement (setting time, hardness, waterproofing)
- Be independent and careful
- Be able to work in a team
- Have good physical strength and endurance
- Possess good knowledge of applied mathematics and interpretation of plans and specifications

TRAINING

Study program:

Vocational studies diploma – Préparation et finition du béton (5117) and Preparing and Finishing Concrete (5617)

Duration of training:

900 hours

Academic prerequisite:

Category 2*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$16,052
Journeyman**	\$37,952
Those with at least 500 hours of work	\$47,399
Proportion***	78%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of journeymen having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$21.83	\$22.08	\$20.50
2nd period	\$26.51	\$26.81	\$24.90
Journeyman	\$31.19	\$31.54	\$29.29

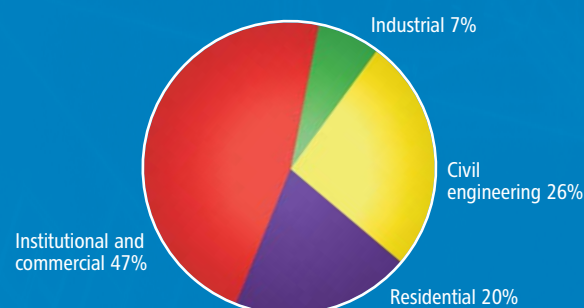
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	230	224239
Placement rate for graduates*	82.4%	73.3%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	41
Bas-Saint-Laurent-Gaspésie	55
Côte-Nord	22
Eastern Townships	65
Island of Montréal	373
Laval-Laurentides-Lanaudière	617
Mauricie-Bois-Francs	181
Montréal	394
Outaouais	103
Québec City	405
Saguenay-Lac-Saint-Jean	90
Other regions and James Bay	23
Total	2,369

Number of women employed

10

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Cement finisher	15%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 - 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	31	53%	45%	2%	1,075
Journeyman	43	13%	70%	17%	1,294
Total, cement finishers	38	31%	59%	10%	2,369
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- The number of cement finishers active in the industry has grown steadily since 1996. There were 2,369 workers active in 2009, including a high proportion of apprentices. A total of 800 employers hire cement finishers.
- Activity varies greatly by season. Half of the work is generated in the institutional and commercial sector, while almost a quarter comes from the civil engineering and roadwork sector.
- In recent years, admissions into the trade have jumped, rising from 31 new apprentices in 1996 to 239 in 2009. New apprentices earn an average of almost \$16,000 in the first year, while 80% of journeymen earn an average of almost triple that amount annually.
- Recruitment needs will be high in coming years thanks to favourable prospects in institutional and commercial construction and in large-scale projects, current and planned, in the civil engineering and roadwork sector. In addition, there will be needs related to high worker turnover.



Training offered

in the following institutions:

- École des métiers de la construction de Montréal*
- École des métiers et occupations de l'industrie de la construction de Québec

* This school also offers the program in English.





Crane Operator

(excluding concrete-pump operators)

Trade

Description of the trade

- Operates all types of cranes, including conventional truck-mounted on tracks or trucks, hydraulic telescoping cranes, boom trucks, and tower cranes.
- Operates travelling cranes and boring machines.
- Drives concrete pumps equipped with a distribution mast and activates the mechanisms.

** Please note that the economic data supplied on this page do not include those for concrete pump operators. Because this specialty was created in late 2007, the CCQ did not have enough data to provide documentation for the tables on this page.*

TRAINING

Study program:

Vocational studies diploma
– Conduite de grues (5248)

Duration of training:

870 hours

Academic prerequisite:

Category 2*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in crane operation and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the apprenticeship period of 2,000 hours in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to concepts of electricity, electronics, mathematics, applied physics, and thermodynamics
- Know how to interpret different symbols and signals
- Be precise and independent
- Be in good physical condition, have good dexterity and movement coordination
- Not suffer from vertigo, dizziness, or claustrophobia
- Due to threats to his or her own safety and that of others, the crane operator must always act responsibly
- Be able to communicate effectively

Average annual salary

Apprentice*	\$38,628
Journeyman**	\$55,320
Those with at least 500 hours of work	\$65,362
Proportion***	83%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of journeymen having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice – Class A	\$27.66	\$27.64	\$25.27
Journeyman – Class A	\$32.54	\$32.52	\$29.73
Apprentice – Class B	\$26.45	\$26.53	\$24.51
Journeyman – Class B	\$31.12	\$31.21	\$28.83

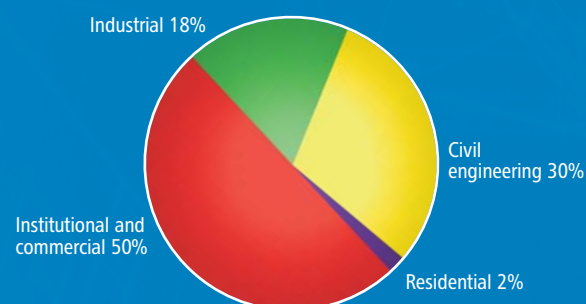
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	33	23
Placement rate for graduates*	97.2%	82.5%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	36
Bas-Saint-Laurent-Gaspésie	76
Côte-Nord	69
Eastern Townships	35
Island of Montréal	93
Laval-Laurentides-Lanaudière	243
Mauricie-Bois-Francis	86
Montréal	229
Outaouais	44
Québec City	156
Saguenay-Lac-Saint-Jean	65
Other regions and James Bay	15
Total	1,147

Number of women employed

6

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Crane operator	40%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	33	48%	47%	5%	92
Journeyman	47	10%	57%	33%	1,055
Total, crane operators	46	13%	56%	31%	1,147
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- In 2009, there were 1,147 crane operators working on construction sites. Since 1998, employment has been rising constantly. More than 300 construction companies hire crane operators, but the 12 largest ones report half of all hours worked.
- The distribution of jobs among sectors is quite stable from year to year. Almost half of the volume of work is done in institutional and commercial construction, while industrial construction and the civil engineering and roadwork sector share the other half.
- The industry integrated 23 new apprentices in 2009. Almost all of these new workers had a diploma and quickly found a job after they graduated. The average salary earned by a journeyman who works more than 500 hours is over \$65,000, one of the highest salaries in all of the construction trades.
- The job prospects are excellent for coming years. Demand will rise sharply thanks to growth in institutional and commercial construction and strong activity in civil engineering and roadwork. Because there is notable ageing of workers, a new generation is needed to fill positions left open by retirements.



Training offered

in the following institution:

- Centre de formation en conduite d'engins de chantier et de grues (Atelier-école Les Cèdres)





Diver

Description of the occupation

- Executes underwater activities related to construction, repairs, maintenance, installation, demolition, and inspection of underwater equipment or structures
- May perform underwater welding, oxygen cutting, carpentry, cement laying, electrical work, plumbing, or blasting
- May perform related work (for example, recovery of various objects)
- The diver is usually equipped with a self-contained or non-self-contained, limited or unlimited breathing apparatus

TRAINING

Study program:

Attestation of collegial studies – Plongée professionnelle (ELW.01)

Duration of training:

1,635 hours

Academic prerequisite:

Be 18 years old or over and hold a vocational studies diploma (DEP) or a high-school leaving diploma (DES), a Class A diving certificate, and a medical certificate.

Access to construction sites

- Individuals who present to the CCQ a college transcript attesting to their having graduated with an AEC – Professional Diving may register for the 15-hour course *Cours de connaissance générale de l'industrie de la construction* (CCGIC), in order to obtain an occupation competency certificate.
- The number of places reserved for the CCGIC depends on labour needs established annually by the construction industry.

AND

- Those who practise this occupation must be aged 18 years or over and hold the vocational qualification required in compliance with the competency standards in force of the Canadian Standards Association (CSA). They must have passed the decompression chamber test and undergo a medical examination.

Skills and interests

- Have knowledge linked to application of concepts of mathematics, physics, chemistry, biology, construction, and electricity
 - Be in good physical condition
 - Be able to move heavy objects
 - Have leadership and composure
 - Be independent and careful
- Divers are often faced with critical or unforeseen situations. They must work in environments that involve specific risks, such as confined spaces, underwater currents, contaminated water, ice, and changes in pressure. Low visibility and water temperature are other difficulties that divers experience.

Occupation

Average annual salary

Diver*	\$24,233
Those with at least 500 hours of work	\$41,852
Proportion**	49%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Proportion of workers in this occupation having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Diver	\$34.16	\$34.16	\$31.70

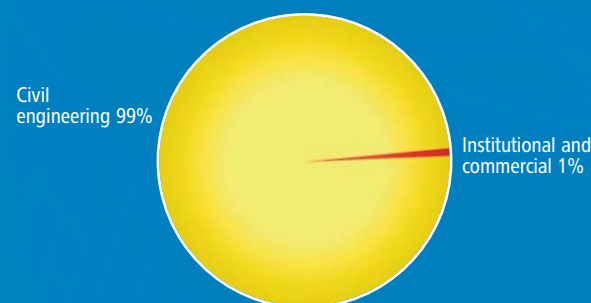
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	16	12
Placement rate for graduates*	na	na

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	0
Bas-Saint-Laurent—Gaspésie	4
Côte-Nord	7
Eastern Townships	3
Island of Montréal	20
Laval—Laurentides—Lanaudière	15
Mauricie—Bois-Francs	3
Montréal	20
Outaouais	2
Québec City	28
Saguenay—Lac-Saint-Jean	10
Other regions and James Bay	4
Total	116

Number of women employed

5

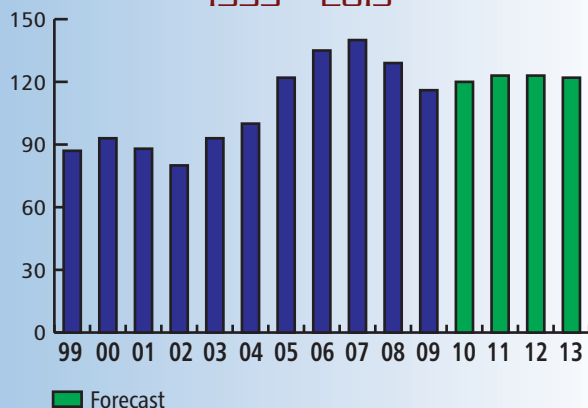
Mobility of workers

Proportion of workers asked to travel from one region to another:*

Diver	65%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Total, divers	34	43%	53%	4%	116
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- There were 116 divers working on sites in 2009, which is within the average for the last five years.
- Only 20 employers, working almost exclusively in civil engineering and roadwork, hire divers. These companies move around a great deal, and 65% of divers have reported hours worked in a region other than the one in which they live.
- The industry admitted 12 new divers in 2009, which is slightly below the average of the preceding five years. Out of this number, 10 had a diploma. Divers earn an average of more than \$24,000 per year, but they may earn almost double this amount when they work at least 500 hours.
- The demand for workers should be good in coming years, given the favourable situation in the civil engineering and roadwork sector.



Training offered

in the following institution:

- Institut maritime du Québec (Rimouski)





Electrician

Trade

Description of the trade

- Constructs, overhauls, alters, repairs, and maintains electrical installations
- The installations may be used for lighting, heating, or motive power. This work includes, in all cases, wires, cables, conduits, accessories, appliances, and apparatuses that form part of the installation.

Note: Work done by electricians must meet the requirements of the different applicable standards and regulations.

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in construction electricity and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

* Other programs are recognized for earning an apprentice competency certificate in the trade of electrician, such as the DEPs in construction electricity and in installation and maintenance of security systems, as well as numerous diplomas (DECs) and attestations of college studies (AECs) in the electro-technical sector (09).

Apprenticeship system

- Have completed the four apprenticeship periods of 2,000 hours each (8,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to application of mathematical calculations, electrical engineering, and electronics, as well as reading plans and technical specifications
- Be independent and careful
- Like working alone
- Have good professional ethics
- Be able to interpret standards, solve malfunctions, and work in tight spaces
- Be in good physical condition
- Have good physical coordination

Average annual salary

Apprentice*	\$19,862
Journeyman**	\$44,400
Those with at least 500 hours of work	\$55,456
Proportion***	77%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of journeymen having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$16.27	\$16.26	\$15.49
2nd period	\$19.52	\$19.51	\$18.59
3rd period	\$22.78	\$22.76	\$21.69
4th period	\$27.66	\$27.64	\$26.33
Journeyman	\$32.54	\$32.52	\$30.98

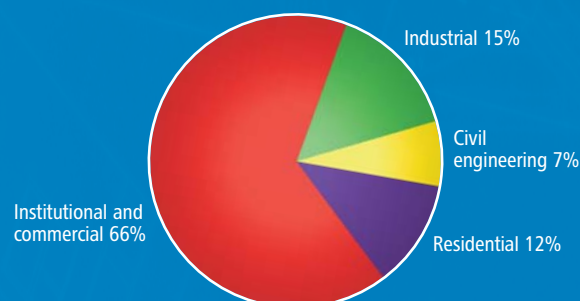
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	1,022	763
Placement rate for graduates*	87.1%	84.9%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



TRAINING

Study program:

Vocational studies diploma – Électricité (5295) and Electricity (5795)

Duration of training:

1,800 hours

Academic prerequisite:

Category 1*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Employed workers in 2009

Abitibi-Témiscamingue	381
Bas-Saint-Laurent—Gaspésie	424
Côte-Nord	286
Eastern Townships	501
Island of Montréal	1,759
Laval—Laurentides—Lanaudière	3,436
Mauricie—Bois-Francis	922
Montréal	3,177
Outaouais	564
Québec City	2,018
Saguenay—Lac-Saint-Jean	628
Other regions and James Bay	56
Total	14,152

Number of women employed

151

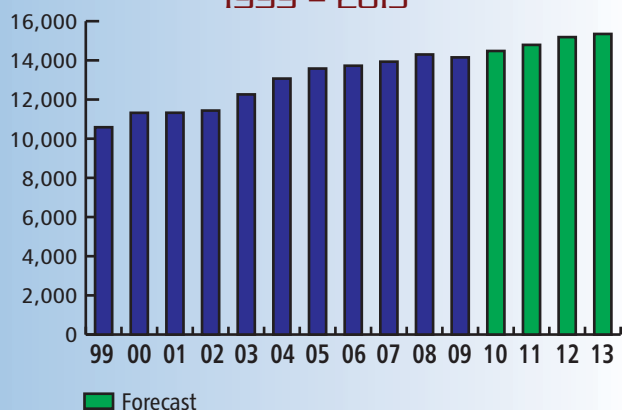
Mobility of workers

Proportion of workers asked to travel from one region to another:*

Electrician	12%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	28	66%	33%	1%	5,219
Journeyman	43	12%	70%	18%	8,933
Total, electricians	38	32%	56%	12%	14,152
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- In numbers of workers, this is the second-largest trade. There were 14,152 electricians employed in 2009. It is almost obligatory to have a diploma to have access to the trade of electrician. It is also one of the trades with the most women: in 2009, there were 151 female electricians. About 2,400 employers hire electricians.
- Industrial construction and the institutional and commercial sector generate most of the hours worked by electricians. Forecasts for these sectors are favourable for coming years. Residential construction, which accounts for 13% of the volume of work, should also maintain a high level of activity. In addition, electricians do maintenance and residential renovation, in which work will not slow down in the near future.
- In 2009, 763 apprentices joined the industry, which is below the historical average. There are numerous graduates seeking a job. The trade, which is not very seasonal in nature, allows for a high annual average of hours to be worked and thus a good average annual salary to be earned: in the first year, apprentices earn almost \$20,000. For a journeyman who works at least 500 hours, the average annual salary is more than \$55,000.
- Job prospects are good for electricians, given the forecast strong increase in demand in coming years. On the other hand, the availability of workers is currently high. The high number of graduates also raises concern.



Training offered

in the following institutions:

- Centre Polymétier (Rouyn-Noranda)
- Centre d'électrotechnologie Pearson (Lachine)*
- Centre d'études professionnelles (Saint-Jérôme)
- Centre intégré de mécanique industrielle de la Chaudière (Saint-Georges)
- Centre intégré de mécanique, de métallurgie et d'électricité (LaSalle)
- Centre régional intégré de formation (Granby)
- CFP Le Chantier (Laval)
- CFP A.-W.-Gagné (Sept-Îles)
- CFP Paspébiac-Bonaventure (Bonaventure)
- CFP de Baie-Comeau
- CFP de l'Outaouais (Gatineau)
- CFP des Moulins (Terrebonne)
- CFP Gabriel-Rousseau (Saint-Romuald)
- CFP Jonquière
- CFP Paul-Rousseau (Drummondville)
- CFP Pavillon-de-l'Avenir (Rivière-du-Loup)
- CFP Pierre-Dupuy (Longueuil)
- CFP Qualitech (Cap-de-la-Madeleine)
- CFP 24-juin (Sherbrooke)
- École des métiers de la construction de Montréal
- École des métiers et occupations de l'industrie de la construction de Québec
- École professionnelle de Saint-Hyacinthe
- École professionnelle des métiers (Saint-Jean-sur-Richelieu)

* This school also offers the program in English.
To find out which other schools offer the program in English, please contact the school board in your region.





Electrician

specializing in security systems installation

Trade

Description of the trade

- Constructs, overhauls, alters, repairs, and maintains various security systems such as fire alarms, burglar alarms, and emergency communications, access cards, and video surveillance systems

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in installation and maintenance of security systems and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the three apprenticeship periods of 2,000 hours each (6,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to electronics, electricity, computers, operation of computer systems, and problem-resolution processes
- Be independent and careful
- Be capable of reading English
- Be able to adjust apparatuses precisely
- Have good near vision
- Have good physical agility and dexterity

TRAINING

Study program:

Vocational studies diploma
– Installation et entretien de systèmes de sécurité (5296)

Duration of training:

1,485 hours

Academic prerequisite:

Category 1*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$17,504
Journeyman**	\$29,657
Those with at least 500 hours of work	\$43,646
Proportion***	64%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of journeymen having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$15.59	\$15.88	\$14.96
2nd period	\$18.19	\$18.53	\$17.45
3rd period	\$22.08	\$22.50	\$21.19
Journeyman	\$25.98	\$26.47	\$24.93

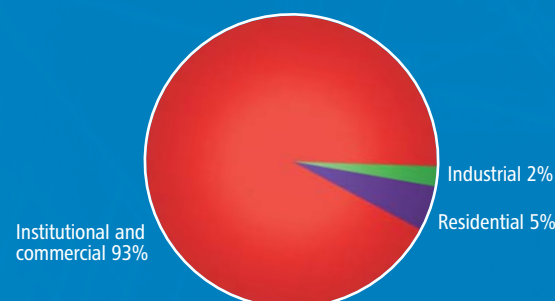
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	71	51
Placement rate for graduates*	94.4%	91.9%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	14
Bas-Saint-Laurent—Gaspésie	18
Côte-Nord	12
Eastern Townships	28
Island of Montréal	118
Laval—Laurentides—Lanaudière	279
Mauricie—Bois-Francs	71
Montréal	261
Outaouais	14
Québec City	227
Saguenay—Lac-Saint-Jean	25
Other regions and James Bay	8
Total	1,075

Number of women employed

19

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Security systems installer	12%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	30	58%	40%	2%	310
Journeyman	43	10%	81%	9%	765
Total, security systems installers	39	24%	69%	7%	1,075
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- Employment in this specialty, which included 1,075 employed workers in 2009, has remained relatively stable over the last two years. Almost 370 employers hire security systems installers.
- Institutional and commercial construction is responsible for almost all of the hours worked by security systems installers. Institutional construction will be on the rise in coming years, while commercial construction should regain momentum after a temporary drop in activity.
- In 2009, 51 apprentices were admitted into the specialty; this is below the average registered from 2004 to 2008. Graduates, representing more than 80% of apprentices, successfully enter the job market after obtaining their diploma. They represent more than 80% of apprentices. The annual average salary for an apprentice is \$17,500 in the first year, and it rises to almost \$30,000 for a journeyman. On the other hand, two thirds of journeymen who work at least 500 hours earn more than \$43,600 per year.
- Job prospects are good due to a strong rise in demand forecast for coming years. In fact, the situation in the institutional sector is favourable to this trade.



Training offered

in the following institutions:

- CF Compétence de la Rive-Sud (La Prairie)
- École des métiers et occupations de l'industrie de la construction de Québec





Elevator Mechanic

Trade

Description of the trade

- Installs, repairs, modernizes, and maintains mechanical conveyance systems such as traction and hydraulic elevators, escalators, and rolling sidewalks, according to the requirements of the standards in force.

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in elevator mechanics and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the five apprenticeship periods of 2,000 hours each (10,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to assembly techniques, electronics, electricity, hydraulics, mechanics, instrumentation, and interpretation of applicable standards
- Be independent and careful
- Have professional ethics
- Be able to analyze different systems, work in a team, and work at heights and in restricted spaces
- Have good coordination and be in good physical condition

TRAINING

Study program:

Vocational studies diploma – Mécanique d'ascenseur (5200) and Elevator Mechanics (5700)

Duration of training:

1,800 hours

Academic prerequisite:

Category 1*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$39,516
Journeyman**	\$68,555
Those with at least 500 hours of work	\$79,494
Proportion***	85%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of journeymen having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$18.17	\$18.01	\$17.14
2nd period	\$21.80	\$21.61	\$20.56
3rd period	\$25.43	\$25.21	\$23.99
4th period	\$30.88	\$30.61	\$29.13
5th period	\$30.88	\$30.61	\$29.13
Journeyman	\$36.33	\$36.01	\$24.27

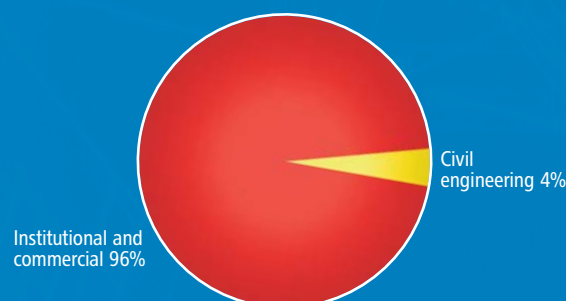
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	64	55
Placement rate for graduates*	93.5%	100.0%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	9
Bas-Saint-Laurent—Gaspésie	8
Côte-Nord	0
Eastern Townships	15
Island of Montréal	193
Laval—Laurentides—Lanaudière	219
Mauricie—Bois-Francis	17
Montréal	224
Outaouais	18
Québec City	148
Saguenay—Lac-Saint-Jean	8
Other regions and James Bay	82
Total	941

Number of women employed

10

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Elevator mechanic	23%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	30	62%	37%	1%	321
Journeyman	43	10%	78%	12%	620
Total, elevator mechanics	39	28%	64%	8%	941
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- In 2009, there were 941 elevator mechanics, the same number as in 2008. A third of them were apprentices. These workers are hired by 80 employers.
- Elevator mechanics work almost exclusively in the institutional and commercial sector, where the volume of work will remain high. Their work is not very seasonal, which enables them to have the highest average annual hours worked of all the trades (1,450).
- In 2009, 55 new apprentices were admitted into the industry, 60% of whom had a diploma. In the first year of work, apprentices earn an average salary of \$39,500, while the average annual income of journeymen working at least 500 hours may be as high as \$79,500. This is the highest salary of all construction trades.
- Job prospects are excellent for elevator mechanics, despite the good current availability of workers, since demand will increase in coming years. Moreover, graduates in this trade do very well on the job market.



Training offered

in the following institution:

- École des métiers du Sud-Ouest de Montréal*

* This school also offers the program in English.





Erector Mechanic (Glazier)

Trade

Description of the trade

- Prepares, assembles, installs, and adjusts glass products and all similar pieces made of metal or substitute materials
- Installs and repairs all sort of glass, including tympan panels, ornamental and decorative items (mirrors), prefabricated sheeting, curtain walls (prefabricated or not), doors, windows, garage doors, breast walls, and similar pieces made of sheet or moulded metal.

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in assembly and installation of glass products and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the three apprenticeship periods of 2,000 hours each (6,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to mathematics, geometric forms, and reading of plans and specifications
- Be in good physical condition
- Be capable of moving heavy objects and working at heights
- Be precise and have good manual dexterity
- Respect the workplace health and safety rules

TRAINING

Study program:

Vocational studies diploma – Montage et installation de produits verriers (5139)
(This course will be offered starting in 2009.)

Duration of training:

1,350 hours

Academic prerequisite:

Category 1*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$26,030
Journeyman**	\$38,978
Those with at least 500 hours of work	\$52,196
Proportion***	72%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of journeymen having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$19.17	\$19.37	\$17.51
2nd period	\$22.37	\$22.60	\$20.43
3rd period	\$27.16	\$27.44	\$24.81
Journeyman	\$31.95	\$32.28	\$29.19

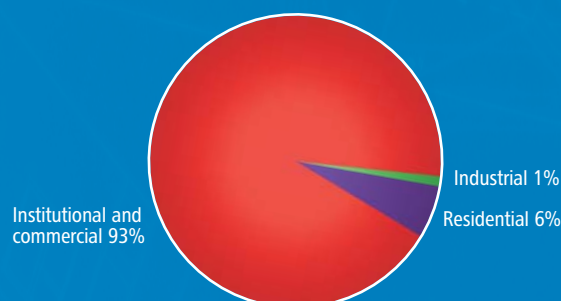
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	182	143
Placement rate for graduates*	84.1%	92.9%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	43
Bas-Saint-Laurent-Gaspésie	36
Côte-Nord	16
Eastern Townships	45
Island of Montréal	244
Laval-Laurentides-Lanaudière	572
Mauricie-Bois-Francis	80
Montréal	401
Outaouais	117
Québec City	276
Saguenay-Lac-Saint-Jean	80
Other regions and James Bay	11
Total	1,921

Number of women employed

8

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Erector mechanic (glazier)	10%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	32	51%	46%	3%	971
Journeyman	45	9%	74%	17%	950
Total, erector mechanics (glaziers)	39	30%	60%	10%	1,921
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- Since this trade has come under the construction collective agreements (1997), employment has risen almost constantly. In 2009, there were 1,921 erector mechanics (glaziers), double the number 12 years ago. More than half of them were apprentices. About 500 employers use the services of erector mechanics (glaziers).
- Most of the work is done in the institutional and commercial sector, which also includes high-rise residential buildings. The situation should remain favourable in this sector in coming years, since large-scale projects are on the drawing board for hospitals and educational buildings.
- A total of 143 new apprentices, a third of whom had a diploma, were admitted to construction sites in 2009. Apprentices make an average salary of \$26,000 the first year, while journeymen who work at least 500 years earn an average of \$52,000 per year.
- Job prospects are excellent for this trade. The vigour of the institutional and commercial sector will generate growth in demand for erector mechanics (glaziers), while worker availability is limited.



Training offered

in the following institutions:

- CF Le Chantier (Laval)
- CFP Samuel-De Champlain (Québec)





Fire-protection Mechanic

Trade

Description of the trade

- Installs, overhauls, alters, repairs, and maintains automatic sprinkler systems, including piping and other equipment used to prevent and fight fires
- Prepares, assembles, installs, and connects piping and accessories, and activates, verifies, and inspects systems.

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in fire-protection mechanics and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the four apprenticeship periods of 2,000 hours each (8,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to application of concepts of mathematics, hydraulics, and electricity
- Know how to interpret plans and technical specifications
- Be independent and analytical
- Be well organized
- Be in good physical condition
- Be capable of moving heavy objects
- Be able to work on scaffoldings

TRAINING

Study program:

Vocational studies diploma – Mécanique de protection contre les incendies (5312)

Duration of training:

900 hours

Academic prerequisite:

Category 2*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$29,916
Journeyman**	\$46,826
Those with at least 500 hours of work	\$56,042
Proportion***	81%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of journeymen having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$16.27	\$16.26	\$15.49
2nd period	\$19.52	\$19.51	\$18.59
3rd period	\$22.78	\$22.76	\$21.69
4th period	\$27.66	\$27.64	\$26.33
Journeyman	\$32.54	\$32.52	\$30.98

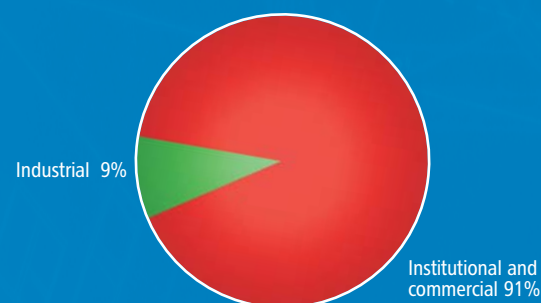
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	61	59
Placement rate for graduates*	97.0%	88.9%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	10
Bas-Saint-Laurent—Gaspésie	23
Côte-Nord	9
Eastern Townships	23
Island of Montréal	101
Laval—Laurentides—Lanaudière	334
Mauricie—Bois-Francis	27
Montréal	211
Outaouais	21
Québec City	155
Saguenay—Lac-Saint-Jean	41
Other regions and James Bay	40
Total	995

Number of women employed

2

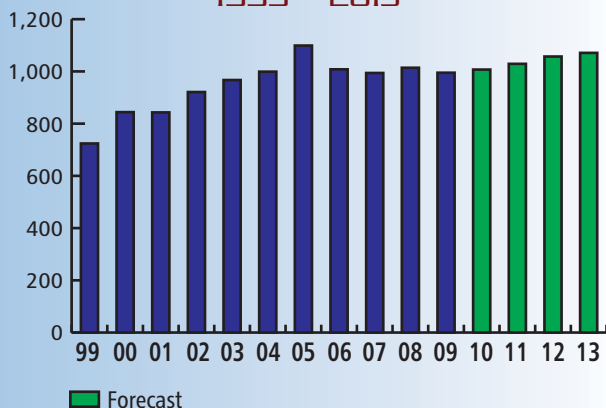
Mobility of workers

Proportion of workers asked to travel from one region to another:*

Fire-protection mechanic	24%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	28	68%	32%	0%	329
Journeyman	40	14%	78%	8%	666
Total, fire-protection mechanics	36	32%	63%	5%	995
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- There are about 1,000 fire-protection mechanics. Employment has been quite stable for several years. The work is not very seasonal, which enables workers to work more hours. A small number of employers, about 100, hire fire-protection mechanics. The 10 largest employers do more than half of the work.
- The work is done mainly in the institutional and commercial sector. The volume of work in the institutional field should remain high, while it should pick up in the commercial field, after a temporary drop. Regular preventive maintenance, intended to reduce risks and costs associated with system failures, has increased the opportunities for this trade.
- Almost 60 apprentices entered the industry in 2009, more than 60% of whom had a diploma. Apprentices earn an average of \$30,000 in the first year. When they reach journeyman status, their annual average salary reaches \$56,000 if they work at least 500 hours. The annual average hours worked is one of the highest among the construction trades.
- Job prospects are good thanks to a strong forecast increase in demand that will result, among other things, from the tightening of regulations for protection of buildings. On the other hand, the average age of fire-protection mechanics is among the lowest in the industry; as a consequence, the need to replace older workers is still limited.



Training offered

in the following institution:

- École Polymécanique de Laval





Heavy Equipment Mechanic

Trade

Description of the trade

- Maintains and repairs cranes, shovels, levellers, spreaders, rollers, tractors, off-road trucks, and all motorized construction equipment and machinery, fixed or mobile, used for grading, handling, or excavation.

Access to construction sites

- Present to the CCQ the original of the vocational studies diploma in construction equipment mechanics and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the three apprenticeship periods of 2,000 hours each (6,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to mechanics for diesel, two-stroke, and four-stroke engines, hydraulics, pneumatics, electricity, and electronics
- Be careful and resourceful
- Have a sense of initiative
- Work neatly
- Be in good physical condition
- Be capable of moving heavy objects

TRAINING

Study program:

Vocational studies diploma
– Mécanique d'engins de chantier (5055)

Duration of training:

1,800 hours

Academic prerequisite:

Category 1*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$30,301
Journeyman**	\$49,119
Those with at least 500 hours of work	\$77,486
Proportion***	61%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of journeymen having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$18.86	\$19.42	\$17.99
2nd period	\$22.00	\$22.66	\$20.99
3rd period	\$26.72	\$27.51	\$25.49
Journeyman	\$31.43	\$32.37	\$29.99

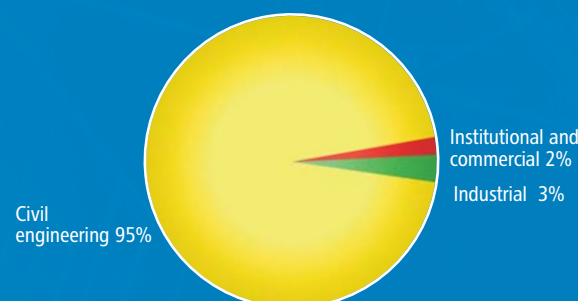
Wage in April 2010.

Integration into the labour market

	Annual average 2004-2008	2009
New apprentices admitted by the CCQ	24	33
Placement rate for graduates*	92.4%	86.7%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	20
Bas-Saint-Laurent-Gaspésie	60
Côte-Nord	51
Eastern Townships	17
Island of Montréal	10
Laval-Laurentides-Lanaudière	26
Mauricie-Bois-Francis	31
Montréal	39
Outaouais	4
Québec City	87
Saguenay-Lac-Saint-Jean	86
Other regions and James Bay	3
Total	434

Number of women employed



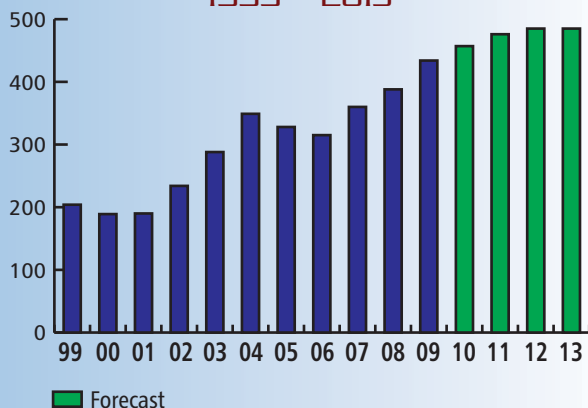
Mobility of workers

Proportion of workers asked to travel from one region to another:*

Heavy equipment mechanic	50%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 - 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	33	45%	51%	4%	80
Journeyman	46	11%	62%	27%	354
Total, heavy equipment mechanics	43	17%	61%	22%	434
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- Thanks to the major hydroelectric sites, the presence of heavy equipment mechanics on construction sites reached a peak in 2009, at 434 employees. On the other hand, many work in workshops and are therefore not covered by the industry's collective agreements. This is why there were only 80 apprentices active on sites in 2009, compared to 354 journeymen.
- Almost 150 employers hire heavy equipment mechanics. The civil engineering and roadwork sector generates most of the work in this trade. Roadwork and power stations, underway and on the drawing board, will continue to stimulate activity and will result, as it has in the past, in half of these workers travelling outside their region of residence.
- In 2009, 33 new apprentices joined the industry. During the first year, an apprentice earns an average salary of more than \$30,000, while the annual average salary of a journeyman who works at least 500 hours may reach \$77,500.
- Job prospects are good for heavy equipment operators. The demand will rise strongly, notably on large sites such as the La Romaine hydroelectric complex. Forecasts also call for a growing number of departures due to retirement, since almost 1 heavy equipment mechanic in 5 is aged 55 or over.



Training offered

in the following institutions:

- CF en mécanique de véhicules lourds (Saint-Romuald)
- CFP A.-W.-Gagné (Sept-Îles)
- CFP Carrefour Formation Mauricie (Shawinigan)
- CFP du Nunavik (Inukjuak)
- CFP Lac-Abitibi (La Sarre)
- CFP L'Envol (Carleton)
- CFP Mont-Laurier
- CFP Paul-Gérin-Lajoie (Vaudreuil-Dorion)
- CFP Pavillon-de-l'Avenir (Rivière-du-Loup)
- CFP Roberval
- CFP Wilbrod-Bherer (Québec)
- CFP 24-Juin (Sherbrooke)
- École des métiers de l'équipement motorisé de Montréal





Heavy Equipment Operator

Trade

Description of the trade

The trade of heavy equipment operator has four specialties.

- Tractor operator: specialist who may operate tractors, bulldozers, scrapers, loaders, etc.
- Leveller operator: specialist who operates levellers
- Spreader operator: specialist who operates asphalt and cement spreaders, graders, etc.
- Roller operator: specialist who operates rollers, roller-compressors, and compactors.

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in operation of heavy equipment and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the apprenticeship period of 2,000 hours in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to the reading of plans, survey monuments, and concepts of mechanics, hydraulics, and electricity
- Be resourceful, careful, and vigilant
- Be capable of working alone
- Have good physical coordination
- Be dextrous

TRAINING

Study program:

Vocational studies diploma
– Conduite d'engins de chantier (5220)

Duration of training:

1,095 hours

Academic prerequisite:

Category 2*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$23,465
Journeyman**	\$34,383
Those with at least 500 hours of work	\$48,154
Proportion***	68%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of journeymen having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice – Class AA	\$26.32	\$26.42	-
Journeyman – Class AA	\$30.97	\$31.08	-
Apprentice – Class A	\$25.47	\$25.63	\$23.71
Journeyman – Class A	\$29.97	\$30.15	\$27.89
Apprentice – Class B	\$24.83	\$25.03	\$23.15
Journeyman – Class B	\$29.21	\$29.45	\$27.23

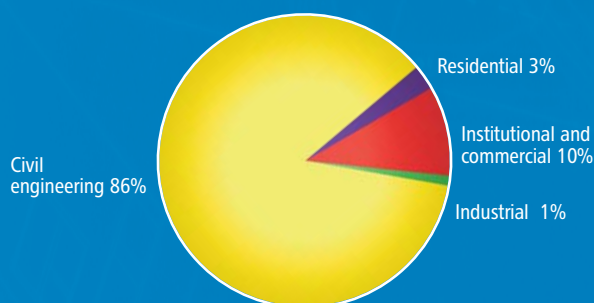
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	245	264
Placement rate for graduates*	73.1%	69.6%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	349
Bas-Saint-Laurent—Gaspésie	554
Côte-Nord	318
Eastern Townships	195
Island of Montréal	305
Laval—Laurentides—Lanaudière	1,222
Mauricie—Bois-Francs	531
Montréal	1,096
Outaouais	318
Québec City	1,177
Saguenay—Lac-Saint-Jean	553
Other regions and James Bay	42
Total	6,660

Number of women employed

34

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Heavy equipment operator	21%
All trades and occupations	17%

* Excludes travel between the regions of Montérégie, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	33	45%	52%	3%	1,205
Journeyman	47	11%	60%	29%	5,455
Total, heavy equipment operators	44	17%	59%	25%	6,660
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- In 2009, 6,660 heavy equipment operators were working for more than 1,790 employers. Different types of equipment are used. Tractor operation accounts for 62% of the work; roller operation, 14%; spreader operation, 10%; backhoe operation, 8%; and leveller operation, 6%.
- Since the beginning of the 2000s, this trade has seen employment grow thanks to numerous projects in the hydroelectric, roadwork, and infrastructure fields. However, the work is seasonal: there is six times more work in summer than in winter.
- Since 2003, more than 200 apprentices have been admitted into the industry every year. In 2009, the number of new apprentices stood at 264, among whom almost 1 in 5 had a diploma. During the first year of work, an apprentice's average salary is about \$23,500, while the annual average salary of a journeyman who works at least 500 hours is over \$48,000.
- Ageing of workers, combined with an increase in demand, will lead to good job prospects in coming years.



Training offered

in the following institutions:

- Centre national de conduite d'engins de chantier (Saint-Jean-Chrysostome)





Insulator

Trade

Description of the trade

- Installs, repairs, or renovates thermal insulation systems in order to preserve the temperature of a liquid or gas
- Insulates piping systems, air ducts, and reservoirs and applies protective finishes
- Installs rigid or semi-rigid insulation

Insulators work in institutional and commercial buildings, industries, etc.

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in insulation and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the three apprenticeship periods of 2,000 hours each (6,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to physics, technical drawing, working with tools and machinery
- Be careful and resourceful
- Be able to work in a team
- Be in good physical condition
- Be able to lift heavy objects, move around on scaffoldings, and work at heights

TRAINING

Study program:

Vocational studies diploma – Calorifugeage (5119)

Duration of training:

900 hours

Academic prerequisite:

Category 2*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$35,977
Journeyman**	\$44,759
Those with at least 500 hours of work	\$55,175
Proportion***	78%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of journeymen having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$19.52	\$19.69	\$18.59
2nd period	\$22.78	\$22.97	\$21.69
3rd period	\$27.66	\$27.90	\$26.33
Journeyman	\$32.54	\$32.82	\$30.98

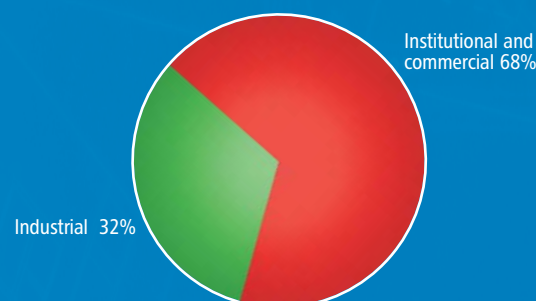
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	54	19
Placement rate for graduates*	93.2%	84.6%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	13
Bas-Saint-Laurent-Gaspésie	16
Côte-Nord	4
Eastern Townships	41
Island of Montréal	102
Laval-Laurentides-Lanaudière	265
Mauricie-Bois-Francs	58
Montréal	159
Outaouais	24
Québec City	133
Saguenay-Lac-Saint-Jean	45
Other regions and James Bay	1
Total	861

Number of women employed

28

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Insulator	13%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	31	55%	42%	3%	243
Journeyman	45	12%	65%	23%	618
Total, insulators	41	24%	59%	17%	891
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- For a second consecutive year, the number of insulators dropped slightly; there were 861 in 2009. This reduction is explained by the sluggish industrial sector.
- Insulators are very specialized workers who are hired by about 140 employers, mainly in the institutional and commercial sector and the industrial sector.
- A total of 19 new apprentices joined the industry in 2009, a number far below the average in recent years (54). An apprentice insulator may hope to earn almost \$36,000 during the first year of work. The annual salary of a journeyman who works at least 500 hours may reach more than \$55,000 per year.
- Job prospects are good for insulators, thanks to major projects to get underway in the institutional and commercial sector and the forecast recovery of the industrial sector.



Training offered

in the following institution:

- École des métiers de la construction de Montréal





Interior Systems Installer

Trade

Description of the trade

- Erects interior walls and partitions
- Lays gypsum on walls and ceilings
- Installs suspended ceilings made of acoustic or decorative tiles
- Installs all types of laths
- Applies levelling, surface division, cutting, attachment, anchorage, and assembly techniques

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in installing interior systems and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the three apprenticeship periods of 2,000 hours each (6,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to applying mathematical concepts, taking of imperial and metric measurements, and interpretation of plans and technical specifications
- Be independent and careful
- Be well organized
- Be in good physical condition
- Be capable of moving heavy objects
- Be able to work on scaffoldings

TRAINING

Study program:

Vocational studies diploma – Pose de systèmes intérieurs (5118)

Duration of training:

645 hours

Academic prerequisite:

Category 2*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$20,481
Journeyman**	\$38,982
Those with at least 500 hours of work	\$48,463
Proportion***	77%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of journeymen having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$19.29	\$19.28	\$17.77
2nd period	\$22.51	\$22.50	\$20.73
3rd period	\$27.33	\$27.32	\$25.18
Journeyman	\$32.15	\$32.14	\$29.62

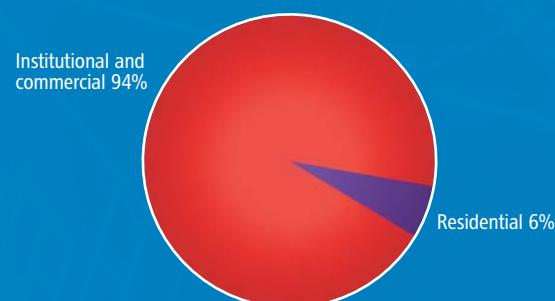
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	299	133
Placement rate for graduates*	82.5%	72.1%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	23
Bas-Saint-Laurent-Gaspésie	13
Côte-Nord	11
Eastern Townships	69
Island of Montréal	401
Laval-Laurentides-Lanaudière	757
Mauricie-Bois-Francs	107
Montréal	514
Outaouais	189
Québec City	297
Saguenay-Lac-Saint-Jean	72
Other regions and James Bay	8
Total	2,461

Number of women employed

32

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Interior systems installer	10%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	30	58%	41%	1%	1,261
Journeyman	42	65%	67%	16%	1,200
Total, interior systems installers	36	38%	54%	8%	2,461
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- In 2009, 2,461 interior systems installers were working in the industry. Out of this number, more than half were apprentices. They are hired by 973 employers.
- The institutional and commercial sector is responsible for almost all of the employment of interior system installers. In the institutional field, the volume of work should remain high, while in the commercial field it should improve after a temporary slowdown.
- In 2009, 133 apprentices joined the industry, a much lower number than in preceding years. Almost two thirds of the new apprentices have a diploma. The annual average salary of apprentices is \$20,500 in the first year, while journeymen who work at least 500 hours earn an annual average salary of over \$48,000.
- The job prospects are quite good for this trade. The workers are relatively young but there is high turnover, so the trade continually requires new workers. In addition, demand will grow slightly on construction sites.



Training offered

in the following institutions:

- École des métiers de la construction de Montréal
- École des métiers et occupations de l'industrie de la construction de Québec





Lineman

Occupation

Description of the occupation

- Does installation and repairs of electric-energy transmission and distribution lines and of energy transformer stations
- Deals with all aspects of overhead or underground lines, from erecting a structure to installing a cable network to maintenance and repairs
- Linemen may work for construction contractors specializing in this area or for a network operator (e.g., Hydro Québec)

Access to construction sites

- Individuals who present to the CCQ an academic transcript attesting to their having graduated with a DEP – installation of electrical transmission lines may register for the 15-hour course *Cours de connaissance générale de l'industrie de la construction* (CCGIC), in order to obtain an occupation competency certificate.
- The number of places reserved for the CCGIC depends on labour needs established annually by the construction industry.

Skills and interests

- Have knowledge linked to application of concepts of electricity, mathematics, physics, and chemistry
- Be independent and careful
- Be in good physical condition, dextrous, and have a good sense of balance (agility and flexibility)
- Be able to work in a team
- Be available to travel regularly outside of the region of residence, often for extended periods
- Apply workplace health and safety rules
- Be capable of working at heights

TRAINING

Study program:

Vocational studies diploma
– Montage de lignes électriques (5185)

Duration of training:

900 hours

Academic prerequisite:

Category 2*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Lineman*	\$57,073
Those with at least 500 hours of work	\$64,884
Proportion**	86%

* Average salary in 2009 of journeymen having reported at least one hour of work.

** Proportion of workers in this occupation having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Transport and distribution lines	Communications networks
Lineman		
Class 1	\$32.86	-
Class 2	\$31.47	-
Class 3	\$27.82	-
Class 4	\$27.09	-
"T" lineman	-	\$33.62

Wage in April 2010.

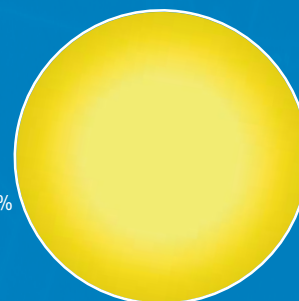
Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	26	34
Placement rate for graduates*	89.2%	89.9%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector

Civil engineering 100%



Employed workers in 2009

Abitibi-Témiscamingue	37
Bas-Saint-Laurent-Gaspésie	44
Côte-Nord	46
Eastern Townships	23
Island of Montréal	31
Laval-Laurentides-Lanaudière	160
Mauricie-Bois-Francs	74
Montréal	112
Outaouais	27
Québec City	205
Saguenay-Lac-Saint-Jean	73
Other regions and James Bay	3
Total	835

Number of women employed

3

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Lineman	62%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Total, linemen	44	21%	55%	24%	835
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- In 2009, there were 835 linemen on construction sites, a considerable increase of 10% over 2008. The growth in work on hydroelectric power stations since the beginning of the decade has been good for linemen, for whom almost all the volume of work comes from the civil engineering and road-work sector.
- Almost 60 companies in the industry hire linemen. The largest firms are responsible for a very high proportion of the activity. The work is done mainly on transmission lines, which generally requires linemen to work outside their region of residence.
- In 2009, 34 new workers joined the industry, which is above the average for the last five years. Linemen who work at least 500 hours earn an annual average salary of up to \$65,000.
- Job prospects remain excellent for linemen. Hydroelectric power stations will stimulate the demand for workers, and the workforce is ageing, which will create the need for new workers.



Training offered

in the following institution:

- CF en montage de lignes (Saint-Henri-de-Lévis)





Millwright

Trade

Description of the trade

- Installs, repairs, adjusts, assembles and disassembles, and handles machinery
- Manufactures jigs for this machinery

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in industrial construction and maintenance mechanics and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the three apprenticeship periods of 2,000 hours each (6,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to mathematics, hydraulics, computers, automation, welding, and machine-tooling
- Be ingenious and resourceful
- Be precise
- Be dextrous and in good physical condition
- Be capable of moving heavy objects and working in a team

TRAINING

Study program:

Vocational studies diploma – Mécanique industrielle de construction et d'entretien (5260) and Industrial Construction and Maintenance Mechanics (5760)

Duration of training:

1,800 hours

Academic prerequisite:

Category 1*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$19,740
Journeyman**	\$34,684
Those with at least 500 hours of work	\$54,008
Proportion***	58%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of journeymen having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$19.52	\$19.51	\$18.59
2nd period	\$22.78	\$22.76	\$21.69
3rd period	\$27.66	\$27.64	\$26.33
Journeyman	\$32.54	\$32.52	\$30.98

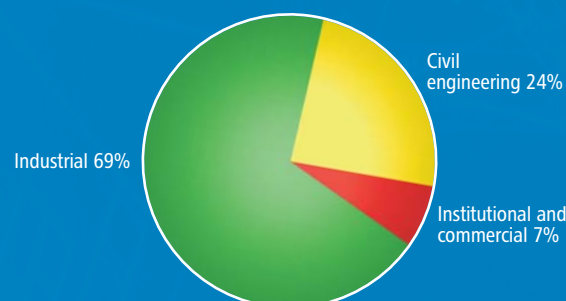
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	39	19
Placement rate for graduates*	90.7%	88.9%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	40
Bas-Saint-Laurent-Gaspésie	80
Côte-Nord	81
Eastern Townships	41
Island of Montréal	55
Laval-Laurentides-Lanaudière	168
Mauricie-Bois-Francs	217
Montréal	237
Outaouais	13
Québec City	78
Saguenay-Lac-Saint-Jean	132
Other regions and James Bay	32
Total	1,144

Number of women employed

4

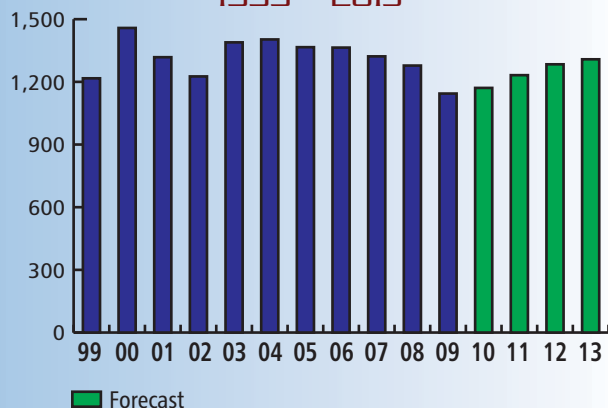
Mobility of workers

Proportion of workers asked to travel from one region to another:*

Millwright	32%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	34	48%	46%	6%	136
Journeyman	48	4%	66%	30%	1,008
Total, millwrights	46	10%	63%	27%	1,144
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- Construction work done by millwrights fluctuates from year to year. The number of employees might drop suddenly between two major sites. In 2009, the number of employed workers dropped for the third consecutive year, to 1,144; this is explained by the difficulties in the industrial sector, where millwrights do more than two thirds of their volume of work.
- The majority of the 186 companies that hire millwrights specialize in industrial construction or in the installation of electromechanical equipment for hydroelectric power stations.
- The industry admitted 19 new apprentices in 2009, which is far below previous years. The installation of machinery is not always covered by the construction collective agreements, but when the work is covered, an apprentice earns an average of \$20,000 in the first year, while the annual average salary of a journeyman working at least 500 hours rises to \$54,000.
- The job prospects will improve in coming years due to a better situation for industrial construction and the vigour of the civil engineering and roadwork sector. The ageing of workers will also generate a need for new workers.



Training offered

in the following institutions:

- CDC Laurier*
- Centre d'excellence en formation industrielle (Windsor)
- Centre intégré de mécanique, de métallurgie et d'électricité (LaSalle)
- Centre intégré de mécanique industrielle de la Chaudière (Saint-Georges)
- Centre La Croisée (Donnacona)
- CF Harricana (Amos)
- CF Vision 20/20 (Victoriaville)
- CFP A.-W.-Gagné (Sept-Îles)
- CFP Bernard-Gariépy (Sorel-Tracy)
- CFP Carrefour Formation Mauricie (Shawinigan)
- CFP Amqui
- CFP de Cowansville*
- CFP de Baie-Comeau
- CFP de la Pointe-du-Lac (Salaberry-de-Valleyfield)
- CFP des Moulins (Terrebonne)
- CFP Jonquière
- CFP Le Tremplin (Thetford Mines)
- CFP Performance Plus (Lachute)
- CFP Relais de la Lièvre-Seigneurie (Gatineau)
- École des métiers du Sud-Ouest de Montréal
- École Polymécanique de Laval

* This school also offers the program in English.





Ornamental Iron Worker

Trade

Description of the trade

- Makes, assembles, and installs architectural elements made of metal or other similar materials, such as stairs, balconies, balustrades, fences, and awnings
- Applies fabrication, bolting, welding, rigging, and assembly techniques
- May be asked to work on all types of works or buildings

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in ornamental ironwork and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the two apprenticeship periods of 2,000 hours each (4,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Have knowledge linked to application of concepts mathematics, geometry, metallurgy, and reading manufacturing and installation plans
- Be independent and careful
- Be able to work in a team
- Have a good sense of aesthetics and be in good physical condition
- Be able to move heavy objects of various shapes
- Have good spatial perception
- Be capable of working at heights occasionally

TRAINING

Study program:

Vocational studies diploma – Montage structural et architectural (5299)

Duration of training:

1,230 hours

Academic prerequisite:

Category 2*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$33,310
Journeyman**	\$34,408
Those with at least 500 hours of work	\$51,094
Proportion***	63%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of journeymen having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$23.01	\$22.97	\$21.62
2nd period	\$27.94	\$27.90	\$26.25
Journeyman	\$32.87	\$32.82	\$30.88

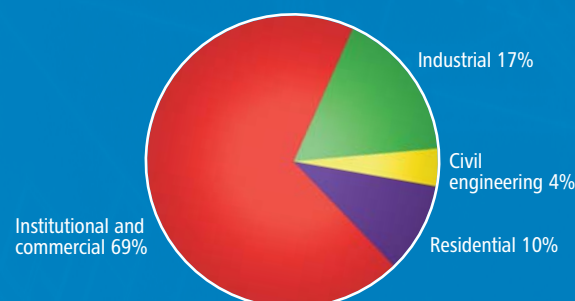
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	62	38
Placement rate for graduates*	79.7%	82.1%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	18
Bas-Saint-Laurent-Gaspésie	23
Côte-Nord	16
Eastern Townships	29
Island of Montréal	148
Laval-Laurentides-Lanaudière	213
Mauricie-Bois-Francs	58
Montréal	226
Outaouais	25
Québec City	150
Saguenay-Lac-Saint-Jean	26
Other regions and James Bay	0
Total	932

Number of women employed

8

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Ornamental iron worker	20%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	34	44%	51%	5%	279
Journeyman	44	11%	73%	16%	653
Total, ornamental iron workers	41	21%	66%	13%	932
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- In 2009, there were 932 ornamental iron workers active on construction sites. They are hired by more than 400 companies.
- The institutional and commercial sector is responsible for 70% of the hours worked by ornamental iron workers. The activity should remain high in this sector thanks to numerous hospital and educational construction projects. Industrial and residential construction share the rest of the hours worked. Job forecasts for these sectors are favourable for coming years.
- In 2009, 38 new apprentices joined the industry. Apprentices earn an average of \$33,000 in the first 12 months following hiring, while journeymen who work at least 500 hours may earn \$51,000 per year.
- Job prospects are excellent for ornamental iron workers, given the favourable forecasts for institutional and commercial construction, which will generate a strong rise in demand in coming years.



Training offered

in the following institution:

- CF des métiers de l'acier (Montréal)





Painter

Trade

Description of the trade

- Prepares and conditions the surfaces of all structures, and covers them with one or several layers of film-forming compounds
- Covers wall surfaces with wallpaper or any similar material

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in commercial and residential painting and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the three apprenticeship periods of 2,000 hours each (6,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to product chemistry, colour theory, design, and reading of plans
- Be careful and precise
- Work neatly
- Be able to distinguish colours
- Have good physical coordination
- Be able to work at heights

TRAINING

Study program:

Vocational studies diploma – Peinture de bâtiment (5116) and Commercial and Residential Painting (5616)

Duration of training:

900 hours

Academic prerequisite:

Category 2*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$15,384
Journeyman**	\$29,316
Those with at least 500 hours of work	\$40,299
Proportion***	68%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of journeymen having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$18.18	\$18.46	\$16.63
2nd period	\$21.21	\$21.54	\$19.40
3rd period	\$25.76	\$26.15	\$23.56
Journeyman	\$30.30	\$30.77	\$27.72

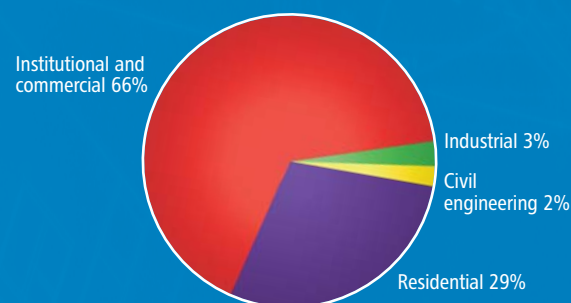
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	521	331
Placement rate for graduates*	78.8%	71.1%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	133
Bas-Saint-Laurent—Gaspésie	188
Côte-Nord	71
Eastern Townships	220
Island of Montréal	883
Laval—Laurentides—Lanaudière	1,165
Mauricie—Bois-Francs	261
Montréal	953
Outaouais	339
Québec City	842
Saguenay—Lac-Saint-Jean	201
Other regions and James Bay	25
Total	5,281

Number of women employed

415

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Painter	11%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	37	33%	61%	6%	2,603
Journeyman	48	4%	67%	29%	2,678
Total, painters	43	19%	64%	17%	5,281
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- In 2009, 5,281 painters were working on construction sites. Among all the trades, that of painter has the largest number of women: 415. Many of the 1,861 companies that hire painters are small in size, with an average of two painters on the payroll.
- Two thirds of the volume of work is done in the institutional and commercial sector, where activity will remain high. A large part of the work is done in the residential construction, which will remain vigorous in the coming years. Painting work in existing buildings also offers good work opportunities.
- A total of 331 apprentices joined the construction industry in 2009, below the average for preceding years. The average salary of apprentices is almost \$15,000 in the first year, and journeymen who work at least 500 hours earn an average of \$40,000 for work falling under the construction collective agreements.
- The growing demand for workers, combined with high turnover, generates good work prospects for painters.



Training offered

in the following institutions:

- CFP Jonquière
- École des métiers de la construction de Montréal*
- École des métiers et occupations de l'industrie de la construction de Québec

* This school also offers the program in English.





Pipe Fitter

Trade

Description of the trade

- Installs, overhauls, alters, repairs, and maintains plumbing and heating systems

This trade has two specialties: plumber and heating systems installer.

- **Plumber:** Does work related to water-supply and water-disposal piping in buildings and structures
- **Heating systems installer:** Does work related to piping and other elements of heating systems

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in plumbing and heating and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the four apprenticeship periods of 2,000 hours each (8,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge linked to application of notions of mathematics, chemistry, and physics, plumbing and heating systems, and reading of plans
- Be independent and careful
- Be able to work in a team
- Be in good physical condition
- Be dextrous

TRAINING

Study program:

Vocational studies diploma – Plomberie-chauffage (5148) and Plumbing and Heating (5648)

Duration of training:

1,500 hours

Academic prerequisite:

Category 1*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$23,235
Journeyman**	\$43,400
Those with at least 500 hours of work	\$54,247
Proportion***	76%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of journeymen having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include earnings that may be made for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$16.27	\$16.26	\$15.49
2nd period	\$19.52	\$19.51	\$18.59
3rd period	\$22.78	\$22.76	\$21.69
4th period	\$27.66	\$27.64	\$26.33
Journeyman	\$32.54	\$32.52	\$30.98

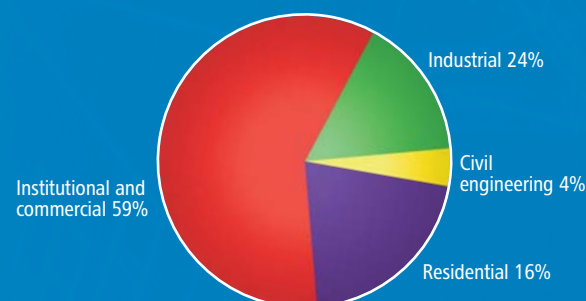
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	532	430
Placement rate for graduates*	91.8%	84.8%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	153
Bas-Saint-Laurent—Gaspésie	218
Côte-Nord	113
Eastern Townships	297
Island of Montréal	1,105
Laval—Laurentides—Lanaudière	2,000
Mauricie—Bois-Francs	571
Montréal	1,598
Outaouais	330
Québec City	1,149
Saguenay—Lac-Saint-Jean	345
Other regions and James Bay	24
Total	7,903

Number of women employed

41

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Pipe fitter	13%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	29	62%	37%	1%	2,885
Journeyman	44	13%	66%	21%	5,018
Total, pipe fitters	38	31%	56%	13%	7,903
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- This is the third-largest trade in construction in terms of workers. In 2009, about 7,900 pipe fitters were active on construction sites. Employment has remained relatively stable over the last four years. Pipe welders are hired by 1,350 employers.
- The volume of work is done mainly in the institutional and commercial sector, as well as in the industrial sector. The institutional and commercial sector should regain vigour in coming years, as should the industrial sector.
- The industry admitted 430 new apprentices in 2009, which is lower than the average in recent years. Most of the apprentices admitted are graduates. As they practise a trade that is not very seasonal, pipe fitters work almost all year round and earn a good living: apprentices earn an average of \$23,000 in the first year, while journeymen who work at least 500 hours earn more than \$54,000 per year.
- Job prospects will remain good in this trade, due mainly to the strong rise in demand for workers forecast in coming years.



Training offered

in the following institutions:

- CF Vision 20/20 (Victoriaville)
- CFP Daniel-Johnson (Montréal)
- CFP de l'Outaouais (Gatineau)
- CFP Jonquière
- CFP Pavillon-de-l'Avenir (Rivière-du-Loup)
- CFP Samuel-De Champlain (Québec)
- École des métiers de la construction de Montréal*
- École Polymécanique de Laval
- École professionnelle de Saint-Hyacinthe

* This school also offers the program in English.





Pipe Welder (High Pressure)

Occupation

Description of the occupation

- Interprets classification of pipes and standards
- Does preparation work for high-pressure welding
- Cuts, prepares, and welds different pipes using electric arc welding with covered electrodes or gas welding with tungsten electrodes.

Access to construction sites

- Individuals who present to the CCQ an academic transcript attesting to their having graduated with a DEP – High-Pressure Welding may register for the 15-hour course *Cours de connaissance générale de l'industrie de la construction* (CCGIC), in order to obtain an occupation competency certificate.
- The number of places reserved for the CCGIC depends on labour needs established annually by the construction industry.

Skills and interests

- Acquire knowledge related to reading of plans, concepts of metallurgy, various welding and cutting techniques, and controlling welding parameters
- Have professional ethics
- Be independent
- Have very good dexterity and good coordination of movement
- Be able to work in uncomfortable positions
- Respect workplace health and safety rules

TRAINING

Study program:

Attestation of vocational specialization (ASP) – Soudage haute pression (5234) and High Pressure Welding (5734)

Duration of training:

600 hours (5 months)

Academic prerequisite:

Those who register for the study program leading to the ASP must hold one or another of these vocational studies diplomas:

- Soudage montage (5195)
- Welding and Fitting (5695)

OR

- Have the equivalent apprenticeship recognized

OR

- Practise a trade or vocation related to this study program

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Pipe Welder (High Pressure)*	\$33,421
Those with at least 500 hours of work	\$49,275
Proportion**	61%

* Average salary in 2009 of individuals having reported at least one hour of work.

** Proportion of workers in this occupation having accumulated 500 hours in 2009.

Does not include income that may have been earned for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Pipe welder	\$32.54	\$32.52	\$30.98

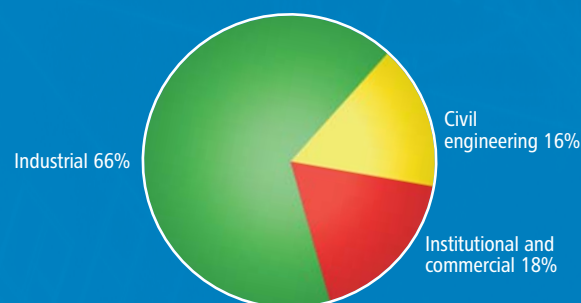
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	18	7
Placement rate for graduates*	90.7%	83.5%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	24
Bas-Saint-Laurent-Gaspésie	10
Côte-Nord	20
Eastern Townships	38
Island of Montréal	48
Laval-Laurentides-Lanaudière	110
Mauricie-Bois-Francs	73
Montréal	104
Outaouais	14
Québec City	38
Saguenay-Lac-Saint-Jean	54
Other regions and James Bay	0
Total	533

Number of women employed

6

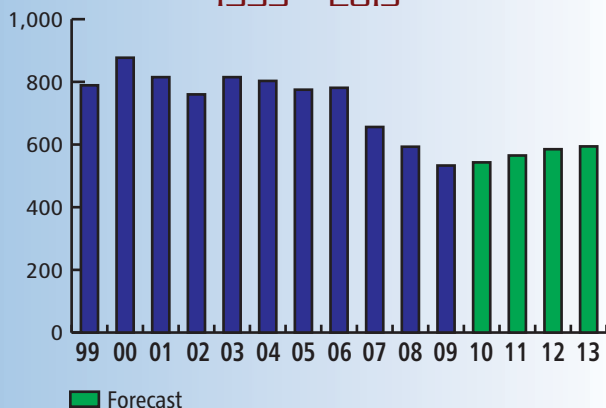
Mobility of workers

Proportion of workers asked to travel from one region to another:*

Pipe welder	20%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Total, pipe welders	48	7%	62%	31%	533
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- After three consecutive years of decreases, the number of pipe welders dropped to 533 in 2009. About 160 construction companies hire pipe welders, with the 20 largest ones reporting almost one third of hours worked.
- Industrial construction is the main source of employment for pipe welders. The slowdown in this sector explains the drop in employment. On the other hand, the improving economic situation will stimulate industrial construction and, as a result, the recruitment of pipe welders.
- The industry admitted 7 new pipe welders in 2009, a much lower number than in recent years. Pipe welders may earn an annual average salary of over \$33,000, but those who work for at least 500 hours may earn more than \$49,000 per year.
- Despite the very high current availability of workers, job prospects remain good for coming years due to retirements. In addition, demand will increase considerably as the industrial sector becomes more active.



Training offered

in the following institutions:

- Centre intégré de formation en métallurgie de La Pocatière
- CF en métallurgie de Laval
- CFP Anjou
- CFP de Lévis
- CFP de l'Outaouais (Gatineau)
- CFP en métallurgie et multiservices (Chicoutimi)
- CFP Lac-Abitibi (La Sarre)
- CFP Mont-Joli – Mitis
- CFP Nova** (Châteauguay)
- CFP Qualitech (Cap-de-la-Madeleine)
- CFP Sorel-Tracy
- CFP 24-Juin (Sherbrooke)
- École des métiers de la construction de Montréal*

* This school also offers the program in English.

** This school offers the program in English only.





Plasterer

Trade

Description of the trade

- Using a trowel or a machine, applies calcareous coatings such as plaster, celanite, mortar, cement, metallic grouting compound, stucco, acrylic sealing coat or other substitutes
- Points and fills gypsum wallboard joints
- Does plaster moulding work and pours and sets ornaments

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in plastering and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the three apprenticeship periods of 2,000 hours each (6,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to mathematics, technical drawing, and materials chemistry
- Be careful, precise, and creative
- Work neatly
- Have good physical coordination
- Be able to work at heights
- Be able to work in uncomfortable positions

TRAINING

Study program:

Vocational studies diploma – Plâtrage (5286) and Plastering (5786)

Duration of training:

810 hours

Academic prerequisite:

Category 2*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$18,789
Journeyman**	\$29,308
Those with at least 500 hours of work	\$40,827
Proportion***	67%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.
 ** Average salary in 2009 of individuals having reported at least one hour of work.
 *** Proportion of journeymen in this trade having accumulated 500 hours in 2009.
 Does not include income that may have been earned for work not falling under the construction collective agreements.

Hourly wage according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$18.18	\$18.67	\$17.48
2nd period	\$21.21	\$21.78	\$20.40
3rd period	\$25.76	\$26.44	\$24.77
Journeyman	\$31.03	\$31.11	\$29.14

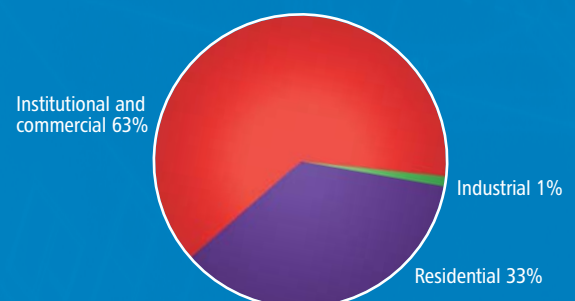
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	362	207
Placement rate for graduates*	82.2%	77.6%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	23
Bas-Saint-Laurent-Gaspésie	26
Côte-Nord	13
Eastern Townships	130
Island of Montréal	406
Laval-Laurentides-Lanaudière	753
Mauricie-Bois-Francs	160
Montréal	554
Outaouais	226
Québec City	575
Saguenay-Lac-Saint-Jean	121
Other regions and James Bay	9
Total	2,996

Number of women employed

116

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Plasterer	10%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	33	44%	53%	3%	1,828
Journeyman	46	7%	75%	18%	1,168
Total, plasterers	38	29%	62%	9%	2,996
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- There were 2,996 plasterers working on construction sites in 2009, more than double the number 10 years ago. The work is done mainly in residential, institutional, and commercial construction. Plasterers are hired by more than 1,300 construction employers.
- Institutional and commercial construction should regain strength in coming years. On the institutional side, a number of major projects are planned. In addition, activity should remain high in new residential construction and in residential renovation.
- In 2009, 207 new apprentices, a third of whom had a diploma, joined the industry. In the first year of work, an apprentice earns almost \$19,000, while the annual average salary of a journeyman who works at least 500 hours is around \$41,000 for work falling under the construction collective agreements.
- Job prospects are good for plasterers thanks to slightly rising demand and high worker turnover.



Training offered

in the following institutions:

- CFP de l'Outaouais (Gatineau)
- CFP Jonquière
- École des métiers de la construction de Montréal*
- École des métiers et occupations de l'industrie de la construction de Québec

* This school also offers the program in English.





Refrigeration Mechanic

Trade

Description of the trade

- Installs, overhauls, alters, repairs, and maintains refrigeration systems of refrigeration and air-conditioning systems.

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in refrigeration and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the four apprenticeship periods of 2,000 hours each (8,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire basic knowledge of mathematics, physics (pneumatics, hydraulics, and electricity), use of a computer, and reading plans and specifications
- Be resourceful and careful
- Be able to work in a team
- Apply workplace health and safety rules with regard to electricity, mechanics, and handling of hazardous products
- Have an analytic mind
- Have good manual dexterity

TRAINING

Study program:

Vocational studies diploma
– Réfrigération (5075)

Duration of training:

1,800 hours

Academic prerequisite:

Category 1*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$20,738
Journeyman**	\$53,754
Those with at least 500 hours of work	\$61,353
Proportion***	86%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of individuals having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include income that may have been earned for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$16.27	\$16.26	\$15.49
2nd period	\$19.52	\$19.51	\$18.59
3rd period	\$22.78	\$22.76	\$21.69
4th period	\$27.66	\$27.64	\$26.33
Journeyman	\$32.54	\$32.52	\$30.98

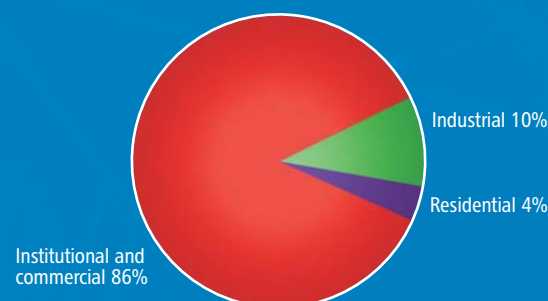
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	210	196
Placement rate for graduates*	90.7%	88.9%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	42
Bas-Saint-Laurent—Gaspésie	55
Côte-Nord	28
Eastern Townships	118
Island of Montréal	308
Laval—Laurentides—Lanaudière	897
Mauricie—Bois-Francs	166
Montréal	707
Outaouais	35
Québec City	404
Saguenay—Lac-Saint-Jean	71
Other regions and James Bay	10
Total	2,841

Number of women employed

5

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Refrigeration mechanic	12%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	28	69%	30%	1%	973
Journeyman	40	14%	77%	7%	1,868
Total, refrigeration mechanics	36	34%	61%	5%	2,841
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- The number of refrigeration mechanics active on construction sites has been growing since 1988 and reached a record 2,841 in 2009. Almost 590 companies use their services, but 100 of the largest ones account for two thirds of hours worked.
- The work is done mainly in the institutional and commercial sector, in which the level of activity will remain high in coming years. Refrigeration mechanics have opportunities other than new construction, however, since maintenance and repairs also provide plenty of work. These workers find employment all year round. In addition, the increasing use of air conditioning in buildings favours this trade.
- In 2009, integration of new apprentices was maintained at the rate of almost 200 for the sixth consecutive year. Almost all apprentices are graduates, who have success on the job market when they earn their diploma. Aboriginals earn an average of almost \$21,000 in the first year. The annual average of hours worked is among the highest of all trades, and journeymen who work at least 500 hours may earn more than \$61,000 per year.
- Job prospects are excellent for refrigeration mechanics. Increasing demand for workers is forecast for coming years. However, because the average age is one of the lowest in the industry, the need to replace older workers is still limited.



Training offered

in the following institutions:

- CF Vision 20/20 (Victoriaville)
- CFP de Lachine – Pavillon Dalbé-Viau*
- CFP Jonquière
- CFP Pavillon technique (Québec)
- CFP Pierre-Dupuy (Longueuil)
- CFP 24-Juin (Sherbrooke)
- École Polymécanique de Laval

* This school also offers the program in English.





Reinforcing Steel Erector

Trade

Description of the trade

- Installs rods, metal laths, or any other similar material to reinforce concrete
- Cuts, bends, ties, welds, places, and installs reinforcing steel used in the construction of form-work, columns beams, slabs, or other similar work.

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in installing concrete reinforcement and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the apprenticeship period of 2,000 hours in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to application of geometric forms and volumes, and mathematical concepts and physics principles related to concrete structures
- Be able to read plans
- Be dextrous
- Have good physical coordination
- Be able to work in a team
- Be in very good physical condition
- Be able to move heavy objects, execute repetitive movements, and work at heights

TRAINING

Study program:

Vocational studies diploma
– Pose d'armature du béton (5076)

Duration of training:

735 hours

Academic prerequisite:

Category 2*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$29,394
Journeyman**	\$51,099
Those with at least 500 hours of work	\$56,027
Proportion***	89%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of individuals having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include income that may have been earned for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice	\$27.94	\$27.90	\$25.78
Journeyman	\$32.87	\$32.82	\$30.33

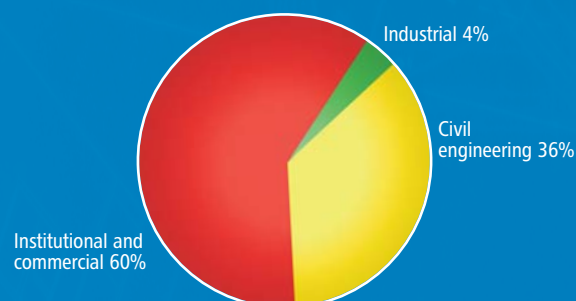
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	100	89
Placement rate for graduates*	80.1%	80.0%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	20
Bas-Saint-Laurent-Gaspésie	68
Côte-Nord	38
Eastern Townships	40
Island of Montréal	191
Laval-Laurentides-Lanaudière	348
Mauricie-Bois-Francs	64
Montréal	194
Outaouais	44
Québec City	181
Saguenay-Lac-Saint-Jean	45
Other regions and James Bay	16
Total	1,249

Number of women employed

6

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Reinforcing steel erector	45%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	27	67%	33%	0%	348
Journeyman	40	25%	61%	14%	901
Total, reinforcing steel erectors	36	37%	53%	10%	1,249
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- There were 1,249 reinforcing steel erectors working on construction sites in 2009, 30% of whom were apprentices. Employment has been growing strongly for 10 years. The number of workers has grown an average of 7% per year since 1998, which is above the growth observed for workers as a whole.
- The vigour of institutional and commercial construction and the civil engineering and roadwork sector favours employment of reinforcing steel erectors, since 96% of their work is concentrated in these sectors. There are 151 construction companies hiring reinforcing steel erectors.
- The number of new apprentices working in the industry rose to 89 in 2009, the majority of whom had a diploma. In the first year, apprentices earn an annual average salary of about \$29,400, while journeymen earn an average of \$51,000 per year.
- Job prospects are excellent for reinforcing steel erectors thanks to a strong rise in demand forecast for coming years.



Training offered

in the following institution:

- CF des métiers de l'acier (Montréal)





Resilient Flooring Layer

Trade

Description of the trade

- Lays undercarpets, carpets, both glued and nailed, tiles, parquet floor tiles, and resilient products such as linoleum
- Replaces, repairs, or adds coverings in existing buildings. Generally works during the final phase of construction
- Levels surfaces, and uses tracing, cutting, gluing, nailing, and pointing techniques for coverings and insertion of motifs.

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in laying resilient flooring and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the apprenticeship period of 2,000 hours in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to application of concepts of mathematics, properties of materials and products, interpretation of plans and technical specifications
- Be careful
- Have good dexterity
- Be well organized
- Be in good physical condition
- Be capable of moving heavy objects
- Be flexible

TRAINING

Study program:

Vocational studies diploma – Pose de revêtements souples (5115)

Duration of training:

900 hours

Academic prerequisite:

Category 2*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$20,621
Journeyman**	\$23,857
Those with at least 500 hours of work	\$37,782
Proportion***	57%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of individuals having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include income that may have been earned for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice	\$24.11	\$24.36	\$22.96
Journeyman	\$28.36	\$28.66	\$27.01

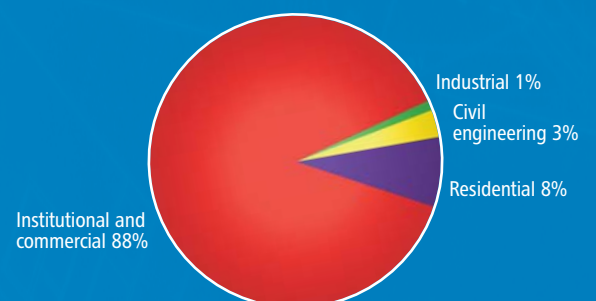
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	93	108
Placement rate for graduates*	90.2%	82.4%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	27
Bas-Saint-Laurent-Gaspésie	62
Côte-Nord	14
Eastern Townships	31
Island of Montréal	151
Laval-Laurentides-Lanaudière	284
Mauricie-Bois-Francs	52
Montréal	208
Outaouais	96
Québec City	197
Saguenay-Lac-Saint-Jean	52
Other regions and James Bay	16
Total	1,190

Number of women employed

20

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Resilient flooring layer	13%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	32	51%	45%	4%	383
Journeyman	45	10%	69%	51%	807
Total, resilient flooring layers	41	24%	61%	15%	1,190
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- Almost 1,200 employees work as resilient flooring layers in construction. These workers are hired by 538 contractors, the 50 largest of which report more than half of the volume of work.
- Most of the work is done in the institutional and commercial sector, where activity will be vigorous in coming years. New residential construction, which generates almost 10% of the activity, should also maintain a high level of activity, and prospects are good in residential renovation. There is always a call for replacement of existing floors, and the clientele is increasingly demanding.
- In 2009, 108 new apprentices were working on construction sites, slightly more than the average for preceding years. The annual average salary of apprentices is \$20,600 in the first year for work falling under the industry's collective agreements.
- Job prospects are good, given the forecast growth in demand. In addition, high turnover of workers is generating a need for new resilient flooring layers.



Training offered

in the following institutions:

- CFP Gérard-Filion (Longueuil)
- École des métiers de la construction de Montréal
- École des métiers et occupations de l'industrie de la construction de Québec





Roofer

Trade

Description of the trade

- Installs roof coverings that may be composed of asphalt-impregnated felt, hot bitumen, and gravel; elastomeric, liquid, and thermoplastic membranes; and different types of shingles
- Repairs and insulates roofs
- Prepares the sheathing
- Applies techniques of lifting, handling, chipping, waterproofing, attaching, spreading, and welding of membranes

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in installing roof coverings and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the apprenticeship period of 2,000 hours in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to application of concepts of mathematics and properties of products and materials
- Be meticulous
- Be well organized
- Be capable of working in a team and at heights
- Be able to move heavy objects
- Be in good physical condition and be able to adapt to extreme temperature changes
- Have good manual dexterity
- Be punctual and hard-working
- Have a sense of initiative

TRAINING

Study program:

Vocational studies diploma
– Pose de revêtements de toiture (5032)

Duration of training:

600 hours

Academic prerequisite:

Category 2*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$21,989
Journeyman**	\$34,068
Those with at least 500 hours of work	\$44,131
Proportion***	74%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.
** Average salary in 2009 of individuals having reported at least one hour of work.
*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.
Does not include income that may have been earned for work not falling under the construction collective agreements.

Hourly wage according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice	\$27.66	\$27.90	\$26.33
Journeyman	\$32.54	\$32.82	\$30.98

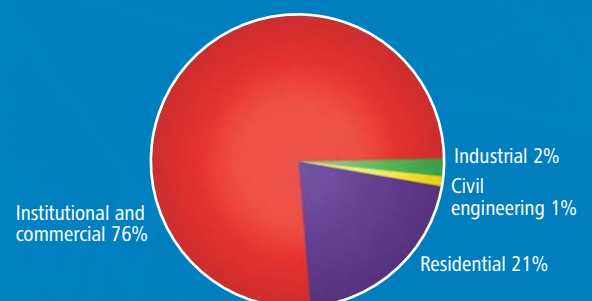
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	733	632
Placement rate for graduates*	93.2%	81.4%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	61
Bas-Saint-Laurent—Gaspésie	144
Côte-Nord	32
Eastern Townships	259
Island of Montréal	568
Laval—Laurentides—Lanaudière	1,486
Mauricie—Bois-Francis	482
Montréal	1,089
Outaouais	363
Québec City	763
Saguenay—Lac-Saint-Jean	155
Other regions and James Bay	16
Total	5,418

Number of women employed

23

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Roofer	10%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	30	58%	40%	2%	2,973
Journeyman	41	19%	69%	12%	2,445
Total, roofers	35	40%	53%	7%	5,418
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- In 2009, there were 5,418 roofers active in the industry, double the number 10 years ago. The high seasonality of the industry influences their employment. The duration of on-site apprenticeship required for this trade is among the shortest. The volume of work is concentrated mainly in the institutional and commercial sector, but it is gaining ground in the residential sector. About 900 employers recruit roofers.
- Employment has broken records in recent years, and it should continue to increase slightly over the medium term. Institutional and commercial construction will be vigorous, while activity should remain high in new residential construction. Residential renovation also offers good prospects.
- In 2009, 632 new apprentices, very few of whom had diplomas, joined the industry. Nevertheless, graduates successfully entered the job market after obtaining their diploma. During the first year, apprentices earn an average salary of almost \$22,000, while three quarters of journeymen earn double this amount for work falling under the construction collective agreements.
- Job prospects are excellent for roofers thanks to a forecast rise in demand in coming years, while availability of workers is very low and the turnover rate is very high.



Training offered

in the following institutions:

- CF Le Chantier (Laval)
- École des métiers et occupations de l'industrie de la construction de Québec





Shovel Operator

Trade

Description of the trade

- Operates all types of mechanical shovels, backhoes, cranes equipped with a clamshell or drag bucket, pivoted-arm excavators, and all other similar excavation equipment
- Works during the stage before construction starts

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in operation of heavy equipment and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the apprenticeship period of 2,000 hours in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to application of concepts of mathematics, mechanics, hydraulics, and electricity, and the reading of plans and survey monuments
- Have dexterity and good physical coordination

TRAINING

Study program:

Vocational studies diploma
– Conduite d'engins de chantier (5220)

Duration of training:

1,095 hours

Academic prerequisite:

Category 2*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$21,145
Journeyman**	\$38,304
Those with at least 500 hours of work	\$52,961
Proportion***	69%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of individuals having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include income that may have been earned for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice – Class AA	\$28.10	\$28.04	-
Journeyman – Class AA	\$33.06	\$32.99	-
Apprentice – Class A	\$27.23	\$27.25	\$25.27
Journeyman – Class A	\$32.04	\$32.06	\$29.73
Apprentice – Class B	\$26.38	\$26.45	\$24.51
Journeyman – Class B	\$31.03	\$31.12	\$28.83

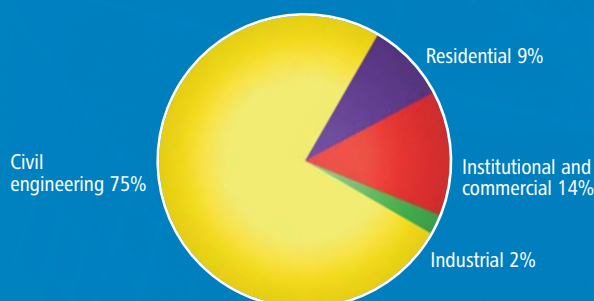
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	145	189
Placement rate for graduates*	73.1%	69.6%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	217
Bas-Saint-Laurent—Gaspésie	415
Côte-Nord	256
Eastern Townships	305
Island of Montréal	143
Laval—Laurentides—Lanaudière	979
Mauricie—Bois-Francs	438
Montréal	973
Outaouais	234
Québec City	1,154
Saguenay—Lac-Saint-Jean	561
Other regions and James Bay	23
Total	5,698

Number of women employed

21

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Shovel operator	21%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	35	39%	51%	10%	1,142
Journeyman	44	14%	63%	23%	4,556
Total, shovel operators	42	19%	61%	20%	5,698
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- In 2009, there were 5,700 shovel operators – a record. This increase is a result of the good situation in the civil engineering and roadwork sector, where three quarters of the work is done, and a growing trend toward using shovels in construction. Almost 1,900 employers hire shovel operators.
- Many hydroelectric, roadwork, and infrastructure projects will continue to generate employment in this trade. A considerable part of the work will also come from the institutional and commercial sector, where the volume of work will remain high.
- The number of apprentices admitted into the industry reached 189 in 2009, a number seven times higher than 10 years ago. Nevertheless, integration into a construction site poses a challenge because handling the equipment requires the apprentice and the employer to be very composed mentally. The annual average salary of an apprentice during the first year of work is over \$21,000, while that of a journeyman who works at least 500 hours is around \$53,000. Seasonal variations have a major impact on annual income.
- Job prospects will be good for the coming years because of the growing demand for workers in this trade. In addition, there will likely be a growing number of retirements, since 20% of workers are 55 or over.



Training offered

in the following institution:

- Centre national de conduite d'engins de chantier (Saint-Jean-Chrysostome)





Structural Steel Erector

Trade

Description of the trade

- Assembles and installs structural elements made of steel, pre-stressed concrete, or combinations of any other similar materials
- Takes part in construction of bridges, viaducts, dam shutters, towers, silos, and buildings
- Applies rigging, bolting, welding, and assembly techniques for structural components such as beams, columns, and trusses

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in structural steel erection and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the two apprenticeship periods of 2,000 hours each (4,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to applied mathematics, metallurgy, and reading of plans
- Be agile and careful
- Be capable of working in a team
- Be in good physical condition
- Be capable of moving heavy objects
- Be capable of working at heights

TRAINING

Study program:

Vocational studies diploma – Montage structural et architectural (5299)

Duration of training:

1,230 hours

Academic prerequisite:

Category 2*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$30,419
Journeyman**	\$46,007
Those with at least 500 hours of work	\$55,117
Proportion***	80%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of individuals having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include income that may have been earned for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$23.01	\$22.97	\$21.69
2nd period	\$27.94	\$27.90	\$26.33
Journeyman	\$32.87	\$32.82	\$30.98

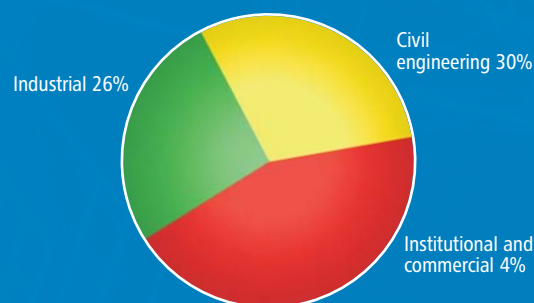
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	55	49
Placement rate for graduates*	79.7%	82.1%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	84
Bas-Saint-Laurent—Gaspésie	111
Côte-Nord	90
Eastern Townships	51
Island of Montréal	91
Laval—Laurentides—Lanaudière	286
Mauricie—Bois-Francs	159
Montréal	326
Outaouais	59
Québec City	266
Saguenay—Lac-Saint-Jean	195
Other regions and James Bay	12
Total	1,730

Number of women employed

6

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Structural steel erector	45%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	31	53%	42%	5%	294
Journeyman	44	12%	69%	19%	1,436
Total, structural steel erectors	42	19%	64%	17%	1,730
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- In 2009, the number of structural steel erectors working on construction sites (1,730) remained more or less stable compared to 2008. Non-residential construction generates much of the work for this trade.
- About 400 construction companies hire structural steel erectors. Of this number, the 70 largest employers report almost half of the hours worked.
- In 2009, about 50 apprentices were admitted into the industry, below the average for recent years. More than half of them had a diploma. Apprentices earn an average salary of \$30,400 in the first year, while journeymen who work at least 500 hours have an annual average salary of \$55,000.
- Despite the large number of structural steel erectors currently available, job prospects are good, since the need for new workers will be high and demand will grow strongly.



Training offered

in the following institution:

- CF des métiers de l'acier (Montréal)





Surveyor

Occupation

Description of the occupation

- Gathers, transfers, calculates, and puts into plans surveying data using specialized instruments (electronic notebook, conventional or electronic total station, GPS receiver, calculation software, design software, etc.) in order to produce plans or define projected structures
- Supplies data regarding alignment, altitude, orientation, and dimension of various lots or types of infrastructure (industrial or commercial complexes, buildings, residences, roads, etc.)

Access to construction sites

- Individuals who present to the CCQ an academic transcript attesting to their having graduated with a DEP – Surveying and Topography may register for the 15-hour course Cours de connaissance générale de l'industrie de la construction (CCGIC), in order to obtain an occupation competency certificate.
- The number of places reserved for the CCGIC depends on labour needs established annually by the construction industry.

Skills and interests

- Like working outdoors
- Acquire knowledge linked to application of concepts in mathematics, geodesy, topography, surveying
- Be at ease with computerized equipment (software, calculators, etc.)
- Have a sense of team spirit and a good capacity for analysis
- Be independent, accurate, and careful
- Be available to travel to different regions

TRAINING

Study program:

Vocational studies diploma (DEP) – Arpentage et topographie (5238)

Duration of training:

1,800 hours

Academic prerequisite:

Category 1*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Surveyor*	\$45,126
Those with at least 500 hours of work	\$57,070
Proportion**	77%

* Average salary in 2009 of individuals having reported at least one hour of work.

** Proportion of workers in this occupation having accumulated 500 hours in 2009.

Does not include income that may have been earned for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Surveyor	\$32.14	\$32.14	\$27.62
Surveyor class 2	\$27.32	\$27.32	—

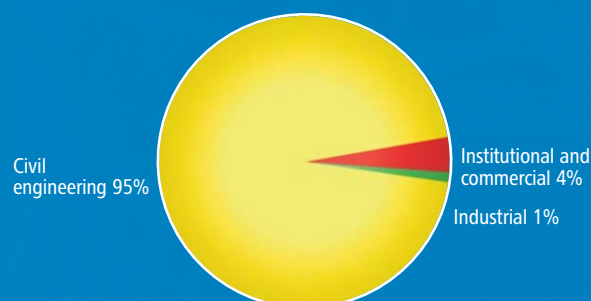
Wage in April 2010.

Integration into the labour market

	Annual average 2007-08	2009
New apprentices admitted by the CCQ	96	129
Placement rate for graduates*	85.2%	76.6%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	29
Bas-Saint-Laurent—Gaspésie	68
Côte-Nord	50
Eastern Townships	52
Island of Montréal	75
Laval—Laurentides—Lanaudière	135
Mauricie—Bois-Francs	77
Montréal	125
Outaouais	17
Québec City	242
Saguenay—Lac-Saint-Jean	147
Other regions and James Bay	87
Total	1,024

Number of women employed

80

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Surveyor	33%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Total, surveyors	38	31%	59%	11%	1,024
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- In 2009, the number of surveyors working on construction sites rose to 1,024, double the number 10 years ago. Surveyors work for 330 employers, and almost all of their work is done in the civil engineering and roadwork sector.
- One worker in three must travel to work in a region other than his or her own. The surveyor workforce was 8% female in 2009, making this occupation one of the 10 trades and occupations with the highest proportion of women working in construction.
- In 2009, 129 new surveyors, almost half of whom had a diploma, joined the industry. The average annual salary for these workers was over \$45,000, and more than three quarters worked at least 500 hours, which enabled them to earn an average of \$57,000 per year.
- Job prospects are good for surveyors. Demand for workers will be stimulated in coming years by numerous roadwork, infrastructure, and electric energy projects.

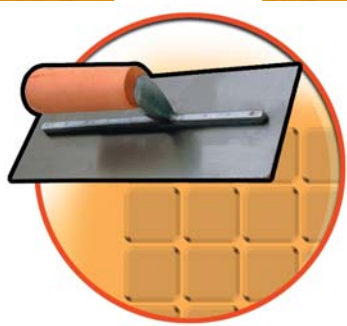


Training offered

in the following institutions:

- CFP Jonquière
- CFP Neufchâtel
- École des métiers du Sud-Ouest de Montréal
- École professionnelle de métiers (Saint-Jean-sur-Richelieu)





Tile Setter

Trade

Description of the trade

- Prepares surfaces, cuts and lays marble, granite, terrazzo, slate, ceramic tiles, and all other similar or substitute materials
- Hand- or machine-polishes surfaces made of granite, marble, or any other material of a similar nature
- Applies cement and putty to joints

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in tile setting and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the three apprenticeship periods of 2,000 hours each (6,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to geometric calculation, materials chemistry, preparation of surfaces, and application of alignment methods
- Be able to rapidly execute repetitive tasks
- Be precise and careful
- Be concerned with the aesthetic quality of the finished product
- Have good dexterity and good colour perception
- Be capable of working in uncomfortable positions and executing tasks while moving

TRAINING

Study program:

Vocational studies diploma – Carrelage (5300) and Tiling (5800)

Duration of training:

690 hours

Academic prerequisite:

Category 2*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$20,907
Journeyman**	\$29,183
Those with at least 500 hours of work	\$43,882
Proportion***	61%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of individuals having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include income that may have been earned for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$19.33	\$19.32	\$18.10
2nd period	\$22.55	\$22.54	\$21.12
3rd period	\$27.38	\$27.37	\$25.64
Journeyman	\$32.21	\$32.20	\$30.17

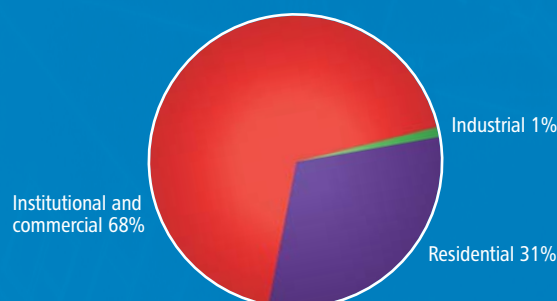
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	203	186
Placement rate for graduates*	87.8%	89.2%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	25
Bas-Saint-Laurent—Gaspésie	51
Côte-Nord	21
Eastern Townships	107
Island of Montréal	374
Laval—Laurentides—Lanaudière	426
Mauricie—Bois-Francis	85
Montréal	358
Outaouais	99
Québec City	342
Saguenay—Lac-Saint-Jean	46
Other regions and James Bay	6
Total	1,940

Number of women employed

51

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Tile setter	13%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	32	50%	47%	3%	1,042
Journeyman	45	7%	75%	18%	898
Total, tile setters	38	30%	60%	10%	1,940
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- In 2009, a record number of 1,940 tile setters were working on construction sites. There were double the number as 10 years ago. Among tile setters is a significant female workforce of 51 employees.
- Almost 800 employers hire tile setters. The volume of work is concentrated in the institutional and commercial sector and the residential sector. Seasonal variations have a limited impact on the volume of work, since tile setters work indoors.
- Job numbers, which have been growing for more than 10 years, should continue to increase in coming years, but more slowly. Growth in residential renovation should continue, while the level of activity should remain high in new residential construction. Furthermore, activity should recover in institutional and commercial construction, the most important sector for this trade.
- A total of 186 new apprentice tile setters joined the industry in 2009. Out of this number, about one quarter had a diploma. The placement rate for new graduates on the labour market surpassed the average in recent years. In the first year, apprentices earn an average annual salary above \$20,000, while journeyman who work at least 500 hours receive an average salary of \$44,000 for work falling under the construction collective agreement.
- Job prospects are excellent for tile setters, since the demand for workers will grow and the current availability of workers is low.



Training offered

in the following institutions:

- CFP de l'Outaouais (Gatineau)
- CFP Pierre-Dupuy (Longueuil)
- École des métiers de la construction de Montréal*
- École des métiers et occupations de l'industrie de la construction de Québec

* This school also offers the program in English.





Tinsmith

Trade

Description of the trade

- Traces, fabricates, and installs all types of sheet-metal items
- Erects and repairs ventilation, air-conditioning, and warm-air-heating systems, as well as all exhaust systems for various materials
- Installs prefabricated metallic items, exterior coverings, and the coverings of metallic roofs
- Applies drawing, cutting, bending, anchorage, and mechanical and thermal assembly techniques

Access to construction sites

- Present to the CCQ his or her academic transcript attesting that he or she has graduated with a DEP in tinsmithery and sheet-metal work and an employment guarantee of at least 150 hours from an employer registered with the organization. This measure allows individuals to obtain an apprentice competency certificate in the trade.

Apprenticeship system

- Have completed the three apprenticeship periods of 2,000 hours each (6,000 hours total) in order to be eligible for the provincial qualification examination that leads to obtaining the journeyman competency certificate for the trade.

Skills and interests

- Acquire knowledge related to drawing and applied trigonometry
- Be able to interpret plans and technical specifications
- Be independent and careful
- Have an analytic mind
- Have good manual dexterity
- Be able to work at heights

TRAINING

Study program:

Vocational studies diploma
– Ferblanterie-tôlerie (5233)

Duration of training:

1,800 hours

Academic prerequisite:

Category 1*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Average annual salary

Apprentice*	\$25,316
Journeyman**	\$41,701
Those with at least 500 hours of work	\$52,076
Proportion***	77%

* Average salary of graduates admitted in 2008, for the 12 months following their admission.

** Average salary in 2009 of individuals having reported at least one hour of work.

*** Proportion of journeymen in this trade having accumulated 500 hours in 2009.

Does not include income that may have been earned for work not falling under the construction collective agreements.

Hourly wage

according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Apprentice			
1st period	\$19.52	\$19.69	\$18.59
2nd period	\$22.78	\$22.97	\$21.69
3rd period	\$27.66	\$27.90	\$26.33
Journeyman	\$32.54	\$32.82	\$30.98

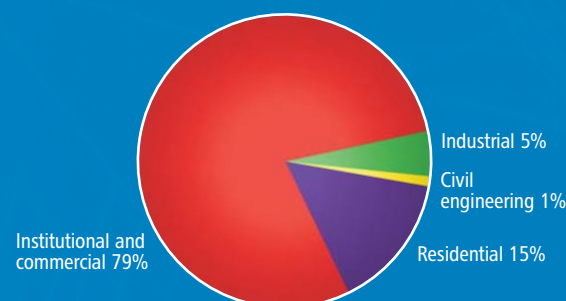
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	295	196
Placement rate for graduates*	89.4%	91.7%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	66
Bas-Saint-Laurent-Gaspésie	110
Côte-Nord	38
Eastern Townships	147
Island of Montréal	342
Laval-Laurentides-Lanaudière	1,179
Mauricie-Bois-Francs	242
Montréal	871
Outaouais	175
Québec City	655
Saguenay-Lac-Saint-Jean	184
Other regions and James Bay	14
Total	4,023

Number of women employed

34

Mobility of workers

Proportion of workers asked to travel from one region to another:*

Tinsmith	14%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Apprentice	30	55%	43%	2%	1,441
Journeyman	44	11%	72%	18%	2,582
Total, tinsmiths	39	26%	62%	12%	4,023
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- The number of tinsmiths working on construction sites dropped slightly in 2009 to reach 4,023. Out of this number, more than a third are apprentices. This is one of the 10 trades in which there are the most women: there were 34 in 2009, while there were only 9 in 1988.
- A total of 1,052 construction companies hire tinsmiths, but 100 of them are responsible for almost half of the volume of work. Most of the work is done in the institutional and commercial sector.
- Among the 196 new apprentices admitted in 2009, almost a third had a diploma. The placement rate for graduates grew in 2009, surpassing the average in previous years. An apprentice tinsmith with a diploma earns an average of \$23,300 during the 12 months following hiring, while the annual average salary of a journeyman who works at least 500 hours reaches \$52,000.
- The demand for tinsmiths will be very high in coming years, since demand will be growing strongly on large-scale institutional projects.



Training offered

in the following institutions:

- CF en métallurgie de Laval
- CFP en métallurgie et multiservices (Chicoutimi)
- CFP Le Tremplin (Thetford Mines)
- CFP Paul-Rousseau (Drummondville)
- École des métiers de la construction de Montréal
- École des métiers et occupations de l'industrie de la construction de Québec





Welder

Description of the occupation

- Interprets specifications and welding procedures
- Does preparation work for welding and fitting
- Cuts, prepares, and assembles pieces and pipes of different metals using various welding techniques

Access to construction sites

- Individuals who present to the CCQ an academic transcript attesting to their having graduated with a DEP – Welding and Fitting may register for the 15-hour course *Cours de connaissance générale de l'industrie de la construction* (CCGIC), in order to obtain an occupation competency certificate.
- The number of places reserved for the CCGIC depends on labour needs established annually by the construction industry.

Skills and interests

- Acquire knowledge related to reading of plans, concepts of metallurgy, operation of various welding and cutting techniques, and controlling welding parameters
- Have professional ethics
- Be independent
- Have very good dexterity and good coordination of movement
- Be able to work in uncomfortable positions
- Respect workplace health and safety rules

TRAINING

Study program:

Vocational studies diploma – Soudage-montage (5195) and Welding and Fitting (5695)

Duration of training:

1,800 hours

Academic prerequisite:

Category 1*

* The academic prerequisites for all trades and occupations in this brochure are described on page 76.

Occupation

Average annual salary

Welder*	\$41,034
Those with at least 500 hours of work	\$62,493
Proportion**	62%

* Average salary in 2009 of individuals having reported at least one hour of work.

** Proportion of workers in this occupation having accumulated 500 hours in 2009.

Does not include income that may have been earned for work not falling under the construction collective agreements.

Hourly wage according to the collective agreements

	Industrial, institutional and commercial	Civil engineering and roadwork	Light residential
Welder	\$30.69	\$31.69	\$29.35

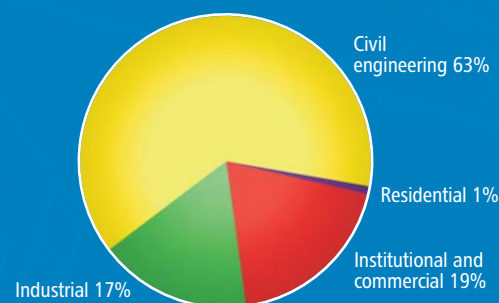
Wage in April 2010.

Integration into the labour market

	Annual average 2004-08	2009
New apprentices admitted by the CCQ	26	29
Placement rate for graduates*	89.9%	84.0%

* Source: survey *La Relance au secondaire en formation professionnelle*, Ministère de l'Éducation, du Loisir et du Sport du Québec. Note that the study is conducted in March, a month when activity in the construction industry is not at its maximum.

Volume of work by sector



Employed workers in 2009

Abitibi-Témiscamingue	10
Bas-Saint-Laurent—Gaspésie	12
Côte-Nord	16
Eastern Townships	3
Island of Montréal	25
Laval—Laurentides—Lanaudière	57
Mauricie—Bois-Francs	12
Montréal	41
Outaouais	1
Québec City	40
Saguenay—Lac-Saint-Jean	23
Other regions and James Bay	1
Total	241

Number of women employed

2

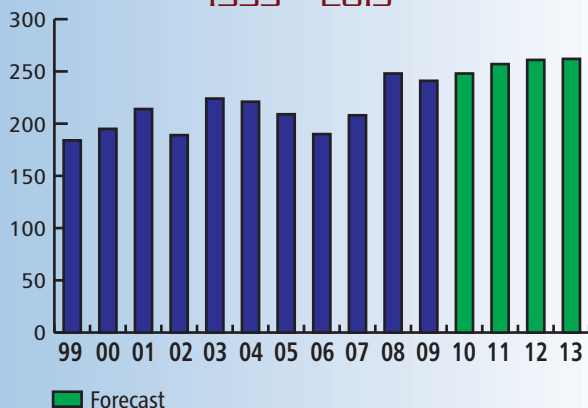
Mobility of workers

Proportion of workers asked to travel from one region to another:*

Welder	36%
All trades and occupations	17%

* Excludes travel between the regions of Montréal, the island of Montréal, and Laval-Laurentides-Lanaudière.

Number of workers employed 1999 – 2013



Age of the labour force, 2009

	Average age	Under 30 years	30-54 years	55 years and over	Total number of workers
Total, welders	42	18%	66%	16%	241
All trades and occupations	39	30%	57%	13%	145,206

Job prospects

- In 2009, 241 welders worked in construction, maintaining the peak attained in 2008. One welder in three works outside his or her region of residence.
- Almost 130 companies hire welders. The civil engineering and roadwork sector alone generates almost two thirds of the activity.
- The industry admitted 29 new welders in 2009, a number similar to preceding years. Graduates successfully entered the job market after obtaining their diploma. Welders earn an annual average salary of \$41,000, and those who work at least 500 hours may earn \$62,000.
- Job prospects for welders are excellent due to the strong rise in demand forecast in coming years. The need for workers is also explained by high worker turnover.



Training offered

in the following institutions:

- Centre d'études professionnelles Saint-Jérôme
- Centre d'excellence en formation industrielle (Windsor)
- Centre intégré de formation en métallurgie (La Pocatière)
- Centre intégré de mécanique, de métallurgie et d'électricité (LaSalle)
- Centre intégré de mécanique industrielle de la Chaudière (Saint-Georges)
- Centre La Croisée (Donnacoona)
- CEFPA – Pavillon Bégin (Alma)
- CFP Alma
- CFP André-Morissette (Plessisville)
- CFP Anjou
- CFP de l'Asbesterie (Asbestos)
- CFP A.-W.-Gagné (Sept-Îles)
- CFP C.-E.-Pouliot (Gaspé)**
- CFP Charlevoix (Baie-St-Paul)
- CFP de Cowansville**
- CFP de la Jamésie (Chibougamau)
- CFP de Lennoxville**
- CFP de Lévis
- CFP de l'Outaouais (Gatineau)
- CFP de Matane
- CFP Dolbeau-Mistassini (Dolbeau)
- CFP en métallurgie et multiservices (Chicoutimi)
- CFP Lac-Abitibi (La Sarre)
- CFP Le Tremplin (Thetford-Mines)
- CFP Mont-Joli – Mitis (Mont-Joli)
- CFP Nova** (Châteauguay)
- CFP Pavillon-de-l'Argile (Joliette)
- CFP Pavillon-de-l'Avenir (Rivière-du-Loup)
- CFP Paul-Rousseau (Drummondville)
- CFP Pierre-Dupuy (Longueuil)
- CFP de la Pointe-du-Lac (Salaberry-de-Valleyfield)
- CFP Qualitech (Cap-de-Madeleine)
- CFP de Québec
- CFP Sorel-Tracy
- CFP 24-Juin (Sherbrooke)
- École des métiers de la construction de Montréal
- École professionnelle de métiers (Saint-Jean-sur-Richelieu)
- Pavillon-Montcalm (Saint-Lin-des-Laurentides)

** This school offers the program in English only.



Academic prerequisites

associated with vocational study programs

Here is the legend for the prerequisites categories appearing in the “Training” sections for the trades and occupations described in this brochure.

Category 1

For individuals who hold a secondary studies diploma or its recognized equivalent, no supplementary condition for admission is required.

OR

For individuals at least 16 years of age as of September 30 of the school year in which they begin their training, the condition for admission is the following: have passed the Secondary 4 units in the language of teaching, the second language, and mathematics.

OR

For individuals at least 18 years of age, the condition for admission is the following: have passed the general development test and the prerequisites specific to the targeted program.

OR

For individuals who have passed the units of Secondary 3 in language of teaching, second language, and mathematics in the study programs established by the minister, continuing of general education at the same time as vocational training is required in order to pass the units that are missing among the following: Secondary 4 in language of teaching, second language, and mathematics in the study programs established by the minister.

Category 2

For individuals who hold a secondary studies diploma or its recognized equivalent, no supplementary condition for admission is required.

OR

For individuals at least 16 years of age as of September 30 of the school year in which they begin their training, the condition for admission is the following: have passed the Secondary 3 units in the language of teaching, the second language, and mathematics.

OR

For a person at least 18 years of age, the condition for admission is the following: have passed the general development test and the prerequisites specific to the targeted program.

To be certain that you have the required academic prerequisites, please contact one of the vocational training centres that offer the vocational studies program that you are interested in.

List of offices

of the Commission de la construction du Québec

Abitibi-Témiscamingue

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Web site:

www.ccq.org

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Handwriting practice lines consisting of 28 horizontal lines.

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Association des constructeurs
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