

# Architectural Technologists & Technicians

NOC 2251

## NATURE OF WORK

Architectural technologists and technicians may work independently or provide technical assistance to professional architects and civil design engineers in conducting research, preparing drawings, architectural models, specifications and contracts and in supervising construction projects. Architectural technologists and technicians are employed by architectural and construction firms, and governments.

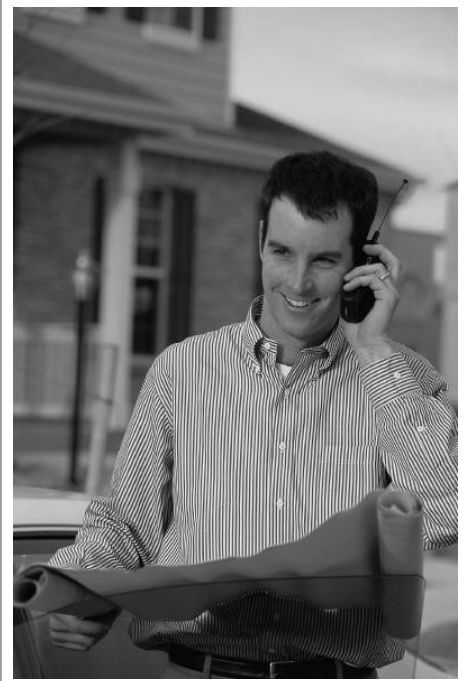
## EXAMPLE TITLES

Architectural Design Technician, Architectural Design Technologist, Architectural Technician, Architectural Technologist

## MAIN DUTIES

Architectural technologists and technicians perform some or all of the following duties:

- Assist in the development of architectural designs
- Analyze building codes, by-laws, space requirements, site requirements and other technical documents and reports
- Prepare manual and CAD (computer-assisted design) drawings, specifications, cost estimates and listings of quantities of material from conceptual drawings and instructions
- Construct architectural and display models, and 3-D virtual models of architectural designs
- Prepare contract and bidding documents
- May supervise drafters, technicians and technologists on the architectural team
- May supervise construction projects and co-ordinate, monitor and inspect work done by others



## WAGES & SALARIES

Low - Data Unavailable

Average - \$20.56 per hour

High - Data Unavailable

Note - 2007 Reference Period



Northwest  
Training and Adjustment Board  
113 - 100 Casimir Avenue  
DRYDEN, Ontario P8N 3L4  
Tel: 807.223.3813

[www.ntab.on.ca](http://www.ntab.on.ca)

GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)

## EMPLOYMENT TRENDS

Opportunities for employment in this occupation are expected to be good over the period from 2009 to 2013.

Employment levels for architectural technologists and technicians are heavily dependent on activity in the construction sector, which experiences less activity during an economic downturn. The use of computer-aided design technology is blurring the boundary between the work of engineers, architects and technologists. Many young engineers and architects are now doing conception design and production tasks once done by technicians and technologists. This trend may limit future employment growth.

Current use of computerized design is transforming this occupation. Workers will need to develop the appropriate skills and will need intermittent retraining and professional development to keep up with new technologies.

## EMPLOYMENT REQUIREMENTS

- Completion of a two- to three-year college program in architectural technology or a related subject is usually required.
- Certification in architectural technology or in a related field through provincial associations of architectural or engineering/applied science technologists and technicians may be required by employers.
- A period of supervised work experience, usually two years, is required before certification.
- In Quebec, membership in the regulatory body is required to use the title of Professional Technologist.

## LOCAL SKILLS REQUIREMENTS

- Ability to work collaboratively or independently
- 3D visualization
- Good verbal communication skills
- Ability to present information to others effectively
- Computer skills

## WHERE TO GET TRAINING

Additional information about this occupation can be obtained from the following web sites:

- Canadian Council of Technicians and Technologists ([www.cctf.ca](http://www.cctf.ca))
- Ontario Association of Architects ([www.oaa.on.ca](http://www.oaa.on.ca))
- Ontario Association of Certified Engineering Technicians & Technologists ([www.oacett.org](http://www.oacett.org))
- Association of Architectural Technologists of Ontario ([www.aato.on.ca/](http://www.aato.on.ca/))

## WORKING CONDITIONS

Working with architects and civil engineers engaged in building design, architectural technologists and technicians often operate on-site and therefore must take precautions against the risks associated with construction. Hours will be greater as deadlines approach and during particularly intense construction periods. Some development of detailed working drawings will require work indoors.

## RELATED OCCUPATIONS

- Architects (2151)
- Civil Engineering Technologists & Technicians (2231)
- Construction Estimators (2234)
- Construction Inspectors (2264)
- Construction Managers (0711)
- Drafting Technologists and Technicians (2253)
- Land Survey Technologists & Technicians (2254)

## POTENTIAL EMPLOYERS

- Federal and Provincial Governments
- Architectural, Engineering and other Scientific Companies
- Building Developers and Construction Firms

# Concrete Finishers

**NOC 7282**

## NATURE OF WORK

Concrete finishers smooth and finish freshly poured concrete, apply curing or surface treatments and install, maintain and restore various masonry structures such as floors, ceilings, sidewalks, roads and patios. They are employed by construction companies, cement and concrete contractors and manufacturers of precast concrete products, or they may be self-employed.

## EXAMPLE TITLES

Cement Finisher Apprentice, Cement Mason, Concrete Finisher, Concrete Mason, Precast Concrete Finisher

## MAIN DUTIES

Concrete finishers perform some or all of the following duties:

- Check formwork, granular base and steel reinforcement materials and direct placement of concrete into forms or onto surfaces according to grade
- Fill hollows and remove high spots to smooth freshly poured concrete
- Operate power vibrator to compact concrete
- Level top surface of concrete according to grade and depth specifications using straightedge or float
- Impart desired finish to concrete surfaces using hand and power tools
- Install anchor bolts, steel plates, door sills and other fixtures in freshly poured concrete
- Apply hardening and sealing compounds to cure surface of concrete
- Waterproof, damp-proof and restore concrete surfaces
- Repair, resurface and replace worn or damaged sections of floors, walls, roads and other concrete structures



## WAGES & SALARIES

Low - \$ 14.70 per hour

Average - \$ 22.80 per hour

High - \$ 30.75 per hour

Note - 2007 Reference Period



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**GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)**

## EMPLOYMENT TRENDS

In Ontario, employment opportunities for these trades are expected to remain fair to good over the next two years. Employment prospects are closely linked to the construction industry, both residential (i.e.: houses, townhomes, condominiums) and non-residential (i.e.: manufacturing plants, institutions, roads, engineering projects, commercial buildings). Over the last few years rapid growth in new housing starts resulted in a tight labour market with reports of shortages for many of the construction trades including Concrete Finishers. Over the forecast period housing starts are expected to decline slightly, which should moderate labour market pressures. However, since Concrete Finishers are employed through-out the construction industry, tradepersons working in the residential sector have the opportunity to find work in the non-residential sector. Accordingly, employment opportunities for qualified job seekers should remain steady.

Employment in the construction industry is highly seasonal. Employment opportunities are significantly better during the peak summer months than during the winter months. Although winter layoffs occur annually, especially during periods of very cold weather, they are less frequent than in the past due to advances in materials and heating used at job sites.

## EMPLOYMENT REQUIREMENTS

- Completion of secondary school is usually required.
- Completion of a two- to four- year apprenticeship program , or
- Over three years of work experience in the trade and some high school, college or industry courses in cement finishing are usually required to be eligible for trade certification.
- Trade certification is compulsory in Quebec and available, but voluntary, in Newfoundland, Nova Scotia, Prince Edward Island, New Brunswick, Ontario, Manitoba, Saskatchewan, Alberta, and British Columbia.
- Inter-provincial trade certification (Red Seal) is also available to qualified concrete finishers.

## LOCAL SKILLS REQUIREMENTS

Although inter-provincial trade certification (Red Seal) is available to qualified concrete finishers in most provinces, the province of Ontario does not participate in this certification program for this trade.

### Skills Requirements

Most employers who advertise are looking for workers who have the following experience and skills:

Experience: 1-5 years

### Specific Skills:

Finish concrete surfaces using hand and power tools. Level top surface concrete according to grade and depth specification. Direct placement of concrete into forms or surfaces.

### Additional Skills:

Work at heights, on scaffolding or swing stages.

### Essential Skills:

Working with others, oral communication and problem solving.

## WORKING CONDITIONS

Work performed by the Cement Mason Finisher is required on almost every kind of construction job, usually on a project-by-project basis. Pouring and finishing concrete is strenuous work requiring bending, stooping and carrying heavy objects. Exposure to water, noises and vibrations is common. Workers generally have a 35-40 hour week, often in shifts, and must be prepared to travel to where work is available.

Starting wage rate for an apprentice is typically lower than the journeyman wage rate but increases as the apprentice gains experience.

## RELATED OCCUPATIONS

- Bricklayers (7281)
- Concrete products machine operators (in 9414 Concrete, Clay and Stone Forming Operators
- Supervisors of concrete finishers (in 7219 Contractors and Supervisors, Other Construction Trades, Installers, Repairers and Servicers)

## WHERE TO GET TRAINING

Information on apprenticeship programs in Ontario is available on the Ministry of Education / Ministry of Training, Colleges and Universities website at:

[www.edu.gov.on.ca/eng/training](http://www.edu.gov.on.ca/eng/training)



# Contractors & Supervisors, Other Construction Trades Installers, Repairers & Servicers

## NOC 7219

### NATURE OF WORK

This unit group includes roofing, masonry, painting and other construction trade contractors, not elsewhere classified, who own and operate their own business. Supervisors in this unit group supervise and co-ordinate the activities of various tradespersons, installers, repairers and servicers classified in the following minor groups: Masonry and Plastering Trades (728), Other Construction Trades (729) and Other Installers, Repairers and Servicers (744). They are employed by a wide range of establishments; places of employment are indicated in the unit group descriptions. This unit group also includes prefabricated product installation and service contractors and proprietors of some repair and service establishments.

### EXAMPLE TITLES

Bricklaying Contractor, Cement Finishing Contractor, Painting Contractor, Roofing Contractor, Foreman/Woman of Glaziers, Insulators, Plasterers, Supervisor for Pest Control, Bicycle Repair Shop, Painters and Decorators, Tilesetters

### MAIN DUTIES

Contractors and supervisors in this unit group perform some or all of the following duties:

- Supervise, co-ordinate and schedule the activities of construction workers engaged in bricklaying, roofing, cement finishing, filesetting, plastering, drywall installation, glazing, insulating and painting, and workers who install and service prefabricated products in residential and commercial properties, as well as workers who repair a wide variety of products, such as musical instruments, sports equipment, vending machines, bicycles and cameras
- Establish methods to meet work schedules and co-ordinate work activities with other subcontractors
- Resolve work problems and recommend measures to improve productivity and product quality
- Requisition materials and supplies
- Train workers in job duties, safety procedures and company policies
- May manage the operations of own company
- May also supervise, co-ordinate and schedule the activities of related apprentices, helpers and labourers



### WAGES & SALARIES

Low - \$ 15.00 per hour

Average - \$ 19.35 per hour

High - \$ 30.15 per hour

Note:

2006 Reference Period for the Thunder Bay area



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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)

## EMPLOYMENT TRENDS

The employment growth rate will likely be below average because of an expected decline in the residential construction industry. The retirement rate will likely be above average and the number of retiring workers should contribute to job openings. The majority of workers work in the construction sector.

As the work is highly seasonal the occupation experiences high turnover. There are frequent job opportunities occurring as employers seek replacement workers. It is quite common for roofers and shinglers to work part of the year in this trade, and work in other jobs during the off season. Employment is fairly evenly distributed across the province.

## EMPLOYMENT REQUIREMENTS

- Completion of secondary school is usually required.
- Several years of experience in the trade or in the work area supervised are usually required.
- Journeyman/woman trade certification may be required for some occupations in this unit group.

## LOCAL SKILLS REQUIREMENTS

Most employers who advertise are looking for workers who have the following experience and skills:

Experience: 1 - 5 years

### Specific Skills:

Ensure adherence to safety standards. Supervise workers and projects.

### Essential Skills:

Working with others, problem solving, oral communication, decision making and reading text.

## WHERE TO GET TRAINING

For information on college and university programs visit the CanLearn Interactive website at:

[www.canlearn.ca](http://www.canlearn.ca)

## WORKING CONDITIONS

Some workers in this occupation classification must work at great heights. The work is very strenuous, dangerous, and is often done in adverse weather conditions. Work involves climbing, bending squatting, sitting, standing, and heavy lifting. At times work can be seasonal due to weather conditions or economic situations. Workers often work more than 40 hours per week. Workers may need to travel to and from worksites.

## RELATED OCCUPATIONS

- Contractors and Supervisors, Carpentry Trades (7215)
- Contractors and Supervisors, Pipefitting Trades (7213)
- Electrical contractors and supervisors of electricians (in 7212 Contractors and Supervisors, Electrical Trades and Telecommunications Occupations)
- Ironwork contractors and supervisors of ironworkers (in 7214 Contractors and Supervisors, Metal Forming, Shaping and Erecting Trades)

## WHERE TO GET TRAINING

For information on college and university programs visit the CanLearn Interactive website at:

[www.canlearn.ca](http://www.canlearn.ca)

# Customer Service, Information & Related Clerks

## NOC 1453

### NATURE OF WORK

This unit group includes clerks who answer enquiries and provide information regarding an establishment's goods, services and policies and who provide customer services such as receiving payments and processing requests for services. They are employed by retail establishments, call centres, insurance, telephone and utility companies and by other establishments throughout the private and public sectors.

### EXAMPLE TITLES

Account Information Clerk, Call Centre Agent, Complaints Clerk, Counter Enquiries Clerk, Courtesy Desk Clerk, Customer Service Clerk, Enquiries Clerk, Hospital Information Clerk, Information Clerk, Order Desk Agent, Public Relations Clerk, Tourist Information Clerk

### MAIN DUTIES

The following is a summary of main duties for some occupations in this unit group:

- Customer service clerks in retail establishments answer, in person or on the phone, enquiries from customers and investigate complaints regarding the establishment's goods, services and policies; arrange for refunds, exchange and credit for returned merchandise; receive account payments; and receive credit and employment applications
- Call centre agents take customer orders for goods or services; promote goods or services; respond to enquiries and emergencies; investigate complaints and update accounts
- Customer service clerks in insurance, telephone, utility and similar companies explain the type and cost of services offered; order services; provide information about claims or accounts; update accounts; initiate billing and process claim payments; and receive payment for services
- Information clerks provide information to customers and the public concerning goods, services, schedules, rates, regulations and policies in response to telephone and in-person enquiries



### WAGES & SALARIES

Low - \$ 10.00 per hour

Average - \$ 15.52 per hour

High - \$ 23.00 per hour

Note - 2007 Reference Period



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**GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)**

## EMPLOYMENT TRENDS

Over the next two years opportunities for customer service, information and related clerks are expected to be good.

Employment for this occupation is expected to grow more rapidly than the average for all occupations through the year 2009.

The trend towards centralization of corporate information functions through telecentres, often located in lower-cost areas of the country, or the world, may negatively affect employment opportunities for this occupational group in large urban centres. With that said, replacement needs are expected to be significant as many young people work as customer service representatives for a few years before switching to other, higher paying jobs.

## EMPLOYMENT REQUIREMENTS

- Completion of secondary school is usually required.
- Completion of some college or other post-secondary programs may be required.
- Clerical or sales experience may be required.

## LOCAL SKILLS REQUIREMENTS

Most positions in this category require communication and computer skills along with product knowledge.

Most employers who advertise are looking for workers who have the following experience and skills:

Experience: 0 - 6 months

### Specific Skills:

Answer inquiries and provide information to customers. Access and process information. Explain the type and cost of services offered.

A growing number of customer self-help applications are being used to process basic transactions, increasing the complexity of customer inquiries directed to customer contact centre agents. Consequently, employers are looking for individuals with the skills to work in a highly integrated, multi-channel environment and who can deal with more complex customer inquiries.

## WHERE TO GET TRAINING

Most customer service and information clerks receive on-the-job training.

## WORKING CONDITIONS

Customer service representatives, information and related clerks generally work in reception areas, though in small businesses and in some accommodation establishments they may be located at the front of the general office. Much of their work now occurs by telephone. Performance in these jobs is often monitored by automated call distribution technology (length of calls, need for referrals, time off-line).

## RELATED OCCUPATIONS

- Correspondence, Publication & Related Clerks (1452)
- Customer service representatives in banks and other financial institutions (in 1433 Customer Service Representatives - Financial Services)
- General ticket and information agents (airline) (in 6433 Airline Sales and Service Agents)
- Receptionists and Switchboard Operators (1414)
- Retail Salespersons and Sales Clerks (6421)
- Supervisors, Library, Correspondence and Related Information Clerks (1213)
- Ticket and information clerks (except airline) (in 6434 Ticket Agents, Cargo Service Representatives and Related Clerks (Except Airline))

## POTENTIAL EMPLOYERS

- Retail Stores
- Government
- Call Centres
- Hospitals

# Dental Hygienists & Dental Therapists

## NOC 3222

### NATURE OF WORK

Dental hygienists provide dental hygiene treatment and information related to the prevention of diseases and disorders of the teeth and mouth. They are employed in dentists' offices, hospitals, clinics, educational institutions, government agencies and private industry. Dental therapists carry out limited dental services related to the prevention and treatment of diseases and disorders of the teeth and mouth. They are employed by the federal government and the provincial governments to provide services in rural and remote communities.

### EXAMPLE TITLES

Dental Hygienist, Dental Nurse, Dental Therapist

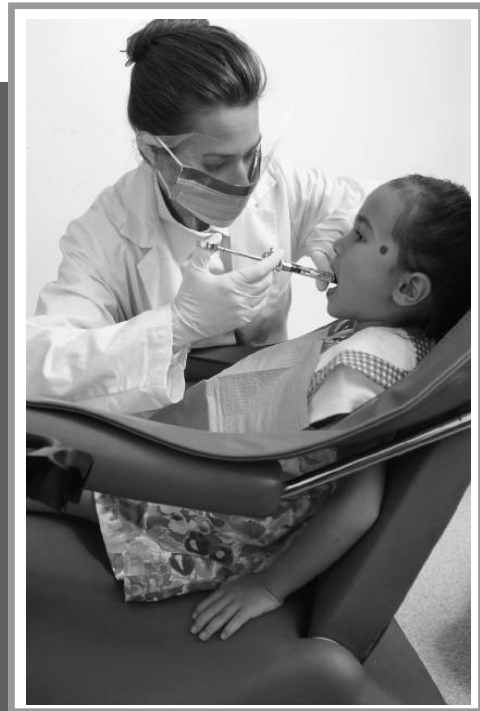
### MAIN DUTIES

Dental hygienists perform some or all of the following duties:

- Conduct an initial dental assessment and consult with dentists on patient care, take dental impressions and develop x-rays, instruct patients regarding oral hygiene procedures, clean and stimulate the gums to prevent gum disease
- Remove stains and deposits from teeth to prevent tooth and root decay, apply fluoride treatment
- May perform restorative and orthodontic procedures under the direction of a dentist
- May supervise dental assistants in their health care functions.

Dental therapists perform some or all of the following duties:

- Conduct dental assessments and consult with dentist on patient care
- Take dental impressions and develop X-rays
- Remove stains and deposits from teeth to prevent tooth and root decay
- Apply fluoride treatment
- Instruct patients regarding oral hygiene procedures
- Supervise dental assistants in their health care functions
- May drill and fill cavities, extract teeth and replace portions of tooth crown.



### WAGES & SALARIES

Low - \$ 28.00 per hour

Average - \$ 33.74 per hour

High - \$ 43.68 per hour

Note:

2007 Reference Period for the Thunder Bay area



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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)



## EMPLOYMENT TRENDS

Opportunities for employment in this occupation are expected to be good over the period from 2009 to 2013 as the population ages and increasing attention to dental hygiene. The demand for dental services is influenced by population growth, improvements in oral hygiene that allow people to keep their teeth longer and public awareness of the importance of dental health. These factors have increased the overall need for preventive, operative and orthodontic services.

However, demand for dental services is sensitive to the business cycle since dental care is paid for by private insurance or directly by patients. Consequently, in an economic downturn, consumer demand for some dental services may decrease.

Due to rapid changes in diagnostic and treatment technology, professionals in these fields of work must continually upgrade their skills. Those who stay abreast of new technologies may have an advantage over others seeking employment in these fields.

## EMPLOYMENT REQUIREMENTS

- Dental hygienists are required to complete a college program ranging from one to three years, or other approved program in dental hygiene recognized by the governing board within the province or territory of residence.
- Licensing by the appropriate provincial or territorial regulatory body is required for dental hygienists.

## LOCAL SKILLS REQUIREMENTS

Most employers who advertise are looking for workers who have the following experience and skills:

### Experience:

No experience required.

### Dental Hygienist Specific Skills:

Instruct patients regarding oral hygiene. Take, develop and mount X-rays. Apply fluoride treatment. Clean and stimulate the gums to prevent gum disease. Remove stains and deposits from teeth. Conduct initial dental assessments and consult with dentists on patient care.

### Dental Therapist Specific Skills:

Instruct patients regarding oral hygiene. Take, develop and mount X-rays. Remove stains and deposits from teeth. Conduct initial dental assessments and consult with dentists on patient care.

### Additional Skills:

Supervise dental assistants in their health care functions.

### Essential Skills:

Oral communication, working with others, computer use, problem solving, job task planning and organizing, writing, reading text, document use, finding information, critical thinking, decision making, continuous learning, numeracy and significant use of memory.

## WORKING CONDITIONS

Dental hygienists and dental therapists work in neat, well-lit sanitary environments, following sterile procedures. They work standing and sitting and sometimes in uncomfortable positions. Over half of the dental hygiene jobs are full-time done during normal business hours although part-time workers account for more than one third of all employees in this occupation. In order to better serve the needs of clients, hygienists must work flexible hours and be available to work in the evenings and during weekends. Dental therapists in Ontario may practice only on Crown land or on aboriginal reserves.

## RELATED OCCUPATIONS

- Dental Assistants (3411)
- Dental Technologists, Technicians & Laboratory Bench Workers (3223)
- Dentists (3113)
- Denturists (3221)

## POTENTIAL EMPLOYERS

- Hospitals
- Dental clinics
- Dental offices
- Health Unit
- Government

## WHERE TO GET TRAINING

Registration with the College of Dental Hygienists of Ontario (CDHO) is required to practice as a dental hygienist in Ontario.

Dental hygiene educational programs are offered throughout Ontario and approved institutions are listed on the website of the Commission on Dental Accreditation of Canada ([www.cda-adc.ca/cdacweb/en](http://www.cda-adc.ca/cdacweb/en)).

Complete and current registration requirements are listed on the CDHO website ([www.cdho.org](http://www.cdho.org)).

# Electricians

## (Except Industrial & Power System)

NOC 7241

### NATURE OF WORK

Electricians in this unit group lay out, assemble, install, test, troubleshoot and repair electrical wiring, fixtures, control devices and related equipment in buildings and other structures. They are employed by electrical contractors and maintenance departments of buildings and other establishments, or they may be self-employed.

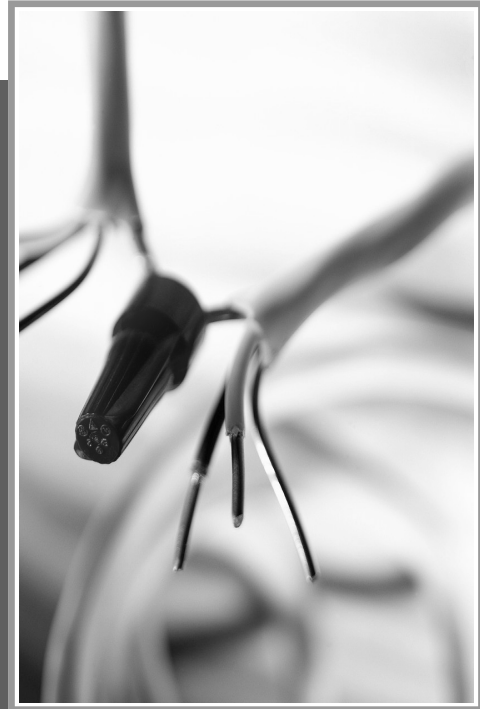
### EXAMPLE TITLES

Apprentice electrician, construction electrician, construction electrician apprentice, domestic and rural electrician, electrician

### MAIN DUTIES

Electricians in this unit group perform some or all of the following duties:

- Read and interpret drawings, circuit diagrams and electrical code specifications to determine wiring layouts for new or existing installations
- Pull wire through conduits and through holes in walls and floors
- Install brackets and hangers to support electrical equipment
- Install, replace and repair lighting fixtures and electrical control and distribution equipment, such as switches, relays and circuit breaker panels
- Splice, join and connect wire to fixtures and components to form circuits
- Test continuity of circuits using test equipment to ensure compatibility and safety of system, following installation, replacement or repair
- Troubleshoot and isolate faults in electrical and electronic systems and remove and replace faulty components
- Connect electrical power to sound and visual communication equipment, signalling devices and heating and cooling systems
- Conduct preventive maintenance programs and keep maintenance records.



### WAGES & SALARIES

Low - \$ 15.00 per hour

Average - \$ 25.08 per hour

High - \$ 38.93 per hour

Note - 2007 Reference Period



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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)

## EMPLOYMENT TRENDS

Opportunities for employment in this occupation are expected to be good over the period from 2009 to 2013.

Due to the large size of this occupational group, many job openings will result from the need to replace workers who retire. In addition, demand will be spurred by population growth and rapid changes in technology which require more complex wiring systems be installed and maintained.

Technological developments in building design, the increasing use of computers and telecommunications in the workplace and installations of automated manufacturing systems in factories will enhance job opportunities for electricians. As the stock of buildings ages, renovation projects which retrofit existing electrical and wiring systems to meet electrical codes will create further work opportunities.

However, employment for these electricians is sensitive to the cyclical nature of the construction industry. Electricians generally work on a project-by-project basis. When construction activity is slow, they may experience unemployment while waiting for the next project. Recent federal tax incentives for residential renovations will continue to generate jobs in the short term for electricians as they implement ecoENERGY Retrofit initiatives. In the long term, as the construction sector and economy rebound, employment growth should continue at forecast levels. When hiring apprentices, employers place a high value on logical thinking, problem-solving skills, and math skills related to the job, in addition to technical skills.

## EMPLOYMENT REQUIREMENTS

- Completion of secondary school is usually required.
- Completion of a four- to five-year apprenticeship program is usually required.
- Trade certification for construction electricians is compulsory in Newfoundland, Nova Scotia, Prince Edward Island, New Brunswick, Quebec, Ontario, Saskatchewan, Alberta, British Columbia, the Northwest Territories and the Yukon and available, but voluntary, in Manitoba
- Trade certification for electricians (domestic and rural) is mandatory in Quebec and Ontario, and available, but voluntary in Newfoundland.
- Inter-provincial trade certification (Red Seal) is also available to qualified construction electricians.

## LOCAL SKILLS REQUIREMENTS

Most employers who advertise are looking for workers who have the following experience and skills:

**Experience:** 1 - 5 years

### Specific Skills:

Install, replace and repair electrical controls and panel boxes. Splice, join and connect wires. Troubleshoot and isolate faults. Test and measure voltage, loads, ground faults integrity of circuits.

### Additional Skills:

Instruct apprentices. Read and interpret blueprints, drawings and specifications. Keep maintenance reports and documentation.

### Essential Skills:

Reading text, document use, writing, numeracy, oral communication, thinking skills, problem solving, decision making, significant use of memory, finding information and computer use.

## WORKING CONDITIONS

Electricians work both indoors and outdoors. Much of the electrical work is done while standing, frequently on ladders, scaffolds, or in confined spaces. Shift work, occasional weekend work or travel may be required. Work may be seasonal and safety procedures must be observed at all times to guard against electrical shock.

## RELATED OCCUPATIONS

- Electrical Mechanics (7333)
- Industrial Electricians (7242)
- Power System Electricians (7243)
- Supervisors of Electricians (in 7212 Contractors & Supervisors, Electrical Trades & Telecommunications Occupations)

## POTENTIAL EMPLOYERS

- Electrical Companies
- Self Employment

## WHERE TO GET TRAINING

Entry to apprenticeship requires a job and usually completion of Grade 12.

Alternatively, entry into apprenticeship can be pursued through pre-apprenticeship training.

Information on apprenticeship programs is available on the Ministry of Education/Ministry of Training, Colleges and Universities website at: [www.edu.gov.on.ca](http://www.edu.gov.on.ca)

# Food Service Supervisors

## NOC 6212

### NATURE OF WORK

Food service supervisors, supervise, direct and co-ordinate the activities of workers who prepare, portion and serve food. They are employed by hospitals and other health care establishments and by cafeterias, catering companies and other food service establishments.

### EXAMPLE TITLES

Cafeteria Supervisor – Food Services, Catering Supervisor, Canteen Supervisor, Food Service Supervisor

### MAIN DUTIES

- Food service supervisors perform some or all of the following duties:
- Supervise, co-ordinate and schedule the activities of staff who prepare, portion and serve food
- Estimate and order ingredients and supplies required for meal preparation
- Prepare food order summaries for chef according to requests from dieticians, patients in hospitals or other customers
- Establish methods to meet work schedules
- Maintain records of stock, repairs, sales and wastage
- Train staff in job duties, and sanitation and safety procedures
- Supervise and check assembly of regular and special diet trays and delivery of food trolleys to hospital patients
- Ensure that food and service meet quality control standards
- May participate in the selection of food service staff and assist in the development of policies, procedures and budgets
- May plan cafeteria menus and determine related food and labour costs.



### WAGES & SALARIES

Low - \$ 9.50 per hour

Average - \$ 10.25 per hour

High - \$ 12.50 per hour

Note:

2007 Reference Period for the Thunder Bay area



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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)

## EMPLOYMENT TRENDS

Opportunities for employment in this occupation are expected to be average over the period from 2009 to 2013. Demand for these supervisors is largely dependent on consumer spending and the overall state of the economy. Growth in the population of elderly people will result in a growing demand for food service supervisor jobs in nursing and residential care facilities and supportive care services.

Managers are usually hired from within the establishment through the promotion of existing staff. Use of computerized ordering systems and inventory control systems will continue to increase. Supervisors will need to be familiar with these systems. Also, employers are stressing the need for teamwork, communication, planning and organizing skills.

## EMPLOYMENT REQUIREMENTS

- Completion of secondary school is usually required.
- Completion of a community college program in food service administration, hotel and restaurant management or related discipline, or
- Several years of experience in food preparation or service are required.
- Management trainee programs may be available. Smart Serve and food safety or food handling certifications may be required.

## LOCAL SKILLS REQUIREMENTS

Most employers who advertise are looking for workers who have the following experience and skills:

Experience: 1 - 2 years

### Specific Skills:

Supervise and co-ordinate activities of staff who prepare and portion food. Ensure food service and quality control. Maintain records of stock, repairs, sales and wastage.

### Additional Skills:

Train staff in job duties, sanitation and safety procedures. Establish methods to meet work schedules.

### Essential Skills:

Working with others, oral communication, problem solving, decision making and finding information.

## WHERE TO GET TRAINING

For information on college and university programs visit the CanLearn Interactive website at: [www.canlearn.ca](http://www.canlearn.ca)

## WORKING CONDITIONS

Restaurant and food service managers work variable hours that can change at short notice when employees are absent. Restaurant managers tend to work long hours including evenings and weekends, which are the most popular dining hours. Managers in institutions, such as cafeteria managers, often work more conventional hours, but long hours are common as well. Restaurant and food service managers must be aware of the laws and regulations regarding the sale of alcohol if applicable, and must ensure that health and safety regulations are followed.

## RELATED OCCUPATIONS

- Banquet captains (in 6453 Food & Beverage Servers)
- Maîtres d'Hôtel and Hosts/Hostesses (6451)
- Restaurant and Food Service Managers (0631)

## POTENTIAL EMPLOYERS

- Restaurants
- Fast Food Outlets and Franchises
- Hotels, Motels and Tourist Operations
- Catering or Food Services Companies



# Insurance Adjusters & Claims Examiners

NOC 1233

## NATURE OF WORK

Insurance adjusters investigate insurance claims and determine the amount of loss or damages covered by insurance policies. They are employed in claims departments of insurance companies or as independent adjusters. Insurance claims examiners examine claims investigated by insurance adjusters and authorize payments. They are employed at head offices or branches of insurance companies.

## EXAMPLE TITLES

Adjuster, Claims Examiner, Claims Representative, Insurance Adjuster

## MAIN DUTIES

Insurance adjusters perform some or all of the following duties:

- Investigate circumstances surrounding insurance claims to determine validity of claim
- Inspect automobile, home or other property damage
- Take statements and consult with claimants, accident witnesses, doctors and other relevant individuals and examine records or reports
- Determine amount of loss or damages covered by insurance policies
- Negotiate settlement of claims
- Prepare adjustment reports.

Insurance claims examiners perform some or all of the following duties:

- Review, examine, calculate and authorize insurance claims investigated by insurance adjusters
- Examine adjusters' reports and similar insurance claims or precedents to determine extent of insurance coverage
- Ensure claims are valid and settlements are made according to company practices and procedures
- Consult lawyers, doctors or other relevant individuals to discuss insurance claims
- Approve automobile, fire, life, disability, dental or other insurance claims.



## WAGES & SALARIES

Low - Data Unavailable

Average - Data Unavailable

High - Data Unavailable

Note - 2007 Reference Period



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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)

## EMPLOYMENT TRENDS

Opportunities for employment in this occupation are expected to be good over the period from 2009 to 2013.

Technology is reducing the amount of time it takes for insurance adjusters and claim examiners to complete a claim thereby increasing efficiency. However, demand for these workers will increase regardless of new technology because some functions cannot be easily automated. In addition, the need for adjusters and examiners will grow as result of more policies being sold to accommodate a growing and aging population.

As the elderly population increases, there will be greater need for health care, resulting in more opportunities for work. Insurance adjusters and claims examiners work with computerized accounting and insurance processing systems. Those with specialized computer skills will have the best chances at employment.

## EMPLOYMENT REQUIREMENTS

- Completion of secondary school is required.
- A bachelor's degree, college diploma or some post-secondary education, or
- Several years of experience as a clerk in the claims department or other general insurance experience are required.
- Several years of on-the-job training and completion of insurance industry courses and training programs are required.
- Independent adjusters require a provincial licence issued by the Superintendent of Insurance in the province or territory of employment.

## LOCAL SKILLS REQUIREMENTS

Most employers who advertise are looking for workers who have the following experience and skills:

Experience: 1 - 2 years

### Insurance Adjuster Specific Skills:

Examine records and reports. Investigate circumstances surrounding insurance claims. Determine validity of claims. Negotiate settlement of claims.

### Insurance Claims Examiner Specific Skills:

Ensure claims are valid. Ensure settlements are made according to company practices and procedures. Review, examine, calculate and authorize insurance claims.

Business Equipment and Computer Applications: MS Word, Windows and Database software.

### Essential Skills:

Oral communication, working with others, computer use, problem solving, job task planning and organizing, writing, reading text, document use, finding information, critical thinking, decision making, continuous learning, numeracy and significant use of memory.

## WORKING CONDITIONS

The investigative aspect of the job sometimes involves evening and weekend work in order to meet clients outside regular business hours.

## RELATED OCCUPATIONS

- Supervisors, Finance & Insurance Clerks (1212)

## POTENTIAL EMPLOYERS

- Insurance Companies
- Insurance and Real Estate Agencies
- Provincial Government

## WHERE TO GET TRAINING

Additional information about this occupation can be obtained from the following web sites:

- The Canadian Independent Adjusters' Association ([www.ciaa-adjusters.ca](http://www.ciaa-adjusters.ca))
- Insurance Institute of Canada ([www.iic-iac.org](http://www.iic-iac.org))
- Ontario Insurance Adjusters Association ([www.oiaa.com](http://www.oiaa.com))

For information on college and university programs visit the CanLearn Interactive website at: [www.canlearn.ca](http://www.canlearn.ca)

# Mapping & Related Technologists & Technicians

NOC 2255

## NATURE OF WORK

Mapping and related technologists and technicians gather, analyze, interpret and use geospatial information for applications in natural resources, geology, environment and land use planning. This unit group includes technologists and technicians who design and prepare maps, interpret aerial photographs, operate interpretative and airborne remote sensing equipment, and develop and operate geographical information systems.

## EXAMPLE TITLES

Aerial Survey Technician, Cartographer, Cartographic Technician, Geographic Information Systems (GIS) Technician, Map Editor, Mapping Technician, Photogrammetric Technologist, Photogrammetrist, Remote Sensing (RS) Technician, Softcopy Photogrammetrist

## MAIN DUTIES

Cartographic technologists and technicians perform some or all of the following duties:

- Generate maps and related graphs and charts using digital mapping techniques, computer interactive graphics, computer assisted design and drafting (CAD) software, traditional drafting methods and computer or traditional scribing tools
- Photogrammetric technologists and technicians perform some or all of the following duties:
- Examine and interpret aerial photographs to prepare topographic maps, aerial-photograph mosaics and related charts
- Operate digitized stereoscopic plotting and computer graphics equipment

Aerial survey technologists and technicians perform some or all of the following duties:

- Operate airborne remote sensing equipment such as survey film or digital cameras, laser or radar sensors and scanners which produce images of large areas of the earth, coastline, or of the atmosphere

Remote sensing technologists and technicians perform some or all of the following duties:

- Develop specialized analog and computer software specific routines to customize and integrate image analysis
- Verify the integrity and accuracy of data contained in remote sensing image analysis systems.



## WAGES & SALARIES

Low - Data Unavailable

Average - Data Unavailable

High - Data Unavailable

Note - 2007 Reference Period



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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)

## EMPLOYMENT TRENDS

Employment growth in this occupation depends primarily on the status of public finances and on technological change. Governments are major users of mapping and geomatics products. Computerized tools help to produce work that can be used for many purposes; assessment role reform, municipal affairs, natural resource and forest management, agriculture, agricultural and urban zoning, statistical analyses, transportation, environment, etc. Government budget cuts and the effectiveness of computer tools, however, have resulted in a decline in the number of cartographic technologists and technicians who work for governments. Despite the improvements in the budget situations governments are focusing their new spending on health care and to a lesser degree, education. This factor should therefore not contribute to employment growth in this occupation in the next few years. The private geomatics market has experienced a very strong growth rate, especially in offices of engineers and other scientific and technical services, but there too, computer tools help to boost productivity and limits consequently the employment growth possibilities within this industry.

Taking into account these moderate trends, the number of mapping and related technologists and technicians is expected to increase only slightly over the next few years.

## EMPLOYMENT REQUIREMENTS

- Completion of secondary school is required.
- Technologists in this unit group require completion of a two to three-year college program in cartography, photogrammetry, aerial survey, remote sensing, geographic information system or geomatics.
- Technicians in this unit group require completion of a one to two-year college program in cartography, photogrammetry, aerial survey, remote sensing, geographic information system or geomatics.

## LOCAL SKILLS REQUIREMENTS

- Team project work
- Drawing
- 3-D visualization
- Writing
- Presenting
- Computer skills

## WHERE TO GET TRAINING

For information on college and university programs visit the CanLearn Interactive website at:

[www.canlearn.ca](http://www.canlearn.ca)

## WORKING CONDITIONS

Surveyors and surveying technicians typically work an 8-hour day, 5 days a week and may spend a good part of their time outdoors. Sometimes, they work longer hours during the summer, when weather and light conditions are best for fieldwork. Construction-related work may be limited during times of inclement weather.

Surveyors and technicians engage in active, strenuous, work. They often stand for long periods, walk considerable distances and climb hills with heavy packs of instruments and other equipment. They also can be exposed to all types of weather. Traveling is sometimes part of the job, and surveyors and technicians may commute long distances, stay away from home overnight, or temporarily relocate near a survey site. Surveyors also work indoors while planning surveys, searching court records for deed information, analyzing data and preparing reports and maps.

## RELATED OCCUPATIONS

- Airborne geophysical equipment operators (in 2212 Geological & Mineral Technologists & Technicians)
- Drafting Technologists and Technicians (2253)
- Engineering technologists & technicians who apply geotechnical & topographical information to land use & urban planning (in 2231 Civil Engineering Technologists and Technicians)
- Geomatics engineers and surveying engineers (in 2131 Civil Engineers)
- Land Survey Technologists and Technicians (2254)
- Land Surveyors (2154)

## POTENTIAL EMPLOYERS

They are employed by all levels of government, the armed forces, utilities, mapping, computer software, forestry, architectural, engineering and consulting firms and other related establishments, federal, provincial and municipal governments highway and heavy construction firms, electric power companies, residential and commercial building developers, architectural and engineering consulting companies.

# Medical Radiation Technologists

## NOC 3215

### NATURE OF WORK

This unit group includes technologists who operate radiographic and radiation therapy equipment to administer radiation treatment and produce images of body structures for the diagnosis and treatment of injury and disease. They are employed in hospitals, cancer treatment centres, clinics and radiological laboratories. Medical radiation technologists who are supervisors or instructors are included in this unit group.

### EXAMPLE TITLES

Clinical Instructor- Radiation Therapy, Mammography Technician, Nuclear Medicine Technologist, Radiation Oncology Technologist, Radiation Therapist, Radiation Therapy Technologist (RTT), Radiological Technologist, Radiotherapy Technician, Supervisor- Nuclear Medicine Technologists, X-ray technician

### MAIN DUTIES

**Radiography** - Medical radiation technologists registered in radiography may perform the following:

- General x-rays, fluoroscopic examinations, angiography, mammography and computed tomography.

#### Radiation Therapy

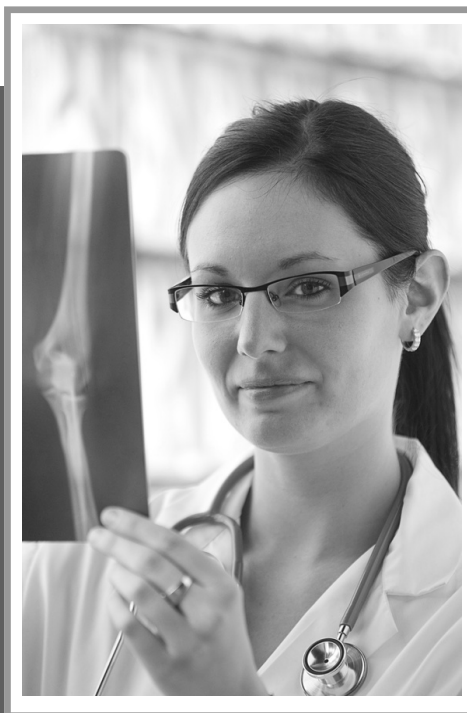
- Medical radiation technologists registered in radiation therapy may perform the following:
- While working closely with oncologists, plan treatment, administer treatment and educate the patient on how to cope with side effects.

**Nuclear Medicine** - Medical radiation technologists registered in nuclear medicine may perform the following:

- Use gamma cameras and computer systems to assess organ function and structure, and help in the diagnoses of numerous disorders.

**Magnetic Resonance** - Medical radiation technologists registered in magnetic resonance may perform the following:

- Imaging the brain, spine, abdomen, pelvis and the musculoskeletal and cardiovascular systems.



### WAGES & SALARIES

Low - \$ 25.00 per hour

Average - \$ 31.90 per hour

High - \$ 37.65 per hour

Note - 2007 Reference Period



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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)



## EMPLOYMENT TRENDS

In Ontario, employment for this occupation is expected to grow more rapidly than the average for all occupations through the year 2009. Increases in illnesses associated with an ageing population should increase the demand for workers in this occupation. As well, innovations in the use of nuclear medicine to diagnose illnesses, such as cancer, may increase demand for these professionals. However, overall demand for these technologists depends on the extent of government funding for new technologies and cancer centres.

Technological change, in particular the introduction of sophisticated imaging technologies, will create new skill requirements in the field.

## EMPLOYMENT REQUIREMENTS

- Completion of a two- to three-year college, hospital school or other approved program in diagnostic radiography (for radiological technologists), nuclear medicine technology (for nuclear medicine technologists) or radiation therapy (for radiation therapists), or
- A bachelor of health sciences in radiography, nuclear medicine or radiation therapy, and
- A period of supervised practical training are required.
- Licensure with a regulatory body is required in all provinces.
- Experience as a medical radiation technologist is required for supervisors and instructors.

## LOCAL SKILLS REQUIREMENTS

Magnetic resonance technology (the newest specialty) also requires the completion of an approved educational program. Programs in magnetic resonance are post-graduate programs which may be completed after the successful completion of a program in one of the other three specialties. The regulatory body in Ontario is the College of Medical Radiation Technologists of Ontario.

## WHERE TO GET TRAINING

A list of all the approved programs in Ontario is available on the College of Medical Radiation Technologists of Ontario website at:

[www.cmrto.org](http://www.cmrto.org)

## WORKING CONDITIONS

A 35 to 40 hour work week is common including night, evening and weekend work.

Physical stamina is also important for lifting patients and standing for long periods of time. Shields and other protective devices are used to reduce radiation risks.

## RELATED OCCUPATIONS

- Other medical technologists and technicians (in 321 Medical Technologists and Technicians (Except Dental Health))

## POTENTIAL EMPLOYERS

- Hospitals

# Medical Sonographers

## NOC 3216

### NATURE OF WORK

Medical sonographers operate ultrasound equipment to produce and record images of various parts of the body to aid physicians in monitoring pregnancies and in diagnosing cardiac, ophthalmic, vascular and other medical disorders. They are employed in clinics and hospitals. Medical sonographers who are supervisors or instructors are included in this unit group.

### EXAMPLE TITLES

Diagnostic Medical Sonography Instructor, Medical Sonographer, Medical Sonographers Supervisor, Registered Diagnostic Medical Sonographer (RDMS), Ultrasound Technologist

### MAIN DUTIES

Medical sonographers perform some or all of the following duties:

- Operate ultrasound imaging equipment that transmits high frequency sound pulses through the body to produce images of those parts of the body requiring examination
- Monitor examination by viewing images on video screen, to evaluate quality and consistency of diagnostic images, and make adjustments to equipment, as required
- Record, store and process scanned images by using camera unit connected to ultrasound equipment
- Observe and care for patients throughout examinations to ensure patient safety and comfort
- Prepare examination reports for physicians to aid in the monitoring of pregnancies and the diagnosis of cardiac, abdominal, ophthalmic, vascular and other disorders
- Perform quality control checks on ultrasound equipment to ensure proper operation and perform minor repairs and adjustments as required
- May supervise and train student and other medical sonographers.



### WAGES & SALARIES

Low - Data Unavailable

Average - Data Unavailable

High - Data Unavailable

Note - 2007 Reference Period



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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)

## EMPLOYMENT TRENDS

Opportunities for employment in this occupation are expected to be good over the period from 2009 to 2013 as the population ages and increasing demand for diagnostic imaging and therapeutic technology. Sonography becomes an increasingly attractive alternative to radio logic procedures as patients seek safer treatment methods.

As well, job growth in this occupation has been influenced by the strong shift toward outpatient care, made possible by technological advances that permit more procedures to be performed outside the hospital. In addition to job openings from growth, some openings will arise from the need to replace sonographers who retire or leave the occupation permanently.

## EMPLOYMENT REQUIREMENTS

- Completion of a training program in a related field such as diagnostic radiography, nuclear medicine or nursing; and
- Completion of a one-year college or hospital-based program in diagnostic medical sonography and supervised practical training are required.
- Certification examinations by the American Registry of Diagnostic Medical Sonographers are usually required by employers.
- Registration with the Canadian Society of Diagnostic Medical Sonographers or a provincial counterpart is available and may be required by employers.

## LOCAL SKILLS REQUIREMENTS

The Canadian Society of Diagnostic Medical Sonographers recognizes the certifying examinations of the American Registry of Diagnostic Medical Sonographers.

## WHERE TO GET TRAINING

Additional information about this occupation can be obtained from the following web sites:

- Canadian Society of Diagnostic Medical Sonographers ([www.csdms.com](http://www.csdms.com))
- Ontario Society of Diagnostic Medical Sonographers ([www.osdms.org](http://www.osdms.org))
- Canadian Information Centre for International Credentials ([www.cicic.ca](http://www.cicic.ca))
- Human Resources and Skills Development Canada ([www.hrsc.gc.ca](http://www.hrsc.gc.ca))
- Canadian Association of Medical Radiation Technologists ([www.camrt.ca](http://www.camrt.ca))
- Canadian Society for Medical Laboratory Science ([www.csmls.org](http://www.csmls.org))

## WORKING CONDITIONS

Sonographers work with diagnostic imaging machines in health care facilities, usually in darkened rooms. Some are also required to perform procedures at patients' bedsides. This work involves standing, sitting for long periods and some lifting and turning of disabled patients. While in the past, sonographers were at an increased risk for musculoskeletal disorders such as carpal tunnel syndrome, neck, back and eye strain, the greater use of ergonomic equipment has greatly reduced such health risks.

Sonographers who work on contract tend to travel to several health care facilities in an area. Most sonographers work full-time, about 40 hours a week. Those who work in hospitals, may be required to work evening and weekend hours or be ready to report to duty on short notice.

## RELATED OCCUPATIONS

- Other technologists and technicians who operate diagnostic medical equipment (in 3218 Electroencephalographic and Other Diagnostic Technologists, n.e.c.)

## POTENTIAL EMPLOYERS

- Hospitals

# Other Trades & Related Occupations

## NOC 7383

### NATURE OF WORK

This unit group includes tradespersons and related skilled workers, not elsewhere classified, who repair, service, install, calibrate or fabricate a variety of products. They are employed by a wide range of establishments, or they may be self-employed.

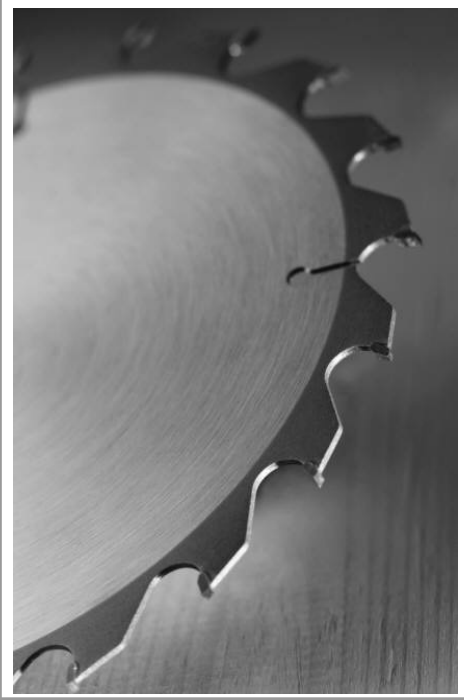
### EXAMPLE TITLES

Aircraft Patternmaker, Farrier, Gunsmith, Locksmith, Recreation Vehicle Technician, Safe and Vault Servicer, Saw Fitter, Small Arms Repairer, Template Maker

### MAIN DUTIES

The following is a summary of main duties for some occupations in this unit group:

- Gunsmiths fabricate guns and repair and modify firearms according to blueprints or customers' specifications.
- Locksmiths repair, install and adjust locks, make keys and change lock combinations.
- Recreation vehicle technicians repair or replace electrical wiring, plumbing, propane gas lines, appliances, windows, doors, cabinets and structural frames in recreational vehicles.
- Safe and vault servicers install, repair and maintain safes and vaults in banks and other establishments.
- Saw fitters repair, set and sharpen band saws, chainsaws, circular saws and other types of saw blades according to specifications.



### WAGES & SALARIES

Low - \$ 12.00 per hour

Average - \$ 23.72 per hour

High - \$ 27.48 per hour

Note - 2007 Reference Period



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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)

## EMPLOYMENT TRENDS

There is little or no mobility among occupations in this unit group. Progression to supervisory positions is possible with experience.

Red Seal trade certification for recreation vehicle service technicians allows for inter-provincial mobility.

## EMPLOYMENT REQUIREMENTS

- Completion of secondary school is usually required.
- Completion of two- to four-year apprenticeship program in a relevant trade, such as locksmith, recreation vehicle technician or sawfitting, or
- College, high school or industry courses combined with several years of related work experience, or
- Several years of on-the-job training are required.
- Provincial trade certification or licence may be required for other occupations in this unit group.
- Interprovincial trade certification (Red Seal) is also available to qualified recreation vehicle service technicians.

## LOCAL SKILLS REQUIREMENTS

- There is little or no mobility among occupations in this unit group.
- Progression to supervisory positions is possible with experience.
- Red Seal trade certification for recreation vehicle service technicians allows for inter-provincial mobility.

## WHERE TO GET TRAINING

Additional information about these occupations can be obtained from the following web site:

- Trade Schools, Colleges & Universities ([www.trade-schools.ca/locations/ontario.asp](http://www.trade-schools.ca/locations/ontario.asp))

## WORKING CONDITIONS

Work can be performed indoors such as in an office or school or outside in various weather conditions. Work may be done near or with equipment, instruments, machinery or power/hand tools that may be a potential source of accident or injury. Workplace may be potentially noisy - constant or intermittent - to cause marked distraction or possible loss of hearing.

## RELATED OCCUPATIONS

- Automotive Service Technicians (732)
- Motorcycle & Other Related Mechanics (7334)
- Other Repairers and Servicers (7445)
- Other Small Engine & Equipment Mechanics (7335)

## POTENTIAL EMPLOYERS

- Automotive Repair Shops
- Specialty Repair Shops
- Service Facilities
- Car & Truck Dealerships
- Large organizations that own fleets of vehicles
- Gasoline Stations
- Service Stations
- Self Employment



# Painters & Decorators

## NOC 7294

### NATURE OF WORK

Painters and decorators apply paint, wallpaper and other finishes to interior and exterior surfaces of buildings and other structures. They are employed by construction companies, painting contractors, building maintenance contractors, or they may be self-employed.

### EXAMPLE TITLES

Construction Painter, Maintenance Painter, Painter, Painter and Decorator, Painter and Decorator Apprentice, Paperhanger

### MAIN DUTIES

Painters and decorators perform some or all of the following duties:

- Read specifications to determine quantities of materials required
- Prepare and clean surfaces using methods such as scraping, sanding, sand-blasting, hydro-blasting and steam-cleaning; remove old wallpaper and loose paint; repair cracks and holes in walls; and sandpaper and apply sealer
- Mix and thin paint to obtain desired colour and texture
- Apply paint or other materials, such as stains, lacquer, enamel, oil, varnish, fibreglass, metal coating or fire retardant using brushes, rollers or spray equipment
- Measure, cut and apply wallpaper or fabric to walls
- Assemble and erect scaffolding and swing gates
- Advise customer on selection of colour schemes and choice of wall coverings
- May provide cost estimates to clients



### WAGES & SALARIES

Low - \$ 13.00 per hour

Average - \$ 19.04 per hour

High - \$ 26.57 per hour

Note:

2007 Reference Period for the Thunder Bay area



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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)

## EMPLOYMENT TRENDS

Opportunities for employment in this occupation are expected to be good over the period from 2009 to 2013.

A strong construction industry, particularly residential, often leads to strong demand for painters and decorators. The weaker economy that began in early 2008 would normally restrain demand for these occupations, but strong fiscal spending by all levels of government will help boost construction activity and result in average prospects for these occupations. In the medium term, it is assumed that the private sector will strengthen enough to offset the end of government funded construction initiatives. Residential starts are expected to fall in 2009, but increase in 2010.

Also, in the coming years many construction workers will be retiring, increasing job opportunities in these occupations.

## EMPLOYMENT REQUIREMENTS

- Completion of secondary school is usually required.
- Completion of a three to four-year apprenticeship program, or
- Over three years of work experience in the trade is usually required to be eligible for trade certification.
- Trade certification is compulsory in Ontario
- Inter-provincial trade certification (Red Seal) is also available to qualified painters and decorators.

## LOCAL SKILLS REQUIREMENTS

Most employers who advertise are looking for workers who have the following experience and skills:

**Experience:** Experience an asset.

**Specific Skills:**

Prepare, clean and sand surfaces to be painted. Repair cracks and holes. Apply paint, wallpaper and other materials and finishes to interior and exterior surfaces.

**Additional Skills:** Supervise other workers.

## WHERE TO GET TRAINING

Additional information about this occupation can be obtained from the following web sites:

- Canadian Information Centre for International Credentials ([www.cicic.ca](http://www.cicic.ca))
- Careers in Construction ([www.careersinconstruction.ca](http://www.careersinconstruction.ca))
- Interprovincial Standards Red Seal Program ([www.red-seal.ca](http://www.red-seal.ca))
- Skilled Trades ([www.apprenticetrades.ca/](http://www.apprenticetrades.ca/))
- Canada Green Building Council ([www.cagbc.org](http://www.cagbc.org))

## WORKING CONDITIONS

Painters and decorators try to arrange their work so they will be outdoors in late spring, summer and early fall, and indoors in the late fall and winter. They must stand for long periods of time often working with their arms raised over their heads. There is some risk of injury from falling off ladders, scaffolds or swing stages (platforms suspended on high rise buildings), and from working with hazardous chemicals such as paint thinners & removers.

Painters and decorators may be required to lift and move items that weigh up to 20 kilograms. A significant percentage of workers (over 40%) are self-employed.

## RELATED OCCUPATIONS

- Automotive Painters (in 7322 Motor Vehicle Body Repairers)
- Interior Decorators (in 6421 Retail Salespersons and Sales Clerks)
- Painters and Coaters - Industrial (9496)
- Painters, Sculptors & Other Visual Artists (5136)
- Supervisors of Painters and Decorators (in 7219 Contractors and Supervisors, Other Construction Trades, Installers, Repairers and Servicers)

## POTENTIAL EMPLOYERS

- Construction firms
- Building construction firms
- Self-employment
- Construction contractors
- Household furniture makers
- Furniture manufacturers and repairers
- Interior and finishing construction firms

# Paralegal & Related Occupations

## NOC 4211

### NATURE OF WORK

Legal assistants and paralegals prepare legal documents, maintain records and files and conduct research to assist lawyers or other professionals. Notaries public administer oaths, take affidavits, sign legal documents and perform other activities according to the limitations of their appointment. Trademark agents advise clients on intellectual property matters. Independent paralegals provide legal services to the public as allowed by government legislation, or provide paralegal services on contract to law firms or other establishments. Legal assistants and paralegals are employed by law firms, by record search companies and in legal departments throughout the public and private sectors. Independent paralegals are usually self-employed. Trademark agents are employed by law firms and legal departments throughout the public and private sectors, trademark development and search firms or they may be self-employed. Notaries public are employed by government and in the public and private sectors or they may be self-employed

### EXAMPLE TITLES

Commercial Law Clerk, Corporate Paralegal, Family Law Paralegal, Independent Paralegal, Land Titles Examiner, Law Clerk, Legal Assistant, Legal Researcher, Litigation Legal Assistant, Notary Public, Paralegal, Real Estate Law Clerk, Title Searcher, Trademark Agent

### MAIN DUTIES

Legal assistants and paralegals in law firms or in other establishments perform some or all of the following duties:

- Assist lawyers by interviewing clients, witnesses and other related parties, assembling documentary evidence, preparing trial briefs, and arranging for trials
- Prepare wills, real estate transactions and other legal documents, court reports and affidavits

Notaries public perform some or all of the following duties:

- Administer oaths and take affidavits and depositions
- Witness and certify the validity of signatures on documents

Trademark agents perform some or all of the following duties:

- Advise clients on intellectual property matters and represent clients before the Registrar of Trade-Marks



### WAGES & SALARIES

Low - Data Unavailable  
Average - \$ 20.00 per hour  
High - Data Unavailable

Note - 2007 Reference Period



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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)

## EMPLOYMENT TRENDS

Opportunities for employment in this occupation are expected to be good over the period from 2009 to 2013.

Paralegal services are affected by legislative rules governing paralegals' right to practice in various legal domains, as well as the overall economic environment. Paralegals are now able to do routine legal services typically done by attorneys. In an attempt to reduce costs, employers are opting to hire paralegals to conduct duties once performed by lawyers. There is also a trend towards specialization among paralegal firms. All of this is expected to create good employment opportunities for this group. It is expected that demand for these professionals will increase as awareness of their services grows.

## EMPLOYMENT REQUIREMENTS

- Legal assistants and paralegals in law firms require a bachelor's degree in law or a college diploma in a legal assistant or law clerk program or in-house training from a law firm or other legal establishment.
- Independent paralegals require knowledge of legal principles and procedures usually obtained through industry-sponsored courses and through experience, or on completion of a community college paralegal program.
- Notaries public are appointed after examination and certification of their qualifications by the governing judiciary in Ontario and require a provincial licence.
- Trade-mark agents require two years of in-house training under the supervision of a registered trade-mark agent and successful completion of an examination conducted jointly by the Intellectual Property Institute of Canada and the Registrar of Trade-marks, or either one of the above. Trade-mark agents must also be licensed to practise law. Trade-mark agents require registration with the federal Registrar of Trade-marks and with the federal Trade-Mark Office.

## LOCAL SKILLS REQUIREMENTS

Most employers who advertise are looking for workers who have the following experience and skills:

Experience: 3 - 5 years

### Legal or Law Clerk Specific Skills:

Prepare legal documents, court reports and affidavits.  
Research records, court files and other legal documents.

**Business Equipment and Computer Applications:**  
Word processing, spreadsheets and legal software applications.

### Essential Skills:

Oral communication, working with others, computer use problem solving, job task planning and organizing, writing, reading text, document use, critical thinking, decision making continuous learning, numeracy and significant use of memory.

## WORKING CONDITIONS

Paralegals usually work in an office environment. Travelling is occasionally required.

A standard 40-hour work week is the norm but long hours are sometimes required to meet deadlines. The majority of paralegal work is for private law firms helping lawyers by preparing cases through research.

## RELATED OCCUPATIONS

- Articling students, Quebec notaries & trade-mark lawyers (in 4112 Lawyers & Quebec Notaries)
- Legal Secretaries (1242)
- Patent agents (in 4161 Natural and Applied Science Policy Researchers, Consultants and Program Officers)

## POTENTIAL EMPLOYERS

- Federal, Provincial & Municipal Governments
- Law Firms
- Record Search Companies
- Self-Employed Business Service Firms

# Plasterers, Drywall Installers, Finishers & Lathers

## NOC 7284

### NATURE OF WORK

Plasterers apply finish, and maintain and restore plaster or similar materials, on interior and exterior walls, ceilings and building partitions to produce plain or decorative surfaces. Drywall installers and finishers install and finish drywall sheets and various types of ceiling systems. Lathers install support framework for ceiling systems, interior and exterior walls and building partitions. They are employed by construction companies and by plastering, drywalling and lathing contractors, or they may be self-employed.

### EXAMPLE TITLES

Acoustical ceiling installer, ceiling installer, drywall applicator, drywall finisher, drywall installer and finisher apprentice, drywall taper, interior systems mechanic, lather, lather apprentice, plasterer, plasterer apprentice, sheetrock applicator and wood lather.

### MAIN DUTIES

Plasterers perform some or all of the following duties:

- Apply, level and smooth coats of plaster using trowels, floats, brushes and spraying equipment
- Trowel or spray coats of stucco over exteriors of buildings to form weatherproof surfaces
- Finish corners and angles and create decorative designs in finish coat, if required

Drywall installers and finishers perform some or all of the following duties:

- Measure, cut and fit drywall sheets for installation on walls & ceilings
- Position and secure sheets to metal or wooden studs or joists
- Cut and install metal corner beads to protect exterior corners
- Fabricate and install suspended metal ceiling grids and place in panels to form acoustical and coffered ceilings

Lathers perform some or all of the following duties:

- Install metal stud framing and furring for interior drywall or plaster walls and ceilings, using hand and power tools



### WAGES & SALARIES

Low - \$ 10.42 per hour

Average - \$ 21.03 per hour

High - \$ 29.09 per hour

Note:

2007 Reference Period for the Thunder Bay area



Northwest  
Training and Adjustment Board  
113 - 100 Casimir Avenue  
DRYDEN, Ontario P8N 3L4  
Tel: 807.223.3813

[www.ntab.on.ca](http://www.ntab.on.ca)

GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)



## EMPLOYMENT TRENDS

In Ontario, employment opportunities for these trades are expected to remain fair to good over the next two years. Employment prospects are closely linked to the construction industry, especially residential construction (e.g. houses, town-homes, condominiums). Over the last few years rapid growth in new housing starts resulted in a tight labour market with reports of shortages for many of the construction trades including Plasterers, Drywall Installers and Finishers and Lathers. Over the forecast period housing starts are expected to decline slightly, which should moderate labour market pressures. Employment opportunities for highly qualified job seekers should, however, remain steady.

Employment in the construction industry is highly seasonal. Although the work in these trades largely takes place indoors, it can be affected by weather related slowdowns in other trades. Accordingly, employment opportunities are significantly better during the peak summer months than during the winter months.

## EMPLOYMENT REQUIREMENTS

- Completion of secondary school is usually required.
- Completion of a three or four year apprenticeship program in plastering, drywalling or lathing
- A combination of over three years of work experience and some high school, college or industry courses in plastering, drywalling or lathing is usually required
- Plasterer trade certification is compulsory in Quebec and available, but voluntary, in Saskatchewan and British Columbia
- Inter-provincial trade certification (Red Seal) is also available to qualified lathers (interior systems mechanic)

## LOCAL SKILLS REQUIREMENTS

Most employers who advertise are looking for workers who have the following experience and skills:

Experience: 1 - 5 years

Specific Skills:

Apply, level and smooth coats of plaster. Clean and prepare surfaces. Finish corners and angles.

Additional Skills: Work at heights.

## WHERE TO GET TRAINING

Information on apprenticeship programs in Ontario is available on the Ministry of Education / Ministry of Training, Colleges and Universities website at: [www.edu.gov.on.ca](http://www.edu.gov.on.ca)

## WORKING CONDITIONS

The work is mainly done indoors creating interior walls and ceilings, either in new buildings or in older buildings that are being renovated or repaired. Standing for long periods and heavy lifting is common. Face masks are usually worn, especially by drywall finishers, to prevent inhaling fine dust caused by sanding. Workers generally have a 35-40 hour week, with occasional weekends and overtime. They must be prepared to travel to work on a project-by-project basis. The starting wage rate for an apprentice is typically lower than the journeyman wage rate but increases as the apprentice gains experience.

Most workers in this occupation are self-employed as independent contractors. Employment is usually on a project by project basis and results in a high proportion of part-year work. It is common for workers who are self-employed to sub-contract services to general contractors or to offer services to individual clients.

## RELATED OCCUPATIONS

- Supervisors of trade workers in this unit group (in 7219 Contractors and Supervisors, Other Construction Trades, Installers, Repairers and Servicers)

## POTENTIAL EMPLOYERS

- Construction Companies
- Home Contracting Companies
- Self Employment

# Plumbers

## NOC 7251

### NATURE OF WORK

Plumbers install, repair and maintain pipes, fixtures and other plumbing equipment used for water distribution and waste water disposal in residential, commercial and industrial buildings. They are employed in maintenance departments of factories, plants and similar establishments, by plumbing contractors, or they may be self-employed.

### EXAMPLE TITLES

Maintenance plumber, plumber, plumber apprentice and plumbing mechanic.

### MAIN DUTIES

Plumbers perform some or all of the following duties:

- Read blueprints, drawings and specifications to determine layout of plumbing system, water supply network and waste and drainage systems
- Install, repair and maintain domestic, commercial or industrial plumbing fixtures and systems
- Locate and mark positions for pipe connections, passage holes and fixtures in walls and floors
- Cut opening in walls and floors to accommodate pipe and pipe fittings
- Measure, cut, bend and thread pipes using hand and power tools or machines
- Join pipes using couplings, clamps, screws, bolts, cement or soldering, brazing and welding equipment
- Test pipes for leaks using air and water pressure gauges
- May prepare cost estimates



### WAGES & SALARIES

Low - \$ 12.77 per hour

Average - \$ 18.24 per hour

High - \$ 30.00 per hour

Note - 2007 Reference Period



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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)

## EMPLOYMENT TRENDS

Opportunities for employment in this occupation are expected to be good over the period from 2009 to 2013. In addition, many job openings will be created each year from the need to replace workers who retire. Jobs in the plumbing trades are determined primarily by the existing stock of piping that must be maintained and the amount of new construction and renovation work.

Technological advances in plumbing are creating the need for higher skills. Computer literacy is important, as the use of computers in drawing, estimating, coordination and cost reporting related to plumbing expands. Increasingly, computer-controlled equipment is being utilized on the job. The plumbing trade is changing through increased installation of integrated plumbing systems in home construction, an increase in prefabrication, and new plastics and joining technologies in gas and water piping. More sophisticated measuring devices are being introduced and better material handling and joining methods are being developed.

Licensed plumbers who also hold a gas fitter's certificate will have better job prospects. This occupation is less vulnerable to the economic cycle compared to other construction jobs. In an economic downturn, plumbers are still required to maintain, replace and restore piping systems. In addition, the residential renovation stimulus is likely to create short term demand for plumbers in many home renovation projects particularly in bath remodelling.

## EMPLOYMENT REQUIREMENTS

- Completion of secondary school is usually required.
- Completion of a four- to five-year apprenticeship program or a combination of over five years of work experience in the trade and some high school, college or industry courses in plumbing is usually required to be eligible for trade certification.
- Trade certification is compulsory in Ontario
- Interprovincial trade certification (Red Seal) is available to qualified plumbers.

## LOCAL SKILLS REQUIREMENTS

Most employers who advertise are looking for workers who have the following experience and skills.

Experience: 1 - 5 years

### Specific Skills:

Install, repair and maintain plumbing fixtures and systems. Join pipes with couplings, clamps, screws, bolts or cement. Inspect and test pipes for leaks.

### Additional Skills:

Instruct apprentices, reading text, document use, writing, numeracy, oral communication, thinking skills, problem solving, decision making, significant use of memory, finding information and computer use.

## WHERE TO GET TRAINING

Information on apprenticeship programs in Ontario is available on the Ministry of Education/Ministry of Training, Colleges and Universities website at: [www.edu.gov.on.ca](http://www.edu.gov.on.ca)

## WORKING CONDITIONS

The work is done both indoors and outdoors. Plumbers frequently must lift heavy pipes, stand for long periods, and sometimes work in confined positions. Those engaged in construction generally work a standard 40-hour week; those involved in maintaining pipe systems, including those who provide contract maintenance services, may have to work evening or weekend shifts, as well as be on call. Plumbers have to be aware of the dangers of working on rigging and scaffolding and in and around trenches.

## RELATED OCCUPATIONS

- Gas Fitters (7253)
- Steamfitters, Pipefitters and Sprinkler System Installers (7252)
- Supervisors of plumbers (in 7213 Contractors and Supervisors, Pipefitting Trades)

## POTENTIAL EMPLOYERS

- Plumbing Contractors
- Construction Companies
- Maintenance department of factories
- School Boards
- Self Employment

# Property Administrators

## NOC 1224

### NATURE OF WORK

Property administrators perform administrative duties and co-ordinate activities related to the management and rental of investment property and real estate on behalf of property owners. They are employed by property and real estate management companies, property development companies and by government.

### EXAMPLE TITLES

Accommodation Officer, Apartment Rental Agent, Housing Project Manager, Leasing Co-ordinator- Property, Property Administrator, Property Rentals Manager

### MAIN DUTIES

Property administrators perform some or all of the following duties:

- Negotiate or approve rental or lease of various properties in a portfolio on behalf of property owners and ensure that terms of lease agreement are met
- Prepare and administer contracts for provision of property services, such as cleaning and maintenance, security services and alarm systems
- Co-ordinate the implementation of repairs, maintenance and renovations carried out on buildings and monitor progress and cost of work for property owners
- Compile and maintain records on operating expenses and income, prepare reports and review rents to ensure they are at market value
- Ensure that trouble calls received from clients or tenants are acted upon
- Administer damage deposits
- May hire and supervise rental agents, property clerks, building superintendents or other support staff performing operational, clerical or maintenance duties.



### WAGES & SALARIES

Low - Data Unavailable  
Average - \$ 18.37 per hour  
High - Data Unavailable

Note - 2007 Reference Period



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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)

## EMPLOYMENT TRENDS

Opportunities for employment in this occupation are expected to be good over the period from 2009 to 2013.

While job growth will create new positions, many job openings will stem from replacement needs as older workers retire. Opportunities for property administrators are impacted by the growth in real estate and commercial property markets. The rise in the number of condominiums, town houses and apartments will increase the need for property administrators.

With the continued growth in the number of older people, there will also be an increased demand for various types of suitable housing such as assisted living arrangements and retirement communities. Job opportunities are expected to be particularly good for those with experience managing housing for older people or with experience running a health unit.

## EMPLOYMENT REQUIREMENTS

- Completion of secondary school is required.
- Completion of training courses or vocational program in property management or real estate may be required.
- Several years of administrative experience as a property clerk, contract clerk, or administrative officer are usually required.

## LOCAL SKILLS REQUIREMENTS

Most employers who advertise are looking for workers who have the following experience and skills:

Experience: 0 - 2 years

### Specific Skills:

Ensure response to trouble calls from clients or tenants. Ensure terms of lease agreements are met. Negotiate or approve rental or lease of properties on behalf of property owner.

Business Equipment and Computer Applications: Windows, electronic mail, MS Word, Excel.

### Additional Skills:

Hire and supervise support staff performing operational, clerical or maintenance duties.

### Essential Skills:

Oral communication, working with others, computer use, problem solving, job task planning and organizing, writing, reading text, document use, finding information, critical thinking, decision making, continuous learning, numeracy and significant use of memory.

## WORKING CONDITIONS

Working time for property administrators is divided between an office environment and clients' premises.

## RELATED OCCUPATIONS

- Building Superintendents (in 6663 Janitors, Caretakers and Building Superintendents)
- Property Clerks (in 1441 Administrative Clerks)
- Real Estate Agents and Salespersons (6232)

## POTENTIAL EMPLOYERS

- Insurance and Real Estate Agencies
- Operators of Buildings and Dwellings
- Property Development Companies
- Provincial and Municipal Governments

## WHERE TO GET TRAINING

For information on college and university programs visit the CanLearn Interactive website at: [www.canlearn.ca](http://www.canlearn.ca)



# Refrigeration & Air Conditioning Mechanics

NOC 7313

## NATURE OF WORK

Refrigeration and air conditioning mechanics install, maintain, repair and overhaul residential central air conditioning systems, commercial and industrial refrigeration and air conditioning systems and combined heating, ventilation and cooling systems. They are employed by refrigeration and air conditioning installation contractors, various industrial settings, food wholesalers, engineering firms and retail and servicing establishments.

## EXAMPLE TITLES

Central Air Conditioning Mechanic, Commercial Air Conditioning Mechanic, Heating and Cooling Mechanic, Heating Ventilation and Air Conditioning (HVAC) Mechanic, Refrigeration and Air Conditioning Mechanic Apprentice, Refrigeration Mechanic, Transport Refrigeration Mechanic

## MAIN DUTIES

Refrigeration and air conditioning mechanics perform some or all of the following duties:

- Read and interpret blueprints, drawings or other specifications
- Measure and lay out reference points for installation
- Assemble and install refrigeration or air conditioning components such as motors, controls, gauges, valves, circulating pumps, condensers, humidifiers, evaporators and compressors using hand and power tools
- Measure and cut piping, and connect piping using welding and brazing equipment
- Install, troubleshoot and overhaul entire heating, ventilation, air handling, refrigeration and air conditioning systems
- Start up system and test for leaks using testing devices
- Recharge system with refrigerant, check and test regulators, calibrate system and perform routine maintenance or servicing
- Repair and replace parts and components for entire refrigeration, air conditioning, ventilation or heat pump system
- May install, maintain and repair equipment in refrigerated trucks used to transport food or medical supplies
- May prepare work estimates for clients



## WAGES & SALARIES

Low - Data Unavailable  
Average - \$ 21.79 per hour  
High - Data Unavailable

Note - 2007 Reference Period



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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)

## EMPLOYMENT TRENDS

Opportunities for employment in this occupation are expected to be good over the period from 2009 to 2013. As the population expands and the supply of buildings grows, the demand for this occupational group will increase due to the installation of new, more efficient air conditioning and refrigeration systems. In a recent survey conducted by Ipsos Reid of over 1000 non-residential contractors, refrigeration and air conditioning mechanics were reported in short supply across the province.

The residential HVACR systems are typically replaced every 10 to 15 years which means that the large number of homes built in the last decade will enter this replacement timeframe. In addition, more jobs will be created as a result of the growing demand to retrofit old systems with more energy efficient, ecofriendly heating and cooling systems. Much of the work for these mechanics will also be in maintenance and repair which usually remains relatively stable even during economic slowdowns.

Recent federal tax incentives for residential renovations will continue to generate jobs in the short term for refrigeration and air conditioning mechanics. In the long term, as the construction sector and economy rebound, employment growth should continue at forecast levels. As in most other trades, there is an increasing need for computer literacy and the ability to operate computer-controlled equipment.

## EMPLOYMENT REQUIREMENTS

- Completion of secondary school is usually required.
- Completion of a three- to five-year apprenticeship program, or
- A combination of over five years of work experience in the trade and some high school, college or industry courses in refrigeration and air conditioning repair is usually required to be eligible for trade certification.
- Trade certification for refrigeration and air conditioning mechanics is compulsory in Ontario
- Interprovincial trade certification (Red Seal) is also available to qualified refrigeration and air conditioning mechanics.
- 

## LOCAL SKILLS REQUIREMENTS

Most employers who advertise are looking for workers who have the following experience and skills:

Experience: 3 - 5 years

### Specific Skills:

Install, troubleshoot, repair and overhaul entire heating, ventilation, air handling, refrigeration. Perform routine maintenance and servicing. Assemble and install refrigeration or air conditioning components.

### Additional Skills:

Service clientele. Read blueprints

## WORKING CONDITIONS

Refrigeration and air conditioning mechanics work in homes, restaurants, supermarkets, hospitals and anywhere where there is cooling control equipment. The work is mainly indoors, though some installations will involve outside work. The specific work conditions are highly dependent on the location of the repair job. Several hazards, including electric shock, burns and muscle strain, pose a threat but safety precautions reduce the risk greatly. Overtime and irregular hours are common during peak periods in hot weather.

## RELATED OCCUPATIONS

- Domestic refrigerator or window air conditioner servicers and repairers (in 7332 Electric Appliance Servicers and Repairers)
- Supervisors of refrigeration and air conditioning mechanics (in 7216 Contractors and Supervisors, Mechanic Trades)

## POTENTIAL EMPLOYERS

- Plumbing, Heating and Air Conditioning Construction Firms
- Appliance, Television, Radio and Stereo Stores
- Commercial Refrigerator and Air Conditioner Manufacturers
- Mechanical Construction Firms
- Engineering Firms

## WHERE TO GET TRAINING

For information on college and university programs visit the CanLearn Interactive website at:

[www.canlearn.ca](http://www.canlearn.ca)

# Residential & Commercial Installers & Servicers

NOC 7441

## NATURE OF WORK

Workers in this unit group install and service a wide variety of interior and exterior prefabricated products such as windows, doors, electrical appliances, water heaters, fences, play structures and septic systems, at residential or commercial properties. They are employed by companies specializing in specific product installation and service.

## EXAMPLE TITLES

Aluminium Window Installer, Eavestrough Installer, Electric Appliance Installer, Exterior Cladder, Fence Erector, Hot Tub Installer, Kitchen Cupboard and Vanity Installer, Recreation Structure Erector, Siding Installer, Sign installer, Swimming Pool Installer, Water Conditioner Servicer, Water Heater Servicer, Window Installer

## MAIN DUTIES

Installers and servicers in this unit group perform some or all of the following duties:

- Read blueprints or work order specifications to determine layout and installation procedures
- Measure and mark guidelines to be used for installations
- Install, repair and service interior prefabricated products such as doors, windows, kitchen cupboards, bathroom vanities, water heaters and household appliances using hand and power tools
- Install, repair and service exterior prefabricated products such as siding, shutters, awnings, fencing, decks, septic systems, signs and play structures using hand and power tools.



## WAGES & SALARIES

Low - \$ 10.50 per hour

Average - \$ 17.98 per hour

High - \$ 28.08 per hour

Note:

2007 Reference Period for the Thunder Bay Area



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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)

## EMPLOYMENT TRENDS

Part-time employment is quite common in this group. Although there is a high incidence of self-employment in some of these fields, most installers, repairers and servicers work for an employer.

Employment in these fields is moderately sensitive to overall economic conditions and very often seasonal.

### EMPLOYMENT REQUIREMENTS

- Some secondary school education is usually required.
- On-the-job training and several months of related installing, repairing or servicing experience are usually required.
- A driver's licence may be required.

### LOCAL SKILLS REQUIREMENTS

Most employers who advertise are looking for workers who have the following experience and skills:

Experience: 0 - 2 years

#### Specific Skills:

Utilize hand and power tools. Assemble and install products. Determine layout and installation procedures.

#### Additional Skills:

Read and interpret blueprints, drawings and specifications. Supervise other workers.

### WHERE TO GET TRAINING

- Training is primarily done on-the-job

### WORKING CONDITIONS

This occupation is affected by seasonal factors. In addition, the length of work may be dictated by the project. While at work, someone in this occupation would put in full-time hours. Overtime may also be required.

### RELATED OCCUPATIONS

- Central air conditioner installers (in 7313 Refrigeration and Air Conditioning Mechanics)
- Supervisors of workers in this unit group (in 7219 Contractors and Supervisors, Other Construction Trades, Installers, Repairers and Servicers)

### POTENTIAL EMPLOYERS

- Construction companies
- Specialty trade contractors
- Home renovation stores
- Self Employment

# Respiratory Therapists & Clinical Perfusionists

NOC 3214

## NATURE OF WORK

Respiratory therapists assist physicians in the diagnosis, treatment and care of patients with respiratory and cardiopulmonary disorders. They are employed in hospitals, medical clinics, health units, extended-care facilities, public health centres and respiratory home care companies.

## EXAMPLE TITLES

Cardiopulmonary Technologist, Cardiovascular Perfusion Supervisor, Cardiovascular Perfusionist, Certified Clinical Perfusionist (CCP), Chief Respiratory Technologist, Clinical Perfusionist, Perfusionist, Registered Respiratory Therapist (RRT), Respiratory Therapist, Respiratory Therapy Clinical Instructor

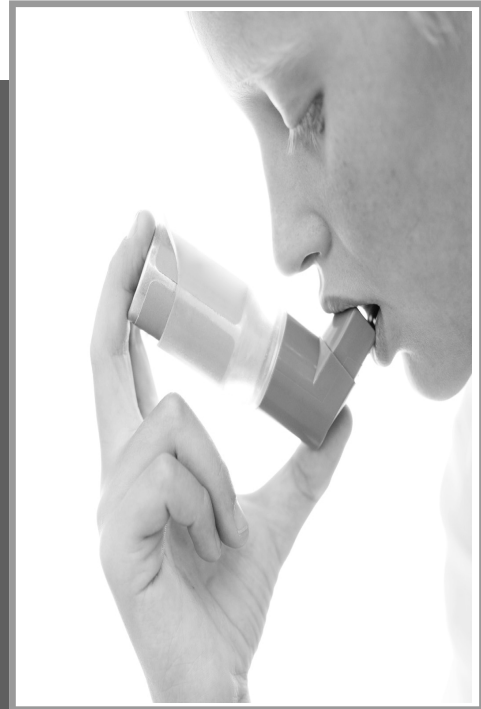
## MAIN DUTIES

Respiratory therapists perform some or all of the following duties:

- Perform diagnostic tests
- Operate and monitor respiratory equipment
- Operate, monitor, maintain and test a variety of diagnostic and therapeutic equipment
- Assess patients and perform or assist with interventions
- Perform artificial respiration and external cardiac massage
- Assist with transport of high-risk patients
- Participate in home care programs for chronic respiratory patients and provide patient and family education

Clinical perfusionists perform some or all of the following duties:

- Assemble, maintain and operate extracorporeal circulation equipment, intra-aortic balloon pumps and other heart assist devices
- Administer blood products, drugs and other substances through heart-lung machines and other devices
- Monitor vital signs to maintain patients' physiological functions during cardiopulmonary surgery



## WAGES & SALARIES

Low - Data Unavailable

Average - \$ 21.87 per hour

High - Data Unavailable

Note - 2007 Reference Period



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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)



## EMPLOYMENT TRENDS

Opportunities for employment in this occupation are expected to be good over the period from 2009 to 2013.

The potential increase in cardiopulmonary diseases due to an ageing population and technological advances in treatment will increase the demand for respiratory therapists. Changes to licensing requirements in Ontario that require all new graduates to write special exams and existing workers to be randomly re-tested may adversely affect the supply of new professionals in the future; even as demand for these services increases. As the population continues to age, respiratory and cardiopulmonary illnesses such as pneumonia, chronic bronchitis, heart disease and emphysema will increase which will spur demand for respiratory therapists. Demand for these professionals will also be influenced by the increase in lung transplant patients, heart attack and accident victims and premature infants.

Workers in this occupation will need to keep up with the latest medical technologies. Perfusion is in constant evolution. Clinical perfusionists are asked to help develop new technologies to respond to the needs in cardiac surgeries. Perfusionists are more and more involved in research as well.

## EMPLOYMENT REQUIREMENTS

- Respiratory therapists require the completion of a two- to three-year college, hospital or university degree program in respiratory therapy, including clinical training.
- Clinical perfusionists require the completion of a respiratory therapy or registered nursing program with a minimum of one year of work experience as a respiratory therapist or registered nurse, and
- Completion of a college or university program in clinical perfusion, including clinical training.
- Cardiopulmonary technologists require a minimum of a diploma in an allied health discipline such as respiratory therapy, nursing diploma or degree, or a degree in a related science and training through a post-diploma program or supervised on-the-job clinical training.
- Licensing is required for respiratory therapists in Ontario
- Registration with the Canadian Association of Cardio-Pulmonary Technologists (C.A.C.P.T.) may be required.

## WHERE TO GET TRAINING

Additional information about this occupation can be obtained from the following web sites:

- Canadian Association of Cardio-Pulmonary Technologists ([www.cacpt.ca](http://www.cacpt.ca))
- College of Respiratory Therapists of Ontario ([www.crto.on.ca](http://www.crto.on.ca))
- Canadian Society of Clinical Perfusion ([www.cscp.ca](http://www.cscp.ca))
- Canadian Society of Respiratory Therapists ([www.csrt.com](http://www.csrt.com))
- Respiratory Therapy Society of Ontario ([www.rtsso.org](http://www.rtsso.org))

## WORKING CONDITIONS

Respiratory therapists and technologists usually work a 35 to 40-hour work-week. Since hospitals work on a continuous basis, they may work nights, evenings or weekends. The work involves following safety precautions to reduce the risk posed by compressed gases and the dangers of infectious diseases that may be present in blood samples and syringes.

## RELATED OCCUPATIONS

- Other Medical Technologists & Technicians (Except Dental Health) (3219)
- Other Technical Occupations in Therapy and Assessment (3235)

## POTENTIAL EMPLOYERS

- Hospitals
- Medical Clinics
- Health Units
- Extended Care Facilities
- Public Health Centres
- Home Health Service Providers

# Roofers & Shinglers

## NOC 7291

### NATURE OF WORK

Roofers install, repair or replace flat roofs and shingles, shakes or other roofing tiles on sloped roofs. Shinglers install and replace shingles, tiles and similar coverings on sloped roofs. They are employed by roofing and general contractors, or they may be self-employed.

### EXAMPLE TITLES

Apprentice Roofer, Asphalt Roofer, Built-up Roofer, Flat Roofer, Residential Steep Roofer, Roofer, Shingler, Single-ply Roofer

### MAIN DUTIES

Roofers perform some or all of the following duties:

- Install, repair or replace built-up roofing systems using materials such as asphalt saturated felts and hot asphalt and gravel
- Install, repair or replace single-ply roofing system using waterproof sheet materials such as modified plastics, elastomeric or other asphaltic compositions
- Install, repair or replace shingles, shakes and other roofing tiles on sloped roofs of buildings
- Install sheet metal flashings
- Apply waterproof coatings to concrete or other masonry surfaces below or above ground level
- Install and repair metal roofs using hand and power tools
- Set up scaffolding to provide safe access to roofs
- May estimate materials required and quote costs

Shinglers perform some or all of the following duties:

- Install or replace asphalt shingles, wood shingles and shakes and masonry or baked clay roofing tiles on sloped roofs of buildings
- Set up scaffolding to provide safe access to roofs



### WAGES & SALARIES

Low - \$ 12.00 per hour

Average - \$ 24.11 per hour

High - \$ 30.91 per hour

Note:

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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)

## EMPLOYMENT TRENDS

Opportunities for employment in this occupation are expected to be good over the period from 2009 to 2013.

A strong construction industry often leads to strong demand for roofers and shinglers. The weaker economy that began in late 2008 would normally restrain demand for this occupation, but strong fiscal spending by all levels of government will help boost construction activity and result in average prospects for these occupations. The 2009 Ontario Construction Secretariat survey report of Ontario contractors shows that roofers and shinglers were most commonly in short supply. In the medium term, it is assumed that the private sector will strengthen enough to offset the end of government funded construction initiatives. Residential starts are expected to fall in 2009, but increase in 2010.

Also, in the coming years many construction workers will be retiring, increasing jobs opportunities in these occupations.

## EMPLOYMENT REQUIREMENTS

- Completion of secondary school is usually required.
- For roofers, completion of a two- to three-year apprenticeship program, or
- Over three years of work experience in the trade are usually required to be eligible for trade certification
- Apprenticeship certification is voluntary in Ontario for roofers
- Interprovincial trade certification (Red Seal) is also available to qualified roofers
- Shinglers require one to two years of on-the-job training

## LOCAL SKILLS REQUIREMENTS

Most employers who advertise are looking for workers who have the following experience and skills:

Experience: 1 - 5 years

### Specific Skills:

Troubleshoot and detect leaks. Install sheet metal flashings.

### Additional Skills:

Supervise other workers. Instruct apprentices.

### Essential Skills:

Working with others and oral communication.

## WORKING CONDITIONS

Roofing work is strenuous. It involves heavy lifting, as well as climbing, bending, and kneeling. Roofers work outdoors in all types of weather, particularly when making repairs. These workers risk slips or falls from scaffolds, ladders, or roofs, or burns from hot bitumen. In addition, roofs become extremely hot during the summer. In Ontario, over 80% work full-time and almost one in five are self-employed.

## RELATED OCCUPATIONS

- Supervisors of roofers and shinglers (in 7219 Contractors and Supervisors, Other Construction Trades, Installers, Repairers and Servicers)

## POTENTIAL EMPLOYERS

- Construction Firms
- Building Construction Firms
- Self-Employment
- Construction Contractors

## WHERE TO GET TRAINING

Additional information about this occupation can be obtained from the following web sites:

- Careers in Construction ([www.careersinconstruction.ca](http://www.careersinconstruction.ca))
- Interprovincial Standards Red Seal Program ([www.red-seal.ca](http://www.red-seal.ca))
- Skilled Trades ([www.apprenticetrades.ca](http://www.apprenticetrades.ca))

# Systems Testing Technicians

**NOC 2283**

## NATURE OF WORK

Systems testing technicians execute test plans to evaluate the performance of software applications and information and telecommunications systems. They are employed in information technology units throughout the private and public sectors.

## EXAMPLE TITLES

Application Tester, Application Testing Technician, Software Test Co-ordinator, Software Tester, Systems Tester, Systems Testing Technician, User Acceptance Tester

## MAIN DUTIES

Systems testing technicians perform some or all of the following duties:

- Develop and document software testing plans
- Install software and hardware and configure operating system software in preparation for testing
- Execute and document results of software application tests and information and telecommunication systems tests
- Develop and implement software and information system testing policies and procedures.



## WAGES & SALARIES

Low - Data Unavailable

Average - Data Unavailable

High - Data Unavailable

Note - 2007 Reference Period



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**GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)**

## EMPLOYMENT TRENDS

Opportunities for employment in this occupation are expected to be good over the period from 2009 to 2013.

Due to global technological advancement, companies continue implementing technology even during tough economic times, maintaining the need for systems testing. Although application/system testing is a crucial part in the development and marketing of new technology, it can often be done out of province, even out of country. Since many of these jobs could be outsourced to areas where prevailing wages are lower, demand for these workers will be moderated. System testing technician is often an entry level position and is often the starting point for many new IT graduates. The number of new graduates should meet industry needs.

## EMPLOYMENT REQUIREMENTS

- Completion of a college program in computer science, computer programming or network administration is usually required
- College or other courses in computer programming or network administration are usually required
- Certification or training provided by software vendors may be required by some employers

## LOCAL SKILLS REQUIREMENTS

Candidates with knowledge of various operating systems such as Windows XP and Vista, Linux, Unix, and Apple OSx, and experience with networking and development tools/languages will have the best prospects.

Employers are most in need of workers needs with a combination of technical, business and interpersonal skills, including:

- core technical skills
- experience with specific applications and platforms
- experience with specific business processes to which ICT is a solution
- communications skills
- team work skills

## WHERE TO GET TRAINING

Additional information about this occupation can be obtained from the following web sites:

- Institute for Certification of Computing Professionals ([www.iccp.org](http://www.iccp.org))
- Ontario Association of Certified Engineering Technicians & Technologists ([www.oacett.org](http://www.oacett.org))
- Information and Communications Technology Council ([www.ictc-ctic.ca](http://www.ictc-ctic.ca))

## WORKING CONDITIONS

The majority of systems testing technicians work a 40 hours a week and primarily work indoors. Travel may be required at times to visit offsite clients.

## RELATED OCCUPATIONS

- Computer and Network Operators and Web Technicians (2281)
- Computer Engineers (Except Software Engineers) (2147)
- Computer Programmers and Interactive Media Developers (2174)
- Information Systems Analysts and Consultants (2171)
- Software Engineers (2173)
- User Support Technicians (2282)
- Web Designers and Developers (2175)

## POTENTIAL EMPLOYERS

- Computer Systems Design & Related Services
- Telecommunication Industry
- Software Publishers
- Communications Equipment Manufacturing
- Computer & Peripheral Equipment Manufacturing
- Finance and Insurance
- Public Administration



# Telecommunications Line & Cable Workers

NOC 7245

## NATURE OF WORK

Telecommunications line and cable workers install, repair and maintain telecommunication lines and cables. They are employed by cable television companies and by telephone and other telecommunications services.

## EXAMPLE TITLES

Apprentice Lineman/woman - Telecommunications, Cable Repairer - Telecommunications, Communication Technician - Construction, Construction Technician - Cable Television Lineman/woman - Telecommunications, Splicer Technician - Telephone, Telecommunications Line Installer, Telephone Line Technician

## MAIN DUTIES

Telecommunications line and cable workers perform some or all of the following duties:

- Install, remove, maintain and repair aerial and underground telephone and other telecommunication transmission and distribution lines, cables and associated hardware
- Install (but do not repair or maintain) cable television lines and cables
- Splice and repair various types and sizes of telephone and other telecommunication cables including single line, coaxial and fibre optic
- Inspect and test telecommunication transmission lines and cables for transmission characteristics and to locate faults
- Climb and work aloft on poles, ladders or other support structures or work in confined spaces such as trenches, tunnels and crawl spaces
- Communicate with other workers to co-ordinate the preparation and completion of work assignments
- Assist in the erection and removal of telecommunication poles, towers and associated support structures
- May operate excavation machinery and other heavy equipment



## WAGES & SALARIES

Low - Data Unavailable

Average - Data Unavailable

High - Data Unavailable

Note - 2007 Reference Period



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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)

## EMPLOYMENT TRENDS

Telephone and cable television service providers are the main employers of telecommunications line and cable workers.

Although telecommunications companies are continually involved in upgrading existing equipment, these upgrades may lead to only a few job openings. Job opportunities are expected to result from retirements or employment growth.

The telecommunications industry is often fiercely competitive and can be subject to sudden changes in technology.

## EMPLOYMENT REQUIREMENTS

- Completion of secondary school is required.
- Completion of a four-year telecommunications line and cable apprenticeship program,
- A combination of over three years work experience in the trade and some industry-related or other specialized courses, or
- Completion of a two year college program in electronics is usually required

## LOCAL SKILLS REQUIREMENTS

Most employers who advertise are looking for workers who have the following experience and skills:

Experience: 1 - 2 years

### Specific Skills:

Install and maintain telephone equipment. Determine nature, cause and location of trouble. Test equipment to locate transmission faults.

### Additional Skills:

Work at heights or in confined spaces. Complete and maintain test and service records.

### Essential Skills:

Working with others, problem solving, decision making, oral communication, reading text, critical thinking, writing and job task planning and organizing.

## WORKING CONDITIONS

An inside work environment where the temperature or humidity may be considerably different from normal room conditions. Working near or with equipment, instruments, machinery or power/hand tools that may be a potential source for accident or injury. Exposure to electrical circuitry, high tension wires, transformers or other equipment that may be a potential source for electrical shock. Working on locations that are treacherous and a potential source of injury.

## RELATED OCCUPATIONS

- Cable Television Service and Maintenance Technicians (7247)
- Electrical Power Line & Cable Workers (7244)
- Supervisors of telecommunications line and cable workers (in 7212 Contractors & Supervisors, Electrical Trades & Telecommunications Occupations)
- Telecommunication Installation and Repair Workers (7246)

## POTENTIAL EMPLOYERS

- Computer Systems Design & Related Services
- Telecommunication Industry
- Software Publishers
- Communications Equipment Manufacturing
- Computer & Peripheral Equipment Manufacturing
- Finance and Insurance
- Public Administration

## WHERE TO GET TRAINING

Information is available on the Ministry of Education / Ministry of Training, Colleges and Universities website at: [www.edu.gov.on.ca](http://www.edu.gov.on.ca)

# Tilesetters

## NOC 7283

### NATURE OF WORK

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

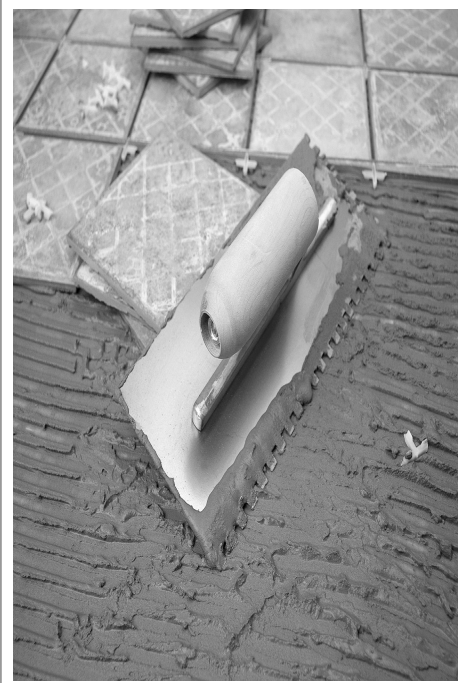
### EXAMPLE TITLES

Apprentice tilesetter, ceramic tile installer, marble setter, terrazzo polisher, terrazzo worker, tile installer and tilesetter

### MAIN DUTIES

Tilesetters perform some or all of the following duties:

- Prepare, measure and mark surface to be covered
- Build underbeds and install anchor bolts, wires and brackets
- Mix, apply and spread mortar, cement, mastic, glue or other adhesives using hand trowel
- Set tiles in position and apply pressure to affix tiles to base
- Align and straighten tile using levels, squares and straightedges
- Cut and fit tiles around obstacles and openings using hand and power cutting tools
- Pack grout into joints between tiles and remove excess grout
- Install tile strips
- Lay and set mosaic tiles to create decorative wall, mural and floor designs
- Mix, lay and polish terra surfaces
- Cut, polish and install marble and granite
- Remove and replace cracked or damaged tiles
- May prepare cost estimates and orders



### WAGES & SALARIES

Low - Data Not Available

Average - \$22.47

High - Data Not Available

Note:

2007 Reference Period for the Thunder Bay area



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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)

## EMPLOYMENT TRENDS

In Ontario, employment opportunities for these trades are expected to remain fair to good over the next two years. Employment for this group is closely linked to the construction industry, especially residential (e.g. houses, townhomes, condominiums) but also for non-residential construction projects such as shopping malls, office buildings, hospitals, schools and restaurants. Over the last few years rapid growth in new housing starts resulted in a tight labour market with reports of shortages for many of the construction trades including Tilesetters.

Over the forecast period housing starts are expected to decline slightly which should moderate labour market pressures. Employment prospects for highly qualified job seekers should, however, remain steady. In Ontario, employment in the construction industry is highly seasonal. Although the work in these trades largely takes place indoors, it can be affected by weather related slowdowns in other trades. Accordingly, employment opportunities are significantly better during the peak summer months than during the winter months.

## EMPLOYMENT REQUIREMENTS

- Completion of secondary school is usually required
- Completion of a three- or four-year apprenticeship program, or
- A combination of over three years of work experience in the trade and some high school, college or industry courses in tilesetting is usually required to be eligible for trade certification
- Trade certification is compulsory in Quebec and available, but voluntary, in Saskatchewan, Alberta and British Columbia

## LOCAL SKILLS REQUIREMENTS

Most employers who advertise are looking for workers who have the following experience and skills:

Experience: 3 - 5 years

### Specific Skills:

Prepare, measure and mark surfaces to be covered. Mix, apply and spread adhesive substances. Set tiles in place and apply pressure to affix them to base. Cut and fit tiles around obstacles.

### Additional Skills:

Read and interpret blueprints, drawings and specifications.

## WHERE TO GET TRAINING

Information on apprenticeship programs in Ontario is available on the Ministry of Education / Ministry of Training, Colleges and Universities website at:

[www.edu.gov.on.ca/eng/training/apprenticeship](http://www.edu.gov.on.ca/eng/training/apprenticeship)

## WORKING CONDITIONS

Tilesetters generally work indoors. However, some work is done outdoors in a variety of weather conditions. The job involves a lot of bending, kneeling, reaching and some heavy lifting. There is some risk of injury from sharp edges and power tools, or from working with dangerous chemicals. This trade works a 40 hour week, with occasional weekend and overtime hours. Workers must be prepared to travel to job sites on a project-by-project basis.

Starting wage rate for an apprentice is typically lower than the journey person wage rate but increases as the apprentice gains experience.

## RELATED OCCUPATIONS

- Bricklayers (7281)
- Plasterers, Drywall Installers and Finishers and Lathers (7284)
- Supervisors of tilesetters (in 7219 Contractors and Supervisors, Other Construction Trades, Installers, Repairers and Servicers)

## POTENTIAL EMPLOYERS

- Construction Companies
- Masonry Companies
- Self Employment

# User Support Technicians

## NOC 2282

### NATURE OF WORK

Technicians in this group provide first-line technical support to computer users experiencing difficulties with computer hardware and with computer applications and communications software. They are employed by computer hardware manufacturers and retailers, software developers, in call centres and in information technology units throughout the private and public sectors.

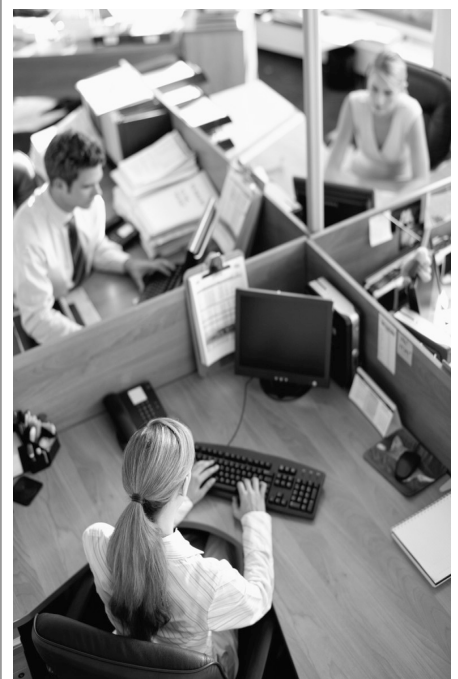
### EXAMPLE TITLES

Call Centre Agent - Technical Support, Client Support Representative - Systems, Computer Help Desk Representative - Systems, Computer Help Desk Supervisor, Hardware Installation Technician, Hardware Technical Support Analyst, Help Desk Technician, Software Installation Technician, Software Technical Support Analyst, Systems Support Representative, Technical Support Analyst - Systems, Technical Support Supervisor, User Support Technician

### MAIN DUTIES

User support technicians perform some or all of the following duties:

- Communicate electronically and in person with computer users experiencing difficulties to determine and document problems experienced
- Consult user guides, technical manuals and other documents to research and implement solutions
- Provide advice and training to users in response to identified difficulties
- Collect, organize and maintain a problems and solutions log for use by other technical support analysts
- Participate in the redesign of applications and other software
- May supervise other technical support workers in this group



### WAGES & SALARIES

Low - \$ 12.00 per hour

Average - \$ 17.32 per hour

High - \$ 24.84 per hour

Note:

2007 Reference Period for the Thunder Bay area



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GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)



## EMPLOYMENT TRENDS

Opportunities for employment in this occupation are expected to be good over the period from 2009 to 2013.

Due to global technological advancement, companies will continue to implement new technologies, maintaining the need for this occupation. Furthermore, complex technology often results in a growing need for user support. Although the demand for user support is expected to show above average growth through 2013, the provider of user support can often reside out of province, even out of country. Since many of these jobs could be outsourced to areas where prevailing wages are lower, demand for these workers will be moderated. User support is often an entry level position and is often the starting point for many new IT graduates.

Candidates with strong problem solving, analytical, interpersonal and communication skills should have the best prospects.

## EMPLOYMENT REQUIREMENTS

- Completion of a college program in computer science, computer programming or network administration is usually required.
- College or other courses in computer programming or network administration are usually required.
- Certification or training provided by software vendors may be required by some employers.

## LOCAL SKILLS REQUIREMENTS

Most employers who advertise are looking for workers who have the following experience and skills:

Experience: 0 - 1 year

Specific Skills:

Communicate electronically and in person with computer users experiencing difficulties to determine and document problems experienced. Provide advice and training to users in response to identified difficulties. Consult user guides, technical manuals and other documents to research and implement solutions.

Computer and Technology Knowledge:  
Windows and Internet.

Essential Skills:

Oral communication, working with others, computer use, problem solving, reading text, finding information, critical thinking, decision making and continuous learning.

## WHERE TO GET TRAINING

Additional information about this occupation can be obtained from the following web sites:

- Institute for Certification of Computing Professionals ([www.iccp.org](http://www.iccp.org))
- Ontario Association of Certified Engineering Technicians and Technologists ([www.oacett.org](http://www.oacett.org))

## WORKING CONDITIONS

User Support Technicians work indoors and spend the majority of their time in front of a computer. They usually work about forty hours per week. Occasionally, longer hours may be required to solve specific problems. They provide technical support from a remote location or by directly going to the client's workstation. Constant interaction with clients or fellow employees is required. Both technical skills and communication skills are crucial to this job. There is often considerable pressure to work as fast as possible to deal with the technical issues and achieve immediate results in all situations.

## RELATED OCCUPATIONS

- Computer and Network Operators and Web Technicians (2281)
- Computer Programmers and Interactive Media Developers (2174)
- Information Systems Analysts and Consultants (2171)
- Systems Testing Technicians (2283)

## POTENTIAL EMPLOYERS

- Computer Systems Design & Related Services
- Computer and Communications Equipment Makers
- Business Support Services
- Telecommunication Industry
- Information Services
- Software Publishers
- Finance and Insurance
- Public Administration
- Wholesale Trade
- Educational Services

# Veterinary & Animal Health Technologists & Technicians

**NOC 3213**

## NATURE OF WORK

Veterinary and animal health technologists and technicians provide technical support to veterinarians by caring for animals and assisting in the diagnosis and treatment of animal health disorders. They are employed in veterinary clinics, animal hospitals, animal shelters, zoos, animal research laboratories, government and pharmaceutical companies.

## EXAMPLE TITLES

Animal Health Technician, Animal Health Technologist, Laboratory Animal Technician, Veterinarian Assistant, Veterinary Technician, Veterinary Technologist

## MAIN DUTIES

Veterinary and animal health technologists and technicians perform some or all of the following duties:

- Handle, restrain and care for animals undergoing treatment and surgery
- Produce radiographs, collect samples and perform other laboratory tests to assist in diagnosis of animal health problems
- Assist veterinarian with animals before, during and following surgery, and by preparing surgical equipment, administering and monitoring anaesthetics and cleaning up after surgery
- Prepare and administer medications and vaccines under direction of veterinarian
- Administer treatments as prescribed by a veterinarian
- Conduct specialized procedures such as animal identification and hoof trimming
- Counsel clients on animal health care
- Conduct and assist in laboratory research
- May perform a variety of office management and clerical duties



## WAGES & SALARIES

Low - Data Unavailable

Average - Data Unavailable

High - Data Unavailable

Note - 2007 Reference Period



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**GOOD EMPLOYMENT PROSPECTS FOR ONTARIO (2009 - 2013)**

## EMPLOYMENT TRENDS

This is a small occupational group with many veterinary and animal health technologists and technologists employed part time.

Employment prospects are expected to be above average over the next few years. New openings will result from the need to replace those who retire. Spending on veterinary services has doubled over the last ten years due to the increasing number of pets in North America, as well as the fact that more pet owners consider their pets to be members of their family. Pet owners are more willing to spend money for veterinary procedures to extend the life of their animals. This trend is creating an increased demand for veterinary services and is increasing employment opportunities for veterinary and animal health technologists and technicians.

Recent outbreaks of diseases in farm animals such as avian influenza and bovine spongiform encephalopathy, are also increasing the demand for veterinary diagnostic services and the services of veterinary and animal health technologists and technicians.

## EMPLOYMENT REQUIREMENTS

- Completion of a two- or three-year animal health/veterinary technology college program is required
- Successful completion of the Veterinary Technologist National Examination (VTNE) may be required in some employment settings
- Registration with provincial animal health technologists' or veterinary technicians'/technologists' associations is available, but voluntary in all provinces

## LOCAL SKILLS REQUIREMENTS

Not Available.

## WHERE TO GET TRAINING

For information on college and university programs visit the CanLearn Interactive website at:

[www.canlearn.ca](http://www.canlearn.ca)

## WORKING CONDITIONS

Full-time veterinary and animal technologists and technicians work 40 to 50 hours per week. They work indoors in veterinary clinics where their work environment is often noisy. Some emergency on-call work may be required.

Sometimes, the work may be unpleasant and physically demanding. Stress is often associated with treating abused animals or euthanizing animals. The work can also be physically demanding, as veterinary and animal health technologists and technicians are required to lift, hold or restrain animals, exposing themselves to bites or scratches. Safety precautions are undertaken to reduce risk of injury.

Individuals working in these occupations may also feel a sense of accomplishment in knowing they are providing necessary care for animals.

## RELATED OCCUPATIONS

- Pet Groomers and Animal Care Workers (6483)

## POTENTIAL EMPLOYERS

- Veterinary Clinics
- Animal Hospitals
- Pet Groomers
- Animal Shelters