

Apprenticeship
Training Standard
Logbook

Sheet Metal Worker

308A

1994

Apprenticeship Training Standard

The Apprenticeship Training Standard or herein after referred to as "Logbook" is a document issued to Apprentices who sign a Registered Training Agreement in the Province of Ontario as an official record of training. It is to be used by the Apprentice and Sponsor/trainer to guide the process of skills development in a particular trade.

Training As An Apprentice

- ✓ Ensure you, your sponsor, and your witness sign a Training Agreement with the Ministry of Labour, Immigration, Training and Skills Development. Once it is registered, you will receive a copy of the registered Training Agreement for your records.
- ✓ Notify the local Service Delivery Office immediately if any changes to contact information or training agreement, especially if you change sponsors.
- Review the Logbook regularly with your trainer and sponsor to discuss your progress, ask questions, seek feedback and have the trainer <u>sign-off on</u> <u>competencies</u>
- Keep an accurate record of the hours you work.
- Attend classroom training when it is offered.
- Apply for the financial incentives for which you are eligible.



Completing Your Logbook

- ✓ Complete the Sponsor Record Form A form must be completed for each Sponsor/Trainer used during your apprenticeship.
- ✓ Confirm Skill Sign-off is Complete
 - You and your trainer sign-off each required skill to confirm that you have demonstrated competency in that skill.
 - Shaded boxes in your Logbook mean the skills are optional and do not have to be confirmed by your trainer or sponsor. However, you are encouraged to complete them as part of your training.

✓ Confirm Skill Set Sign-off is Complete

After you and your trainer have signed-off all the required skills in a skill set, your sponsor signs the signature box on the form in Appendix C – "Skill Set Completion for Sponsors" to confirm your completion of all competencies within each skill set.

This document is the property of the apprentice named inside and represents the official record of your training. For information about completing your apprenticeship, see inside of back cover.



Apprentice Name:
Address:
Phone Number:
Email Address:
Trade:
Training Agreement # (for Compulsory and Non-Compulsory trades):
STO Account No. (for Compulsory trades only):

This document is the property of the Apprentice named herein and represents the official record of their training.

If you have questions about the use of this Logbook or about your Apprenticeship program, contact your local Service Delivery Office (see Appendix D in this book) or the Employment Ontario hotline at: 1-800-387-5656.

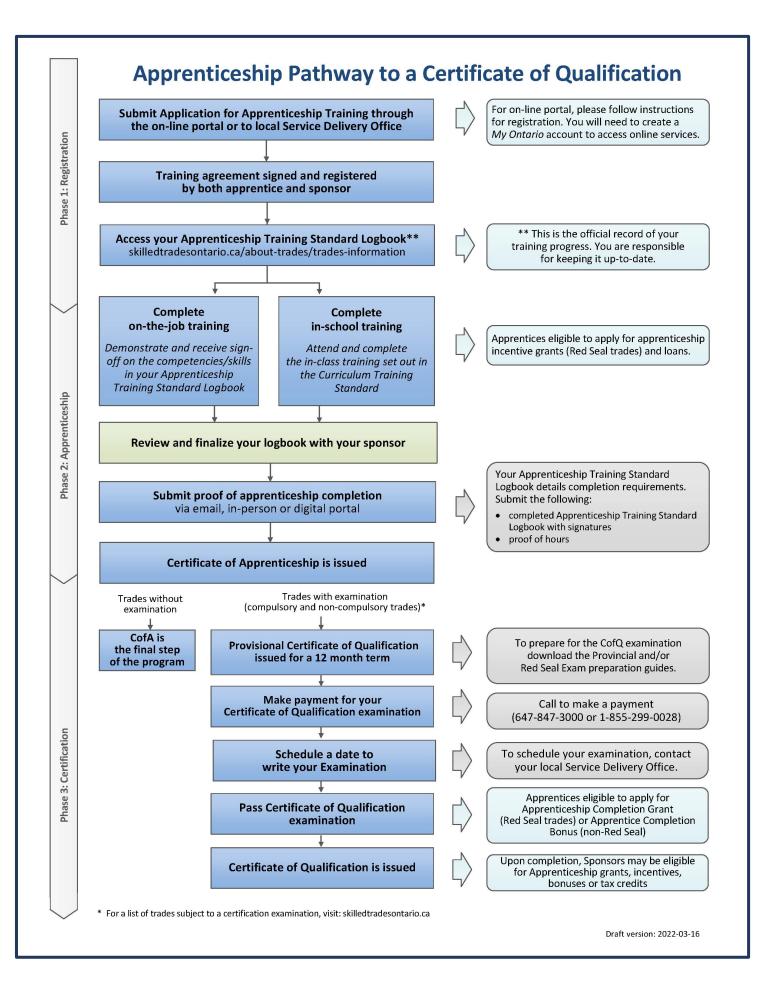


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<u>Please Note:</u> This Standard has been revised to reflect the visual identity of Skilled Trades Ontario (STO) which replaced the Ontario College of Trades on January 1, 2022. The content of this Standard may refer to the former organization; however, all trade specific information or content remains relevant and accurate based on the original date of publishing.

Please refer to STO's website: <u>skilledtradesontario.ca</u> for the most accurate and up to date information. For information about BOSTA and its regulations, please visit <u>Building</u> Opportunities in the Skilled Trades Act, 2021 (BOSTA).

Any updates to this publication are available on-line; to download this document in PDF format, please follow the link: Skilled Trades Ontario.ca.

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Foreword: Purpose, Terms and Conditions of the registered Training Agreement

Purpose:

- Prior to starting official apprenticeship activities, the apprentice, sponsor and a witness are required to sign a Training Agreement.
- The Training Agreement that you have signed is an important legal document that outlines your responsibilities as an apprentice and the responsibilities of your sponsor.
- Once registered, this training agreement (or contract) marks the start of your formal agreement between the apprentice, the sponsor and the Ministry.
- For compulsory trades, the apprenticeship registration document must be accessible when working.

The Apprentice agrees:

- To inform the local Service Delivery Office of any change to your contact information or change in sponsor within 7 days;
- To follow the Sponsor's and Trainer's lawful instructions and make every effort to acquire the skills identified in the Logbook for the Trade which is part of the apprenticeship program established by Skilled Trades Ontario for the trade;
- To obtain written verification from the Sponsor and the Trainer(s) that the requirements in the Logbook for the trade have been met.
- When you receive an "Offer of Classroom Training", confirm your attendance by following the instructions in the offer. Failure to do so may result in losing your opportunity to attend school which delays the completion of your apprenticeship.

The Sponsor agrees:

- To ensure that the Apprentice is provided with the training required as part of the apprenticeship program established by Skilled Trades Ontario for this trade;
- To review the progress of training with the Apprentice, and with the Trainer(s) where the Sponsor and the Trainer are not the same party.
- Release your apprentice from work to attend in-school training without penalty to the apprentice.
- To maintain the journeyperson/apprentice ratio for your trade, if applicable.
- To monitor their apprentice(s) progress
- To ensure that the Trainer(s) verifies, in writing, when each skill identified in the Logbook for the trade has been successfully completed by the Apprentice;
- To contact the Ministry should any changes in your capacity to train, your contact information, or your apprentice's status in the program change.

Trade Specific Resources and Links

Trade Specific Resource	Link
Red Seal Program	red-seal.ca
Apprenticeship in Ontario	ontario.ca/page/apprenticeship-ontario
Employment Ontario	employmentontario.ca
Service Canada	servicecanada.gc.ca
Building Opportunities in the Skilled Trades Act, 2021	Building Opportunities in the Skilled Trades Act, 2021, S.O. 2021, c. 28 - Bill 288 (ontario.ca)
Ministry of Labour, Immigration, Training and Skills Development	Ministry of Labour, Immigration, Training and Skills Development ontario.ca
Exam Preparation Guide	Exam Resources – Skilled Trades Ontario
Skills Zone (Ontario Skills Passport)	http://www.skillszone.ca/

^{*}Please note, all website addresses are current at time of printing

Methodology-Standard Development

A standard is developed with a broad group of trade representatives who form the initial working group. This includes subject matter experts/ tradespeople/ instructors and employers from a cross section of the sector/industry, with varying years of work experience in the field. The working group reviews, develops and recommends revision to the content of the standard. Their role also involves harmonizing and updating other supporting content for the product.

An essential part of the standard development is the validation process. This is the opportunity to have a broader representation of the sector and provide feedback on the content of draft standard. This process is conducted in various ways and may include sending out a survey or the draft document (or both) directly to the sector. The comments received are reviewed by the working group and revisions are made as required based on a consensus model.

Introduction to the Logbook

This "on-the job" Logbook is the training standard for Sheet Metal Worker 308A and was developed by Skilled Trades Ontario in consultation with representatives from industry. It identifies all the skills associated with and required to learn the trade.

The Logbook is divided into skill sets, which are further divided into skills. These skill sets and skills are written in statements that describe what the Apprentice must perform and to what standard, in order to be considered competent in that skill.

The successful performance of these skills is tracked in the Logbook. Once achieved, this skills' sign-off, along with the completion of in-school program requirements or equivalent, is how the apprenticeship program is completed and apprentices receive a Certificate of Apprenticeship.

The Sponsor/trainer and Apprentice are required to sign-off and date each skill after the Apprentice has demonstrated proficiency in these skills. However, if a skill is shaded, it is optional and does not need to be signed-off, though it has been defined as a part of the scope of practice for the trade.

All practices described in this standard must be performed by the apprentice according to the specific criteria identified. In general, the standard of performance for this trade is to be performed according to all applicable jurisdictional codes and standards and all health and safety standards must be respected and observed.

All skills within the Apprenticeship Training Standard are to be performed, as applicable, according to and in compliance with the following:

- Occupational Health and Safety Legislation and Regulations;
- Other applicable legislation, regulation, codes and standards;
- Industry best practices;
- Company policies and procedures.

The information presented in this standard is, to the best of our knowledge, current at time of printing and is intended for general application. Please refer to the Skilled Trades Ontario website for the most accurate and up-to-date information: skilledtradesontario.ca

Roles and Responsibilities

Under the **Building Opportunities in the Skilled Trades Act**, 2021 (BOSTA)

Skilled Trades Ontario (STO) is responsible for:

- Establishing and maintaining qualifications;
- Establishing Apprenticeship Programs and other training programs including training Standards, curriculum standards and certifying examinations;
- Issuing certificates for the purposes of this Act such as Certificates of Qualification;
- Maintaining a Public Registry for compulsory trades <u>skilledtradesontario.ca/public-register/</u>;
- Determining whether the experience and qualifications obtained by applicants for a certificate of qualification who do not complete an apprenticeship are equivalent to those received through completing an apprenticeship (Trade Equivalency Assessments)
- Promoting the skilled trades and conducting research.
- Conducting research and evaluate whether a trade should be prescribed as a trade for the purposes of this Act and to make recommendations on these matters to the Minister.

Ministry of Labour, Immigration, Training and Skills Development (MLITSD) is responsible for:

- Classifying trades as compulsory trades;
- · Prescribing scopes of practice for trades;
- Approving which persons may provide in-class training for apprenticeship programs (TDAs);
- Registering Training Agreements;
- Providing those who successfully complete an apprenticeship program with a certificate of apprenticeship (CofA);
- Administering examinations, including certifying examinations;
- Promoting the skilled trades and conducting research;
- Exercising such other powers and perform such other duties and functions as are provided for in this Act or the regulations.

For any matter related to your registered Training Agreement or completing your apprenticeship, you must contact your local Service Delivery Office.

Roles and Responsibilities of the Apprentice

An Apprentice is an individual who has entered into a registered Training Agreement (refer to Foreword: "Purpose, Terms and Conditions of TA" page 1) with a Sponsor to receive training in a trade as part of an apprenticeship program established by Skilled Trades Ontario. As an Apprentice, you have certain roles and responsibilities to follow throughout your apprenticeship training:

- 1. As an Apprentice, you signed the Training Agreement and have entered into a contract with the Ministry of Labour, Immigration, Training and Skills Development and your Sponsor.
- 2. If you are registered as an Apprentice in a compulsory trade, your name will automatically appear in the Skilled Trades Ontario Public Register.
- 3. You are responsible for informing the staff at your local Service Delivery Office regarding changes to the following:
 - Your Sponsor's address;
 - Your name and address; and/or,
 - Your Sponsor, including starting employment with a new Sponsor
- 4. As an Apprentice, you are responsible for completing skills or skill sets in this Logbook (as detailed in the "Eligibility for Apprenticeship Program Completion" section of this document) and ensuring that they are dated and signed by both you and your Trainer.
- 5. Once you have demonstrated competency in all the mandatory skills and received a sign off on each skill by your sponsor/trainer, you must have the Skill Set Completion Form completed and signed by your current Sponsor.
- 6. Submit your Logbook to your local Service Delivery Office.
- 7. Present your Apprentice Completion Form (Please refer to Appendix B), along with your authorized Logbook to your local Service Delivery Office.

Roles and Responsibilities of Sponsors and Trainers

Sponsors are responsible for ensuring all terms are met as per the registered Training Agreement. They are named on the registered Training Agreement as the entity responsible for ensuring Apprentices receive the training required as part of an apprenticeship program. As a signatory to this agreement, they are designated as the 'Signing Authority' for the Apprentice's Skill Set Completion Form and are required to attest to successful achievement by signing the appropriate box at the completion of each skill set. Some sponsors may also act as the Trainer.

A **Trainer** is an individual who oversees the performance of a task and sets the workplace expectations and practices for the Apprentice.

In compulsory trades, a Trainer must hold a valid Certificate of Qualification and be registered with Skilled Trades Ontario.

In non-compulsory trades, a Trainer is an individual who holds one of the following:

- A Certificate of Qualification;
- A Certificate of Apprenticeship in the trade; or,
- Has completed both the workplace-based training (competencies and/or hours as applicable) and classroom training components of the trade's apprenticeship program; or,
- Has workplace experience equivalent to the apprenticeship program) and has the skills outlined in the Logbook.

Competency means being able to perform to the required standard (please refer to "Introduction to the Logbook"). Trainers/Sponsors and Apprentices are required to sign-off and date the skills in the Logbook following each successful acquisition. The Logbook forms a record of this achievement.

The Trainer must provide their signature based on their assessment and professional judgment that the apprentice is competent in the skills described above. The Trainer's signature is not a general warranty or guarantee of the apprentice's future conduct.

Sponsors participating in this training program will be designated as the Signing Authority and are required to attest to successful achievement by signing the appropriate box included at the end of each skill set.

Health and Safety

Safe working procedures and conditions, accident prevention and the preservation of health are of primary importance for apprenticeship programs in Ontario. These responsibilities are shared and require the joint efforts of government, sponsors, employers, supervisors, workers, apprentices and the public to achieve the goal of making Ontario's workplaces safe and healthy.

The Occupational Health and Safety Act (OHSA) provides us with the legal framework and the tools to do this. It sets out the rights and duties of all parties in the workplace, placing ultimate responsibility on the employer for the health and safety of workers (in this case apprentices) by ensuring procedures, controls, and training are established for dealing with workplace hazards. Therefore, it is imperative that all parties become aware of circumstances that may lead to injury, illness or harm. Safe learning experiences and environments can be created by controlling the variables and behaviours that may contribute to or cause an accident, injury or illness.

A sponsor who is not the employer is reminded that the employer has legal responsibilities respecting health and safety over the apprentice who is their worker. The sponsor should encourage safe work habits and adherence to the employer's occupational health and safety requirements for the workplace.

It is generally recognized that a positive attitude about safety in partnership with health and safety competency contributes to an accident-free environment. Everyone will benefit as a result of a healthy attitude towards the prevention of accidents.

Workers and apprentices can be exposed to a multitude of hazards and, therefore, should be familiar with the Occupational Health and Safety Act and regulations.

The Internal Responsibility System:

One of the primary purposes of the Occupational Health and Safety Act (OHSA) is to facilitate a strong Internal Responsibility System (IRS) in the workplace. To this end, the OHSA lays out the duties of employers, supervisors, workers, apprentices, constructors and workplace owners.

Workplace parties' compliance with their respective statutory duties is essential to the establishment of a strong IRS in the workplace.

Simply put, the IRS means that everyone in the workplace has a role to play in keeping workplaces safe and healthy. Workers and apprentices in the workplace who see a health and safety problem such as a hazard or contravention of the OHSA in the workplace have a statutory duty to report the situation to the employer or a supervisor. Employers and supervisors are, in turn, required to address those situations and acquaint workers with any hazard in the work that they do.

The IRS helps support a safe and healthy workplace. In addition to the workplace parties' compliance with their legal duties, the IRS is further supported by well-defined health and safety policies and programs, including the design, control, monitoring and supervision of the work being performed.

Roles and Responsibilities under the Occupational Health and Safety Act

Employer's Responsibilities include but are not limited to the following:

- Instruct, inform and supervise workers and apprentices to protect their health and safety.
- Appoint competent persons as supervisors.
- Inform a worker, apprentice, or a person in authority, about any hazard in the workplace and train them in the handling, storage, use, disposal and transport of any equipment, substances, tools, material, etc.
- Take every precaution reasonable in the circumstances for the protection of a worker/apprentice.
- In workplaces in which more than five workers are regularly employed, prepare and post a written occupational health and safety policy and set up and maintain a program to implement it.
- Prepare and post policies with respect to workplace violence and workplace harassment and develop programs supporting workplace harassment and workplace violence policies.
- Ensure knowledge of applicable legislative, regulatory, codes and standards so requirements to be followed are clear to all workers/apprentices.

Trainer/Supervisor Responsibilities include but are not limited to the following:

- Ensure that a worker or apprentice works in compliance with the Act and regulations.
- Ensure that any equipment, protective device or clothing required by the employer is used or worn by the worker or apprentice.
- Advise a worker/apprentice of any potential or actual health or safety dangers known by the supervisor.
- Take every precaution reasonable in the circumstances for the protection of workers.

Worker/Apprentice Responsibilities include but are not limited to the following:

- Work in compliance with the Act and regulations.
- Use or wear any equipment, protective devices or clothing required by the employer.
- Report to the employer or supervisor any known missing or defective equipment or protective device that may endanger the worker or another worker.
- Report any hazard or contravention of the Act or regulations to the employer or supervisor.
- Not remove or make ineffective any protective device required by the employer or by the regulations.
- Not use or operate any equipment or work in a way that may endanger any worker.

The Three Rights of Workers/Apprentices

The OHSA gives workers and apprentices three important rights:

- 1. The right to know about hazards in their work and get information, supervision and instruction to protect their health and safety on the job.
- 2. The right to participate in identifying and solving workplace health and safety problems either through a health and safety representative or a worker member of a joint health and safety committee.
- 3. The right to refuse work that they believe is dangerous to their health and safety or that of any other worker in the workplace.

For construction projects applying to construction trades a Constructor is also identified

On all projects, either the owner or someone hired by the owner is the constructor.

The intent of the Occupational Health and Safety Act is to have one person with overall authority for health and safety matters on a project. This person is the constructor of the project.

The constructor is the party with the greatest degree of control over health and safety at the entire project and is ultimately responsible for the health and safety of all workers and apprentices. The constructor must ensure that all the employers, apprentices and workers on the project comply with the Act and its regulations.

Constructor's duties include the following:

- To ensure that the measures and procedures in the Act and regulations are carried out.
- To ensure that every employer, apprentice and worker on the project complies with the Act and regulations.
- To ensure that the health and safety of workers/apprentices on the project are protected.

Ministry of Labour, Immigration, Training and Skills Development

The Ministry of Labour, Immigration, Training and Skills Development conducts periodic inspections of workplaces to ensure that safety acts and regulations are being followed. Please direct any questions to the Occupational Health and Safety Contact Centre at 1-877-202-0008.

Apprenticeship Program Summary/Guidelines

Scope of Practice

The Scope of Practice for the trade of Sheet Metal Worker is set out in section 126 of Ontario Regulation 875/21 under BOSTA and reads as follows:

- (1) The scope of practice for the trade of sheet metal worker includes the following:
 - 1.Manufacturing or fabricating all ferrous and nonferrous sheet metal work of No. 10 U.S. Gauge or any equivalent or lighter gauge and all other materials used in lieu of it.
 - Assembling, handling, erecting, installing, dismantling, reconditioning, adjusting, altering, repairing or servicing all ferrous and nonferrous sheet metal work of No. 10 U.S. Gauge or any equivalent or lighter gauge and all other materials used in lieu of it.
 - Reading and interpreting all shop and field sketches used in fabrication and erection, including those taken from sketches or original architectural and engineering drawings.
 - 4. Fabricating or installing metal cladding over insulation.
- (2) The scope of practice for the trade of sheet metal worker does not include work listed in subsection (1) that is performed in production commonly known as mass production.

*While the Logbook draws on the scope of practice regulation (Section 126 of Ontario Regulation 875/21 under BOSTA). The Logbook does not purport to add to or modify the scope of practice as provided in regulation. *

Program Guidelines

On-the-Job Training Duration

Industry has identified 8280 hours as the benchmark necessary for any Apprentice to become competent in the skills required. There may be circumstances in which the duration varies from this guideline.

In-Class Training Duration

Industry has identified 720 hours of in-school training as the duration necessary for an Apprentice to complete the in-school curriculum for this program.

Total Training Hours

9000 hours

Journeyperson to Apprentice Ratio

Ratios in Regulation:

If a trade has been prescribed as being subject to an apprentice to journeyperson ratio, the number of apprentices who may be sponsored or employed by a person in the trade in relation to the number of journeypersons employed or otherwise engaged by the person in the trade **shall not exceed one apprentice for each journeyperson**; Further information can be found in the Apprenticeship section of the Government of Ontario website at ontario.ca/page/hire-apprentice

Program Requirements

Compulsory and Non-compulsory Classification

Regulations under the *Building Opportunities in the Skilled Trades Act, 2021,* classify each trade as either "compulsory" or non-compulsory." This trade is compulsory

It is the responsibility of an Apprentice to maintain a training record in the form of a Logbook. The Sponsor and Trainer are required to sign-off when competencies in the trade are achieved.

Skills for Success Summary

Skills for Success are needed in a quickly changing world for work, learning and life. They are foundational for building other skills and important for effective social interaction. Everyone benefits from having these skills as they help individuals get a job, progress at their current job and change jobs. They also help individuals become active members of their community and succeed in learning.

Through extensive research and consultations, the Government of Canada launched the new Skills for Success model renewing the previous Essential Skills framework to better reflect the needs of the current and future labour market.

The occupational specific Essential Skills profiles are available online. These will be updated over time to align with the new Skills for Success model found here: Skills for Success model

Standard of Performance

In general, the standard of performance for this trade are to be performed, as applicable, according to and in compliance with the following:

Industry Safety Standards which are based upon:

- Occupational Health and Safety Legislation and Regulations;
- Jurisdictional legislation and regulations, codes and standards (municipal bylaws etc.)
- Company policies and procedures
- All applicable manufacturers specifications and engineering specifications

Other Suggested or Required Certification(s) and Training

While an apprentice receives health, safety and occupational specific training and/or certification in a variety of fields during their apprenticeship, it is important to be aware that other occupational health and safety training and certification renewal or updating may also be required during their career before performing new types of work.

Training the Apprentice - Tips for Apprentices, Sponsors and Trainers

Tips for Apprentices

Remember, it takes time to learn. The following is a list of additional tips and tools to help make the most of your apprenticeship training:

- Practice safe work procedures early to create good habits;
- Use your Logbook as a journal to keep track of the skills you have achieved;
- Review your training plan with your Training Consultant, Trainer, or Sponsor;
- Discuss your training needs with your Trainer and/or Sponsor;
- Listen to the suggestions of your Trainer;
- Ask your Trainer questions if you are unsure of any skill you need to perform or any tools or equipment you need to use to perform your duties;
- Show enthusiasm and develop good work habits; and,
- Upon demonstration of competency, ensure that you and your Trainer sign-off the individual skills.

To get the most from this mentoring experience, request exposure to the full scope of the trade; meet regularly with your Sponsor/Trainer to discuss your progress, ask questions and seek feedback.

Tips for Sponsors

- Select Trainers with good communication skills and who work well with others;
- Ensure that the Apprentice always works under the direction of or has access to a qualified Trainer;
- Encourage Trainers to take upgrading courses (e.g. Train the Trainer, Mentor, Coach, etc.);
- Set out clear expectations and involve both the Apprentice and Trainer in developing the training plan
- Encourage safe work habits;
- Allow time for the Trainer to train and demonstrate skills to the Apprentice;
- Provide opportunities and time for the Apprentice to learn the trade;
- Ensure that the Apprentice receives the varied on-the-job trade training experience outlined in this document;
- Recognize good performance;
- Observe frequently;
- Provide constructive feedback and conduct regular performance reviews involving the Apprentice and Trainer;
- Use the Logbook as a monitoring tool and a part of regular performance evaluations; and,
- Complete the Skill Set Completion Form once the Apprentice has demonstrated competency in the skills.

• The detailed content listed for each skill is not intended to represent an inclusive list; rather, it is included to illustrate the intended direction for the skill acquisition.

Tips for Trainers

Trainers are responsible for ensuring the Apprentice is developing the skills outlined in this document. Here is a list of tips and tools to help Trainers in their supervision of Apprentices:

- Demonstrate model safe work habits;
- Provide opportunities and time for the Apprentice to learn the trade;
- Treat Apprentices fairly and with respect;
- Review the Logbook with the Apprentice and develop a training plan;
- Set out clear expectations and recognize good performance;
- Expose Apprentices to the full scope of the trade by providing training on the skills outlined in this document;
- Encourage and respond to all questions;
- Be patient;
- Explain, show and demonstrate the skill;
- Meet regularly with the Apprentice to discuss the apprentice's progress
- Provide continuous feedback;
- Sign-off skills when your Apprentice demonstrates competency, and,
- Use the Logbook as a guide to evaluate competence in each skill area. By using the Logbook, Trainers will be able to guide the process to and assist Apprentices to develop skills outlined in this document.

The best mentoring experience is when an Apprentice is given as much training/exposure to the full scope of the trade as possible. If this is not possible, help them to determine other ways this may be possible.

Notice of Collection of Personal Information

- 1. At any time during your apprenticeship training, you may be required to show this Logbook to the local Service Delivery Office. You will be required to submit the signed Apprenticeship Completion form to the Service Delivery Office in order to complete your program. The Service Delivery Office will use your personal information to administer and finance Ontario's apprenticeship training system, including confirming your completion and issuing your Certificate of Apprenticeship.
- 2. The Service Delivery Office will disclose information about your program completion and your Certificate of Apprenticeship to Skilled Trades Ontario, as it is necessary for Skilled Trades Ontario to carry out its responsibilities.
- 3. Your personal information is collected, used and disclosed by the Ministry of Labour, Immigration, Training and Skills Development under the authority of the *Building Opportunities in the Skilled Trades Act, 2021 (BOSTA).*
- 4. Questions about the collection, use and disclosure of your personal information by the Ministry may be addressed to the:

Manager, Employment Ontario Contact Centre Ministry of Labour, Immigration, Training and Skills Development 33 Bloor St. E, 2nd floor, Toronto, Ontario M7A 2S3

Toll-free: 1-800-387-5656; Toronto: 416-326-5656

TTY: 1-866-533-6339 or 416-325-4084

List of Trainers

Trainer's Name (Please Print)	Trainer's Signature	Date of start with Trainer (day/month/year)

0338.0 Protect Self and Others

General Performance Objective

Wear safety clothing and equipment, identify hazards in the work area, perform work in accordance with safety legislation, check condition of ladders and scaffolding, communicate with co-workers, inspect and maintain tools and apply basic first aid.

Skills

0338.01

Wear, adjust, and maintain safety clothing and equipment to ensure correct fit and optimum protection of self and others in compliance with the Occupational Health and Safety Act (OHSA) and owner/client safety standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

^{*} For a compulsory trade, a Trainer must hold a certificate of Qualification in that trade as per section 10(1) of BOSTA and be registered with Skilled Trades Ontario.

Identify hazards in the work area by inspecting the site to identify hazards to self and others including: fire hazards, exposure to toxic chemicals, electrical and explosive hazards, absence of protective barriers, the potential for falls, following good housekeeping practices and taking corrective action where required.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Perform work in accordance with safety legislation including Workplace Hazardous Materials Information System (WHMIS), OHSA Regulations pertaining to the industrial and construction sectors, the Workers' Compensation Act and Regulations to ensure the protection of self and others.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

O338.04 Check condition of ladders, scaffolding and related equipment prior to use including toe boards, hand rails, outriggers and wheels, approved ladders, approved planking, cleats and pins and/or platforms, braced, motorized lifts and take corrective action where required by securing all attachments and reporting or replacing unsafe, worn or defective components.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Communicate with co-workers and others to warn of hazards, ensure safe working practices, promote team work and to prevent accidents and injury to self and others.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Inspect and maintain tools and equipment prior to use, following manufacturers' recommended procedures. Check for damage or wear and repair or replace damaged components to ensure effective operation and the safety of self and others.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Apply basic first aid to self and co-workers to treat cuts, burns, abrasions, sprains, chemical inhalation, contaminants in the eyes and seek immediate assistance when required.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

0339.0 Use and Maintain Hand/Power Tools and Equipment General Performance Objective

Select, maintain and use hand tools, power tools, devices to measure, mark, align and level and operate explosive actuated tools.

Skills

Select, maintain and use hand tools, demonstrating required hand/eye co- ordination and dexterity to' perform sheet metal work effectively in accordance with required tolerances.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

^{*} For a compulsory trade, a Trainer must hold a certificate of Qualification in that trade as per section 10(1) of BOSTA and be registered with Skilled Trades Ontario.

Select, use and maintain power hand tools including electrical, pneumatic and gasoline powered types, following manufacturers' recommendations regarding equipment capacities and limitations to perform sheet metal work effectively in accordance with required tolerances.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Select, maintain and use tools and devices to measure, mark, align and level, ensuring the fit and accuracy of sheet metal layouts, fabrication work and installations as required by drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Select, maintain and operate explosive actuated tools in accordance with manufacturers' maintenance procedures and operational instructions and the requirements of OHSA to ensure safe and effective operation.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

0340.0 Read, Interpret and Produce Drawings

General Performance Objective

Read and interpret drawings and specifications, free hand sketches and details, produce an interference drawing, read and interpret manufacturer's equipment manuals, take off required materials and design system layout.

Skills

0340.01

Read and interpret drawings and specifications including shop drawings, symbols, bills of materials, details, addendums and schematic drawings to determine the work to be performed.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

^{*} For a compulsory trade, a Trainer must hold a certificate of Qualification in that trade as per section 10(1) of BOSTA and be registered with Skilled Trades Ontario.

Produce free-hand sketches to illustrate to others the work to be performed, the fittings or components to be fabricated or installed, listing all symbols and required information, dimensions and materials.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

O340.03 Produce details and drawings using drafting instruments to illustrate to others the work to be performed, the fittings or components to be fabricated or installed, listing all symbols, required information, dimensions and materials and showing correct proportions.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Produce an interference drawing by comparing original mechanical, electrical, structural and architectural drawings to identify areas where original design places duct-work, conduit, piping or building systems at conflicting elevations or locations and using drafting instruments, illustrate on that drawing a relocation of the various systems that will resolve the conflict.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Read and interpret codes and regulations, manufacturers' equipment manuals and specifications to determine installation clearances and dimensions, required maintenance and pre-operational checks prior to equipment installation and start- up.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Take-off required materials, components, hardware and equipment from drawings and specifications by correctly identifying system components on a drawing, listing all items and required information on bills of material and by calculating and including labour and material costs.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Design system lay-out by determining: building size and orientation, window and door areas, U-factors for the building materials used, the number of air changes required by building occupancy, heating and cooling loads. Calculate duct sizes and required locations, fresh air requirements. Determine unit and fan sizes and produce a drawing showing the lay-out of the system and components.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

0341.0 Lay-Out and Drafting

General Performance Objective

Develop patterns for rectangular, round, elliptical and irregular shapes employing parallel line, radial line and triangulation methods, develop templates and jigs and operate CAD/CAM equipment to produce drawings, production and shipping lists.

Skills

O341.01 Develop stretch out patterns for various profile forms using trammels, dividers, scribers, rules, squares, straight edges, calculating material thickness and bend allowances, marking symbols, brake points, notches, seams, areas to be rolled or formed, areas to be cut out and transferring measurements and cutting out the patterns accurately to the tolerances required by drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

^{*} For a compulsory trade, a Trainer must hold a certificate of Qualification in that trade as per section 10(1) of BOSTA and be registered with Skilled Trades Ontario.

Develop patterns for rectangular, round, elliptical and irregular shapes, employing the parallel line method and using trammels, dividers, scribers, rules, squares, straight edges, calculating material thickness and bend allowances, marking symbols, brake points, notches, seams, areas to be rolled or formed, areas to be cut out, transferring measurements and cutting out the patterns accurately to the tolerances required by drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Develop patterns for conical and pyramid shapes, employing the radial line method and using trammels, dividers, scribers, rules, squares, straight edges, calculating material thickness and bend allowances, marking symbols, brake points, notches, seams, areas to be rolled or formed, areas to be cut out, transferring measurements and cutting out the patterns accurately to the tolerances required by drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Develop patterns for irregular tapered forms, transitions and double angle forms employing the triangulation method and using trammels, dividers, scribers, rules, squares, straight edges, calculating material thickness and bend allowances, marking symbols, brake points, notches, seams, areas to be rolled or formed, areas to be cut out, transferring measurements and cutting out the patterns accurately to the tolerances required by drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Lay-out and use fitting patterns and templates, jigs for round, square and rectangular companion flanges, gauge lines and hole cutting guides to accurately and efficiently produce standard size fittings and fitting components to uniform dimensions and required tolerances.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Operate CAD/CAM equipment to produce computer files of shop drawings, working drawings and interference drawings by entering required program from the main menu, correctly selecting sub-menu variables and attributes to input design data including symbols, dimensions, information, fitting and labelling data, store and save files on hard drive and a disk and print finished drawings by sending required computer commands to a fast plotter.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

0342.0 Set Up and Operate Shop Equipment

General Performance Objective

Set up and operate hand brakes, foot shears, power brakes, power shears, roll forming equipment, rotary bench machines, punching and notching equipment, slitting equipment, drill presses, rotary cutting equipment, spiral, flex and duct/coil equipment, power rolling equipment, abrasive and friction cutting equipment and operate computer controlled shape cutter.

Skills

0342.01

Set up and operate standard hand brakes, box/pan brakes, bar folders, cleat formers and attachments, adjusting front and back gauges to perform profile bending, forming and shaping operations within equipment limitations and capacities to produce fittings and products of ferrous and non-ferrous metals to the tolerances required by drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

^{*} For a compulsory trade, a Trainer must hold a certificate of Qualification in that trade as per section 10(1) of BOSTA and be registered with Skilled Trades Ontario.

Set up and operate standard foot shears, performing all required equipment adjustments including front and back gauge settings to ensure that the blades and gauges produce clean and accurate cuts within equipment limitations and capacities, to a given line or dimension.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Set up and operate power brakes, selecting and attaching required forming, punching and notching dies, adjusting stroke for various angles, material thickness and lengths, adjusting manual and power operated microprocessor controlled back gauges to perform profile bending forming and shaping operations within equipment limitations and capacities to produce fittings and products of ferrous and non-ferrous metals to tolerances required by drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Set up and operate power shears, performing all required equipment adjustments including the settings for manual and power 'operated microprocessor controlled back gauges to ensure that the blades and gauges produce clean and accurate cuts within equipment limitations and capacities, to a given line or dimension.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Set up and operate roll forming equipment, checking stock width and length, making adjustments for material thickness and profile allowance for various shapes including locks, cleats, panels, pipe and eavestrough.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Set up, adjust and operate manual and power rotary bench machines, selecting and attaching required rolls, making adjustments for material thickness and type, to produce beading, crimping, swaging, flanging, burring, easy edges, elbow edges, furnace collars, wired edges and turning edges of even dimensions free from roller cuts.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Set up and operate manual and power punching and notching equipment, including an ironworker, beverly shear and rotex punches, selecting and positioning required dies and blades to produce holes and notches to the tolerances required by drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Set up, adjust and operate slitting equipment by setting guides and positioning slitting rolls to allow for material thickness, produce clean and accurate cuts within equipment limitations and capacities.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Set up and operate a drill press, selecting and attaching required bit size, chuck speed, adjusting depth gauge and drill pressure and securing material with drill vice to produce clean and accurate holes to the tolerances required by drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Set up and operate rotary cutting equipment, adjusting circle arm for radius of cut and offset allowance for various thickness of materials to produce clean and accurate circular, irregular or straight cuts to the tolerances required by drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Set up, adjust and operate spiral and flex forming equipment, adjusting for material thickness, seam tension and appearance, selecting required mould diameter to produce spiral and flex pipe free from leaks or distortions in shape.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Set up and operate duct/coil line equipment to produce various duct sizes, seams, notches, re-enforcement beads and braking, including required pin spotting, application of adhesives and insulation as required by drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Set up and operate manual and power rolling equipment, adjusting rolls for material thickness and radius and performing lead edge preparation to roll metal sheets to required shape and dimensions.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Set up and operate ring rolling equipment, selecting and fitting the required dies/rollers and adjusting roller tension to roll and form flat bar, angle iron and channel to specified radius and contour.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Set up and operate abrasive and friction cutting equipment, selecting and fitting the required cutting blade/accessory and coolant, adjusting blade tension, wheel tension and cutting speed to produce safe, accurate cuts on metals and other materials.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Operate CAD/CAM equipment to produce and record production and shipping lists by selecting required program from main menu, correctly selecting sub-menu variables and attributes to input design data including symbols, dimensions, information, fitting and duct numbers, labelling data, orientation, connector type, fitting components, type and gauge of materials, seams, locks and stiffeners and save file on hard drive and .on a disk for use during shop fabrication.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Load fabrication disk on the hard drive of the shop area computer, print labels showing sheet sizes, fitting, components and duct information and transmit file information to computer controlled plasma or laser shape cutter.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Set up and operate computer controlled plasma or laser shape cutter, wearing all required personal protective equipment and following manufacturers' specified operating instructions. Perform cutting operations by clearing the previous data from the equipment monitor, selecting incoming data, loading the required metal on the cutting table, moving the torch to the start position, activating the equipment and labelling, removing and arranging finished pieces in correct sequence for shop forming and fabrication.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

0343.0 Weld and Cut

General Performance Objective

Set up and operate oxy-fuel cutting and welding equipment, plasma arc cutting equipment, shielded metal arc welding, M.I.G. welding, gas tungsten, carbon arc, plastic and resistance welding equipment, apply thermo-setting materials and perform soldering operations.

Skills

0343.01

Set up, operate and maintain manual and automatic oxy-fuel cutting equipment, wearing all required safety clothing and equipment, selecting, fitting and adjusting regulators, cleaning and preparing tips, to produce clean and even cuts on all ferrous metals, free from excessive slag and heat distortion.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

^{*} For a compulsory trade, a Trainer must hold a certificate of Qualification in that trade as per section 10(1) of BOSTA and be registered with Skilled Trades Ontario.

Set up, operate and maintain plasma arc cutting equipment and components, wearing all required safety clothing and equipment, setting required gas or air pressure, current control, ensuring required speed of travel and distance from workpiece to produce precise cuts on ferrous and non-ferrous metals.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Set up, operate and maintain manual and automatic oxy-fuel welding equipment, wearing all required safety clothing and equipment, selecting, fitting and adjusting regulators, cleaning and preparing tips, demonstrating dexterity with filler rod and torch manipulation to produce clean, firm welds in the flat and horizontal position of sufficient quality to pass visual inspection.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Set up and operate shielded metal arc welding equipment, wearing all required safety clothing and equipment, selecting required polarity, current settings and electrodes to produce all position welds of sufficient quality to meet the codes and standards established by Canadian Welding Bureau.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

O343.05 Set up and operate metal inert gas (M.I.G.) welding equipment, wearing all required safety clothing and equipment, selecting required polarity, current settings and filler wire, adjusting filler wire speed to produce all position welds of sufficient quality to meet the codes and standards established by Canadian Welding Bureau.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

O343.06 Set up and operate gas tungsten arc welding equipment including components and controls, wearing all required safety clothing and equipment, selecting required polarity and demonstrating dexterity with filler rod and torch manipulation to produce all position welds on ferrous and nonferrous metals of sufficient quality to meet the codes and standards established by Canadian Welding Bureau.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Set up and operate carbon arc welding equipment, wearing all required safety clothing and equipment, selecting required polarity and current setting, demonstrating dexterity with filler rod and carbon electrode manipulation to produce all position brazing joints on light gauge ferrous metals of sufficient quality to pass visual inspection.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Set up and operate plastic welding equipment by adjusting nozzle temperature, performing required edge preparation, selecting correct filler rod diameter and maintaining required rate of travel to bond plastic fittings or parts in accordance with manufacturers' recommended procedures.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Set up and operate resistance welding equipment, selecting and fitting required tip size, filing to shape, adjusting tip pressure, current setting, weld time and activating cooling water to produce firm spot welds on ferrous and non-ferrous metals with a minimum of tip marking.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Apply thermo-setting materials for bonding operations, wearing all required safety clothing and equipment, completing required material safety data sheets and using fibreglass reinforced polyester (F.R.P.), solvents, catalysts, resins, gauze and application tools to seal, bond and attach FRP pipe, fittings, flanges and components in accordance with manufacturers' recommended procedures.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Perform soldering operations, demonstrating correct methods of forging, shaping and tinning soldering irons, using heating pots, sal ammoniac, required fluxes, soft solders, tools and files, to seam, join and seal ferrous and non-ferrous metals.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Perform hard soldering operations using oxy-fuel equipment and components using required fluxes and hard solders including silver, solder and brazing rods to seam, join and seal ferrous and non-ferrous metals in accordance with drawings, codes and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

0344.0 Fabricate for Shop and Field

General Performance Objective

Select ferrous and non-ferrous materials, calculate allowances, perform hammering, forming and shaping operations and pin spotting, Apply sealants, join sheet metal with locks and seams, install hardware, cut and fit duct liners, perform final assembly and inspection of fabricated sheet metal.

Skills

O344.01 Identify and select ferrous and non-ferrous materials and all other materials used in lieu of metals by reviewing shop take-off sheets and using a metal gauge.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

^{*} For a compulsory trade, a Trainer must hold a certificate of Qualification in that trade as per section 10(1) of BOSTA and be registered with Skilled Trades Ontario.

Calculate allowances for bends, seams, rolling stretch-outs, small and big ends and material thickness, by applying trade formula and by recording and producing list sizes to ensure accurate cutting lists.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/v	Appropriac Print Name	Appropriac Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Perform hammering, metal stretching, forming, shaping and joining operations using bench bars, mandrels, stakes, hammers, mallets and groove seamers to produce work pieces of required shape and dimensions, free from tool marks or metal stress.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Perform manual and automatic pin spotting and insulation operations using specified materials, required tools, adhesives and clips as specified by the Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) standards, job drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Apply sealants, install gaskets, duct sealers and gauze, wearing required protective equipment, using required tools and brushes to secure and effectively seal joints and fittings in accordance with drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Join sheet metal using locks, seams, rivets, companion flanges, cleats, fasteners and welds, using required tools and equipment and following the spacing specified by SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

osa44.07 Fabricate and install hardware and related system components including turning vanes, dampers, control rods, quadrants, access doors, bracing, coils, and filter sections using required tools, fasteners and equipment to tack, brace, secure and align metal work, ensuring the fit and finish required by SMACNA standards, job drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Measure, cut and fit duct and spouting liners, using friction and abrasive cutting equipment, required tools, adhesives, welding and cutting equipment to ensure a firm fit and bond, smooth and clean interior finish with required laps and setbacks in accordance with drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Perform final assembly of sheet metal work by cleaning, grinding, sanding, polishing, and painting operations to achieve the fit and the finish required by drawing and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Conduct final inspection of fabricated sheet metal work by checking measurements, alignment, fit and finish to ensure quality control required by drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

0345.0 Erect, Remove and Operate Work Platforms

General Performance Objective

Erect, secure, operate and remove site fabricated work platforms, premanufactured scaffold, single and multi-level swing stages and manual and motorized work platforms.

Skills

0345.01

Erect, secure, operate and remove site fabricated work platforms including angle iron, channel, pipe, beam and decking construction types using required tools and equipment and securing all components to provide safe and effective access to and from the work area in compliance with OHSA and the scaffold manufacturers' directions.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

^{*} For a compulsory trade, a Trainer must hold a certificate of Qualification in that trade as per section 10(1) of BOSTA and be registered with Skilled Trades Ontario.

0345.02 Erect, secure, operate and remove all pre-manufactured scaffold including all related brackets and attachments, securing all components to

provide safe and effective access to and from the work area in compliance with OHSA and the scaffold manufacturers' directions.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Erect, secure, operate and remove single and multi-level swing stages, including manual and power operated types, boatswains chairs
and suspended platforms, using hoisting and rigging equipment, tools and
accessories, testing operation of all components to provide safe and
effective access to and from work area in compliance with OHSA and the

scaffold manufacturers' directions.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

0345.04 Erect, secure, operate and remove manual and motorized work platforms using all safety equipment and attachments in compliance with OHSA and the manufacturers' directions.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

0346.0 Rig and Hoist

General Performance Objective

Demonstrate the ability to tie off personnel, materials and equipment, perform standard hand signals, check condition of hoisting equipment, select and operate hoisting equipment to lift, move and place equipment and materials.

Skills

0346.01

Perform all rigging and hoisting operations in compliance with OHSA and in accordance with the Hoisting and Rigging Manual of the Construction Safety Association of Ontario (CSAO) to perform work effectively and to protect self and others.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

^{*} For a compulsory trade, a Trainer must hold a certificate of Qualification in that trade as per section 10(1) of BOSTA and be registered with Skilled Trades Ontario.

Demonstrate the ability to effectively tie off personnel, materials and equipment with fibre and wire rope using approved knots, hitches, splices and accessories in accordance with the Hoisting and Rigging Manual of the CSAO.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Demonstrate standard hand signals to convey directions and instructions to co- workers and equipment operators to ensure rigging and hoisting operations are performed safely and effectively in accordance with the Hoisting and Rigging Manual of CSAO.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Check condition of hoisting equipment prior to use by checking operation of moving components, condition of fibre and wire ropes and attachments and by replacing damaged parts to ensure safe and effective operation in accordance with the Hoisting and Rigging Manual of CSAO.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Select hoisting, lifting and moving equipment by performing calculations to determine the weight load, location of materials and equipment and place of installation to ensure that hoisting, lifting and moving operations are performed safely and effectively within equipment capacities and limitations.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Operate hoisting equipment to lift, move and place equipment and materials using overhead cranes, genie (cable lifts), rope falls, fork lifts, rope and chain falls, tirfors, hydraulic and mechanical jacks, air cushions, and dollys to ensure that hoisting operations are performed safely and effectively in accordance with OHSA and the Hoisting and Rigging Manual of CSAO.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

0347.0 Install Heating, Ventilating and Air Conditioning Systems **General Performance Objective**

Select tools materials and equipment, position sleeves determine work sequence, establish reference points, locate and install equipment, assemble and erect duct- work, install sound attenuators, isolators, plastic FRP duct systems, louvres, stacks, grilles, diffusers, perform leak test operations, install alternative energy systems, access flooring and clean rooms.

Skills

0347.01

Select tools, materials and equipment required for work to be performed by reviewing drawings and specifications, surveying work location to establish lines, grades and elevations to effectively plan and prepare for the installation and erection required by drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/vv	Appropriate Drint Name	Appropriac Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

^{*} For a compulsory trade, a Trainer must hold a certificate of Qualification in that trade as per section 10(1) of BOSTA and be registered with Skilled Trades Ontario.

0347.02 **Position sleeves, fire dampers, inserts**, by following drawings to accommodate later installation of Heating, Ventilating and Air Conditioning and other air handling systems to avoid interference with other building systems and amenities in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Determine work sequence and required manpower by reviewing site accessibility, order of assembly, size and weight of components and method of assembly to facilitate effective installation and/or erection in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

O347.04 Establish reference points and bench marks by locating the indicators, symbols and dimensions on drawings and transferring those measurements and marks to the required work location to facilitate fabrication, erection or installation.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Plan and co-ordinate sequence of fabrication and installation by reviewing site accessibility, order of delivery, order of assembly, required labour, materials, equipment and safety requirements and by planning the work in co-operation with other trades.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

0347.06

Locate and install residential equipment including low, medium and high efficiency furnaces, filters, electronic air cleaners, combustion air, venting, heat recovery ventilators, ventilation, air conditioners and humidifiers and related components using tools, components and accessories to complete installations in accordance with applicable codes, manufacturers' manuals, drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Locate and install heating, ventilating and make-up air equipment including coils, boosters, filters and racks, dampers, volume boxes, V.A. V boxes, blowers, fans, humidifiers and filter gauges using tools components and accessories to complete installations in accordance with manufacturers' installation manuals, drawings, specifications and SMACNA

standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Assemble and erect duct work, fittings, plenums, hangers, supports, splitter dampers, silencers and related components, supplementary steel support structures, using tools, hardware and equipment to complete installations in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Install sound attenuators, insulation materials and lead shielding for sound and radio frequency abatement, using tools, hardware and equipment to complete installations in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Install and adjust isolators, flexible connectors and inertia bases to eliminate vibration and sound transmission using tools, hardware and equipment to complete installations in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Install plastic FRP and other non-metallic duct systems, following manufacturers' recommended procedures and using tools, adhesives and accessories to complete installations in accordance with manufacturers' directions, codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Install louvres, bird and fly screens, intake and exhaust outlets, weather-proofing and related components using tools, hardware and equipment to complete installations in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Install stacks, breeching and chimneys including prefabricated pipe and custom fabricated types and related components, using tools, hardware and equipment to complete installations in accordance with drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Locate and install grilles, diffusers, light troughers, linear diffusers, combo units, vectrol extractor dampers, using tools, manufacturers' hardware and attachments to complete installations and to regulate airflow in accordance with drawings and balancing specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Perform leak test operations using air blowers, pressure gauges, sealants and related components to pressurize system to design pressure and locate and seal any leaks in the system.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Install alternative energy systems including solar and heat reclaiming types, using required tools, manufacturers' specified hardware, attachments and components to conserve energy by supporting conventional heating ventilating and air conditioning systems in accordance with codes, drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Install access flooring for computer zone environmental control using required tools, equipment, components and hardware, following manufacturers' recommended procedures to complete installations and ensure operational performance in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Install clean rooms (Environmental Rooms) including all system components and filters, following manufacturers' recommended procedures and installation manuals, to complete installations and ensure operational performance of system in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

0348.0 Fabricate and Install Industrial Environmental Systems and Specialized Installations

General Performance Objective

Fabricate and install dust collecting systems, material handling and conveyor systems, exhaust hoods, industrial ovens, sound abatement shielding, insulation lagging and cladding, chutes, miscellaneous support structures, catch pans, stainless steel equipment, metal shelving, laundry and garbage chutes, fresh air intake and exhaust systems, draft curtains, fire stops and drying systems.

Skills

0348.01

Fabricate and install dust collecting systems and reclaim systems including, fabric filter collectors, precipitators, air cleaning devices and explosion venting, related ducting, blast gates, blowers, cyclones, fire dampers, bag house, flexible piping and fittings, sound attenuators and hoppers using tools, hardware and equipment, sealants, soldering and welding equipment to ensure operational performance of system in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

^{*} For a compulsory trade, a Trainer must hold a certificate of Qualification in that trade as per section 10(1) of BOSTA and be registered with Skilled Trades Ontario.

Vacuum systems, chutes and flumes, air-veyor systems, gravity chutes, conveyor covers, rubber skirting, flame scanners, loop box coolers, trim chutes, sampling systems, using tools, hardware and equipment, piping, fittings, manufactured components, fans, blowers, volume control devices, sealants, soldering and welding equipment and gaskets to ensure operational performance of system in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Fabricate and install fume exhaust hoods and ventilators including heat recovery and filtration systems, and carbon monoxide exhaust systems, fans and blowers, dampers and controls, using fasteners and sealers, tools, hardware and equipment to ensure operational performance of system in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Fabricate and install industrial ovens, spray booths, casings, airwashers, cupolas, and spray eliminators, including all attachments, braces, flashings, expansion joints, associated duct-work, blowers, filters, hardware, sealants and insulation, using tools, rigging and welding equipment to ensure operational performance of system in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Fabricate and install sound abatement and radio frequency shielding of lead, copper and other shielding materials using hardware, required isolation, tools and equipment, following manufacturers' installation instructions and recommended sequence to complete installations in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Fabricate and install lagging and cladding, including flashings, strapping and fasteners, clips, locks, seams, sealers, expansion joints, and related components using tools and equipment to enclose, protect, seal and weatherproof insulation material covering equipment, piping and other installations in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Fabricate and install chutes, spouting, hoppers, dryers and elevator leg casings, using tools, equipment and hardware, welding and rigging equipment, aligning all components and performing necessary adjustments to ensure effective operation and fit in accordance with codes, drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Fabricate and install miscellaneous/supplementary steel support structures and imbedded parts using tools, hardware, welding, cutting and rigging equipment to secure, brace and support duct-work, stacks, equipment and installations in accordance with codes, drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Fabricate and install catch pans, drip pans and guards, using tools, hardware and equipment to complete installations in accordance with codes, drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

O348.10 Custom fabricate and install stainless steel equipment and components for hospital, kitchen laboratory and general industrial and commercial purposes, using tools, equipment and hardware, welding and cutting equipment to ensure the required fit and finish in .accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Fabricate and install metal shelving, racking, toilet partitions and lockers, following manufacturers' recommended installation procedures, using tools, hardware and equipment to ensure correct alignment, fit and finish in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Fabricate and install laundry, garbage chutes and mail chutes including related access doors, fire dampers and components, using tools, hardware and equipment to complete installations in accordance with codes, drawings and specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Fabricate and install fresh air intake and exhaust systems including motorized dampers, silencers, louvres, and flexible connectors for standby electrical generators using tools, hardware and equipment to complete installations and ensure correct operation of the generator in accordance with codes, drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Fabricate and install draft curtains and fire stops including hangers, required supports, access openings and protective fire doors using tools, equipment, hardware, welding, rigging and cutting equipment, to ensure zone isolation, fire protection and containment in accordance with codes, drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Fabricate and install specialized drying systems used in pulp and paper manufacturing operations including hoods, pocket ventilators, economizers, eliminators, blades, fans, volume dampers, doors, related duct-work, fittings, components and controls, using tools, equipment, hardware, welding, rigging and cutting equipment, ensuring correct alignment, fit and effective operation in accordance with codes, drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

0349.0 Test, Adjust and Balance

General Performance Objective

Determine location of equipment, complete system data sheets, check position of dampers, activate system equipment, measure fan velocity and static pressure, locate pitot transverse stations, adjust dampers, check air quality, take final readings and compile a balancing report.

Skills

Determine location of equipment, components and controls by reviewing systems drawings and by visual inspection of the installation to organize and plan the sequence of operations for the testing, adjusting and balancing work to be performed.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

^{*} For a compulsory trade, a Trainer must hold a certificate of Qualification in that trade as per section 10(1) of BOSTA and be registered with Skilled Trades Ontario.

Complete system data sheets including schematic drawings showing test locations and system components, listing specified and actual air quantities, hydronic and performance data to accurately record the status of the system.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Check position of dampers including volume control dampers and fire dampers. Check that all filters are in place, following schematic and system drawings and remove shipping bolts and hold down straps to prepare system for start-up and initial performance checks.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Activate system equipment under maximum load conditions. Check rotation of blowers and motors, motor and fan rpm and check motor amperage using tachometers and ammeters to ensure the system has been installed in accordance with codes, drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Measure fan velocity and static pressure, calibrating and using instruments including manometers, pitot tubes, magnehelic gauges, anemometers, electronic instruments and velometers. Perform calculations to determine air velocities in HVAC systems and convert test readings to air volume and accurately record findings on system data sheets.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

0349.06	Measure fan velocity and static pressure, calibrating and using
	instruments, including manometers, pitot tubes, magnehelic gauges,
	anemometers, electronic instruments and velometers. Perform calculations
	to determine the velocities required for conveying various materials and
	convert test readings to air volume and accurately record findings on
	system data sheets.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Locate pitot traverse stations on trunk ducts and take readings using pitot tubes, manometers, magnehelic gauges. Perform calculations to convert velocities into air volumes and accurately record findings on system data sheets and make fan and damper adjustments where air volumes do not match design specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Adjust dampers, diffusers, grilles, and registers on branch ducts, taking readings with velometers, electronic instruments and magnehelic gauges, performing calculations to convert velocities into air volumes and accurately record findings on system data sheets and make adjustments to achieve the air distribution required by design specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Adjust dampers, blast gates, branch ducts on material handling systems, taking readings with velometers, pitot tubes, manometers, electronic instruments, and magnehelic gauges, performing calculations to convert velocities into air volumes and accurately record findings on system data sheets and make adjustments to achieve the air distribution and material handling capacities required by design specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

O349.10 Check air quality and sound levels using sling psychrometers, psychometric charts, thermometers, filter gauges, sound meters, carbon monoxide sensing devices/equipment and air sampling devices. Visually check filter and humidification systems and accurately record findings on system data sheets and make adjustments to ensure that the systems' performance conforms to design specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Take final readings of temperatures, air velocities, volumes, and air distribution, humidity, fan revolutions per minute, fan motor readings, operation of dampers and controls, filter and unit resistance, using test instruments and compile a detailed balancing report in accordance with drawings and specifications.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

0350.0 Install Roofing and Architectural Metals

General Performance Objective

Fabricate and install copings and flashings, cornice work, expansion joints, soakers, metal roofs, single or double walled siding and floor decking, gutters, down-spouts, scuppers, skylights, roof entries, minarets, turrets and ventilators.

Skills

0350.01

Fabricate and install coping and flashings of ferrous and non-ferrous metals, using tools, equipment, hardware, caulking and soldering equipment and starter strips to cover and waterproof roofing installations in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

^{*} For a compulsory trade, a Trainer must hold a certificate of Qualification in that trade as per section 10(1) of BOSTA and be registered with Skilled Trades Ontario.

Fabricate and install architectural cornice and decorative work, using tools, equipment, hardware, caulking and soldering equipment, clips, cleats, locks and seams to seal, protect, weatherproof and enhance the appearance of architectural structures in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Fabricate and install expansion joints of ferrous and non-ferrous metals, butyl rubber or other materials to seal, protect and weatherproof building materials and structures, using tools, equipment, sealants, hardware and soldering equipment, clips, cleats, locks and seams to maintain a waterproof seal during thermal expansion, contraction and settling of building structures in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Fabricate and install soakers, flashings for step, cape, hip, valley, ridge, gravel stops and nosing, using tools, hardware, soldering equipment, sealants, drills, clips, cleats, locks and seams to protect and weatherproof building materials and structures in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Fabricate and install ferrous and non-ferrous metal roofs, including corrugated, flat, lapped, batten seam, inverted and other types joined by seams, cleats, fasteners, and locks using tools, hardware, equipment, sealants, soldering equipment, clips and cleats, to seal, protect, weatherproof and enhance the appearance of architectural structures in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

0350.06

Install single or double walled siding, roof and floor decking using tools, equipment, hardware, locks, seams, soldering equipment, sealants, clips, cleats, insulation, gaskets, hoisting, rigging and welding equipment, scaffolding and swing stages, Z bars and structural supports, vapour barriers and related components to enclose, seal and weatherproof structures in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

0350.07

Fabricate and install gutters, down-spouts, scuppers and conductor heads using tools, hardware, soldering equipment, sealants, clips, spikes, locks and seams, snow and ice guards, to seal and weatherproof structures in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

0350.08

Fabricate, install, repair, enclose and weatherproof skylights, roof entries, smoke and explosion hatches, louvred enclosures and roof penetrations including all components and flashings using tools, hardware, soldering equipment, sealants, clips, cleats, locks and seams to permit natural lighting and ventilation into buildings and to seal and weatherproof structures in accordance with codes, drawings, specifications, and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

0350.09

Fabricate and install towers, minarets, steeples, turrets, ventilators, monitors and other roofing enclosures using tools, equipment, hardware, caulking and soldering equipment, clips, cleats, locks and seams to seal, protect, weatherproof and enhance the appearance of architectural structures in accordance with codes, drawings, specifications and SMACNA standards.

mm/dd/yy	Trainer Print Name	*Trainer Signature
mm/dd/yy	Apprentice Print Name	Apprentice Signature

Definitions

Apprentice

- An individual who, pursuant to a registered Training Agreement, is receiving or is to receive training in a trade that is required as part of an apprenticeship program
- Holds a Training Agreement in either a compulsory or non-compulsory trade;
- Are subject to any ratios that have been set out in regulation and or recommended by industry for their trade(s);
- Remain as an Apprentice until they receive their Certificate of Apprenticeship

BOSTA

Building Opportunities in the Skilled Trades Act, 2021 (BOSTA)

Certificate of Apprenticeship (C of A)

A certificate issued to individuals who have demonstrated that they have completed an apprenticeship program in Ontario.

Certificate of Qualification (C of Q)

A certificate issued to an individual who has completed an apprenticeship or equivalent AND passed the Certificate of Qualification examination.

Competence

The ability of an individual to perform a skill, consistently without assistance, in the workplace as set out in the Logbook.

Competency Analysis Profile (CAP Chart)

A chart that identifies the training needs of an individual trade and details the skills/skill sets that must be demonstrated during an apprenticeship program.

Journeyperson

Journeyperson means an individual who holds a certificate of qualification (in a compulsory or non-compulsory trade) and/or an individual who practices as a journeyperson in a non-compulsory trade who does not hold a certificate of qualification and has equivalent experience in that trade.

Mandatory Skill

Status assigned to unshaded individual skills, skill sets or general performance objectives which must be signed-off for the Apprentice to complete their program.

Optional Skill

Status assigned to shaded individual skills, skills sets or general performance objectives for which sign-off is not required for the Apprentice to complete the program.

Provisional Certificates of Qualification

- A Provisional Certificate of Qualification is issued to an individual who has
 obtained a Certificate of Apprenticeship (in both compulsory and non-compulsory
 trades) in a program that has a Certificate of Qualification examination, to which
 the individual has not yet passed the Certificate of Qualification examination.
- A Provisional Certificate of Qualification shall have the prescribed term or, if no term is prescribed, a term of one year.
- In a compulsory trade, the Provisional Certificate of Qualification allows a person to continue working legally in the trade for up to 12 months while they work to pass the certifying exam.
- Individuals with a Provisional Certificate of Qualification are subject to any ratios that have been set out for their trade(s).

Ratios

For the purpose of an Apprenticeship program, a ratio is the maximum number of Journeypersons to Apprentices. The purpose of ratios is to provide consistent supervision, training and continuity of work.

Red Seal Program

The Interprovincial Standards Red Seal Program (also known as the Red Seal Program) was established more than 50 years ago to provide greater mobility across Canada for skilled workers and represents a standard of excellence for industry. Through the program, individuals are able to obtain a Red Seal endorsement on their provincial/territorial certificates by achieving 70% or higher on an interprovincial Red Seal examination.

The Interprovincial Standards Red Seal Program acknowledges their competence and ensures recognition of their certification throughout Canada without further examination. There are currently over 50 Red Seal designated trades. **The Red Seal Program is recognized as the interprovincial** *standard of excellence* in the skilled trades. The Interprovincial Standards Red Seal Program is a partnership between the Government of Canada, the Provinces, the Territories and various stakeholders.

Sign-off

Signature of the Sponsor of record, or an individual to whom that Sponsor has delegated signing authority, (e.g. Trainer) indicating an Apprentice's demonstration of competence.

Skill

Individual competency/task described in the Logbook.

Skill Sets

Group or selection of individual skills found in the Logbook.

Skill Set Completion for Sponsors

Listing for all skill sets and includes space for sign-off by Sponsor of record.

Sponsor

Means a person that has entered into a registered Training Agreement under which the person is required to ensure that an individual is provided with workplace-based training in a trade as part of an apprenticeship program.

Sponsor of Record

Refers to the Sponsor documented as being signatory to the registered Training Agreement or Contract of Apprenticeship. In order for a Sponsor to be considered for the training of Apprentices, they must identify that the workplace has qualified persons or the equivalent on site, and can identify that the workplace has the tools, equipment, materials, and processes which have been identified by the Industry representatives for the trade.

Trainer

An individual who oversees the performance of a task and sets the workplace expectations and practices for the Apprentice. For a compulsory trade, a qualified Trainer is an individual who holds a Certificate of Qualification. In a non-compulsory trade, a Trainer is an individual who either holds a CofQ, CofA, or is considered equivalent.

Ready to Write Your Exam?

Many of the skilled trades in Ontario have a final certification examination that you must pass to become certified in your trade. Passing the examination gives you the right to hold yourself out as a Journeyperson and receive a Certificate of Qualification in your trade.

There are two types of trade certification examinations in Ontario:

- 1. Provincial (Ontario) examinations which lead to a Certificate of Qualification.
- 2. Red Seal examinations which lead to a Certificate of Qualification with an Interprovincial Red Seal endorsement.

If a trade is designated as Red Seal in Ontario, you will be writing the Red Seal examination. To access the Red Seal preparation guide please visit: red-seal.ca

Ontario's Exam Preparation Guide

Exam Resources – Skilled Trades Ontario

Basic Examination Details for You to Know

- You will have up to four hours to write your examination.
- Accommodations must be requested and approved prior to scheduling your examination.
- You can leave the examination centre if you complete the examination in less than four hours.
- Exam questions are multiple choice with four options from which you must choose the correct answer. Your examination may have between 90 and 150 multiple choice questions.
- You need a mark of 70% to pass.

Scheduling Your Examination

The examination scheduling process is currently outlined in detail on the Skilled Trades Ontario website: Exam Scheduling – Skilled Trades Ontario

Remember these 3 basic steps:

- 1. Confirm your eligibility to write the examination with Skilled Trades Ontario.
- Contact Client Services at Skilled Trades Ontario to pay your examination fee.
- Contact the local Service Delivery Office to schedule your examination in their examination centre: https://www.ontario.ca/page/employment-ontario-apprenticeship-offices

Instructions for Recording a Change in Sponsor

- 1. Record your first sponsor's information in Sponsor Record #1 this would be the sponsor who has signed your initial apprenticeship Training Agreement for this trade.
- 2. If you do change sponsors prior to completing this apprenticeship, please contact your local Service Delivery Office immediately to update your sponsor record.
- 3. Please make sure you record all the information regarding any additional sponsors of record towards your apprenticeship using the Sponsor Records on the following pages (if applicable).

You must fill out a Change of Sponsor Record each time you change your sponsor.

Sponsor Record #1

Sponsor Information		
Apprentice Name		
Training Agreement #	Date (mm/dd/yy)	
Sponsor Name		
Address		
Telephone		
E-mail Address		
Summary of Training		
Employment Start Date		
Employment End Date		
Total hours of training & instruction between dates of employment.		
Skill Sets Completed		
As the Sponsor, I hereby confirm the best of my knowledge.	hat the above information is true and accurate to the	
ignature: Date: (mm/dd/yy)		

The Sponsor is required to sign-off and date the skills after the Apprentice has proven competence in those skills. However, if a skill is shaded, it is optional and does not need to be signed-off.

Change of Sponsor Record #2

Sponsor Information	
Apprentice Name	
Training Agreement #	Date (mm/dd/yy)
Sponsor Name	
Address	
Telephone	
E-mail Address	
Summary of Training	
Employment Start Date	
Employment End Date	
Total hours of training & instruction between dates of employment.	
Skill Sets Completed	
As the Sponsor, I hereby confirm t best of my knowledge.	hat the above information is true and accurate to the
Signature:	Date: (mm/dd/yy)

The Sponsor is required to sign-off and date the skills after the Apprentice has proven competence in those skills. However, if a skill is shaded, it is optional and does not need to be signed-off.

Change of Sponsor Record #3

Sponsor Information		
Apprentice Name		
Training Agreement #		Date (mm/dd/yy)
Sponsor Name		
Address		
Telephone		
E-mail Address		
Summary of Training		
Employment Start Date		
Employment End Date		
Total hours of training & instruction between dates of employment.		
Skill Sets Completed		
As the Sponsor, I hereby confirm to best of my knowledge.	hat the above information is true ar	nd accurate to the
Signature:	Date: (mm/dd/	yy)

The Sponsor is required to sign-off and date the skills after the Apprentice has proven competence in those skills. However, if a skill is shaded, it is optional and does not need to be signed-off.

Change of Sponsor Record #4

Sponsor Information		
Apprentice Name		
Training Agreement #		Date (mm/dd/yy)
Sponsor Name		
Address		
Telephone		
E-mail Address		
Summary of Training		
Employment Start Date		
Employment End Date		
Total hours of training & instruction between dates of employment.		
Skill Sets Completed		
As the Sponsor, I hereby confirm coest of my knowledge.	that the above information is true a	nd accurate to the
Signature:	Date: (mm/dd/	уу)

The Sponsor is required to sign-off and date the skills after the Apprentice has proven competence in those skills. However, if a skill is shaded, it is optional and does not need to be signed-off.

Appendix A — Instructions for Apprenticeship Program Completion

Once an Apprentice has completed all the classroom training and benchmark on-the-job hours specified for the trade and has acquired all the mandatory skills included in this Logbook.

The Apprentice and the Sponsor complete the Apprentice Completion Form and the Skill Set Completion for Sponsors Form located on the following pages.

- 1. They sign the forms and submit them to their local Service Delivery Office. To find the closest office, check the contact information at ontario.ca/page/employment-ontario-apprenticeship-offices or call the Employment Ontario toll free number at (1-800-387-5656).
- 2. For All Trades: All mandatory skills (or the combination indicated in the completion requirements for the trade) in the Logbook must be signed-off. The recommended hours are a benchmark. If the Sponsor is completing the Apprentice before the industry recommended training hours are done, staff may request further information regarding the Apprentice's on-the-job training. An example of a request would be a letter from the Sponsor confirming the Apprentice worked for some time in the trade before the initial Training Agreement was registered, thereby acquiring some skills beforehand.

If Apprentices are submitting the completion request form and supporting documentation to their local Service Delivery Office by mail, fax, or email (as a scanned document), they should not include their Logbook; if they are presenting this form in person at the local Service Delivery Office, they should bring their Logbook with them.

After staff verifies all the information in the completion request, they may contact either the Apprentice or the Sponsor for further information or documentation. Once the completion has been confirmed, the local Service Delivery Office will issue a Certificate of Apprenticeship to the Apprentice.

Skilled Trades Ontario will receive notification of this completion.

- If the Apprentice has completed a program in a compulsory trade, Skilled Trades
 Ontario will automatically register the Apprentice for a Provisional Certificate of
 Qualification to continue to work legally for one year while preparing for the
 certification examination.
- If an Apprentice completes their apprenticeship in a non-compulsory trade and there is a Certificate of Qualification exam, they must write and pass the exam to receive a Certificate of Qualification from Skilled Trades Ontario.

For permission to schedule an exam once completion is confirmed, the individual must first contact the Skilled Trades Ontario Client Services Department at 647-847-3000 or toll free at 1-855-299-0028 to pay the certification examination fee. Once you have paid your exam fee with Skilled Trades Ontario, book your exam by contacting your nearest Employment Ontario local Service Delivery Office.

Appendix B — Apprentice Completion Form

Please fill out both sides of this form, including the Skill Set Completion for Sponsors (see back of form). Once both sides are completed, submit the form to your local Service Delivery Office (find contact information at ontario-apprenticeship-offices or by calling Employment Ontario at (1-800-387-5656).

Apprentice Information				
Name (print)				
Client ID # Issued by Ministry				
Telephone Number(s)				
Sponsor Information				
Legal Name				
Address				
Telephone Number(s)				
Sponsor's Signing Authority (print name)				
E-mail Address				
D 16 0				
Program Information				
Trade Name				
Number of hours required as p Agreement (hours-based trade	•			
Hours completed? (documentation attached)		Yes()	No ()	Not applicable ()
Classroom training completed or exempt?		Yes ()	No ()	Not applicable ()
hereby confirm that the information	tion submitte	d on both	sides of th	is form is true and
ζ	x			
\(\)\left\(\)\left\(\)\left\(\)\reft	Signa	ature of Spo	nsor's Sign	ning Authority Date

Appendix C — Skill Set Completion for Sponsors

You will find the skill set numbers and titles in the Logbook's Table of Contents. By signing off each skill set in the table below, you are providing final confirmation, as the Apprentice's Sponsor, that the Apprentice has demonstrated competency in all the mandatory skills included in the skill set.

Skill Set #	Skill Set Title	Signing Authority Signature
0338.0	Protect Self and Others	
0339.0	Use and Maintain Hand/Power Tools and Equipment	
0340.0	Read, Interpret and Produce Drawings	
0341.0	Lay-Out and Drafting	
0342.0	Set Up and Operate Shop Equipment	
0343.0	Weld and Cut	
0344.0	Fabricate for Shop and Field	
0345.0	Erect, Remove and Operate Work Platforms	
0346.0	Rig and Hoist	
0347.0	Install Heating, Ventilating and Air Conditioning Systems	
0348.0	Fabricate and Install Industrial Environmental Systems and Specialized Installations	
0349.0	Test, Adjust and Balance U0350.0 Install Roofing and Architectural Metals	
0350.0	Install Roofing and Architectural Metals	

Ministry of Labour, Immigration, Training and Skills Development use only:			
Sponsor verified as most recent sponsor of record:	Yes ()	No ()	
Documentation to support completion of hours attached:	Yes ()	No ()	
Completion of classroom training verified:	Yes ()	No ()	
Staff Name Signature		<u>-</u>	
Date			

Appendix D — Local Service Delivery Offices in Ontario

For current office listings visit: ontario.ca/page/employment-Ontario-apprenticeship-offices

Location	Contact	Location	Contact
Barrie 705-737-1431	55 Cedar Pointe Dr Unit 609, Barrie, ON L4N 5R7	Marathon 807-346-1550	52 Peninsula Road, Suite 103 Marathon, Ontario, P0T 2E0
Belleville 613-968-5558 1-800-953-6885	135 North Front St, Belleville, ON K8P 3B5	Markham 905-513-2695	140 Allstate Parkway, Suite 505, Markham, Ontario L3R 5Y8
Brantford 519-756-5197	505 Park Rd North Suite 201, Brantford, ON N3R 7K8	North Bay 705-495-8515 1-800-236-0744	200 First Ave West, North Bay, ON P1B 3B9
Chatham 519-354-2766 1-800-214-8284	870 Richmond St West 1st Floor, Chatham, ON N7M 5J5	Ottawa 613-731-7100 1-877-221-1220	Preston Square, 347 Preston Street, Suite 310, Ottawa, ON K1S 3H8
Cornwall 613-938-9702 1-877-668-6604	132 Second St East Ste 202, Cornwall, ON K6H 1Y4	Owen Sound 519-376-5790 1-800-838-9468	1450 1st Ave West, Suite 100, Owen Sound, ON N4K 6W2
Dryden 807-456-2665 1-800-734-9572	Provincial Government Building, 479 Government St, Dryden, ON P8N 3K9	Peel 905-279-7333 1-800-736-5520	The Emerald Centre, 10 Kingsbridge Garden Circle, Suite 404, Mississauga, ON L5R 3K6
Durham 905-433-0595 1-800-461-4608	78 Richmond Street West, Oshawa, ON L1G 1E1	Pembroke 613-735-3911 1-800-807-0227	615 Pembroke St East, Pembroke, ON K8A 3L7
Elliot Lake 1-800-236-8817	50 Hillside Dr North, Elliot Lake, ON P5A 1X4	Peterborough 705-745-1918 1-877-433-6555	901 Lansdowne St West, Peterborough, ON K9J 1Z5
Fort Frances 807-274-8634	922 Scott St 2nd Flr, Fort Frances, ON P9A 1J4	Sarnia 519-542-7705 1-800-363-8453	162 Lochiel Street, Suite 101, Sarnia, ON N7T 7W5
Geraldton 807-854-1966	208 Beamish Avenue West Geraldton, Ontario P0T 1M0	Sault Ste. Marie 705-945-6815 1-800-236-8817	477 Queen St East 4th Flr, Sault Ste Marie, ON P6A 1Z5
Halton 905-842-5105 1-844-901-5105	700 Dorval Dr., Suite 201, Oakville, ON L6K 3V3	St Catharines 905-704-2991 1-800-263-4475	Garden City Tower, 301 St Paul St East, 10th Flr, St Catharines, ON L2R 7R4
Hamilton 905-521-7764 1-800-668-4479	Ellen Fairclough Bldg, 119 King St West 8th Flr, Hamilton, ON L8P 4Y7	Sudbury 705-564-3030 1-800-603-5999	159 Cedar St Ste 506, Sudbury, ON P3E 6A5
Kapuskasing 705-465-5785 705-235-1950	Ontario Government Complex, 122 Government Rd West, Kapuskasing, ON P5N 2X8	Thunder Bay 807-346-1550 1-800-439-5493	189 Red River Rd Suite 103, Thunder Bay, ON P7B 1A2
Kenora 807-468-2879 1-800-734-9572	227 1/2 Second St South, Kenora, ON P9N 1G4	Timmins 705-235-1950 1-877-275-5139	Ontario Government Complex, 5520 Highway 101 East Wing B, South Porcupine, ON P0N 1H0
Kingston 613-548-1151 1-866-973-4043	Alliance Business Centre, 299 Concession St Ste 201, Kingston, ON K7K 2B9	Toronto Centre 416-927-7366 1-800-387-5656	2 St Clair West, 11 th floor Toronto, ON M4A 1L5
Kitchener 519-653-5758 1-866-877-0099	4275 King St East, Kitchener, ON N2P 2E9	Toronto South 416-326-5800	625 Church St 1st FI, Toronto, ON M7A 2B5
London 519-675-7788 1-800-265-1050	1200 Commissioners Rd E, Unit 72, London, ON N5Z 4R3	Windsor 519-973-1441	Roundhouse Centre, 3155 Howard Ave 2nd FI, Suite 200, Windsor, ON N8X 4Y8

Competency Analysis Profile (CAP) Chart 0338.4 0338.5 0338.0 0338.1 0338.2 0338.3 Check condition of Identify hazards in Communicate with Wear, adjust and Perform work in **Protect Self and** ladders, maintain safety co-worker the work area accordance with Others clothing and safety legislations scaffolding and related equipment equipment 0338.7 0338.6 Apply basic first Inspect and aid to self and maintain tools and coworkers equipment 0339.0 0339.1 0339.2 0339.3 0339.4 Select, maintain Select, use and **Use and Maintain** Select maintain Select, maintain and use hand tools maintain power and use tools and and operate **Hand/Power Tools** tools devices to explosive actuated and Equipment measure tools 0340.0 0340.1 0340.2 0340.3 0340.4 0340.5 Read and interpret Read and interpret Produce free-Produce details Produce an Read, Interpret and drawings and and drawings codes and hand sketches interference **Produce Drawings** specifications regulations drawing 0340.6 0340.7 Take-off required Design system materials from lay-out. drawings

0341.2 0341.0 0341.1 0341.3 0341.4 0341.5 Develop Develop stretch Develop Develop patterns Lay-out and use Lay-Out and patterns out patterns patterns employing the fitting patterns Drafting employing the employing the triangulation and templates parallel line radial line method method 0341.6 Operate CAD/CAM equipment to produce shop drawings 0342.2 0342.3 0342.5 0342.1 0342.4 0342.0 Set up and Set-Up And operate power operate roll operate standard operate operate power **Operate Shop** standard foot brakes hand brakes shears forming **Equipment** equipment shears 0342.6 0342.7 0342.8 0342.9 0342.10 Set up, adjust and Set up and Set up and Set up and Set up and operate punching operate sitting operate a drill operate rotary operate rotary and notching cutting equipment bench machines equipment press equipment 0342.12 0342.14 0342.11 0342.13 0342.15 Set up and Set up and Set up and Setup and Set up and operate spiral and operate duct/coil operate rolling operate ring rolling operate abrasive flex forming line equipment equipment equipment cutting equipment equipment

0342.16 Operate CAD/CAM equipment to produce production lists 0343.0 0343.1 Weld and Cut 0343.6 Set up and

Set up and operate oxy-fuel cutting equipment

0343.2 Set up and operate plasma arc cutting equipment

0342.17

Load disk on shop

area computer

0343.7 Set up and operate carbon arc welding equipment

0343.12 Perform hard soldering

0342.18

Set up and operate plasma or laser shape cutter.

0343.3

Set up and

operate oxy-fuel

welding equipment

0343.8

Set up and

operate plastic

welding equipment

0343.4 Set up and operate resistance welding equipment

0343.9

Set up and

operate resistance

0343.5 Set up and operate metal inert gas welding equipment

operate gas tungsten arc welding equipment

0343.11 Perform soldering

operations

operations

welding equipment

0343.10 Apply thermosetting materials

0344.0 **Fabricate For Shop** and Field

0344.1 Identify and select ferrous and nonferrous ferrous material

0344.2 Calculate allowances for bends and seams

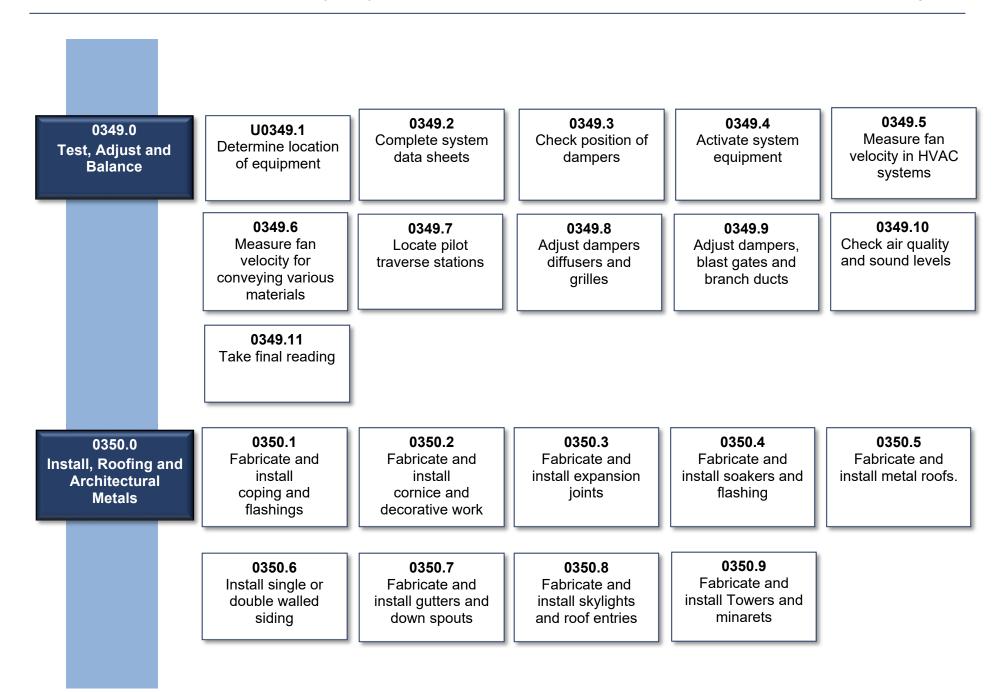
0344.3 Perform hammering, metal stretching and forming operations

0344.4 Perform pin spotting operations

0344.5 Apply sealants, install gaskets and duct sealers

0344.9 0344.10 0344.6 0344.7 0344.8 Fabricate and Perform final Conduct final Join sheet metal Measure, cut and using locks and install hardware fit duct liners assembly of sheet inspection of sheet metal work metal work seams 0345.0 0345.1 0345.2 0345.3 0345.4 Erect and use pre-Erect and operate Erect and use site Erect and operate **Erect, Remove and** manufactured motorized work **Operate Work** fabricated work swing stages scaffold platforms platforms **Platforms** 0346.5 0346.0 0346.1 0346.2 0346.3 0346.4 Perform all rigging Tie off personnel, Check condition of Demonstrate Select lifting and **Rig and Host** materials and and hoisting standard hand hoisting equipment moving equipment equipment operations in signals compliance with OHSA U0346.6 Operate equipment to lift, move and place equipment and materials 0347.0 0347.2 0347.3 0347.4 0347.5 0347.1 Select tools, Position sleeves, Determine work Establish Establish **Install Heating** fire dampers and reference points reference points materials and Ventilating and Air sequence equipment and bench marks and bench marks Conditioning Inserts **Systems**

	0347.6 Locate and install residential equipment	0347.7 Locate and install equipment	0347.8 Assemble and erect duct work	0347.9 Install sound attenuators	0347.10 Plan and co- ordinate sequence of installation
	0347.11 Install plastic duct systems	0347.12 Install louvers, bird and fly screens	0347.13 Install stacks, breeching and chimneys	0347.14 Locate and install grilles and diffusers	0347.15 Perform leak test operations
	0347.16 Install alternative energy systems	0347.17 Install access flooring	0347.18 Install clean rooms		
0348.0 Fabricate and Install Industrial Environmental Systems and Specialized	0348.1 Fabricate and install dust collecting systems	0348.2 Fabricate and install material handling systems	0348.3 Fabricate and install exhaust hoods	0348.4 Fabricate and install ovens and spray booths	0348.5 Fabricate and install sound abatement material
	0348.6 Fabricate and install lagging and cladding	0348.7 Fabricate and install chutes, spouting and hoppers	0348.8 Fabricate and install supplementary support structures.	0348.9 Fabricate and install catch pans	0348.10 Custom fabricate stainless steel equipment
	0348.11 Fabricate and install metal shelving	0348.12 Fabricate and install laundry chutes	0348.13 Fabricate and install fresh air intake and exhaust systems	0348.14 Fabricate and install draft curtains	0348.15 Fabricate and install drying systems



Notes

Completing Your Apprenticeship Program

Once your sponsor agrees you are competent in the required skills, your hours are complete and you have completed all the levels of classroom training required for your trade:

- ✓ Follow the completion instructions on the Completion Form (Appendix A) in the Logbook.
- Answer any questions that MLITSD staff may have and provide any additional completion documentation that may be required.
- Once completion is confirmed, MLITSD will issue you a Certificate of Apprenticeship and notify Skilled Trades Ontario.

After Your Apprenticeship

If you are in a trade with a certification exam, Skilled Trades Ontario will receive notice of your completion.

For compulsory trades, you will be issued a Provisional Certificate of Qualification which will allow you to work legally for up to 12 months until you write and pass your examination.

For a non-compulsory trade, once you pass your examination, you will be issued a Certificate of Qualification for your trade.

Preparing For Your Exam

- To pay for a Certificate of Qualification examination, contact Skilled Trades Ontario Client Services Department at: 647-847-3000 or toll free at 1-855-299-0028
- To schedule your exam: Once you have paid, contact your local Service Delivery Office to book your exam.
- Download Skilled Trades Ontario exam preparation guide at:

 <u>Exam Resources Skilled Trades Ontario</u> and/or view the exam preparation guide for Red Seal trades at: <u>red-seal.ca</u>



SkilledTradesOntario.ca

